
REEF FISH

Identification

TROPICAL PACIFIC



GERALD ALLEN
ROGER STEENE
PAUL HUMANN
NED DELOACH

REEF FISH

Identification

Tropical Pacific



Gerald Allen
Roger Steene
Paul Humann
Ned DeLoach

NEW WORLD PUBLICATIONS, INC. Jacksonville, Florida USA
ODYSSEY PUBLISHING El Cajon, California USA

Printed by

Star Standard Industries Pte Ltd
Singapore

Acknowledgments

This project has been a genuine team effort from the moment it was conceived. John Jackson of Odyssey Publishing provided the kick start by introducing us to the great team at New World Publications – Paul Humann, Ned DeLoach, and Eric Riesch. They have been tireless and incredibly efficient through all phases of the production. Paul and Ned are also accomplished photographers and many of their excellent photos are included in the book.

Special praise is also due to my co-author and best mate Roger Steene. By some odd quirk of fate Roger was the first person I happened to meet after arriving on Australian shores with my family in 1972. We have shared amazing experiences over the past 31 years and it's no accident that all my best trips have been the ones that included Roger. Although I confess to being biased, I consider Roger Steene as the world's leading underwater photographer. His brilliant coffee table books are testimony to his wide range of skills.

Our species coverage has been greatly enriched by contributions from various colleagues, especially Rudie Kuiter and Fenton Walsh from Australia, Dieter Eichler and Helmut Debelius from Germany, Jack Randall from Hawaii, Scott Michael and Robert Myers from mainland USA, and Takamasa and Miki Tonazuka from Bali, Indonesia. Most of the color scans were prepared by Mark Allen.

Scientific advice and assistance with identifications was received from Bill Eschmeyer (California Academy of Sciences), Tony Gill (The Natural History Museum, London), Leslie Knapp (Smithsonian Institution), Rudie Kuiter (Museum of Victoria, Melbourne), Helen Larson (Northern Territory Museum, Darwin), John McCosker (California Academy of Sciences), Tom Munroe (Smithsonian Institution), Jack Randall (Bishop Museum, Hawaii), Bill Smith-Vaniz (U.S. Geological Survey, Gainesville, Florida), and Victor Springer (Smithsonian Institution).

We are especially grateful to the many generous resort owners and charter boat operators, who provided us with wonderful opportunities for fish photography: Rob Barrel and Cat Holloway (Nai'a Charters, Fiji), Dr. and Mrs. Hanny Batuna and daughter Angelique (Murex Dive Resort, Sulawesi), Max Benjamin (Walindi Dive Resort, Papua New Guinea), Mark Ecenbarger (Kungkungan Bay Resort, Sulawesi), Ron Holland (Borneo Divers, Sabah), Nyoman and Reno Kirtya (Grand Komodo Tours, Bali), Carol Palmer and Sonny Tjandra (Ambon Diver Centre), Alan Raabe (FeBrina Dive Cruises, Papua New Guinea), Anton Saksono (Pulau Purtri Resort, Java), Frans Seda (Sao Wisata Resort, Flores), Takamasa Tonozuka (Dive and Dive's, Bali), Rob Vanderloos (Milne Bay Marine Charters, Papua New Guinea), and Wakatobi Divers (Tukang Besi, Indonesia).

Finally GRA expresses his fondest thanks to his wife Connie for her amazing devotion, continued support, and tolerance of frequent overseas travel. He is also grateful for the ongoing support of Conservation International, especially Peter Seligmann (Chairman of the Board and Chief Executive Officer), Sylvia Earle (Executive Director, Marine Conservation Division), and Tim Werner (Senior Director, Marine Conservation Program).

Gerald R. Allen
Perth, Australia

CREDITS

Photography Editor: Eric Riesch

Copy Editors: Ken and Tammy Marks

Art Director & Drawings: Michael O'Connell

First Edition: October 2003

ISBN 1-878348-36-1

Copyright © New World Publications, Inc. 2003

All rights reserved. No part of this book may be reproduced without prior written consent.

Publishers: New World Publications, Inc., 1861 Cornell Road, Jacksonville, FL 32207, (904) 737-6558,

www.fishid.com, eric@fishid.com - Odyssey Publishing, 11558 Rolling Hills Drive, El Cajon, CA 92020, (619) 579-8405.

PHOTO CREDITS

The majority of the species images were taken by the four authors. However, several underwater photographers added their work to this collection. The authors appreciate their efforts and assistance in making this book as comprehensive as possible. Additional photographers include: **Jim Abernathy**, 455tr; **Lyn Adrian**, 43tr; **Mark Allen**, 88ml; **Fred Bavendam**, 366ml; **Nate Bartlett**, 89mr; **Helmut Debelius**, 114br, 118tr, 121br, 187br, 241mr, 244mr, 398br, 418br; **JL Earle**, 187ml; **Dieter Eichler**, 109bl, 111bl, 112ml, 144ml, 145tl, 160bl, 175ml, 179bl, 187mr, 206tr & ml, 216br, 228mr, 230br, 239br, 312tl, 340mr, 349ml, 409mr, 411tr, 427tl, 444tl & bl; **A&A Ferrari/Innerspace Visions**, 128br; **David Hall**, 441tr; **Howard Hall**, 421bl; **Wolcott Henry**, 373 tl, 429 bl; **Johann Hinterkircher/IKAN**, 429tl; **John Hoover**, 30tr, 133br, 134tl, 327ml, 436ml, 438ml; **Burt Jones**, 381ml, 382mr; **Peter Kraugh**, 310br; **Rudie Kuitert**, 58ml, 76bl, 81mr, 94tr, 96tl, 110ml & mr, 113br, 120mr, 121tl & ml, 128ml, 129tr, mr & br, 133bl, 136ml, 137mr, & bl, 140bl & br, 142tl, 160mr, 165ml, 158bl, 159tl, 160mr, 175tr, 175tr, bl & br, 178ml & mr, 181mr, 182tl, tr & br, 184mr & br, 186tr & ml, 191bl, 192tl, 194tl, 203br, 204ml, 205tl, 206tl, 207br, 209ml, 215br, 204ml, 205tl, 206tl, 207br, 209ml, 215br, 222tl, 225tl, 226mr, 227ml, 233ml, 240bl, 241tl & br, 242 mr & br, 243tl, 246bl, 260tl, 270tr & mr, 272tl & tr, 274mr, 277mr & bl, 285bl & br, 291tl & tr, 311bl, 317mr, 324bl, 326bl & br, 327bl, 330mr, 332br, 345tr, 347tr, 355ml, 371 bl, 374br, 375tr, 380bl, 383ml & mr, 396tl, 400bl, 401mr, 403bl & br, 409br, 425mr, 426mr, 428ml, 431tr, 433br, 440tr, 440 ml, mr, bl, & br, 452bl, 455bl; **Ken Marks**, 4 m & b, 288tl, 394tr, 443ml; **Hajime Masuda**, 94br; **Scott Michael**, 142ml, 143tl, 143tr, 148tl, 149br, 150mr, 193bl, 194tr, 196ml, 197mr & br, 198bl, 200tr, 202tr, 204tl, 226tr, 230ml, 231tr, 271bl, 276tl, 325ml, 351tr, 363ml, 365mr, 366tr & mr, 383bl, 385tr, 436tr, mr & br, 437 tr, ml, mr & bl, 438br, 441 ml, 443tl, 443tr & bl, 450tr, ml, mr & bl, 451tl, tr, ml & bl, 453 mr & br, 454ml & bl, 457 tl; **Rob Myers**, 46tl, 47mr, 48mr, 54mr, 57br, 58tr, 81ml, 83mr, 87ml, 120ml, 121bl, 126bl, 133 mr, 134bl, 136tl & bl, 147bl & br, 149tr & bl, 150tr, 157br, 167tl, 171tr & br, 172ml, 173tr, 175mr, 176bl, 177ml, 178bl, 179br, 180bl, 183tr, 185br, 196tl mr, bl & mr, 197mr, 200tl & tr, 201br, 204mr, 206bl, 207ml & bl, 211tr, 215tr, ml & mr, 221 tl & ml, 222tr, 224mr, 226br, 227tr & br, 231br, 234tr; 235tr, 235ml & mr, 236tl, 236tr, 237tl, 251bl, 270tl, 305tl, 305tr, 324ml, 334br, 344bl & br, 345bl & br, 346bl & br, 377 br, 387bl, 403br, 418ml, 430mr; **Hiroshi Nagano**, 287mr, 317 bl; **Christopher Newbert**, 124m; **Fraizer Nivens**, 454tl; **Mark Norman**, 452tl; **Jack Randall**, 52bl & br, 66tl, 68tl, 72br, 75ml, 77tl, 98bl, 100br, 103ml, 107bl, 130bl, 132bl, 135ml, 136mr, 144tr, 148bl & br, 151ml, 169ml, 173mr, 183mr & br, 209 bl, 224br, 229ml, 236br, 241ml, 243tr, 261mr, 367ml, 375mr, 395tl & tr, 396bl & br, 400tl, 421mr, 440tl, 442mr, 456br; **Hagen Schmid/IKAN**, 455ml; **Mark Strickland**, 455mr; **Miki Tonozuka**, 444br; **Takamosa Tonozuka**, 38tl, 157bl, 239tr, 287ml, 311tl, 311tr, 322tr, 367tr; **Rob Vanderloos**, 424br; **Peter Verhoog**, 450tl, 454tr; **Fenton Walsh**, 151tl, 198tl, 198tr, 200ml, 207tl, 231bl, 273tl, 278br; **Phil Woodhead**, 294tl; the remaining 2,140 photographs were taken by **Gerald Allen, Roger Steene, Paul Humann and Ned DeLoach**.

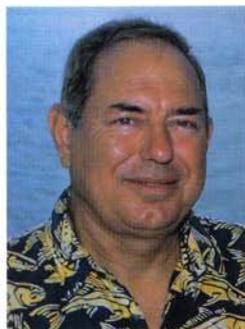
About the Authors



Gerald R. Allen is the author of more than 300 scientific articles and 28 books. He served as Senior Curator of Fishes at the Western Australian Museum between 1974-1998 and is now a full-time consultant with Conservation International. Dr. Allen is an international authority on both coral reef fishes and Australian freshwater fishes. He received a Ph.D. in marine zoology from the University of Hawaii in 1971 and since then has dived extensively throughout the Indo-Pacific region, logging over 6,000 hours underwater. Underwater photography is his favorite hobby and several thousand of his photos have appeared in a wide variety of publications. Originally from the USA, Dr. Allen and his wife Connie have resided in Perth, Western Australia for the past 30 years.



Roger Steene has lived his entire life at the front doorstep of Australia's Great Barrier Reef. He became interested in underwater photography at an early stage and his enthusiasm has never waned. This is his eleventh book devoted to marine subjects, having accumulated more than 30 years of underwater experience in the process. He has dived and photographed in all the world's tropical seas from the Caribbean and Galapagos to the Red Sea and Mauritius. He lists Indonesia and Papua New Guinea as his favorite destinations due to their incredible marine biodiversity. Concentrating on close-up photography, his meticulous attention to detail conveys a special impression of marine life.



Paul Humann began photographing marine life in 1964. In a bold move in 1972 he left his established law practice in his hometown of Wichita, Kansas to become the owner/operator of the *Cayman Diver*, the Caribbean's first successful live-aboard diving cruiser. He sold the vessel in 1979 to devote more time to travel, photography and writing. His images and articles have appeared in nearly every diving and wildlife magazine. Together with his partner Ned DeLoach, Paul has written 14 marine life field guides including the popular 3-volume *Caribbean Reef Set*, *Reef Fish Identification – Galapagos and Coastal Fish Identification – California to Alaska*. When not traveling Paul lives in Davie, Florida where, if not writing about fishes, he tends to another passion, his two-acre palm-studded garden/home fondly known as Mango Manor.

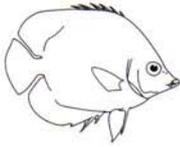


After finishing a degree in education in 1967, **Ned DeLoach** moved from his childhood home in West Texas to Florida so that he would be able to do more of what he loves best – dive. In 1971 he completed his first diving guide to the state, *Diving Guide to Underwater Florida*, which was released in its 10th edition in 2001. Through the 1970s and 1980s Ned was active in Florida's cave diving community and dive/travel writing. A mutual friend introduced Paul to Ned in the mid-80s. Two years later the pair reunited as co-editors of *Ocean Realm* magazine. It was during this time that the idea of producing a series of marine life identification books designed for divers was born. After co-authoring a number of marine life field guides the partners published *Reef Fish Behavior* in 2000. Ned and his wife Anna live in Jacksonville, Florida.

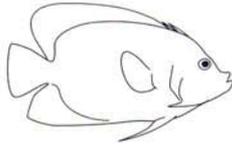
Twenty Identification Groups

1. Disk-shaped/Colorful

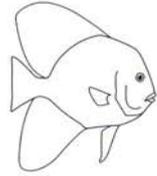
16-43



Butterflyfishes



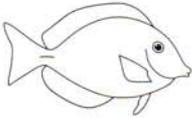
Angelfishes



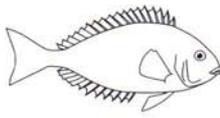
Spadefishes

2. Large Ovals

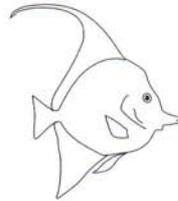
44-59



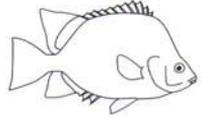
Surgeonfishes



Rabbitfishes



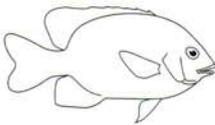
Moorish Idol



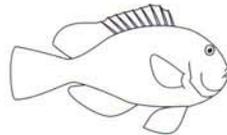
Scats

3. Small Ovals – Damselfishes

60-101



Damselfishes



Damselfishes/Anemonefishes

4. Sloping Heads/Tapered Bodies

102-121



Snappers



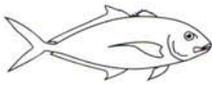
Coral Breams



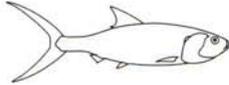
Emperors

5. Silvery

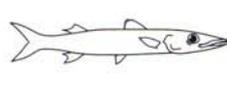
122-137



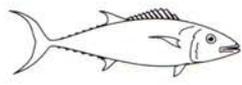
Jacks



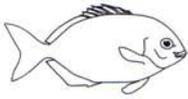
Milkfishes



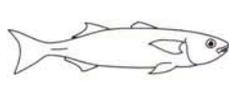
Barracudas



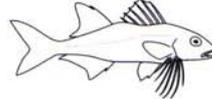
Tunas & Mackerels



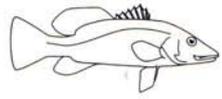
Chubs



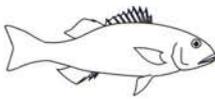
Mullets



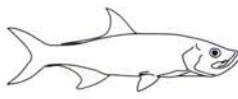
Threadfins



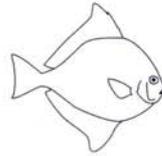
Snooks



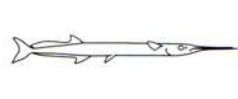
Grunters



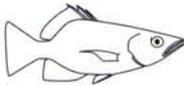
Tarpon



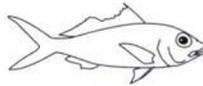
Diamondfishes



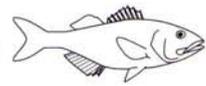
Needlefishes



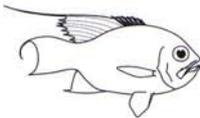
Archerfishes



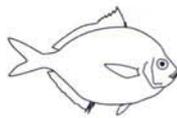
Mojarras



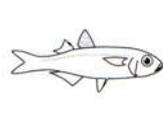
Flagtails



Pearl Perches



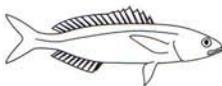
Ponyfishes



Silversides

6. Slender Schoolers/Colorful

138-151



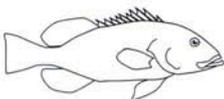
Fusiliers



Sea Basses/Anthias

7. Heavy Bodies/Large Lips

152-173



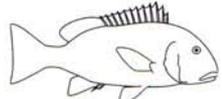
Groupers



Soapfishes



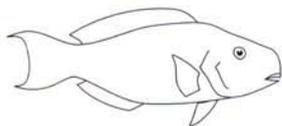
Hawkfishes



Sweetlips

8. Swim with Pectoral Fins – Parrotfishes

174-187



Parrotfishes

9. Swim with Pectoral Fins – Wrasses

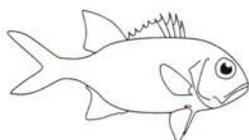
188-237



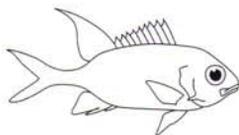
Wrasses

10. Reddish/Big Eyes

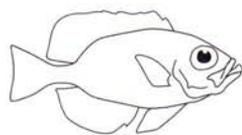
238-245



Soldierfishes



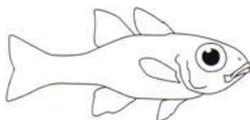
Squirrelfishes



Bigeyes

11. Cardinalfishes

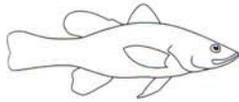
246-267



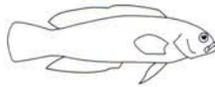
Cardinalfishes

12. Cryptic Crevice Dwellers

268-279



Seabasses/Basslets



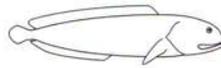
Dottybacks



Devilfishes



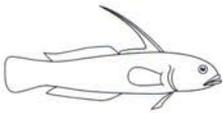
Brotulas



Cuskeels

13. Elongate Sand & Burrow Dwellers

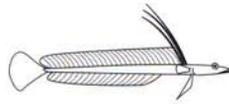
280-299



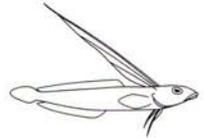
Dartfishes



Wormfishes



Sand Divers



Signalfishes



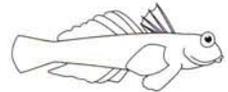
Bandfishes



Convict Blennies



Tilefishes



Dragonets



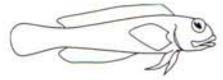
Sandperches



Lizardfishes



Pearl Fishes



Jawfishes

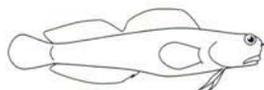
14. Small, Elongate Bottom Dwellers – Gobies

300-337



Gobies

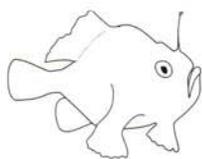
15. Small, Elongate Bottom Dwellers – Blennies 338-359



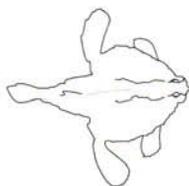
Blennies

16. Odd-Shaped Bottom Dwellers

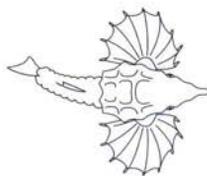
360-389



Frogfishes



Batfishes



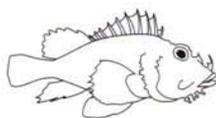
Sea Moths



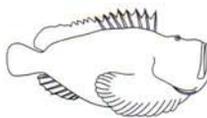
Gurnards



Scorpionfishes/Lionfishes



Scorpionfishes



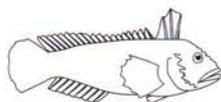
Stonefishes



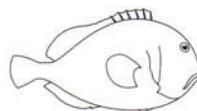
Waspfishes



Flatheads



Velvetfishes



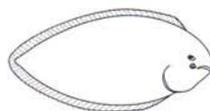
Coral Crouchers



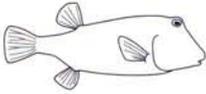
Stargazers



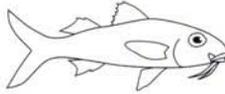
Flounders



Soles



Boxfishes



Goatfishes



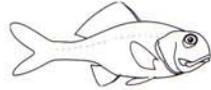
Cornetfishes



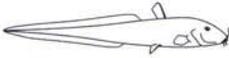
Trumpetfishes



Shrimpfishes



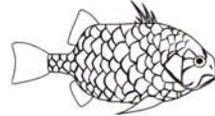
Flashlightfishes



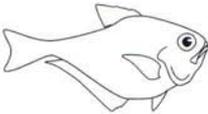
Eel-tailed Catfishes



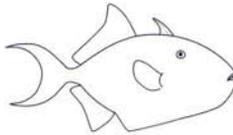
Remoras



Pinecone fishes



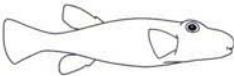
Sweepers



Triggerfishes



Filefishes



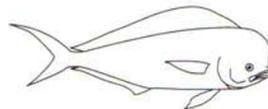
Puffers



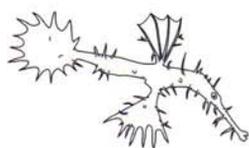
Porupinefishes



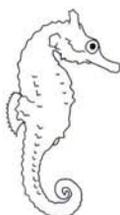
Molas



Dolphinfishes



Ghost Pipefishes

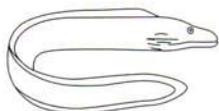


Seahorses

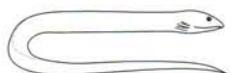


Pipefishes

19. Eels



Morays



Snake Eels

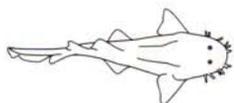


Conger Eels

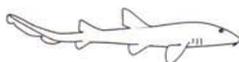


Conger Eels/Garden Eels

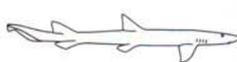
20. Sharks & Rays



Wobbegongs



Bamboo Sharks



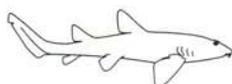
Cat Sharks



Whale Sharks



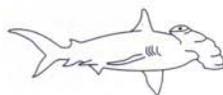
Zebra Sharks



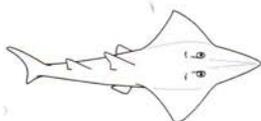
Nurse Sharks



Requiem Sharks



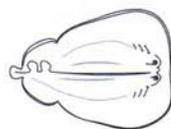
Hammerhead Sharks



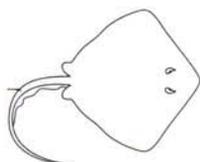
Wedgefishes



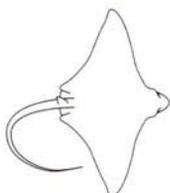
Guitarfishes



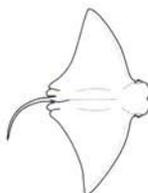
Coffin Rays



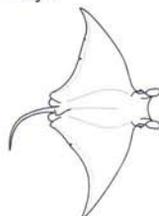
Stingrays



Eagle Rays



Cownose Rays



Manta Rays

How To Use This Book

Identification Groups

Trying to identify a specific fish from the more than 2,000 tropical Pacific species included in this book can be a perplexing task. To help simplify the process, fish families with similar physical or behavioral characteristics have been arranged together into one of 20 color-coded and numbered ID Groups. This approach varies significantly from the traditional system that orders species chronologically by evolutionary development. Although there are a few anomalies, most families, genera and species integrate easily into this visually oriented system.

The ID Groups and their representative families are displayed on the Contents pages. Each group's similar characteristics are listed in italic type at the beginning of its ID Group. It is important for beginning fish watchers to become familiar with the major families that make-up ID Groups, so they can go quickly to the correct section to begin the identification process. Families are scientific groupings based on evolutionary sequence and consequently, typically have similar physical characteristics. An overview of the family's behavioral and physical characteristics (that are observable by divers) is presented at the beginning of each ID Group. The total number of genera and species included in this book, along with diagrams of representative family body shapes, is also given.

Names

Information about each species begins with its common name (that generally used by the English speaking public). Common names are far from standardized and tend to vary from region to region. In some cases there were as many as six different common names applied to a single species. The common names chosen for this text are, in most cases, those names most frequently used in previously published field guides. When this method proved impractical, a name was selected that relates to a readily observable physical feature of the fish, or as a translation of the scientific name. Often where the common name honored an individual, such as the discoverer of the species, the common name was changed to reflect a visually significant feature of the fish in order to help simplify the identification process.

To the right of a species' common name is the species' two-part scientific name printed in italic. These names, rooted in Latin and Greek, are highly standardized and used by scientists throughout the world. The first word (always capitalized) represents the genus. The genus name is given to a group of species, which share a common ancestor, and usually have similar anatomical and physiological characteristics. The second word (never capitalized) is the species. A species includes only animals that are sexually compatible and produce fertile offspring. Each species usually has a combination of visually distinctive features that separates them from all others.

The common and scientific family names follow. Because of its importance in the identification process, the common family name is also printed at the top of left pages where family members appear. Like common species names, common family names also vary between regions. In a few cases, when a distinctive group of fishes within a family are widely known by an alternate name, both names are included together separated by a slash.

The Use of Multiple Photographs for a Species

Many species are presented with more than one photograph. This is necessary to demonstrate differentiations in color, markings and physical features that occur within the same species. Such differentiations are primarily related to one of four categories:

Variations— Species, particularly those from different geographical regions, occasionally exhibit PERMANENT color or marking patterns or physical features distinctly different from the primary species illustrated.

Color and Marking Phases— Often a species may TEMPORARILY alter its color or markings, or, in rare instances, physical features to enhance its camouflage, indicate a change of mood, or for intraspecies communications, such as courtship. Phases can be adapted instantaneously, or, in a few cases, over an extended period of time.

Life Cycle Phases— The juvenile forms (sexually immature individuals) of many species appear distinctly different from adults. In the parrotfish and wrasse families life cycle phases are more complicated: besides juveniles, (denoted in the text as JP [juvenile phase]), adults display two visually distinct phases: the Initial Phase (IP), which generally includes both sexually mature males and females, and the Terminal Phase (TP), which includes only males, that are not only the least abundant, but the largest and most colorful individuals of the species.

Sexes— Males and females of many species display dissimilarity in colors or markings, or differences in body size, or the size and shape of anatomical features, such as fins.

Size

The size, given both in centimeters and inches and feet, represents the maximum size of a species recorded to date.

Description

A species' account is given under the heading ID. Although the visual descriptions in this text might seem redundant to a species' image printed above, this information is often essential when features of an unidentified fish do not exactly match the photograph. In many cases a fish is so distinctive that making a comparison with its photograph easily substantiates its identification. However, because many genera include "similar-appearing" species the identification process is often more complex. Wherever similar-appearing species occur within a genus, every effort has been made to place the species together. Likewise, similar-appearing genera within a family, and similar families within an ID Group have been grouped whenever possible.

To help distinguish between similar-appearing species "distinctive features" that visually differentiate one species from the other have been highlighted with bold text, and where appropriate, an arrow pointing directly to the emphasized characteristic has been superimposed over the photograph.

In some cases the distinctive features emphasized are too small or subtle to establish reliable visual identifications with the naked eye underwater. However, this information, which includes such things as number of scale rows, spine counts, or nostril position, might be relied upon for making identifications from photographic images that can be enlarged and studied in detail.

Behavioral traits that may be observed by a diver and might help in the identification process are also listed under ID following the species' description. This brief information is usually coupled with a species' social organization: solitary, in pairs, form groups, or aggregations, followed by the species' habitat preference and depth range where it typically occurs.

Colors— The colors of many species vary considerably from individual to individual. In such situations, the description might read: "Reddish brown to olive-brown or gray." This means that the fish could be any of the colors or shades between. Many fishes also have an ability to pale, darken, and change colors. Because of this, color alone is rarely relied on for identification.

Markings— The terminology describing markings is defined in the drawings on the following page.

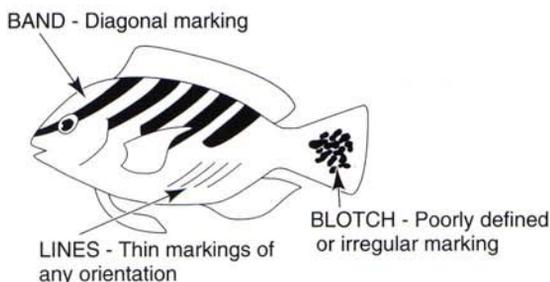
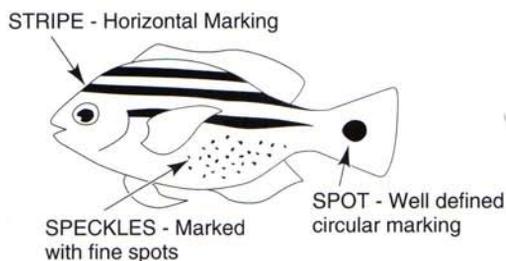
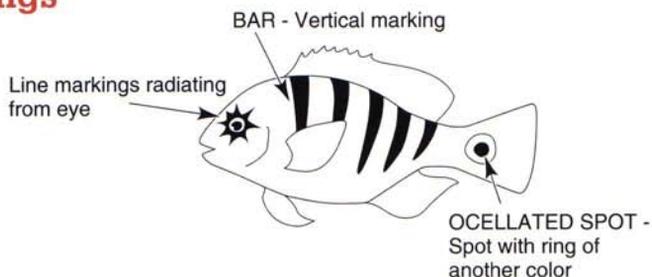
Anatomy— Anatomical features are often referred to as part of the identification process. The features used in this text are pinpointed in the drawings on the following page.

Species Population Distribution

A species' distribution is presented last. This section begins with a Broad Population Range (highlighted with bold text) followed by a more detailed account.

The range of this book extends east from the far eastern Indian Ocean (the Andaman Sea just west of Thailand, Christmas and Coco-Keeling Islands, far western Indonesia and northwestern Australia) to the Pitcairn Island Group in the southeastern Pacific, then south from the tropical water of south and southwest Japan to the southern end of the Great Barrier Reef. Whenever a species distribution extends outside this vast region, such as to the Red Sea and East Africa in the Indian Ocean or to the Hawaiian Islands in north central Pacific, this information is included;

Markings



however, no attempt has been made to provide a complete inventory of fishes that inhabit areas adjacent to the range of this book.

Because of the random nature of the pelagic dispersal of larval fishes, a species' distribution pattern is, to an extent, in constant flux. This fact coupled with our incomplete knowledge of the general distribution of many fishes often limits the accuracy of information given in this section.

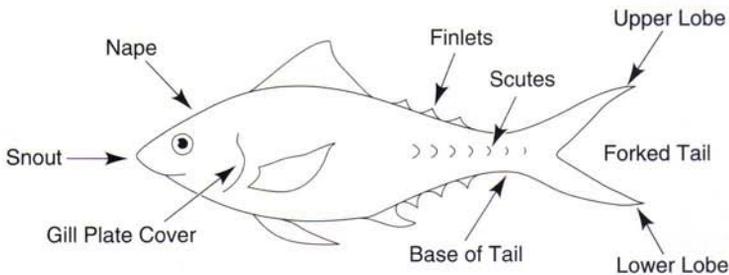
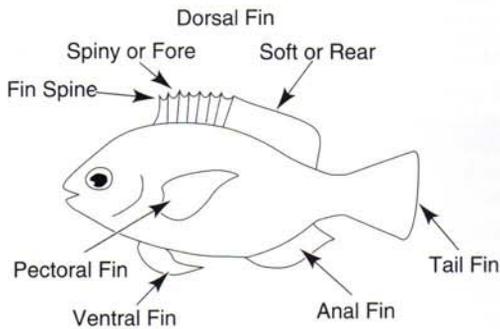
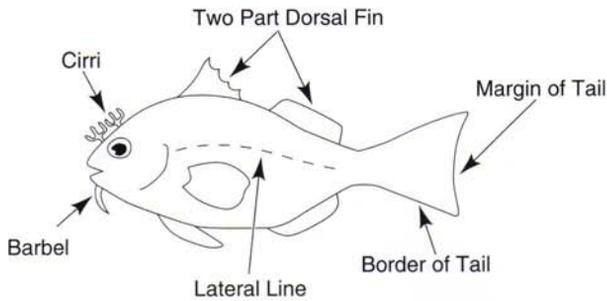
Broad Population Ranges are intended to give readers a quick reference to a species' primary distribution pattern. These ranges are quite arbitrary and do not always follow standard geographic nomenclature. A given fish population might extend completely across a given range or only encompass a significant portion of the area.

Indo-Pacific— A population extending from any point in the western or central Indian Ocean east to the Pacific islands of Hawaii or French Polynesia, and occasionally on to scattered islands east, or to the shore of the Western Hemisphere.

East Indo— The western boundary of this book's range: the Andaman Sea off western Thailand, the Christmas and Coco-Keeling Islands in the eastern Indian Ocean, the shores of western Indonesia and northwestern Australia.

Asian Pacific— A critical region, home to the most bio-diverse population of reef fishes on Earth. In this text, a population bordered in the west by the western shores of Indonesia, then sweeping east well beyond the edge of what is normally considered West Pacific – including the Great Barrier Reef, the Coral Sea, the Solomon Islands, New Caledonia and Vanuatu – and on north to New Guinea, Indonesia, the Philippines, Central and eastern Micronesia, turning northwest to the tropical

Anatomy



boundaries of Okinawa and the Ryukyu Islands southwest of Japan, and finally completing a crude circle by heading back west across the South China Sea to the Gulf of Thailand.

West Pacific — A population that may include all or part of the Asian Pacific, but also extends eastward into the island nations of Fiji, Tonga and Samoa, or north to the Gilbert and Phoenix Islands of the Central Pacific.

Pacific — A population generally extending from Asian and West Pacific east to Hawaii, French Polynesia and occasionally beyond to the Pitcairn Island Group and infrequently on to the far eastern Pacific shores of the Western Hemisphere.

Localized — A limited population center that may include a single island or reef system, but generally representing a somewhat wider area.

Circumtropical — A population extending around the circumference of the world's tropical seas.

Circumglobal — A population extending around the circumference of the world's tropical seas, but also spilling north or south into temperate waters.

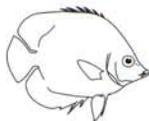
IDENTIFICATION GROUP 1

Disk-shaped/Colorful Butterflyfishes - Angelfishes - Spadefishes

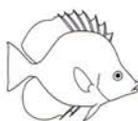
This ID Group consists of thin-bodied fishes with basically round shapes. Generally most are quite colorful.

FAMILY: Butterflyfishes - Chaetodontidae

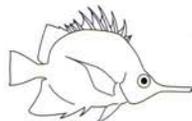
7 Genera – 79 Species Included



Typical Shape



Typical Shape



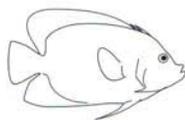
Genus *Forcipiger*

Reminiscent of their butterfly namesake, the majority of these small, colorful fishes spend daylight hours flitting about the reef in search of food within rather confined home ranges. Members of the family are easily identified. Only the closely related angelfishes, once classified in the same family, have the same general shape and appearance. However, angelfishes can be easily distinguished by having more robust bodies and by the presence of a sharp spine on the lower edge of their gill covers.

Butterflyfishes typically travel alone, or in pairs, using keen eyesight to spot tiny worms, exposed polyps and other marine invertebrates. Although most species inhabit coral-rich reefs, a few butterflyfishes associate with silty coastal areas, while others gather in huge shoals high above the reef to feed on drifting plankton.

FAMILY: Angelfishes - Pomacanthidae

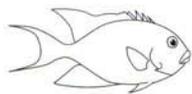
7 Genera – 51 Species Included



Genus *Pomacanthus*



Genus *Centropyge*



Genus *Genicanthus*

Large, colorful and graceful angelfishes from genus *Pomacanthus* epitomize the classic reef fish for many underwater naturalists. However, in the tropical Indo-Pacific the family is dominated in species numbers by the small elusive members of genus *Centropyge*.

Angelfishes are greatly dependent on the shelter of boulders, caves and coral crevices and so traditionally inhabit areas of heavy coral growth or high profile rock spills. The food of *Centropyge* consists primarily of algae, while *Pomacanthus* consume sponge, algae and benthic invertebrates; some species of *Genicanthus* gather in mid-water shoals where they feed on zooplankton, primarily pelagic tunicates.

FAMILY: Spadefishes (Batfishes) - Ehippidae

2 Genera – 6 Species Included



Typical Shape

Although spadefishes, also commonly known as batfishes, are not closely related to butterflyfishes and angelfishes, this small family is placed in ID Group 1 because of the adults' disk-shaped bodies.



VAGABOND BUTTERFLYFISH *Chaetodon vagabundus*

SIZE: to 23 cm (9 in.) **Butterflyfish - Chaetodontidae**

ID: Yellowish white with chevron pattern of narrow lines; **narrow black band across rear body does not cover entire rear dorsal fin.** Usually solitary or form groups; home ranging. Coastal reefs and outer slopes to 30 m.

Indo-Pacific: E. Africa to Hawaii and French Polynesia. - S.W. Japan to E. Australia and Lord Howe I.



Vagabond Butterflyfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Similar to adult but chevron markings faint or absent; black spot on rear dorsal fin; tail clear. Adults and juveniles tolerate wide range of ecological conditions including turbid water and influxes of fresh water near river mouths.



INDIAN VAGABOND BUTTERFLYFISH *Chaetodon decussatus*

SIZE: to 20 cm (8 in.) **Butterflyfish - Chaetodontidae**

ID: Yellowish white with chevron pattern of narrow lines; **wide black band across rear body covers rear dorsal fin.** Usually alone or in pairs; home ranging. Rubble or coral-rich habits to 30 m, often in turbid conditions.

Indo-Asian Pacific: Oman, Maldives and Andaman Sea to E. Timor in S. Indonesia.



WEST AUSTRALIAN BUTTERFLYFISH *Chaetodon assarius*

SIZE: to 13 cm (5 in.) **Butterflyfish - Chaetodontidae**

ID: Beige with vertical rows of dark spots; rear body rimmed in brown with narrow white margin on rear dorsal and anal fins; ocellated spot on rear dorsal fin. Form aggregations. Coastal reefs to 40 m.

Localized: W. Australia from Perth north to Shark Bay.



THREADFIN BUTTERFLYFISH *Chaetodon auriga*

SIZE: to 23 cm (9 in.) **Butterflyfish - Chaetodontidae**

ID: **Pacific Variation** - White with chevron pattern; rear body and tail yellow; spot on rear dorsal fin (except Red Sea); dorsal fin usually trails a thread-like filament. Solitary, in pairs or small groups. Coastal and outer reefs to 40 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and French Polynesia. - S.W. Japan to E. Australia and Lord Howe I.



CHEVRONED BUTTERFLYFISH *Chaetodon trifascialis*

SIZE: to 18 cm (7 in.) **Butterflyfish - Chaetodontidae**

ID: White with numerous black chevron markings; **black tail with yellow margin.** Territorial; defend coral patches against other butterflyfishes. Coral-rich areas to 12 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Philippines, Micronesia, Hawaii and French Polynesia. - S.W. Japan to N.W. & E. Australia.

Butterflyfishes



THREE-STRIPE BUTTERFLYFISH

Chaetodon tricinctus

SIZE: 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: White with pair of wide black bars on body; black eye bar, dorsal and anal fins broadly rimmed with yellow. In pairs or small groups. Coral-rich areas of lagoons and outer reefs in 3-15 m.

Localized: Lord Howe and Norfolk Is. off E. Australia.



YELLOWRIMMED BUTTERFLYFISH

Chaetodon guentheri

SIZE: to 14 cm (5 1/2 in.) Butterflyfishes - Chaetodontidae

ID: Silvery white with numerous dark spots; upper and rear body rimmed in yellow. Rocky reefs and coral-rich outer slopes in 5-40 m. Often near cool upwellings.

Asian Pacific: S.W. Japan, N. Sulawesi and Komodo I. in Indonesia, S. New Guinea to Great Barrier Reef.



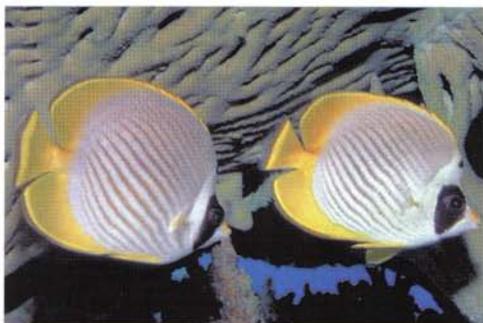
YELLOW-DOTTED BUTTERFLYFISH

Chaetodon selene

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: White with numerous faint yellow spots arranged in diagonal rows, fins yellow (except pectorals); blackish rim on rear body. Solitary or in pairs. Rubble or sand bottoms of coastal reefs in 8-50 m.

Asian Pacific: Indonesia to Malaysian Peninsula, Philippines and N. New Guinea. - S.W. Japan and S. China Sea.



PANDA BUTTERFLYFISH

Chaetodon adiergastus

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: Whitish with darker gray bands, fins yellow-orange (except pectoral); oval-shaped black eye bar, and small black spot on nape. Usually in pairs or small groups. Silty inshore reefs and clear outer reefs in 3-25 m.

Asian Pacific: W. Pacific Rim from S.W. Japan, Indonesia, Malaysian Peninsula and Philippines to N.W. Australia.



BLACK-BACKED BUTTERFLYFISH

Chaetodon melannotus

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: White body with many diagonal black lines, black on upper back; **black saddle on base of tail.** Solitary or in pairs; feed on live soft and hard corals. Coral-rich areas of lagoons, reef flats and seaward reefs in 2-20 m.

Indo-West Pacific: Red Sea and E. Africa to Indonesia, New Guinea and Samoa. - S.W. Japan and Philippines to E. Australia.



SPOT-TAIL BUTTERFLYFISH

Chaetodon ocellicaudus

SIZE: to 14 cm (5 1/2 in.) Butterflyfishes - Chaetodontidae

ID: White body with diagonal black lines; **black spot on base of tail.** Solitary or in pairs. Coral-rich areas of lagoons, reef flats and seaward reefs in 3-50 m. Most common on outer slopes and in reef crest channels.

East Indo-Asia Pacific: Andaman Sea to Indonesia, Philippines and Papua New Guinea. - Palau to Great Barrier Reef.



CROSSHATCH BUTTERFLYFISH

Chaetodon xanthurus

SIZE: to 14 cm (5 1/2 in.) Butterflyfishes - Chaetodontidae

ID: White with **net pattern**, outer tail yellow; broad yellow bar across rear body, black eye bar and spot on nape. Solitary or in pairs. Outer reef slopes and drop-offs, usually among rocks or coral in 12-50 m.

Asian Pacific: Gulf of Thailand, S. China Sea, S.W. Japan, Malaysian Peninsula, Indonesia and Philippines.



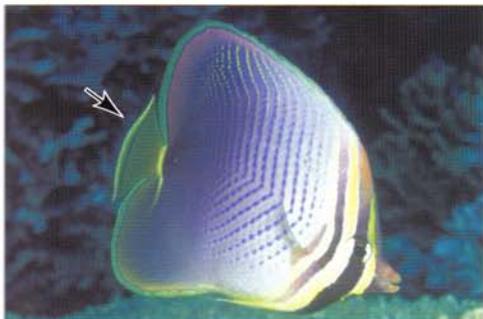
YELLOWBACK BUTTERFLYFISH

Chaetodon mertensii

SIZE: to 12.5 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: White with **chevron markings**, outer tail yellow to orange; broad yellow to orange bar across rear body, black eye bar and spot or smudge on nape. Solitary or in pairs. Lagoons and outer slopes in 10-120 m.

Indo-Pacific: E. Africa, Maldives, Indonesia, Philippines and New Guinea to French Polynesia. - S.W. Japan to E. Australia.



EASTERN TRIANGULAR BUTTERFLYFISH

Chaetodon baronessa

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Body roughly triangular; gray with many chevron markings, **pale yellow tail**. Similar Triangular Butterflyfish [next] has dark triangle marking on tail. In pairs. Near *Acropora* plate coral to 10 m.

East Indo-West Pacific: Cocos-Keeling Is. to Philippines and Fiji. - S.W. Japan and Micronesia to Great Barrier Reef.



TRIANGULAR BUTTERFLYFISH

Chaetodon triangulum

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Body roughly triangular; gray with many pale yellow chevron markings; **dark triangle on tail**. Similar Eastern Triangular Butterflyfish [previous] lacks this marking. In pairs. Near *Acropora* plate coral to 10 m.

Indian Ocean: E. Africa and Madagascar to Bay of Bengal, Andaman Sea to Java in Indonesia.



INDIAN REDFIN BUTTERFLYFISH

Chaetodon trifasciatus

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Pale, becoming bluish toward rear with oblique purplish stripes, anal fin and **base of tail red**; yellow-edged black band across base of anal fin. Usually in pairs. Coral-rich areas to 20 m.

Indian Ocean: E. Africa and Bay of Bengal to Bali in Indonesia.



REDFIN BUTTERFLYFISH

Chaetodon lunulatus

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Pale with oblique purplish stripes, anal fin red, **base of tail pale**; yellow-edged black band across base of anal fin. Usually in pairs. Coral-rich areas to 20 m.

Pacific: Indonesia, Malaysian Peninsula, Philippines, New Guinea, Hawaii to French Polynesia. - S.W. Japan to N.W. Australia and Great Barrier Reef.

Butterflyfishes



BLUE-SPOT BUTTERFLYFISH *Chaetodon plebeius*

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Bright yellow with numerous faint stripes; **blue patch on side**, ocellated spot on base of tail and blue-edged eye bar. Solitary or in pairs. Shallow coastal waters including lagoons and seaward reefs to 10 m.

East Indo-West Pacific: Andaman Sea to Indonesia, New Guinea and Fiji. - S.W. Japan to W. & E. Australia.



ANDAMAN BUTTERFLYFISH *Chaetodon* sp.

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Bright yellow with numerous faint stripes; black spot on base of tail. Solitary or in pairs. Rock and coral reefs near shore and on outer slopes in 10-40 m. An undescribed species previously confused with Blue-spot Butterflyfish [previous].

Indian Ocean: Maldives, Sri Lanka, Andaman Sea to W. Sumatra in Indonesia.



TEARDROP BUTTERFLYFISH *Chaetodon unimaculatus*

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: White with bright yellow dorsal, anal and ventral fins; black tear-shaped spot on back; adults develop a large bulbous snout. Solitary or form small groups. Lagoons and seaward reefs in 10-60 m.

Pacific: Indonesia and Philippines to French Polynesia. - S.W. Japan and Hawaii to N.W. & E. Australia.



INDIAN TEARDROP BUTTERFLYFISH *Chaetodon interruptus*

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: Bright yellow; black tear-shaped spot on back, **thin black bar from rear dorsal to rear anal fin**; adults develop a large bulbous snout. Solitary or form small groups. Lagoon and seaward reefs in areas of hard and soft corals in 10-40 m.

Indian Ocean: E. Africa to Andaman Sea and W. Sumatra in Indonesia.



ECLIPSE BUTTERFLYFISH *Chaetodon bennetti*

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: Bright yellow; large blue-edged black spot on middle of back, **pair of diagonal blue lines on lower body**. Solitary or in pairs. Coral-rich areas of lagoons and on outer reefs in 5-30 m.

Indo-Pacific: E. Africa, Maldives, Indonesia, Philippines and New Guinea to French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



OVAL-SPOT BUTTERFLYFISH *Chaetodon speculum*

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: Bright yellow; large black oval-shaped spot on middle of back. Usually solitary or in pairs; shy. Coral-rich reefs in lagoons and on outer reefs in 8-30 m.

West Pacific: Indonesia, Malaysian Peninsula, Philippines, New Guinea to Tonga. - S.W. Japan to N.W. & E. Australia.

Disk-shaped/Colorful



BLACKCAP BUTTERFLYFISH

Chaetodon wiebeli

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: Golden with thin reddish brown bands; black eye bar with prominent white bar behind, and black saddle across upper nape; tail margin black. Solitary or in pairs. Mixed rock and coral reefs in 4-25 m.

Localized: W. Pacific Rim from Gulf of Thailand to S. W. Japan.



RACCOON BUTTERFLYFISH

Chaetodon lunula

SIZE: to 21 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: Yellow-orange, with dusky back and thin dark diagonal bands; black eye band with white patch behind, connected to wide black band running to dorsal fin. Solitary, in pairs or aggregations. Lagoons and outer reefs to 30 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia, Hawaii and Galapagos. - S.W. Japan to N.W. & E. Australia.



DOTTED BUTTERFLYFISH

Chaetodon semeion

SIZE: to 24 cm (9 1/2 in.) Butterflyfishes - Chaetodontidae

ID: Yellow with horizontal rows of small black spots; blue marking on rear snout and nape; dorsal fin trails a thread-like filament. Usually in pairs. Coral-rich areas of lagoons and outer slopes in 2-50 m.

Indo-Pacific: Sri Lanka to Indonesia, New Guinea, Philippines, Micronesia and Polynesia. - S.W. Japan to Great Barrier Reef.



ORIENTAL BUTTERFLYFISH

Chaetodon auripes

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: Brown to golden brown with numerous thin dark stripes; prominent black eye bar with white bar behind. Solitary or form aggregations. Rocky reefs with some coral and algal growth to 30 m. Juveniles in tide pools.

Localized: W. Pacific Rim from S. China Sea to S. W. Japan.



BLACKLIP BUTTERFLYFISH

Chaetodon kleinii

SIZE: to 14 cm (5 1/2 in.) Butterflyfishes - Chaetodontidae

ID: Light brown with "dirty" white head and diffuse central bar, black lip and ventral fins. Solitary to large aggregations. Rocky reefs and coral-rich areas of lagoons, channels, outer reef slopes in 2-61 m, usually below 10 m.

Indo-West Pacific: E. Africa and Maldives to Samoa and Hawaii. - S.W. Japan to N.W. & E. Australia.



LATTICED BUTTERFLYFISH

Chaetodon rafflesi

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Yellow with network of gray lines; broad dark submarginal band on soft dorsal fin and tail. Solitary or in pairs. Primarily coral-rich areas of sheltered coastal reefs, lagoons and outer slopes to 15 m.

Indo-Pacific: Sri Lanka to Indonesia, New Guinea and French Polynesia. - S.W. Japan to Great Barrier Reef.

Butterflyfishes



ASIAN BUTTERFLYFISH *Chaetodon argentatus*

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: White with net pattern; broad black bars or saddle markings on rear head and mid-body, black bar across rear body. In pairs or small aggregations. Rock or coral reefs in 5-20 m.

Asian Pacific: W. Pacific Rim from S. Japan including Ryukyu and Izu Is., Philippines, S. China and Taiwan.



BLACK & WHITE BUTTERFLYFISH *Chaetodon burgessi*

SIZE: to 14 cm (5 1/2 in.) Butterflyfishes - Chaetodontidae

ID: White; black band from nape to pectoral region, broad black diagonal area across rear of body. Solitary or in pairs. Vertical or undercut dropoffs on outer reefs in 20-80 m, usually below 40 m.

Asian Pacific: E. Indonesia, Philippines, N. New Guinea to Palau and Pohnpei in Micronesia.



TINKER'S BUTTERFLYFISH *Chaetodon tinker*

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: White with numerous dark dots; broad black diagonal area across rear of body. Solitary, in pairs or small aggregations. Usually shelter in black corals and sea fans on steep slopes in 27-160 m.

Localized: Marshall Is., Johnston Atoll and Hawaii.



YELLOW-CROWNED BUTTERFLYFISH *Chaetodon flavocoronatus*

SIZE: to 12 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: White with numerous dark dots, yellow tail; broad black diagonal area across rear of body, yellow band on nape. Solitary or in pairs. Shelter in black corals and sea fans on steep slopes in 35-75 m.

Localized: Known only from Guam (Orote Peninsula) in the Mariana Is, Micronesia.



MARQUESAN BUTTERFLYFISH *Chaetodon declivis*

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: White with dark spots, fins yellowish; broad diagonal area across rear body gradating orange to black, orange eye bar and snout tip. Rocky reef slopes and steep walls adjacent to sand bottoms below 20 m.

Localized: Line Is. in eastern Central Pacific and Marquesas Is. in French Polynesia.



BLACK & YELLOW BUTTERFLYFISH *Chaetodon smithi*

SIZE: to 17 cm (6 3/4 in.) Butterflyfishes - Chaetodontidae

ID: Dark brown head and forebody, yellow rear body and tail. Commonly in large mid-water feeding aggregations. Rocky, algal-covered reefs with scattered coral in 10-30 m.

Localized: Rapa I., Ilots de Bass I. (Marotiri) and Pitcairn Is. in S. and S.E. French Polynesia.

Disk-shaped/Colorful



TAHITI BUTTERFLYFISH

Chaetodon trichrous

SIZE: to 12 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: Head and forebody white gradating to dark brown with pale scale centers forming grid pattern, yellow tail; black eye bar. Solitary, in pairs or small groups. Primarily in sheltered lagoons in 3-25 m.

Localized: Society, Marquesas and Tuamotu Is. in French Polynesia.



JAPANESE BUTTERFLYFISH

Chaetodon nippon

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Yellowish or brassy with dark gray to brownish head and rear body; black spot on rear dorsal fin. Solitary, in pairs or groups. Rocky coastal reefs in 5-30 m.

North Asian Pacific: W. Pacific Rim from S. Korea and S. Japan to N. Philippines.



BLACK BUTTERFLYFISH

Chaetodon flavirostris

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: Dark with yellow rim that is most prominent around rear edge of body and tail; dark blotch on nape; large adults develop hump on forehead. Usually in pairs. Coral and rocky reefs in 2-20 m.

Southern Pacific: E. Australia to Rapa and Pitcairn Is. southeast of French Polynesia.



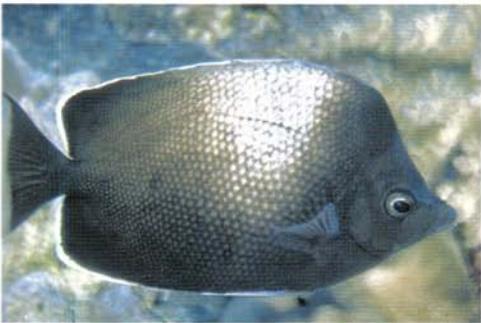
RETICULATED BUTTERFLYFISH

Chaetodon reticulatus

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: Black with pale gray scale centers becoming whitish on back and forebody; yellow-edged black eye bar, margin of tail yellow with black-edges. Solitary, in pairs or aggregations. Exposed outer reefs to 30 m.

Pacific: N. Sulawesi in Indonesia, Philippines, Micronesia to Hawaii and French Polynesia. - S. W. Japan to N.E. Australia.



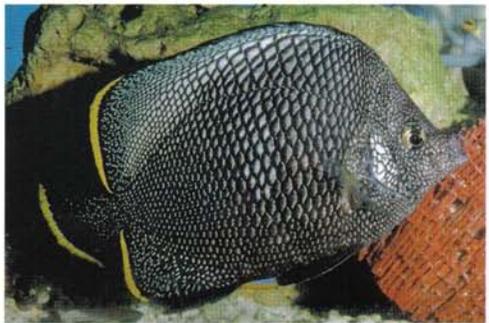
EASTER ISLAND BUTTERFLYFISH

Chaetodon litus

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Dusky brownish gray with large whitish patch on back, fins dusky brown edged with white. Form aggregations. Rocky reefs composed of volcanic boulders with prolific growth of brown algae to 25 m.

Localized: Easter I. in the southeastern Pacific.



WROUGHT IRON BUTTERFLYFISH

Chaetodon daedalus

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: Blackish with whitish blotch or spot on each scale; rear edge of dorsal, anal and tail fins yellow. Form large aggregations; forage widely. Rocky reefs in clear water to 7 m.

Localized: S. Japan and nearby Ryukyu, Ogasawara and Izu Is.

Butterflyfishes



SPECKLED BUTTERFLYFISH

Chaetodon citrinellus

SIZE: to 13 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: Pale yellow to whitish with many rows of faint bluish spots; black edge on anal fin. Solitary, in pairs or small groups. Moderately exposed (to surf) reef flats and seaward reefs usually in 1-3 m; rarely to 30 m.

Indo-Pacific: E. Africa to Indonesia, Philippines and Marquesas Is. in French Polynesia. - S.W. Japan to N. W. & E. Australia.



SPOTTED BUTTERFLYFISH

Chaetodon guttatissimus

SIZE: to 12 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: Beige with distinctive brown to purplish speckling; broad yellow margin on dorsal fin extends across tail base. Solitary or in pairs. Coral reefs, lagoons and seaward slopes in 5-30 m.

Indian Ocean: E. Africa to Maldives, Andaman Sea and Christmas I.



SADDLED BUTTERFLYFISH

Chaetodon ephippium

SIZE: to 23 cm (9 in.) Butterflyfishes - Chaetodontidae

ID: Blue-gray with blue lines on lower body; large white-bordered black patch upper rear body, orange area from snout to ventral fins. Solitary or in pairs. Coral-rich areas in lagoons and seaward reefs to 30 m.

Indo-Pacific: Sri Lanka to Indonesia, Philippines, Micronesia and French Polynesia. - S.W. Japan to N.W. & N.E. Australia.



Saddled Butterflyfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: White, rimmed with yellow; large black teardrop-shaped patch on rear body, dark eyebar and black spot on base of tail. Feeds on coral polyps, algae, sponges, fish eggs and assorted benthic invertebrates.



SPOT-BANDED BUTTERFLYFISH

Chaetodon punctatofasciatus

SIZE: to 12 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: Yellowish tan to yellow; **7 gray bars** on upper body and rows of dark spots below, orange eye bar and black spot on nape. Usually in pairs, sometimes with Dot & Dash Butterflyfish [next]. Lagoons and outer reefs to 45 m.

Pacific: Sumatra in Indonesia, Philippines, Micronesia to Line Is. - Taiwan to N.W. Australia and Great Barrier Reef.



DOT & DASH BUTTERFLYFISH

Chaetodon pelewensis

SIZE: to 12.5 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: Yellowish tan with **diagonal rows of dark spots becoming solid bands on upper body**; orange eye bar, black spot on nape. Usually in pairs; sometimes with Spot-banded Butterflyfish (occasionally hybridize). Outer reefs to 30 m.

Indo-Pacific: Indonesia, Philippines, Micronesia to Line Is. in eastern Central Pacific. - N. Philippines to N.W. & E. Australia.

Disk-shaped/Colorful



LINED BUTTERFLYFISH *Chaetodon lineolatus*

SIZE: to 30 cm (12 in.) Butterflyfishes - Chaetodontidae

ID: White with vertical black lines; broad black band rear body, **wide black eye bar encloses a white spot on nape**. The largest butterflyfish. Solitary or in pairs. Lagoons and seaward reefs from shallows to 171 m.

Indo-Pacific: E. Africa, Red Sea, Maldives to Hawaii and French Polynesia. - S.W. Japan to N.W. & E. Australia.



Lined Butterflyfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Similar to adults, but vertical dark lines on side much fainter, black strip on rear part of body poorly developed, and has large black spot on tail base. Feeds primarily on coral polyps and anemones.



PACIFIC DOUBLE-SADDLE BUTTERFLYFISH *Chaetodon ulietensis*

SIZE: to 15 cm (6 in.) Butterflyfishes - Chaetodontidae

ID: White fore and mid-body, bright yellow rear; pair of diffuse dark saddles across back, black spot on tail base. Solitary, in pairs or groups. Coral-rich areas of lagoons and seaward reefs to 30 m.

East Indo-Pacific: Cocos-Keeling Is. to Indonesia, Malaysian Peninsula, Philippines, Micronesia and French Polynesia. - S.W. Japan to E. Australia.



SPOT-NAPE BUTTERFLYFISH *Chaetodon oxycephalus*

SIZE: to 25 cm (10 in.) Butterflyfishes - Chaetodontidae

ID: White with vertical black lines; broad black band rear body, **black eye bar with separated black patch on nape**. Usually solitary or in pairs. Coral-rich areas, including both coastal and seaward reefs in 10-40 m.

Indo-Asian Pacific: Maldives to Indonesia, Malaysian Peninsula and New Guinea. - N. Philippines to Great Barrier Reef.



SADDEBACK BUTTERFLYFISH *Chaetodon falcula*

SIZE: to 20 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: White becoming **bright yellow on back** and rear body; pair of black saddles across back, black band on tail base. Solitary, in pairs or groups. Coral-rich areas of lagoons and seaward reefs to 15 m.

Indian Ocean: E. Africa, Maldives and Sri Lanka to Andaman Is.



FOURSPOT BUTTERFLYFISH *Chaetodon quadrimaculatus*

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: Yellow-orange with brown upper body; pair of white spots on back. Solitary or in pairs; feed almost exclusively on *Pocillopora* corals. Exposed rocky reefs with scattered coral growth in 2-15 m.

Northern Pacific: Taiwan and S.W. Japan to Hawaii and French Polynesia.

Butterflyfishes



WHITE COLLAR BUTTERFLYFISH

Chaetodon collare

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: Dark gray overall with pale scale centers and red tail; white "collar" marking behind eye. Often in pairs, but may form large aggregations. Rocky shores and coral-rich outer reefs to 20 m.

Indo - Asian Pacific: Arabian Peninsula and Maldives to E. Indonesia, N. Sulawesi and S. Philippines.



White Collar Butterflyfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Brown with similar head markings as adult; also black spot on rear dorsal fin; tail clear. Feeds primarily on coral polyps and polychaetes but also consume algae.



MEYER'S BUTTERFLYFISH

Chaetodon meyersi

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: White to bluish white; **curving black bands** converging near pectoral fin, yellowish rim encircles body. Solitary or in pairs. Coral-rich areas of clear lagoons and seaward reefs in 2-25 m.

Indo - Pacific: E. Africa, Maldives and Bay of Bengal to Indonesia, Philippines, Micronesia and Line Is. in eastern Central Pacific. - S. W. Japan to Great Barrier Reef.



ORNATE BUTTERFLYFISH

Chaetodon ornatissimus

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: Bluish white with **orange bands**; narrow yellow margin on dorsal and anal fins, yellow-edged black eye bar. Usually in pairs. Coral-rich areas in clear water lagoons and seaward reefs to 36 m.

Indo - Pacific: Maldives to Indonesia, Philippines, Micronesia and French Polynesia. - S.W. Japan to N.W. & N.E. Australia.



EIGHT-BANDED BUTTERFLYFISH

Chaetodon octofasciatus

SIZE: to 12 cm (5 in.) Butterflyfishes - Chaetodontidae

ID: **Yellow Variation** - Yellow to orange with 8 narrow black bars. Shelters among branching corals; feed exclusively on coral polyps. Shallow protected lagoons (often turbid/silty) and inner reefs with good coral cover in 3-20 m.

Indo-Asian Pacific: Sri Lanka to Indonesia, Philippines and Solomon Is. - S.W. Japan to N. New Guinea.



Eight-banded Butterflyfish - White Variation

ID: White with 8 narrow black bars, and dark spot at base of tail (occasionally faint).

Asian Pacific: Primarily Palau and N. New Guinea.

Disk-shaped/Colorful



GOLDBARRED BUTTERFLYFISH *Chaetodon rainfordi*

SIZE: to 15 cm (6 in.) **Butterflyfishes - Chaetodontidae**
ID: Yellow; pair of broad bluish gray bars with orange margins and orange eye bar. Solitary or in pairs; easy to approach. Coastal and offshore reefs areas of sparse coral growth to 15 m.

Localized: S. Papua New Guinea to Great Barrier Reef.



GOLDEN-STRIPED BUTTERFLYFISH *Chaetodon aureofasciatus*

SIZE: to 12.5 cm (5 in.) **Butterflyfishes - Chaetodontidae**
ID: Grayish body rimmed with bright yellow; orange band through eye. Solitary or in pairs; hybridizes with Goldbarred Butterflyfish [previous]. Most common on silty coastal reefs, often near river mouths in 5-15 m.

Localized: N. Australia and S. Papua New Guinea to Great Barrier Reef.



BROWN-BANDED BUTTERFLYFISH *Chaetodon modestus*

SIZE: to 17 cm (6 3/4 in.) **Butterflyfishes - Chaetodontidae**
ID: Silvery white with pair of broad brown body bars; ocellated spot on rear dorsal fin. Deep water from 40-250 m, usually below 110 m.

Asian Pacific: A narrow north/south range from S. Japan through Philippines, Malaysian Peninsula and Central Indonesia.



OCELLATED CORALFISH *Parachaetodon ocellatus*

SIZE: to 18 cm (7 in.) **Butterflyfishes - Chaetodontidae**
ID: Silvery white with 5 brown-orange bars across head and body; ocellated spot on tail base, and black spot on elevated triangular dorsal fin. Solitary or in pairs. Coastal and inner reefs littered with sponges in 5-40 m.

West Pacific: Indonesia to Philippines, New Guinea and Fiji. - S. China Sea and S.W. Japan to N.W. & E. Australia.



LORD HOWE BUTTERFLYFISH *Amphichaetodon howensis*

SIZE: to 18 cm (7 in.) **Butterflyfishes - Chaetodontidae**
ID: Alternating black and silver-white bars; yellow hue on back. On rocky reefs with some live corals. Typically at least 50 m, but occasionally shallow.

Southwestern Pacific: S.E. Australia, Lord Howe and Norfolk Is. to N. New Zealand and Kermadec Is.

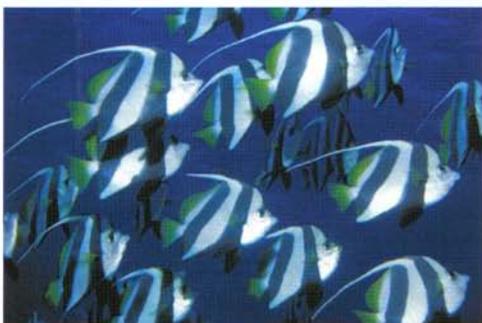


SINGULAR BANNERFISH *Heniochus singularius*

SIZE: to 23 cm (9 in.) **Butterflyfishes - Chaetodontidae**
ID: Body and anal fin black, dorsal fin and tail yellow; long white dorsal-fin filament; bump on nape, white bar behind eye. Solitary or in pairs. Lagoons and outer reefs, often around shipwrecks in 2-250 m.

Indo-West Pacific: Maldives to Indonesia, Philippines, Micronesia and Samoa. - S.W. Japan to N.W. & E. Australia.

Butterflyfishes



SCHOOLING BANNERFISH

Heniochus diphreutes

SIZE: to 21 cm (8 in.) Butterflyfishes - Chaetodontidae

ID: White with pair of black bands, the second band ending at tip of anal fin; elongate dorsal fin filament. **Form large aggregations;** solitary or groups. Outer reef slopes in 5-21 m.

Indo-Southwest Pacific: Red Sea and E. Africa, Maldives, S. Indonesia. - N.W. & E. Australia to Vanuatu and Kermadec Is. - Also 2nd narrow range from Japan to Hawaii.



LONGFIN BANNERFISH

Heniochus acuminatus

SIZE: to 25 cm (10 in.) Butterflyfishes - Chaetodontidae

ID: White with pair of black bands, the second ending behind the tip of the anal fin; elongate dorsal fin filament; long snout compared to similar Schooling Bannerfish [previous]. Lagoons and outer reef slopes in 2-75 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Philippines, and French Polynesia. - S. W. Japan to W. & E. Australia.



MASKED BANNERFISH

Heniochus monoceros

SIZE: to 23 cm (9 in.) Butterflyfishes - Chaetodontidae

ID: Rear body and fins yellow; white band runs from dorsal fin filament to lower head with dark bar behind; bump on nape. Solitary, in pairs or small groups. Lagoons and outer reefs with rich coral growth in 2-25 m.

Indo-Pacific: E. Africa, Bay of Bengal to Indonesia, Philippines, New Guinea and French Polynesia. - S.W. Japan to E. Australia.



PENNANT BANNERFISH

Heniochus chrysostomus

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: White with black band on head, mid-body and upper rear body, yellow upper snout; tallest dorsal spine trails feather-like pennant. Solitary or in pairs. Inshore and outer reefs in 3-45 m.

East Indo-Pacific: Cocos-Keeling Is. to Indonesia, Philippines, Micronesia, Fiji and French Polynesia. - S.W. Japan to N.W. & E. Australia.



PHANTOM BANNERFISH

Heniochus pleurotaenia

SIZE: to 17 cm (6 3/4 in.) Butterflyfishes - Chaetodontidae

ID: White central bar bordered by pair of wide blackish bands that become brown and converge on back; pair of horns just above eyes; bump on nape. Solitary, in pairs or groups. Coral-rich areas to 25 m.

Indian Ocean: Maldives, Sri Lanka, Bay of Bengal and Andaman Sea to W. Java in Indonesia.



HUMPHEAD BANNERFISH

Heniochus varius

SIZE: to 19 cm (7 1/2 in.) Butterflyfishes - Chaetodontidae

ID: Large brown to black triangular area on body; pair of horns just above eyes; bump on nape. Solitary, in pairs or form groups; often under ledges. Coral-rich areas of lagoons and seaward reef slopes in 2-30 m.

Pacific: Indonesia, Philippines, Micronesia and Fiji to Polynesia. - S. W. Japan to N.W. & N.E. Australia and New Caledonia.



TWO-EYED CORALFISH

Coradion melanopus

SIZE: to 15 cm (6 in.)

Butterflyfishes - Chaetodontidae

ID: White; **ocellated spot on rear dorsal and anal fins**, pair of closely spaced brown bars behind head, and orange-edged gray bar rear body. In pairs; often near barrel sponges. Coastal and outer reefs in 10-30 m.

Asian Pacific: Bali and Sulawesi in Indonesia to N. & S. New Guinea, north to the Philippines.



ORANGE-BANDED CORALFISH

Coradion chrysozonus

SIZE: to 15 cm (6 in.)

Butterflyfishes - Chaetodontidae

ID: White with wide orange bar across rear body including dorsal and anal fins; pair of closely spaced brown bars behind head, **ocellated spot on soft dorsal fin**. The most common *Coradion* in most areas. Coastal reefs in 3-60 m.

East Indo-Asian Pacific: Andaman Sea to Indonesia, Philippines, New Guinea and Solomon Is. - S.W. Japan to N. & E. Australia.



HIGHFIN CORALFISH

Coradion altivelis

SIZE: to 20 cm (8 in.)

Butterflyfishes - Chaetodontidae

ID: White with wide orange bar across rear body including dorsal and anal fins; pair of closely spaced brown bars behind head. Resembles Orange-banded Coralfish [previous], but adults **lack spot on soft dorsal fin**. Uncommon. Inshore reefs in 3-15 m.

East Indo-Asian Pacific: Andaman Sea to Indonesia, Philippines, New Guinea and Solomon Is. - S.W. Japan to E. Australia.



MARGINED CORALFISH

Chelmon marginalis

SIZE: to 18 cm (7 in.)

Butterflyfishes - Chaetodontidae

ID: Silvery white; black-edged orange forebody bar and eye bar; wide orange bar across rear body including dorsal and anal fins; long snout. Solitary or in pairs. Mainly coastal reefs and near shore islands to 30 m.

Localized: Tropical N.W. Australia to Cape York and N. Great Barrier Reef.



LONG-BEAKED CORALFISH

Chelmon rostratus

SIZE: to 20 cm (8 in.)

Butterflyfishes - Chaetodontidae

ID: Silvery white; three orange body bars and narrow orange eye bar; ocellated spot on rear dorsal fin; **long beak-like snout**. Solitary or in pairs. Coastal, inner reefs and estuaries, often in turbid water to 25 m.

East Indo-Asian Pacific: E. Andaman Sea to Indonesia, Philippines, Papua New Guinea. - S.W. Japan to E. Australia.



BEAKED CORALFISH

Chelmon muelleri

SIZE: to 18 cm (7 in.)

Butterflyfishes - Chaetodontidae

ID: Silvery white; three orange-brown body bars and narrow orange eye bar; large ocellated spot on rear dorsal fin; **short beak-like snout**. Solitary or in pairs. Shallow coastal reefs with sandy silt or mud bottoms in 2-10 m.

Localized: Tropical N. Australia coast to Great Barrier Reef.

Butterflyfishes - Angelfishes



BIG LONGNOSE BUTTERFLYFISH *Forcipiger longirostris*

SIZE: to 22 cm (8 3/4 in.) Butterflyfishes - Chaetodontidae

ID: Yellow with black upper head and silvery white below; extremely elongate snout; **black spots on breast**, spot on anal fin below tail base. Solitary or in pairs. Outer reefs in 5-60 m.

Indo-Pacific: E. Africa to Indonesia, Philippines, Hawaii and French Polynesia. - S.W. Japan to Great Barrier Reef.



Big Longnose Butterflyfish - Dark Variation

ID: Dark brown to nearly black; intermediates are dusky yellowish or yellowish brown.



LONGNOSE BUTTERFLYFISH *Forcipiger flavissimus*

SIZE: to 22 cm (8 3/4 in.) Butterflyfishes - Chaetodontidae

ID: Yellow with black upper head and silvery white below; elongate snout (short compared to Big Longnose Butterflyfish [previous]); spot on anal fin below tail base. Solitary or in pairs. Coastal and outer reefs in 2-114 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and C. America. - S. W. Japan to N. & E. Australia.



GRAY BUTTERFLYFISH *Hemitaenichthys thompsoni*

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: Uniform dark gray; lacks distinguishing marks. Solitary, in pairs or groups; feed above bottom on plankton. Deep outer reefs in 10-300 m, occasionally shallow coastal reefs and lagoons near deep water.

Central Pacific: Mariana Is. in Micronesia, Samoa, Hawaii and Johnston Atoll to French Polynesia.



PYRAMID BUTTERFLYFISH *Hemitaenichthys polylepis*

SIZE: to 18 cm (7 in.) Butterflyfishes - Chaetodontidae

ID: White pyramid shape formed by yellow triangular patch on upper forebody and rear dorsal fin, head brown, anal fin yellow. Form large aggregations; feed on plankton high in water column. Outer slopes in 3-60 m.

East Indo-Pacific: Cocos-Keeling Is. to Indonesia, Hawaii and Polynesia. - S. China Sea and S. W. Japan to E. Australia.

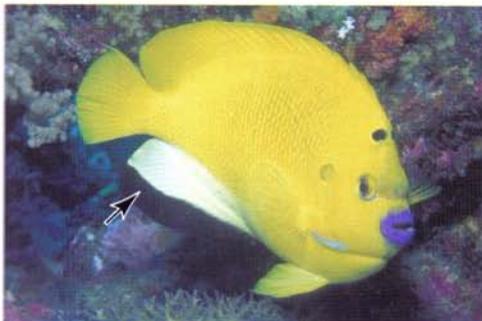


BLACK PYRAMID BUTTERFLYFISH *Hemitaenichthys zoster*

SIZE: to 16 cm (6 1/4 in.) Butterflyfishes - Chaetodontidae

ID: White pyramid shape formed by dark brown to blackish head and rear body. Form large aggregations; feed on plankton high in water column. Outer slopes to 40 m.

Indian Ocean: E. Africa, Maldives and Bay of Bengal to W. Sumatra in Indonesia.



THREE-SPOT ANGELFISH

Apolemichthys trimaculatus

SIZE: to 25 cm (10 in.)

Angelfish - Pomacanthidae

ID: Bright yellow with blue lips; black spot on nape, gray spot just behind head, **broad black margin on anal fin**. Solitary or in pairs. Outer reefs, steep slopes or dropoffs in 15-60 m.

Indo-West Pacific: E. Africa to Indonesia, Philippines, New Guinea and Samoa. - S. W. Japan to N. W. Australia and Great Barrier Reef.



Three-spot Angelfish - Dark Variation

ID: Occasionally darkish green-yellow to brownish yellow with bright yellow spots on scales.



GOLDEN-SPOTTED ANGELFISH

Apolemichthys xanthopunctatus

SIZE: to 25 cm (10 in.)

Angelfish - Pomacanthidae

ID: Brownish with golden scale centers and blue lips, **dorsal, anal and tail fins black**; black spot on nape. Solitary or form small groups. Lagoons, passages and outer slopes in 3-40 m.

North Central Pacific: Micronesia, Gilbert, Phoenix and Line Is. in eastern Central Pacific.



Golden-spotted Angelfish - Juvenile

SIZE: 4-7.5 cm (1 1/2 - 3 in.)

ID: Brownish with wavy golden bands; black eyebar extends over nape, large pale-edged black patch on rear back and dorsal fin.



WHITE-BELTED ANGELFISH

Apolemichthys griffisi

SIZE: to 25 cm (10 in.)

Angelfish - Pomacanthidae

ID: Gray with pale gold spots on sides; white belt broadly bordered in black along back to tail base, black eye bar, large spot on nape. Solitary or in pairs. Steep outer reef slopes in 10-60 m.

Pacific: N. E. Indonesia, E. Papua New Guinea to Solomon, Gilbert, Phoenix and Line Is. in eastern Central Pacific.



PURPLE-MASK ANGELFISH

Paracentropyge venusta

SIZE: to 12 cm (5 in.)

Angelfish - Pomacanthidae

ID: Blue upper head and body, yellow below with large triangular extension invading blue just behind head. Usually solitary; secretive, often upside down under ledges or in caves. Outer reef slopes in 15-35 m.

Localized: W. Pacific Rim from Japan's Ryukyus and Izu Is. to Taiwan and N. Philippines (N. Luzon).

Angelfishes



MULTI-BARRED ANGELFISH *Paracentropyge multifasciata*

SIZE: to 10 cm (4 in.) Angelfishes - Pomacanthidae

ID: Alternating black and white or yellow bars; white-edged black spot on rear dorsal fin. Solitary or form small groups; usually in caves or under ledges, frequently swimming upside down. Steep outer reef slopes in 20-70 m.

East Indo-Pacific: Cocos-Keeling Is. to Philippines, New Guinea and French Polynesia. - S.W. Japan to Great Barrier Reef.



MULTICOLOR PYGMY ANGELFISH *Centropyge multicolor*

SIZE: to 9 cm (3 1/2 in.) Angelfishes - Pomacanthidae

ID: White upper body, yellow face and lower body, dark blue dorsal and anal fins, yellow tail; blue patch on nape with black barring. Usually solitary; shy. Under ledges on steep outer reef dropoffs in 20-90 m.

Central Pacific: Micronesia to Hawaii, south to Samoa, Fiji, Cook Is. and Society Is. in French Polynesia.



JAPANESE PYGMY ANGELFISH *Centropyge interruptus*

SIZE: to 15 cm (6 in.) Angelfishes - Pomacanthidae

ID: Orangish red head and forebody with blue spotting and blue behind, yellow tail. Males have stronger blue spotting on head and heavy blue lines on cheeks. Rocky shores and coral patches in 15-60 m

Localized: S.W. Japan to Kure, Midway Is. and Hawaii.



BLUEBACK PYGMY ANGELFISH *Centropyge colini*

SIZE: to 9 cm (3 1/2 in.) Angelfishes - Pomacanthidae

ID: Pale yellow except for broad patch of blue on upper body extending from nape to soft dorsal fin. Usually solitary; shy, rarely observed. Caves and ledges of steep outer reef slopes in 25-75 m.

East Indo-West Pacific: Cocos-Keeling Is. to C. Indonesia, S. Philippines, Palau, Marshall Is. and Fiji.



OCCELLATED PYGMY ANGELFISH *Centropyge nigricellus*

SIZE: to 6 cm (2 1/2 in.) Angelfishes - Pomacanthidae

ID: Pale yellowish or whitish; prominent black spot at base of pectoral fin base, ocellated spot on rear dorsal fin. Shy, rarely observed. Coral rubble areas in lagoons and along outer reefs in 4-15 m.

North Central Pacific: Scattered from Mariana Is. in Micronesia to Admiralty Is., Samoa, Line Is. and Johnston Atoll.



ORANGEHEAD PYGMY ANGELFISH *Centropyge hotumatua*

SIZE: to 8 cm (3 1/4 in.) Angelfishes - Pomacanthidae

ID: Yellow-orange head and deep blue to nearly black body, yellow-orange tail; blue ring around eye, small dark spot near gill cover. Solitary or form small aggregations. Rock or coral reefs in 14-45 m.

Localized: Austral and Rapa Is. in French Polynesia, also Pitcairn and Easter Is.



YELLOW PYGMY ANGELFISH *Centropyge heraldi*

SIZE: to 10 cm (4 in.) **Angelfishes - Pomacanthidae**

ID: Bright yellow; **dark brown patch behind eye.** Solitary or form loose aggregations. Lagoons and outer reef slopes in areas of mixed coral and rubble in 8-40 m.

Pacific: S.W. Japan and Taiwan, Micronesia, N. Papua New Guinea to Great Barrier Reef and east to French Polynesia.

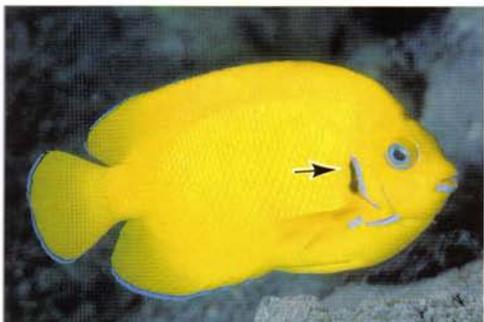


YELLOW BANNERFIN ANGELFISH *Centropyge woodheadi*

SIZE: to 10 cm (4 in.) **Angelfishes - Pomacanthidae**

ID: Bright yellow; **elongate black patch on rear dorsal fin.** Species status is controversial because captive specimens apparently transform to normal Yellow Pygmy Angelfish [previous] coloration. Solitary or form small groups. Rubble areas in 9-20 m.

West Pacific: Great Barrier Reef and Coral Sea to Fiji.



LEMONPEEL ANGELFISH *Centropyge flavissimus*

SIZE: to 14 cm (5 1/2 in.) **Angelfishes - Pomacanthidae**

ID: Bright yellow; **blue edge on gill cover** and usually blue ring around eye. Usually in harems. Mimicked by juvenile Mimic Surgeonfish. Coral-rich lagoons and seaward reefs to 25 m.

East Indo-Pacific: Christmas & Cocos-Keeling Is. to E. Philippines, Micronesia (except Palau and Yap), N. Papua New Guinea and French Polynesia.



Lemonpeel Angelfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Bright yellow; blue-rimmed black spot on center of side; blue edge on gill cover.



BICOLOR ANGELFISH *Centropyge bicolor*

SIZE: to 15 cm (6 in.) **Angelfishes - Pomacanthidae**

ID: Bright yellow head and forebody, deep blue behind with yellow tail; blue saddle across nape extends to eyes. Solitary, in pairs or small groups. Coral-rich and rubble areas of seaward reefs and lagoons, usually in 10-25 m.

West Pacific: Indonesia and Philippines, New Guinea to Samoa and Phoenix Is. - S.W. Japan to N.W. & E. Australia.



KEYHOLE ANGELFISH *Centropyge tibicen*

SIZE: to 18 cm (7 in.) **Angelfishes - Pomacanthidae**

ID: Dark blue; oval-shaped white spot on side, margin of anal fin broadly yellow. Solitary or form small groups. Coral and rubble areas of lagoons and seaward reefs in 4-35 m.

West Pacific: Indonesia, Malaysian Peninsula, W. Pacific Rim, Philippines and New Guinea to New Caledonia. - S. W. Japan to N. & E. Australia and Lord Howe I.

Angelfishes



MIDNIGHT ANGEFISH *Centropyge nox*

SIZE: to 9 cm (3 1/2 in.) Angelfishes - Pomacanthidae

ID: Entirely black. A secretive fish usually alone, occasionally in small groups; hide in crevices and ledges. Coral-rich areas or rubble bottoms, most commonly on sheltered outer reefs, but also lagoons and passes in 10-70 m.

West Pacific: Indonesia, Philippines, N. New Guinea to Vanuatu. - S.W. Japan to N. Great Barrier Reef and New Caledonia.



WHITE-TAILED PYGMY ANGEFISH *Centropyge flavicauda*

SIZE: to 7.6 cm (3 in.) Angelfishes - Pomacanthidae

ID: Dark blue with **translucent to white tail**; dorsal, anal and ventral fins edged in bright blue, black marks on rear edge of dorsal and anal fins. Solitary or form loose aggregations. Coral rubble of lagoons, passages and outer slopes in 10-60 m.

Indo-Pacific: E. Africa to Indonesia, Philippines, Micronesia and Tuamotu Is. in French Polynesia. - S.W. Japan to E. Australia.



YELLOWFIN PYGMY ANGEFISH *Centropyge flavipectoralis*

SIZE: to 10 cm (4 in.) Angelfishes - Pomacanthidae

ID: Dark brown with blue-black paired bars, **yellow pectoral fins**. Similar Brown Pygmy Angelfish [next] lack yellow pectoral fins. Solitary. Areas of coral rubble and reef margins in 3-20 m.

Indian Ocean: Maldives, Sri Lanka and Andaman Sea to N.W. Sumatra in Indonesia.



BROWN PYGMY ANGEFISH *Centropyge multispinis*

SIZE: to 9 cm (3 1/2 in.) Angelfishes - Pomacanthidae

ID: Dark brown with narrow black bars; **large black ear patch**, anal and ventral fins edged in bright blue. Most abundant *Centropyge* in Indian Ocean. Rubble bottoms and coral patches to 30 m.

Indian Ocean: Red Sea and E. Africa, Maldives, Sri Lanka to Andaman Sea.



BLACKTAIL ANGEFISH *Centropyge eibli*

SIZE: to 11 cm (4 1/4 in.) Angelfishes - Pomacanthidae

ID: Pale gray with thin brown to orange bars and black tail with blue margin; orange ring around eye, and orange bar across base of pectoral fin. Solitary, occasionally in pairs. Usually in coral-rich areas in 3-25 m.

Indian Ocean: Sri Lanka and Bay of Bengal south through S. Indonesia to N.W. Australia.



PEARL-SCALED ANGEFISH *Centropyge vrolikii*

SIZE: to 12 cm (5 in.) Angelfishes - Pomacanthidae

ID: Pale gray head and forebody gradating to black on rear body and adjacent fins, tail black with fine blue margin. Solitary or loose groups. Sheltered coastal reefs and outer slopes to 25 m.

West Pacific: Indonesia, Philippines and New Guinea to Marshall Is. and Vanuatu. - S. W. Japan to E. Australia to Lord Howe I.



TWO-SPINED ANGELFISH

Centropyge bispinosus

SIZE: to 10 cm (4 in.)

Angelfishes - Pomacanthidae

ID: Red-orange undercolor with narrow blue bars, head and fins deep blue to purple; two spines extend from lower gill cover. Solitary or form small groups; shy, stay near shelter. Lagoons and outer reef slopes in 5-45 m.

Indo-Pacific: E. Africa to Indonesia, Philippines, New Guinea, Micronesia and French Polynesia. - S.W. Japan to E. Australia.



Two-spined Angelfish - Variation

ID: The amount of red-orange undercolor of this species is variable and occasionally entirely blue. Distinguished from similar White-tailed Pygmy Angelfish [opposite page], which has a translucent to white tail.



GOLDEN ANGELFISH

Centropyge aurantius

SIZE: to 10 cm (4 in.)

Angelfishes - Pomacanthidae

ID: Orange (brown in Sulawesi, Indonesia and Solomon Is.) with rippled bars; blackish ring around eye. Unusually shy species, seldom venture far from coral shelter. Coral-rich areas in 3-20 m.

West Pacific: N.E. Sulawesi in Indonesia, to N. New Guinea, Solomon Is. and Samoa. - Micronesia to N. Great Barrier Reef.



FLAME ANGELFISH

Centropyge loricula

SIZE: to 10 cm (4 in.)

Angelfishes - Pomacanthidae

ID: Brilliant red to red-orange with about 5 black bars; blue markings on rear edge of dorsal and anal fins. Solitary or form small groups; shy. Seaward reefs and lagoons in 5-60 m.

Central Pacific: W. New Guinea and Micronesia to Hawaii. - Great Barrier Reef to French Polynesia. Scattered populations in West Pacific and Indonesia.



RUSTY ANGELFISH

Centropyge ferrugatus

SIZE: to 10 cm (4 in.)

Angelfishes - Pomacanthidae

ID: Rusty color with numerous brown spots; dorsal and anal fins edged with bright blue. Solitary or form small groups; usually close to reef crevices. Rocky reefs and rubble in 6-30 m.

Localized: S.W. Japan south through N. Mindanau in Philippines. - Common at Okinawa.



ORANGEPEEL ANGELFISH

Centropyge shepardi

SIZE: to 12 cm (5 in.)

Angelfishes - Pomacanthidae

ID: Red-orange with narrow dark bars, rear dorsal and anal fins also black. Exposed outer reefs on mixed live and dead coral bottoms in 10-56 m.

Localized: Mariana Is. in Micronesia and Bonin Is. north to Japan's Izu National Park.

Angelfishes



REGAL ANGELFISH

Pygoplites diacanthus

SIZE: to 25 cm (10 in.) Angelfishes - Pomacanthidae

ID: Yellow-orange with 7-8 dark-edged bluish-white bars, yellow tail; dark patch around eye; blue and orange bands on anal fin. Solitary or in pairs; feed on sponges and tunicates. Lagoons and outer reefs to 48 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Philippines and Polynesia. - S.W. Japan to N. Australia and New Caledonia.



BLUE-GIRDLED ANGELFISH

Pomacanthus navarchus

SIZE: to 25 cm (10 in.) Angelfishes - Pomacanthidae

ID: Yellow-orange with blue spots and blue lips; deep blue broad girdle wraps body from nape to ventral fins along belly and curving up to above base of tail. Solitary. Coral reefs in 3-40 m.

Asian Pacific: Indonesia to W. Micronesia and Solomon Is. - Philippines to Great Barrier Reef.



BLUE-RINGED ANGELFISH

Pomacanthus annularis

SIZE: to 45 cm (18 in.) Angelfishes - Pomacanthidae

ID: Orangish brown with upward curving blue bands, tail white; blue ring above pectoral fin, numerous blue markings of head. Solitary or in pairs. Coastal reefs, frequently in murky water, also around caves and wrecks to 60 m.

Asian Pacific: E. Africa to Indonesia, Malaysian Peninsula, Philippines and Solomon Is. - W. Pacific Rim to S.W. Japan.



Blue-ringed Angelfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 1/4 in.)

ID: Bluish black undercolor with narrow closely-spaced pale blue and white bars slightly arched toward head, 2 or 3 are usually slightly wider and more intense, tail mainly whitish or clear without markings.



EMPEROR ANGELFISH

Pomacanthus imperator

SIZE: to 38 cm (15 in.) Angelfishes - Pomacanthidae

ID: Vivid alternating blue and yellow stripes and yellow tail; blue-edged black eye mask, broad blue-edged black bar behind head. Solitary; make loud drumming sound when alarmed. Coral reefs in 6-60 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Philippines, Hawaii and French Polynesia. - S.W. Japan to N. & E. Australia.



Emperor Angelfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: Blue-black with striking pattern of white concentric circular markings, tail transparent. The pattern gradually dissolves into adult coloration between approximately 8-12 cm.



SEMICIRCLE ANGEFISH

Pomacanthus semicirculatus

SIZE: to 35 cm (14 in.) Angelfishes - Pomacanthidae

ID: Greenish brown with blue spotting, pale yellowish lips; blue margins on cheek, spine and gill cover, narrow blue margins on rear dorsal, anal and tail fins. Solitary. Sheltered inshore reefs to 40 m.

Indo-West Pacific: E. Africa to Indonesia, Philippines, New Guinea and Fiji. - S. W. Japan to N.W. & E. Australia.



Semicircle Angelfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: Bluish black undercolor with distinctive semicircular narrow blue and white markings, becoming more arched toward rear body. Color transformation from juvenile to adult usually occurs between 8-16 cm.



SIX-BANDED ANGEFISH

Pomacanthus sexstriatus

SIZE: to 46 cm (18 in.) Angelfishes - Pomacanthidae

ID: Tan with blue scale centers and 6 dark bars; head dark blue with white bar behind eye, blue spotting dorsal, anal and tail fins. Solitary or in pairs. Coastal, lagoon and outer reefs in 3-60 m.

West Pacific: Indonesia, Philippines and New Guinea to New Caledonia. - S. W. Japan to N.W. & E. Australia.



Six-banded Angelfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: Black undercolor with 5-6 prominent white bars interspaced with narrower blue bars between. Juveniles usually begin color transformation to adult pattern between 8-15 cm.



YELLOW-MASK ANGEFISH

Pomacanthus xanthometopon

SIZE: to 38 cm (15 in.) Angelfishes - Pomacanthidae

ID: Yellow with large blue spots on scales forming network pattern, blue head with yellow eye mask; large black spot on rear dorsal. Solitary; feed on sponges and tunicates. Coral-rich areas in 5-30 m.

Indo-West Pacific: Maldives to Indonesia, Philippines, New Guinea and Vanuatu. - S.W. Japan to Great Barrier Reef.



BLUE-STRIPE ANGEFISH

Chaetodontoplus septentrionalis

SIZE: to 20 cm (8 in.) Angelfishes - Pomacanthidae

ID: Brownish orange with bold blue stripes, tail yellow. Uncertain status: possibly the female Blue-stripe Angelfish or male Orange-faced Angelfish [next]. Rock or coral reefs in 5-60 m.

Asian Pacific: W. Pacific Rim including S. China, Taiwan and S. W. Japan.

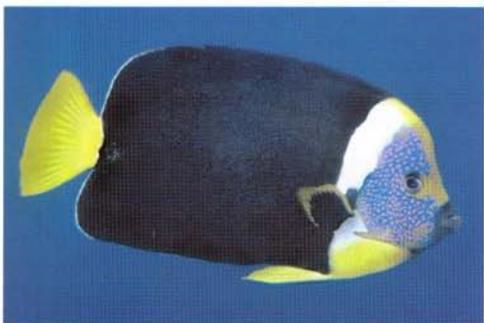
Angelfishes



ORANGE-FACED ANGEFISH *Chaetodontoplus chrysocephalus*
SIZE: to 22 cm (8 3/4 in.) Angelfishes - Pomacanthidae

ID: Orangish head grading to brown then black toward rear, tail yellow; maze of blue markings on head, blue stripes on body. Possible male, variant or hybrid of Blue-stripe Angelfish [previous]. Coral and rubble in 15-25 m.

Asian Pacific: E. Indonesia, Malaysian Peninsula, N. Philippines and W. Pacific Rim to Sagami Bay, Japan.



QUEENSLAND YELLOWTAIL ANGEFISH *Chaetodontoplus meredithi*
SIZE: to 25 cm (10 in.) Angelfishes - Pomacanthidae

ID: Blackish body, head blue (yellow-spotted in male [pictured]) with white bar behind; yellow breast and bright yellow tail; yellow blotch on nape. Solitary or in pairs. Flat bottoms with rocky coral patches in 6-45 m.

Localized: E. Australia from Great Barrier Reef (rare) to Sydney area and Lord Howe I.



SCRIBBLED ANGEFISH *Chaetodontoplus duboulayi*
SIZE: to 25 cm (10 in.) Angelfishes - Pomacanthidae

ID: Dark blue with yellow snout; broad bar on rear head and forebody, yellow stripe under dorsal fin continues to include tail. In pairs or small groups; feed on sponges. Coastal reefs in 5-20 m.

Localized: N. W. & N. E. Australia, Aru Is. in Indonesia to S. New Guinea.



BLUE-SPOTTED ANGEFISH *Chaetodontoplus caeruleopunctatus*
SIZE: to 14 cm (5 1/2 in.) Angelfishes - Pomacanthidae

ID: Gray head, body gray gradating to faded bluish brown with numerous small blue spots, yellow tail. Rarely observed. Nothing is known about the habits and ecological preferences of this species.

Localized: Philippines (most sightings are from Cebu I).



WESTERN YELLOWTAIL ANGEFISH *Chaetodontoplus personifer*
SIZE: to 35 cm (14 in.) Angelfishes - Pomacanthidae

ID: Blackish body, blue head (yellow-spotted in male [pictured]) with white bar behind, orange breast, tail orange with black bar; blotch on nape. Flat bottoms with rocky coral patches in 6-30 m.

Localized: N. W. Australia from Shark Bay to W. edge of Gulf of Carpentaria.



CONSPICUOUS ANGEFISH *Chaetodontoplus conspicillatus*
SIZE: to 25 cm (10 in.) Angelfishes - Pomacanthidae

ID: Gray body rimmed in black, orange face with blue eye ring; bluish white margin on dorsal and anal fins, band of orange on pectoral and tail fins. Solitary, in pairs or small groups. Outer reefs in 20-40 m.

Southwestern Pacific: S. Great Barrier Reef to New South Wales and New Caledonia, Lord Howe and Norfolk Is.



BLACK VELVET ANGELFISH *Chaetodontoplus melanosoma*

SIZE: to 20 cm (8 in.) Angelfishes - Pomacanthidae

ID: Light gray head and back, dark gray below, dorsal, anal and tail fins black with yellow margin; maze of yellow markings on snout and nape. Solitary or in pairs. Inshore and outer rock and coral reefs in 5-30 m.

Asian Pacific: Indonesia and Philippines, to S.W. Japan. Also Milne Bay area in S.E. Papua New Guinea.



PEWTER ANGELFISH *Chaetodontoplus dimidiatus*

SIZE: to 20 cm (8 in.) Angelfishes - Pomacanthidae

ID: Light gray head and back, black below, dorsal and anal fins black with yellow margin, yellow tail; maze of yellow markings on snout and nape. Solitary or in pairs. Inshore and outer rock and coral reefs in 5-30 m.

Asian Pacific: Indonesia and Philippines, north to S.W. Japan.



VERMICULATED ANGELFISH *Chaetodontoplus mesoleucus*

SIZE: to 18 cm (7 in.) Angelfishes - Pomacanthidae

ID: Purplish gray with white vermiculations, tail yellow or gray (possibly two species); white to yellowish patch behind head, black eye bar. Solitary or in pairs. Coral-rich areas of inshore reefs to 20 m.

Asian Pacific: Indonesia, Malaysian Peninsula, Philippines, New Guinea to Solomon Is. - S.W. Japan and to N. Australia.



BALLINA ANGELFISH *Chaetodontoplus ballinae*

SIZE: to 20 cm (8 in.) Angelfishes - Pomacanthidae

ID: White with black upper body, tail and pectoral fins yellow to orange, dark snout tip and triangular eye mask. Solitary or form small groups. Coral or rock reef in 10-80 m.

Localized: N. New South Wales (Coffs Harbor, Ballina, Solitary Is.) and Lord Howe I. Generally rare, but common at Ball's Pyramid near Lord Howe I.



ORNATE ANGELFISH *Genicanthus bellus*

SIZE: to 18 cm (7 in.) Angelfishes - Pomacanthidae

ID: Male - Light gray; golden orange stripe along base of dorsal fin and another on mid-body, borders of tail blue. Solitary or form groups; feed on plankton above bottom. Outer reefs, 25-110 m; rare above 50 m.

Scattered Range: Philippines and scattered east Pacific Is. to Mariana and Marshall Is. in French Polynesia.



Ornate Angelfish - Female

SIZE: to 15 cm (6 in.)

ID: Light gray; black eye bar, curved black marking from rear head extends length of dorsal fin, another extends diagonally from rear head onto lower tail border, upper tail border black, blue patch from behind pectoral fin to lower body.

Angelfishes



ZEBRA ANGELFISH

Genicanthus caudovittatus

SIZE: to 20 cm (8 in.)

Angelfishes - Pomacanthidae

ID: **Male** - White with numerous black bars; **blackened area on middle of dorsal fin**. Solitary or in harems; feed on zooplankton well above bottom; capable of sex reversal. Outer reefs in 15-70 m.

Indian Ocean: Red Sea (common in the Gulf of Aqaba) and E. Africa, Mauritius, Maldives to N. Sumatra in Indonesia.



Zebra Angelfish - Female

SIZE: to 15 cm (6 in.)

ID: Light gray; **black bar above eye**, and black margins on tail.



BLACK-SPOT ANGELFISH

Genicanthus melanospilos

SIZE: to 18 cm (7 in.)

Angelfishes - Pomacanthidae

ID: **Male** - White with numerous black bars; **gold spots on dorsal and tail fins**. In pairs or harems; feed on zooplankton above bottom. Outer reef slopes in 20-45 m.

West Pacific: Indonesia, Malay Peninsula, Philippines, New Guinea and Solomon Is. to Fiji. - S.W. Japan to Great Barrier Reef.



Black-spot Angelfish - Female

SIZE: to 13 cm (5 in.)

ID: Light gray head and lower body becoming yellow on upper half; black tail margins; black bar above eye (compare female Zebra Angelfish [previous]).



HALF-BANDED ANGELFISH

Genicanthus semicinctus

SIZE: to 25 cm (10 in.)

Angelfishes - Pomacanthidae

ID: **Male** - Grayish with black bars that end above yellowish belly; light gray bars on chest, spotted tail. Usually form groups. Outer reef slopes in 10-50 m.

Localized: S.W. Pacific at Lord Howe I. and Kermadec Is.



Half-banded Angelfish - Female

SIZE: to 20 cm (8 in.)

ID: Brown to dark gray head and upper body, white below; blue patch between eyes, margins of tail dark.



BLACKSTRIPED ANGELFISH *Genicanthus lamarck*

SIZE: to 23 cm (9 in.) Angelfishes - Pomacanthidae

ID: Male - White with 4 black stripes; broad black stripe on outer edge of dorsal fin; black speckles on tail. Form groups. Outer reefs in 10-50 m.

Asian Pacific: Indonesia, Malaysian Peninsula, Philippines, New Guinea to Vanuatu. - S.W. Japan to N. Great Barrier Reef.



Blackstriped Angelfish - Female

SIZE: to 15 cm (6 in.)

ID: White with 4 black stripes, the upper is thicker and angles to lower margin of tail; upper margin of tail also black, broad black stripe on outer edge of dorsal fin.



PINSTRIPED ANGELFISH *Genicanthus watanabei*

SIZE: to 15 cm (6 in.) Angelfishes - Pomacanthidae

ID: Male - Bluish head and back with alternating black and white stripes on remainder of body. Usually form mixed-sex feeding aggregations above reefs. Outer reefs in 12-80 m.

Pacific: S.W. Japan to Micronesia, E. Australia and French Polynesia. Absent Indonesia, Philippines, New Guinea and Solomon Is.



Pinstriped Angelfish - Female

SIZE: to 12 cm (5 in.)

ID: Pale blue-gray; short black bar above eye, black margins on dorsal, anal and tail fins.



JAPANESE SWALLOW *Genicanthus semifasciatus*

SIZE: to 21 cm (8 in.) Angelfishes - Pomacanthidae

ID: Male - White with numerous close-set wavy bars on upper body, yellow on head extends into a yellow mid-body stripe; yellow spots on dorsal and tail fins. Usually form same-sex groups. Rock or coral reefs in 15-100 m.

Localized: W. Pacific Rim from S. W. Japan to N. Philippines.



Japanese Swallow - Female

SIZE: to 16 cm (6 1/4 in.)

ID: Dusky brownish gray becoming white on belly; white bar with black borders behind eye; black edged swallowtail.

Spadefishes



LONGFIN SPADEFISH

SIZE: to 41 cm (16 in.)

ID: Silver; dark to faint bar through eye and a second bar from front of dorsal fin to ventral fin, **large dark blotch above rear edge of ventral fin**. Usually form groups. Inshore and outer reefs in 3-25 m.

Indo-Asian Pacific: Red Sea and E. Africa to Solomon Is. - S.W. Japan to Great Barrier Reef.

Platax teira

Spadefishes - Ephippidae



Longfin Spadefish

SIZE: to 12 cm (5 in.)

ID: **Juvenile** - Silver; black eye bar and a second bar from dorsal fin onto ventral fins and a third bar across rear body and fins; extremely elongated dorsal, anal and ventral fins. Occasionally around floating objects. Often solitary, but with increased size form groups.



GOLDEN SPADEFISH

SIZE: to 47 cm (18 3/4 in.)

ID: Yellowish silver; dark to faint bar through eye and a second bar from nape to ventral fin. Very similar Circular Batfish [following] usually has scattered black spots on sides. Form large schools. Coastal and outer reef dropoffs in 3-30 m.

Asian Pacific: Red Sea to Indonesia, Philippines, Palau, New Guinea and Solomon Is. north to S.W. Japan.

Platax boersii

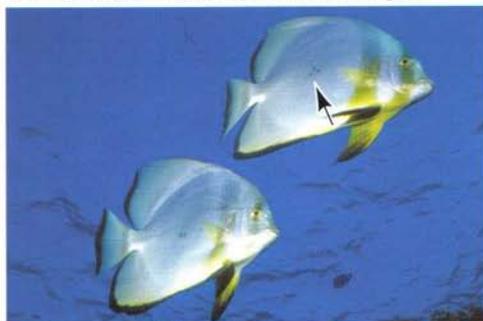
Spadefishes - Ephippidae



Golden Spadefish - Juvenile

SIZE: to 12 cm (5 in.)

ID: Silver, dusky rear body and fins; black eye bar and a second bar from nape onto ventral fin; elongate, triangular-shaped dorsal and anal fins. Sheltered shoreline reefs.



CIRCULAR SPADEFISH

SIZE: to 28 cm (11 in.)

ID: Silver; dark to faint eye bar and a second bar from front of dorsal to ventral fin, **usually few small black spots on sides**. Very similar Golden Batfish [previous] lack these spots. In pairs or groups. Shoreline and outer reefs in 2-35 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Micronesia and Polynesia. - S.W. Japan to N.E. Australia and New Caledonia.

Platax orbicularis

Spadefishes - Ephippidae



Circular Spadefish

SIZE: to 8 cm (3 in.)

ID: **Juvenile** - Brown, rear half of body darker brown; brown rear eye bar and another bar through pectoral and ventral fins. Smaller juveniles orange brown with narrow bar through eye. Occasionally lie on side, mimicking dead leaves.



BATAVIA SPADEFISH

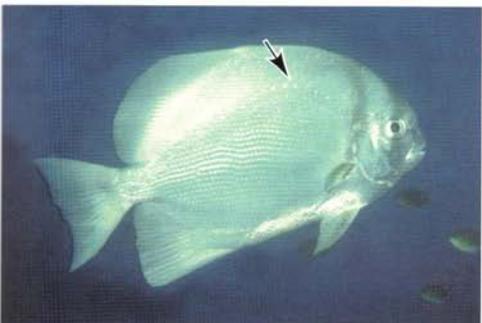
Platax batavianus

SIZE: to 50 cm (20 in.)

Spadefishes - Ehippidae

ID: Silvery; black eye bar and faint broad bar from nape through pectoral fins; **scattered dark spots often on belly**; older adults develop hump over eye. Solitary or form groups. Inshore reefs in 5-40 m.

Asian Pacific: Malay Peninsula to Papua New Guinea and N. Australia.



SHORTFIN SPADEFISH

Zabidius novemaculeatus

SIZE: to 45 cm (18 in.)

Spadefishes - Ehippidae

ID: Silver; faint eye bar and second faint bar through pectoral fins; **row of pearly white spots just above lateral line**; slight bump between eyes. Usually form groups. Inshore coral reefs, often in turbid water in 2-25 m.

Localized: N. Australia and S. New Guinea.



Batavia Spadefish

SIZE: to 5 cm (2 in.)

ID: **Juvenile** - Intricate pattern of black and white bands cover small body and greatly elongate dorsal, anal and ventral fins.



PINNATE SPADEFISH

Platax pinnatus

SIZE: to 37 cm (15 in.)

Spadefishes - Ehippidae

ID: Silver; black eye bar and a second bar through pectoral and onto ventral fin; **distinctive protruding snout**. Young adults have a single wide dusky bar on rear body. Usually solitary. Coastal reefs and seaward slopes in 2-25 m.

West Pacific: Sumatra in Indonesia to Solomon Is. and Vanuatu. - S.W. Japan to N. Australia and New Caledonia.



Pinnate Spadefish

SIZE: to 37 cm (15 in.)

ID: **Large Juvenile** - With maturity a vague white bar appears on the side beginning behind the pectoral fin; the dorsal and anal fins elongate and become more pointed.



Pinnate Spadefish

SIZE: to 12 cm (5 in.)

ID: **Small Juvenile** - Small juveniles black with brilliant orange-red margin around body and fins; fins have a scalloped outline; swim with an exaggerated motion; the smaller juveniles believed to mimic similar-appearing flatworms.

IDENTIFICATION GROUP 2

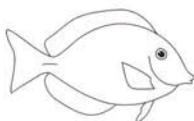
Large Ovals

Surgeonfishes - Moorish Idol - Rabbitfishes - Scats

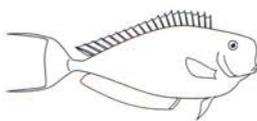
This ID Group consists of fishes that are fairly large, thin-bodied, have a basic oval shape, and are generally colorful.

FAMILY: Surgeonfishes - Acanthuridae

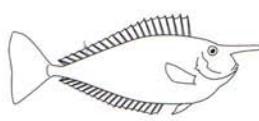
5 Genera – 53 Species Included



Typical Shape



Genus *Naso*



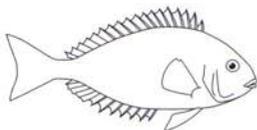
Genus *Naso*

Surgeonfishes have thin, oval bodies, with relatively long continuous dorsal and anal fins, small pointed mouths, and crescent tails. Lateral lines are continuous and scales are not conspicuous. A spine, or pair of spines in a few member of genus *Naso*, as sharp as a surgeon's scalpel and located on each side of the body at the base of the tail, is the origin of this family's common name. The formidable blades, typically housed within fleshy body grooves, are employed when defending territories, establishing social dominance, or as defense against predators. The tail-base spines, formed by modified scales and attached posteriorly by ligaments to the spinal column, cannot be voluntarily erected. The convex forward-pointing blades slip slightly from their grooves each time the tail flexes. If the exposed point happens to snag into something, the spine extends at a right angle from the body.

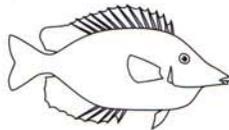
Family members are frequently seen reef inhabitants that often mix in loose aggregations. Most species pick algae from the bottom during the day, while others feed on detritus or consume plankton from the water column.

FAMILY: Rabbitfishes - Siganidae

Single Genus – 21 Species Included



Typical Shape



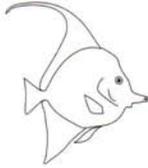
Typical Shape

These moderately sized, oval-shaped fishes have small terminal mouths, continuous lateral lines and venomous dorsal, ventral and anal spines, which can inflict extremely painful wounds. Their common name is derived from a herbaceous diet of sea grasses and algae and a ravenous appetite.

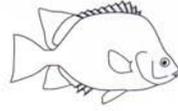
FAMILIES: Moorish Idol - Zanclidae & Scats - Scatophagidae

Single Genus - Single Species

2 Genera - 2 Species Included



Moorish Idol



Scats - Typical Shape

The Moorish Idol is the lone species in its family. Its bold, black, white and yellow bars and a long filamentous dorsal fin make the thin-bodied omnivores one of the most conspicuous and easily recognizable Indo-Pacific reef species. Scats are a small family of bottom-feeding algae and detritus eaters that receive their genus name *Scatophagus* (feces eaters) from their occasional habit of eating human feces.



ORANGEBAND SURGEONFISH

Acanthurus olivaceus

SIZE: to 35 cm (14 in.)

Surgeonfishes - Acanthuridae

ID: Light gray head and forebody, dark gray behind; blue-edged elliptical orange band behind upper gill cover. Solitary or form groups. Over sand bottoms near reefs in 3-45 m.

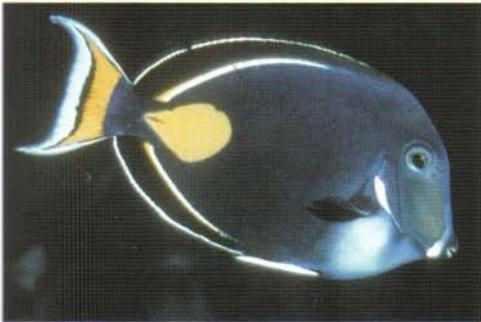
East Indo-Pacific: Coco-Keeling Is. to Indonesia, Philippines, Hawaii and Tuamotu Is. in French Polynesia. - S.W. Japan to Lord Howe I.



Orangeband Surgeonfish - Sub-adult

SIZE: to 8 cm (3 in.)

ID: Juvenile - Entirely yellow, with age they gradually develop an elliptical orange band behind the upper gill cover. Individual shown will soon transform into darker adult.



ACHILLES TANG

Acanthurus achilles

SIZE: to 20 cm (8 in.)

Surgeonfishes - Acanthuridae

ID: Dark to navy blue; large orange teardrop on rear body, white edge on gill cover, and white band at base of dorsal and anal fins, middle of tail orange. Solitary; territorial and aggressive. Surge zone to 4 m.

Central Pacific: W. Caroline Is. in Micronesia, New Caledonia and Hawaii to Pitcairn Is. east of French Polynesia.



WHITE-SPOTTED SURGEONFISH

Acanthurus guttatus

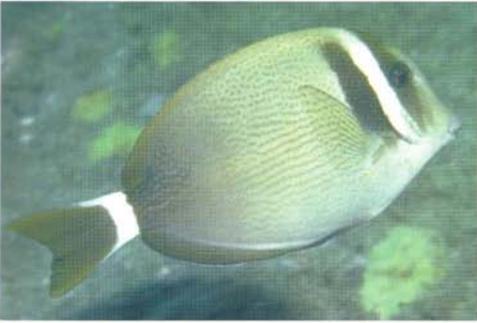
SIZE: to 29 cm (12 in.)

Surgeonfishes - Acanthuridae

ID: Darkish with numerous white spots or streaks rear body; white bar behind eye and behind pectoral fin, yellowish foretail. Usually form groups. Surge zone to 4 m.

Indo-Pacific: Mauritius to Indonesia, Micronesia, Hawaii and French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.

Surgeonfishes



WHITEBAR SURGEONFISH

Acanthurus leucopareius

SIZE: to 20 cm (8 in.)

Surgeonfishes - Acanthuridae

ID: Tan with thin dark stripes; white bar behind eye bordered by two dark bars. Form schools. Rocky, boulder-strewn areas of surge in 0-10 m.

Pacific: Two separate populations. North of equator: S. Japan and Mariana Is. to Hawaii. South of equator: New Caledonia to Pitcairn Is. east of French Polynesia.



MIMIC SURGEONFISH

Acanthurus pyroferus

SIZE: to 25 cm (10 in.)

Surgeonfishes - Acanthuridae

ID: Brown; curving black band from chin to upper edge of gill cover; orange patch above pectoral fin base. Usually solitary. Lagoon and seaward reefs in 4-60 m.

Pacific: Indonesia, Philippines, Micronesia to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



Mimic Surgeonfish - Juvenile

SIZE: to 7 cm (2¾ in.)

ID: Depending on area, mimic one of several *Centropyge* angelfishes to avoid predators. Pictured example mimicking Pearl-Scaled Angelfish, but distinguished by lack of gill cover spine found on all angelfish.



Mimic Surgeonfish - Juvenile

SIZE: to 7 cm (2¾ in.)

ID: Depending on area, mimic one of several *Centropyge* angelfishes to avoid predators. Pictured example mimicking Lemonpeel Angelfish, but distinguished by lack of gill cover spine found on all angelfish.



INDIAN MIMIC SURGEONFISH

Acanthurus tristis

SIZE: to 25 cm (10 in.)

Surgeonfishes - Acanthuridae

ID: Gray face and tan to dark brown body; curving black band from chin to upper gill cover, black patch above pectoral fin base, white margin on tail. Usually solitary. Lagoon and outer reefs in 2-30 m.

Indian Ocean: Seychelles, Chagos, Maldives, Sri Lanka and Andaman Sea to Bali in Indonesia.



Indian Ocean Mimic Surgeonfish - Juvenile

SIZE: to 7 cm (2¾ in.)

ID: Depending on area, mimic one of several *Centropyge* angelfishes to avoid predators. Pictured example mimicking Eibl's Angelfish, but distinguished by lack of gill cover spine found on all angelfish.



WHITECHEEK SURGEONFISH *Acanthurus nigricans*

SIZE: to 21 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Dark brown to navy blue or black, white tail with yellow bar; white patch below eye, white ring behind mouth, yellow line at base of dorsal and anal fins, yellow tail spine. Solitary or form groups. Exposed reefs to 40 m.

East Indo-Pacific: Christmas I. to Indonesia, Micronesia and Hawaii. - S.W. Japan to Great Barrier Reef and New Caledonia.



POWDERBLUE SURGEONFISH *Acanthurus leucosternon*

SIZE: to 38 cm (15 in.) Surgeonfishes - Acanthuridae

ID: Black head and blue body, yellow dorsal fin, white ventral anal and tail fins; white patch below mouth extending to pectoral fin. Form large feeding groups. Inshore and outer reefs to 25 m.

Indian Ocean: E. Africa to Sumatra and Bali in Indonesia.



JAPANESE SURGEONFISH *Acanthurus japonicus*

SIZE: to 21 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Yellowish brown to dark blue becomes yellow on extreme rear body; white patch from lips to eye; white tail. Solitary or form small groups. Clear lagoons and outer reef in 2 - 12 m.

Asian Pacific: Sulawesi in Indonesia to Philippines and S.W. Japan.



BLUE-LINED SURGEONFISH *Acanthurus nigroris*

SIZE: to 25 cm (10 in.) Surgeonfishes - Acanthuridae

ID: Dark to pale bluish brown with numerous fine stripes; **dark spot on rear base of dorsal and anal fins.** Solitary or form small groups. Clear lagoons and seaward reefs to 90 m.

Indo-Pacific: Seychelles to Indonesia, Micronesia, Hawaii and French Polynesia, south to Great Barrier Reef.



YELLOWMASK SURGEONFISH *Acanthurus mata*

SIZE: to 50 cm (19 3/4 in.) Surgeonfishes - Acanthuridae

ID: Slender; pale to dark bluish body with numerous blue and dark horizontal lines, upper lip yellowish; yellow band through eye. Groups feed on zooplankton. Inshore (often turbid) and outer reefs in 5 - 25 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



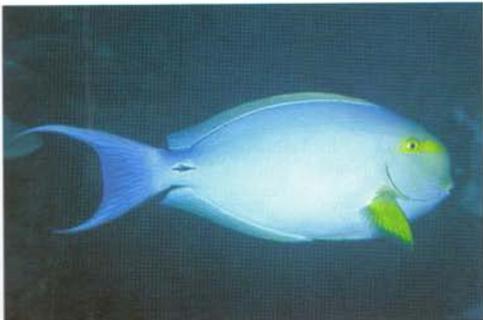
DARK SURGEONFISH *Acanthurus nubilus*

SIZE: to 45 cm (18 in.) Surgeonfishes - Acanthuridae

ID: Bluish with numerous blue spots and wavy lines; **lower head profile rounded** (lower head profile is flattened in most surgeonfishes). Solitary or form small groups; feed on zooplankton. Steep outer reef slopes in 20 - 90 m.

Indo-Pacific: E. Africa to Indonesia, Philippines, New Caledonia and Pitcairn Is. east of French Polynesia.

Surgeonfishes



YELLOWFIN SURGEONFISH *Acanthurus xanthopterus*
SIZE: to 56 cm (22 in.) Surgeonfishes - Acanthuridae

ID: Blue to grayish brown, yellow to yellowish pectoral fins; yellow band passes through eye, frequently a white ring around tail base. The largest surgeonfish. Solitary or form groups. Sandy areas near reefs in 15-90 m.

Indo-Pacific: E. Africa to Mexico. - S.W. Japan to Great Barrier Reef and New Caledonia.



WHITETAIL SURGEONFISH *Acanthurus thompsoni*
SIZE: to 27 cm (10 3/4 in.) Surgeonfishes - Acanthuridae

ID: Dark brown changeable to pale bluish gray, white tail base; may display stripe pattern; body more slender than most surgeonfishes. Form groups; feed on zooplankton high above the bottom. Seaward reef slopes and steep drop-offs in 4-75 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Australia.



YELLOWSTRIPE SURGEONFISH *Acanthurus dussumieri*
SIZE: to 50 cm (20 in.) Surgeonfishes - Acanthuridae

ID: Bluish to brownish body with horizontal line markings; yellow stripe through eye, tail blue with numerous black spots. Solitary or form small groups. Seaward reefs in 9-131 m.

Indo-Pacific: E. Africa to Hawaii and Line Is. in eastern Central Pacific. - S.W. Japan to Great Barrier Reef and Lord Howe I. Absent most of central Pacific.



ROUNDSPOT SURGEONFISH *Acanthurus barieni*
SIZE: to 50 cm (20 in.) Surgeonfishes - Acanthuridae

ID: Brown to yellowish brown with yellow dorsal fin, and white lips; yellow bar behind gill cover, round black spot behind eye. Solitary or in pairs. Clear seaward reefs in 6-50 m.

Indo-Asian Pacific: E. Africa to Solomon Is. - S.W. Japan to Great Barrier Reef.



STRIPED SURGEONFISH *Acanthurus lineatus*
SIZE: to 38 cm (15 in.) Surgeonfishes - Acanthuridae

ID: Gold undercolor with numerous black edged blue stripes and bluish belly, yellow ventral fins; bright blue margins on most fins. Solitary; territorial and aggressive; tail spine venomous. Outer edge of reefs to 6 m.

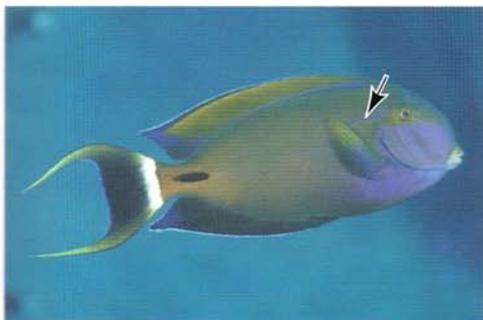
Indo-Pacific: E. Africa to Indonesia, Micronesia and Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



BLACKSTREAK SURGEONFISH *Acanthurus nigricaudus*
SIZE: to 40 cm (16 in.) Surgeonfishes - Acanthuridae

ID: Pale to dark brown or gray; long black bar behind eye to above pectoral fin, thin streak on rear body to tail spine. Solitary or form small groups. Usually over sand near coral or rock outcrops in 3-30 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef.



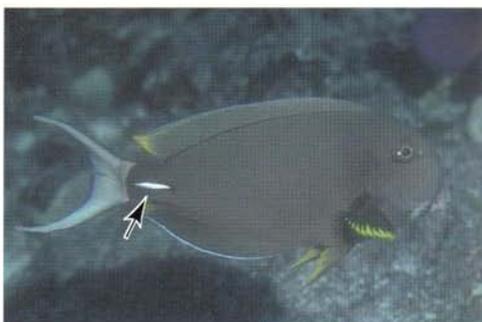
BLACKSPINE SURGEONFISH *Acanthurus fowleri*
 Surgeonfishes - Acanthuridae
SIZE: to 45 cm (18 in.)
ID: Blue head and brownish body; **arc-shaped marking behind head**, heavy black margin encircles tail spine. Solitary or in pairs; often graze on algae growing on sponges. Outer reef areas in clear water in 10-45 m.
Asian Pacific: Indonesia, Philippines and Papua New Guinea.



FINE-LINED SURGEONFISH *Acanthurus grammoptilus*
 Surgeonfishes - Acanthuridae
SIZE: to 35 cm (14 in.)
ID: Brown body with fine wavy blue lines; yellowish band through eye, black margin on tail spine, **bluish cheek with small orange spots**. Solitary or form groups. Inshore reefs in 2-20 m.
Asian Pacific: Indonesia, Philippines, Papua New Guinea and N. Australia.



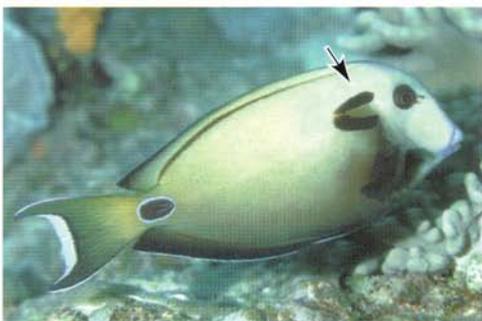
ORANGE-SOCKET SURGEONFISH *Acanthurus auranticavus*
 Surgeonfishes - Acanthuridae
SIZE: to 35 cm (14 in.)
ID: Head brown without spots; body finely lined with purplish blue and dark olive brown stripes; orange ring around eye, orange border encircles tail spine, **dark band behind upper gill cover**. Form small groups. Lagoons and outer reefs to 20 m.
Indo-Pacific: E. Africa to Indonesia, Philippines and Great Barrier Reef.



PALE-LIPPED SURGEONFISH *Acanthurus leucocheilus*
 Surgeonfishes - Acanthuridae
SIZE: to 20 cm (8 in.)
ID: Brown; pale lips and pale band on chin; yellow sub-border on pectoral fin, **white tail spine**. Solitary. Near dropoffs on seaward clearwater reefs in 4-30 m.
Indo-Pacific: E. Africa to Philippines and Line Is. in eastern Central Pacific.



RINGTAIL SURGEONFISH *Acanthurus blochii*
 Surgeonfishes - Acanthuridae
SIZE: to 42 cm (17 in.)
ID: Dark blue to brown; narrow blue margins on dorsal, anal and tail fins, **small orange spot behind eye**, often display white ring around base of tail. Form schools; graze on algae. Lagoon and outer reef in 2-15 m.
Indo-Pacific: E. Africa to Hawaii and Society Is. in French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



TENNENT'S SURGEONFISH *Acanthurus tennenti*
 Surgeonfishes - Acanthuridae
SIZE: to 31 cm (12 1/4 in.)
ID: Brownish gray; **pair of broad black streaks behind upper edge of gill cover**, blue-edged black oval patch around tail spine, margin of tail white. Solitary or form groups. Lagoon and seaward reefs to 40 m.
Indian Ocean: E. Africa to Andaman Sea and Bali in Indonesia.

Surgeonfishes



WHITE-FRECKLED SURGEONFISH *Acanthurus maculiceps*

SIZE: to 20 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Black head with numerous white spots and grayish body; black streak behind upper edge of gill cover, black margin on tail spine, often a white ring around tail base. Solitary or form groups. Outer reefs to 15 m.

East Indo-Pacific: Andaman Sea to Micronesia and Line Is. in E. Central Pacific. - S.W. Japan to Samoa and Great Barrier Reef.

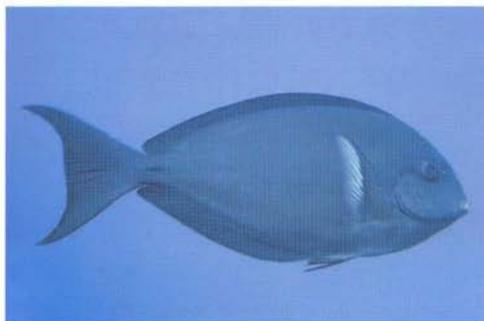


BROWN SURGEONFISH *Acanthurus nigrofuscus*

SIZE: to 21 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Brown with numerous orange spots on head; black spot at rear base of last dorsal and anal fin rays. Common on Indo-Pacific reefs. Form large schools; graze on algae growing on rocky surfaces. Inshore and outer reefs to 20 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



WHITEFIN SURGEONFISH *Acanthurus albipectoralis*

SIZE: to 33 cm (13 in.) Surgeonfishes - Acanthuridae

ID: Dark gray to nearly black, except for white outer half of pectoral fin. Solitary or form small groups; feed on plankton high above bottom. Steep outer reef slopes in 5-20 m.

Southwest Pacific: Great Barrier Reef and Coral Sea to Tonga.



CONVICT TANG *Acanthurus triostegus*

SIZE: to 26 cm (10 1/4 in.) Surgeonfishes - Acanthuridae

ID: White with 5-6 black bars on head and body. Often feed in large groups. Usually on shallow reefs to 5 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia, Hawaii, French Polynesia and Panama. - S.W. Japan to N. & E Australia and Lord Howe I.



PALETTE SURGEONFISH *Paracanthurus hepatus*

SIZE: to 31 cm (12 1/4 in.) Surgeonfishes - Acanthuridae

ID: Brilliant blue head and body with dramatic black hook-shaped marking, yellow tail with black borders. Solitary or form groups. Young hide in branching corals. Usually on clear, current swept outer reefs in 2-25 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia, Samoa, New Caledonia and Line I. - S.W. Japan to Great Barrier Reef.



LONGNOSE TANG *Zebrasoma rostratum*

SIZE: to 21 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Dark brown to nearly black, white tail spine; protruding snout. Solitary or form groups; feed on filamentous algae. Lagoons and seaward reefs in 3-20 m.

East Central Pacific: Line Is. to French Polynesia and east to Pitcairn Is.



BRUSHTAIL TANG

Zebrasoma scopas

SIZE: to 20 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Yellowish brown gradating to nearly black on the tail; dark brush-like patch of bristles in front of white tail spine; tiny pale blue dots or lines on head and body. Solitary or form groups. Lagoons and outer reefs to 50 m.

Indo-Pacific: E. Africa to Indonesia, Philippines and French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



Brushtail Tang - Juvenile

SIZE: 5 cm (2 in.)

ID: Forebody pale golden brown with gold spots on head, rear body dark brown to purple; paired dark bars on body; white tail spine. Solitary. Lagoons and reefs to 50 m.



PACIFIC SAILFIN TANG

Zebrasoma veliferum

SIZE: to 40 cm (16 in.) Surgeonfishes - Acanthuridae

ID: White bars alternate with gray to brown bars, tail white to yellowish to brown without spots; greatly enlarged dorsal and anal fins are dark gray to brown with pale bands. Solitary or form groups. Lagoons and outer reefs to 45 m.

Pacific: Indonesia, Microneaia, Hawaii to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



Pacific Sailfin Tang - Juvenile

SIZE: 4 - 7.5 cm (1 1/2 - 3 in.)

ID: Yellowish with alternating dark and pale bars, tail translucent; greatly enlarged dorsal and anal fins yellow with line markings. Solitary. Rocks and coral of lagoons and shallow protected reefs, occasionally in turbid water.



INDIAN SAILFIN TANG

Zebrasoma desjardini

SIZE: to 40 cm (16 in.) Surgeonfishes - Acanthuridae

ID: Generally gray with pattern of bars and spots on sides; enlarged dorsal and anal fins marked with pale lines; tail dark with blue spots. **Juvenile** - Similar, but yellow-gold. Solitary or form groups. Lagoons and outer reefs in 3-30 m.

Indian Ocean: Red Sea and E. Africa to Andaman Sea and N. Sumatra in Indonesia.



YELLOW TANG

Zebrasoma flavescens

SIZE: to 20 cm (8 in.)

Surgeonfishes - Acanthuridae

ID: Bright yellow with white tail spine; occasionally have a white horizontal line along middle of body. Solitary or form loose groups. Rich coral areas in lagoons and outer reef slopes in 2-46 m.

Northwest and Central Pacific: S.W. Japan to Mariana Is., Marshall Is., Marcus I., Wake I. and Hawaii.

Surgeonfishes



LINED BRISTLETOOTH

Ctenochaetus striatus

SIZE: to 26 cm (10 in.) Surgeonfishes - Acanthuridae

ID: Dark brown with numerous orange spots on head and blue lines on body; may display a small black spot at rear base of dorsal fin. Solitary or form groups; one of most abundant reef fishes. Lagoon and seaward reefs to 35 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia and French Polynesia. - S.W. Japan to Great Barrier Reef.



BLUELIPPED BRISTLETOOTH

Ctenochaetus cyanocheilus

SIZE: to 20 cm (8 in.) Surgeonfishes - Acanthuridae

ID: Orange-brown with blue lines on body and small pale yellowish spots on head, blue lips; **narrow yellow ring around eye.** Solitary or form groups; graze on algae. Lagoon and outer reef slopes to 35 m.

West Pacific: Indonesia to Samoa. - S. Japan to N. Australia.



HAWAIIAN BRISTLETOOTH

Ctenochaetus hawaiiensis

SIZE: to 25 cm (10 in.) Surgeonfishes - Acanthuridae

ID: Dark olive-brown with numerous thin pale greenish stripes covering head, body, dorsal and anal fins. Solitary. Seaward rock and coral reefs in 10 - 45 m.

Central Pacific: Palau and Mariana Is. in Micronesia to Hawaii and French Polynesia.



Lined Bristletooth - Juvenile

SIZE: 3-7 cm (1 - 2 3/4 in.)

ID: Brilliant blue with gold stripes; blue spot at base of rear dorsal fin.



Bluelipped Bristletooth - Juvenile

SIZE: to 6 cm (2 1/2 in.)

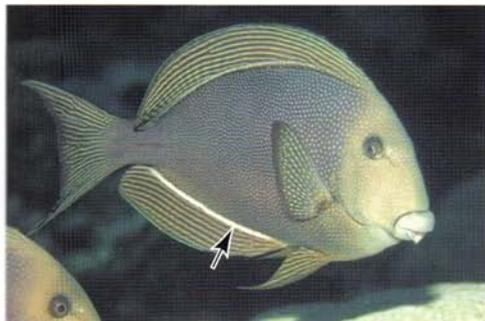
ID: Yellow except for fine blue margins on dorsal, anal and tail fins (similar Yellow Tang [previous page] distinguished by white tail spine); only yellow ring around eye remains after transformation to adult form.



Hawaiian Bristletooth - Juvenile

SIZE: 6 cm (2 1/2 in.)

ID: Orange with dark gray-blue chevron markings. Solitary. Seaward rock and coral reefs in 10 - 45 m.



BLUE-SPOTTED BRISTLETOOTH *Ctenochaetus marginatus*

SIZE: to 22 cm (8 3/4 in.) Surgeonfishes - Acanthuridae

ID: Head pale brown, body bluish with numerous small white spots; **white margin on base of anal fin**, fins finely striped, except pectorals, which have spots. Solitary or form groups. Seaward reef surge zones in 2-10 m. and rarely to 40 m.

Central Pacific: Caroline Is. in Micronesia to Line Is., French Polynesia and Cocos I. off Central America.



TWOSPOT BRISTLETOOTH *Ctenochaetus binotatus*

SIZE: to 22 cm (8 3/4 in.) Surgeonfishes - Acanthuridae

ID: Orangish brown with orange spots on head and pale blue lines on body; **black spot at rear base of dorsal and anal fins**. **Juvenile** - Yellow tail. Usually solitary. Rubble areas of lagoons and seaward reefs in 12-53 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia and French Polynesia. - S.W. Japan to Great Barrier Reef.



GRAY UNICORNFISH *Naso caesioides*

SIZE: to 60 cm (2 ft.) Surgeonfishes - Acanthuridae

ID: Gray to brownish gray, can rapidly change to pattern of indistinct round to vertically elliptical blotches on upper half of body; no horn and no dark margin on gill cover. Solitary or form aggregations. Outer reefs in 6-60 m.

Pacific: Micronesia, Papua New Guinea, New Caledonia to Hawaii and Pitcairn Is. east of French Polynesia.

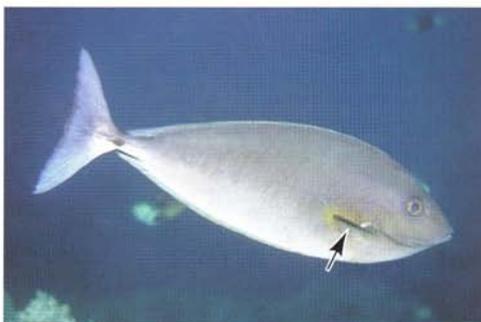


ORANGETIP BRISTLETOOTH *Ctenochaetus tominiensis*

SIZE: to 15 cm (6 in.) Surgeonfishes - Acanthuridae

ID: Brown with paler lower head, outer rear portion of dorsal and anal fins yellow orange, white tail. Solitary or form small groups. Coral-rich areas of lagoons and outer reef slopes in 5-40 m.

Asian Pacific: Bali in Indonesia to Philippines and Palau, south to Vanuatu.



BLUETAIL UNICORNFISH *Naso caeruleacauda*

SIZE: to 30 cm (12 in.) Surgeonfishes - Acanthuridae

ID: Bluish to brownish gray, occasionally yellowish lower body, bluish tail; **black margin on gill cover**; no horn or bump on forehead. Usually form aggregations. Outer reef slopes in 15-45 m.

Asian Pacific: Indonesia, Philippines, Papua New Guinea and Great Barrier Reef.



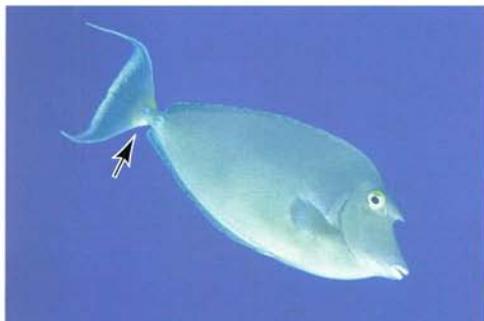
SLENDER UNICORNFISH *Naso lopezi*

SIZE: to 65 cm (2 1/4 ft.) Surgeonfishes - Acanthuridae

ID: Slender body; bluish gray with numerous small round dark gray spots; occasionally displays a large whitish patch around pectoral fin. Form groups; feed on zooplankton along steep outer reef drop-offs in 20-50 m.

East Indo-Pacific: Andaman Sea to Papua New Guinea. - Philippines to Great Barrier Reef.

Surgeonfishes - Moorish Idol



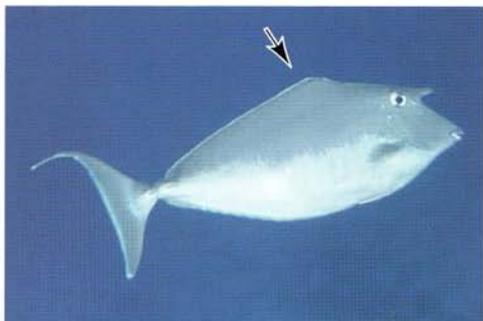
BLUESPINE UNICORNFISH

Naso unicornis

SIZE: to 70 cm (2 1/4 ft.) Surgeonfishes - Acanthuridae

ID: Gray to olive, **tail spines blue**; relatively short forehead horn (does not project past mouth). Solitary or form groups; feed on leafy algae. Lagoons and on outer reefs in 1-80 m.

Indo-Pacific: E. Africa and Red Sea to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



HUMPBACK UNICORNFISH

Naso brachycentron

SIZE: to 60 cm (2 ft.) Surgeonfishes - Acanthuridae

ID: Olive gray; **unusual profile gives "hump-backed" appearance**, adult males develop long horn on forehead, females have only a slight bump. Often form small groups. Seaward reef slopes in 8-30 m.

Indo-Pacific: E. Africa to Society and Marquesas Is. in French Polynesia. - S.W. Japan to N. Australia and Vanuatu.



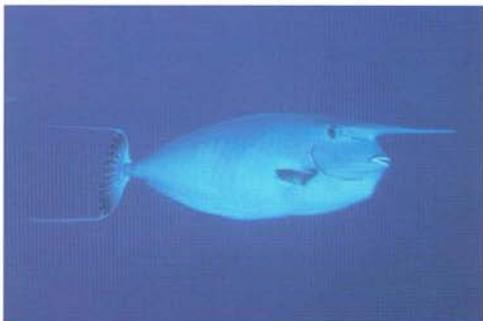
SPOTTED UNICORNFISH

Naso brevirostris

SIZE: to 50 cm (20 in.) Surgeonfishes - Acanthuridae

ID: Brown with dark spots on head and vertical rows of spots and lines on sides, white tail; a broad-based tapering horn on forehead. Usually form small groups. Lagoon and seaward reefs in 4-46 m.

Indo-Pacific: Red Sea and E. Africa to Galapagos Is. off Ecuador. - S.W. Japan to Great Barrier Reef and Lord Howe I.



WHITEMARGIN UNICORNFISH

Naso annulatus

SIZE: to 100 cm (3 1/4 ft.) Surgeonfishes - Acanthuridae

ID: Olive to brown, but capable of rapid change to pale blue-gray, white lips, tail darkish with white fin rays; adults have long tapering horn on forehead. Form small schools. Steep outer reef slopes in 20-60 m.

Indo-Pacific: E. Africa to Indonesia, Micronesia, Hawaii and Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



SLEEK UNICORNFISH

Naso hexacanthus

SIZE: to 75 cm (2 1/2 ft.) Surgeonfishes - Acanthuridae

ID: Brown to bluish gray gradating to yellowish lower side (can quickly change to pale blue); black band marking and black margin on gill cover. Form large schools; feed in mid-water. Dropoffs of seaward reefs in 15-135 m.

Indo-Pacific: E. Africa and Red Sea to Micronesia, Hawaii and Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



BLACKSPINE UNICORNFISH

Naso minor

SIZE: to 19 cm (7 1/2 in.) Surgeonfishes - Acanthuridae

ID: Gray body pales on lower sides, blackish lips, tail spine and its basal plate black, pectoral and tail fins yellowish. Form small to large schools in mid-water. Lagoons and outer reefs in 12-40 m.

Indo-Asian Pacific: E. Africa to Indonesia, Philippines, Papua New Guinea and Great Barrier Reef.



BARRED UNICORNFISH

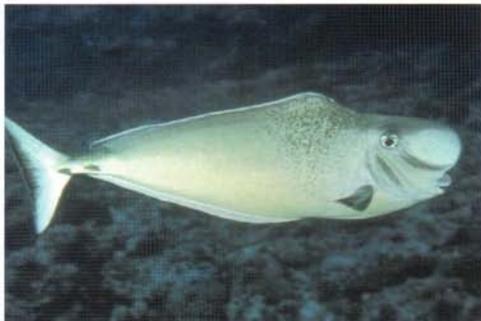
Naso thynnoides

SIZE: to 30 cm (12 in.)

Surgeonfishes - Acanthuridae

ID: Pale gray; wide yellowish stripe from eye to tail, numerous dark bluish gray bars on sides, irregular spots on head. Form groups. Lagoons and outer reefs in 2-30 m.

Indo-West Pacific: E. Africa to Indonesia, Micronesia, Gilbert and Solomon Is. and N. Great Barrier Reef, north to S.W. Japan.



HUMPNOSE UNICORNFISH

Naso tuberosus

SIZE: to 60 cm (2 ft.)

Surgeonfishes - Acanthuridae

ID: Gray gradating to pale yellow on lower side; large bulbous snout, and hump on back. Often form small groups. Seaward reefs in 3-20 m.

Indo-West Pacific: E. Africa to Indonesia, Micronesia, Gilbert and Solomon Is. - S.W. Japan to N. Great Barrier Reef and New Caledonia.



BIGNOSE UNICORNFISH

Naso vlamingii

SIZE: to 50 cm (20 in.)

Surgeonfishes - Acanthuridae

ID: Head shades of brown, body brown to blue or gray; blue lips and a blue band in front of eye, blue vertical lines and spots on sides; can rapidly pale or darken colors and markings. Groups feed in mid-water along outer reef slopes in 4-50 m.

Indo-Pacific: E. Africa to Micronesia, Polynesia and Galapagos. - S.W. Japan to S. Great Barrier Reef and New Caledonia.



Bignose Unicornfish - Dark Phase

ID: Head dark brown, body brown to blue with navy blue vertical lines and spots; blue band in front of eye and blue lips displayed in all phases.



ORANGESPINE UNICORNFISH

Naso lituratus

SIZE: to 30 cm (12 in.)

Surgeonfishes - Acanthuridae

ID: Brownish gray, yellowish nape, orange tail spines and anal fin; yellow-edged black area from mouth to eye, broad black band on dorsal fin. Solitary or form small groups. Lagoon and outer reefs to 70 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii, Pitcairn Is. - S.W. Japan to S. Great Barrier Reef and New Caledonia.



MOORISH IDOL

Zanclus cornutus

SIZE: to 16 cm (6 1/4 in.)

Moorish Idol - Zanclidae

ID: Three wide black and two pale yellow bars; yellow saddle marking on long protruding snout; long trailing dorsal fin filament. Solitary, in pairs or groups; feed primarily on sponges. Lagoons and outer reefs to 180 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii, Polynesia, Mexico and Galapagos. - S.W. Japan to Great Barrier Reef.

Rabbitfishes



BARRED RABBITFISH

Siganus doliatus

SIZE: to 20 cm (8 in.)

Rabbitfishes - Siganidae

ID: Light blue to whitish with intricate pattern of thin yellow and blue lines; pair of dark bands on head and forebody. May hybridize with Virgate Rabbitfish [next]. In pairs or small groups. Inshore and outer reefs in 2-15 m.

West Pacific: Sulawesi in Indonesia to Tonga. - Palau to S. Great Barrier Reef and New Caledonia.



VIRGATE RABBITFISH

Siganus virgatus

SIZE: to 30 cm (12 in.)

Rabbitfishes - Siganidae

ID: Yellow upper body with pale blue spots, white lower body, tail yellow; pair of dark bands on head and forebody. Form small to large groups. Usually inshore coastal reefs, often in turbid water to 12 m.

Indo-Asian Pacific: India to Irian Jaya in E. Indonesia. - S.W. Japan and Philippines to N. Australia.



MASKED RABBITFISH

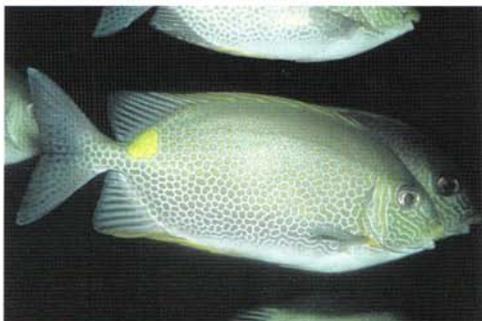
Siganus puellus

SIZE: to 16 cm (6 1/4 in.)

Rabbitfishes - Siganidae

ID: Yellow with wavy broken blue lines arranged vertically on forebody and horizontal on rear; black bar across eye. In pairs; feed on tunicates and sponges. Rich coral areas in 3-12 m.

East Indo-West Pacific: Cocos-Keeling Is. to S. Micronesia and Gilbert Is. - S. China Sea and S.W. Japan to S. Great Barrier Reef and New Caledonia.



GOLDEN RABBITFISH

Siganus guttatus

SIZE: to 35 cm (14 in.)

Rabbitfishes - Siganidae

ID: Pale gray with numerous orangish gold spots; large yellow spot below rear base of dorsal fin. Form small to large schools. Lagoons, coastal reefs and mangroves to 25 m.

East Indo-Asian Pacific: Andaman Sea to Irian Jaya in E. Indonesia, north to S.W. Japan.



LINED RABBITFISH

Siganus lineatus

SIZE: to 35 cm (14 in.)

Rabbitfishes - Siganidae

ID: Pale gray with wavy orange lines, occasionally breaking into spots; large yellow spot below rear base of dorsal fin. Form large schools. Lagoons, coastal reefs and mangroves to 25 m.

Indo-Asian Pacific: Maldives and Sri Lanka to Vanuatu. - Borin Is. in S. Japan to N.W. Australia, S. Great Barrier Reef and New Caledonia.



JAVA RABBITFISH

Siganus javus

SIZE: to 53 cm (21 in.)

Rabbitfishes - Siganidae

ID: Pale gray with numerous bluish white spots and wavy gray lines, yellowish head and dorsal and anal fins; large black blotch on tail. Solitary or form small groups. Coastal reefs, occasionally in brackish water mangroves to 15 m.

Indo-Asian Pacific: Arabian Gulf to Vanuatu. - S. Japan and Philippines to N.E. Australia.



BLACKEYE RABBITFISH

Siganus puelloides

SIZE: to 31 cm (12 1/4 in.)

Rabbitfishes - Siganidae

ID: Pale blue undercolor with close-set yellow spots; **dark marking under chin** and dark area around eye are remnants of a chin to eye band on juveniles. In pairs; feed on algae, tunicates and sponges. Reef flats and along dropoffs to 15 m.

Indian Ocean: Seychelles to Maldives and Andaman Sea.



CORAL RABBITFISH

Siganus coralinus

SIZE: to 25 cm (10 in.)

Rabbitfishes - Siganidae

ID: Yellow-orange undercolor with numerous blue spots; darkish eye bar, may display pattern of dark smudges on back. **Juvenile** - Form small schools in shallow seagrass beds; adults pair in coral-rich areas to 18 m.

Indo-West Pacific: Seychelles to New Caledonia. - S.W. Japan to S. Great Barrier Reef.



HONEYCOMB RABBITFISH

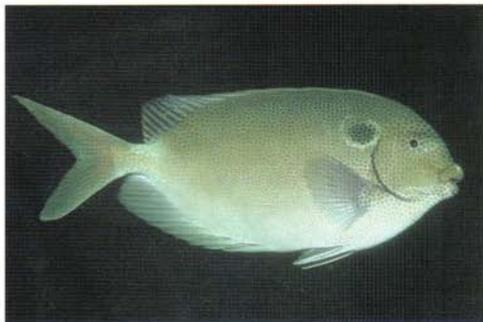
Siganus stellatus

SIZE: to 35 cm (14 in.)

Rabbitfishes - Siganidae

ID: Whitish undercolor with numerous close-set black polygonal spots forming honeycomb network; white edging on rear dorsal, anal and tail fins. In pairs. Lagoon and seaward reefs to 30 m.

Indian Ocean: Red Sea and E. Africa to Andaman Sea and Bali in Indonesia.



GOLD-SPOTTED RABBITFISH

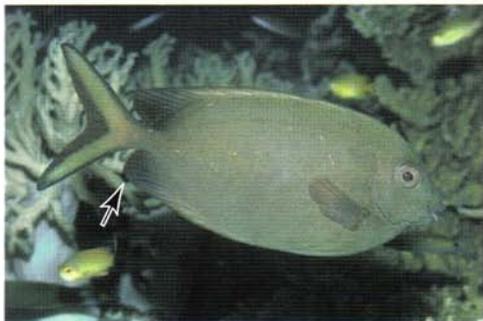
Siganus punctatus

SIZE: to 30 cm (12 in.)

Rabbitfishes - Siganidae

ID: Pale brown to blue with pattern of close-set dark-edged brown to orange spots; may display pale saddle on tail base, large dark spot behind gill cover. In pairs. Coral areas in 1-40 m.

East Indo-West Pacific: Cocos-Keeling Is. to Sumatra in Indonesia, Micronesia and Samoa. - S.W. Japan to W. & E. Australia and New Caledonia.



FINE-SPOTTED RABBITFISH

Siganus punctatissimus

SIZE: to 28 cm (11 in.)

Rabbitfishes - Siganidae

ID: Purplish brown and with numerous close-set pale blue to brown spots, **rear dorsal and anal fins black**; deeply forked tail with dark edging. In pairs; feed on algae. Lagoons and along reef slopes in 3-30m.

West Pacific: Sulawesi in Indonesia, Philippines to Fiji. - S.W. Japan to N.W. Australia and Great Barrier Reef.



RANDALL'S RABBITFISH

Siganus randalli

SIZE: to 25 cm (10 in.)

Rabbitfishes - Siganidae

ID: Brown with a covering of bluish spots; maze-like markings on tail and lower rear body. Form schools. Rubble and sandy areas of coral lagoons and bays to 15 m.

Asian Pacific: Papua New Guinea to Solomon Is. - Chuuk, Pohnpei, Kosrae and Guam in Micronesia.

Rabbitfishes - Scats



FORKTAIL RABBITFISH

Siganus argenteus

SIZE: to 42 cm (17 in.)

Rabbitfishes - Siganidae

ID: Blue to bluish gray with numerous small yellow spots and lines (change to mottled pattern when resting on bottom); **deeply forked tail**. Usually form groups. Juveniles inshore, adults prefer outer reef slopes to 40 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



DUSKY RABBITFISH

Siganus fuscescens

SIZE: to 32 cm (12 3/4 in.)

Rabbitfishes - Siganidae

ID: Gray to bluish gray with numerous small gold spots; **slightly lunate tail**. Form feeding schools over grass beds at high tide, retreat to deeper lagoons at low tide. Coastal reefs, inner reefs of deep lagoons and sea grass beds to 4 m.

East Indo-Asian Pacific: Andaman Sea to Vanuatu and E. Micronesia. - S.W. Japan to W. & E. Australia and New Caledonia.



WHITE-SPOTTED RABBITFISH

Siganus canaliculatus

SIZE: to 29 cm (12 in.)

Rabbitfishes - Siganidae

ID: Greenish to yellow-brown with numerous bluish white spots (change to mottled pattern when resting on bottom); often dark spot behind upper gill opening. Form aggregations. Most common on seagrass flats to 4 m.

Indo-Asian Pacific: Arabian Gulf to S. China Sea and Taiwan, south to Great Barrier Reef.



White-spotted Rabbitfish - Color/Marking Phase

ID: When resting on bottom display mottled pattern of large brown blotches and obscure bars; also covered with numerous tiny pale brown spots and large whitish spots; often dark blotch behind upper gill opening. Forktail [previous] have similar color/markings variations.



SCRIBBLED RABBITFISH

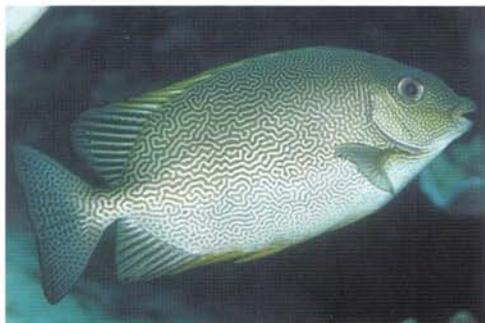
Siganus spinus

SIZE: to 20 cm (8 in.)

Rabbitfishes - Siganidae

ID: Whitish undercolor with labyrinth brown broken bands; fins pale with dark mottling. Smallest member of family. Form small to large schools; graze on algae. Coastal reef flats and outer reefs to 6 m.

Indo-Pacific: India to Society Is. in French Polynesia. - S.W. Japan to S. Great Barrier Reef.



VERMICULATE RABBITFISH

Siganus vermiculatus

SIZE: to 37 cm (15 in.)

Rabbitfishes - Siganidae

ID: Bluish white undercolor with maze of wavy yellowish brown bands; small dark spots on tail with straight margin. Usually form groups. Young occur in shallow brackish areas; adults inhabit sheltered reefs to 15 m.

Indo-West Pacific: India to Indonesia, New Guinea and Fiji. - Philippines and Guam to N. Great Barrier Reef.



ONESPOT RABBITFISH

SIZE: to 24 cm (9 1/2 in.)

ID: Yellow body with elongate black blotch; white head with black band from protruding snout to dorsal fin, black edge on gill cover. Solitary or form small groups. Coral-rich areas, often shelter in staghorn corals, to 30 m.

Asian Pacific: S.W. Japan and Philippines to N.W. Australian Shelf.

Siganus unimaculatus
Rabbitfishes - Siganidae



FOXFACE RABBITFISH

SIZE: to 24 cm (9 1/2 in.)

ID: Yellow body; white head with black band from protruding snout to dorsal fin, black breast marking. Solitary or form groups. Coral-rich areas of lagoons and outer reefs, often shelter in staghorn corals, to 30 m.

West Pacific: Sumatra in Indonesia to Gilbert Is. - Taiwan to Great Barrier Reef and New Caledonia.

Siganus vulpinus
Rabbitfishes - Siganidae



MAGNIFICENT RABBITFISH

SIZE: to 23 cm (9 in.)

ID: White head, blackish upper body becomes pale below, yellow pectoral, anal and tail fins; black band from protruding snout to dorsal fin. In pairs. Coral-rich areas in 2-20 m.

East Indian Ocean: Andaman Sea at Similan Is. and W. Thailand.

Siganus magnificus
Rabbitfishes - Siganidae



BICOLOR RABBITFISH

SIZE: to 22 cm (8 3/4 in.)

ID: Chocolate-brown to rear dorsal and anal fin then abruptly yellow to tail, yellow pectoral fins; protruding snout. In pairs. Coral-rich areas of lagoons and seaward reefs to 8 m.

Localized: Known only from New Caledonia and Fiji.

Siganus uspi
Rabbitfishes - Siganidae



SPOTTED SCAT

SIZE: to 30 cm (12 in.)

ID: Greenish brown to silvery with numerous brown to red-brown spots. Juveniles have alternating light and dark bars. Form aggregations. Sheltered bays, harbors and mangrove creeks to 5 m.

Indo-West Pacific: Arabian Gulf to Indonesia, Philippines, New Guinea and Fiji. - S.W. Japan to Australia.

Scatophagus argus
Scat - Scatophagidae



BANDED SCAT

SIZE: to 28 cm (11 in.)

ID: Silvery; black bars on back form into spots on lower body; sharp fin spines and small scales. Usually form groups. Estuaries, mangrove creeks and lower reaches of streams to 5 m.

Asian Pacific: N. Australia and S. New Guinea to New Caledonia.

Selenotoca multifasciata
Scat - Scatophagidae

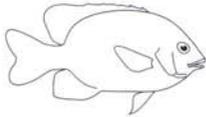
IDENTIFICATION GROUP 3

Small Ovals – Damselﬁshes and Damselﬁshes/Anemonefishes

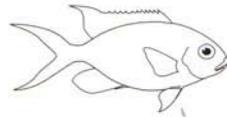
This ID Group consists of small ﬁshes with oval, perch-like proﬁles.

FAMILY: Damselﬁshes - Pomacentridae

18 Genera – 193 Species Included



Typical Shape



Genus *Chromis*

These energetic little ﬁshes are an evident part of every coral reef community. Distinctive visual family characteristics include a single nostril on each side of the snout, rather than the usual two, a continuous dorsal ﬁn, an interrupted lateral line, and a forked or lunate tail.

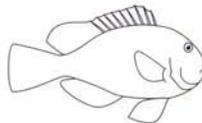
Approximately three-quarters of the 321 known species are found in the Indo-West Paciﬁc. Damselﬁshes display remarkable diversity of habitat preference, feeding habits, and behavior. Coloration is quite variable, ranging from drab hues of brown, gray, and black to brilliant combinations of orange, yellow, and neon-blue. A number of species have juvenile stages characterized by yellow bodies with bright blue stripes crossing their upper heads and backs.

The species in genera *Plectroglyphidodon*, *Hemiglyphidodon* and *Stegastes* are energetic defenders of tiny filamentous algae plots, which they farm as their primary food source. Trespassers, including divers, are aggressively chased and if necessary given pesky nips. The family's plankton feeders include species of *Chromis*, *Dascyllus*, and *Lepidozygus*. Those species classiﬁed in *Abudefduf*, *Chrysiptera*, *Amblyglyphidodon*, *Neopomacentrus* and *Pomachromis* feed on a combination of current-borne plankton, filamentous algae and benthic invertebrates.

All damselfishes are egg layers. Either the male or both partners clear a nest site on the bottom and engage in courtship displays of rapid swimming and ﬁn extension. Males generally turn dark or display broad white blotches during nuptial periods. Courtship and spawning usually occurs around daybreak.

SUBFAMILY: Anemonefishes - Pomacentridae/Amphiprioninae

2 Genera – 19 Species Included



Typical Shape

A subfamily of damselfishes (Amphiprioninae), commonly known as anemonefishes or clownfishes, have developed the ability to live among the stinging tentacles of large sea anemones. About one-third of the anemonefishes inhabit a specific host anemone. However, Clark's Anemonefish, the most wide-ranging member of the subfamily, inhabit all ten known host anemone species.

Anemonefishes live in small social groups with a single large dominant female, a smaller sexually-active male and from two to four even smaller males and juveniles. With the loss of the female, the largest male will change sex and become the harem's new matriarch.

Only three species exhibit a difference in color patterns between the sexes; and juveniles in all but three species resemble adults. Only the Clark's Anemonefish displays a marked difference in color patterns between geographic regions. The diet of most anemonefishes consists of current-borne zooplankton, primarily copepods and larval tunicates, and occasional bits of algae.

Small Ovals – Damselfishes



BENGAL SERGEANT

Abudefduf bengalensis

SIZE: to 17 cm (6 7/8 in.) Damselfishes - Pomacentridae

ID: Whitish to pale ray with 6-7 black bars; only member of genus *Abudefduf* to have **rounded tail lobes**. Coastal and lagoon reefs to 6m.

Indo-Asian Pacific: Pakistan to Great Barrier Reef, north to S.W. Japan.



BLACK-TAIL SERGEANT

Abudefduf lorenzi

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Whitish to yellowish with 5-6 black bars; **large black blotch on base of tail**. Protected coastal areas near shore, frequently next to docks or breakwaters in less than 6 m.

Asian Pacific: Sulawesi and Molucca Is. in Indonesia to Philippines, Papua New Guinea and Solomon Is.



SCISSORTAIL SERGEANT

Abudefduf sextasciatus

SIZE: to 15 cm (6 in.) Damselfishes - Pomacentridae

ID: Whitish with 5 black bars; **bold black borders on tail**. Usually form groups; feed on plankton in mid-water. Coastal and offshore reefs to 15 m.

Indo-Pacific: Red Sea and E. Africa to Rapa I. in S. French Polynesia. - S.W. Japan to Australia.



YELLOWTAIL SERGEANT

Abudefduf notatus

SIZE: to 15 cm (6 in.) Damselfishes - Pomacentridae

ID: Gray with 5 narrow white bars (including band on tail base); yellow tail. Usually form schools, but occasionally solitary. Rocky inshore reefs with moderate to strong wave action to 12 m.

Indo-Asian Pacific: E. Africa to New Britain east of Papua New Guinea, north to S.W. Japan.



BANDED SERGEANT

Abudefduf septemfasciatus

SIZE: to 19 cm (7 1/2 in.) Damselfishes - Pomacentridae

ID: Whitish with 6-7 dark grayish bars, upper first 2-3 bars often intensely dark. Form small groups. Rocky inshore reefs with mild to moderate surge conditions to 3 m.

Indo-Pacific: E. Africa to Line Is. and French Polynesia. - S.W. Japan to Great Barrier Reef.



BLACKSPOT SERGEANT

Abudefduf sordidus

SIZE: to 19 cm (7 1/2 in.) Damselfishes - Pomacentridae

ID: Grayish with 5-6 wide dark gray bars and narrow white bars between; **small black saddle marking on upper base of tail**. Usually form small groups. Rocky shoreline reefs with mild to moderate surge to 3 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Pitcairn Is. east of French Polynesia. - S.W. Japan to E. Australia.

Damselfishes



INDO-PACIFIC SERGEANT

Abudefduf vaiqiensis

SIZE: to 19 cm (7 1/2 in.)

Damselfishes - Pomacentridae

ID: Gray with 5 black to purple or blue bars (including bar at tail base); frequently with yellow back. Usually form feeding groups in mid-water or guard nests inside rocky crevices. Shoreline reefs and outer slopes to 12 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S.W. Japan to Great Barrier Reef.



STAGHORN DAMSEL

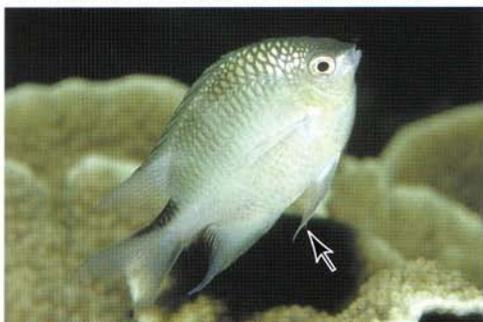
Amblyglyphidodon curacao

SIZE: to 11.5 cm (4 1/2 in.)

Damselfishes - Pomacentridae

ID: Pale greenish to whitish with three wide, dark green bars; mid-body may be yellow. Usually form groups. Commonly shelter among branches of staghorn *Acropora* coral on coastal reefs, lagoons and outer slopes to 15 m.

West Pacific: Singapore to Vanuatu, Samoa and Marshall Is. - S.W. Japan to N.W. Australia and Great Barrier Reef.



BATUNA'S DAMSEL

Amblyglyphidodon batunai

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Whitish often with greenish sheen and silvery reflections on forehead and back, upper edge of tail base blackish and **white ventral fins**. Solitary or form groups. Sheltered within branches of *Acropora* corals, often silty reefs, in 2-10 m.

Indo-Asian Pacific: Maldives to Indonesia, Philippines and N.W. Australia.



GREEN SERGEANT

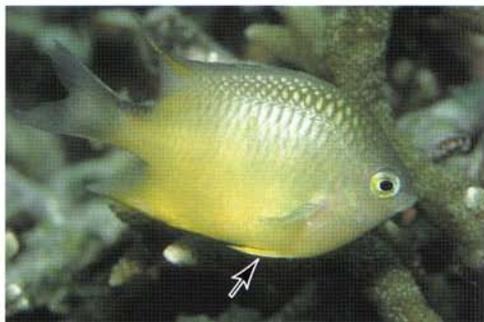
Abudefduf whiteleyi

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Pale green to yellowish green and blue-green with 4-5 narrow black bars; tail and outer edges of dorsal and anal fins blackish. Solitary or form groups. Outer edge of reefs and surge gutters to 5 m.

Southwestern Pacific: Great Barrier Reef, Coral Sea and New Caledonia.



TERNATE DAMSEL

Amblyglyphidodon tematensis

SIZE: to 12 cm (5 in.)

Damselfishes - Pomacentridae

ID: Whitish often with yellow hue and silvery reflections on forehead and back; upper edge of tail base blackish and **yellow ventral fins**. Usually form groups. Shelter within branching corals of protected coastal reefs to 12 m.

Asian Pacific: Indonesia, Philippines, New Guinea, Palau and Solomon Is.



GOLDEN DAMSEL

Amblyglyphidodon aureus

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Bright yellow to gold including fins; blue markings around eye; long pointed rear dorsal and anal fins. Solitary or in pairs. Steep outer reefs slope in 12-35 m.

East Indo-West Pacific: Andaman Sea to Fiji and Marshall Is. in Micronesia. - S.W. Japan to N.W. Australia and New Caledonia.

Small Ovals – Damselfishes



WHITE-BELLY DAMSEL *Amblyglyphidodon leucogaster*

SIZE: to 13 cm (5 in.) Damselfishes - Pomacentridae

ID: Gray with pale scale centers, yellow ventral fins; black edge on dorsal, anal and tail fins. **Fiji Variation** - Pale gray with yellow anal fin and lacks black margin on dorsal and anal. Lagoons and outer reefs in 2-45 m.

West Pacific: N. Sumatra in Indonesia to Vanuatu and Samoa. - S.W. Japan to Great Barrier Reef.



GREEN DAMSEL *Amblyglyphidodon indicus*

SIZE: to 15 cm (6 in.) Damselfishes - Pomacentridae

ID: Green upper body gradating to gray or yellowish below; narrow dark borders on tail. Long considered a variation of White-belly Damselfish, but is an undescribed species. Solitary or form small groups. Near shore and outer reefs in 5-45 m.

Indian Ocean: Red Sea and E. Africa to Andaman Sea.



BLACK-BANDED DEMOISELLE *Amblypomacentrus breviceps*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: White; dark eye bar, pair of black bars on upper half of body joined by dark margin on dorsal fin; slender body, adults have filaments on tail lobes; young are yellow to brown on lower half. Sand or silt bottoms of coastal reefs and lagoons in 2-35 m.

Asian Pacific: Indonesia, Philippines and New Guinea to Solomon Is. and Great Barrier Reef.



BANGGAI DEMOISELLE *Amblypomacentrus clarus*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Similar to Black-banded Demoiselle, [previous], but dark bars more intense and not joined by dark dorsal fin margin, also lack brownish tones and no yellow on young. Usually form small groups. Silty sand bottoms of sheltered bays and harbors in 15-30 m.

Localized: Banggai Is. off central E. Sulawesi, Indonesia.



SILVER-STREAKED DAMSEL *Altrichthys azurelineatus*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Whitish with narrow silver streak on each scale, joining to form narrow lines; black margin on dorsal fin and borders of tail. Adults in pairs; guard broods of 20-100 babies; young form groups. Sheltered reefs coral in 2-8 m.

Localized: Calamian Group north of Palawan in Philippines.



GUARDIAN DAMSEL *Altrichthys curatus*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Whitish to pale green or olive; narrow silver streak on each scale join to form narrow lines. Adults in pairs; guard broods of 20-100 babies; young form groups. Sheltered reefs in 2-10 m.

Localized: Calamian Group and Cuyo Is. north of Palawan in Philippines.



SKUNK ANEMONEFISH *Amphiprion akallopisos*

SIZE: to 10 cm (4 in.)

ID: Pinkish orange; white mid-dorsal stripe from head (but

not lip) to tail. Can be distinguished from similar Orange

Anemonefish [next] by location. Live with Magnificent and

Merten's Anemones in 3-25 m.

Indian Ocean: E. Africa to Sumatra, Java and Bali in Indonesia.



PINK ANEMONEFISH *Amphiprion perideraion*

SIZE: to 10 cm (4 in.)

ID: Pink to orange; narrow white head bar, and white dorsal

stripe from between eyes to tail. Live with 4 anemone species

but most commonly with the Magnificent Anemone on reefs

in 3-20 m.

West Pacific: Indonesia to Marshall Is. in E. Micronesia, - S.W.

Japan to N.W. Australia and New Caledonia.



ORANGE-FINNED ANEMONEFISH *Amphiprion chrysopterus*

SIZE: 17 cm (6 1/4 in.)

ID: Brown to nearly black; pair of white or pale bluish bars,

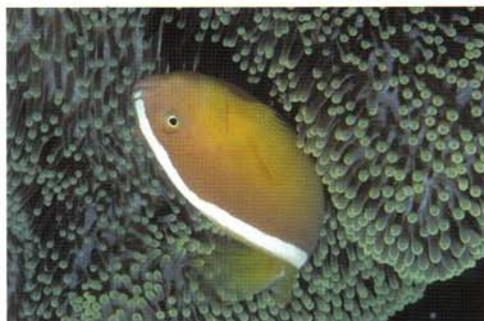
second bar narrow; dorsal and pectoral fins yellow-orange, tail

white, ventral and anal fins yellow-orange except black in

Melanesia. Live with 6 anemone species to 20 m.

West and Central Pacific: Palau in Micronesia, New Guinea,

Great Barrier Reef, Fiji and French Polynesia.



ORANGE ANEMONEFISH *Amphiprion sandaractinus*

SIZE: to 13 cm (5 in.)

ID: Orange; white mid-dorsal stripe running from at least mid-

snout and often lip to tail. Live most commonly with Merten's

Anemone in 3-20 m.

Asian Pacific: Indonesia and W. Australia to Solomon Is.,

north to S.W. Japan.



WHITE-BONNET ANEMONEFISH *Amphiprion leucokranos*

SIZE: to 13 cm (5 in.)

ID: Orange to light brown; broad white patch on forehead

tapers toward dorsal fin and smaller patch at mid-dorsal fin;

single, usually discontinuous bar behind eye. Live with

Leathery, Magnificent and Merten's Anemones in 2-12 m.

Localized: N. Papua New Guinea and Solomon Is.



THREEBAND ANEMONEFISH *Amphiprion trinctatus*

SIZE: to 13 cm (5 in.)

ID: Entirely black to dark brown or with variable amounts of

yellow orange; three white or pale bluish bars. Similar to

Mauritan and Seychelles Anemonefish distinguished by

location. Lagoons and outer reefs in 3-40 m.

Localized: Marshall Is. in Micronesia.

Small Ovals – Damselﬁshes



CLARK'S ANEMONEFISH

Amphiprion clarkii

SIZE: to 12 cm (5 in.)

Damselﬁshes - Pomacentridae

ID: Black to entirely orange with pair of white or pale bluish bars, **second bar wide**; tail white or yellow, usually with abrupt boundary if body dark; other fins variably black to yellow-orange. Live with 10 anemone species to 55 m.

Indo-West Paciﬁc: Persian Gulf to Micronesia, New Caledonia and Fiji. - S.W. Japan to N. Australia (rare).



TOMATO ANEMONEFISH

Amphiprion frenatus

SIZE: to 6 cm (2 1/2 in.)

Damselﬁshes - Pomacentridae

ID: **Male** - Orange to red with a single white or pale bluish head bar; male considerably smaller than female. Live with Bulb-Tentacle Anemone on reefs to 12 m.

Localized: S. China Sea, Malaysian Peninsula, Kalimantan (Borneo) and W. Indonesia, north to S.W. Japan.



RED AND BLACK ANEMONEFISH

Amphiprion melanopus

SIZE: to 13 cm (5 in.)

Damselﬁshes - Pomacentridae

ID: Reddish orange with variable amounts of black on sides; a white to pale bluish bar on head. Young are overall reddish orange with 2-3 narrow white bars. Live with 3 anemone species in lagoons and outer reefs to 10 m.

Paciﬁc: Bali in Indonesia to Marshall Is., Fiji and Society Is. in French Polynesia. - Philippines to Great Barrier Reef.



Clark's Anemonefish - Orange Variation

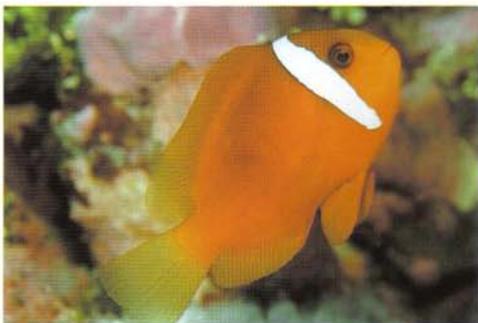
ID: Exhibit variable amounts of yellow-orange. Some are entirely pale, others, such as the form shown, have a dark patch on rear body. Coloration is influenced by the host anemone species.



Tomato Anemonefish - Female

SIZE: to 14 cm (5 1/2 in.)

ID: Primarily black on sides with red snout, breast, belly and fins; white or pale blue head bar. Similar to Northwestern Australian Anemonefish [following] and Black and Red Anemonefish [next] distinguished by location. **Junvenile** - 2-3 white bars.



Red and Black Anemonefish - Variation

ID: Entirely red-orange variation with white head bar occurs in Fiji and French Polynesia and sporadically among populations of those with black on sides. Coral Sea populations often lack the head bar. Similar Tomato anemonefish male [previous] distinguished by location.

Damselfishes



MCCULLOCH'S ANEMONEFISH *Amphiprion mccullochi*

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Dark brown to black with whitish snout and tail; white head bar does not cross over head. Lagoons and rocky shoreline reefs. Live most commonly with Bulb-Tentacle Anemone in 2-45 m.

Localized: Lord Howe and Norfolk Is.



BARRIER REEF ANEMONEFISH *Amphiprion akindynos*

SIZE: to 11.5 cm (4 1/2 in.) Damselfishes - Pomacentridae

ID: Light to dark brown; pair of white or pale bluish bars, head bar often constricted or discontinuous across top of head. Live with at least 6 anemone species in 3-25 m.

Southwestern Pacific: Great Barrier Reef, Coral Sea, New Caledonia and Loyalty Is.



SADDLEBACK ANEMONEFISH *Amphiprion polymnus*

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Varying amounts of black to dark brown and yellow-orange; white head bar and broad somewhat forward slanting mid-body bar; white edging on black tail. Usually with Haddon's Anemone on sandy bottoms in 2-35 m.

Asian Pacific: Indonesia and N. Australia to Solomon Is., north to S.W. Japan.



SEBAE ANEMONEFISH *Amphiprion sebae*

SIZE: to 14 cm (5 1/2 in.) Damselfishes - Pomacentridae

ID: Varying amounts of black to dark brown and yellow-orange; white head bar and broad somewhat forward slanting mid-body bar; all or some yellow on tail. Usually with Haddon's Anemone on sand bottoms in 2-25 m.

Indian Ocean: Arabian Sea to Sumatra and Java in Indonesia.



WIDE-BAND ANEMONEFISH *Amphiprion latezonatus*

SIZE: to 14 cm (5 1/2 in.) Damselfishes - Pomacentridae

ID: Dark brown to black with wide pyramid-shaped white area covering most of side; white bar on head and across tail base. Live most commonly with Leathery Anemone on rocky and inshore reefs in 10-45 m.

Southwestern Pacific: S. Queensland, Australia, N. New South Wales and Lord Howe I.



RED SADDLEBACK ANEMONEFISH *Amphiprion ephippium*

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Red to reddish orange with variable amount of black on rear body (no bars); young entirely red-orange except a white head bar. Live most commonly with Bulb-Tentacle Anemone on shoreline reefs in 2-15 m.

East Indian Ocean: Andaman Sea to Sumatra and Java in Indonesia.

Small Ovals - Damselfishes



FALSE CLOWN ANEMONEFISH *Amphiprion ocellaris*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Orange with 3 white bars, middle bar has forward-projecting bulge; variable amounts of black edging on bars and fins. Shoreline reefs to 15 m.

East Indo-Asian Pacific: Andaman Sea to N.W. Australia, Central Indonesia and Philippines. Rare black variation around Darwin, Australia; brown variation elsewhere.



CLOWN ANEMONEFISH *Amphiprion percula*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Orange with 3 white bars, middle bar has forward-projecting bulge; variable amounts of black edging on bars and fins. Similar False Clown [previous] distinguished by location. Live with 3 anemone species to 15 m.

West Pacific: N. New Guinea, Solomon Is., Great Barrier Reef to Vanuatu.

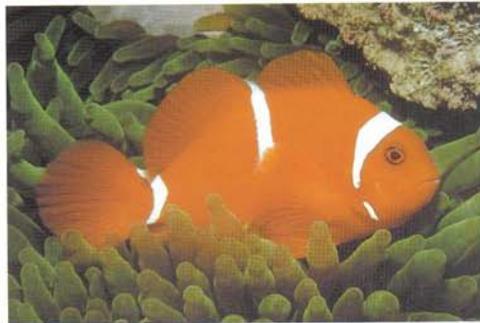


NORTHWEST AUSTRALIAN ANEMONEFISH *Amphiprion rubrocinctus*

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Red to orange with variable amounts of black on head and body; white or pale bluish head bar (in larger females often narrow with poorly defined edges). Similar Tomato and Black and Red Anemonefish [previous] distinguished by location. Live with Bulb-tentacle Anemone on reefs to 8 m.

Localized: W. Australia and the Northern Territory.



SPINECHEEK ANEMONEFISH *Premnas biaculeatus*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Male - Brilliant red to brownish red with 3 narrow white to gray bars; pair of long spines on cheek. Live in Bulb-tentacle Anemone to 18 m.

Asian Pacific: Indonesia and Philippines to New Guinea, N. Great Barrier Reef and Vanuatu.



Spinecheek Anemonefish - Female

SIZE: to 16 cm (6 1/4 in.)

ID: Several times larger than male. Dusky red with 3 narrow white or gray bars; fins are same color as body.



BIG-LIP DAMSEL *Cheiloprion labiatus*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Brown; large swollen lips. Solitary or loose groups. Associated with branching *Acropora* corals on which they feed. Sheltered shoreline reefs to 3 m.

East Indo-Asian Pacific: Andaman Sea to Solomon Is. and Vanuatu. - Philippines to Australia.

Damselfishes



CROSS'S DAMSEL

Neoglyphidodon crossi

SIZE: to 13 cm (5 in.) Damselfishes - Pomacentridae

ID: Dark chocolate brown; golden iris. Solitary or loose groups. Rocky shorelines and sheltered coral reefs of bays and lagoons in 2-12 m.

Localized: Komodo, Flores, Sulawesi, Molucca Is. and W. Irian Jaya in Indonesia.



Cross's Damselfish - Juvenile

SIZE: 3-5 cm (1 1/2 - 2 in.)

ID: Bright red-orange head, upper body and fins, pale mauve lower body; neon-blue stripe extending from snout to rear base of dorsal fin. At a length of about 4-6 cm body gradually darkens to adult coloration.



YELLOWTAIL DAMSEL

Neoglyphidodon nigroris

SIZE: to 11 cm (4 1/4 in.) Damselfishes - Pomacentridae

ID: Brown gradating to yellow on rear body, tail and adjacent fins; **dark bar on gill cover**, black spot on upper pectoral fin base. Solitary or form loose groups. Passes and on outer reef slopes in 2-23 m.

East Indo - West Pacific: Andaman Sea to Great Barrier Reef, Coral Sea and Vanuatu, north to Palau and S.W. Japan.



Yellowtail Damselfish - Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Yellow with pair of black stripes from snout to rear dorsal fin base and eye to tail; black spot on upper pectoral fin base.



CARLSON'S DAMSEL

Neoglyphidodon carlsoni

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Head and body charcoal gray with black scale outlines. **Juveniles** - Similar, but with thin blue streak along back. Solitary. Near entrances of caves and ledges; difficult to detect among shadows. Fringing reefs and lee side of platform reefs in 1-5 m.

Localized: Known only from Fiji.



OCELLATED DAMSEL

Neoglyphidodon bonang

SIZE: to 13 cm (5 in.) Damselfishes - Pomacentridae

ID: Dark brown; blue ocellated spot on mid-dorsal fin base and a second below last dorsal rays; large adults sometimes lose these spots. Among rocks and corals of shoreline reefs, often in turbid conditions to 20 m.

Indo - Asian Pacific: Sri Lanka and Andaman Sea to Sumatra, Java and Komodo I. in Indonesia.

Small Ovals – Damselfishes



BLACK DAMSEL

SIZE: to 15 cm (6 in.) Damselfishes - Pomacentridae

ID: **Jet black**; no distinctive markings. Similar Javanese Damsel [next] has paler coloration. Solitary. Shoreline reefs, lagoons and outer slopes, usually in areas with abundant soft corals to 12 m.

Indo - Asian Pacific: Red Sea and E. Africa to Vanuatu. - S.W. Japan to N. Australia.



JAVANESE DAMSEL

SIZE: to 14 cm (5 1/2 in.) Damselfishes - Pomacentridae

ID: **Gray with black scale outlines and blackish fins.** Similar Black Damsel [previous] has darker coloration. Solitary or form loose groups. Sheltered shoreline reefs, lagoons and reef flats to 4 m.

Asian Pacific: Indonesia, Philippines and Ashmore Reef (Timor Sea).



MULTISPINE DAMSEL

SIZE: to 14 cm (5 1/2 in.) Damselfishes - Pomacentridae

ID: Adult gray-brown with yellowish pectoral fins; sub-adult (pictured) blue with dark scale outlines; yellow belly. Solitary or form groups. Coral and rocky reefs in 2-30 m.

Southwestern Pacific: S. Great Barrier Reef, New Caledonia, Lord Howe and Norfolk Is.



Black Damsel - Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Pale blue with stripe of yellow from snout to rear dorsal fin; blue ventral and anal fins with black frontal margin; thin yellow borders on tail. Once thought to be separate species until intermediates were discovered.



Javanese Damsel - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Thin black body; neon-blue lines on head, middle of dorsal fin and upper tail base; white to yellow bar near mid-body.



Multispine Damsel - Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Bright yellow; neon-blue line connecting snout with blue ocellated spot on middle of dorsal fin, a second smaller blue ocellated spot at base of last dorsal rays. Solitary or form groups. Coral and rocky reefs in 2-30 m.

Damselfishes



BARHEAD DAMSEL *Neoglyphidodon thoracotaeniatus*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: **Eastern Variation** - Blue-gray; three brown bars on head with white between, dark spot on upper pectoral fin base. Solitary or form loose groups. Sheltered reef slopes and deeper lagoons in 15-45 m.

Asian Pacific: Papua New Guinea and Solomon Is.



Barhead Damselfish - Eastern Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Pale mauve with yellow ventral and anal fins; three orange bars on head, blue ocellated spot on dorsal fin base, dark spot on upper pectoral fin base. Generally stay closer to bottom than adults. Sheltered reef slopes and deeper lagoons in 15-45 m.



Barhead Damselfish - Western Variation

SIZE: to 10 cm (4 in.)

ID: Dark gray gradating to nearly black rear body; dark brown head bars with white between; black spot on pectoral fin base. Solitary or loose groups. Sheltered reef slopes and deeper lagoons in 15-45 m.

Asian Pacific: Indonesia, Philippines and Palau.



Barhead Damselfish - Western Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Whitish forebody, dark rear body, yellow ventral fins; three yellowish brown bars on head, blue ocellated spot on dorsal fin base. Generally stay closer to bottom than adults. Sheltered reef slopes and deeper lagoons in 15-45 m.



JOHNSTON DAMSEL *Plectroglyphidodon johnstonianus*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Yellowish tan, head often with bluish hue; broad, black bar across rear body. Solitary or form loose groups. Often associated with *Acropora* and *Pocillopora* branching corals in passages and outer reef slopes in 2-12 m.

Indo - Pacific: E. Africa to Hawaii and Pitcairn Is., east of French Polynesia. - S.W. Japan to E. Australia.



Johnston Damselfish - Pale Variation

ID: Pale yellowish tan body and bluish head; lacks characteristic dark bar across rear body. Apparently a color variant that is relatively rare and found among normal populations.

Small Ovals – Damselishes



PHOENIX DAMSEL *Plectroglyphidodon phoenixensis*

SIZE: to 9 cm (3 1/2 in.) Damselishes - Pomacentridae

ID: Brown with white tail; four narrow white to yellowish bars and black bar on tail base; may display pale ocellated spot on rear dorsal fin. Solitary or form loose groups. Rocky shores and reef flats exposed to vigorous wave action to 8 m.

Indo-Pacific: E. Africa to S.W. Japan to Johnston I, Line Is. and French Polynesia.



BLACKBAR DAMSEL *Plectroglyphidodon dickii*

SIZE: to 11 cm (4 1/4 in.) Damselishes - Pomacentridae

ID: Tan with fine dark scale margins, white rear body and tail, pectoral fins have yellow hue; a narrow black bar across rear body. Solitary or form loose groups. Coral-rich areas of lagoons and outer reefs to 12 m.

Indo-Pacific: E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia.



BRIGHTEYE DAMSEL *Plectroglyphidodon imparipennis*

SIZE: to 6 cm (2 1/2 in.) Damselishes - Pomacentridae

ID: Light blue-gray (nearly white), tail base and tail often yellow, nape and fore-back may be dusky; black bar across middle of eye, iris silvery. Wave-swept shallows to 3 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn Is. east of French Polynesia. - S.W. Japan to E. Australia.



JEWEL DAMSEL *Plectroglyphidodon lacrymatus*

SIZE: to 10 cm (4 in.) Damselishes - Pomacentridae

ID: Brown with black scale margins, often gradating to tan or whitish on rear body and tail; small blue spots scattered on head and body. Solitary or form loose groups. Lagoons and outer reefs in 2-12 m.

Indo-Pacific: E. Africa to Marshall Is. in Micronesia and French Polynesia. - S.W. Japan to E. Australia.



WHITEBAND DAMSEL *Plectroglyphidodon leucozonus*

SIZE: to 10 cm (4 in.) Damselishes - Pomacentridae

ID: Brown with white bar across mid-body; rear edge of gill cover often dark, black spot on upper pectoral fin base. Solitary or form loose groups. Rocky shores and reef flats exposed to wave action to 4 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



LAGOON DAMSEL *Hemiglyphidodon plagiometopon*

SIZE: to 18 cm (7 in.) Damselishes - Pomacentridae

ID: Brown; head occasionally pale gradating to dark rear body; no distinctive markings. "Farm" algae; aggressive toward intruders. Sheltered shoreline reefs and lagoons often in areas of silting and turbid water to 20 m.

East Indo-Asian Pacific: Andaman Sea, Indonesia, Philippines, New Guinea, Solomon Is. and Great Barrier Reef.

Damselfishes



SURGE DEMOISELLE

Chrysiptera brownriggii

SIZE: to 8.5 cm (3 1/4 in.) Damselfishes - Pomacentridae

ID: Yellow to yellow-orange; bright neon-blue stripe extends from snout to below rear dorsal fin, 2 blue and black spots on upper base of tail. Solitary or form groups. Outer reef flats and surge channels to 12 m.

Indo-Pacific: E. Africa to Fiji and French Polynesia. - S.W. Japan to New Caledonia.



ONESPOT DEMOISELLE

Chrysiptera unimaculata

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Usually pale brown to gray forebody with dark rear body, occasionally entirely dark, yellowish pectoral fins; usually dark blotch or spot on rear dorsal fin. Solitary or form small groups. Wave-exposed reef flats to 2 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S.W. Japan to Australia and the Coral Sea.



BLUELINE DEMOISELLE

Chrysiptera caeruleolineata

SIZE: to 5.5 cm (2 1/4 in.) Damselfishes - Pomacentridae

ID: Pale yellow to orange often with purplish tints; bright neon-blue stripe from snout to rear dorsal fin, scattered blue spots on head. Usually form small groups. Rubble and rock outcroppings on steep outer slopes in 30 - 65 m.

West Pacific: Rowley Shoals, 260 km west of N.W. Australia to Samoa, north to S.W. Japan.



Surge Demoiselle - Brown Variation

ID: Dark brown; usually with white bar on mid-body and another at base of tail; yellowish patch or bar on gill cover. Basis for two variations, blue-backed (*leucopomus*) and brown (*amabilis*) is unknown and is apparently not related to size, geographic location or habitat as the two occasionally mix.



Onespot Demoiselle - Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Yellowish; neon-blue stripe on upper head; blue-ringed black ovate spot below mid-dorsal fin; dark spot or spot at rear dorsal fin. Solitary or form loose groups. Shallow reef flats and shoreline reefs exposed to mild surge to 2 m.



Blueline Demoiselle - Rowley Shoals Variation

SIZE: to 5.5 cm (2 1/4 in.)

ID: Dark purplish blue; neon-blue stripe from snout to mid-back; yellow base of tail, adjacent fins and tail. Usually on steep slopes below 40 m.

Localized: Rowley Shoals, 260 km west of N.W. Australia.

Small Ovals – Damselfishes



ROLLAND'S DEMOISELLE

Chrysiptera rollandi

SIZE: to 5 cm (2 in.)

Damselfishes - Pomacentridae

ID: Variable, but most commonly dark bluish upper head and back to mid-body, below bluish gray; all varieties have long white ventral fins. Protected shoreline reefs, lagoons and outer slopes in 2-35 m.

East Indo - Asian Pacific: Andaman Sea to Coral Sea, north to Philippines.



Roland's Demoiselle - East Coral Sea Variation

ID: Yellow snout and nape, wide black diagonal area from lower head to base of front dorsal fin and white behind; long white ventral fins.

Localized: E. Coral Sea including Vanuatu and New Caledonia.



KING DEMOISELLE

Chrysiptera rex

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Upper head and forebody variable from grayish blue to yellow, remainder of body and fins yellowish, ventral fins translucent; often tiny blue speckles on head and body. Solitary or form groups. Surge channels and outer reefs to 6 m.

Asian Pacific: Indonesia and Philippines. - S.W. Japan to Coral Sea.



YELLOW CROWN DEMOISELLE

Chrysiptera sp.

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Light gray to whitish with translucent ventral fins; broad yellow wash from snout to mid-back. Solitary or form loose groups. Reef tops and surge channels of fringing and offshore reefs in 2-8 m. A recently discovered undescribed species.

Localized: N. Sulawesi in Indonesia including Togean and Banggai Is.



TALBOT'S DEMOISELLE

Chrysiptera talboti

SIZE: to 6 cm (2 1/2 in.)

Damselfishes - Pomacentridae

ID: Commonly pale mauve but variable (black in Fiji); bright yellow area from snout to back, black spot on middle of dorsal fin. Solitary or form small groups. Shoreline reefs, lagoons and outer slopes in 6-35 m.

East Indo - West Pacific: Andaman Sea to Coral Sea and Fiji, north to Philippines.



BLEEKER'S DEMOISELLE

Chrysiptera bleekeri

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Blue to purple body with yellow upper head, foreback and dorsal fin; ventral fins often yellow. Similar Yellowfin Damsel [below] distinguished by location. Solitary or form loose groups close to bottom. Sheltered shoreline reefs in 3-12 m.

Localized: Komodo I. to Irian Jaya in E. Indonesia and Philippines.

Damselfishes



YELLOWFIN DEMOISELLE

Chrysiptera flavipinnis

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Blue with yellow mid-dorsal stripe running from snout to tail, belly; anal and **ventral fins yellowish to whitish**. Similar Bleeker's Damselfish [above] distinguished by location. Rubble and dead coral outcroppings in sandy areas in 3-38 m.

Asian Pacific: S.E. Papua New Guinea, Great Barrier Reef and Coral Sea to Vanuatu.



STARCK'S DEMOISELLE

Chrysiptera starcki

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Deep blue with broad zone of yellow from snout to upper foreback and most of dorsal fin, tail translucent yellow, **blue ventral fins**. Solitary or form groups. Rocky outcroppings and crevices and sand channels on outer slopes in 25-52 m.

West Pacific: Coral Sea to Fiji, north to S.W. Japan and Taiwan.



SOUTH SEAS DEVIL

Chrysiptera taupou

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Blue with a few scattered small white spots; **pale patch on upper tail base**, yellow to translucent dorsal, ventral, anal and tail fins, belly yellow or white. **Female** - [pictured] Have black spot below rear dorsal fin. Solitary or groups. Lagoons and outer reefs to 5 m.

West Pacific: N. Great Barrier Reef and Coral Sea to Samoa.



South Seas Devil - Variation

ID: The amount of yellow on the fins of this species is highly variable. This female variation from Fiji.



GOLDTAIL DEMOISELLE

Chrysiptera parasema

SIZE: to 6 cm (2 1/2 in.)

Damselfishes - Pomacentridae

ID: Brilliant blue head to rear body then yellow including adjacent tail and ventral fins. Similar Azure Demoiselle [next] distinguished by yellow belly. Form groups. Shelter within branching corals of protector reefs to 16 m.

Asian Pacific: N.W. Australia, Sulawesi in Indonesia, Philippines to E. Papua New and Solomon Is.



AZURE DEMOISELLE

Chrysiptera hemicyanea

SIZE: to 6 cm (2 1/2 in.)

Damselfishes - Pomacentridae

ID: Brilliant blue over most of head and body, yellow lower body, ventral, anal and tail fins. Similar Goldtail Demoiselle [previous] distinguished by blue belly. Form small groups. Shelter within coral branches of seaward reefs and lagoons in 3-20 m.

Localized: N.W. Australia Shelf reefs and Molucca Is. to W. Irian Jaya in Indonesia.

Small Ovals – Damselfishes



BLUE DEVIL *Chrysiptera cyanea*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Male - Blue with blue dorsal fin and scattered yellow to white spots, bright yellow-orange tail base, ventral fins often yellowish. Lagoons and sheltered shoreline reefs to 10 m.

West Pacific: Indonesia to Marshall Is. in E. Micronesia and Solomon Is. - S.W. Japan to Great Barrier Reef.



Blue Devil - Female

SIZE: to 8 cm (3 in.)

ID: Blue; small black spot at base of rear part of dorsal fin; black band from snout to eye (also present on males). Fiji variation has white to yellowish belly, ventral, anal and tail fins.



TRACEY'S DEMOISELLE *Chrysiptera traceyi*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Dark purplish gray, pale yellowish tail base, ventral fins blackish; ovate black blotch at base of middle of dorsal fin. Solitary or form small groups. Lagoons and outer reefs in 5 - 30 m.

Northwestern Pacific: Micronesia and Philippines.



SPRINGER'S DEMOISELLE *Chrysiptera springeri*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Brilliant blue occasionally intermixed with black speckling. Similar Milne Bay and Sinclair's Demoiselle [next] distinguished by location. Form small groups. Shelter within branching corals of protected reefs and lagoons in 5-30 m.

Localized: Komodo I. to Sulawesi and Irian Jaya in Indonesia and Philippines.



MILNE BAY DEMOISELLE *Chrysiptera cymatilis*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Brilliant blue with lighter blue spotting on head and breast; "mask" from snout to eye, black spot or blotch at base of rear dorsal fin. Form small groups. Shelter within branching corals of protected seaward reefs and lagoons in 3-20 m.

Localized: Milne Bay Province, E. Papua New Guinea.



SINCLAIR'S DEMOISELLE *Chrysiptera sinclairi*

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Brilliant blue with blue streaks and small blotches on lower head and breast. Form small groups. Shelter with branching corals of protected seaward reefs and lagoons to 15 m.

Localized: Bismarck Archipelago, Papua New Guinea from Manus I. to N. Solomon Is.

Damselfishes



GRAY DEMOISELLE

Chrysiptera glauca

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Pale gray with bluish tint and occasional yellow-olive hue on upper half of head and body. Usually form aggregations. Reef flats and near-shore shallows exposed to wave action, to 2 m.

Indo - Pacific: E. Africa to Line Is. and Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



Gray Demoiselle - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: Sky blue; **neon-blue stripe from snout to front of dorsal fin.** Inhabit wave-swept shallows including tidal pools.



BLUESPOT DEMOISELLE

Chrysiptera oxycephala

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Yellowish gray with numerous tiny blue spots; dusky "mask" from upper lip to eye. **Juvenile** - Blue head and upper body, grayish to yellowish below. Form small to large groups. Sheltered shoreline reefs and lagoons in rich coral areas to 16 m.

Asian Pacific: Indonesia, Philippines, Palau and Papua New Guinea.



TWOSPOT DEMOISELLE

Chrysiptera biocellata

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Dark grayish brown with pale tail; white mid-body bar. **Juvenile** - Primarily yellow with blue lines on forehead and upper side and pair of black spots on dorsal fin. Rubble and rock outcroppings in lagoons and shore reefs to 5 m.

Indo - West Pacific: E. Africa to Samoa and Marshall Is. in Micronesia. - S.W. Japan to N. W. Australia and New Caledonia.



KUITERT'S DEMOISELLE

Chrysiptera kuiterti

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: White with 3 black bars: 1) on mid-head; 2) forebody behind ventral fins; 3) rear body behind anal fin. **ventral fins white.** Solitary or in pairs. Flat or sloping sand bottoms around rock or coral outcroppings in 15-30 m.

Localized: Sri Lanka and N. Bali, Indonesia.



THREEBAND DEMOISELLE

Chrysiptera trilineata

SIZE: to 6 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: White with 3 black bars: 1) on mid-head; 2) forebody extending onto rear half of ventral fin; 3) rear body extending onto rear half of anal fin, **ventral fin half black half white.** Solitary or in pairs. Sand bottoms around rock or coral outcroppings in 10-38 m.

West Pacific: S. Japan to Coral Sea, Fiji and Samoa.

Small Ovals – Damselfishes



YELLOW-TAILED DASCYLLUS

Dascyllus flavicaudus

SIZE: to 11 cm (4 1/4 in.)

Damselfishes - Pomacentridae

ID: Medium brown to dark brown, **rear dorsal and tail fins slightly yellow to transparent**; black spot on upper pectoral fin base. Form groups near coral heads or anemones in 3-40 m.

Eastern Central Pacific: Society, Tuamotu and Rapa Is. in French Polynesia, also Pitcairn Is.



THREE-SPOT DASCYLLUS

Dascyllus trimaculatus

SIZE: to 14 cm (5 1/2 in.)

Damselfishes - Pomacentridae

ID: Gray with black scale edges, **fins dark except rear dorsal**; occasionally a suffusion of yellow or orange on head and breast. Usually form groups. Coral and rocky reefs to 55 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia (absent Hawaii and Marquesas Is.)



Three-spot Dascyllus - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Black with large white spot on forehead and another on middle of upper back (both white spots gradually reduced in size with increased growth); occasionally a suffusion of yellow or orange on head and breast. Often near and in anemones, mixing with anemonefishes.



ORANGEFIN DASCYLLUS

Dascyllus auripinnis

SIZE: to 14 cm (5 1/2 in.)

Damselfishes - Pomacentridae

ID: Bright orange ventral, anal, and tail fins, and yellow orange hue on lower body. Usually form groups near anemones. Coral and rocky reefs in 3-45 m.

Localized: Line and Phoenix Is. in Central Pacific.



HUMBUG DASCYLLUS

Dascyllus aruanus

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: White with 3 black bars, **black ventral fin**; large white spot between eyes. Form groups; shelter among branching corals when threatened. Inshore and lagoon reefs to 12 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and E. French Polynesia. - S.W. Japan to Australia.



BLACK-TAILED DASCYLLUS

Dascyllus melanurus

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: White with 3 black bars; large white spot between eyes extends to lips; **black rear half of tail**. Form groups; shelter within branching corals when threatened. Inshore and lagoon reefs to 12 m.

Asian Pacific: Indonesia, Philippines to N. Great Barrier Reef and Coral Sea, also E. Caroline Is. in Micronesia.

Damselfishes



INDIAN DASCYLLUS

Dascyllus carneus

SIZE: to 7 cm (2¾ in.) Damselfishes - Pomacentridae

ID: Tan head, white body with diffuse black bar between; broad black margin on dorsal fin. Form groups; shelter within branching corals when threatened. Inshore and outer reefs in 5-35 m.

Indian Ocean: E. Africa to Andaman Sea and Java Sea in Indonesia.



RETICULATED DASCYLLUS

Dascyllus reticulatus

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: White to tan with diffuse black bar behind head, often rear body and tail dusky; usually small blue spots on head; black margin on dorsal fin. Shelter within branching corals in inshore and outer reefs to 50 m.

Indo-Pacific: Cocos-Keeling Is. to Indonesia, Samoa and Line Is. in eastern Central Pacific.- S.W. Japan to N.W. and E. Australia.



WHITE DAMSEL

Dischistodus perspicillatus

SIZE: to 19 cm (7½ in.) Damselfishes - Pomacentridae

ID: White; highly variable markings include 2 or 3 black to dusky spots, saddles or bars on forehead, mid-back and rear back. Solitary or form groups. Lagoon and inshore reefs with sand, silt and seagrass bottoms to 10 m.

East Indo-West Pacific: Andaman Sea to N.W. Australia, Great Barrier Reef and Vanuatu, north to Palau and Philippines.



White Damselfish - Juvenile

SIZE: 3-5 cm (1¼-2 in.)

ID: Yellowish white with pair of black bars behind head and on mid-body; ventral fins yellow. Rocky outcroppings in sandy or weedy areas.



BLACKVENT DAMSEL

Dischistodus melanotus

SIZE: to 15 cm (6 in.) Damselfishes - Pomacentridae

ID: White with broad brown area on upper head and forebody; dark brown patch on belly; large pale spots on gill cover. Solitary. Lagoon and inshore coral reefs to 10 m.

Asian Pacific: Indonesia to Great Barrier Reef and Coral Sea, north to S.W. Japan.



HONEYHEAD DAMSEL

Dischistodus prosopotaenia

SIZE: to 18 cm (7 in.) Damselfishes - Pomacentridae

ID: Golden brown with wide white bar on mid-body and white tail; black blotch below front dorsal fin. Solitary or form loose groups. Lagoon and inshore reefs with sand and silt bottoms to 12 m.

East Indo-Asian Pacific: Andaman Sea to Great Barrier Reef and Coral Sea, north to Philippines.

Small Ovals – Damselfishes



PALESPOT DAMSEL

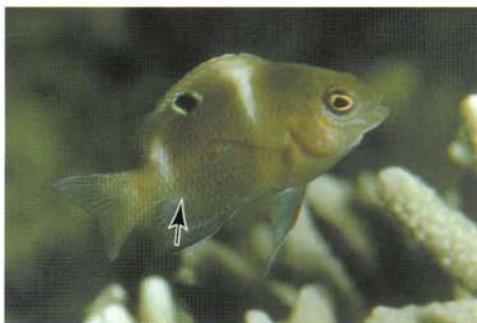
Dischistodus chrysopoecilus

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Dark brown; pale bar across nape, **yellowish line and spots on head**; white spot on middle of upper back. Nest-guarding males (shown here) display light gray head, forebody and tail. Solitary or form loose groups to 5 m.

Asian Pacific: Indonesia and Philippines to Palau, New Guinea and Solomon Is.



Palespot Damselfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Dark brown with **pair of white bars ending near mid-body**; ocellated spot on middle of dorsal fin, blue to yellow streaks and spots on cheek and gill cover. Sand and silt bottoms of sheltered reefs in sea grass or around rocky outcroppings to 5 m.



MONARCH DAMSEL

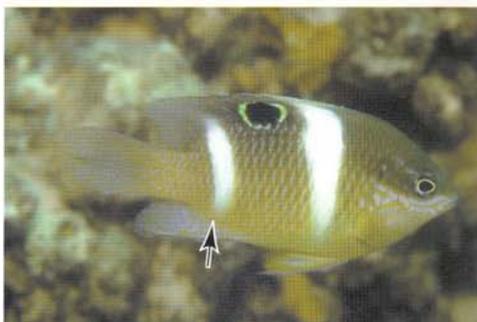
Dischistodus pseudochrysopoecilus

SIZE: to 16 cm (6 1/4 in.)

Damselfishes - Pomacentridae

ID: Dark brown (almost black) with blue streak on each scale; **blue lines and spots on head**, white spot on middle of upper back. Coral thickets interspersed with open sand or dead coral to 5 m.

Asian Pacific: Indonesia, Philippines, New Guinea, Great Barrier Reef and Coral Sea.



Monarch Damselfish - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Brown with pale blue streak on each scale; **pair of white bars on side extends to belly**; large pale ocellated spot on middle of dorsal fin; blue streaks and spots on cheek and gill cover.



BANDED DAMSEL

Dischistodus fasciatus

SIZE: to 13 cm (5 in.)

Damselfishes - Pomacentridae

ID: Pale with dark bar through eye; **wide brown body bar**. Shoreline and lagoon reefs with silt and sand bottoms to 8 m.

Asian Pacific: Indonesia and Philippines.



DARWIN DAMSEL

Dischistodus darwinensis

SIZE: to 13 cm (5 in.)

Damselfishes - Pomacentridae

ID: White with five brown bars; often yellowish upper head and back. Coral or rock outcroppings on sheltered shoreline reefs with silt and sand bottoms to 8 m.

Localized: N.W. Cape, W. Australia to Gulf of Carpentaria, Queensland.

Damselfishes



REEF CHROMIS

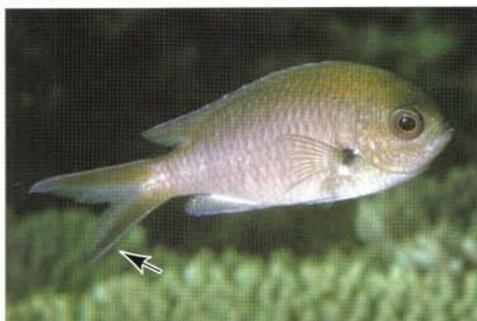
Chromis agilis

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Brown with **bluish area on breast and lower head**; no markings except a prominent black spot covering pectoral fin base. Solitary or form groups. Rocky shore or outer reefs in 3-56 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn Is. - Micronesia to Great Barrier Reef and New Caledonia.



WEST AUSTRALIAN CHROMIS

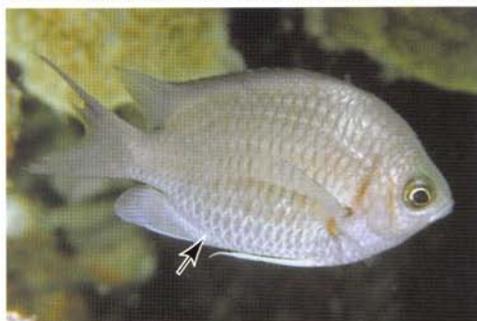
Chromis westaustralis

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Brown; dark borders on tail; black spot at base of pectoral fin, **fine blue margin on dorsal, anal and tail fins**, distinguished from similar Yellow-spotted Chromis [previous] by location. Usually form aggregations, sometimes in the hundreds. Coral or rocky reefs in 2-75 m.

Localized: West Australia from North West Cape south to Albany.



YELLOW-SPECKLED CHROMIS

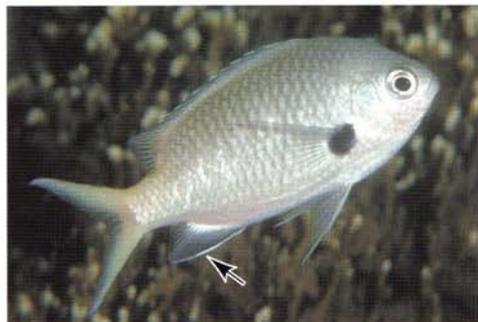
Chromis alpha

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Gray-brown with **bluish lower parts**; small black spot on upper pectoral fin base, may have small yellow spots on body. Solitary or form groups. Commonly on steep outer reef slopes in 18-95 m.

Pacific: Indonesia, Philippines, New Guinea to French Polynesia. - Micronesia to N.W. and N.E. Australia and New Caledonia.



YELLOW-SPOTTED CHROMIS

Chromis flavomaculata

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Gray to brown; prominent black spot covering pectoral fin base; yellow to pale yellow spot at rear base of dorsal fin, **fine blue margins on fins**. Form large schools. Coastal reefs, lagoons and outer slopes in 6-40 m.

Asian Pacific: Two populations - S.W. Japan to Philippines; E. Australia and Coral Sea.



PEARLSPOT CHROMIS

Chromis notata

SIZE: to 16 cm (6 1/4 in.)

Damselfishes - Pomacentridae

ID: Dark gray to brown; **white spot at rear base of dorsal fin**, (distinguished from similar Smokey Chromis [following page] by body coloration) large black spot on pectoral fin base. Usually form groups. Coastal and offshore rocky reefs or scattered coral areas in 2-15 m.

Localized: Islands from Taiwan to S. Japan.



WHITE-SPOTTED CHROMIS

Chromis albomaculata

SIZE: to 18 cm (7 in.)

Damselfishes - Pomacentridae

ID: Brown with pale scale centers; **whitish rear margins of dorsal, anal and tail fins**. Solitary or form groups. Steep slopes and rocky bottoms, mainly on offshore reefs, in 3-56 m.

Localized: Islands of S. and S.W. Japan.

Small Ovals – Damsel-fishes



PHILIPPINES CHROMIS *Chromis scotochloptera*
SIZE: to 15 cm (6 in.) Damsel-fishes - Pomacentridae
ID: Golden brown gradating to bluish gray on lower body; **black margin on front of anal fin and borders of tail.** Usually form groups. Upper edge of drop-offs in 5-20 m.
Asian Pacific: Indonesia and Philippines.



AMBON CHROMIS *Chromis amboinensis*
SIZE: to 7.5 cm (3 in.) Damsel-fishes - Pomacentridae
ID: Light gray-brown; **orange spot on upper pectoral fin base;** dark borders on rear dorsal and anal fins and tail. Solitary or loose groups. Lagoons and outer reefs in 5-65 m.
East Indo - Asian Pacific: Cocos-Keeling Is. to Indonesia, Samoa and Mariana Is. in N. Micronesia.



TERNATE CHROMIS *Chromis tematensis*
SIZE: to 7 cm (2 3/4 in.) Damsel-fishes - Pomacentridae
ID: Brown with silvery **white to bluish lower parts;** black borders on tail. Indian Ocean variation has yellow hue on back. Large schools in areas of *Acropora* corals in 2-15 m.
Indo - West Pacific: E. Africa to Samoa. - S.W. Japan to Great Barrier Reef and New Caledonia.



SMOKY CHROMIS *Chromis fumea*
SIZE: to 13 cm (5 in.) Damsel-fishes - Pomacentridae
ID: Golden brown upper head and body, blue to gray below; **white spot rear base of dorsal fin,** broad dark borders on tail, black spot on pectoral fin base. Form mid-water feeding aggregations over rock or coral reefs in 3-25 m.
Asian Pacific: Malaysian Peninsula, Komodo I. in Indonesia, W. and E. Australia. - S.W. Japan to New Zealand.



BLUE-GREEN CHROMIS *Chromis vindis*
SIZE: to 8 cm (3 in.) Damsel-fishes - Pomacentridae
ID: Blue to pale green with no markings. Form large schools above coral thickets. Coastal reefs and lagoons in 2-20 m.
Indo - Pacific: Red Sea and E. Africa to Marquesas and Society Is. in French Polynesia. - S.W. Japan to Australia.



BLACK-AXIL CHROMIS *Chromis atriptectoralis*
SIZE: to 10 cm (4 in.) Damsel-fishes - Pomacentridae
ID: Blue to pale green; **black spot on axil of pectoral fin.** Form large schools; feed in mid-water above coral thickets. Lagoons and outer reefs in 2-15 m.
Indo - Pacific: Mascarene and Seychelles Is. to Pitcairn Is. east of French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.

Damselfishes



YELLOW-AXIL CHROMIS *Chromis xanthochira*

SIZE: to 14 cm (5 1/2 in.) Damselfishes - Pomacentridae

ID: Bluish to greenish or olive with dark scale margins; blackish borders on tail, **yellow blotch at base of pectoral fin**. Solitary or form groups. Outer reef slopes in 10-48 m.

Asian Pacific: Indonesia and Philippines to Solomon Is. and Great Barrier Reef.



DARKFIN CHROMIS *Chromis atripes*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Light brown with **dark edge on anal and rear dorsal fin**; small dark spot on upper pectoral fin base. Solitary or form loose aggregations. Steep outer reef slopes and deeper patch reefs in 10-35 m.

West Pacific: Indonesia to Marshall Is. and Gilbert Is. - S.W. Japan to N.W. and N.E. Australia and New Caledonia.



MALAYAN CHROMIS *Chromis flavipectoralis*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Golden brown with white rear body including tail and rear dorsal and anal fins, white ventral fin, **yellow-orange base of pectoral fin**. Solitary or form loose aggregations. Shoreline reefs and seaward reef slopes in 2-16 m.

Indian Ocean: Maldives and Andaman Sea to Java Sea in Indonesia.



OVATE CHROMIS *Chromis ovatiformes*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Light yellow-brown with white tail including base; rear dorsal and anal fins whitish or clear; **a small black spot on upper pectoral fin base**. Solitary or form small scattered groups. Outer reefs on coral or rocky bottoms in 10-40 m.

Asian Pacific: N. Kalimantan (Borneo) in Indonesia and Philippines to Izu Is. in S.W. Japan.



PACIFIC HALF-AND-HALF CHROMIS *Chromis iomelas*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Dark brown to black head and forebody, white rear body and tail. Distinguished from Indian Half-and-Half Chromis [next] by location. Solitary or form groups. Outer reef areas in 3-35 m.

Southwestern Pacific: Great Barrier Reef and Coral Sea to Fiji.



INDIAN HALF-AND-HALF CHROMIS *Chromis dimidiata*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Dark brown to black head and forebody, white rear body and tail. Distinguished from Pacific Half-and-Half Chromis [previous] by location. Solitary or form groups. Common near shore and on seaward reef slopes in 2-20 m.

Indian Ocean: Red Sea, E. Africa and Christmas I. to Sumatra and Java in Indonesia.

Small Ovals – Damselﬁshes



BLUE-AXIL CHROMIS

Chromis caudalis

SIZE: to 9 cm (3 1/2 in.)

Damselﬁshes - Pomacentridae

ID: Dark gray to brown with white tail including base, rear dorsal and anal fins whitish or clear; **blue spot covering pectoral fin base**. Solitary or form small groups. Steep outer reef slopes in 20-50 m.

Pacific: Indonesia and Philippines to Line Is. in eastern Central Pacific.



STOUT-BODY CHROMIS

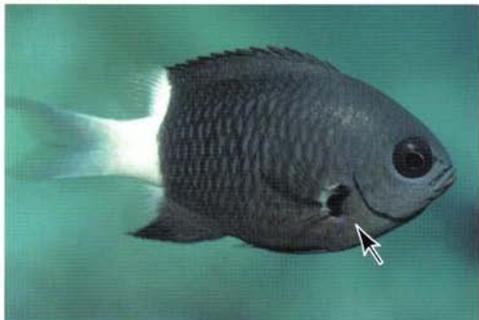
Chromis chrysurus

SIZE: to 16 cm (6 1/4 in.)

Damselﬁshes - Pomacentridae

ID: Brown with darker spot on each scale, white rear body including tail and rear dorsal and anal fins; **pearly stripe below eye**. Groups usually swim well above bottom. Outer coral and rocky reefs in 6-30 m.

Localized: Three populations: Mauritius and Réunion Is. in W. Indian Ocean; Taiwan and S.W. Japan; Coral Sea and Fiji.



BICOLOR CHROMIS

Chromis margaritifer

SIZE: to 8 cm (3 in.)

Damselﬁshes - Pomacentridae

ID: Dark brown to black with white rear body including tail and rear dorsal and anal fins; **black spot covers pectoral fin base**. Solitary or form groups. Coastal and offshore reefs in 2-20 m.

Indo-Pacific: Cocos-Keeling Is. to Micronesia, Line Is. and E. French Polynesia. - S.W. Japan to N.W. and N.E. Australia and New Caledonia.



MIDGET CHROMIS

Chromis acares

SIZE: to 5.5 cm (2 1/4 in.)

Damsel fish - Pomacentridae

ID: Blue-gray to light purple; yellow area from eye to pectoral fin, black rear anal fin, and broad yellow borders on tail. Form aggregations above coral heads, clear lagoons and channels and exposed seaward reefs in 2-37 m.

West and Central Pacific: Mariana Is. in Micronesia to Hawaii, Vanuatu and Society Is. in French Polynesia.



PALE-TAIL CHROMIS

Chromis xanthurus

SIZE: to 15 cm (6 in.)

Damselﬁshes - Pomacentridae

ID: Dark charcoal-gray to blackish with **white tail including base, but not rear dorsal and anal fins**. Usually form groups. Outer reef slopes in 3-40 m.

Indo-Pacific: Cocos-Keeling Is. to Indonesia, Line Is. and Pitcairn Is. east of French Polynesia. - S.W. Japan to N.W. and N.E. Australia and New Caledonia.



Pale-tail Chromis - Juvenile

SIZE: 3-6 cm (1 1/4-2 1/2 in.)

ID: Slate-gray to bright blue with yellow dorsal and anal fins and borders of tail. Often shelter in soft corals.

Damselfishes



DEEP REEF CHROMIS

Chromis delta

SIZE: to 6.5 cm (2½ in.) Damselfishes - Pomacentridae

ID: Gray; white band around base of tail, tail pale to translucent; black spot covers pectoral fin base. Solitary or form small groups. Steep outer reef slopes in 10-80 m.

West Pacific: Indonesia to Fiji. - Taiwan to N. Great Barrier Reef.



ALLEN'S CHROMIS

Pomacentrus alleni

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Cinnamon-brown; white band around tail base, pale tail. Prominent black spot covers pectoral fin base. Solitary or form groups. Coral reefs and shorelines in 11-30 m.

Localized: Taiwan to Bonin Is south of Japan.



GREEN CHROMIS

Chromis cinerascens

SIZE: to 13 cm (5 in.) Damselfishes - Pomacentridae

ID: Dusky gray-green with yellow tints on lower forebody, ventral fins white. Nest-guarding fish sometimes white with large irregular brown blotches. Form large schools. Silty coastal reefs in 3-15 m.

Indo-Asian Pacific: Sri Lanka to N.W. Australia, north to Hong Kong.



WHITE-TAILED CHROMIS

Chromis leucura

SIZE: to 6.5 cm (2½ in.) Damselfishes - Pomacentridae

ID: Dark blue gray with yellow ventral fins and white tail; black edge marking extends from rear dorsal fin to rear anal fin, black spot covers pectoral fin base. Solitary or form small groups. Around deep boulders or scattered coral in 16-119 m.

Indo-Pacific: Mauritius and Réunion Is. to N. Sumatra in Indonesia, S.W. Japan, Hawaii and French Polynesia.



TWINSPOT CHROMIS

Chromis elerae

SIZE: to 7 cm (2¾ in.) Damselfishes - Pomacentridae

ID: Brown; two white spots, one each at base of rear dorsal and anal fin rays. Form small groups. Caves, ledges and black coral thickets, usually on steep slopes in 12-70 m.

Indo-West Pacific: Maldives to Fiji and Guam in Micronesia. - Taiwan to Australia.



SCALY CHROMIS

Chromis lepidolepis

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Gray to brown; dark tips on tail fin lobes, and dark blotch middle edge of anal fin, black tips on dorsal fin rays. Usually form groups. Shoreline reefs, lagoons and outer slopes in 2-20 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. in eastern Central Pacific. - S.W. Japan to N.W. Australia and New Caledonia.

Small Ovals – Damselfishes



LINED CHROMIS

Chromis lineata

SIZE: to 5 cm (2 in.)

Damselfishes - Pomacentridae

ID: Yellowish brown undercolor with blue scale rows forming stripes on body; fine blue margins on dorsal, anal and ventral fins. Usually form groups or aggregations above outer reef slopes in 2-10 m.

Indo - Asian Pacific: Christmas I. to Indonesia and Solomon Is. - Philippines to Great Barrier Reef.



VANDERBILT'S CHROMIS

Chromis vanderbilti

SIZE: to 6 cm (2 1/2 in.)

Damselfishes - Pomacentridae

ID: Yellowish brown undercolor with blue scale rows forming stripes on body; **lower border of tail and anal fin black.** Usually form aggregations above prominent coral heads on exposed seaward reefs in 2-20 m.

Pacific: N.W. Australia to Hawaii and French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



YELLOW CHROMIS

Chromis analis

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Bright yellow to brownish yellow with bright yellow fins. **Dusky band at base of dorsal fin.** Solitary or form large groups. Steep outer reef slopes and rocky bottoms in 10 - 70 m.

West Pacific: Indonesia to Australia and Fiji. - S.W. Japan and Mariana Is. in Micronesia to New Caledonia



Yellow Chromis - Phase

ID: Occasionally display whitish blotches.



DOUBLEBAR CHROMIS

Chromis opercularis

SIZE: to 16 cm (6 1/4 in.)

Damselfishes - Pomacentridae

ID: Charcoal-gray with pale scale centers; narrow black bar on gill cover, and broad black bar from rear upper corner of gill cover to pectoral fin base. Form groups. Outer reef slopes in 10 - 40 m.

Indian Ocean: E. Africa to Andaman Sea and Seribu Is. off Java, Indonesia.



WEBER'S CHROMIS

Chromis weberi

SIZE: to 12 cm (5 in.)

Damselfishes - Pomacentridae

ID: Brown with dark margins on scales; dark brown bar on gill cover, and another from upper edge of gill cover to pectoral fin base; **black tips on tail lobes.** Coastal and outer reefs in 3-25 m.

Indo - Pacific: Red Sea and E. Africa to Line Is. and Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia and New Caledonia.

Damselfishes



BARRIER REEF CHROMIS *Chromis nitida*
SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: White; black bordered brown "skull-cap" runs from snout to mid-dorsal fin, black borders on tail and anal fin. Usually form groups. Lagoons and outer reefs in coral areas in 5-25 m.

Southwestern Pacific: Central and S. Great Barrier Reef, south to Sydney and Lord Howe I.



BLACKBAR CHROMIS *Chromis retrofasciata*
SIZE: to 5.5 cm (2 1/4 in.) Damselfishes - Pomacentridae

ID: Yellowish tan with whitish tail; dark band above eye, black bar across rear edge of body. Solitary or form groups. Stay near bottom of lagoons and on outer reefs in 5-65 m.

West Pacific: Indonesia and Philippines to Great Barrier Reef and Fiji.



SPINY CHROMIS *Acanthochromis polyacanthus*
SIZE: to 13 cm (5 in.) Damselfishes - Pomacentridae

ID: Visual ID nearly impossible due to highly variable color and markings depending on geographic location. Similar in shape to *Chromis* damselfishes, but much larger than most. Usually in pairs. Shoreline, lagoon and outer reefs to 65 m.

Asian Pacific: Indonesia and Philippines to N. Australia and Solomon Is.



Spiny Chromis - Variation

ID: One of only a few fish species lacking a pelagic larval stage, which accounts for the localized range of many variations. Although all variations appear to be physically identical (except for color/markings) recent DNA testing reveals that several species may make up the Spiny Chromis Complex.

Localized: N. Coral Sea off N.E. Australia



Spiny Chromis - Variation

ID: With over 15 different color and marking variation, sometimes separated by only 20-30 km, positive ID can only be established by dorsal fin spines, 17 instead of the 12-14 in other *Chromis*. This variation is one of several at Great Barrier Reef.

Localized: N. Fergusson I. and Goodenough I. in the N. Great Barrier Reef and Papua New Guinea.

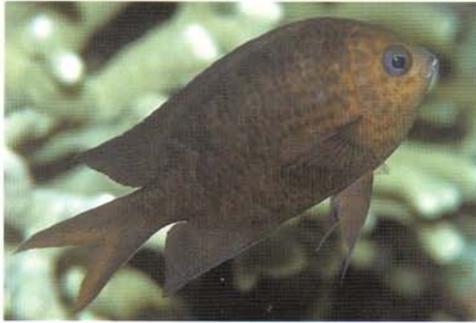


Spiny Chromis - Variation

ID: Pairs guard babies as well as eggs. Two large adults tending many young can be a clue to identification.

Localized: Hardman I. in Milne Bay Province, Papua New Guinea.

Small Ovals – Damselfishes



Spiny Chromis - Variation

ID: This entirely dark variation and similar forms are widespread throughout the Philippines and Indonesia.

Localized: N.W. shelf off W. Australia.



FUSILIER DAMSEL

Lepidozygus tapeinosoma

Damselfishes - Pomacentridae

SIZE: to 9 cm (3 1/2 in.)

ID: Elongate body; greenish brown to yellowish upper body, bluish to pink below; usually a yellow spot at base of last dorsal fin rays. Form feeding aggregations high above bottom. Often in areas of strong current in 5 - 25 m.

Indo-Pacific: E. Africa to Line Is. and E. French Polynesia. - S.W. Japan to Great Barrier Reef and Coral Sea.



GUAM REEF-DAMSEL

Pomachromis guamensis

Damselfishes - Pomacentridae

SIZE: to 5.5 cm (2 1/4 in.)

ID: Grayish head and belly, light blue-green body gradating to yellow rear body and tail; a small black spot on upper pectoral fin base. Feed in groups on plankton 1 - 2 m. above bottom. Exposed seaward reefs in 3 - 33 m.

Localized: Mariana Is. in Micronesia.



RICHARDSON'S REEF-DAMSEL

Pomachromis richardsoni

Damselfishes - Pomacentridae

SIZE: to 5.5 cm (2 1/4 in.)

ID: Light brown upper head gradating to light blue-gray with dark scale margins on upper body; black streak on upper tail base, black tail borders. Form groups. Exposed reefs in 10 - 20 m.

Indo - West Pacific: Reunion and Mauritius Is. to New Caledonia, Fiji and Samoa. - Taiwan and S.W. Japan to Great Barrier Reef.



CHINESE DEMOISELLE

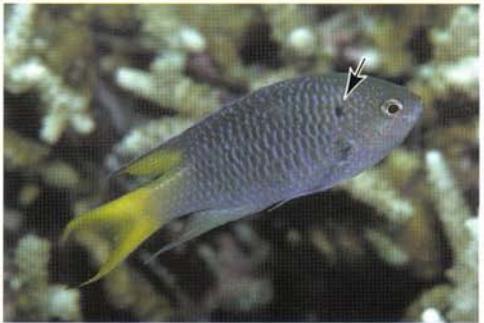
Neopomacentrus bankieri

Damselfishes - Pomacentridae

SIZE: to 7 cm (2 3/4 in.)

ID: Gray with yellow rear dorsal and tail fins; small black spot on upper pectoral fin base. Form schools. Coral and rock outcroppings or debris on sand and silt bottoms in 3 - 12 m.

Asian Pacific: South China, Java Seas and Great Barrier Reef.



YELLOWTAIL DEMOISELLE

Neopomacentrus azysron

Damselfishes - Pomacentridae

SIZE: to 8 cm (3 in.)

ID: Blue-gray with yellow rear dorsal and tail fins; dark "ear" spot, black spot on upper pectoral fin base. Form schools. Deeper surge channels or near ledges to 12 m.

Indo - West Pacific: E. Africa to Melanesia Islands (absent Fiji). - Taiwan to Australia.

Damselfishes



CORAL DEMOISELLE *Neopomacentrus nemurus*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Blue-gray with yellow rear dorsal, anal and tail fins; **small dark "ear" spot**, and another on upper pectoral fin base, blue dot on each scale of tail base. Silty inshore reefs and lagoons to 10 m.

Asian Pacific: Indonesia, Philippines, Palau, New Guinea, Solomon Is. and Vanuatu.



VIOLET DEMOISELLE *Neopomacentrus violascens*

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Brown with yellow tail and rear dorsal fin; **large black "ear" spot**, and another at base of pectoral fin. Inshore reefs on soft bottoms around coral or rock outcroppings, wharf pilings and wreckage in 5-25 m.

Asian Pacific: Indonesia, Philippines, New Guinea, Solomon Is. and Vanuatu.



REGAL DEMOISELLE *Neopomacentrus cyanomos*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Dark brown, rear dorsal fin yellow with yellow or white spot at base, rear tail yellowish; black "ear" spot. Form groups. More common on sheltered inshore reefs, but also found on outer reefs in 5-18 m.

Indo-West Asian: Red Sea and E. Africa to Vanuatu. - S.W. Japan to Australia.



Regal Demoiselle - N. Sumatran Variation

ID: Similar to typical variation, but lacks yellow markings and upper lobe of tail is white. Sheltered inshore reefs around large coral formations or wreckage.

Localized: Northern tip of Sumatra.



FRESHWATER DEMOISELLE *Neopomacentrus taeniurus*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: Brown with dark scale margins and yellow tail with dark borders; yellow edge on rear edge of dorsal and anal fins. Form small groups. Mangroves, lower reaches of freshwater streams and bays with freshwater discharge to 3 m.

Indo-Asian Pacific: E. Africa to Australia and New Guinea.



BROWN DEMOISELLE *Neopomacentrus filamentosus*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Gray-brown, rear dorsal and tail fins abruptly clear; narrow blue margin on most fins. Soft bottoms of lagoons and inshore reefs also around coral and rock outcroppings or wreckage in 5-12 m.

East Indo-Asian Pacific: Andaman Sea to N. Australia and Coral Sea, north to Philippines.

Small Ovals – Damselfishes



SWEETWATER DEMOISELLE *Neopomacentrus aquadulcis*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: Charcoal-gray; fins (except pectorals) have fine blue margins, pectoral fin base dark; broadly rounded tail lobes. Nuptial males display white margin on tail lobes. Form small groups. Tidal reaches of freshwater streams to 2 m.

Localized: S.E. Papua New Guinea from Morobe coast to Milne Bay.



COLIN'S DAMSEL *Pomacentrus colini*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Gray with darker scale outlines and large white patch on upper rear body extending onto dorsal fin. Solitary or form loose groups. Shoreline reefs and lagoons in 10 - 18 m.

Localized: S.E. Papua New Guinea from Port Moresby to Milne Bay.



AMBON DAMSEL *Pomacentrus amboinensis*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: Body color variable according to locality but most commonly yellow; pale pink to blue blotches and markings on lower head. **Juvenile** - Black spot on rear dorsal fin persists on adults in Andaman Sea. Sandy areas in 2 - 40 m.

East Indo - West Pacific: Andaman Sea to Fiji and Marshall Is. in Micronesia. - S.W. Japan to Australia.



SPOTTED-CHEEK DAMSELFISH *Pomacentrus spilotoceps*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Reddish brown to purplish gray; dark "ear" spot, black spot on upper pectoral base, pale orange to pinkish blue spots on gill cover, and sometimes with yellow belly in Marshall Islands. Solitary or loose groups. Sheltered reefs in 2-15 m.

West Pacific: Tonga and Fiji, north to Marshall Is.



WHITESPOT DAMSEL *Pomacentrus albimaculus*

SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae

ID: Gray to brown with dark scale outlines; white saddle on upper tail base. Solitary or form groups. Rocky outcroppings and debris of sandy inshore areas in 10 - 20 m.

Localized: Reliably known only from the Madang region of Papua New Guinea.



KOMODO DAMSEL *Pomacentrus komodoensis*

SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae

ID: Brown with darker scale margins; blue iris with thin inner yellow ring. **Juvenile** - Reddish tinge on back and blue-edged black spot on dorsal fin. Solitary or form groups. Rock or boulder-strewn shorelines to 5 m.

Localized: Known only from Komodo I., Indonesia.

Damselfishes



BROWN DAMSEL

Pomacentrus opisthostigma

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: **E. New Guinea Variation** - Color variable from dark brown to yellowish tan; **most consistent identification feature on all variations is small dark wedge-shaped mark on upper pectoral fin base.** Solitary. Turbid shores with coral in 3-12 m.

Asian Pacific: Philippines and New Guinea. This variation from Milne Bay, Papua New Guinea.



Brown Damsel - W. New Guinea Variation

ID: Brown; whitish blotch on rear dorsal fin, small wedge-shaped dark mark on upper pectoral fin base.

Localized: Misool I., Irian Jaya, Indonesia.



Brown Damsel - Philippine Variation

ID: Purplish brown with whitish tail; wedge-shape mark is extended to form bar across entire pectoral fin base.

Localized: Calamian Is. north of Palawan, Philippines.



BURROUGH'S DAMSEL

Pomacentrus burroughi

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Reddish brown; pale yellow blotch on base of rear dorsal fin, **black "ear" spot.** Solitary or form loose groups. Sheltered shoreline and lagoon reefs, usually in silty areas in 2-16 m.

Asian Pacific: Java in Indonesia to New Guinea and Solomon Is., north to Palau and Philippines.



Burrough's Damsel - E. Sulawesi Variation

ID: Same as typical variation, except lack pale blotch on base of rear dorsal fin.

Localized: Togeang and Banggai Is. off E. Sulawesi, Indonesia.



Burrough's Damsel - Juvenile

SIZE: 3-4.5 cm (1 1/4-1 3/4 in.)

ID: Dark gray, nearly black with royal blue spots on head and scale streaks on back, tail pale to translucent; ocellated spot on rear dorsal fin.

Small Ovals – Damselfishes



COLOMBO DAMSEL

Pomacentrus proteus

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Yellowish brown with blue spots or streaks on most scales; **blue line markings from snout to foreback**, a blue-edged black spot on rear dorsal fin. Solitary or form loose groups. Silty shorelines on mixed rubble and coral reefs in 2-10 m.

Localized: Sri Lanka and Andaman Sea.



Colombo Damselfish - Juvenile

SIZE: 3-6 cm (1 1/4 - 2 1/2 in.)

ID: Blue on head and back gradating to yellow below; neon-blue line markings on upper head and blue spotting below, black spot edged in neon-blue on rear dorsal fin. **Distinguished from similar Miller's Damselfish juvenile [below] by location.**



MILLER'S DAMSEL

Pomacentrus milleri

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Gray with dark scale outlines; fine blue margins on most fins. Solitary or form loose groups. Mainly shoreline reefs with dead coral, rubble or weeds to 6 m.

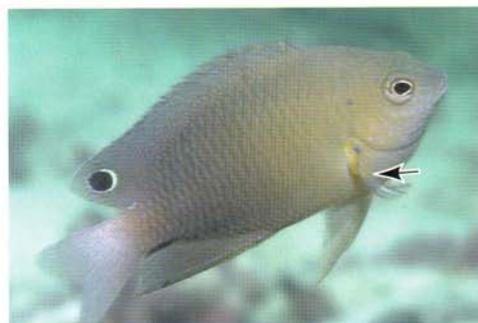
Localized: W. and N. Australia from Perth area to Gulf of Carpentaria.



Miller's Damselfish - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: Bluish upper head and back gradating to yellow below; neon-blue lines on upper head, and blue spotting below, black spot edged in blue on rear dorsal fin. **Distinguished from similar Colombo Damselfish juvenile [above] by location.**



BORNEO DAMSEL

Pomacentrus armillatus

SIZE: to 7 cm (2 3/4 in.)

Damselfishes - Pomacentridae

ID: Purplish brown with whitish tail, and **yellowish pectoral fin**; ocellated spot on rear dorsal, black "ear" spot. Solitary or form small groups. Sheltered shoreline reefs in silty areas with scattered corals in 8-12 m.

Localized: N. Kalimantan (Borneo) in Indonesia and Philippines.



THAI DAMSEL

Pomacentrus polyspinus

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Gray with dark scale outlines; blue lines on snout and forehead, ocellated spot on rear dorsal fin and may display small black "ear" spot. Solitary or form groups. Shoreline and lagoon reefs in 3-10 m.

Localized: E. Andaman Sea.

Damselfishes



BLUE DAMSEL

Pomacentrus pavo

SIZE: to 11 cm (4 1/4 in.) Damselfishes - Pomacentridae

ID: Light blue to light green with vertical dark streaks on scales, rear tail yellowish; scattered blue spots on head, black "ear" spot. Form groups. Shoreline and lagoon reef coral patches surrounded by sand to 16 m.

Indo - Pacific: E. Africa to Micronesia and French Polynesia. - Taiwan to E. Australia.



Blue Damselfish - Andaman Sea Variation

ID: Both variations can vary between light blue to light green (green variation pictured); this variation distinguished by dark margin on dorsal and anal fins; other markings same as typical variation.

Localized: Andaman Sea in E. Indian Ocean.



NEON DAMSEL

Pomacentrus coelestis

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Neon-blue with yellow to whitish (most common) to clear anal and tail fins. Usually form groups. Rubble areas to 12 m.

Indo - Pacific: Sri Lanka and Andaman Sea to Line Is. and French Polynesia, north to S.W. Japan.



ANDAMAN DAMSEL

Pomacentrus allenii

SIZE: to 6.5 cm (2 1/2 in.) Damselfishes - Pomacentridae

ID: Neon-blue with yellow anal fin; blackstreak along lower edge of tail. Usually in groups. Rubble and dead reef areas, both near shore and on outer slopes in 3-15 m.

East Indian Ocean: Andaman Sea and Indian Ocean coasts of Sumatra and Java in Indonesia.



SIMILAR DAMSEL

Pomacentrus similis

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Deep blue (generally lacking brightness of other neon-blue damselfishes), pale yellowish tail and blackish ventral fins. Solitary or form groups. Rubble or sand and silt areas around rock outcroppings or debris to 15 m.

East Indian Ocean: Sri Lanka and Andaman Sea.



GOLDBELLY DAMSEL

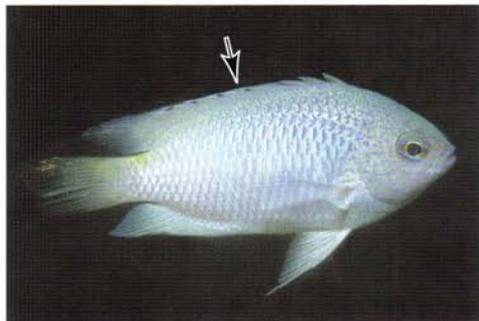
Pomacentrus auriventris

SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae

ID: Neon-blue head and upper body, yellow lower and rear body, anal and tail fins. Solitary or form groups; often mix with Neon Damselfishes [previous]. Mainly on rubble slopes in 2-15 m.

Indo - Asian Pacific: Christmas I. to W. Bali and E. Kalimantan (Borneo) in Indonesia and Caroline Is. in E. Micronesia.

Small Ovals – Damselfishes



MUDDY DAMSEL *Pomacentrus limosus*
SIZE: to 7 cm (2 3/4 in.) Damselfishes - Pomacentridae
ID: Pale gray (nearly white) with scattered blue spots on head and blue streak on most body scales; **black tips on dorsal spines**. Solitary or form loose groups. Coastal and offshore reefs, usually in turbid silty areas in 6-12 m.
Localized: Kimberley coast of far N.W. Australia.



AUSTRALIAN DAMSEL *Pomacentrus australis*
SIZE: to 8 cm (3 in.) Damselfishes - Pomacentridae
ID: Bluish gray upper head and back, remainder light gray to white; vertical blue streak on scales of back. Large Adults are blue on upper body and white below. Solitary or form groups. Coral rock outcroppings in sand or rubble areas in 5-35 m.
Localized: Great Barrier Reef to Sydney, Australia.



BLUE-SPOTTED DAMSEL *Pomacentrus azuremaculatus*
SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae
ID: Light blue-gray (nearly white) with **blue spot or streak on scales of upper forebody**. Solitary or form loose groups. Mainly offshore coral reefs in 5-30 m.
Localized: E. Andaman Sea and Seribu Is. in Java Sea, Indonesia.



REID'S DAMSEL *Pomacentrus reidi*
SIZE: to 11 cm (4 1/4 in.) Damselfishes - Pomacentridae
ID: Light gray; blue spots and streaks on cheek and gill cover, pale blue streak on each body scale, **small black spot on upper pectoral fin base**. Solitary and form groups. Outer reef slopes and deep lagoons in 12-70 m.
Asian Pacific: Indonesia, Philippines, Palau and New Guinea to Great Barrier Reef and Coral Sea.



TWINSPOT DAMSEL *Pomacentrus geminospilus*
SIZE: to 7.5 cm (3 in.) Damselfishes - Pomacentridae
ID: Light blue-gray with darker scale outlines; blue spots and blotches on cheek and gill cover. Solitary or form small groups. Sheltered shoreline reefs and lagoons on sloping silty bottoms around coral and rock outcroppings in 3-15 m.
Localized: N. Kalimantan (Borneo) and Palawan Province, Philippines.



Twinspot Damselfish - Juvenile
SIZE: 3-4.5 cm (1 1/4-1 3/4 in.)
ID: Light blue-gray with pair of ocellated spots; **one on rear dorsal fin and another across upper tail base**.

Damselfishes



PRINCESS DAMSEL

Pomacentrus vaiuli

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Blue with yellow-orange area on upper head and back; blue lines extends from snout onto back and dorsal fin, ocellated spot rear dorsal fin, black "ear" spot. Solitary or form loose aggregations. Lagoons and outer reef slopes in 3-45 m.

West Pacific: Bali in Indonesia to Micronesia and Samoa. - S.W. Japan to Australia.



Princess Damselfish - Bali Variation

ID: Orange-brown; markings same as typical variation.

Localized: Bali in Indonesia.



Princess Damselfish - Rowley Shoals Variation

ID: Lacks yellow-orange area on upper head and body; blue spotting on body scales, black tips on tail fin lobes; other markings same as typical variation.

Localized: Rowley Shoals, 260 km west of N.W. Australia.



OBSCURE DAMSEL

Pomacentrus adelus

SIZE: to 8.5 cm (3 1/4 in.)

Damselfishes - Pomacentridae

ID: Gray-brown; golden iris, ocellated spot on rear of dorsal fin (sometimes absent), dark "ear" spot. **Juvenile** - Gray-blue with blue lines on forehead and spot at rear of dorsal fin. Inshore and outer reefs to 8 m.

East Indo - Asian Pacific: Andaman Sea to Great Barrier Reef and Coral Sea, north to Philippines.



JAVA DAMSEL

Pomacentrus javanicus

SIZE: to 8 cm (3 in.)

Damselfishes - Pomacentridae

ID: Two-tone light yellowish brown upper body and whitish or light gray below; **black tips on dorsal fin spines**. Solitary or form loose groups. Heavily silted reefs of lagoons and outer slopes in 10-18 m.

Localized: Java Sea, presently known only from Seribu Is.



BLACKSPOT DAMSEL

Pomacentrus stigma

SIZE: to 12 cm (5 in.)

Damselfishes - Pomacentridae

ID: Light gray with **black blotch on rear anal fin**. Solitary or loose groups. Shoreline, lagoon and outer reefs in 2-10 m.

Localized: N. Kalimantan (Borneo) in Indonesia and Philippines.

Small Ovals – Damselfishes



SPECKLED DAMSEL

Pomacentrus bankanensis

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Variable, but commonly orange-brown with blue lines from snout onto back, **white tail**; ocellated spot on rear dorsal fin, black "ear" spot and black spot on base of pectoral fin. Shoreline, lagoon and outer reefs to 12 m.

East Indo-West Pacific: Andaman Sea to Vanuatu and Fiji. - S.W. Japan to Australia and Coral Sea.



Speckled Damsel - Variation

ID: Yellow-brown body with only faint blue lines from snout onto back; all variations have white tail, ocellated spot on rear dorsal fin, black "ear" spot and black spot on base of pectoral fin.



Speckled Damsel - Variation

ID: Orange-brown body with only faint blue lines from snout onto back; other markings same as typical variation.



SAKSONO'S DAMSEL

Pomacentrus saksoni

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Pale gray to nearly white; wedge-shaped brownish mark on upper pectoral fin base. Silty coral reefs in 8-15 m.

Localized: Seribu Is. in Java Sea and Sangihe Is. in N. Sulawesi, Indonesia.



WHITETAIL DAMSEL

Pomacentrus chrysurus

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Gray-brown with white tail, often lighter gray on upper back and dorsal fin; upper rim of eye orange. Solitary or form loose groups. Sandy areas of shoreline reefs and lagoons to 3 m.

Indo-West Pacific: Maldives and Sri Lanka to Australia and New Caledonia, north to S.W. Japan.



Whitetail Damsel - Juvenile

SIZE: 3-4.5 cm (1 1/4-1 3/4 in.)

ID: Gray with white tail; broad dorsal stripe of orange from snout to rear dorsal fin, ocellated spot on rear dorsal fin.

Damselfishes



BLACK-MARGINED DAMSEL *Pomacentrus nigromarginatus*

SIZE: to 9 cm (3½ in.) Damselfishes - Pomacentridae

ID: Pale to dark gray, often (but not always) with yellow on rear body, dorsal, anal and tail fins; **black margin on tail**, black spot covering pectoral fin base. Solitary. Steep outer reef slopes around coral and rock outcroppings in 20-50 m.

West Pacific: Philippines and E. Indonesia. - S.W. Japan to N.W. and E. Australia, Coral Sea and Fiji.



PHILIPPINE DAMSEL *Pomacentrus philippinus*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: Dark gray to purple with black scale margins; black spot on pectoral fin base. Solitary or form groups. Passages and outer reefs, usually in shadows of cliffs and ledges to 12 m.

Indo-West Pacific: Maldives to Great Barrier Reef, Coral Sea and Fiji, north to S.W. Japan.



SCALY DAMSEL *Pomacentrus lepidogenys*

SIZE: to 9 cm (3½ in.) Damselfishes - Pomacentridae

ID: Pale blue-gray with yellow dorsal fin and tail base. Variation from Melanesia and Tonga are light gray with little or no yellow. Shoreline, lagoon and outer reefs to 12 m.

East Indo-West Pacific: Andaman Sea to Philippines, Palau, Great Barrier Reef, Coral Sea, Fiji and Tonga.



GOLDBACK DAMSEL *Pomacentrus nigromanus*

SIZE: to 9 cm (3½ in.) Damselfishes - Pomacentridae

ID: Gray head and forebody gradating to bright yellow on rear body, dorsal and tail fins; large black spot on pectoral fin base, **black margin on anal fin**. Solitary or form groups. Lagoons and outer slopes in 6-60 m.

West Pacific: Philippines and E. Indonesia to New Guinea, Solomon Is. and Vanuatu.



IMITATOR DAMSEL *Pomacentrus imitator*

SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae

ID: Gray head and body with black scale margins gradating to tan tail; gold iris, large black spot covering pectoral fin base. Solitary or form groups. Usually seen on outer reef slopes in 2-15 m.

Southwestern Pacific: Coral Sea to Rotuma I. in N. Fiji.



NAGASAKI DAMSEL *Pomacentrus nagasakiensis*

SIZE: to 12 cm (5 in.) Damselfishes - Pomacentridae

ID: Dark gray with black scale margins; numerous blue lines and spots on head; black dorsal spine tips, large black spot on pectoral fin base; **tail whitish with faint wavy lines**. Sandy areas around rock outcroppings in 5-30 m.

Indo-Asian Pacific: Maldives to Palau and Vanuatu. - S.W. Japan to N.W. Australia and New Caledonia.

Small Ovals – Damselfishes



WEDGESPOT DAMSEL *Pomacentrus cuneatus*
SIZE: to 9 cm (3 1/2 in.) Damselfishes - Pomacentridae
ID: Gray with darker scale margins; wedge-shaped black mark at upper pectoral fin base, **blue tips on dorsal spines**, black "ear" spot. Solitary or form loose groups. Shoreline reefs, often in turbid silty areas to 6 m.

Localized: Singapore, Java Sea, Komodo I. and W. Irian Jaya in Indonesia.



BLUESPOT DAMSEL *Pomacentrus grammorhynchus*
SIZE: to 12 cm (4 3/4 in.) Damselfishes - Pomacentridae
ID: Dark brown to yellow-tan; blue to lavender spots and markings on cheek and gill cover; may have dark "ear" spot, **neon-blue saddle spot over upper tail base**. Tail orange in Java Sea. Shoreline and lagoon reefs in 2-12 m.

Asian Pacific: Java Sea, E. Kalimantan (Borneo) to Micronesia and Solomon Is. - Taiwan to N.W. and N.E. Australia.



CHARCOAL DAMSEL *Pomacentrus brachialis*
SIZE: to 10 cm (4 in.) Damselfishes - Pomacentridae
ID: Charcoal-gray to black; large black spot covering base of pectoral fin. Usually feed in groups in mid-water a short distance above reef. Passages and outer reef slopes in 6-40 m.

West Pacific: Indonesia and Philippines to Great Barrier Reef, Coral Sea and Fiji, north to S.W. Japan.



Wedgespot Damselfish - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: Yellow with blue lines and bands from snout to rear dorsal fin ending at an ocellated spot.



Bluespot Damselfish - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: Blue-gray gradating to yellow over most of lower and rear body and adjacent fins; neon-blue lines on upper head and upper back, blue spot on upper tail base. Adults and juveniles usually around branching corals.



ALEXANDER'S DAMSEL

SIZE: to 9 cm (3 1/2 in.)

ID: Gray; black spot covering pectoral fin base, **tips of dorsal spines black**. Usually form groups; a common species. Shoreline, lagoon and outer reefs in 5-30 m.

Asian Pacific: Malaysian Peninsula to Molucca Is. in Indonesia, north to S.W. Japan.

Damselfishes



LEMON DAMSEL

Pomacentrus moluccensis

SIZE: to 7 cm (2 3/4 in.)

Damselfishes - Pomacentridae

ID: Bright yellow; usually display small black spot at upper pectoral fin base, tiny dark "ear" spot, **fine black margin on anal fin**. Usually form groups around live coral patches. Shoreline, lagoon and outer reefs to 14 m.

East Indo - West Pacific: Andaman Sea to Palau and Fiji. - S.W. Japan to N.W. and E. Australia and Coral Sea.



BLUEBACK DAMSEL

Pomacentrus simsiang

SIZE: to 9 cm (3 1/2 in.)

Damselfishes - Pomacentridae

ID: Yellow with blue upper head and back; pale spots on cheek and gill cover, usually blue lines on forehead. Solitary or form groups. Silty shoreline reefs and lagoons around coral and rock outcroppings to 10 m.

Asian Pacific: Indonesia, Philippines, Palau to Solomon Is. and Vanuatu. - S.W. Japan to Australia.



BRACKISH DAMSEL

Pomacentrus taeniometopon

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Dark brown to nearly black with yellowish tail; often with neon-blue markings on upper head and rear dorsal fin. Solitary or form loose groups. Mangrove areas and lower reaches of freshwater streams to 4 m.

Asian Pacific: Indonesia, Philippines and New Guinea, north to Taiwan and S.W. Japan.



Lemon Damselfish - Fiji/Tonga Variation

ID: Often purplish brown rather than plain yellow; markings same as typical variation. Tonga fish are very dark, except for the yellow tail.

Localized: Fiji and Tonga.



Blueback Damselfish - Juvenile

SIZE: 3-4 cm (1 1/4 - 1 1/2 in.)

ID: Yellow with blue upper head and back; neon-blue lines extend from snout to back, a large blue-edged black spot on rear dorsal fin.

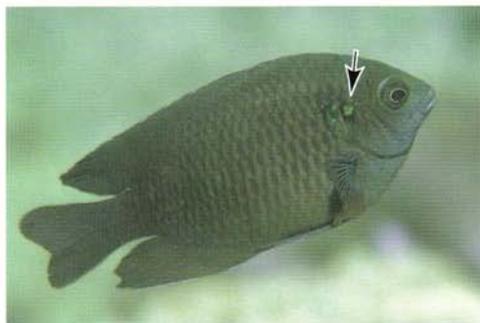


Brackish Damselfish - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: Dark brown to nearly black undercolor with brilliant neon-blue lines and dot rows and orange tail; ocellated spot on rear dorsal fin.

Small Ovals – Damselfishes



SMOKY DAMSEL

Pomacentrus littoralis

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Dark charcoal-gray; green "ear" spot. Variations from Indonesia and Philippines usually have orange upper rim on eye. Solitary or form loose groups. Silty shoreline reefs to 4 m.

Asian Pacific: Malaysian Peninsula, Singapore, Indonesia, Philippines and N. Australia.



WARD'S DAMSEL

Pomacentrus wardi

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Brown with no distinctive markings. Juvenile - Yellow with blue lines on upper head, large ocellated spot on dorsal fin. Solitary or form loose groups. Coastal and offshore reefs to 20 m.

Localized: Great Barrier Reef and E. Australian coast south to Sydney area.



INDONESIAN DAMSEL

Pomacentrus melanochir

SIZE: to 7 cm (2 3/4 in.)

Damselfishes - Pomacentridae

ID: Dark charcoal-gray with variable amounts of blue on scales; small orange spot on upper pectoral fin base. Usually form groups. Shoreline reefs on rubble slopes, typically where currents are periodically strong to 8 m.

Localized: Bali, Flores, Timor and Molucca Is. in Indonesia.



THREESPOT DAMSEL

Pomacentrus tripunctatus

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Dark gray-brown, black spot or saddle on upper tail base. Juvenile - Similar, but with ocellated spot on rear dorsal fin. Usually form groups. Mainly along dead shoreline reefs to 3 m, but typically less than 1 m.

East Indo-Asian Pacific: Sri Lanka and Andaman Sea to Australia and Vanuatu, north to Philippines.



SMITH'S DAMSEL

Pomacentrus smithi

SIZE: to 7 cm (2 3/4 in.)

Damselfishes - Pomacentridae

ID: Light gray with pale yellow wash over nape and upper back and a few blue spots; bright yellow iris. Form large busy schools over patches of branching corals. Silty coastal reefs and lagoons in 2-14 m.

Asian Pacific: Indonesia and Philippines.



GOLDHEAD DAMSEL

Pomacentrus aurifrons

SIZE: to 7 cm (2 3/4 in.)

Damselfishes - Pomacentridae

ID: Yellow on snout, forehead, and base of anterior dorsal spines. Form groups, among sponge, soft corals, and branching hard corals. Coastal reefs in 2-14 m.

Asian Pacific: Papua New Guinea, Solomon Is. and Vanuatu.

Damselfishes



WESTERN GREGORY

Stegastes obreptus

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Brown with dark scale margins; **black spot or blotch on front dorsal fin**. Solitary or form loose groups. Shoreline and lagoon reefs in 2 - 6 m.

East Indo - Asian Pacific: Continental margins from India to N.W. Australia, north to S.W. Japan.



Western Gregory - Juvenile

SIZE: 3 - 4.5 cm (1 1/4 - 1 3/4 in.)

ID: Yellowish gold with narrow dark scale margins; blue spots on head, large black spot with yellow edging on front of dorsal fin.



PACIFIC GREGORY

Stegastes fasciolatus

SIZE: to 11 cm (4 1/4 in.)

Damselfishes - Pomacentridae

ID: Dark brown with blackish scale margins; **dusky stripe below lower lip**, violet streak below eye and scattered violet spots on lower head and body. Rock and coral reefs exposed to surge to 5 m.

Indo-Pacific: E. Africa, Micronesia to Hawaii and Easter I. in eastern Pacific. - S.W. Japan to and Australia and Lord Howe I.



Pacific Gregory - Juvenile

SIZE: 3 - 4.5 cm (1 1/4 - 1 3/4 in.)

ID: Dark gray to brown with yellow tail; yellow-edged black spot on front of dorsal fin. Adults and juveniles variable, depending on location; adults from W. Indian Ocean have yellow rear of body and adjacent fins.



CORAL SEA GREGORY

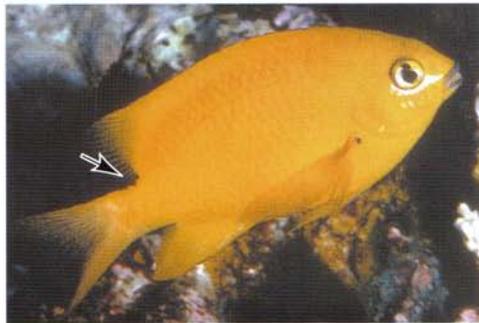
Stegastes gascoynei

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Brown; **dark scale edges form vertical lines on side**, yellow lower body and fins, golden iris; small black spot on upper pectoral fin base. Solitary or form loose groups. Coral and rocky reefs in 2 - 30 m.

Southwestern Pacific: Great Barrier Reef and Coral Sea to N. New Zealand.



GOLDEN GREGORY

Stegastes aureus

SIZE: to 11 cm (4 1/4 in.)

Damselfishes - Pomacentridae

ID: Bright yellowish-orange with dusky blue lips; **black saddle on tail base**, small black spot on upper pectoral fin base. Solitary or form loose groups. Reef flats, lagoons and outer reefs to 5 m.

Pacific: New Caledonia, Gilbert, Samoa, Phoenix, Line and Marquesas Is. in French Polynesia.

Small Ovals – Damselfishes



BLUNTSNOUT GREGORY

Stegastes lividus

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Brown; large black blotch on base of rear dorsal fin and adjacent back (pale-edged black spot in Indian Ocean). Form groups; "farm" algae; aggressive toward intruders. Shelter in dead staghorn corals to 5 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia, New Caledonia and Tonga.



JAPANESE GREGORY

Stegastes altus

SIZE: to 15 cm (6 in.)

Damselfishes - Pomacentridae

ID: Brown with darker scale margins; black blotch on front dorsal fin (not apparent in photo); **lips whitish**. Solitary or form loose groups. Among boulders of shoreline reefs in 5-20 m.

Localized: S. and S.W. Japan.



WHITEBAR GREGORY

Stegastes albifasciatus

SIZE: to 11 cm (4 1/4 in.)

Damselfishes - Pomacentridae

ID: Dark gray to brown; often white bar across rear body, large black and white spot on rear base of dorsal fin, black spot on base of pectoral fin. Solitary or form loose groups. Rubble and boulder areas exposed to wave action to 2 m.

Indo-Pacific: E. Africa to Micronesia, Line Is. and French Polynesia. - S.W. Japan to Australia and New Caledonia.



DUSKY GREGORY

Stegastes nigricans

SIZE: to 14 cm (5 1/2 in.)

Damselfishes - Pomacentridae

ID: Variable from light brown or gray to nearly black; **dark spot at base of rear dorsal fin**, purplish streak below eye. Form groups; "Farm" algae; aggressive toward intruders. Shelter in branching corals to 10 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia, New Caledonia and Tonga.



AUSTRALIAN GREGORY

Stegastes apicalis

SIZE: to 13 cm (5 in.)

Damselfishes - Pomacentridae

ID: Brown with darker scale margins; yellow iris; **red-orange margin on rear dorsal fin and upper lobe of tail**. Usually solitary. Coastal reefs and inner parts of Great Barrier Reef to 5 m.

Localized: Great Barrier Reef and E. Australian coast to Sydney area.



GULF DAMSEL

Pristotis obtusirostris

SIZE: to 10 cm (4 in.)

Damselfishes - Pomacentridae

ID: Light gray to whitish undercolor with blue spot on each scale, occasionally a yellowish to greenish wash on upper head and back. Form groups. Flat sand or rubble bottoms around coral or rock outcroppings in 5-80 m.

Indo-Asian Pacific: Arabian Gulf to S.W. Japan and E. Australia, mainly continental margins.

IDENTIFICATION GROUP 4

Sloping Heads/Tapered Bodies

Snappers - Coral Breams - Emperors - Seabreams

This ID Group consists of fishes that have what can best be described as a basic “fish-like” shape with relatively large mouths and notched tails.

FAMILY: Snappers - Lutjanidae

8 Genera – 36 Species Included

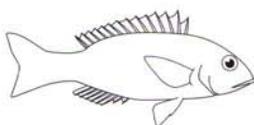


Typical Shape

Snappers are medium-sized, oblong fishes with triangular heads. All have shallow, notched tails, and a single, continuous dorsal fin that is often higher in the front. They also have slightly upturned snouts, large mouths, and prominent canine teeth near the front of both jaws. Most species are active, nocturnal predators that primarily feed on fishes, but they also consume cephalopods, gastropods and crustaceans. The two smaller family members in genus *Pinjalo*, pick drifting zooplankton from the currents. Most snappers inhabit shallow to medium depths; however, a few species live along ledges several hundred feet below the surface.

FAMILY: Coral Breams - Nemipteridae

4 Genera – 25 Species Included

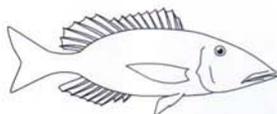


Typical Shape

Coral Breams are small- to medium-sized inhabitants of reefs and surrounding sand and rubble areas. All have small terminal mouths that never extend past the eyes, a single unnotched dorsal fin, and indented or forked tails. Although Coral Breams occasionally form groups, most are solitary. The alert, opportunistic bottom-feeders hover just above the sand between short, aggressive dashes in search of food.

FAMILY: Emperors - Lethrinidae

4 Genera – 26 Species Included



Typical Shape

Emperors, close kin to snappers and sweetlips, are common, medium- to large-sized fishes. Most species inhabit the reef's fringes where they feed primarily on sand-dwelling invertebrates. A few species are nocturnal predators and larger species occasionally feed on fishes. Most members of genus *Lethrinus* have the ability to rapidly switch on and off dark mottled patterns, bars or spots.



HUMPBACK SNAPPER

Lutjanus gibbus

SIZE: to 50 cm (20 in.)

Snappers - Lutjanidae

ID: Shades of red to gray; maroon forked tail with rounded lobes, high arching nape and foreback; orange around base of pectoral fin. Solitary or form schools. Lagoons, passages and outer reef slopes in 1-150 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Line Is. and French Polynesia. - S.W. Japan to Australia and New Caledonia.



RED EMPEROR SNAPPER

Lutjanus sebae

SIZE: to 60 cm (2 ft.)

Snappers - Lutjanidae

ID: **Juvenile/Sub-adult** - White with red-brown mid-body bar; band from lip to nape, 2nd band mid-dorsal fin to lower tail. **Adult** - Solid red. Solitary. Typically deep, sandy bottoms to 100 m. Juveniles associate with sea urchins.

Indo-Asian Pacific: Red Sea and E. Africa to Australia and Papua New Guinea, north to S. Japan.



MALABAR SNAPPER

Lutjanus malabaricus

SIZE: to 100 cm (3 1/4 ft.)

Snappers - Lutjanidae

ID: **Juvenile** - Reddish with narrow dusky stripes; black band from lip through eye to dorsal fin, white-edged black spot covering tail base. **Adult** - Red in deep water, not on reefs. Solitary. Coastal and outer reefs in 10-40 m.

Indo-West Pacific: Arabian Gulf to Palau and Fiji. - Taiwan and S.W. Japan to S.E. Australia.



TIMOR SNAPPER

Lutjanus timorensis

SIZE: to 50 cm (20 in.)

Snappers - Lutjanidae

ID: Red; black spot on base of pectoral fin. Young have diagonal dark bar through eye and pearl-white spot on upper tail base [pictured]. Coastal reef slopes, often on sand with scattered reef or log debris in 10-130 m.

East Indo-West Pacific: Andaman Sea to Samoa, north to Philippines.

Snappers



LONGSPOT SNAPPER

Lutjanus fulviflamma

SIZE: to 35 cm (14 in.)

Snappers - Lutjanidae

ID: Whitish undercolor with **yellow stripes of equal width below lateral line**, yellow tail and anal fin; long oval to rectangular spot on lateral line below mid-dorsal fin. Usually form groups. Estuaries, coastal reefs and outer slopes in 3-35 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa and Tonga. - Taiwan to S.W. & S.E. Australia and Lord Howe I.



BLACKSPOT SNAPPER

Lutjanus ehrenbergii

SIZE: to 35 cm (14 in.)

Snappers - Lutjanidae

ID: Whitish undercolor with **5 thin yellow stripes below lateral line**, yellowish tail and anal fins; large round black spot on lateral line below mid-dorsal fin. Usually form groups. Coastal reefs and estuaries in 1-20 m.

Indo-Asian Pacific: Red Sea and E. Africa to E. Caroline Is. and Palau in Micronesia. - S.W. Japan to N. Great Barrier Reef.



BLUESTRIPE SNAPPER

Lutjanus kasmira

SIZE: to 35 cm (14 in.)

Snappers - Lutjanidae

ID: Bright yellow upper body with **4 neon-blue stripes**; white belly with faint gray stripes. Usually congregate around coral outcroppings. Coastal reefs, lagoons and outer slopes in 1-265 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii (introduced) and Polynesia. - S.W. Japan to S.E. Australia.



FIVE-LINED SNAPPER

Lutjanus quinquelineatus

SIZE: to 39 cm (15 3/4 in.)

Snappers - Lutjanidae

ID: Yellow with **5 blue stripes**, bottom stripe on yellow belly; usually black spot or smudge on rear back. Frequently form groups. Coastal reefs, lagoons and outer reef slopes in 2-40 m.

Indo-West Pacific: Arabian Gulf to Fiji. - S.W. Japan to Australia.



BENGAL SNAPPER

Lutjanus bengalensis

SIZE: to 30 cm (12 in.)

Snappers - Lutjanidae

ID: Yellow upper half of body with **4 neon-blue stripes**; **white unmarked lower body immediately below 4th stripe**. Small groups congregate around outcroppings. Coastal reefs, lagoons and outer slopes in 10-30 m.

Indo-Asian Pacific: Red Sea and E. Africa to Molucca Is. in E. Indonesia.



SPANISH FLAG

Lutjanus carponotatus

SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Grayish to white undercolor with 5-9 yellow to golden brown stripes; black spot on base of pectoral fin. Solitary or form groups. Turbid coastal reefs, lagoons and outer slopes in 1-35 m.

Indo-Asian Pacific: India to Papua New Guinea. - S. China to N. Australia and Great Barrier Reef.

Sloping Heads/Tapered Bodies



GOLDEN-LINED SNAPPER

SIZE: to 28 cm (11 in.)

ID: Pale reddish undercolor with narrow yellow stripes on side, yellow tail; often a small dark spot on rear upper back. Usually form large aggregations; hover above reefs. Steep coastal slopes and outer reefs in 10-50 m.

West Pacific: Indonesia to Palau, Samoa and Tonga. - S.W. Japan to N. Australia.

Lutjanus rufolineatus

Snappers - Lutjanidae



TWO-SPOT SNAPPER

SIZE: to 20 cm (8 in.)

ID: Slender; brownish gray back with 2-3 white spots, reddish brown belly; wide reddish brown stripe from snout to tail and wide white stripe from mouth to tail. Form small to large groups. Coastal reefs, lagoons and seaward slopes in 5-30 m.

Indo - West Pacific: Maldives to Fiji. - Philippines to Great Barrier Reef.

Lutjanus biguttatus

Snappers - Lutjanidae



BIGEYE SNAPPER

SIZE: to 30 cm (12 in.)

ID: Silvery with yellow or yellow-brown stripe from eye to yellow tail with several narrower stripes below; **small gap between large eye and lip**. Form large drifting aggregations. Coastal reefs and outer slopes in 10-90 m.

Indo - Asian Pacific: Red Sea and E. Africa to Solomon Is. - S.W. Japan to Australia.

Lutjanus lutjanus

Snappers - Lutjanidae



INDIAN SNAPPER

SIZE: to 30 cm (12 in.)

ID: Similar to Bigeye Snapper [next], but **wider gap between eye and lip**. Form small to large aggregations. Congregate around coral or rock outcroppings on coastal reefs and outer slopes in 5-90 m.

Indo - Asian Pacific: E. Africa to Indonesia and Philippines.

Lutjanus madras

Snappers - Lutjanidae



ONESPOT SNAPPER

SIZE: to 60 cm (2 ft.)

ID: Silver to reddish or yellowish silver with **yellow fins**; may display a horizontally elongate black spot on rear back. Solitary or form small groups. Outer reef areas in 5-60 m.

Indo - Pacific: Red Sea and E. Africa to Micronesia, Line Is., Tuamotu and Marquesas Is. in French Polynesia. - S.W. Japan to Australia and New Caledonia.

Lutjanus monostigma

Snappers - Lutjanidae



BUTTON SNAPPER

SIZE: to 28 cm (11 in.)

ID: Dusky reddish brown, often yellow-orange lower body; deep notch in gill cover; lack distinctive markings. Solitary or form loose aggregations. Coastal reefs, lagoons and outer slopes in 3-20 m.

Asian Pacific: Philippines, Indonesia and Papua New Guinea.

Lutjanus bouton

Snappers - Lutjanidae

Snappers



LUNARTAIL SNAPPER

Lutjanus lunulatus

SIZE: to 35 cm (14 in.)

Snappers - Lutjanidae

ID: Reddish pink with yellow belly, pectoral, ventral and anal fins; wide dark crescent on foretail. Solitary or form small groups. Coastal reefs and seaward slopes in 10-30 m.

Indo-Asian Pacific: Pakistan to Philippines, Papua New Guinea and Vanuatu.



PYGMY SNAPPER

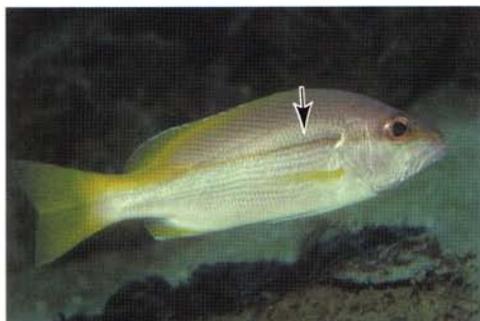
Lutjanus maxweberi

SIZE: to 20 cm (8 in.)

Snappers - Lutjanidae

ID: White with 4 black stripes. A rare, poorly known, species. Occurs in small groups. Apparently restricted to lower reaches of freshwater streams, brackish estuaries and mangrove-lined inlets in 3-4 m.

Asian Pacific: Philippines, Indonesia and Papua New Guinea.



BROWNSTRIPE SNAPPER

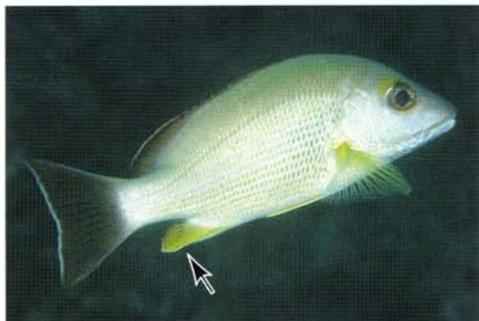
Lutjanus vitta

SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Whitish with diagonal brownish lines above lateral line and horizontal below; **yellow to brown or black stripe from eye to base of tail.** Solitary or form groups. Coastal and offshore reefs in 10-72 m.

Indo-West Pacific: Seychelles and W. India to Marshall Is. in Micronesia and Gilbert Is. - S.W. Japan to Australia.



BLACKTAIL SNAPPER

Lutjanus fulvus

SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Silvery white to pale yellow to yellow or tan with black tail, **yellow pectoral, ventral and anal fins.** Solitary or form loose aggregations. Coastal reefs, lagoons and outer slopes in 1-75 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Tuamotu and Marquesas and Rapa Is. in French Polynesia. - S.W. Japan to S.E. Australia and Norfolk Is.



MANGROVE RED SNAPPER

Lutjanus argentimaculatus

SIZE: to 120 cm (4 ft.)

Snappers - Lutjanidae

ID: Grayish with tints of red, green and brown, **darkish fins; darkish scale centers.** **Juvenile** - 8 white bars and pair of blue streaks across cheek. Solitary or form loose aggregations. Mangrove coasts to steep outer reefs in 1-120 m.

Indo-Pacific: Red Sea and E. Africa to Samoa and Line Is. in eastern Central Pacific - S.W. Japan to S.E. Australia.



DARK-TAILED SNAPPER

Lutjanus lemniscatus

SIZE: to 65 cm (2 1/4 ft.)

Snappers - Lutjanidae

ID: Gray-brown to olive, silvery or reddish with black tail; **pectoral, ventral and anal fins match color of body** (never yellow). **Juvenile** - Broad black stripe on side. Solitary or form groups. Coastal reefs, lagoons and outer slopes in 2-80 m.

Indo-Asian Pacific: India and Sri Lanka to S. Papua New Guinea and N. Australia including Great Barrier Reef.

Sloping Heads/Tapered Bodies



RED SNAPPER

Lutjanus bohar

SIZE: to 75 cm (2½ ft.)

Snappers - Lutjanidae

ID: Red to reddish gray; large robust body; **pronounced groove in front of eyes**, upper edge of pectoral fin dark. Solitary or form groups. Lagoons and outer reefs in 5-150 m.

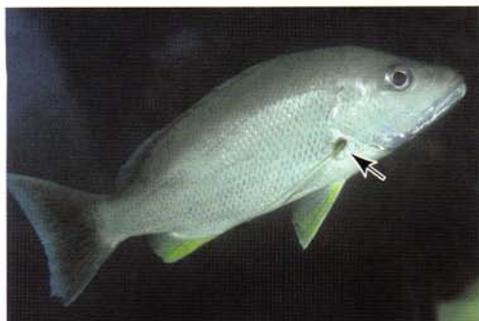
Indo-Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



Red Snapper - Juvenile

SIZE: 5-15 cm (2-6 in.)

ID: Grayish brown with two white spots on back just below start and end of soft dorsal fin; translucent tail with dark borders.



RUSSELL'S SNAPPER

Lutjanus russelli

SIZE: to 28 cm (11 in.)

Snappers - Lutjanidae

ID: Silvery white with pinkish hue, yellow ventral and anal fins; **black pectoral fin base**, frequently black spot or blotch on rear back. Solitary or form groups. Estuaries and coastal reefs to 80 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S.W. Japan to Australia.



Russell's Snapper - Juvenile

SIZE: 5-10 cm (2-4 in.)

ID: White with brown stripes; often with pale-edged black spot on rear body (lack spot in northwestern Pacific populations). Frequent in brackish mangrove estuaries and lower reaches of streams.



BLACK-BANDED SNAPPER

Lutjanus semicinctus

SIZE: to 35 cm (14 in.)

Snappers - Lutjanidae

ID: Olive back, white below; 7 black bars on upper half of body, large black spot covering tail base. Solitary or form small groups. Lagoons and seaward reefs in 5-35 m.

West Pacific: Philippines and Molucca Is. in Indonesia to Great Barrier Reef (rare), New Caledonia, Fiji and Caroline Is. in Micronesia.



CHECKERED SNAPPER

Lutjanus decussatus

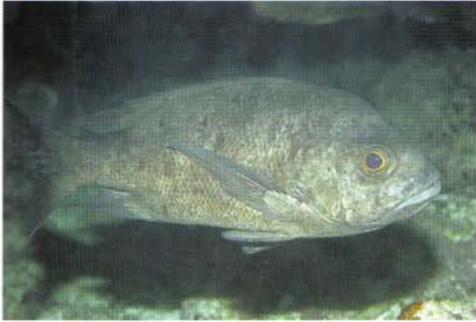
SIZE: to 30 cm (12 in.)

Snappers - Lutjanidae

ID: White undercolor with 6 brown stripes body and 6-7 dark bars across back forming netted pattern on upper body; black spot on base of tail. Solitary or form groups. Coastal reefs, lagoons and outer slopes in 5-35 m.

Indo-Asian Pacific: India to W. Papua New Guinea, north to S.W. Japan.

Snappers



BLACK SNAPPER

Macolor niger

SIZE: to 60 cm (2 ft.)

Snappers - Lutjanidae

ID: Gray to gray-brown with numerous indistinct blotches; **no blue lines or spots on head**; large eye with dull gold iris. Solitary or form schools. Steep slopes of lagoons, passes and outer reefs in 3-90 m.

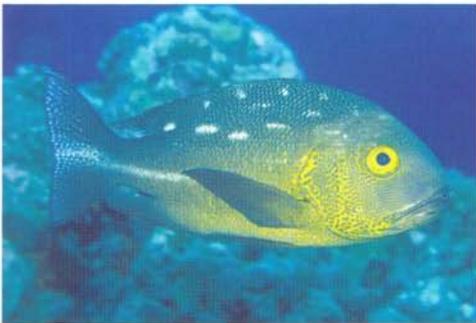
Indo-West Pacific: Red Sea and E. Africa to Micronesia and Samoa. - S.W. Japan to Australia and New Caledonia.



Black Snapper - Juvenile

SIZE: 4-15 cm (1 1/2 - 6 in.)

ID: Distinctive black and white pattern; **tips of tail lobes white**. Solitary; swim with jerky motion. Upper edge of steep slopes in 5-15 m.



MIDNIGHT SNAPPER

Macolor macularis

SIZE: to 60 cm (2 ft.)

Snappers - Lutjanidae

ID: Black with pale line markings in scales; **blue line and spot markings on head**; large eye with bright gold iris. Solitary or form groups. Edge of steep slopes of lagoons, passes and outer reefs in 5-50 m.

Indo-West Pacific: Maldives to Solomon Is. - S.W. Japan to N. Australia and New Caledonia.



Midnight Snapper - Intermediate

SIZE: 15-25 cm (6-10 in.)

ID: Body color and head markings same as adults, but have several white spots on back and mid-lateral; white stripe from behind pectoral fin onto tail. Both adults and intermediates often have gold undercolor on lower head that extends under pectoral fins.



Midnight Snapper - Juvenile

SIZE: 4-15 cm (1 1/2 - 6 in.)

ID: Distinctive black and white pattern, **tips of tail lobes clear**; white stripe through center of tail, very long ventral fins. Solitary; swims with jerky motion. Upper edge of steep slopes in 5-15 m.



PINJALO SNAPPER

Pinjalo pinjalo

SIZE: to 50 cm (20 in.)

Snappers - Lutjanidae

ID: Variable shades from reddish gray to red that can quickly intensify or pale, **yellow ventral fins**; more robust than similar Slender Pinjalo [next]. Form schools. Coastal reefs and outer slopes in 15-100 m.

Indo-Asian Pacific: Arabian Gulf to Taiwan and Papua New Guinea.

Sloping Heads/Tapered Bodies



SLENDER PINJALO

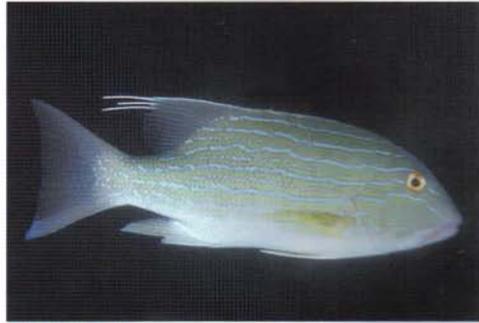
Pinjalo lewisii

SIZE: to 50 cm (20 in.)

Snappers - Lutjanidae

ID: Variable shades from grayish red to bright red that can quickly intensify or pale; may display pale spot on upper base of tail. Similar Pinjalo Snapper [previous] distinguished by yellow ventral fins. Form schools. Outer reefs in 20 - 100 m.

Indo-West Pacific: Laccadive Is. (off S.W. India) to S.W. Japan and Fiji.



CHINAMANFISH

Symphorus nematophorus

SIZE: to 80 cm (2³/₄ ft.)

Snappers - Lutjanidae

ID: Undercolor shades of yellow-brown to brown to olive with numerous blue stripes from head to tail; often filaments trail from fore rays of dorsal fin. Solitary or form groups. Coastal reefs to 50 m. Can cause ciguatera poisoning (banned from sale in Australia).

Asian Pacific: S.W. Japan to N. Australia and New Caledonia.



SAILFIN SNAPPER

Symphorichthys spilurum

SIZE: to 60 cm (2 ft.)

Snappers - Lutjanidae

ID: Undercolor shades of yellow with numerous blue stripes from head to tail; black ocellated spot on tail base, dark saddle bar behind head; young adults trail long filaments from dorsal and anal fins. Form schools. Mixed sand and coral to 60 m.

West Pacific: Philippines and Molucca Is. in E. Indonesia. - S.W. Japan to N. Australia and New Caledonia.



Sailfin Snapper - Older Adult

ID: With age adults lose the long trailing dorsal and anal fin filaments and develop a steep snout (almost squared off head profile).



YELLOWTAIL FALSE FUSILIER

Paracaesio xanthura

SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Blue with yellow area on back extending from forehead to tail; similar Yellowback Fusilier distinguished by a black spot on pectoral fin base. Form schools. Below diver depths in tropics, but 10 - 50 m in subtropics.

Indo-West Pacific: Red Sea to S.W. Japan, Papua New Guinea and Samoa.



FALSE FUSILIER

Paracaesio sordida

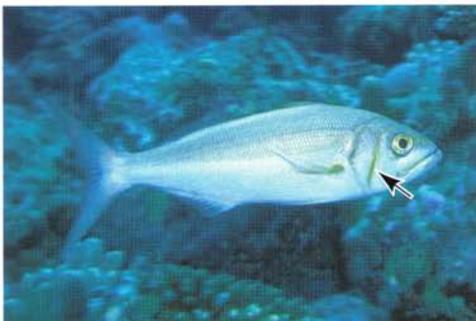
SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Purplish brown to blue with faint dark stripes, lower lobe of tail red (dark brown underwater); slender elongate body with deeply forked tail similar to fusilier family (Caesionidae). Form schools. Steep outer reefs in 30 - 200 m.

Indo-West Pacific: Red Sea to S.W. Japan, Papua New Guinea and Samoa.

Snappers - Coral Breams



SMALLTOOTH JOBFISH

Aphareus furca

SIZE: to 40 cm (16 in.)

Snappers - Lutjanidae

ID: Blue-gray; slender body with large mouth and strongly forked tail, pectoral fins long; dark outline on rear edge and **bar on gill cover**. Solitary or form small groups. Lagoons and seaward reefs in 5-100 m.

Indo-Pacific: Red Sea and E. Africa to Panama. - S.W. Japan to Australia.



GREEN JOBFISH

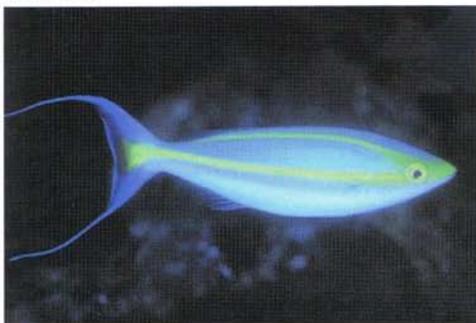
Aprion virescens

SIZE: to 100 cm (3 1/4 ft.)

Snappers - Lutjanidae

ID: Dark green to blue to bluish gray; slender cylindrical body with strongly forked tail, pectoral fins short; no distinctive markings. Usually solitary. Lagoons, reef passes and outer slopes in 5-150 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Australia and Lord Howe I.



DOUBLE WHIPTAIL

Pentapodus emeryi

SIZE: to 35 cm (14 in.)

Coral Breams - Nemipteridae

ID: Blue back grading to whitish lower body with thin yellowish stripe on back and wider mid-lateral stripe; slender with pointed snout and elongate filament on each tail lobe. Solitary or form small groups. Silty coastal reefs in 2-35 m.

Asian Pacific: N.W. Australia, W. Indonesia and Philippines.



Double Whiptail - Juvenile

SIZE: 4-8 cm (1 1/2 - 2 3/4 in.)

ID: Deep blue to purple with yellow to gold stripe on back and a somewhat wider yellow to gold mid-lateral stripe.



YELLOW-STRIPED WHIPTAIL

Pentapodus aureofasciatus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Bluish back and white belly; creamy yellow mid-lateral stripe and yellowish streak on back. A common but undescribed species. Solitary or in pairs. Mid-water over sand near reefs in 5-20 m.

West Pacific: E. Indonesia and Philippines to Samoa, north to Taiwan.



Yellow-striped Whiptail - Juvenile

SIZE: 4-7 cm (1 1/2 - 2 3/4 in.)

ID: Blue body with equal width bright yellow stripes on back and side. Usually solitary. Rubble areas.

Sloping Heads/Tapered Bodies



PARADISE WHIPTAIL

Pentapodus paradiseus

SIZE: to 35 cm (14 in.)

Coral Breams - Nemipteridae

ID: Gray; white stripe bordered by dark gray stripe from eye to tail joins white V-shaped mark and small black spot on tail base. Solitary or form small groups. Coastal reefs in 10-70 m.

Asian Pacific: S. Papua New Guinea, Solomon Is. and Great Barrier Reef.



Paradise Whiptail - Juvenile

SIZE: 3-5 cm (1 1/4-2 in.)

ID: Dark back and white lower body; broad yellow stripe on side bordered by black stripe below. Solitary. Coastal reefs in 10-70 m.



BUTTERFLY WHIPTAIL

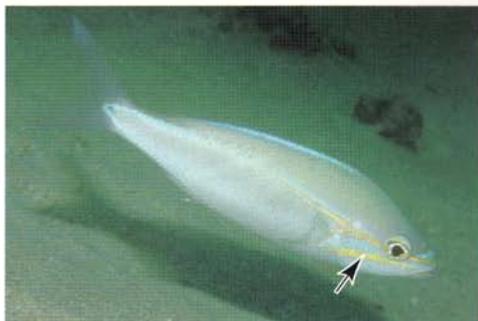
Pentapodus setosus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Light gray; gold to yellow stripe from eye to upper base of tail joins a pale lower stripe to form a V with central dark spot; adults have filament extending from upper tail lobe. Solitary or form small groups. Coastal reefs in 5-50 m.

Asian Pacific: Malaysian Peninsula, Singapore, Indonesia and Philippines.



NORTHWEST AUSTRALIAN WHIPTAIL

Pentapodus porosus

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Light gray; pair of orange stripes on head, blue V-shaped mark and black spot at tail base, thin blue stripe along base of dorsal fin. Solitary or form small groups. Coastal reefs in 5-50 m.

Localized: N.W. Australia and S. Papua New Guinea.



SMALL-TOOTHED WHIPTAIL

Pentapodus caninus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Greenish gray to bluish gray back gradating to whitish lower body; broad yellowish stripe from eye to base of tail; no dark band between eyes. Solitary or form small groups. Silty coastal reefs and deep lagoons in 2-35 m.

West Pacific: Malaysian Peninsula to Gilbert Is. - S.W. Japan to New Caledonia.



JAPANESE WHIPTAIL

Pentapodus nagasakiensis

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Brownish back gradating to whitish lower body; white stripe bordered with wide yellow to gold diffuse stripes from snout through lower eye to tail; slender with pointed snout. Solitary or form small groups. Coastal reefs in 20-100 m.

Asian Pacific: S.W. Japan and central Indonesia to N.W. Australia.

Coral Breams



THREE-STRIPED WHIPTAIL

Pentapodus trivittatus

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Gray, underside of head and body white; pale saddles and stripe on back, white mid-body blotch gradates into stripe toward tail. Solitary or in pairs. Coastal reefs and lagoons in 2-30 m.

Asian Pacific: Malaysian Peninsula to Philippines, E. Caroline Is. in Micronesia and Solomon Is.



Three-striped Whiptail - Variation

ID: Pale gray with bright yellow patch on side below rear dorsal fin.

Localized: N.E. Sulawesi, Indonesia including Togeang and Banggai Is.



WHITE-SHOULDERED WHIPTAIL

Pentapodus bifasciatus

SIZE: to 20 cm (8 in.)

Coral Breams - Nemipteridae

ID: Brown to dark gray on upper sides with 3 white stripes; white marking on upper rear edge of gill cover; slender with pointed snout. Solitary or form groups. Silty coastal reefs in 2-20 m.

Asian Pacific: Singapore, Malaysian Peninsula, W. Indonesia and Philippines.



FORK-TAILED THREADFIN BREAM

Nemipterus furcosus

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Pinkish red with dusky saddles on back, lower edge of tail whitish; elongate body with deeply forked tail. Seldom on reefs, usually inhabit featureless sand bottoms in 3-100 m.

Indo-Asian Pacific: Sri Lanka to S.W. Japan, Palau, N. Australia and New Caledonia.



CORAL WHIPTAIL

Scaevius mili

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Eight alternating white to light blue and dark gray stripes on upper body, **bottom stripe connected with slanting dark lines**; small dark spot on upper tail base. Solitary or form small groups. Coastal reefs in 3-40 m.

Localized: N.W. Australia.



STRIPED WHIPTAIL

Scaevius vitta

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Light gray; dark mid-lateral stripe with diffuse white borders, often a broad dusky to blackish area along upper edge of belly. Solitary or form small groups. Coastal reefs in 1-30 m.

Localized: W. Australia.

Sloping Heads/Tapered Bodies



RAINBOW MONOCLE BREAM

Scolopsis temporalis

SIZE: to 40 cm (16 in.)

Coral Breams - Nemipteridae

ID: Gray back with pale blue to white stripe and wider bright stripe below; pair of blue bands between eyes, darkish spot behind upper rear eye, narrow orange line on cheek. Solitary or form groups. Mixed sand of coastal and lagoon reefs to 35 m.

West Pacific: E. Sulawesi and Molucca Is. in Indonesia to Papua New Guinea, Solomon Is., Vanuatu and Fiji.



BRIDLED MONOCLE BREAM

Scolopsis biineatus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Dark gray to yellow upper body, white below; black-edged white band runs from below eye to rear of dorsal fin, 3 yellow stripes on upper head. Solitary or form small groups. Sand and rubble fringe of reefs to 25 m.

Indo-West Pacific: Maldives to Fiji. - S.W. Japan to Australia and New Caledonia.



Bridled Monocle Bream - Juvenile

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: Alternating black and yellow stripes on upper body, whitish below. Juveniles in Fiji entirely yellow; an effective mimic of the Fijian variation of the Bicolor Fangblenny. Sand and rubble fringe of reefs to 25 m.



Bridled Monocle Bream - Juvenile Variation

SIZE: 3-5 cm (1 1/4 - 2 in.)

ID: White to light gray with broad black stripe along back. Effectively mimics Smith's Fangblenny and Imposter Fangblenny. Sand and rubble fringe of reefs to 25 m.

Localized: Andaman Sea.



THREE-LINED MONOCLE BREAM

Scolopsis trilineatus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Shades of gray; 3 white to yellowish curving lines extend from eye to back and base of dorsal fin, dark band between eyes with bluish band above. Solitary or form groups. Sheltered coastal reefs and lagoons in 1-10 m.

West Pacific: Central Indonesia to Samoa. - Philippines to Great Barrier Reef.



LATTICE MONOCLE BREAM

Scolopsis taeniopterus

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Yellowish gray upper body and white below; dark mid-lateral stripe; red spot on pectoral fin base, bluish stripe or patch on snout extends between eyes. Solitary or form groups; shy. Sandy fringe of reefs or muddy estuaries in 2-25 m.

East Indo-Asian Pacific: E. Andaman Sea to Papua New Guinea. - Taiwan to Australia.

Coral Breams



PEARLY MONOCLE BREAM

Scolopsis margaritifer

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Pearly shades of gray; frequently 2-3 longitudinal rows of yellow spots on side and yellow pectoral fin base, two narrow whitish bars below rear dorsal fin. Solitary or form groups. Sand and rubble fringe of coastal reefs and lagoons in 2-25 m.

West Pacific: Sumatra in Indonesia to Palau and Vanuatu. - Taiwan to N. Australia.



Pearly Monocle Bream - Juvenile

SIZE: 4-6 cm (1½ - 2½ in.)

ID: White upper body bordered with pair of black stripes and yellow below; black spot on front of dorsal fin. Solitary or form groups. Sand and rubble fringe of coastal reefs and lagoons in 2-25 m.



WHITESTREAK MONOCLE BREAM

Scolopsis ciliatus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Pale gray body; 2-4 longitudinal rows of orange spots on side, white streak below base of dorsal fin. Solitary or form groups. Sandy fringe of coastal and lagoon reefs in 2-25 m. Frequent silty areas.

East Indo-Asian Pacific: Andaman Sea to Solomon Is. and Vanuatu, north to S.W. Japan.



Whitestreak Monocle Bream - Bali Variation

ID: Dark gray above and lighter below with thin white stripe below dorsal fin base and white streak along middle of side. Solitary or form groups. Coastal reefs in 8-25 m.

Localized: Black sand slopes of N. Bali.



ARABIAN MONOCLE BREAM

Scolopsis ghanam

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Alternating pale gray to black and white stripes on upper body and white below with rows of black spots. Solitary or form small groups. Coastal reefs and lagoons in 2-25 m.

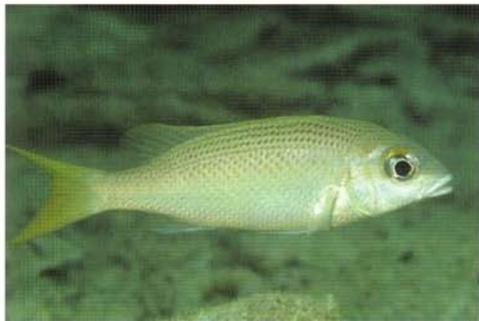
Indian Ocean: Red Sea, E. Africa and Arabian Gulf to Andaman Sea.



Arabian Monocle Bream - Pale Gray Variation

ID: Alternating narrow gray and white stripes on back, rows of darkish spots below.

Sloping Heads/Tapered Bodies



PALE MONOCLE BREAM

Scolopsis affinis

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Pale gray body with yellowish tail; 3-4 rows of black dots on upper back. Solitary or form small groups. Sandy bottoms of lagoons and coastal reefs in 5-35 m.

East Indo-Asian Pacific: Andaman Sea to Solomon Is. - S.W. Japan to Great Barrier Reef.



Pale Monocle Bream - Juvenile

SIZE: 4-7 cm (1 1/2 - 2 3/4 in.)

ID: White with two dusky stripes on back and wide black mid-lateral stripe. Solitary or form small groups. Sandy bottoms of lagoons and coastal reefs in 5-35 m.



MONOGRAM MONOCLE BREAM

Scolopsis monogramma

SIZE: to 38 cm (15 in.)

Coral Breams - Nemipteridae

ID: Pale gray to whitish body; blue band between eyes and margin on yellowish tail; often display elongate brown blotch on side with adjacent yellowish areas. Solitary or form small groups. Sandy fringe of coastal reefs lagoons in 2-50 m.

Asian Pacific: Sumatra in Indonesia to Papua New Guinea. - S.W. Japan to E. Australia and New Caledonia.



Monogram Monocle Bream - Pale Phase

ID: Pale grayish when brown blotch and yellowish areas are not displayed; blue band between eyes and blue margin on yellowish tail; older adults have a long filament extending from upper tail lobe.



STRIPED MONOCLE BREAM

Scolopsis lineatus

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Dark gray to blackish upper body with 2-3 white stripes and irregular whitish bars, white below. Solitary or form groups. Sandy fringe of coastal reefs, lagoons and seaward slopes in 1-20 m.

East Indo-West Pacific: Andaman Sea to Vanuatu and Gilbert Is. - S.W. Japan to Great Barrier Reef.



PEARL-STREAKED MONOCLE BREAM

Scolopsis xenochrous

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Brownish body with pale underside; brown-edged diagonal blue streak behind head followed by a series of brown spots and elongate pearly streak. Solitary or form groups. Rubble areas of coastal reefs, lagoons and outer slopes in 5-50 m.

Indo-Asian Pacific: Maldives to Solomon Is. - Taiwan to Australia.

Coral Breams - Emperors



WHITECHEEK MONOCLE BREAM

Scolopsis vosmeri

SIZE: to 25 cm (10 in.)

Coral Breams - Nemipteridae

ID: Deeper bodied than most members of the family; purplish brown with dark scale centers; broad white bar on head behind eye. Solitary or form small groups. Sand and rubble bottoms of coastal reefs and lagoons in 2-25 m.

Indo-Pacific: Red Sea and E. Africa to N. Australia, north to S.W. Japan.



YELLOWSTRIPE MONOCLE BREAM

Scolopsis auratus

SIZE: to 30 cm (12 in.)

Coral Breams - Nemipteridae

ID: Yellowish to greenish to bluish pale gray upper body and whitish belly; broad yellow mid-lateral stripe, dark diffuse band between eyes. Solitary or form small groups. Sandy bottoms of lagoons and coastal reefs in 1-30 m.

East Indian Ocean: Maldives, Sri Lanka, Andaman Sea to W. Sumatra and S. Java.



STRIPED LARGE-EYE BREAM

Gnathodentex aureolineatus

SIZE: to 30 cm (12 in.)

Emperors - Lethrinidae

ID: Silvery gray to brown; dark scale rows on back, 4-5 brown to gold stripes on sides, yellow-orange blotch below rear dorsal fin. Solitary to large aggregations. Shallow coastal reefs, lagoons and outer slopes in 3-20 m.

Indo-Pacific: E. Africa to Micronesia, Line Is. and French Polynesia. - S.W. Japan to S.E. Australia and Norfolk Is.



HUMPNOSE BIGEYE BREAM

Monotaxis grandoculis

SIZE: to 60 cm (2 ft.)

Emperors - Lethrinidae

ID: Black to gray, silver or brown back gradating to pale underside, often yellowish tints on head; black spot on base of pectoral fin. Solitary or form groups. Coastal reefs, lagoons and outer slopes to 100 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Australia and New Caledonia.



Humpnose Bigeye Bream - Sub-adult

SIZE: 20-35 cm (8-14 in.)

ID: Black to gray to brown back gradating to pale underside; 4 bars of juveniles [next] fade with age, head and rear bar fade first, middle bars also disappear on large adults; black spot on base of pectoral fin.



Humpnose Big-eye Bream - Juvenile

SIZE: 4-10 cm (1½ - 4 in.)

ID: Black to gray to brown back gradating to pale underside with 4 white bars, the first and last lost with maturity; yellowish tail lobes; more slender body than adults.

Sloping Heads/Tapered Bodies



GRAY LARGE-EYE BREEM

Gymnocranius griseus

SIZE: to 35 cm (14 in.)

Emperors - Lethrinidae

ID: Silvery gray with several irregular dark bars on head and body. Young have heavily blotched pattern with eye bar, and bar across pectoral fins. Solitary or form small groups. Sand or rubble bottoms of coastal reefs in 15-80 m.

East Indo - Asian Pacific: Andaman Sea to Malaysian Peninsula, Indonesia, north to S.W. Japan.



BLACKNAPE LARGE-EYE BREEM

Gymnocranius sp.

SIZE: to 45 cm (18 in.)

Emperors - Lethrinidae

ID: Silvery gray with dark scale centers on back; darkish bar through and below eye; **tail lobes rounded**. Solitary or form small groups. Open sand or rubble bottoms of coastal reefs, lagoons and outer slopes in 15-50 m.

West Pacific: S.W. Japan to N. Papua New Guinea, Great Barrier Reef, Coral Sea and New Caledonia.



BLUESPOTTED LARGE-EYE BREEM

Gymnocranius microdon

SIZE: to 41 cm (16 in.)

Emperors - Lethrinidae

ID: Silvery gray with dark scale centers on back; darkish bar through and below eye, pale blue spots on head; **tail lobes pointed**. Solitary or form small groups. Sand or rubble bottoms near reefs and on outer slopes in 20-50 m.

East Indo - West Pacific: Andaman Sea to Fiji, north to Micronesia and S.W. Japan.



YELLOWSNOUT LARGE-EYE BREEM

Gymnocranius frenatus

SIZE: to 35 cm (14 in.)

Emperors - Lethrinidae

ID: Silvery gray; yellowish tint between eyes and on snout, **3 wavy blue lines below eye**. Solitary or form small groups. Open sand or rubble bottoms of coastal reefs and lagoons in 20-80 m.

Asian Pacific: Malaysian Peninsula, Philippines and Indonesia to S. China Sea.



BLUE-LINED LARGE-EYE BREEM

Gymnocranius grandoculis

SIZE: to 80 cm (2 3/4 ft.)

Emperors - Lethrinidae

ID: **Juvenile** - Silvery gray; several faint thin bars on side, eye bar. **Adult** - Unmarked except wavy blue lines on cheek; **no yellowish tint on snout**. Solitary or form small groups. Sand or rubble bottoms in 15-100 m.

Indo - Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to N.W. & S.E. Australia.



JAPANESE LARGE-EYE BREEM

Gymnocranius evanus

SIZE: to 45 cm (18 in.)

Emperors - Lethrinidae

ID: Silvery gray with **scattered small black spots**. Solitary or form small groups. Open sand or rubble bottoms near reefs in lagoons and on outer slopes in 15-50 m.

West Pacific: Philippines, Micronesia and Papua New Guinea to Tonga. - S. China Sea and S.W. Japan to E. Australia and Norfolk Is.

Emperors - Seabreams



LONGFACE EMPEROR

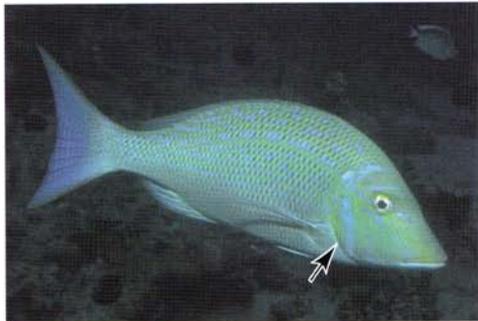
SIZE: to 100 cm (3 1/4 ft.)

ID: Elongate body with long pointed snout; gray to olive with no distinctive markings; often display mottled pattern. Largest species in family. Solitary or form groups; highly active and fast swimming. Sand bottoms of lagoons and outer slopes in 1-185 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan and Micronesia to Australia and New Caledonia.

Lethrinus olivaceus

Emperors - Lethrinidae



SPANGLED EMPEROR

SIZE: to 80 cm (2 3/4 ft.)

ID: Elongate pointed snout; pale gray with blue to white scale centers; **blue streaks on cheek**. Solitary to large groups. Flat sand bottoms in the vicinity of reefs to 75 m; also frequent seagrass beds and mangrove areas.

West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.

Lethrinus nebulosus

Emperors - Lethrinidae



SPOTCHECK EMPEROR

SIZE: to 50 cm (20 in.)

ID: Bright silver to brownish silver with diffuse stripe and bar markings on lower body; reddish brown spot on rear edge of gill cover. Solitary or form small groups. Sand and rubble bottoms of coastal reefs and outer slopes to 40 m.

Indo - Asian Pacific: Sri Lanka to Solomon Is. - S.W. Japan and Micronesia to Australia and New Caledonia.

Lethrinus rubrioperculatus

Emperors - Lethrinidae



YELLOWLIP EMPEROR

SIZE: to 60 cm (2 ft.)

ID: Elongate body; unmarked silvery pale gray to olive, also mottled and blotched pattern; **yellow upper lip**, yellow to orange spot on base of pectoral fin. Solitary or form small groups. Sand and rubble bottoms near reefs in 5-30 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and French Polynesia. - S. Japan to Great Barrier Reef and New Caledonia.

Lethrinus xanthochilus

Emperors - Lethrinidae



THUMBPRINT EMPEROR

SIZE: to 50 cm (20 in.)

ID: Pale gray with elongate dark blotch on middle of side. (Indian Ocean variation has dark blotch surrounded by orange halo.) Solitary or form groups. Sandy shallows next to shore, coastal reefs and lagoons to 20 m.

Indo - West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan and Micronesia to N. Australia and New Caledonia.

Lethrinus harak

Emperors - Lethrinidae



Thumbprint Emperor - Phase

ID: Has the ability to rapidly fade and intensify dark mid-body spot. **Two narrow lines below eye are distinctive when spot is faded.**

Sloping Heads/Tapered Bodies



PINKEAR EMPEROR

Lethrinus lentjan

SIZE: to 50 cm (20 in.) Emperors - Lethrinidae

ID: Pale silvery gray; **bright red streak on rear edge of gill cover**. Solitary or form groups. Sandy areas of coastal reefs, lagoons and outer slopes in 10-50 m.

Indo-West Pacific: Red Sea and E. Africa to Tonga. - S.W. Japan to N. Australia and New Caledonia.



Pinkear Emperor - Mottled Phase

ID: May camouflage by changing to mottled and blotched shades of brown especially when resting on bottom at night, but still distinguished by bright red streak on rear edge of gill cover. Most species of emperors can quickly change to a similar mottled pattern.



ORANGE-STRIPED EMPEROR

Lethrinus obsoletus

SIZE: to 50 cm (20 in.) Emperors - Lethrinidae

ID: Pale gray; **yellow stripe from base of pectoral fin to tail**. Solitary or form small groups. Seagrass beds and sand and rubble areas of coastal reefs, lagoons and outer slopes to 30 m.

Indo-West Pacific: Red Sea and E. Africa to Tonga and Samoa. - S.W. Japan and Micronesia to Australia and New Caledonia.



Orange-striped Emperor - Blotched Phase

ID: May quickly camouflage to mottled and blotched shades of brown especially when sheltering in seagrass, branching gorgonians or corals also at night, but still distinguished by yellow stripe from base of pectoral fin to tail. Most emperors can quickly change to a similar mottled pattern.



SMALLTOOTH EMPEROR

Lethrinus microdon

SIZE: to 70 cm (2 3/4 ft.) Emperors - Lethrinidae

ID: Long pointed snout; silvery gray; **dark streaks radiate from fore lower quarter of eye**. Solitary or form groups. Coastal reefs, lagoons and outer slopes in 10-80 m.

Indo-Asian Pacific: Red Sea and E. Africa to Papua New Guinea. - S.W. Japan to N. Australia.



Smalltooth Emperor - Mottled Phase

ID: May camouflage by changing to mottled and blotched shades of brown, especially at night, but still distinguished by dark streaks radiating from fore lower quarter of eye. Most species of emperors can quickly change to a similar mottled pattern primarily when near bottom.

Emperors- Seabreams



YELLOWFIN EMPEROR

Lethrinus erythracanthus

SIZE: to 70 cm (2 1/4 ft.)

Emperors - Lethrinidae

ID: Dark bluish head and dark gray body with yellow fins. Easily distinguished from most emperors by large size. Solitary. Deep lagoons and outer reef slopes in 15-120 m.

Indo-Pacific: E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



Yellowfin Emperor - Juvenile

SIZE: 5-10 cm (2-4 in.)

ID: Gray head, yellowish body with several narrow white stripes or broken lines on side. Solitary. Deep lagoons and outer reef slopes in 15-120 m.



LONGSPINE EMPEROR

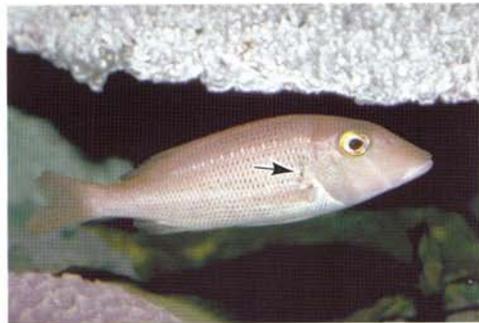
Lethrinus genivittatus

SIZE: to 20 cm (8 in.)

Emperors - Lethrinidae

ID: Silvery brown with brown bars, spots and mottling; **second spine of dorsal fin longest** (often much longer). Solitary. Grass beds, estuaries, mangroves and shallow areas of sand around coastal reefs.

Asian Pacific: S.W. Japan and Indonesia to New Caledonia (absent Great Barrier Reef).



BLACKBLOTCH EMPEROR

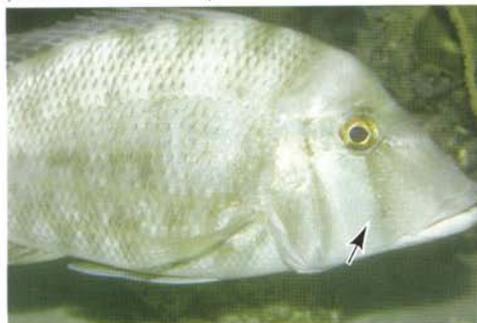
Lethrinus semicinctus

SIZE: to 29 cm (12 in.)

Emperors - Lethrinidae

ID: Slender body; reddish upper body gradating to gray below, may have yellowish head; **short dusky band behind gill cover**, can rapidly intensify or fade large dark mid-body blotch below 2nd dorsal fin. Solitary. Sandy reef flats and lagoons.

Indo-Asian Pacific: Sri Lanka to Vanuatu. - S.W. Japan, Palau and Marshall Is. in Micronesia to Great Barrier Reef.



GRASS EMPEROR

Lethrinus laticaudis

SIZE: to 56 cm (22 in.)

Emperors - Lethrinidae

ID: Pale silvery gray; often marked with diffuse dark blotches and irregular bars, **blue line markings radiate from lower edge of eye and pale blue spots on cheek**. Solitary or form groups. Sandy areas near reefs in 5-35 m.

Asian Pacific: Lesser Sunda Is. in Indonesia, N. Australia, Papua New Guinea to Solomon Is.



SWEETLIP EMPEROR

Lethrinus miniatus

SIZE: to 90 cm (3 ft.)

Emperors - Lethrinidae

ID: Long pointed snout; gray, dark centers on scales of back, reddish brown upper head, lips often red; **base of pectoral fins bright red**; may display alternating light and dark bars. Solitary or form groups. Sand and rubble between reefs in 5-35 m.

Southwest Pacific: N. Australia, Coral Sea and New Caledonia.

Sloping Heads/Tapered Bodies



AMBON EMPEROR

Lethrinus amboninensis

SIZE: to 57 cm (23 in.)

Emperors - Lethrinidae

ID: Light to dark mottled and spotted greenish brown with silvery tints; **snout from lip to eye slightly convex** (most members of genus have a slightly concave snout). Solitary. Rubble and sand areas of lagoons and reefs.

Pacific: S.W. Japan, Indonesia and Micronesia to Marquesas Is. in French Polynesia.



LONGFIN EMPEROR

Lethrinus erythropterus

SIZE: to 50 cm (20 in.)

Emperors - Lethrinidae

ID: Red to yellow-brown, often with faint bars; pair of pale to bright white bars on base of tail. Solitary or form small groups. Coastal reefs, lagoons and outer slopes in 2-25 m.

Indo-Asian Pacific: E. Africa to Philippines, Papua New Guinea, Solomon Is., Palau and Caroline Is. in Micronesia.



SLENDER EMPEROR

Lethrinus variegatus

SIZE: to 20 cm (8 in.)

Emperors - Lethrinidae

ID: Small elongate body; mottled shades of green to brown mixed with white; wide darkish mid-lateral stripe, pale spots on fins. Usually form groups. Seagrass beds and sandy areas near coral reefs to 15 m.

Indo-West Pacific: Red Sea and E. Africa to New Caledonia. - S.W. Japan, Micronesia to N.W. Australia and Great Barrier Reef.



ORNATE EMPEROR

Lethrinus ornatus

SIZE: to 40 cm (16 in.)

Emperors - Lethrinidae

ID: Silvery; red margin on cheek and gill cover, broad yellowish stripes on sides. Solitary or form small groups. Seagrass beds and sand and rubble areas of coastal reefs and lagoons to 30 m.

Indo-Asian Pacific: Sri Lanka to Papua New Guinea. - S.W. Japan to Great Barrier Reef.



YELLOWTAIL EMPEROR

Lethrinus atkinsoni

SIZE: to 41 cm (16 in.)

Emperors - Lethrinidae

ID: Silvery to silvery blue or olive-brown, yellow tail and base; diffuse yellow area may extend from pectoral fin to tail base, yellow around upper eye. Solitary. Outer reef slopes, sandy areas of lagoons and sea grass beds in 2-25 m.

Pacific: Indonesia to Tuamotu Is. in French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



RIVER SEABREAM

Acanthopagrus berda

SIZE: to 50 cm (20 in.)

Seabreams - Sparidae

ID: Silvery gray to black or olive brown with brassy reflections, lighter gray to whitish on belly and chin. Solitary or form groups. Coastal reefs and muddy estuaries, occasionally enter freshwater streams.

Indo-Asian Pacific: Red Sea and E. Africa to Solomon Is. - S.W. Japan to Australia.

IDENTIFICATION GROUP 5

Silvery

Jacks - Barracudas - Tunas & Mackerels - Others

This ID Group consists of fishes that are silver to gray in color, and are generally unpatterned; however, several species have bluish, yellowish or greenish tints and occasional markings. All have forked tails.

FAMILY: Jacks (Trevallys) - Carangidae

14 Genera – 30 Species Included



Typical Shape

Jacks, also commonly known as trevallys, are strong open-water swimmers that on occasion form large schools that roam for great distances. Although primarily pelagic, solitary jacks often feed along the fringes of outer reef slopes. These voracious predators of fishes, and in a few cases crustaceans, are generally silvery, have laterally compressed or torpedo-shaped bodies with deeply sloping heads, large eyes and mouths, slender tail bases and widely forked tails. On many species, scales at the rear of their single, continuous lateral line form a series of short spiny structures called scutes. Jacks vary greatly in size from the small, aggregation-oriented, plankton-feeding scads, to the Giant Trevally, which can reach a length of 165 cm (5 1/2 ft.). The wide geographic distribution of most species indicates a lengthy pelagic larval stage.

FAMILY: Barracudas - Sphyraenidae

Single Genus – 6 Species Included

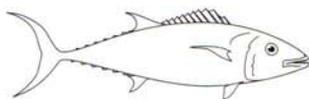


Typical Shape

Barracudas are relatively large, silvery, elongate fishes with long jaws filled with an awesome array of pointed teeth. They have two, low, widely separated dorsal fins and widely forked tails indicative of their typically pelagic existence. These rapacious fish predators appear quite frightening; however, they present little or no threat to divers. The few substantiated attacks on humans involved spearfishing or fish feeding activities. A few species form large spiraling schools that occasionally allow a cautious diver to enter their midst. The Great Barracuda, the largest family member reaching a length of 180 cm (6 ft.), are typically solitary reef inhabitants that often approach divers out of curiosity not menace.

FAMILY: Tunas & Mackerels - Scombridae

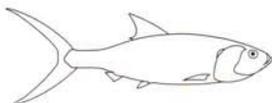
Single Genus – 6 Species Included



Typical Shape

Tunas are streamlined, spindle-shaped open-water fishes with two dorsal fins that fold into grooves and finlets between the second dorsal and their deeply forked or lunate tails. At least two small keels extend from each side of the narrow tail base. Their upper bodies vary between shades of silvery iridescent blues and greens with countershadowings of white on the belly. Pelagic species, built for speed and endurance are rapacious predators of squids and fishes in the near-surface zone of the open ocean.

FAMILY: Others



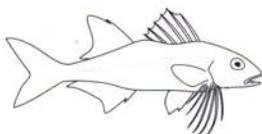
Milkfishes - Chanidae



Chubs - Kyphosidae



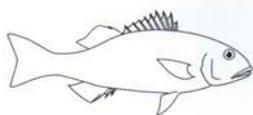
Mullets - Mugilidae



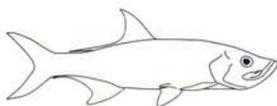
Threadfins - Polynemidae



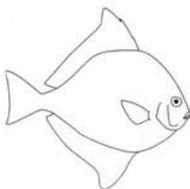
Snooks - Centropomidae



Grunters - Terapontidae



Tarpons - Megalopidae



Diamondfishes - Monodactylidae



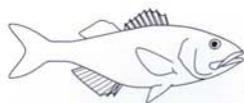
Needlefishes - Belonidae



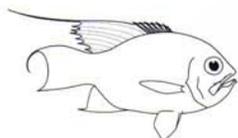
Archerfishes - Toxotidae



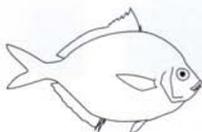
Mojarras - Gerreidae



Flagtails - Kuhliidae



Pearl Perches - Glaucosomatidae



Ponyfishes - Leiognathidae



Silversides - Atherinidae

Jacks



AFRICAN POMPANO

Alectis ciliaris

SIZE: to 130 cm (4¼ ft.)

Jacks - Carangidae

ID: Silver, often have bluish or greenish tints; deep body with steep head profile and deeply forked tail; scales not obvious. Young form schools, large adults often solitary. Pelagic; often near dropoffs to 100 m.

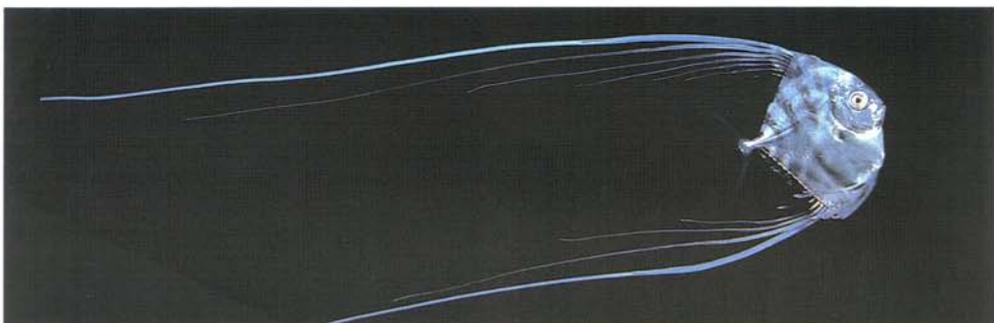
Circumtropical.



African Pompano - Young Adult

SIZE: to 90 cm (3 ft.)

ID: Fore lobes of rear dorsal and anal fins of young trail long filamentous rays that are lost with age.



African Pompano - Juvenile

SIZE: body to 13 cm (5 in.)

ID: Diamond-shaped juveniles trail long thread-like filaments from dorsal and anal fins; as fish mature filaments become progressively shorter, disappearing in large adults.



GOLD-SPOTTED TREVALLY

Carangoides fulvoguttatus

SIZE: to 130 cm (4¼ ft.)

Jacks - Carangidae

ID: Silvery with many small golden or brassy spots; often 5 faint darkish bars on side; large adults have 3 or 4 dark blotches along middle of side. Solitary or form schools. Coastal reefs, lagoons and outer slopes to 100 m.

Indo-Asian Pacific: Red Sea and E. Africa to N. Australia, north S.W. Japan.



BLUDGER TREVALLY

Carangoides gymnostethus

SIZE: to 90 cm (3 ft.)

Jacks - Carangidae

ID: Silvery with a few brown or yellow spots scattered on sides. Juveniles and young adults form schools, adults usually solitary. Sheltered coasts and over deeper offshore reefs to at least 70 m.

Indo-Asian Pacific: Red Sea and E. Africa to N. Australia, north to S.W. Japan.



BARCHEEK TREVALLY *Carangoides plagiotaenia*

SIZE: to 42 cm (17 in.) Jacks - Carangidae

ID: Silvery; **narrow dark bar on gill cover.** Solitary or form small groups. Most common along edge of steep outer reef slopes in 2-200 m.

Indo - West Pacific: Red Sea and E. Africa to Tonga. - S.W. Japan and Marshall Is. in Micronesia to Australia.



ORANGE-SPOTTED TREVALLY

Carangoides bajad

SIZE: to 61 cm (2 ft.) Jacks - Carangidae

ID: Brassy silver to yellow-orange with many small orange spots on sides. Solitary or form small groups. Coastal reefs and outer slopes to 70 m.

Indo - Asian Pacific: Red Sea to Papua New Guinea, north to S.W. Japan.



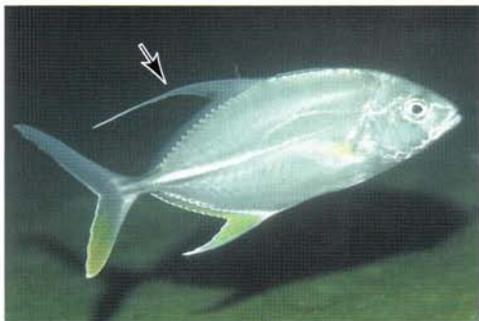
Orange-spotted Trevally - Variation

ID: Yellow-orange head, body and fins.



Orange-spotted Trevally - Variation

ID: Mixed silver and yellow-orange head, body and fins.



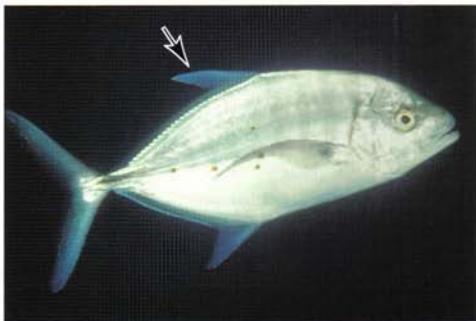
COACHWHIP TREVALLY

Carangoides oblongus

SIZE: to 46 cm (18 in.) Jacks - Carangidae

ID: Silvery, lower lobe of tail, anal and pectoral fins occasionally yellowish; **fore lobe of rear dorsal fin elongate.** Solitary or form small schools. Coastal reefs and lagoons, usually over sandy bottoms to 50 m.

Indo - West Pacific: E. Africa to Fiji. - S.W. Japan to Australia.



YELLOW-SPOTTED TREVALLY

Carangoides orthogrammus

SIZE: to 70 cm (2 1/4 ft.) Jacks - Carangidae

ID: Silvery with elliptical yellow spots or blotches on sides, **bluish fins;** occasionally faint darkish bars on side. Solitary or form small schools. Commonly over sand in lagoons, passes and around outer reefs in 3-160 m.

Indo - Pacific: E. Africa to Revillagigedo Is. in far eastern Pacific. - S.W. Japan to Australia.

Jacks



BLUE TREVALLY

Carangoides ferdau

SIZE: to 70 cm (2 1/4 ft.)

Jacks - Carangidae

ID: Silvery; rear dorsal, anal and tail fins tinted yellowish green; usually display 5-7 chevron bars. Form schools. Lagoons and outer reefs, often over sandy areas to 60 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii. - S.W. Japan to New Caledonia.



WHITETONGUE JACK

Uraspis heivola

SIZE: to 50 cm (20 in.)

Jacks - Carangidae

ID: Silver; football-shaped with **low inconspicuous dorsal fin**; adults unmarked, sub-adults have 6-7 broad darkish bars; tongue and floor of mouth white. Form schools. Pelagic and around offshore pinnacles and reefs in 25-130 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



BLACK JACK

Caranx lugubris

SIZE: to 74 cm (2 1/2 ft.)

Jacks - Carangidae

ID: Silvery gray to brown to nearly black; small dark spot at upper end of gill cover; scutes, rear dorsal, anal and rear of tail fins dark. Solitary or form small schools. Mainly offshore reefs in 20-70 m.

Circumtropical.



BLUEFIN TREVALLY

Caranx melampygus

SIZE: to 100 cm (3 1/4 ft.)

Jacks - Carangidae

ID: Silvery iridescent blue to green with dense spotting on upper two-thirds of body, blue to bluish fins. Solitary or form schools. Inhabit a variety of reef habitats, but most common on outer reefs to 190 m; can be locally abundant.

Indo-Pacific: Red Sea and E. Africa to far eastern Pacific. - S.W. Japan to Australia.



BRASSY TREVALLY

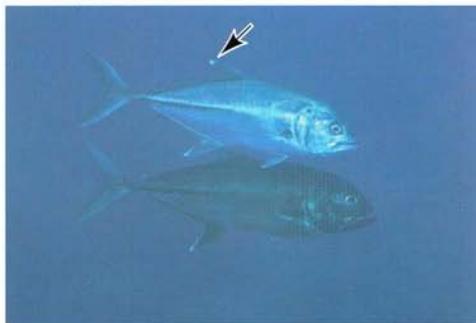
Caranx papuensis

SIZE: to 80 cm (2 1/4 ft.)

Jacks - Carangidae

ID: Silver, often with bronze to greenish tints, **lower tail lobe yellowish with white margin**; dark speckles above lateral line; white spot behind upper edge of gill cover. Solitary or form schools. Over lagoon to seaward reefs to 30 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef, New Caledonia and Samoa.



BIGEYE TREVALLY

Caranx sexfasciatus

SIZE: to 100 cm (3 1/4 ft.)

Jacks - Carangidae

ID: Silver (males turn black when courting); small black spot on upper end of gill cover, **white tip on fore lobe of rear dorsal fin**; relatively large eye. Form large schools. Most common on clear outer reefs to 50 m.

Indo-Pacific: Red Sea and E. Africa to far eastern Pacific. - S.W. Japan to Australia.



GIANT TREVALLY

Caranx ignobilis

SIZE: to 165 cm (5 1/2 ft.)

Jacks - Carangidae

ID: Silvery with numerous scattered small black spots; **small black area on upper base of pectoral fin**; steep forehead profile. Usually solitary. Most common on seaward reef slopes to 80 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



SILVER TREVALLY

Pseudocaranx dentex

SIZE: to 94 cm (3 1/4 ft.)

Jacks - Carangidae

ID: Bluish silver with mid-body yellowish stripe to tail and yellowish edge below rear dorsal and anal fins to tail; black spot on rear gill cover. Pairs or form small schools. Deep bottom feeders to 200 m; shallower in cool water.

Pacific: Indonesia to Hawaii, French Polynesia and Easter I.



YELLOWTAIL AMBERJACK

Seriola lalandi

SIZE: to 193 cm (6 1/2 ft.)

Jacks - Carangidae

ID: Elongate; silvery with a bronze to yellow stripe along middle of side to tail, **yellowish to yellow tail**. Form large schools. Usually offshore, but occasionally over reefs in 5-60 m.

Circumglobal: Primarily in subtropical seas.



AMBERJACK

Seriola dumerili

SIZE: to 188 cm (6 1/2 ft.)

Jacks - Carangidae

ID: **Elongate**; silvery; dark band runs from lip, across eye, to origin of dorsal fin, occasionally an amber stripe from gill cover to tail. Usually solitary, occasionally form small schools. Pelagic, but occasionally over reefs.

Circumtropical.



ALMACO JACK

Seriola rivoliana

SIZE: to 90 cm (3 ft.)

Jacks - Carangidae

ID: Silvery; high back profile; **dark band runs from lip across eye to front of dorsal fin**. Form schools. Pelagic, but occasionally over reefs; often around floating objects.

Circumglobal: In tropical and subtropical seas.



RAINBOW RUNNER

Elagatis bipinnulatus

SIZE: to 120 cm (4 ft.)

Jacks - Carangidae

ID: Silvery olive-blue; long slender body with pair of light blue stripes on sides, often with broader olive or yellowish stripe between. Form schools. Most common on outer reefs to 150 m.

Circumtropical.

Jacks - Milkfishes



SMALL-SPOTTED DART

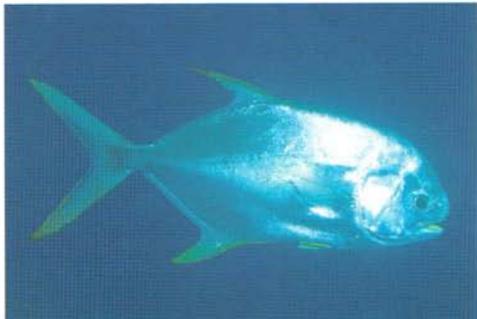
Trachinotus bailloni

SIZE: to 54 cm (21 $\frac{1}{4}$ in.)

Jacks - Carangidae

ID: Silver; blunt broadly rounded snout, fore lobes of rear dorsal and anal fins elongate, long widely forked tail lobes; 1-5 small black spots on middle of side. Coastal waters; often in surge zones along sandy beaches.

Indo-Pacific: Red Sea and E. Africa to Marshall Is. and Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



SNUBNOSE POMPANO

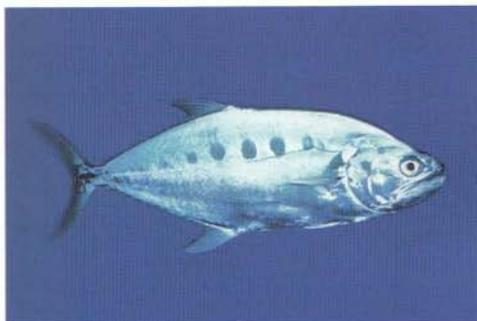
Trachinotus blochi

SIZE: to 65 cm (2 $\frac{1}{4}$ ft.)

Jacks - Carangidae

ID: Silver, pectoral and anal fins frequently yellow or orange; blunt broadly rounded snout; fore lobes of rear dorsal and anal fins elongate, long widely forked tail lobes. Solitary or form schools. Coral and rocky reefs in 10-50 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



TALANG QUEENFISH

Scomberoides commersonnianus

SIZE: to 120 cm (4 ft.)

Jacks - Carangidae

ID: Silver with single row of large dark spots on upper body. Solitary or form groups. Coastal reefs, lagoons and outer slopes to 25 m.

Indo-Asian Pacific: Red Sea and E. Africa to New Guinea. - S.W. Japan to Australia.



DOUBLE-SPOTTED QUEENFISH

Scomberoides lysan

SIZE: to 70 cm (2 $\frac{1}{4}$ ft.)

Jacks - Carangidae

ID: Silver with double row of 6-8 dusky round blotches on side; black spot on tip of fore lobe of rear dorsal fin. Often form small schools. Coastal reefs, lagoons and outer slopes to 100 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii. - S.W. Japan to Australia.



GOLDEN TREVALLY

Gnathanodon speciosus

SIZE: to 140 cm (4 $\frac{3}{4}$ ft.)

Jacks - Carangidae

ID: **Juveniles/Young Adults** - Bright yellow to silver with 7-11 black bars are replaced by a few black patches or spots on adults; fins yellow. Small groups of juveniles to 5 cm often accompany large pelagic fishes. Tiny juveniles often with jellyfishes. Coastal, lagoons and outer reefs.

Indo-Pacific: Red Sea to far eastern Pacific.



PILOTFISH

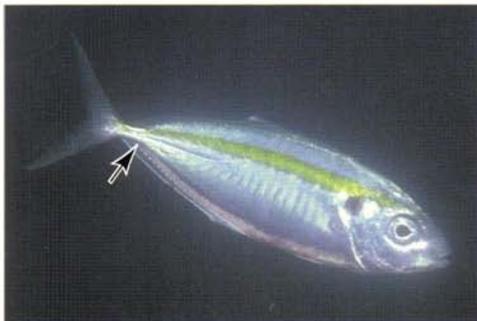
Naucrates ductor

SIZE: to 75 cm (2 $\frac{1}{2}$ ft.)

Jacks - Carangidae

ID: Silver with 5-7 wide black bars. Closely associated with pelagic sharks and rays. Form schools near front of host. Juveniles occasionally associate with jellyfishes.

Circumtropical.

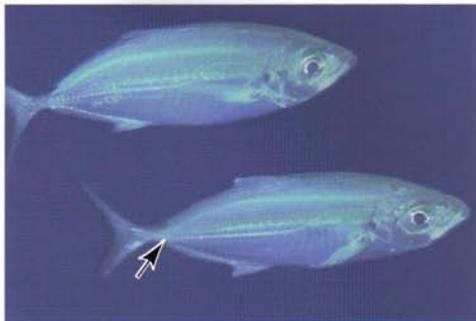


YELLOWSTRIPE SCAD *Selaroides leptolepis*

SIZE: to 22 cm (8 7/8 in.) Jacks - Carangidae

ID: Silvery with broad pale to bright yellow stripe from eye to tail; dark spot on rear edge of gill cover; **narrow row of scutes from mid-body to tail**. Form large schools. Often mill around wharf pilings or reef edges to 20 m.

Indo-Asian Pacific: Arabian Gulf to S.W. Japan and N. Australia.



OXEYE SCAD *Selar boops*

SIZE: to 22 cm (8 7/8 in.) Jacks - Carangidae

ID: Silvery with broad pale to bright yellow stripe from eye to tail; dark spot on rear edge of gill cover; **wide row of scutes from mid-body to tail**, large eye. Form large schools. Coastal reefs, lagoons and outer slopes to 170 m.

East Indo-West Pacific: Andaman Sea to Australia, Vanuatu and Caroline Is. in central Micronesia.



BIGEYE SCAD *Selar crumenophthalmus*

SIZE: to 30 cm (12 in.) Jacks - Carangidae

ID: Silvery, often with yellow stripe on side; deep-body (compare with more slender body of Russell's Mackerel Scad [next]); large eye (diameter greater than snout length), scutes only on rear lateral line. Form schools. Coastal reef and lagoons to 170 m.

Circumtropical.

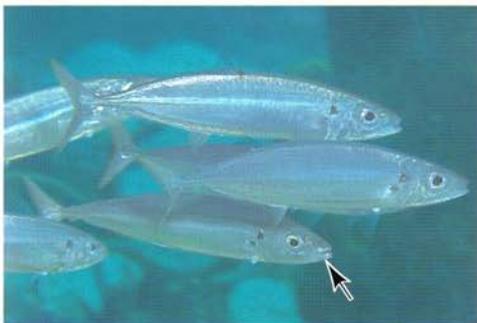


RUSSELL'S MACKEREL SCAD *Decapterus russelli*

SIZE: to 40 cm (16 in.) Jacks - Carangidae

ID: Silvery, **tail translucent to dusky yellow**; slender, nearly cylindrical in cross section; large mouth, jaw extends to below fore-eye; dusky spot on edge of gill cover; scutes only on rear lateral line. Form schools. Coastal reefs to 300 m.

Indo-West Pacific: Red Sea and E. Africa to Australia and New Caledonia, north to S.W. Japan.

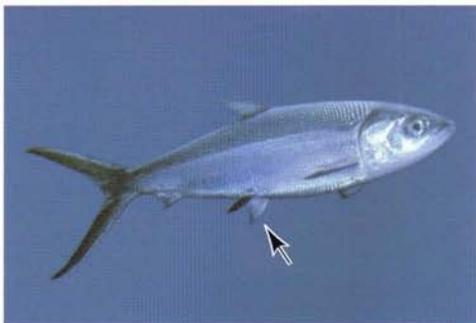


MACKEREL SCAD *Decapterus macarellus*

SIZE: to 35 cm (14 in.) Jacks - Carangidae

ID: Silvery, **very slender**, nearly cylindrical in cross section; **small mouth, jaw does not extend below eye**; black spot on edge of gill cover. Form large schools. Coastal, lagoons and outer reefs to 360 m.

Circumtropical.



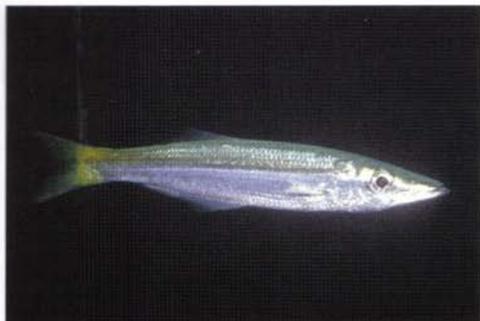
MILKFISH *Chanos chanos*

SIZE: to 180 cm (6 ft.) Milkfishes - Chanidae

ID: Silvery gradating to bluish green on back; single dorsal fin, large dark deeply forked tail, **ventral fins at mid-body below dorsal fin**. Form schools. Near surface of lagoons and seaward reefs.

Indo-Pacific: Red Sea and E. Africa to Central America. - S.W. Japan to Australia.

Barracuda - Tunas & Mackerels



YELLOWTAIL BARRACUDA

Sphyraena flavicauda

SIZE: to 50 cm (20 in.)

Barracudas - Sphyraenidae

ID: Silvery, **yellowish to yellow tail**; long cylindrical body with underslung jaw and pointed teeth; a pair of diffuse brownish stripes on side. Form schools. Coastal reefs, lagoons and outer slopes to 20 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



BRASS STRIPED BARRACUDA

Sphyraena helleri

SIZE: to 85 cm (3 ft.)

Barracudas - Sphyraenidae

ID: Silvery; long cylindrical body and large underslung jaw with pointed teeth; pair of thin brassy stripes on sides. Form large daytime schools; disperse to feed at night. Coastal, lagoon and outer reefs to 60 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn I. east of French Polynesia. - S.W. Japan to Australia.



BIGEYE BARRACUDA

Sphyraena forsteri

SIZE: to 65 cm (2 ft.)

Barracudas - Sphyraenidae

ID: Silvery; long cylindrical body and large underslung jaw with pointed teeth; **rear dorsal fin dusky with white tip**, blackish spot behind base of pectoral fin. Form schools. Reefs and outer reef slopes to 300 m.

Indo-Pacific: E. Africa to Society Is. in French Polynesia. - S.W. Japan to New Caledonia.



GREAT BARRACUDA

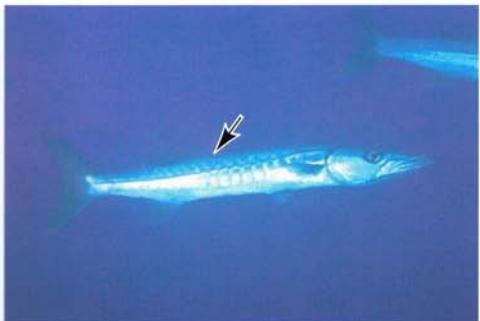
Sphyraena barracuda

SIZE: to 180 cm (6 ft.)

Barracudas - Sphyraenidae

ID: Silvery; long cylindrical body and large underslung jaw with pointed teeth; **usually has a few scattered dark blotches**. Can display barred or mottled pattern when resting near bottom. Solitary or form small groups. Reefs, usually in relatively shallow water to 15 m.

Circumtropical.



PICKHANDLE BARRACUDA

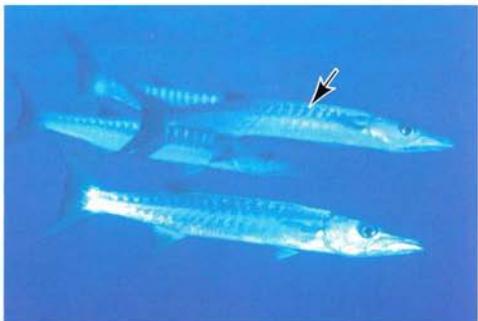
Sphyraena jello

SIZE: to 150 cm (5 ft.)

Barracudas - Sphyraenidae

ID: Silvery with yellowish tail; long cylindrical body and large underslung jaw with pointed teeth; **about 20 wavy bars primarily on upper half of the body**. Form schools. Coastal, lagoons and outer reefs to about 60 m.

Indo-West Pacific: E. Africa to Fiji. - S.W. Japan to Australia.



BLACKFIN BARRACUDA

Sphyraena qenie

SIZE: to 100 cm (3 1/4 ft.)

Barracudas - Sphyraenidae

ID: Silvery with dusky to dark tail with dark margin; long cylindrical body and large underslung jaw with pointed teeth; **about 18-22 chevron-shaped dark markings on sides**. Form large schools. Seaward reefs to 50 m.

Indo-Pacific: Red Sea and E. Africa to Panama. - S.W. Japan to Australia.



WAHOO *Acanthocybium solandri*

SIZE: to 210 cm (7 ft.) Tunas & Mackerels - Scombridae

ID: Silver; long slender body with dorsal and anal finlets and elongate pointed snout; occasionally display wavy-bar pattern. Solitary or in pairs. Pelagic, but occasionally pass near reefs.

Circumtropical.

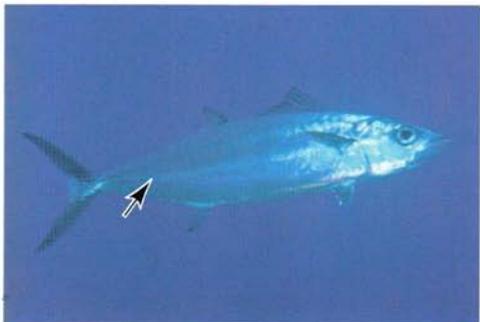


NARROW BARRED SPANISH MACKEREL *Scomberomorus commerson*

SIZE: to 235 cm (7 1/2 ft.) Tunas & Mackerels - Scombridae

ID: Silvery; long slender body with dorsal and anal finlets; display numerous thin wavy-bars. Solitary. Pelagic, but occasionally pass near or over reefs.

Indo-West Pacific: Red Sea to Australia and New Caledonia, north to S.W. Japan.



DOUBLE-LINED MACKEREL *Grammatorcynus bilineatus*

SIZE: to 100 cm (3 1/4 ft.) Tunas & Mackerels - Scombridae

ID: Silver; long slender unmarked body with dorsal and anal finlets; 2 lateral lines, one on upper the other on lower side. Lagoon, outer reefs and around dropoffs and steep pinnacles to 15m.

Indo-West Pacific: Red Sea to Samoa. - S.W. Japan to Australia.



DOGTOOTH TUNA *Gymnosarda unicolor*

SIZE: to 180 cm (6 ft.) Tunas & Mackerels - Scombridae

ID: Silver; long somewhat stocky unmarked body with dorsal and anal finlets; pale tips on rear dorsal and anal fins; single lateral line. Most common tuna on coral reefs. Deeper lagoons, passes and outer reef slopes to 60 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



YELLOWFIN TUNA *Thunnus albacares*

SIZE: to 210 cm (7 ft.) Tunas & Mackerels - Scombridae

ID: Silver, yellow dorsal and anal fins; large deep body; long dark pectoral fins. Form large schools. Pelagic, occasionally individuals or schools may pass by outer reef drop-offs.

Circumglobal: In tropical and temperate seas.



ORIENTAL BONITO *Sarda orientalis*

SIZE: to 102 cm (3 1/4 ft.) Tunas & Mackerels - Scombridae

ID: Silvery; torpedo-like body with closely spaced dorsal fins and dorsal and anal finlets; numerous narrow black stripes on back. Form schools. Pelagic, occasionally in the vicinity of reefs.

Indo-Pacific: Red Sea and E. Africa to Central America. - S.W. Japan to Australia.

Tunas & Mackerels - Chubs - Mulletts



LONG-JAWED MACKEREL

Rastrelliger kanagurta

SIZE: to 35 cm (14 in.) Tunas & Mackerels - Scombridae

ID: Silvery; faint spotting on upper back with narrow stripes below, black spot under pectoral fin. Form tightly bunched schools; feed on plankton with widely opened mouths. Coastal, lagoons and seaward reefs, often in turbid water to 90 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



TOPSAIL DRUMMER

Kyphosus cinerascens

SIZE: to 45 cm (18 in.)

Chubs - Kyphosidae

ID: Silvery gray with thin dark horizontal lines on side; **rear dorsal fin distinctly elevated** (higher than tallest dorsal spines). Form small to large groups. Rocky shores, reef flats, lagoons and outer reefs to 25 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia.



LOWFIN DRUMMER

Kyphosus vaigiensis

SIZE: to 45 cm (18 in.)

Chubs - Kyphosidae

ID: Silvery gray with narrow bronzy stripes; rear dorsal fin not elevated; **outer edge of anal fin aligns with outer edge of upper tail lobe**. Form small to large groups. Rocky shores, reef flats, lagoons and outer reefs to 25 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and French Polynesia.



Lowfin Drummer - Phase

ID: Can change rapidly to pattern with numerous white spots.



GRAY DRUMMER

Kyphosus bigibbus

SIZE: to 70 cm (2 1/4 ft.)

Chubs - Kyphosidae

ID: Silvery gray with narrow bronzy stripes; may display large white spots; rear dorsal fin not elevated; **rear edge of anal fin aligns forward of front edge of upper tail lobe**. Form groups. Seaward reefs to 25 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef and N. New Zealand.



Gray Drummer - Yellow Variation

ID: Occasionally this species is uniformly yellow and rarely albino.



WESTERN DRUMMER

Kyphosus cornelii

SIZE: to 60 cm (2 ft.)

Chubs - Kyphosidae

ID: Silvery gray with **broad brown streak along upper and lower margins of tail**. Usually form schools. Rock or coral reefs to 20 m.

Localized: W. Australia between Cape Leeuwin and Coral Bay.



STRIPEY

Microcanthus strigatus

SIZE: to 16 cm (6 1/4 in.)

Chubs - Kyphosidae

ID: White to yellow undercolor with 5-6 black stripes. Solitary or form small or dense aggregations. Lagoons, rocky areas and shallow coral reefs.

Localized: Isolated populations in E. and W. Australia, N. New Caledonia, Taiwan, S.W. Japan and Hawaii.



FRINGLIP MULLET

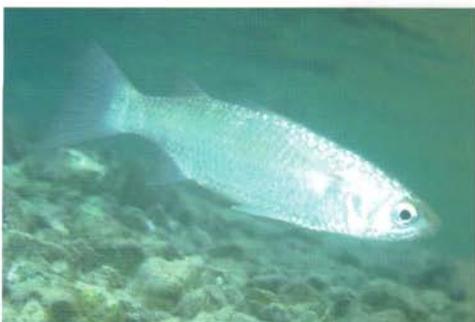
Crenimugil crenilabris

SIZE: to 40 cm (16 in.)

Mullets - Mugilidae

ID: Silvery with **narrow gray stripe on each scale row**; black spot at upper pectoral fin base; rear margin of lunate tail dusky. Form schools. Often near coral reefs to 10 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia.



DWARF MULLET

Valamugil engeli

SIZE: to 15 cm (6 in.)

Mullets - Mugilidae

ID: **Small**; silvery without distinctive markings. Form schools. Shallow protected areas of sand, algae and mud in lagoons and around shallow reef flats to 8 m.

Indo-Pacific: E. Africa to French Polynesia.



DIAMOND-SCALE MULLET

Liza vaiigiensis

SIZE: to 52 cm (20 3/4 in.)

Mullets - Mugilidae

ID: Silvery with large diamond-shaped scales, **black pectoral fins**, yellowish tan square-cut tail. Form schools. Protected sandy shorelines of lagoons and reef flats to 10 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



ACUTE-JAWED MULLET

Neomyxus leuciscus

SIZE: to 46 cm (18 in.)

Mullets - Mugilidae

ID: Silvery with **yellow spot on base of pectoral fin**. Form schools. Lagoons and around seaward reefs to 10 m.

Pacific: S. Japan, Micronesia, Hawaii, Line Is. and French Polynesia.

Grunters - Tarpons - Needlefishes - Halfbeaks - Archerfish



SIXFEELER THREADFIN

Polydactylus sexfilis

SIZE: to 25 cm (10 in.)

Threadfins - Polynemidae

ID: Silver; under-slung jaw, 6 elongate rays extend from lower pectoral fins. Rays extend to scour sand when feeding. Solitary or form small groups. Sand, mudflats and mangroves.

Indo - Pacific: India to Micronesia, Hawaii and Pitcairn Is. east of French Polynesia. - S. Japan to Australia.



SAND BASS

Psammoperca waigiensis

SIZE: to 47 cm (18 3/4 in.)

Snooks - Centropomidae

ID: Silvery gray to brown; eyes have glassy appearance. Solitary or small groups; nocturnal. Often in dark recesses around weedy areas in 3-12 m.

Asian Pacific: Indonesia to Philippines. - China to N. Australia.



CRESCENT-BANDED GRUNTER

Terapon jarbua

SIZE: to 32 cm (13 in.)

Grunters - Terapontidae

ID: Silvery with pattern of curved darkish bands on body; striped tail. Form schools. Estuaries, stream mouths and along sandy beaches in areas of brackish water in 20-290 m.

Indo - West Pacific: Red Sea to Samoa. - S.W. Japan to Australia.



SILVER GRUNTER

Mesopristes argenteus

SIZE: to 30 cm (12 in.)

Grunters - Terapontidae

ID: Silvery gray with white belly; white first spine on ventral and anal fins, yellow iris. **Small Juveniles** - White with 4 or 5 black stripes and yellow fins. Solitary or form groups. Estuaries and stream mouths, occasionally near reefs to 3 m.

Asian Pacific: Indonesia, Philippines, New Guinea and Solomon Is. to Cape York in N.E. Australia.



INDO-PACIFIC TARPON

Megalops cyprinoides

SIZE: to 90 cm (3 ft.)

Tarpons - Megalopidae

ID: Silver; large prominent scales, pectoral fins low on body, ventral fins on belly below dorsal fin, deeply forked tail. Solitary or form small groups. Inner bays, river mouths and mangroves to 50 m.

Indo - Pacific: Red Sea to N. Micronesia and French Polynesia. - S. Korea to S.E. Australia.



DIAMONDFISH

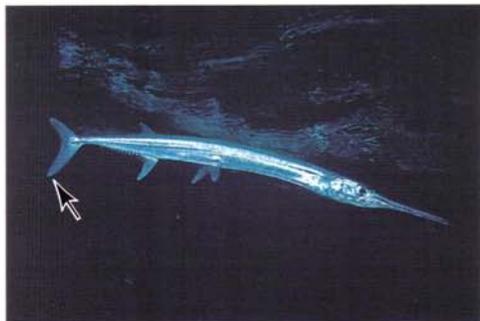
Monodactylus argenteus

SIZE: to 27 cm (10 3/4 in.)

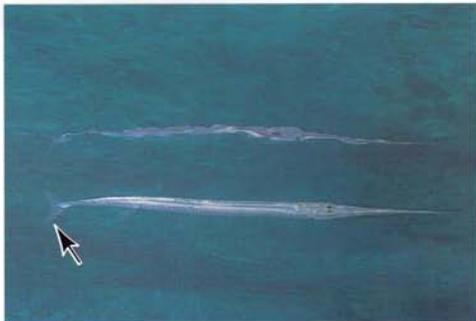
Diamondfishes - Monodactylidae

ID: Silver, dorsal and tail fins yellowish to yellow; round laterally compressed body with prominent triangular dorsal and anal fins. Form schools. Estuaries, harbors and silty inshore reefs to 10 m.

Indo - West Pacific: Red Sea and E. Africa to Mariana Is. in Micronesia. - S.W. Japan to Australia.



CROCODILE NEEDLEFISH *Tylosurus crocodilus*
Needlefishes - Belonidae
SIZE: to 150 cm (5 ft.)
ID: Silvery; extremely slender with elongate upper and lower jaws and numerous needle-like teeth; **forked tail with larger lower lobe** and black keel on base. Solitary or form small groups. Near surface of lagoons and inshore reefs.
Circumtropical.



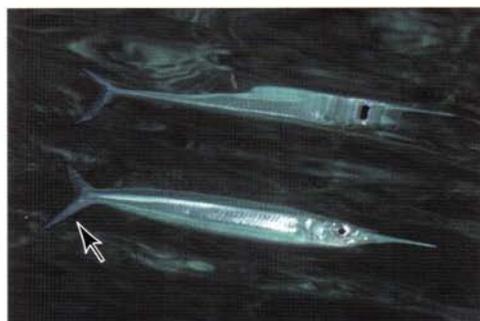
KEELTAIL NEEDLEFISH *Platybelone argalus*
Needlefishes - Belonidae
SIZE: to 37 cm (15 in.)
ID: Silvery; extremely slender with elongate upper and lower jaws; **forked tail with lobes of nearly equal size** and black keel on base. Solitary or small form groups. Near surface of lagoons and inshore reefs.
Circumtropical.



REEF NEEDLEFISH *Strongylura incisa*
Needlefishes - Belonidae
SIZE: to 70 cm (2 1/4 ft.)
ID: Silvery; extremely slender with elongate upper and lower jaws and numerous needle-like teeth; **tail margin wavy with larger lower lobe**; no keel on tail base. Solitary or form small groups. Near surface of lagoons and inshore reefs.
Asian Pacific: S.W. Japan and Micronesia to Great Barrier Reef.



ESTUARINE HALFBEAK *Zenarchopterus dispar*
Halfbeaks - Hemiramphidae
SIZE: to 13 cm (5 in.)
ID: Silvery; slender body with very short upper jaw and elongate sword-like lower jaw; **margin of tail straight (not forked)**. Common in estuaries, but occasionally at surface above coral reefs and near mangroves.
Indo-West Pacific: Sri Lanka to Samoa. - Mariana Is. in N. Micronesia to New Caledonia.



DUSSUMIER'S HALFBEAK *Hyporhamphus dussumieri*
Halfbeaks - Hemiramphidae
SIZE: to 30 cm (12 in.)
ID: Silvery; slender body with **very short upper jaw and elongate sword-like lower jaw**; **tail forked** with lower lobe longer than upper. Form schools. Near surface of lagoons and seaward reefs.
Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Australia.



BANDED ARCHERFISH *Toxotes jaculatrix*
Archerfishes - Toxotidae
SIZE: to 20 cm (8 in.)
ID: Silvery white with 4 or 5 wedge-shaped black bars on upper half of sides; dorsal fin well back on rear body. Swim near surface; "shoot" down insect prey with jet of water from mouth. Coral reefs adjacent to mangroves.
Indo-Asian Pacific: India to Indonesia, New Guinea and Australia.

Mojarras - Flagtails - Ponyfishes - Silversides



DEEP-BODIED SILVER BIDDY

Gerres erythrouus

SIZE: to 35 cm (14 in.)

Mojarras - Gerreidae

ID: Silver with dusky bars and darkish tail, yellow ventral fins. Form loose groups to small schools. Sand flats and slopes to 40 m.

Indo-Asian Pacific: Maldives to S.W. Japan, Palau and Yap in Micronesia.



LONGTAIL SILVER BIDDY

Gerres acinaces

SIZE: to 35 cm (14 in.)

Mojarras - Gerreidae

ID: Silver with obvious scales; several rows of dusky (usually oval) markings on sides; young have 7-8 dusky bars. Solitary or form loose groups. Sandy areas near reefs to 12 m.

Indo-West Pacific: Red Sea and E. Africa to Marshall Is. in Micronesia. - S.W. Japan to Australia.



OBLONG SILVER BIDDY

Gerres oblongus

SIZE: to 35 cm (14 in.)

Mojarras - Gerreidae

ID: Silver with ovular spots forming broken stripes. Solitary or form loose groups. Sandy areas near reefs.

Indo-West Pacific: Red Sea to Samoa. - S.W. Japan to New Caledonia.



BLACKTIP SILVER BIDDY

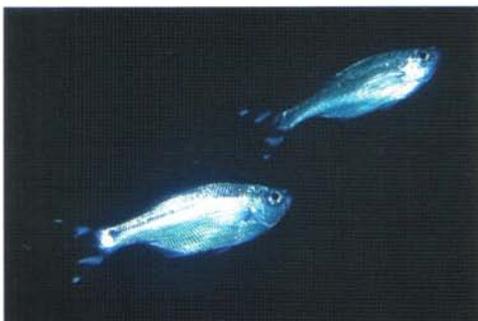
Gerres oyena

SIZE: to 25 cm (10 in.)

Mojarras - Gerreidae

ID: Silver with obvious scales; unmarked except for a blackish margin on dorsal fin (more intense at front). Solitary or form small groups. Common along sandy beaches and sand bottoms near reefs to 10 m.

Indo-Asian Pacific: Red Sea and E. Africa to Mariana Is. in Micronesia. - S.W. Japan to Australia.



BARRED FLAGTAIL

Kuhlia mugil

SIZE: to 24 cm (9 1/2 in.)

Flagtails - Kuhlidae

ID: Silvery, perch-like fish with striped pattern on tail. Frequently form schools. Rocky surf zones. Juveniles often inhabit rocky tide pools.

Indo-Pacific: Red Sea to Central America. - S.W. Japan to Australia.



PLAIN FLAGTAIL

Kuhlia petit

SIZE: to 25 cm (9 3/4 in.)

Flagtails - Kuhlidae

ID: Silvery with no distinguishing markings; may mix with Barred Flagtail, but lack of bold markings on tail. Form aggregations in surf zone of rocky shores or in tide pools.

Central Pacific: Phoenix Is. in Central Pacific and Marquesas Is. in French Polynesia.



THREADFIN PEARL-PERCH *Glaucosoma magnificum*

SIZE: to 10 cm (4 in.) Pearl Perches - Glaucosomatidae

ID: Compressed oval body; silver with greenish mottling on rear body; brown eye bar, white spot below rear dorsal fin; filament trails from fore lobe of rear dorsal fin. Usually form schools. Coastal reefs and trawling grounds in 10-30 m.

Localized: S. New Guinea to N. Australia.



ORANGEFIN PONYFISH *Leiognathus bindus*

SIZE: to 11 cm (4 1/4 in.)

Ponyfishes - Leiognathidae

ID: Silvery gray with subtle maze-like pattern on back; deep body; orange spot at front of dorsal fin. Usually form schools. Coastal rock and coral reefs mixed with sand bottoms to 40 m.

Indo-Asian Pacific: India and Sri Lanka to S.W. Japan and Australia.



TOOTHPONY *Gazza minuta*

SIZE: to 14 cm (5 1/2 in.) Ponyfishes - Leiognathidae

ID: Silvery gray with bold maze-like pattern of dark markings on back. Usually form aggregations. Silty coastal reefs to 40 m.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S.W. Japan to Australia.



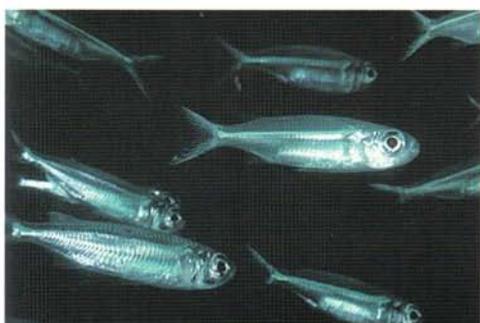
SLENDER SILVERSIDE *Hypoatherina barnesi*

SIZE: to 7 cm (2 1/4 in.)

Silversides - Atherinidae

ID: Thin body (compare with Robust Silverside [next]); greenish silver; bright narrow stripe from upper eye to tail, **broad stripe below running from gill cover to near origin of anal fin.** Form large schools. Lagoons and along shore lines.

Indo-West Pacific: E. Africa to N.E. Australia, Fiji and N. Cook Is.



ROBUST SILVERSIDE *Atherinomorus lacunosus*

SIZE: to 14 cm (5 1/2 in.) Silversides - Atherinidae

ID: Robust body; greenish silver often with blue reflections on gill cover; two dorsal fins with ventrals below and behind pectorals; narrow silver mid-body stripe. Form schools. Near surface in sheltered waters of mangroves and coastal reefs.

Asian Pacific: Kalimantan (Borneo) in Indonesia to Solomon Is. - Philippines and Palau to Great Barrier Reef.



STRIPED SILVERSIDE *Atherinomorus endrachtensis*

SIZE: to 10 cm (4 in.)

Silversides - Atherinidae

ID: Silvery; slender with two dorsal fins and ventrals below and behind pectorals; several longitudinal rows of small dark spots on sides. Form schools. Usually at surface in sheltered waters of mangroves and coastal reefs.

Asian Pacific: Kalimantan (Borneo) in Indonesia to Solomon Is. - Philippines and Palau to Great Barrier Reef.

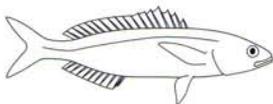
IDENTIFICATION GROUP 6

Slender Schoolers/Colorful Fusiliers - Anthias

This ID Group consists of slender bodied, fast-moving fishes that gather in large numbers in mid-water to feed on current-borne zooplankton.

FAMILY: Fusiliers - Caesionidae

4 Genera – 17 Species Included



Typical Shape

Fusiliers, close relatives of snappers, are a small family of fishes confined to the tropical waters of the Indo-Pacific. Family members typically have slender torpedo-shaped bodies, small terminal mouths with protrusible upper jaws, and deeply forked tails. Fusiliers typically congregate in large, fast-swimming zooplankton-feeding aggregations in mid-water along outer reef slopes. Such schools often consist of mixed species. During the day small assemblies from aggregations approach the reef where they mill about in loose groups and often attend cleaning stations. While near the reef several species develop rusty brown complexions. Fusiliers also seek the reefs' protection to sleep at night.

SUBFAMILY: Anthias - Serranidae/Anthiinae

4 Genera – 38 Species Included



Typical Shape

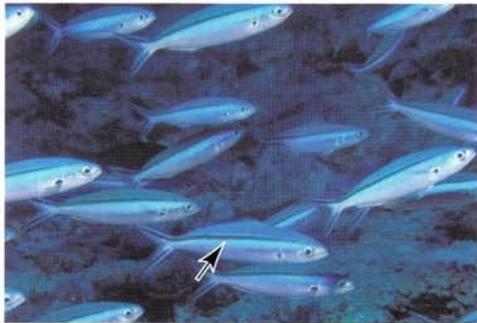


Typical Shape

Anthias, small sea basses classified in the subfamily Anthiinae, spend much of the day feeding on zooplankton just above the reef's protection. On many current-swept outer reef slopes in the tropical Pacific pulsating clouds of the small, brightly colored plankton-pickers represent the largest and most visually dramatic concentrations of fish life. The huge feeding aggregations, often numbering in the hundreds or even thousands, are made up of many small coexisting social units known as harems. Each harem consists of a single dominant male, a few lesser males and a cluster of females and juveniles.

Like other sea basses, anthias are sequential hermaphrodites that begin life as females, and later, influenced by social or environmental cues change into males. A few males eventually rise through a strictly controlled pecking order to gain exclusive dominance of a harem. These typically larger, more brilliantly colored individuals, which often display filamentous fin streamers, constantly defend their social position and bevy of females by aggressively challenging neighboring males and lesser males under their control. At dusk a colony's dominant males begin frenzied up and down, zigzagging courtship dances culminating in side-by-side spawning rushes with individual females in their harems.

Slender Schoolers/Colorful



BLUESTREAK FUSILIER

Pterocaesio tile

SIZE: to 25 cm (9½ in.)

Fusiliers - Caesionidae

ID: Silvery blue; several dark scale row stripes on back, wider dark stripe below, **iridescent blue stripe from gill cover to tail**, black streak on tail lobes. Form aggregations, often mix with other fusiliers. Clear water slopes and reefs to 60 m.

Indo - Pacific: E. Africa to Rapa I. in French Polynesia. - S.W. Japan to New Caledonia.



Bluestreak Fusilier - Red Phase

ID: Most fusiliers have the ability to change their typical open-water colors to reddish brown shades, especially on the lower body, when they associate with reefs for sanctuary to attend cleaning stations or to sleep at night.



RUDDY FUSILIER

Pterocaesio pisang

SIZE: to 21 cm (8¼ in.)

Fusiliers - Caesionidae

ID: Vary from a solid color to combinations of blue to blue-green to silvery red; red to black tail tips, straight thin black lateral line. Form aggregations, often mix with other fusiliers. Steep slopes and shallow coastal and seaward reefs to 30 m.

Indo - West Pacific: E. Africa to reefs offshore N.W. Australia, Philippines and Fiji.



TWINSTRIPE FUSILIER

Pterocaesio mairi

SIZE: to 35 cm (13½ in.)

Fusiliers - Caesionidae

ID: Silvery blue to blue-green; **yellow stripe on side covers lateral line except on tail base**, a second stripe on back, dark tail tips. Form aggregations, often mix with other fusiliers. Steep slopes and coastal, lagoons and seaward reefs to 30 m.

Indo - Pacific: E. Africa to Samoa and French Polynesia. - S. Japan and Micronesia to New Guinea.



THREESTRIPE FUSILIER

Pterocaesio trilineata

SIZE: to 20 cm (8 in.)

Fusiliers - Caesionidae

ID: Silvery; three yellowish to brownish stripes alternate with three bluish stripes on back; dark tail tips. Form aggregations, often mix with other fusiliers. Steep slopes, shallow coastal, lagoon and seaward reefs to 30 m.

Indo - Pacific: E. Africa to Fiji, Line Is. and French Polynesia. - S.W. Japan to E. Australia.



DOUBLE-LINED FUSILIER

Pterocaesio digramma

SIZE: to 21 cm (8¼ in.)

Fusiliers - Caesionidae

ID: Silvery blue to blue-green; **thin yellow stripe on side below lateral line except above on tail base** and another on back; dark tail tips. Form aggregations, often mix with other fusiliers. Steep slopes, patch reefs and seaward reefs to 30 m.

Asian Pacific: E. Malaysian Peninsula and S.W. Japan to Australia and New Caledonia.

Fusiliers



RANDALL'S FUSILIER

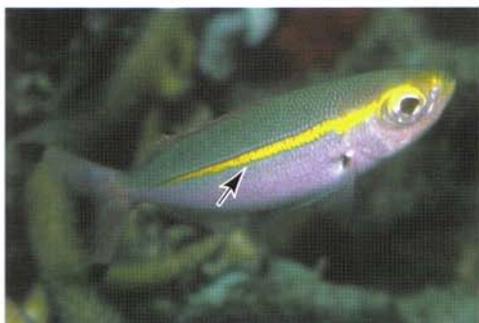
Pterocaesio randalli

SIZE: to 25 cm (9 3/4 in.)

Fusiliers - Caesionidae

ID: Silvery blue to reddish blue or blue-green; large elongate yellow blotch on forebody, black to reddish tail tips. Form aggregations, often mix with other fusiliers. Steep slopes and coastal, lagoon and seaward reefs to 30 m.

Indo - Asian Pacific: E. Andaman Sea to Molucca Is. in Indonesia and S. Philippines.



NARROWSTRIP FUSILIER

Pterocaesio tessellata

SIZE: to 25 cm (9 3/4 in.)

Fusiliers - Caesionidae

ID: Bluish green back with reddish to white below; **narrow yellow stripe** covers lateral line except on tail base, dark tail tips. Form aggregations. Most commonly on steep slopes, also coastal and seaward reefs to 30 m.

Indo - Asian Pacific: E. India and Sri Lanka to Philippines, Palau and Vanuatu.



SLENDER FUSILIER

Gymnoaesio gymnoptera

SIZE: to 18 cm (7 in.)

Fusiliers - Caesionidae

ID: Bluish green back, silvery pink to reddish below; 2-3 diffuse wavy stripes on back and narrow yellow to brown stripe below, dark tail tips. Form aggregations, often mix with other fusiliers. Coral reefs in 2-20 m.

Indo - West Pacific: Red Sea and E. Africa to Fiji, north to Philippines.



GOLDBAND FUSILIER

Pterocaesio chrysozona

SIZE: to 21 cm (8 1/4 in.)

Fusiliers - Caesionidae

ID: Silvery brownish blue to green back and pale lower body; **wide yellow stripe** from eye, tapers toward tail base, dark tail tips. Form aggregations. Coastal, lagoons and outer reefs in 2-25 m.

Indo - Asian Pacific: Red Sea and E. Africa to Papua New Guinea, - S.W. Japan to Australia.



WIDE-BAND FUSILIER

Pterocaesio lativittata

SIZE: to 20 cm (8 in.)

Fusiliers - Caesionidae

ID: Silvery blue; **yellow stripe from eye bulges above pectoral fin and tapers toward tail base**, dark tail tips. Form aggregations, often mix with other fusiliers. Most common on steep slopes and deep passes, also coastal, lagoons and seaward reefs in 10-50 m.

Indo - Asian Pacific: Maldives to N.E. Papua New Guinea.



MOTTLED FUSILIER

Dipterygonatus balteatus

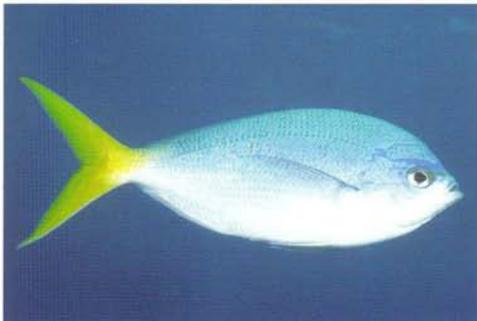
SIZE: to 14 cm (5 1/2 in.)

Fusiliers - Caesionidae

ID: Brownish to bronze back, silvery below; pair of thin dark wavy stripes on back and pale tan stripe below, dark tail tips. Form aggregations, often mix with other fusiliers. Coastal, lagoons and seaward reefs to 20 m.

Indo - Asian Pacific: Gulf of Aden and Somalia to Solomon Is. - Taiwan to Australia.

Slender Schoolers/Colorful



YELLOWTAIL FUSILIER

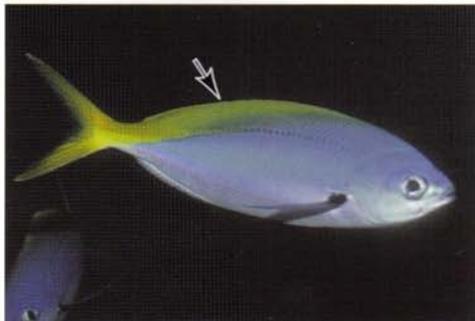
Caesio cuning

SIZE: to 50 cm (20 in.)

Fusiliers - Caesionidae

ID: Silvery blue to blue-green with yellow forked tail; deeper body than other fusiliers. Form large aggregations. Upper edge of steep slopes and around coastal patch reefs, often in silty areas with reduced visibility to 30 m.

Indo-West Pacific: E. India and Sri Lanka to Vanuatu. - S.W. Japan to Palau, N.W. Australia and Great Barrier Reef.



BLUE AND YELLOW FUSILIER

Caesio teres

SIZE: to 40 cm (1 1/4 ft.)

Fusiliers - Caesionidae

ID: Silvery blue, yellow from back to lower tail base and tail, black pectoral fin base. Form large aggregations, often mix with other fusiliers. Upper edge of steep slopes and around coastal patch reefs and seaward reefs to 30 m.

Indo-Pacific: E. Africa to Micronesia, Samoa and Line Is. in eastern Central Pacific. - S.W. Japan to Great Barrier Reef.



YELLOWBACK FUSILIER

Caesio xanthonota

SIZE: to 40 cm (16 in.)

Fusiliers - Caesionidae

ID: Silvery blue with yellow nape, back and tail. Form large aggregations often mix with other fusiliers. Upper edge of steep slopes and around coastal patch reefs and seaward reefs to 30 m.

Indo-Asian Pacific: E. Africa to Indonesia.



LUNAR FUSILIER

Caesio lunaris

SIZE: to 40 cm (16 in.)

Fusiliers - Caesionidae

ID: Silvery blue; black tip on tail lobes, row of black dashes on arching lateral line. **Young** - Yellow tail with black tips. Form large aggregations, often mix with other fusiliers. Upper edge of steep slopes, coastal patch and seaward reefs to 30 m.

Indo-West Pacific: Red Sea and E. Africa to Solomon Is. and Fiji. - S.W. Japan to Palau and Great Barrier Reef.



VARIABLE-LINED FUSILIER

Caesio varilineata

SIZE: to 40 cm (16 in.)

Fusiliers - Caesionidae

ID: Silvery blue with 2-6 yellow stripes; black streak near tip of each tail lobe. Form aggregations, often mix with other fusiliers. Upper edge of steep slopes and around coastal patch reefs and outer reefs in 2-25 m.

Indian Ocean: Red Sea and E. Africa to N.W. Sumatra in Indonesia.



SCISSORTAIL FUSILIER

Caesio caeruleaura

SIZE: to 35 cm (14 in.)

Fusiliers - Caesionidae

ID: Silvery blue; yellow stripe on side from head to tail, dark streak on each lobe of forked tail. Form large aggregations, often mix with other fusiliers. Upper edge of steep slopes and around coastal patch reefs and seaward reefs to 30 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Micronesia and Great Barrier Reef.

Anthias



RED SLENDER ANTHIAS *Luzonichthys earlei*

SIZE: to 4.4 cm (1 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Red often with some dark speckling and markings on back; 2 separate dorsal fins and small mouth. Form plankton-feeding aggregations 1-3 m above substrate, often mix with other anthias species. Steep outer reef slopes in 15-205 m.

Indo-Pacific: Maldives to Marshall Is. in Micronesia, Hawaii and Line Is. in eastern Central Pacific.



YELLOWNOSE SLENDER ANTHIAS *Luzonichthys whiteleyi*

SIZE: to 6 cm (2 1/2 in.) Anthias - Serranidae/Anthiinae

ID: Red to pink with yellow to orange upper head and back, **body color continues onto tail**; 2 separate dorsal fins. Form plankton-feeding aggregations 1-3 m above substrate, often mix with other anthias species. Steep slopes of outer reefs in 15-50 m.

East Indo-Pacific: East Indian Ocean to Phoenix and Line Is.



YELLOWBACK ANTHIAS *Pseudanthias evansi*

SIZE: to 10 cm (4 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Violet with bright yellow back from nape diagonally to lower tail; scattered yellow spots on body, **pale band through eye**. Form large plankton-feeding aggregations 1-3 m above substrate of outer reefs slopes to 40 m.

Indian Ocean: East Africa and Mauritius to Christmas I. and Andaman Sea.



MAGENTA SLENDER ANTHIAS *Luzonichthys waitei*

SIZE: to 7 cm (2 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Magenta with yellow to orange upper head and on back; **deep violet to yellow on tail borders**; 2 separate dorsal fins. Form huge schools, often mix with other anthias species. Steep outer reef slopes to 35 m.

Indo-West Pacific: Aldabra to New Caledonia and Fiji. - S.W. Japan to Great Barrier Reef.



BARTLETT'S ANTHIAS *Pseudanthias bartlettorum*

SIZE: to 9 cm (3 1/2 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Lavender with yellow upper head, back, dorsal and tail fins; **violet tail borders**; long 2nd dorsal fin spine. **Female** - Similar, lack long fin spine. Form plankton-feeding aggregations above substrate. Steep outer reef slopes in 4-30 m.

Pacific: Papua New Guinea, Palau, Caroline and S. Marshall Is. in Micronesia to Line Is. in eastern Central Pacific.



Yellowback Anthias - Female

ID: Violet with bright yellow back from nape diagonally to lower tail; orange band through eye. Aggregations may number in the hundreds and contain far more females than males.

Slender Schoolers/Colorful



LONGFIN ANTHIAS

Pseudanthias ventralis

SIZE: to 7 cm (2³/₄ in.)

Anthias - Serranidae/Anthiinae

ID: **Male** - Lavender with variable amounts of yellow on upper head, back and tail base, yellow fins, except red often in dorsal; random magenta stripes and spots on back; long ventral fins. Form small groups on outer reefs in 26-68 m.

Pacific: Great Barrier Reef to Pitcairn I. east of French Polynesia, north to Mariana Is. in Micronesia.



Longfin Anthias - Female

ID: Shades of lavender with yellow back and fins.



TWOSPOT ANTHIAS

Pseudanthias bimaculatus

SIZE: to 9 cm (3¹/₂ in.)

Anthias - Serranidae/Anthiinae

ID: **Male** - Shades of red or orange with lavender to purple scribble markings; 2 orange to yellow bands bordered with lavender to purple extend from eye to pectoral fin, tips of tail lobes bluish. Form small plankton-feeding aggregations 1-3 m above reefs and steep slopes in 20-60 m.

Indo-Pacific: E. Africa to Java and Bali in Indonesia.



Twospot Anthias - Female

ID: Red to orange or magenta head and forebody gradating to bright yellow back, tail base and dorsal, anal and tail fins. Turbid coastal reefs and clear outer reefs.



SQUARESPOT ANTHIAS

Pseudanthias pleurotaenia

SIZE: to 20 cm (8 in.)

Anthias - Serranidae/Anthiinae

ID: **Male** - Orangish red to magenta; large square violet spot on side; long 3rd dorsal spine. Form loose groups containing far more females than males. Steep seaward slopes in 10-180 m, usually below 25 m.

West Pacific: Indonesia to Samoa. - S.W. Japan and Micronesia to N.W. Australia and New Caledonia.



Squarespot Anthias - Female

ID: Orange with yellow fins; pair of violet stripes run from eye to tail base (compare similar female Shen's and Scalegin Anthias [following]). Form harems with dominant males. Socially dominant female capable of sex change over period of 2-3 weeks.

Anthias



SHEN'S ANTHIAS

Pseudanthias sheni

SIZE: to 20 cm (8 in.)

Anthias - Serranidae/Anthiinae

ID: Male - Orangish red to magenta or violet; 3rd dorsal spine of male elongate. Groups contain numerous females and several males. Form plankton-feeding aggregations 1-3 m above outer reef slopes in 20-55 m.

Localized: Offshore reefs of N.W. Australia.



Shen's Anthias - Female

ID: Orange with yellow fins; pair of violet stripes run from eye to tail base. Form harems with dominant males. Socially dominant female capable of sex change over period of 2-3 weeks. **Essentially identical to female Squarespot Anthias [previous], distinguish by association with male of same species.**



DOTTYBACK ANTHIAS

Pseudanthias venator

SIZE: to 7 cm (2 7/8 in.)

Anthias - Serranidae/Anthiinae

ID: Male - Reddish orange with yellowish highlights; small dark spots on upper body, yellowish tail borders. Form small groups. Lurk around caves and ledges on steep outer reef slopes in 20-50 m.

North Asian Pacific: Philippines to S.W. Japan.



BICOLOR ANTHIAS

Pseudanthias bicolor

SIZE: to 13 cm (5 in.)

Anthias - Serranidae/Anthiinae

ID: Male - Orange upper body, lavender to pale pink below; long 2nd and 3rd dorsal fin spines with yellow tips. **Female** - Similar, but spines shorter and lack yellow tips. Form schools. Ledges and outcroppings of lagoon and outer reefs in 5-68 m.

Indo-Pacific: Mauritius to Hawaii and Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



BARRIER REEF ANTHIAS

Pseudanthias engelhardi

SIZE: to 10 cm (4 in.)

Anthias - Serranidae/Anthiinae

ID: Male - Pale lavender-pink with pale yellowish to orangish tint on head and forebody; pale band below eye; 3rd dorsal spine slightly elongate. Form plankton-feeding aggregations 1-3 m. above outer reefs in 50-70 m.

Localized: Great Barrier Reef and Milne Bay Province of S.E. Papua New Guinea.



Barrier Reef Anthias - Female

ID: Pale lavender pink with yellow tint on head.

Slender Schoolers/Colorful



PAINTED ANTHIAS *Pseudanthias pictilis*

SIZE: to 15 cm (6 in.) Anthias - Serranidae/Anthiinae

ID: Male - Variable shading from lavender to red, **tail red with broad yellowish white bar at base**; yellow line from eye to base of pectoral fin. Form aggregations above outer reef slopes in 10-40 m, usually below 20 m.

Southwestern Pacific: Coral Sea, Great Barrier Reef, New Caledonia and Lord Howe I.



FLAME ANTHIAS *Pseudanthias ignitus*

SIZE: to 8 cm (3 in.) Anthias - Serranidae/Anthiinae

ID: Male - Orange to yellow body, lavender to pink head and bright red dorsal fin; **red borders on tail**. Form plankton-feeding aggregations above upper edges of steep slopes in 10-30 m.

Indian Ocean: Maldives and Andaman Sea to N. Sumatra and Indonesia.



REDFIN ANTHIAS *Pseudanthias dispar*

SIZE: to 9.5 cm (3 7/8 in.) Anthias - Serranidae/Anthiinae

ID: Male - Orange to yellow body, lavender to pink head and bright red dorsal fin, translucent tail. Form plankton-feeding aggregations 1-3 m above substrate; males erect dorsal fin during courtship. Upper edge of steep slopes to 15 m.

East Indo-Pacific: Christmas I. to Line Is. in eastern Central Pacific. - S.W. Japan and Micronesia to Great Barrier Reef.



Redfin Anthias - Female

ID: Orange to peach upper head, body and fins, lower head pale; 2 narrow violet to lavender or yellowish bars extend from eye to pectoral fin base. Form schools, females far outnumber males.



PURPLE QUEEN *Pseudanthias pascualis*

SIZE: to 17 cm (5 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Male - Purple with numerous small dark blue to orange spots; yellowish snout forming fleshy protuberance and pale chin. Form plankton-feeding aggregations high above outer reef slopes in 5-60 m.

Pacific: N. Sulawesi in Indonesia and Micronesia to French Polynesia. - Taiwan and S.W. Japan to Great Barrier Reef.



Purple Queen - Female

ID: Purple to purplish red; red to orange stripe from eye to edge of gill cover. Aggregations contain far more females than males.

Anthias



PURPLE ANTHIAS

Pseudanthias tuka

SIZE: to 12 cm (4 3/4 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Purple; yellow to yellowish chin and **dark purple blotch on rear dorsal fin**. Form plankton feeding-aggregations 1-3 m above outer reef slopes, but also coastal reefs in 2-40 m.

Asian Pacific: Indonesia to Solomon Is. - S.W. Japan, Palau to N.W. Australia and Great Barrier Reef.



Purple Anthias - Female

ID: Purple to lavender; yellow stripe along back to tip of upper tail lobe, yellow border lower tail lobe. Aggregations contain far more females than males.



THREADFIN ANTHIAS

Pseudanthias huchti

SIZE: to 12 cm (4 3/4 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Lavender-gray to yellowish gray; bright red stripe from eye to pectoral fin base, red border on ventral fins; long 3rd dorsal spine. Solitary or form small plankton-feeding groups around outcroppings of clear outer reef slopes in 4-20 m.

Asian Pacific: Indonesia, Philippines, Palau, Papua New Guinea, Solomon Is., Vanuatu and Great Barrier Reef.



Threadfin Anthias - Female

ID: Dull yellow or greenish yellow; bright yellow borders on tail. Groups contain far more females than males.



STOCKY ANTHIAS

Pseudanthias hypselosoma

SIZE: to 19 cm (7 1/2 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Pinkish with extensive red area on upper head and foreback, red spot on dorsal fin; rounded tail, elongate ventral fins and large anal fin. Form schools above coral outcroppings on sheltered coastal reefs and lagoons to 35 m.

East Indo - West Pacific: Maldives to Samoa. - S.W. Japan to Palau and Great Barrier Reef.



Stocky Anthias - Female

ID: Orange with pinkish lavender tints; slightly forked tail with red tips on lobes, thin lavender line from eye to pectoral fin lobe. In groups females far outnumber males.

Slender Schoolers/Colorful



SCALEFIN ANTHIAS

Pseudanthias squamipinnis

SIZE: to 15 cm (6 in.)

Anthias - Serranidae/Anthiinae

ID: Male/Red Variation - Shades of red with yellow spots on body scales; purple blotch on outer pectoral fin; long 3rd dorsal spine. Form small to huge plankton-feeding aggregations above shallow coastal, lagoon and outer reefs in 2 - 20 m.

Indo - West Pacific: Red Sea and E. Africa to Solomon Is. and Fiji. - S.W. Japan to Palau and E. Australia.



Scalefin Anthias - Female

ID: Orange; violet-edged orange stripe runs from eye to pectoral fin base. Compare similar female Squarespot and Shen's Anthias [previous]. In groups or aggregations females greatly outnumber males.



Randall's Anthias - Male/Striped Variation

ID: Males often develop wide violet stripe markings.



Scalefin Anthias - Male/Purple Variation

ID: Shades of purple, body may have tints of yellow or green; purple blotch on outer pectoral fin on all male variations; long 3rd dorsal spine. Feed on plankton in strong currents high above the substrate. Often the most common anthias species on shallow reefs.



RANDALL'S ANTHIAS

Pseudanthias randalli

SIZE: to 7 cm (2 3/4 in.)

Anthias - Serranidae/Anthiinae

ID: Male - Red to lavender; fins red with variable violet markings; elongate 3rd dorsal spine. **Female** - Similar, but have yellowish dorsal and tail fins. Form small groups. Lurk near caves and ledges on steep dropoffs in 15 - 120 m.

Asian Pacific: Indonesia and Philippines to Marshall Is. in E. Micronesia, north to S.W. Japan.



Randall's Anthias - Male/Lavender Variation

ID: Lavender males often develop wide red stripe markings.

Anthias



GOLDEN ANTHIAS

Pseudanthias aurlentus

SIZE: to 6 cm (2 1/2 in.) Anthias - Serranidae/Anthiinae

ID: Male - Orangish; pair of bright red stripes with white stripe between on upper body; long 3rd spine of dorsal fin. Form small groups above rubble and boulder areas on outer reef slopes in 40-60 m.

Localized: Line Is. in eastern Central Pacific.



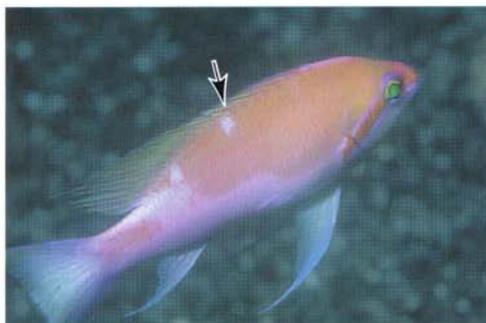
LUZON ANTHIAS

Pseudanthias luzonensis

SIZE: to 14.5 cm (5 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Male - Peach to pinkish with reddish snout; red to orange band across nape divides into three narrow wavy stripes to tail, wide red margin on tail. **Female** - Pale peach without distinctive markings. Outer reef slopes in 20-60 m.

Asian Pacific: Indonesia and Philippines to Papua New Guinea. - Taiwan to Palau and Great Barrier Reef.



WHITESPOTTED ANTHIAS

Pseudanthias hutomoi

SIZE: to 12 cm (4 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Male - Pinkish to lavender; reddish band with violet borders from eye to pectoral fin, 2 white spots on back and whitish blotch on rear body and upper tail base. Form small schools. Cluster around rocky outcroppings on coastal reefs in 30-70 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



Whitespotted Anthias - Female

ID: Pinkish with reddish scale margins and yellowish brown upper head; wide orangish band from eye to pectoral fin, 3-4 small white spots on back and upper tail base.



OLIVE ANTHIAS

Pseudanthias olivaceus

SIZE: to 12 cm (4 3/4 in.) Anthias - Serranidae/Anthiinae

ID: Male - Olive to dark gray; yellow spots on scales of lower body may align to form bars, yellow stripe behind eye. Form small plankton-feeding aggregations around rock and coral formations of seaward reefs to 34 m.

Central Pacific: Cook and Austral Is. to French Polynesia, north to Line Is.



Olive Anthias - Female

ID: Purple or reddish gray with bright yellow tail; red border on dorsal fin. Sometimes associated with Fusilier Damselfish which apparently mimics anthias.

Slender Schoolers/Colorful



SILVERSTREAK ANTHIAS

Pseudanthias cooperi

SIZE: to 14 cm (5½ in.) Anthias - Serranidae/Anthiinae

ID: Male - Red to orange to pale pink with **red tail**; silver-white streak below eye, red patch or bar on mid-side (may be intense or faint). Form small plankton-feeding aggregations above substrate of current swept outer reefs and drop-offs in 15-60 m.

Indo-Pacific: E. Africa to Samoa and Line Is. in eastern Central Pacific. - S.W. Japan to Micronesia and Australia.



REDBAR ANTHIAS

Pseudanthias rubrizonatus

SIZE: to 10 cm (4 in.) Anthias - Serranidae/Anthiinae

ID: Male/Pink Variation - Peach on head gradating to pale pink on rear body; pale stripe below eye and red bar on side. Form clusters around coral outcroppings, sometimes in turbid water. Coastal and seaward reefs in 10-58 m.

East Indo-Asian Pacific: Andaman Sea to Solomon Is. - S.W. Japan to Palau, N.W. Australia and Great Barrier Reef.



SUNSET ANTHIAS

Pseudanthias parvirostris

SIZE: to 9 cm (3½ in.) Anthias - Serranidae/Anthiinae

ID: Male - Yellow with purple dorsal fin and borders on tail; purple line markings on head. Reddish with white dorsal fin and tail borders in Indian Ocean. Form small aggregations near patch reefs and coral outcroppings of deep outer slopes in 30-65 m.

Indo-Asian Pacific: Mauritius and Maldives to Philippines, Palau and Solomon Is., north to S. Japan.



Silverstreak Anthias - Female

SIZE: to 11 cm (4¼ in.) Anthias - Serranidae/Anthiinae

ID: Olive upper body gradating to reddish head and lavender belly; reddish band from eye to pectoral fin; red dorsal and tail fins.



Redbar Anthias - Male/Yellow Variation

ID: Peach on head gradating to yellow on rear body, occasionally entirely yellow; pale stripe below eye and red bar on side. **Female** - Light red with yellow mark on each scale except belly where whitish, a narrow violet band from below eye to lower pectoral base, red tipped tail lobes.



Sunset Anthias - Female

ID: Pinkish undercolor with yellow spots on scales to solid bright yellow; violet line markings on snout and top of head.

Anthias



LORI'S ANTHIAS

Pseudanthias lori

SIZE: to 12 cm (4¾ in.) Anthias - Serranidae/Anthiinae

ID: Lavender to red undercolor with orangish spots on body scales; 3-5 bright red bars on back, bright red stripe on upper tail base, **tail lobes reddish**. Steep outer reef slopes and drop-offs in 25-60 m.

East Indo-Pacific: Christmas I. to Philippines, Fiji and French Polynesia. - S.W. Japan to N.W. Australia and Great Barrier Reef.



YELLOWSPOTTED ANTHIAS

Pseudanthias flavoguttatus

SIZE: to 11 cm (4¼ in.) Anthias - Serranidae/Anthiinae

ID: Lavender to red undercolor with yellow spots on scales; alternating bright red and white bars on back and tail base, **yellow tail lobes**. Form small schools. Lurk near ledges and caves of deep outer reef slopes and dropoffs below 30 m.

North Asian Pacific: S. Japan to Palau.



PRINCESS ANTHIAS

Pseudanthias smithvanizi

SIZE: to 9.5 cm (3¾ in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Lavender undercolor with orangish spots on body scales; red to reddish upper head and back, purple tail borders. Form small groups, sometimes mix with Lori's Anthias [previous]. Steep outer reef slopes in 6-70 m.

East Indo-West Pacific: Cocos-Keeling Is. to Palau and Marshall Is. in Micronesia. - S.W. Japan to Great Barrier Reef.



Princess Anthias - Female

ID: Lavender undercolor with orangish spots on body scales; white to pale blue stripe on back continues into white to pale blue tail with red borders.



REDSTRIP ANTHIAS

Pseudanthias fasciatus

SIZE: to 21 cm (8¼ in.) Anthias - Serranidae/Anthiinae

ID: **Female** - Orange to peach; red stripe from gill cover to tail. **Male** - Distinguished by long tail lobes. Solitary or form small groups. Most commonly in caves (may orient upside down to ceiling) of deep outer reefs and steep slopes 20-68 m.

Indo-Asian Pacific: Red Sea to Papua New Guinea. - S.W. Japan to Palau and Great Barrier Reef.



HAWK ANTHIAS

Serranocirrhites latus

SIZE: to 13 cm (5 in.) Anthias - Serranidae/Anthiinae

ID: Deep pink to orangish with yellow spot on scales of upper body; large bright yellow spot on upper gill cover, yellow bands radiate from eye. Solitary or form small groups. Lurk under ledges or near recesses in outer reef dropoffs in 15-70 m.

West Pacific: Indonesia to Fiji. - S.W. Japan to Palau, Great Barrier Reef and New Caledonia.

Slender Schoolers/Colorful



PAINTED PERCHLET

Pseudanthias pictilis

SIZE: to 13.5 cm (5 1/4 in.) Anthias - Serranidae/Anthiinae

ID: **Male** - Reddish lavender; violet bar edged with orange below middle of soft dorsal fin, pale oval-shaped mark on tail. Form mid-water aggregations above seaward reef slopes in 20-40 m.

Southwest Pacific: S. Great Barrier Reef, New Caledonia and Lord Howe I.



Painted Perchlet - Female

ID: Violet-pink sides and belly gradating to yellow upper back, dorsal and tail fins. Form mid-water aggregations, usually far more abundant than males.



DWARF PERCHLET

Plectranthias nanus

SIZE: to 5 cm (2 in.) Anthias - Serranidae/Anthiinae

ID: White to tan undercolor with irregular reddish brown blotches and spots; diagonal bar below eye, **dark spot on upper and lower tail base**. Solitary. Crevices and recesses of coastal, lagoon and outer reefs in 6-55 m.

East Indo-Pacific: Christmas I. to Philippines, Hawaii, Line Is. and Pitcairn Is. east of French Polynesia. (Only around islands.)



LONGFIN PERCHLET

Plectranthias longimanus

SIZE: to 3.5 cm (1 1/2 in.) Anthias - Serranidae/Anthiinae

ID: White to tan undercolor; irregular reddish brown blotches, diagonal brown bar below eye, **white spot on upper and lower tail base and behind dorsal fin**. Solitary. Crevices and recesses of reefs in 6-73 m.

Indo-West Pacific: E. Africa to Fiji. - S.W. Japan to Great Barrier Reef. Primarily from continental margins and large islands.



CHEQUERED PERCHLET

Plectranthias inermis

SIZE: to 3.5 cm (1 1/2 in.) Anthias - Serranidae/Anthiinae

ID: Whitish undercolor; large square red blotches align to form bars; **first three dorsal spines yellowish**; fins translucent or lightly spotted. Solitary. Base of steep slopes in rubble or in crevices of seaward slopes in 14-65 m.

East Indo-Asian Pacific: Christmas I. to Molucca Is. in Indonesia, Philippines and New Guinea.



REDBLOTCH PERCHLET

Plectranthias winniensis

SIZE: to 4.8 cm (1 7/8 in.) Anthias - Serranidae/Anthiinae

ID: Yellowish orange to yellowish brown; reddish blotching on tail base, **small pale spot on back between 1st and 2nd dorsal fins**. Solitary; cryptic crevice dwellers. Outer reef slopes in 23-58 m.

Indo-Pacific: Red Sea to Hawaii and Pitcairn Is. east of French Polynesia. - Marshall Is. in Micronesia to Great Barrier Reef and New Caledonia.

IDENTIFICATION GROUP 7

Heavy Bodies/Large Lips

Groupers - Soapfishes - Hawkfishes - Sweetlips

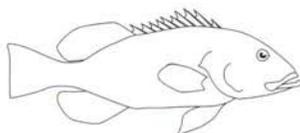
This ID Group consists of fishes with heavy, robust bodies.

FAMILY: Sea Basses - Serranidae

As a group members of family Serranidae are difficult to define, but can be distinguished by three spines on their gill covers, a long, continuous dorsal fin, a complete lateral line, large mouths with more than one row of teeth, and typically rounded tail fins. Serranids, which include the species-rich grouper complex, has undergone dramatic alterations in recent years. For example, anthias, presented in ID Group 6, were previously classified in family Anthiidae, but are now included in Serranidae as subfamily Anthiinae; likewise soapfishes once classified in family Grammistidae are now considered members of the sea bass family in subfamily Grammistinae. Also, a small group of diminutive sea basses in subfamily Liopropomatinae are presented in ID Group 11 because of their cryptic nature. Most sea basses are hermaphroditic beginning life as females and later changing into males. A few species, however, develop both male and female gonads simultaneously.

FAMILY: Sea Basses/Groupers - Serranidae

6 Genera – 57 Species Included



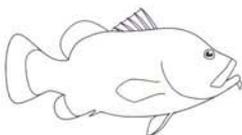
Typical Shape

Groupers, the most recognizable members of the sea bass family, are also locally known as rockcods, cods, hinds, and trouts. All have strong, stout bodies and large mouths filled with more than one row of teeth. In the Indo-Pacific, they vary in size from the Giant Grouper reaching a length of 231 cm (7 1/2 ft.) to the Blacktip Grouper attaining less than 40 cm (16 in.). Smaller groupers mature in one year, while larger species take many years to reach sexual maturity. Spawning is seasonal and controlled by moon phase. Many of the larger species travel from miles around, at precise times, to spawn in mass aggregations at traditional sites.

Groupers, subject to regular infestations of external parasites, spend significant amounts of time at preferred cleaning stations within their home ranges where larger individuals establish proprietary claims. Groupers are solitary carnivores that hunt near the bottom. Although awkward in appearance, groupers can cover short distances quickly. Fishes or crustaceans are drawn into their gullets by a powerful suction created when they rapidly open cavernous mouths. Held securely by hundreds of small, rasplike teeth that cover the jaws, tongue and palate, the prey is swallowed whole.

SUBFAMILY: Soapfishes - Serranidae/Grammistinae

5 Genera – 6 Species Included

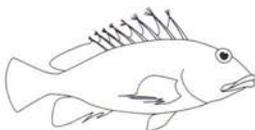


Typical Shape

The small group of fishes, known as soapfishes, exhibit a mixed bag of body shapes, but all have the unique ability to exude a soapy skin toxin (grammistin), which makes them unpalatable to predators. Soapfishes typically have upturned mouths, protruding lower jaws, and rounded tail fins. They generally inhabit shallow waters, and are solitary night-hunters that tend to lie on the bottom or hide inside crevices during the day.

FAMILY: Hawkfishes - Cirrhitidae

7 Genera – 15 Species Included

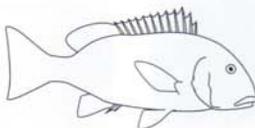


Typical Shape

Hawkfishes are a family of small, stout-bodied bottom fishes, without swim bladders, that typically establish territories within the branches of soft and hard corals. Initially curious, the picturesque fishes perch in an exposed position until closely approached before darting into protect areas where their thick lower pectoral fins can be used to wedge themselves in place. A series of cirri attached near the tips of their dorsal fin spines easily and reliably identifies family members. The sequential hermaphrodites live in small harems. All, except the plankton-feeding Lyretail Hawkfish, are lie-in-wait predators of small fishes and crustaceans.

FAMILY: Sweetlips (Grunts) - Haemulidae

2 Genera – 14 Species Included



Typical Shape

Sweetlips are closely related to and resemble snappers, but are not quite as large, have smaller mouths, more prominent lips, and lack the snappers' canine teeth. The fishes are known in many regions as grunts because of a "grunting" sound produced by rubbing flat teeth plates together, which is amplified by adjacent air bladders. The nocturnal predators of bottom-dwelling crustaceans spend daylight hours hovering alone or in groups near the reef's structure. Boldly patterned and erratic swimming juveniles only vaguely resemble their adult forms.

Groupers



SLENDER GROUPEr

Anyperodon leucogrammicus

SIZE: to 52 cm (20 3/4 in.)

Groupers - Serranidae

ID: Slender body; greenish to brownish gray with red-orange spots covering head and body; usually 3-4 pale stripes of variable intensity depending on mood. Solitary; fish predators. Sheltered coastal and outer reefs in 5-80 m.

Indo - West Pacific: Red Sea and E. Africa to Marshall Is. in Micronesia and Samoa. - S.W. Japan to Australia.



Slender Grouper - Juvenile

SIZE: to 12 cm (4 3/4 in.)

ID: Gold undercolor with dark edged pale blue stripes; blue-edged black spot on base of tail and another on base of rear dorsal fin. Mimic similar appearing wrasse allowing a close approach to fish prey.



PEACOCK GROUPEr

Cephalopholis argus

SIZE: to 55 cm (22 in.)

Groupers - Serranidae

ID: Brown; covered with small black-edged blue spots, broad blue borders on rear dorsal, anal, pectoral and tail fins. Solitary or form groups of up to 12 including a single dominant male. Variable habitats from tide pools to outer reef slopes in 1-15 m.

Indo - Pacific: Red Sea and E. Africa to E. French Polynesia. - S.W. Japan to Australia.



Peacock Grouper - Pale Phase

ID: Can pale or darken rapidly. Frequently display 5-6 pale bars on rear body in both the dark and pale phases.



BLUESPOTTED GROUPEr

Cephalopholis cyanostigma

SIZE: to 30 cm (12 in.)

Groupers - Serranidae

ID: Brown to reddish brown, often lightly mottled; covered with numerous black-edged blue spots. Solitary. Coastal, lagoon and seaward reefs in 1-50 m.

Asian-Pacific: E. Malaysian Peninsula, Philippines and Papua New Guinea to Great Barrier Reef.



Bluespotted Grouper - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Dark gray to brown with yellow fins. It was once described as a separate species, *C. xanthopterus*, but transitional specimens revealed its true identity. Like other genus members feed on crustaceans and fishes.

Heavy Bodies/Large Lips



BLUELINED GROUPE

Cephalopholis formosa

SIZE: to 34 cm (13 $\frac{3}{4}$ in.)

Groupers - Serranidae

ID: Dark brown to yellowish brown with dark blue, primarily horizontal, lines on head, body and fins. Solitary. Dead silty reefs in sheltered waters and coastal reefs in 1-15 m.

Indo-Asian Pacific: India and Maldives to N.W. Australia, north to S.W. Japan.



HARLEQUIN GROUPE

Cephalopholis polleni

SIZE: to 43 cm (17 in.)

Groupers - Serranidae

ID: Yellow to greenish yellow; bright blue or violet stripes on head, body and fins. Solitary. Clear water of outer reefs and steep slopes, seldom in less than 30 m.

Indo-Pacific: S.E. Africa to Line Is. in eastern Central Pacific, north to S.W. Japan.



CHOCOLATE GROUPE

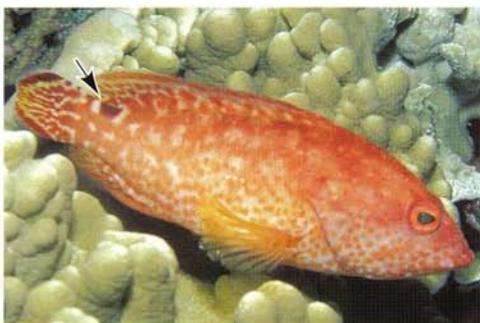
Cephalopholis boenak

SIZE: to 26 cm (10 in.)

Groupers - Serranidae

ID: Brown; usually display 7-8 dark bars on side, tail with dark corners edged in blue. Solitary; feed primarily on crustaceans. Dead silty reefs in sheltered waters and coastal reefs in 4-30 m.

Asian Pacific: E. Africa to Australia and New Caledonia, north to S.W. Japan.



LEOPARD GROUPE

Cephalopholis leopardus

SIZE: to 20 cm (8 in.)

Groupers - Serranidae

ID: Mottled reddish brown with numerous red-orange to pinkish red spots; dark brown saddle on tail base, dark brown streak on upper corner of tail, less intense streak below. Solitary. Coastal, lagoon and outer reefs to 35 m.

Indo-Pacific: E. Africa to Society Is. in French Polynesia. - S.W. Japan to Australia.



FLAGTAIL GROUPE

Cephalopholis urodeta

SIZE: to 27 cm (10 $\frac{3}{4}$ in.)

Groupers - Serranidae

ID: Brown to reddish, darker toward tail; occasionally display faint pale bars, **diagonal white lines across corners of tail**. Indian Ocean variation lacks these lines and has a dark spot on upper gill cover. Solitary. Variable reef habitats in 1-60 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Australia.



STRAWBERRY GROUPE

Cephalopholis spiloparaea

SIZE: to 22 cm (8 $\frac{3}{4}$ in.)

Groupers - Serranidae

ID: Red to pale reddish orange with dark red to brownish red mottling; commonly covered with faint pale spots, **blue to pale submarginal outline on tail**. Solitary. Common on steep outer slopes in 15-108 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Australia.

Groupers



CORAL GROUPEr

Cephalopholis miniata

SIZE: to 41 cm (16 in.)

Groupers - Serranidae

ID: Orange-red to reddish brown with numerous dark-edged blue spots; a narrow blue margin on all fins except pectorals, occasionally display pale bars. Solitary. Coastal, lagoon and seaward reefs in 2-150 m.

Indo - Pacific: Red Sea and E. Africa to Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



Coral Grouper - Small Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Orange-red with scattering blue-gray spots on head, body and fins. Inhabit caves and crevices, rarely in open.



SADDLE GROUPEr

Cephalopholis sexmaculata

SIZE: to 48 cm (19 in.)

Groupers - Serranidae

ID: Orange-red with numerous small blue spots; often lines on head, 6-7 pale saddles on back that commonly extend into bars on sides. Solitary or form groups. Caves on outer reef slopes in 10-150 m.

Indo - Pacific: E. Africa to French Polynesia. - S.W. Japan to Australia.



Saddle Grouper - Juvenile

SIZE: to 48 cm (19 in.)

ID: Similar to adults, but with black saddles between pale bars, sparser blue spotting and blue lines on head. Inhabit deep caves and recesses, rarely in open.



TOMATO GROUPEr

Cephalopholis sonnerati

SIZE: to 57 cm (23 in.)

Groupers - Serranidae

ID: Orange-red to reddish brown with dense network of red spots on head; more loosely scattered, fainter spots on body and fins. Solitary; frequent shrimp cleaning stations. Lagoon and outer reefs in 10-150 m.

Indo - Pacific: E. Africa to Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



Tomato Grouper - Variation

ID: Blotchy shades of red-orange to brown often forming 6-7 bars; scattering of small white spots on fins. Solitary. Patch reefs below 20 m.

Heavy Bodies/Large Lips



FRECKLED GROUPEr

Cephalopholis microprion

SIZE: to 24 cm (9 1/2 in.) Groupers - Serranidae

ID: Completely dark brown or display whitish area covering much of body; dark-edged blue spots cover head and breast. Solitary. Dead silty reefs in sheltered coastal waters in 2-20 m.

West Pacific: Malaysian Peninsula and Philippines to Great Barrier Reef and Fiji.



MASKED GROUPEr

Gracila albomarginata

SIZE: to 50 cm (2 1/2 ft.)

Groupers - Serranidae

ID: Olive head gradating to nearly black on body; large white square on mid-body, mid-lateral row of short narrow dark bars, line markings on head, dark spot on white tail base. Solitary; hover in mid-water. Steep outer reef slopes in 15-120 m.

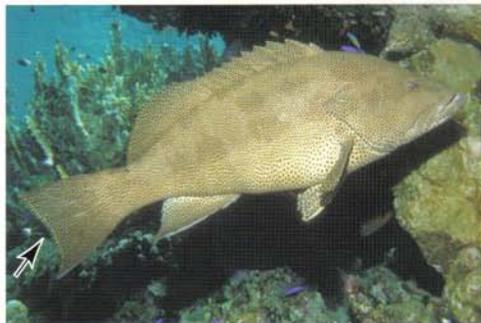
Indo-Pacific: E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



Masked Grouper - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Dark violet to lavender with bright red margins on dorsal, anal and tail fins. Solitary. Outer reefs in 2-20 m.



BROWN-SPOTTED GROUPEr

Epinephelus chlorostigma

SIZE: to 75 cm (2 1/2 ft.)

Groupers - Serranidae

ID: Shades of brown covered with numerous small close-set brown spots; tail slightly concave (tails rounded on most grouper species). Solitary. Coastal, lagoon and seaward reefs and mud bottoms in 4-280 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa, north to S.W. Japan.



INDONESIAN GROUPEr

Epinephelus waandersi

SIZE: to 60 cm (2 ft.)

Groupers - Serranidae

ID: Whitish to bright white body, grayish head and yellowish gray fins covered with small brown spots (frequently obscured by bright white areas); large dark blotches form broken bars. Solitary. Coastal reefs in 3-25 m.

Localized: Indonesia.



SURGE GROUPEr

Epinephelus socialis

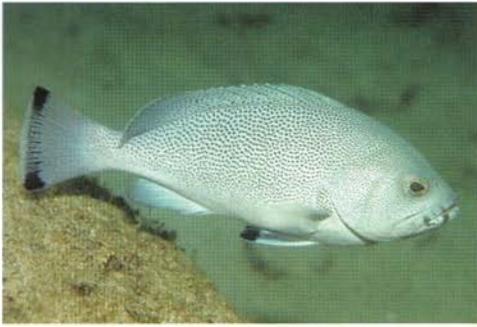
SIZE: to 42 cm (17 in.)

Groupers - Serranidae

ID: Shades of brown to olive with numerous small close-set brown spots; scattered white spots, dark margin on tail, rear dorsal and anal fins. Solitary. Surge areas of reef flats, rocky rubble and deep tide pools to 3 m.

Central Pacific: Insular areas from S. Japan to Samoa, Line Is. and Rapa I. in French Polynesia.

Groupers



SPECKLED GROUPE

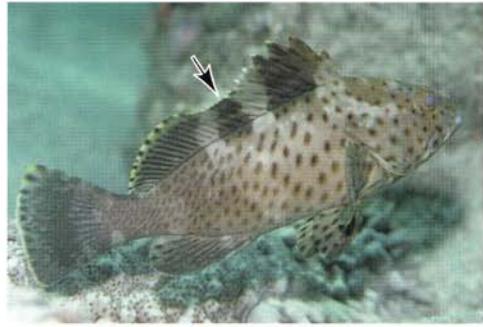
Epinephelus cyanopodus

SIZE: to 120 cm (4 ft.)

Groupers - Serranidae

ID: Pale bluish gray; profuse small black spots on head, body and fins. Juveniles and sub-adults (pictured) have black margin on tail and black ventral fin tips. Solitary. Lagoons and outer reefs over sand bottoms near patch reefs to 150 m.

West Pacific: S. China Sea and Marshall Is. in Micronesia to Fiji. - S.W. Japan to Australia.



LONGSPINE GROUPE

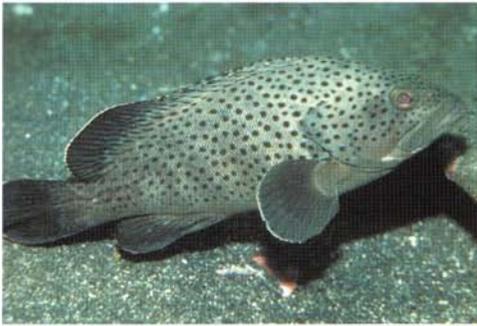
Epinephelus longispinis

SIZE: to 50 cm (20 in.)

Groupers - Serranidae

ID: Grayish brown with paler blotches; brown spots on head and diagonally-elongate spots on body, **pair of large dark blotches on dorsal fins**. Solitary. Coastal reefs in 1-70 m.

Indo-Asian Pacific: E. Africa to Lesser Sunda Is. in Indonesia.



PALEMARGIN GROUPE

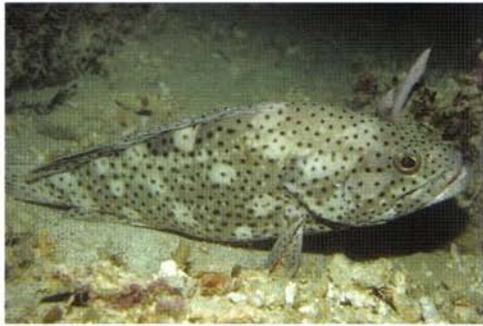
Epinephelus bontoides

SIZE: to 30 cm (12 in.)

Groupers - Serranidae

ID: Gray-brown with scattered reddish brown to black spots; fins dark gray with narrow pale margins. Solitary. Sheltered coastal reefs over mud, rock or cobble bottoms in 2-30 m.

Asian Pacific: Taiwan, Indonesia and Philippines to New Britain east of Papua New Guinea.



CORAL ROCK GROUPE

Epinephelus corallicola

SIZE: to 49 cm (19 1/2 in.)

Groupers - Serranidae

ID: Blotchy dirty white to pale brown with small widely spaced black spots on head, body and fins; darkish saddles on back, no distinct margin on rear dorsal, anal and tail fins. Solitary or form small groups. Silty coastal reefs and estuaries in 5-20 m.

Asian Pacific: W. Malaysian Peninsula to Solomon Is. - Taiwan to Australia.



DUSKYTAIL GROUPE

Epinephelus bleekeri

SIZE: to 75 cm (2 1/2 ft.)

Groupers - Serranidae

ID: Whitish undercolor with numerous orange to reddish or dark brown spots on head and body, spots on fins less well defined; often display several faint dark bars on body, **white margin on spotless tail**. Solitary. Silty coastal reefs to 50 m.

Indo-Asian Pacific: Arabian Gulf to N.W. Australia, north to Taiwan.



SNUBNOSE GROUPE

Epinephelus macrospilus

SIZE: to 43 cm (17 in.)

Groupers - Serranidae

ID: Dirty white with large polygon-shaped brown spots covering head, body and fins; white margin on dorsal, anal and **rounded tail fin**. Solitary. Coastal, lagoon and outer reefs in 3-44 m.

Indo-Pacific: E. Africa to Marquesas Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.

Heavy Bodies/Large Lips



BLACKSADDLE GROUPEr *Epinephelus howlandi*
Groupers - Serranidae

SIZE: to 44 cm (17 3/4 in.)
ID: Blotchy pale gray and brownish gray with brownish black spots on head, body and fins; dark saddles on back and upper tail base, white margins on dorsal, anal and tail fins. Solitary. Lagoon and outer reefs in 1-37 m.

West Pacific: S. China Sea to Samoa. - S.W. Japan to Great Barrier Reef.



GREASY GROUPEr *Epinephelus tauvina*
Groupers - Serranidae

SIZE: to 75 cm (2 1/2 ft.)
ID: Blotchy dirty white to pale brown with reddish brown spots on head, body and fins; darkish saddles on back, series of black spots form dark margin on rear dorsal, anal and tail fins. Solitary. Coastal, lagoon and outer reefs in 1-20 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef.



ARELATE GROUPEr *Epinephelus areolatus*
Groupers - Serranidae

SIZE: to 40 cm (16 in.)
ID: Gray to whitish with numerous large close-set brown spots that become smaller and more numerous with maturity; narrow white straight margin on tail (tails rounded on most grouper species). Solitary. Fine sediment bottoms to 200 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S.W. Japan to N.W. Australia.



TWINSPOr GROUPEr *Epinephelus bilobatus*
Groupers - Serranidae

SIZE: to 33 cm (13 in.)
ID: Light gray undercolor with polygonal spots in varying shades of brown; brilliant white strip on back, pair of blackish bi-lobed spots at base of dorsal fin. Solitary. Coastal reefs with weed bottoms and scattered coral patches in 4-50 m.

Asian Pacific: N.W. Australia and islands just west of Irian Jaya in Indonesia.



LONGFIN GROUPEr *Epinephelus quoyanus*
Groupers - Serranidae

SIZE: to 38 cm (15 in.)
ID: Whitish undercolor with closely set polygonal spots in varying shades of brown; brown diagonal band across breast, broad dark margin on anal fin, two darkish bands on throat under gill cover. Solitary. Silty coastal reefs in 1-50 m.

East Indo-Asian Pacific: Andaman Sea to Papua New Guinea. - S.W. Japan to Australia.



HONEYCOMB GROUPEr *Epinephelus merra*
Groupers - Serranidae

SIZE: to 32 cm (13 in.)
ID: White undercolor with polygonal spots in varying shades of brown; no distinctive markings. Solitary. Coastal, lagoon and sheltered outer reefs in 1-50 m, but usually less than 20 m.

Indo-Pacific: E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.

Groupers



FOURSADDLE GROUPEr

Epinephelus spilotoceps

SIZE: to 31 cm (12 1/4 in.)

Groupers - Serranidae

ID: Whitish undercolor with closely packed polygonal spots in varying shades of brown; **merging spots on back form 4 dark saddles**. Solitary. Coastal, lagoon and outer reefs in 1-20 m.

Indo-Pacific: E. Africa to Line Is. in eastern Central Pacific. - S. China Sea to offshore reefs of W. Australia.



HEXAGON GROUPEr

Epinephelus hexagonatus

SIZE: to 26 cm (10 in.)

Groupers - Serranidae

ID: Whitish undercolor with closely packed polygonal spots in varying shades of brown; spots on upper body often pale and poorly defined, **merging dark polygons on back form 5 dark saddles**. Solitary. Outer reefs exposed to surge.

Indo-Pacific: Red Sea and E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Great Barrier Reef.



CAMOUFLAGE GROUPEr

Epinephelus polyphkadion

SIZE: to 61 cm (2 ft.)

Groupers - Serranidae

ID: Brown with dirty white blotches, especially on upper body; numerous small dark brown spots covering head, body and fins, **dark saddle on tail base**. Solitary. Clear water of lagoons and outer reefs in 1-46 m.

Indo-Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



ONE-BLOTCH GROUPEr

Epinephelus melanostigma

SIZE: to 33 cm (13 in.)

Groupers - Serranidae

ID: Bluish white undercolor with closely packed polygonal spots in varying shades of brown; **merging spots on back form dark saddle under mid-dorsal fin**. Solitary. Lagoons, reef flats and seaward slopes to 10 m.

Indo-West Pacific: E. Africa to Samoa, north to S.W. Japan.



NETFIN GROUPEr

Epinephelus miliaris

SIZE: to 53 cm (21 in.)

Groupers - Serranidae

ID: Undercolor white with irregular gray blotches and covered with **closely packed polygonal brown spots**. Solitary; young inhabit mangroves and seagrass beds, adults in deeper water. Coastal reefs and outer slopes in 1-180 m.

Indo-West Pacific: E. Africa to Samoa, north to S.W. Japan.



CLOUDY GROUPEr

Epinephelus erythrurus

SIZE: to 43 cm (17 in.)

Groupers - Serranidae

ID: Dark gray with irregular pale spots and blotches randomly joined to form maze-like pattern. Solitary. Turbid harbours and estuaries with muddy or silty-sand bottoms in 1-20 m.

Indo-Asian Pacific: Pakistan, Laccadive Is. off India to Malaysian Peninsula and W. Indonesia.

Heavy Bodies/Large Lips



HIGHFIN GROUPEr

SIZE: to 60 cm (2 ft.)

Epinephelus maculatus

Groupers - Serranidae

ID: Brownish gray to brown covered with dark brown polygonal spots; **pair of prominent white saddles on forehead and middle of back.** Solitary. Often on open sand at base of reefs in coastal, lagoon and outer reefs in 2-100 m.

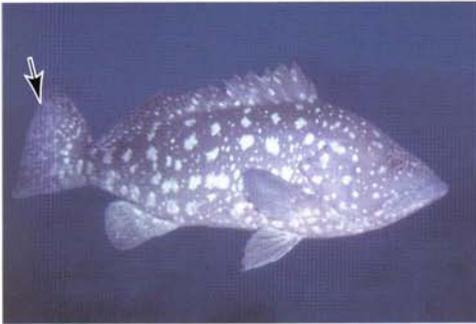
Indo-West Pacific: E. Africa to Samoa, north to S.W. Japan.



Highfin Grouper - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Dark brown with some yellowish tint, especially on fins; widely spaced large blackish and white spots, white saddles on nape (largest), mid-back and tail base. Young are found close to coral outcroppings and debris.



WHITEBLOTCHED GROUPEr

SIZE: to 100 cm (3 1/4 ft.)

Epinephelus multinotatus

Groupers - Serranidae

ID: Dark gray with scattered irregular whitish spots and blotches on head, body and fins; **rear edge of tail straight** or slightly concave. Solitary; juveniles more common near shore, adults usually in deep water. Coastal reefs in 10-90 m.

Indian Ocean: E. Africa and Arabian Gulf to W. Australia.



WHITESPOTTED GROUPEr

SIZE: to 60 cm (2 ft.)

Epinephelus caeruleopunctatus

Groupers - Serranidae

ID: Brownish gray to charcoal with white spots and blotches; pectoral, **anal and convex tail fins black**; only grouper to have underlying netted pattern. Solitary. Inside or near caves of coastal, lagoon and seaward reefs in 4-65 m.

Indo - West Pacific: E. Africa and Arabian Gulf to Fiji. - S.W. Japan to E. Australia.



WHITESTREAKED GROUPEr

SIZE: to 35 cm (14 in.)

Epinephelus ongus

Groupers - Serranidae

ID: Brown with large white blotches; numerous small pale spots on head, body and fins, the spots join to form wavy stripes on larger individuals. Solitary and cryptic. Near caves and ledges of coastal and lagoon reefs in 5-25 m.

Indo - West Pacific: E. Africa to Fiji. - S.W. Japan to Australia.



Whitestreaked Grouper - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Dark brown with numerous small white spots on head, body and fins. Solitary. Shelter under ledges or close to coral outcroppings of coastal, lagoon and outer reef slopes in 1-20 m.

Groupers



MALABAR GROUPEr

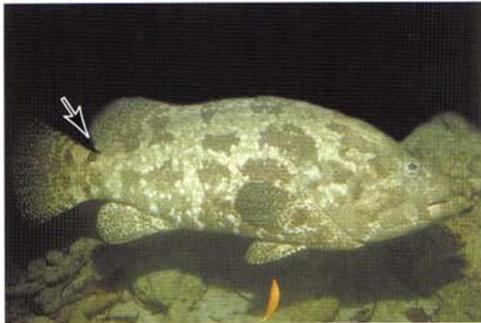
Epinephelus malabaricus

SIZE: to 234 cm (7 1/2 ft.)

Groupers - Serranidae

ID: Large; barred or mottled shades of gray to brown to olive with small whitish spots and blotches; covered with numerous small dark spots. Solitary. Protected areas of reefs, lagoons and estuaries to 100 m.

Indo-West Pacific: Red Sea to Fiji and Tonga. - S.W. Japan to Great Barrier Reef and New Caledonia.



BROWN-MARBLED GROUPEr

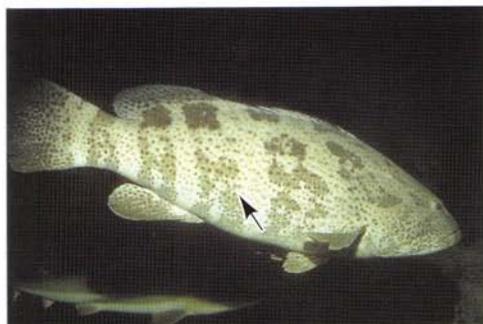
Epinephelus fuscoguttatus

SIZE: to 100 cm (3 1/4 ft.)

Groupers - Serranidae

ID: Pale yellowish brown with numerous close-set small brown spots of variable intensity; five vertical series of irregular dark brown blotches, **small black saddle tail base**. Solitary. Coastal, lagoon and outer reef slopes in 1-60 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



ORANGE-SPOTTED GROUPEr

Epinephelus coioides

SIZE: to 95 cm (3 1/4 ft.)

Groupers - Serranidae

ID: Tan to dark gray-brown with numerous orangish spots on head, body and fins; **four irregular ladder or H-shaped dark bars** and 3-4 blackish saddles on back. Solitary. Turbid coastal reefs and estuaries in 1-100 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



POTATO GROUPEr

Epinephelus tukula

SIZE: to 200 cm (6 1/2 ft.)

Groupers - Serranidae

ID: Huge; pale grayish with large round to ovate dark gray or blackish blotches on body; dark gray bands and blotches on head, spoke-like markings radiating from eye. Solitary. Coastal, lagoon and seaward reefs in 5-150 m.

Indo-Asian Pacific: Red Sea and E. Africa to Great Barrier Reef, north to S.W. Japan.



GIANT GROUPEr

Epinephelus lanceolatus

SIZE: to 234 cm (7 1/2 ft.)

Groupers - Serranidae

ID: Huge; mottled shades of dark gray to dark brown with small whitish spots and blotches. Largest Indo-Pacific grouper attaining a weight of at least 288 kg. (635 lbs.). Solitary. Coastal reefs, lagoons and outer slopes in 3-100 m.

Indo-Pacific: S. Red Sea and E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



WAVY-LINED GROUPEr

Epinephelus undulosus

SIZE: to 50 cm (2 1/2 ft.)

Groupers - Serranidae

ID: Pale gray to reddish gray; small dark spots on head, dark wavy lines and spots on body, fins bluish on smaller fish. Solitary. Coastal reefs, usually on open sand bottoms near low coral or rock outcroppings in 15-90 m.

Indo-Asian Pacific: E. Africa and Arabian Sea to Papua New Guinea, north to Taiwan.

Heavy Bodies/Large Lips



BLACKTIP GROUPEr

Epinephelus fasciatus

SIZE: to 40 cm (16 in.)

Groupers - Serranidae

ID: Highly variable from pale to medium greenish gray, reddish yellow or brown and scarlet; often with 5-6 dark bars of variable intensity, black tips on spinous dorsal fin. Solitary. Coastal, lagoon and seaward reefs in 3-160 m.

Indo-Pacific: Red Sea and E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



Blacktip Grouper - Variation

ID: Dark reddish brown with dark body bars; top of head reddish brown with 2 pale bands across nape, **black tips on dorsal fin spines** (source of common name) are not always present.



HALFMOON GROUPEr

Epinephelus rivulatus

SIZE: to 45 cm (18 in.)

Groupers - Serranidae

ID: Reddish brown head, mottled pale brown body with 5-6 irregular dark brown bars; **dark brown tail with pale speckling**. Solitary. Coastal reefs, often in weedy areas in 10-150 m.

Indo-West Pacific: E. Africa to Australia and New Caledonia. - S.W. Japan to N. New Zealand.



REDMOUTH GROUPEr

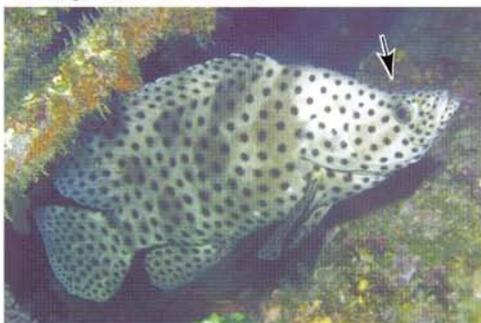
Aethaloperca rogaa

SIZE: to 60 cm (2 ft.)

Groupers - Serranidae

ID: Dark brown to black, occasionally with orangish cast; frequently with pale bar across abdomen; inside mouth red. Solitary. Usually inside or near caves or under ledges in coral-rich areas of seaward reefs in 3-50 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S.W. Japan to Australia.



BARRAMUNDI

Cromileptes altivelis

SIZE: to 70 cm (2 1/4 ft.)

Groupers - Serranidae

ID: Pale greenish white to light greenish brown with large widely spaced black spots; compressed body with long sloping nape and **concave profile above eyes**. Solitary and reclusive. Usually on dead, silty reefs in 1-30 m.

West Pacific: E. Malaysian Peninsula to Australia and New Caledonia, north to S.W. Japan.



Barramundi - Juvenile

SIZE: 4-8 cm (1 1/2 - 3 in.)

ID: White with fewer and larger black spots on head, body and fins than adult. Reclusive, hide near or in reef crevices and caves. Swim with unusual undulating motion similar to juvenile Sweetlips.

Groupers - Soapfishes



YELLOW-EDGED LYRETAIL

Variola louti

SIZE: to 55 cm (22 in.)

Groupers - Serranidae

ID: Violet to orange-red to brown with violet to blue spots on head, body and fins; lyre-shaped **tail with yellow margin**. Solitary. Clear waters of lagoons and outer reefs in 3-240 m.

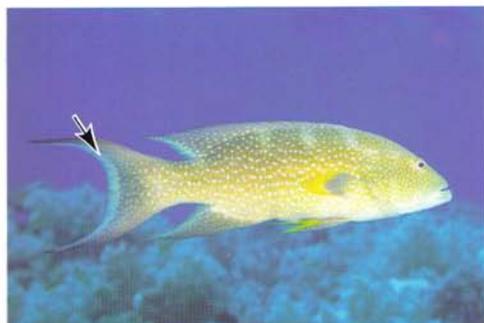
Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S.W. Japan to Australia.



Yellow-edged Lyretail - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Reddish brown back and upper head, white below with broad black stripe between; small blue spots on back and upper head, white stripe from middle of forehead to snout.



WHITE-EDGED LYRETAIL

Variola albinmarginata

SIZE: to 55 cm (22 in.)

Groupers - Serranidae

ID: Brownish orange with violet spots on head, body and fins; lyre-shaped **tail with white margin**. Solitary. Coastal reefs, lagoons and outer reefs in 4-200 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan to Australia.



HIGHFIN CORAL GROUPEr

Plectropomus oligacanthus

SIZE: to 75 cm (2½ ft.)

Groupers - Serranidae

ID: Red to reddish brown to lavender-brown with blue lines on head; blue spots on body and fins with some that join to form vertical lines on mid-side. Solitary. Steep slopes in 5-147 m.

Asian Pacific: Indonesia, Philippine and Marshall Is. in Micronesia to Australia.



SPOTTED CORAL GROUPEr

Plectropomus maculatus

SIZE: to 125 cm (4 ft.)

Groupers - Serranidae

ID: Red, pale gray or olive to dark brown with numerous small blue spots on body and fins; **elongate blue spots on head**, blue margin on tail, blue ring around eye. Solitary. Silty coastal reefs in 5-50 m.

Asian Pacific: Malaysian Peninsula and Philippines to Papua New Guinea and Australia.



LEOPARD CORAL GROUPEr

Plectropomus leopardus

SIZE: to 70 cm (2½ ft.)

Groupers - Serranidae

ID: Red, pale gray or olive to dark brown with **small blue spots on head**, body and fins; blue margin on tail, ring around eye, may display bars. Solitary. Coastal and lagoon reefs in 3-100 m.

West Pacific: South China Sea and S.W. Japan to Australia and Fiji.

Heavy Bodies/Large Lips



BLACKSADDLE CORAL GROUPER

Plectropomus laevis

SIZE: to 125 cm (4 ft.)

Groupers - Serranidae

ID: **Pale Variation** - Whitish with 4 black saddles on body and black band above eye, fins yellow. Generally smaller than the dark form and is possibly restricted to juveniles and females. Solitary. Lagoons and seaward reefs in 4-90 m.

Indo-Pacific: E. Africa to Tuamoutus Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



SQUARTAIL CORAL GROUPER

Plectropomus areolatus

SIZE: to 80 cm (2³/₄ ft.)

Groupers - Serranidae

ID: Whitish to pale gray with numerous small dark-edged blue spots on head, body and fins; frequently with 4-5 dark blotches forming saddles on back. Solitary. Coastal reefs, lagoons and outer reefs in 2-20 m.

Indo-West Pacific: Red Sea to Samoa and Phoenix Is. - S.W. Japan to Australia.



ARROWHEAD SOAPFISH

Belonoperca chabanaudi

SIZE: to 15 cm (6 in.)

Soapfishes - Serranidae

ID: Long slender body and elongate pointed head; dark bluish gray with black speckling; yellow spot on tail base, blue-rimmed black blotches on dorsal and ventral fins. Solitary. Caves and crevices on steep outer reef slopes in 4-50 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan to Australia.



Blacksaddle Coral Grouper - Dark Variation

ID: Dark gray to olive head, light gray to olive body with 3-4 dark bars or saddles; small dark-edged blue spots on head body and fins. This variation is possibly restricted to males, but no conclusive evidence. Feeds on a variety of larger reef fishes.



ROVING CORAL GROUPER

Plectropomus pessuliferus

SIZE: to 120 cm (4 ft.)

Groupers - Serranidae

ID: Brown to orange-red or olive with numerous small dark-edged round and vertically elongate blue spots; may display 5-6 dark bars on upper body. Solitary. Coastal, platform and outer reefs in 10-147 m.

Indian Ocean: Red Sea and E. Africa to Sumatra in Indonesia, but one individual recorded from Fiji in the Pacific.



DOUBLEBANDED SOAPFISH

Diploprion bifasciatum

SIZE: to 25 cm (10 in.)

Soapfishes - Serranidae

ID: Yellow head, body and fins; dark brown to black eye bar and broad bar from mid-dorsal fin to anal fin. Solitary or form small groups. Coastal reefs, often in turbid water in 1-18 m.

Indo-Asian Pacific: India and Maldives to Papua New Guinea. - S.W. Japan to Australia.

Soapfishes - Hawkfishes



SPOTTED SOAPFISH

Pogonoperca punctata

SIZE: to 35 cm (14 in.)

Soapfishes - Serranidae

ID: Brown with dense covering of small white spots; 5 black saddles on head, back and tail base; skin flap on chin. Solitary or in pairs. Clear waters of outer reef slopes in 20 - 120 m.

Asian Pacific: S.W. Japan and Indonesia to New Caledonia.



SIX-LINED SOAPFISH

Grammistes sexlineatus

SIZE: to 27 cm (10 3/4 in.)

Soapfishes - Serranidae

ID: Black with 6-9 white to gold stripes. Solitary. Under ledges or in recesses of lagoons, reef flats or seaward reefs to 20 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



OCCELLATED SOAPFISH

Grammistops ocellatus

SIZE: to 13 cm (5 in.)

Soapfishes - Serranidae

ID: Brown with large pale-edged dark brown to blackish spot on gill cover. Similar Mottled Soapfish [next] has larger scales and is mottled. Solitary or in pairs; cryptic. Deep inside caves and crevices of lagoons and outer slopes in 8-30 m.

Indo-Pacific: E. Africa to Society Is. in French Polynesia. - S.W. Japan to Australia.



MOTTLED SOAPFISH

Pseudogramma polyacanthum

SIZE: to 7.5 cm (3 in.)

Soapfishes - Serranidae

ID: Mottled brown; large pale-edged dark spot on gill cover. Similar Ocellated Soapfish [previous] has much smaller scales and is not mottled. Solitary and cryptic. Caves and crevices of coral reefs in 1-61 m.

Indo-Pacific: E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



FALSE SCORPIONFISH

Centrogenys vaiigiensis

SIZE: to 15 cm (6 in.)

False Scorpionfishes - Centrogeniidae

ID: Mottled brown with numerous dark blotches; dark bands on fins except dorsal which has spots and long spines, also variation with nearly solid orange body and white fins. Resembles a scorpionfish, possibly to discourage predators. Solitary or groups. Estuaries and silty coastal reefs in 2-10 m.

Indo-Asian Pacific: India to N.W. Australia, north to S.W. Japan.



LONGNOSE HAWKFISH

Oxycirrhites typus

SIZE: to 13 cm (5 in.)

Hawkfishes - Cirrhitidae

ID: Long "needle-nosed" snout; white with red bars and stripes forming netted pattern of squares. Solitary. Perch among branches of black coral and gorgonian sea fans on steep outer reef slopes in 12-100 m, usually below 25 m.

Indo-Pacific: Red Sea to Hawaii and Panama. - S.W. Japan to Great Barrier Reef.

Heavy Bodies/Large Lips



TWINSPOT HAWKFISH *Amblycirrhitus bimaculatus*
SIZE: to 8.5 cm (3 1/4 in.) Hawkfishes - Cirrhitidae
ID: Whitish undercolor with irregular brown bars; **pale-edged black spots under rear dorsal fin** and on gill cover. Solitary and cryptic. Caves and crevices of seaward reefs in 2-20 m.
Indo-Pacific: E. Africa to Hawaii and French Polynesia. - Taiwan to Australia.



GOLDEN HAWKFISH *Cirrhitichthys aureus*
SIZE: to 15 cm (6 in.) Hawkfishes - Cirrhitidae
ID: Yellow to orange to pale brown undercolor; may display darkish blotches, pale-edged dark spot on gill cover. Solitary. Outer reef drop-offs, often on sponges, usually below 20 m.
Asian Pacific: Indonesia and Philippines to S.W. Japan.



THREADFIN HAWKFISH *Cirrhitichthys aprinus*
SIZE: to 10 cm (4 in.) Hawkfishes - Cirrhitidae
ID: White undercolor with irregular red to brown bars and blotches; **pale-edged dark brown spot on gill cover**. Solitary or form small groups. Coastal and seaward reefs in 5-40 m.
Asian Pacific: Malaysian Peninsula and S.W. Japan to Papua New Guinea and Australia.



DWARF HAWKFISH *Cirrhitichthys falco*
SIZE: to 7 cm (2 3/4 in.) Hawkfishes - Cirrhitidae
ID: White with a pair reddish brown saddles on forehead; small red-brown blotches on rear body often align as bars, **pair of reddish bars below eye**. Solitary. Near coral heads on seaward reefs in 4-46 m.
Indo-Northwest Pacific: Maldives to Caroline Is. in Micronesia. - S.W. Japan to Australia.



PIXY HAWKFISH *Cirrhitichthys oxycephalus*
SIZE: to 9.5 cm (3 3/4 in.) Hawkfishes - Cirrhitidae
ID: White undercolor with irregular red-brown spots on body and fins. Similar Threadfin Hawkfish [above] has ocellated spot on gill cover. Solitary. Coastal, lagoon and outer reefs to 40 m.
Indo-Pacific: Red Sea and E. Africa to Panama. - Mariana Is. in Micronesia to Australia.



Pixy Hawkfish - Red Variation
ID: Color pattern variable according to locality and depth. Individuals from deeper water frequently have a pinkish undercolor with more closely-set, irregular red to maroon spots. Pictured individual from N. Sulawesi, Indonesia. All variations lack the bars under eye of similar Threadfin Hawkfish and Dwarf Hawkfish [above].

Hawkfishes



SPLENDID HAWKFISH

Cirrhitichthys splendens

SIZE: to 23 cm (9 in.)

Hawkfishes - Cirrhitidae

ID: White undercolor with dark brown body blotches; red spots on head are elongate on nape, spotted tail. Solitary. Seaward reefs in 5-30 m.

Southwest Pacific: N. New South Wales, Lord Howe, Norfolk and Kermadec Is.



MARbled HAWKFISH

Cirrhitus pinnulatus

SIZE: to 28 cm (11 in.)

Hawkfishes - Cirrhitidae

ID: Blotchy brown with white spots on body. One of the larger hawkfishes. Solitary. Seaward reefs in wave-affected areas to 3 m.

Indo-Pacific: Red Sea and E. Africa to Rapa and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



LYRETAIL HAWKFISH

Cyprinocirrhites polyactis

SIZE: to 15 cm (6 in.)

Hawkfishes - Cirrhitidae

ID: Orange-brown with faint brown freckling; forked tail. Solitary or form groups. Unlike other hawkfishes, which feed on the bottom, hover in mid-water feeding on plankton over steep slopes and coral outcroppings in 10-132 m.

Indo-Asian Pacific: E. Africa to Australia, north to S.W. Japan.



FLAME HAWKFISH

Neocirrhites armatus

SIZE: to 9 cm (3 1/2 in.)

Hawkfishes - Cirrhitidae

ID: Brilliant red; broad zone of black on back, also black ring around eye. Solitary and wary. Perch among branches of *Pocillopora* and *Stylophora* branching corals. Clear seaward reefs in 1-10 m.

West Pacific: Philippines, Sunda Is. in Indonesia to Samoa. - S.W. Japan to Great Barrier Reef.



ARC-EYE HAWKFISH

Paracirrhites arcatus

SIZE: to 13 cm (5 in.)

Hawkfishes - Cirrhitidae

ID: Shades of brown; arc-shaped marking of orange, red and blue lines behind eye, 3 orange dashes on lower edge of gill cover, broad white stripe on side to tail. Solitary. Perch on coral heads of coastal, lagoon and seaward reefs in 1-35 m.

Indo-Pacific: E. Africa to Hawaii and French Polynesia. - S.W. Japan to Australia.



NISUS HAWKFISH

Paracirrhites nisus

SIZE: to 10 cm (4 in.)

Hawkfishes - Cirrhitidae

ID: Lower edge of elliptical marking behind eye extends across cheek to lip, broad white stripe on rear body bordered with wide black bands. Solitary or in pairs. Among *Pocillopora* coral on exposed outer reefs in 3-25 m.

Indo-Pacific: Phoenix Is. in Central Pacific and Tuamotu Is. in French Polynesia.

Heavy Bodies/Large Lips



HALFSPOTTED HAWKFISH

Paracirrhites hemistictus

SIZE: to 28 cm (11 in.)

Hawkfishes - Cirrhitidae

ID: **Pale Variation** - Brown to yellowish brown or gray on head and body; white mid-lateral stripe with yellow below, numerous dark spots on upper body. Solitary. Perch in corals on clear, exposed seaward reefs in 1-18 m.

East Indo-Pacific: Cocos-Keeling I. to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



Halfspotted Hawkfish - Dark Variation

ID: Dark brown to dark gray; numerous dark spots cover entire body, single small white spot on mid-body.



YELLOW HAWKFISH

Paracirrhites xanthus

SIZE: to 11 cm (4 1/4 in.)

Hawkfishes - Cirrhitidae

ID: Yellow; short diagonal black line behind eye. Solitary. Perch among branches of *Pocillopora* coral on exposed outer reefs in 3-25 m.

Central Pacific: Phoenix Is. and Tuamotu and Society Is. in French Polynesia.



FRECKLED HAWKFISH

Paracirrhites forsteri

SIZE: to 22 cm (8 3/4 in.)

Hawkfishes - Cirrhitidae

ID: Colors quite variable, most commonly shades of brown; numerous small spots "freckles" on head and forebody, brown striped area toward rear of body. Solitary. Perch on corals in coastal, lagoon and seaward reefs in 1-35 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



Freckled Hawkfish - Variation

ID: Brown head and forebody and at a variable point on rear body becomes yellow continuing onto tail base and tail. Most commonly perch on branching corals including *Acropora*, *Pocillopora* and *Stylophora*.



Freckled Hawkfish - Variation

ID: Red to dark brown on upper half of body becoming black on rear with white lower body; yellow stripe on back; "freckles" on head is key to identification of all variations.

Sweetlips



GOLDSTRIPED SWEETLIPS *Plectorhinchus chrysotaenia*

SIZE: to 50 cm (20 in.) Sweetlips - Haemulidae

ID: Silvery-blue with numerous yellow stripes, bright yellow fins. Solitary or form groups. Coral-rich areas of coastal reefs and lagoons in 6-70 m. Formerly classified as *P. celebicus*.

Asian Pacific: S.W. Japan and Molucca Is. in Indonesia the Great Barrier Reef and New Caledonia.



MANY-LINED SWEETLIPS *Plectorhinchus multivittatum*

SIZE: to 50 cm (20 in.) Sweetlips - Haemulidae

ID: Pale bluish gray with bright yellow fins; wavy yellow lines on head, diagonal rows of broken yellow lines on body. Solitary or form small groups; nocturnally active, drift in sheltered areas during day. Mainly coastal reefs in 3-20 m.

Localized: N.W. Australia.



DIAGONAL-BANDED SWEETLIPS *Plectorhinchus lineatus*

SIZE: to 48 cm (19 in.) Sweetlips - Haemulidae

ID: White with black body bands and white belly; lips and fins yellow; spotted dorsal, anal and tail fins. Solitary or form small groups; generally nocturnal but drift in the open during the day. Coastal reefs, lagoons and seaward reefs to 35 m.

West Pacific: Indonesia and Philippines to Great Barrier Reef and New Caledonia, north to S.W. Japan.



ORIENTAL SWEETLIPS *Plectorhinchus vittatus*

SIZE: to 85 cm (3 ft.) Sweetlips - Haemulidae

ID: White with black stripes, lips and fins yellow; spotted dorsal, anal and tail fins. Solitary or form small groups; nocturnal, but drift in open during the day. Coastal reefs, lagoons and seaward reefs in 2-25 m.

Indo-West Pacific: E. Africa to Australia and Samoa, north to S.W. Japan.



Oriental Sweetlips - Large Juvenile/Sub-adult

SIZE: 10-15 cm (4-6 in.)

ID: White with yellowish head; irregular pattern of broad black stripes, bands and spots on head, body and fins. Solitary; remain close to shelter.



Oriental Sweetlips - Juvenile

SIZE: 4-8 cm (1½-3 in.)

ID: Dark brown with several large irregular white spots bordered with pale yellow. Solitary; remain close to shelter. Swim with peculiar undulating motion.

Heavy Bodies/Large Lips



STRIPED SWEETLIPS

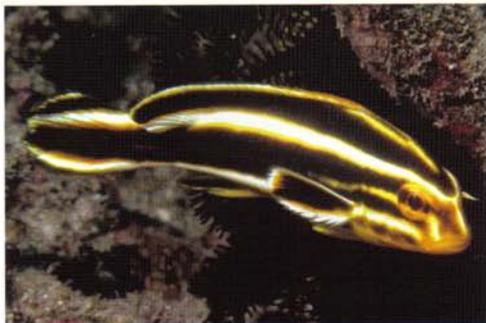
Plectorhinchus lessonii

SIZE: 48 cm (19 in.)

Sweetlips - Haemulidae

ID: White with 4-5 brown stripes on upper body, **white unmarked lower body**, yellow lips; broken lines on head, spots on yellowish dorsal, anal and tail fins. Solitary. Coastal reefs, lagoons and seaward reefs to 35 m.

West Pacific: Malaysian Peninsula and S.W. Japan to Great Barrier Reef and New Caledonia.



Striped Sweetlips - Juvenile

SIZE: 5-12 cm (2-5 in.)

ID: Yellow to pale yellow undercolor; black stripe runs from above eye onto soft dorsal fin, and wide black stripe from eye through tail, pectoral fins dark with pale yellow borders (similar Giant Sweetlips, juvenile [below] pectoral fins translucent yellow).



RIBBON SWEETLIPS

Plectorhinchus polytaenia

SIZE: to 40 cm (16 in.)

Sweetlips - Haemulidae

ID: Bright yellow with bold pattern of black-edged pale blue stripes running from head to tail. Solitary or may form small resting groups during the day; actively forage at night on small invertebrates. Coastal and seaward reefs in 5-40 m.

Asian Pacific: Indonesia and Philippines to Papua New Guinea and N.W. Australia.



GOLD-SPOTTED SWEETLIPS

Plectorhinchus flavomaculatus

SIZE: to 60 cm (2 ft.)

Sweetlips - Haemulidae

ID: Gray with orange and blue stripes on head and small orange spots on upper body extending onto dorsal and tail fins. Solitary or form small groups. Sheltered coastal reefs and lagoons in 2-25 m.

Indo-Asian Pacific: Red Sea and E. Africa to Papua New Guinea, - S.W. Japan to Australia.



GIGANT SWEETLIPS

Plectorhinchus albovittatus

SIZE: to 100 cm (3 1/4 ft.)

Sweetlips - Haemulidae

ID: Dusky gray mottled body; faint wide dark bar behind pectoral fin; black ventral fins and black edges on dorsal, anal and tail fins. Solitary. Lagoon and seaward reefs in 2-50 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji, - S.W. Japan to Australia.



Giant Sweetlips - Juvenile

SIZE: 7-15 cm (3-6 in.)

ID: Yellow undercolor with black stripe from above eye to base of soft dorsal fin; wide black stripe from eye to tail base; pectoral fins translucent yellow. Similar Striped Sweetlips, juvenile [above] pectoral fins dark with pale yellow borders.

Sweetlips



DOTTED SWEETLIPS

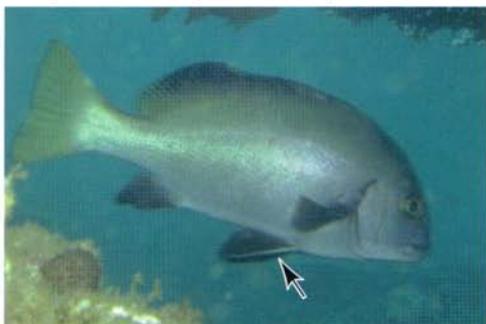
Plectorhinchus picus

SIZE: to 85 cm (3 ft.)

Sweetlips - Haemulidae

ID: Whitish with profuse small black spots covering head, body and fins, unmarked white belly; **black margin on rear edge of gill cover** (similar Many-spotted Sweetlips [below] lack this marking). Solitary. Clear outer reefs and lagoons in 5-50 m.

Indo-Pacific: Seychelles and Mauritius Is. in Indian Ocean to Society Is. in French Polynesia. - S.W. Japan to Australia.



SOMBER SWEETLIPS

Plectorhinchus unicolor

SIZE: to 80 cm (2 1/4 ft.)

Sweetlips - Haemulidae

ID: Uniform dark silvery gray, **black ventral and pectoral fins; white spine on fore ventral fin**, black edge on gill cover above pectoral fin base. Solitary or form small groups. Sheltered areas of reefs.

Localized: Papua New Guinea to Queensland and the Great Barrier Reef.



Many-Spotted Sweetlips - Large Juvenile/Sub-adult

SIZE: 8-20 cm (3-8 in.)

ID: White undercolor, occasionally with yellowish or greenish tinting on back; pattern of numerous brown spots that encircle several large white spots. Usually among corals of sheltered coastal reefs and lagoons in 1-12 m.



Dotted Sweetlips - Juvenile

SIZE: 8-20 cm (3-10 in.)

ID: Black with broad white area on lower parts, white snout; pair of white saddles on back, white ring around base of tail; tail has black center with broad white outer margin. Solitary; swim with peculiar undulating motion.



MANY-SPOTTED SWEETLIPS

Plectorhinchus chaetodonoides

SIZE: to 72 cm (2 1/4 ft.)

Sweetlips - Haemulidae

ID: Whitish to yellowish or greenish undercolor, unmarked whitish belly; profuse dark brown spots on head, body and fins. Usually solitary. Often near ledges of coastal reefs, lagoons and seaward slopes in 2-30 m.

Indo-West Pacific: Maldives to Fiji. - S.W. Japan to Australia.



Many-Spotted Sweetlips - Juvenile

SIZE: 4-10 cm (1 1/4 - 4 in.)

ID: Brown with large white spots with dark borders. Solitary; remain close to shelter. Swim with peculiar undulating motion. Very small individuals possibly mimic toxic flatworms.

Heavy Bodies/Large Lips



BLUBBERLIP

Plectrothinchus gibbosus

SIZE: to 60 cm (2 ft.)

Sweetlips - Haemulidae

ID: Gray to brown with charcoal-gray head; black margin on cheek and gill cover, dark outlines around scales, may display dusky wide bar on back and forebody; high back profile. Solitary. Coastal reefs, lagoons and outer slopes to 25 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



Blubberlip - Large Juvenile

SIZE: 6-20 cm (2 1/2 - 8 in.)

ID: Brown with large pale blotches. Small juveniles are solid or nearly solid brown. Often venture into fresh water.



INDONESIAN SWEETLIPS

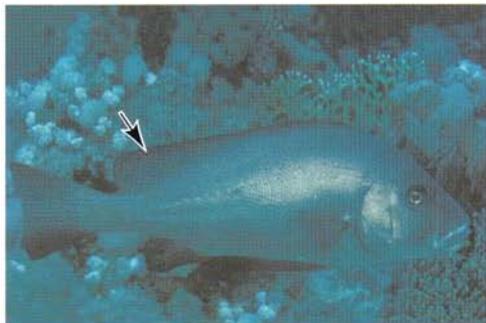
Diagramma sp.

SIZE: to 50 cm (20 in.)

Sweetlips - Haemulidae

ID: Gray with brown spotting on body, larger blackish spots on yellow dorsal and tail fins, black ventral and anal fins. Large juveniles have combination of stripes and longitudinal rows of spots. Solitary or form groups over sand bottoms. Coastal reefs and lagoon in 3-40 m.

Asian Pacific: Malaysian Peninsula, Indonesia and Philippines.



SILVER SWEETLIPS

Diagramma pictum

SIZE: to 94 cm (3 1/4 ft.)

Sweetlips - Haemulidae

ID: Unmarked silvery gray except **dark spotting on dorsal and tail fins**. Solitary or form group. Sand bottoms of coastal reefs and lagoon in 5-40 m.

Indo-West Pacific: Red Sea and E. Africa to Vanuatu. - S.W. Japan to Australia and New Caledonia.



Silver Sweetlips - Sub-adult

SIZE: to 30-60 cm (1-2 ft.)

ID: Silvery gray with yellow to dusky spots.



Silver Sweetlips - Juvenile

SIZE: 5-10 cm (2-4 in.)

ID: White undercolor with pair of broad back stripes on upper body, lower head and body yellow; large black marking on dorsal fin; with age a narrow broken stripe forms between and another below large stripes. Solitary; swim with vigorous side-to-side motion. Sandy areas around rock outcroppings or debris.

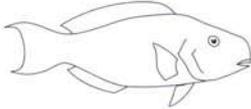
IDENTIFICATION GROUP 8

Swim with Pectoral Fins - Parrotfishes

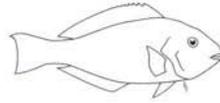
This ID Group consists of fishes that primarily use their pectoral fins to swim. (Besides the closely related Wrasses [next ID Group], few other fishes swim primarily with their pectoral fins.)

FAMILY: Parrotfishes - Scaridae

7 Genera – 41 Species Included



Terminal Phase - Typical Shape



Initial Phase - Typical Shape

Virtually every reef in the Indo-Pacific is home to a bustling community of parrotfishes. These robust assemblies are typified by foraging herds of nondescript, two- to six-inch females, and large, solitary, brightly colored males, which spend their day methodically taking bite after bite of algae from the bottom. Parrotfishes share many traits with their close relatives and forerunners, the wrasses. Members of both families swim primarily with their pectoral fins, change sex from females to males, generally exhibit two or more color patterns within the same species, and have complex social and mating systems. However, unlike wrasses, which use conspicuous canines to capture hard-shelled crustaceans, the teeth of parrotfishes have fused into powerful beaks capable of rasping filamentous algae from the porous external skeletons of dead coral. In the process, large quantities of the reef's structure – calcium carbonate – are routinely consumed. On average, nearly 75 percent of the gut content of parrotfishes is composed of inorganic sediment. Broad, bony teeth plates, known as the pharyngeal mill grind the grit into tiny bits, and a long, specialized alimentary tract, without a true stomach, extracts food, leaving the remains with nowhere to go but back to the reef as sand. In fact, the family's copious processing system generates much of the sand associated with tropical reefs and beaches. It has been estimated that large parrotfishes deposit more than 5,000 pounds of sediment annually.

Contrary to the territorial nature of many reef fishes, that partition and defend limited food supplies, parrotfishes specialize in a plentiful and rapidly renewable plant food source, allowing several species to share overlapping feeding grounds harmoniously. The average parrotfish diet also includes the tender, uncalcified tips of algal bushes, sea grass blades, occasional crustaceans and, now and again, a bite or two of sponge. A few of the larger Indo-Pacific species feed in part on living coral.

During maturation most parrotfishes go through a series of changes that dramatically alter their colors, markings and body shapes. These transformations are marked by a JUVENILE PHASE (JP), INITIAL PHASE (IP) and TERMINAL PHASE (TP), which represents the largest, brightest, most aggressive and least numerous individuals. IP typically consists of females and, in some species, may also include males. Most parrotfishes are hermaphroditic and go through a sex change to become TP, while the IP males of other species simply mature into TP without changing sex. TP, always males, have reached the apex of sexual maturity and experience the greatest reproductive success.

Most parrotfishes live in harems with a single dominant TP, and from two to seven female IP with which they exclusively mate. All species are pelagic spawners that typically release gametes in paired male/female spawning rushes daily at traditional times and locations. A strict, size-related pecking order governs social rank within harems. Such hierarchies allow the largest IP in a harem to transform into a terminal male after the disappearance of the harem's previous TP. These two- to three-week metamorphoses reorder the gonads from ovaries to testes and confer a bright new coat on the recently transformed females.

Swim with Pectoral Fins - Parrotfishes



BLEEKER'S PARROTFISH

SIZE: to 48 cm (19 in.)

ID: **TP** - Green with pink to lavender scale edges; **large pale yellowish to greenish patch on cheek** with green border, dark green margin and borders on tail. Sheltered coastal reefs, lagoons and outer slopes in 3-35 m.

West Pacific: Indonesia to Vanuatu and Fiji. - Philippines and Marshall Is. in Micronesia to E. Australia.

Chlorurus bleekeri

Parrotfishes - Scaridae



Bleeker's Parrotfish - IP

SIZE: to 39 cm (15 1/2 in.)

ID: Dark brown with 3-4 faint pale whitish bars.



GREENHEAD PARROTFISH

SIZE: to 35 cm (14 in.)

ID: **TP** - Green with pink to lavender scale edges gradating to bluish on lower body; **large pale patch on cheek extends to lower head**, dark band from snout to eye. Solitary. Clear waters of seaward reefs in 5-25 m.

East Indian Ocean: E. Andaman Sea to Sumatra and Java in Indonesia.

Chlorurus troscheltii

Parrotfishes - Scaridae



Greenhead Parrotfish - IP

SIZE: to 30 cm (11 3/4 in.)

ID: Dark gray-brown to black with 3-4 pale yellowish bars.



INDIAN PARROTFISH

SIZE: to 55 cm (22 in.)

ID: **TP** - Green back with rosy pink streak on each scale, pale below and **yellowish pectoral region**; green bands around mouth and eye. Form groups. Inner and outer reef crests, usually in shallow surge zone.

Indian Ocean: E. Africa, Mauritius, Seychelles and Andaman Sea to Sumatra and Bali in Indonesia.

Chlorurus capistratoides

Parrotfishes - Scaridae



Indian Parrotfish - IP

SIZE: to 40 cm (16 in.)

ID: Dark gray with pale pinkish snout and tail; 4-5 whitish bars and yellowish outer margin on pectoral fin.

Parrotfishes



BULLETHEAD PARROTFISH

Chlorurus sordidus

SIZE: to 40 cm (16 in.)

Parrotfishes - Scaridae

ID: TP - Highly variable shades of green with lavender scale edges, **pale green tail base**, pale yellowish cheek; blue to lavender to pale green patch on snout. Solitary. Coral reefs and adjacent rubble to 30 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Ducie Is. east of French Polynesia. - S.W. Japan to Australia.



Bullethead Parrotfish - TP Variation

ID: Pale green tail base, pale yellowish cheek and blue to lavender to green snout patch are the most consistent markings of this highly variable species. A square cut tail also distinguishes the Bullethead Parrotfish from many similar appearing species. This variation lacks the bright green band from head to pectoral region like the previously pictured variation.



Bullethead Parrotfish - IP

SIZE: to 26 cm (10 in.)

ID: Light reddish brown head and forebody gradating to dark rear body with 3-4 vertical rows of small white spots (spots can rapidly fade or intensify). Often form small to large groups.



Bullethead Parrotfish - IP/JP

ID: Light reddish brown head and forebody gradating to dark rear body; white tail and base with large centred spot. Large JP and small IP display this marking pattern; with maturity, IP take on the marking of the previous pictured IP.



Bullethead Parrotfish - JP

SIZE: 5-6 cm (2-2 1/2 in.)

ID: Alternating black and white stripes of equal width, 3 each, from head to tail.



BOWER'S PARROTFISH

Chlorurus bowersi

SIZE: to 30 cm (12 in.)

Parrotfishes - Scaridae

ID: TP - Green with rosy pink streak on scales; broad lavender patch on snout, large triangular orange patch on forebody. Usually solitary. Coral-rich areas of lagoons or upper edge of channels in 2-20 m.

Asian Pacific: Indonesia, Philippines and Palau, north to S.W. Japan.

Swim with Pectoral Fins - Parrotfishes



STEEPHEAD PARROTFISH

SIZE: to 80 cm (2 $\frac{7}{8}$ ft.)

ID: **Blunt forehead profile**; shades of green to blue-green with lavender-pink scale edges, blue snout and pale lower head.
IP - Similar to TP. Solitary. Sheltered reefs to 50 m.

Pacific: Bali in Indonesia and Philippines to Line Is. and Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.

Chlorurus microrhinos
Parrotfishes - Scaridae



Steephead Parrotfish - Red Variation

SIZE: to 49 cm (19 $\frac{3}{4}$ in.)

ID: **Blunt forehead profile**; reddish upper two-thirds of head and body, yellow or whitish below, yellow fins. Red variation is generally rare. Both variations can be either TP or IP.

West Pacific: Great Barrier Reef and S. Pacific Is.



Steephead Parrotfish - JP

SIZE: to 15 cm (6 in.)

ID: Black to dark brown with 3-4 yellow to pale stripes.



ROUNDHEAD PARROTFISH

SIZE: to 70 cm (2 $\frac{1}{2}$ ft.)

ID: **TP** - Steep forehead; green to greenish blue with lavender-pink streak on body scales and **extensive yellow area on cheek**. Solitary or with smaller females. Coastal, lagoon and outer reefs in 2-35 m.

Indian Ocean: E. Africa to Andaman Sea and Cocos-Keeling Is. to S.W. Indonesia.

Chlorurus strongycephalus
Parrotfishes - Scaridae



Roundhead Parrotfish - TP Red Variation

ID: Steep forehead; red with blue or green scale margins and yellowish tail, dark green back, red below; some have light green heads. Similar Steephead Parrotfish red variation [above] can be distinguished by location.



Roundhead Parrotfish - IP

SIZE: to 50 cm (20 in.)

ID: Yellow-green upper half of head, back and tail, red to dark brown or greenish below; dark green around mouth, blue-green margin and borders on tail.

Parrotfishes



JAPANESE PARROTFISH

Chlorurus japanensis

SIZE: to 30 cm (12 in.)

Parrotfishes - Scaridae

ID: TP - Light green with broad purple band from forehead to belly; lavender patch on snout. **IP** - Dark brown; red-orange tail with dark margin. Solitary. Sheltered seaward and lagoon reefs to 20 m.

West Pacific: Sulawesi in Indonesia and Philippines to Samoa. - S.W. Japan to E. Australia.



TAN-FACED PARROTFISH

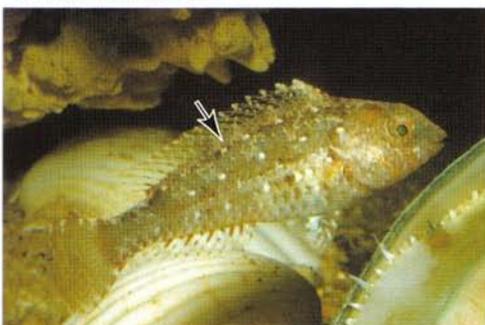
Chlorurus frontalis

SIZE: to 50 cm (20 in.)

Parrotfishes - Scaridae

ID: TP/IP - Green with tan patch and markings on upper head; pale green base of tail. **Large TP** - Develop near vertical head profile and elongate tail lobes. Form groups. Exposed reef flats and seaward reefs to 40 m.

Pacific: S.W. Japan and Great Barrier Reef to Line Is. and Ducie Is. east of French Polynesia.



MARBLED PARROTFISH

Leptoscarus vaiigiensis

SIZE: to 35 cm (14 in.)

Parrotfishes - Scaridae

ID: IP - Well camouflaged. Green or olive to greenish brown, often mottled and speckled, **two horizontal rows of widely spaced white spots on upper side**. **TP** - Similar, but with white stripe on mid-side. Form groups. Seagrass beds to 10 m.

Indo-Pacific: Red Sea and E. Africa to Easter Is. in southeast Pacific. - S.W. Japan to N. New Zealand.



RAGGEDTOOTH PARROTFISH

Calotomus spinidens

SIZE: to 19 cm (7½ in.)

Parrotfishes - Scaridae

ID: TP/IP - Small; brown or greenish brown; **broken stripe of rose spots runs below dorsal fin**. Usually form groups; often camouflaged. Seagrass beds and dense patches of sea weed to 25 m.

Indo-West Pacific: E. Africa to Fiji and Tonga. - S.W. Japan to Australia.



STAREYE PARROTFISH

Calotomus carolinus

SIZE: to 50 cm (20 in.)

Parrotfishes - Scaridae

ID: TP - Blue-green with orange-pink bands radiating from eye. Solitary or form groups. Lagoon and seaward reefs on coral, rubble, weed and seagrass bottoms in 2-30 m.

Indo-Pacific: E. Africa to Pitcairn Is. east of French Polynesia and Mexico. - S. Japan to Australia.



Stareye Parrotfish - IP

SIZE: to 39 cm (15½ in.)

ID: Mottled brown with whitish patches on back; spoke-like bands radiate from eye.

Swim with Pectoral Fins - Parrotfishes



BICOLOR PARROTFISH

SIZE: to 80 cm (2 3/4 ft.)

ID: **TP** - Green with pinkish red spots and lines on head; band from mouth to belly, stripes or bands on fins. Usually with group of IP. Lagoon and seaward reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S. Japan to Australia.

Cetoscarus bicolor
Parrotfishes - Scaridae



Bicolor Parrotfish - IP

SIZE: to 60 cm (2 ft.)

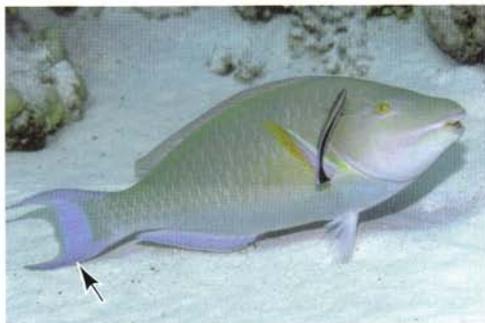
ID: Pale yellowish back with pale greenish scale markings forming netted pattern over black undercolor, gray head with golden iris. Solitary or in harems with other IP.



Bicolor Parrotfish - JP

SIZE: 5-9 cm (2-3 1/2 in.)

ID: White with broad orange bar encircling head from eye to rear gill cover; large orange-edged black spot on dorsal fin, orange outer rim on tail. Solitary.



LONGNOSE PARROTFISH

SIZE: to 75 cm (2 1/2 ft.)

ID: **TP** - Long snout; pale yellow to green with vertical blue streaks on scales, blue tail; elongate tail lobes. **IP** - Similar, but lack elongate tail lobes. Form aggregations. Sheltered areas, usually on sand bottoms near reefs to 25 m.

Indian Ocean: Red Sea and E. Africa to Andaman Sea and Java in Indonesia.

Hipposcarus harid
Parrotfishes - Scaridae



PACIFIC LONGNOSE PARROTFISH

SIZE: to 60 cm (2 ft.)

ID: **IP** - Long snout; pale yellowish gray with pale vertical streaks on scales, yellow tail base; short tail lobes. **TP** - Similar, but lack yellow tail base. Lagoons and seaward reefs on sand bottoms near reefs in 2-40 m.

Pacific: Indonesia to Line Is. and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.

Hipposcarus longiceps
Parrotfishes - Scaridae



Pacific Longnose Parrotfish - JP

SIZE: to 10 cm (4 in.)

ID: Pearly white with orange stripe from eye to tail; black spot at end of stripe on tail base.

Parrotfishes



YELLOWFIN PARROTFISH

SIZE: to 41 cm (16 in.)

ID: TP - Blue to green, bicolored with light head and forebody and dark behind; **green band from snout to rear gill cover**, yellowish patch on tail base. Solitary or form groups. Coastal, lagoon and outer reefs in 8-40 m.

East Indo - Asian Pacific: Andaman Sea to Solomon Is. - Marshall Is. in Micronesia to Great Barrier Reef.

Scarus flavipectoralis

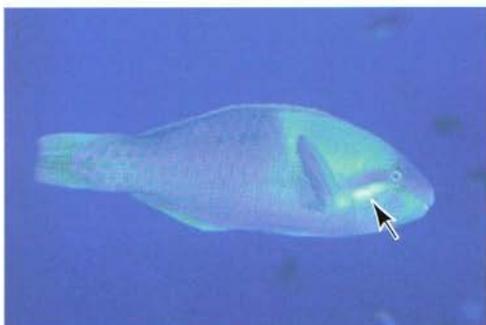
Parrotfishes - Scaridae



Yellowfin Parrotfish - IP

SIZE: to 26 cm (10 in.)

ID: Pale yellowish green to light gray with dark gray tail, bright yellow pectoral fin. Usually form groups.



YELLOW-BARRED PARROTFISH

SIZE: to 30 cm (12 in.)

ID: TP - Dark bluish to greenish gray with large blue-green to green area over nape and upper forebody; **dark and pale band from eye to pectoral fin**. Lagoon and seaward reefs to 25 m.

West Pacific: Indonesia and Philippines to Samoa. - S.W. Japan to Australia.

Scarus dimidiatus

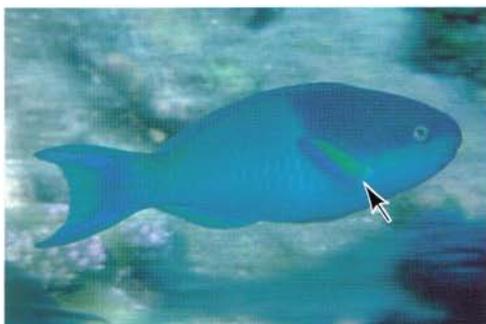
Parrotfishes - Scaridae



Yellow-barred Parrotfish - IP

SIZE: to 22 cm (8 7/8 in.)

ID: Yellowish with gray head and 3 gray saddle-bars on back; may have whitish stripe from eye to tail.



DARK-CAPPED PARROTFISH

SIZE: to 31 cm (12 1/2 in.)

ID: TP - Blue-green with narrow pink scale margins, **lime green and dark blue-green pectoral fin**; upper head and forebody darker shade of purple. Solitary. Reef flats, lagoons and outer slopes to 20 m.

Pacific: Indonesia and Philippines to Line Is. and Society Is. in French Polynesia. - S.W. Japan to Australia.

Scarus oviceps

Parrotfishes - Scaridae



Dark-capped Parrotfish - IP

SIZE: to 25 cm (10 in.)

ID: Light gray with dark gray "cap" on upper head and forebody; 1-2 yellow bands behind; white or yellowish cheek.

Swim with Pectoral Fins - Parrotfishes



BLUEPATCH PARROTFISH

Scarus forsteni

SIZE: to 55 cm (22 in.) Parrotfishes - Scaridae

ID: TP - Green with pink scale edges; darkish "cap" on upper head, **wide green band around mouth**, occasionally pink area on central body. Solitary or form small groups. Lagoon and seaward reefs in 3-30 m.

Pacific: Indonesia and Philippines to Ducie I. east of French Polynesia. - S.W. Japan to Great Barrier Reef.



Bluepatch Parrotfish - IP

SIZE: to 36 cm (14 1/4 in.)

ID: Reddish brown; blue patch centered with green to blue-green on mid-side behind gill cover, may display a white spot above the blue patch. Solitary.



CHAMELEON PARROTFISH

Scarus chameleon

SIZE: to 31 cm (12 1/2 in.) Parrotfishes - Scaridae

ID: TP - Blue to green; broad area of pale salmon behind pectoral fin, blue-green band links eyes and **narrow green band around mouth**. Can quickly alter or intensify color. Coral- rich areas of lagoon and seaward reefs to 35 m.

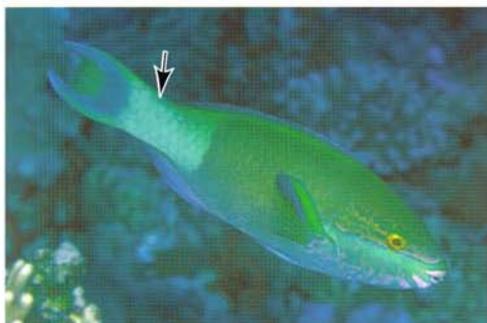
West Pacific: Indonesia and Philippines to Fiji. - S.W. Japan to Australia.



Chameleon Parrotfish - IP

SIZE: to 20 cm (8 in.)

ID: Brown, often with abruptly white belly. Can quickly change or intensify color.



BRIDLED PARROTFISH

Scarus frenatus

SIZE: to 47 cm (18 3/4 in.) Parrotfishes - Scaridae

ID: TP - Shades of green, **abrupt transition from dark to light green on tail base**; pale green bands around mouth. Usually solitary. Seaward slopes and reef crests to 25 m.

Indo - Pacific: Red Sea and E. Africa to Line Is. and Ducie Is. east of French Polynesia. - S.W. Japan to Australia.



Bridled Parrotfish - IP

SIZE: to 36 cm (14 1/4 in.)

ID: Gray to red with broad blackish stripes (sometimes broken into series of diamond-shaped marks) on sides; dorsal, anal and ventral fins frequently bright red. Solitary or form small groups.

Parrotfishes



EAST INDIES PARROTFISH

SIZE: to 31 cm (12 1/2 in.)

ID: TP - Body salmon to green-brown, green tail base and blue tail, green head with **reddish worm markings radiating from eye** and green stripe from eye to behind pectoral fin. Solitary. Coral and rubble areas in 10-30 m.

Asian Pacific: S.W. Japan to Indonesia and Vanuatu.

Scarus hypselopterus

Parrotfishes - Scaridae



East Indies Parrotfish - IP

SIZE: to 20 cm (8 in.)

ID: Gray to brown with two white stripes and white belly; black spot in forward anal fin. Solitary or form small groups.



BLUE-BARRED PARROTFISH

SIZE: to 75 cm (2 1/4 ft.)

ID: TP - Yellow to yellowish brown undercolor with large blue-green scale markings; blue-green band markings around mouth and borders of tail. Solitary. Sheltered silty inshore reefs and areas of sand and rubble in 2-30 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia, Galapagos, Gulf of California and Panama. - S. Japan to Australia.

Scarus ghobban

Parrotfishes - Scaridae



Blue-barred Parrotfish - IP

SIZE: to 62 cm (2 ft.)

ID: Yellow to yellow-brown with 4-5 diffuse blue bars (sometimes broken into spots) on side; blue bands around mouth and eye and blue tail borders. Solitary.



GREENTHROAT PARROTFISH

SIZE: to 70 cm (2 3/4 ft.)

ID: TP - Dark green with yellowish upper head and green below; broad green band across snout. Often form large aggregations. Reef flats and seaward slopes in 3-25 m.

Indo-Asian Pacific: Seychelles and Maldives to New Ireland east of Papua New Guinea, north to S.W. Japan.

Scarus prasiognathos

Parrotfishes - Scaridae



Greenthroat Parrotfish - IP

SIZE: to 40 cm (15 1/2 in.)

ID: Reddish brown with some scattered white speckling. Compare with similar IP Filament-fin Parrotfish.

Swim with Pectoral Fins - Parrotfishes



VIOLET-LINED PARROTFISH

Scarus globiceps

SIZE: to 27 cm (10 $\frac{3}{4}$ in.)

Parrotfishes - Scaridae

ID: TP - Small; shades of green and blue with salmon-pink scale margins; numerous green broken lines and spots on upper head and pale lower head, **2-3 violet stripes on belly**. Solitary Reef flats, lagoons and seaward reefs to 30 m.

Indo-Pacific: E. Africa to Line Is. and French Polynesia. - S.W. Japan to Australia.



Violet-lined Parrotfish - IP

ID: Grayish brown with 3 thin white stripes on belly, may display several pale curved bars on sides and tail base.



PALENOSE PARROTFISH

Scarus psittacus

SIZE: to 30 cm (12 in.)

Parrotfishes - Scaridae

ID: TP - Yellow to green with salmon-pink scale margins, lavender-gray snout and bluish tail. Form groups. Reef flats, lagoons and seaward slopes in 2-25 m.

Indo-Pacific: Red Sea to Hawaii and French Polynesia. - S. Japan to S.E. Australia and Lord Howe I.



Palenose Parrotfish - IP

SIZE: to 20 cm (8 in.)

ID: Reddish brown to gray with pale snout. Feed in large mixed-species schools.



SURF PARROTFISH

Scarus rivulatus

SIZE: to 40 cm (16 in.)

Parrotfishes - Scaridae

ID: TP - Green to blue body, bright green pectoral fins; **orange patch on gill cover**, wavy green bands/lines on head. Form schools. Silty coastal reefs, lagoons and seaward reefs to 20 m.

East Indo-Asian Pacific: Andaman Sea to Australia and New Caledonia, north to S.W. Japan.



Surf Parrotfish - IP

ID: Gray or gray-brown with 2 pale stripes on belly.

Parrotfishes



YELLOWBAR PARROTFISH

Scarus schlegelii

SIZE: to 38 cm (15 in.)

Parrotfishes - Scaridae

ID: TP - Dark green to blue except lighter on upper head and foreback; short bright yellow bar on mid-back continues as pale bar below. Solitary or groups. Coral-rich areas of coastal, lagoon and outer reefs to 50 m.

Pacific: E. Indonesia to French Polynesia. - S.W. Japan to Australia.



Yellowbar Parrotfish - IP

SIZE: to 15 cm (6 in.)

ID: Grayish brown with 5-6 whitish bars. Sometimes form large feeding aggregations in areas rich with soft and stoney corals.



ECLIPSE PARROTFISH

Scarus russellii

SIZE: to 51 cm (20 in.)

Parrotfishes - Scaridae

ID: TP - Blue to purple to purplish green head and forebody and abruptly green rear body with pink scale streaks, reddish pectoral fins, **yellowish cheek**; bands on head. Solitary. Mainly on outer reef slopes in 6-15 m.

Indian Ocean: E. Africa to India and Andaman Sea.



Eclipse Parrotfish - IP

SIZE: to 51 cm (20 in.)

ID: Dark reddish brown head and forebody and abruptly pale rear body with faint darkish bars. Usually form groups.



GREENSNOOT PARROTFISH

Scarus spinus

SIZE: to 30 cm (12 in.)

Parrotfishes - Scaridae

ID: TP - Small; green to blue body, **green snout** and nape and yellow to yellow-green cheek/gill cover. Solitary. Outer reefs in 2-25 m.

West Pacific: Indonesia and Philippines to Samoa. - S.W. Japan to Great Barrier Reef.



Pygmy Parrotfish - IP

SIZE: to 20 cm (8 in.)

ID: Dark brown to nearly black with 4 faint pale bars or vertical rows of whitish spots on side.

Swim with Pectoral Fins - Parrotfishes



TRICOLOR PARROTFISH

SIZE: to 55 cm (22 in.)

ID: TP - Shades of green, often with strong tints of pink or yellow on sides; green bands around mouth; dorsal and anal fins and long, pointed lobes of tail lavender-pink with dark margins. Solitary. Outer slopes in 10 - 40 m.

Indo-Pacific: E. Africa to Palau, Papua New Guinea, Nauru and Line Is. in eastern Central Pacific.

Scarus tricolor

Parrotfishes - Scaridae



Tricolor Parrotfish - IP

SIZE: to 40 cm (16 in.)

ID: Dark gray to blackish head and upper back shading to blue-green or blue on lower side with blackish margins on scales, red tail, yellow-orange anal fin, dusky orange or yellowish ventral fins.



REDLIP PARROTFISH

SIZE: to 70 cm (2 1/4 ft.)

ID: TP - Shades of green, often bicolor with darker forebody; green to blue band on upper lip and double bands on chin, numerous blue to blue-green stripes on tail. Solitary or in pairs. Outer reef slopes to 30 m.

Indo-Pacific: E. Africa to Hawaii, Tuamotu Is. in French Polynesia, Galapagos and Panama. - S.W. Japan to Australia.

Scarus rubroviolaceus

Parrotfishes - Scaridae



Redlip Parrotfish - IP

SIZE: to 48 cm (19 in.)

ID: Shades of red to reddish brown to gray with small black spots and irregular lines on scales, often bicolor with darker forebody, fins and usually lips red. Frequently accompany large males.



RED PARROTFISH

SIZE: to 55 cm (22 in.)

ID: TP - Green with pink scale margins, dark green lips; irregular dark green patch on lower cheek and chin, faint banding or spotting on head. Solitary. Clearwater lagoons and seaward reefs in 3-30 m.

East Indo-Asian Pacific: Cocos-Keeling Is. to Indonesia, S.W. Japan and Marshall Is. in Micronesia.

Scarus xanthopleura

Parrotfishes - Scaridae



Red Parrotfish - IP

SIZE: to 33 cm (13 in.)

ID: Bright red with 3-4 faint pale bars on side. Rare. Solitary or form small groups.

Parrotfishes



FILAMENT-FIN PARROTFISH

Scarus altipinnis

SIZE: to 60 cm (2 ft.)

Parrotfishes - Scaridae

ID: **TP** - Green with scales edged in salmon-pink; dark bands around mouth; **short filamentous extension at middle of dorsal fin**. Form large aggregations. Shallow protected reefs and outer slopes to 30 m.

Pacific: S.W. Japan to Great Barrier Reef and Coral Sea, to Line Is. and Ducie I. east of French Polynesia.



Filament-fin Parrotfish - IP

SIZE: to 37 cm (15 in.)

ID: Red-brown with scales edged in darker shade; a few small white spots often align to form 3-4 vertical rows. Compare with similar IP Greenthroat Parrotfish.



Filament-fin Parrotfish - JP

SIZE: to 10 cm (4 in.)

ID: Grayish white with yellowish snout; two black stripes and broken black stripe on dorsal fin. With maturity grayish white undercolor darkens and stripes disappear.



SWARTHY PARROTFISH

Scarus niger

SIZE: to 35 cm (14 in.)

Parrotfishes - Scaridae

ID: **TP** - Dark reddish brown becoming purplish green with size, red lips; **yellow to green spot or streak behind eye**, dark bands around mouth. Solitary except during courtship. Coral- rich areas to 20 m.

Indo - Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S.W. Japan to Australia.



Swarthy Parrotfish - IP

SIZE: to 26 cm (10 in.)

ID: Red head, belly and fins except tail; wavy black and white stripes on body to foretail, dark bands around mouth and eye. Coral-rich areas of coastal reefs, lagoons and outer slopes to 20 m.



Swarthy Parrotfish - JP

SIZE: 4-9 cm (1½ - 3½ in.)

ID: Black to red-brown with numerous small white spots, tail translucent; often display white bar across tail base. Usually in small groups on rubble bottoms near reefs.

Swim with Pectoral Fins - Parrotfishes



FESTIVE PARROTFISH

Scarus festivus

SIZE: to 43 cm (17 in.)

Parrotfishes - Scaridae

ID: **TP/IP** - Blunt forehead; green with orange to violet scale edges, **large yellow-green spot on tail base**, green bands around mouth and radiating from eye. Solitary and rare. Lagoon and seaward reefs in 3-30 m.

Indo-Pacific: E. Africa to S.W. Japan and Tuamotu Is. in French Polynesia.



GREENLIP PARROTFISH

Scarus viridifucatus

SIZE: to 32 cm (13 in.)

Parrotfishes - Scaridae

ID: **TP** - Shades of green to blue to purplish; blue-green cheek/gill cover with variable mark behind mouth, blue borders on dorsal, anal and tail fins. **IP** - Dark brown. Solitary. Coastal, lagoon and outer reefs to 15 m.

Indian Ocean: E. Africa, Aldabra, Seychelles, Maldives to Sumatra and Bali in Indonesia.



MARQUESAN PARROTFISH

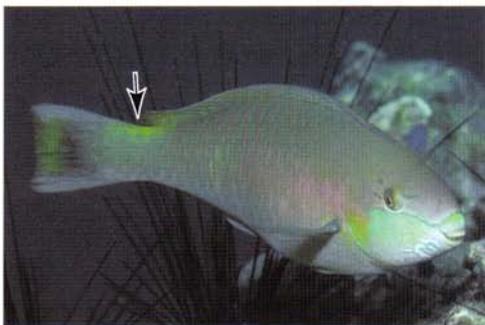
Scarus koputea

SIZE: to 31 cm (12 1/2 in.)

Parrotfishes - Scaridae

ID: **TP** - Gray head and body with black scale margins; yellow-green tail base and **white stripe on side of snout**. **IP** - Shades of red with black scale margins; white patch on lower side and white stripe on anal fin base. Inner bays and outer reef slopes to 18 m.

Localized: Marquesas Is. in French Polynesia.



QUOY'S PARROTFISH

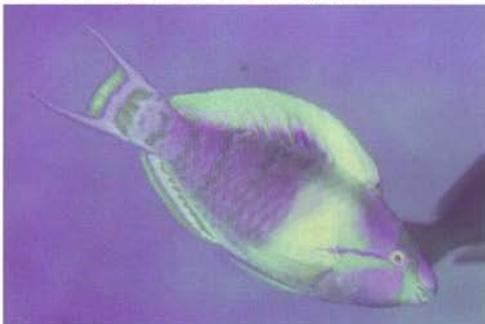
Scarus quoyi

SIZE: to 21 cm (8 in.)

Parrotfishes - Scaridae

ID: **TP** - Small; shades of green to pinkish gray; **lime green saddle on upper tail base**, green "moustache" and cheek. Solitary or form small groups. Sheltered inshore reefs, occasionally on outer slopes in 2-18 m.

Indo-Asian Pacific: India to Vanuatu. - S.W. Japan to New Caledonia.



HIGHFIN PARROTFISH

Scarus longipinnis

SIZE: to 40 cm (16 in.)

Parrotfishes - Scaridae

ID: **TP** - Purple with wide pale bar on forehead; green band runs from eye to pectoral fin; high rounded yellow dorsal fin, elongate tail lobes. **IP** - Light brownish orange, often with dark bars. Clear outer slopes and atoll reefs in 10-55 m.

Pacific: Great Barrier Reef and Coral Sea to Pitcairn Is. east of French Polynesia.



BUMPHHEAD PARROTFISH

Bulbometopon muricatum

SIZE: to 126 cm (4 1/4 ft.)

Parrotfishes - Scaridae

ID: **TP** - Huge, with large hump on forehead; greenish gray. **JP** - Brownish to green with 5 vertical rows of whitish spots on side. Form small groups. Uses head to break coral. Lagoons and seaward reefs to 40 m.

Indo-Pacific: Red Sea and E. Africa to Line Is and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.

IDENTIFICATION GROUP 9

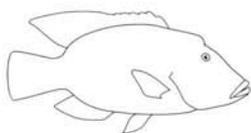
Swim with Pectoral Fins - Wrasses

Wrasses/Tuskfishes, Hogfishes & Razorfishes

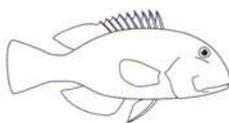
This ID Group consists of fishes that primarily use their pectoral fins to swim. (Besides the closely related parrotfishes [previous ID Group], few other fishes primarily use their pectoral fins to swim.)

FAMILY: Wrasses - Labridae

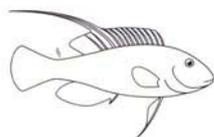
32 Genera – 185 Species Included



Humhead Wrasse



Wrasses/Tuskfishes



Flasher Wrasses



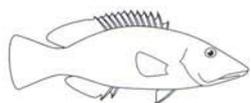
Typical Shape



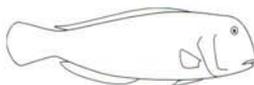
Typical Shape



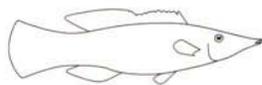
Cigar Wrasse



Wrasses/Hogfishes



Wrasses/Razorfishes



Cleaner Wrasses

Like the closely related parrotfishes, wrasses have large, noticeable scales, swim primarily with their pectoral fins, are often quite colorful, and have the ability to change sex from female to male when certain age, growth or social criteria are met. But unlike parrotfishes, which scrape algae from rocks with fused beaks, most wrasses feed on hard-shelled invertebrates including crabs, shrimps, brittle stars and small gastropods. When discovered, the delicacies are seized or scissored free with a prominent set of protruding canines and crushed with powerful pharyngeal teeth.

In the Indo-Pacific, only gobies (Gobiidae) outnumber wrasses in quantity of species. Wrasses vary greatly in both body shape and size. Whether small or large, slender or deep-bodied, all wrasses have terminal mouths, usually displaying prominent canines, thick lips, and a single, continuous dorsal fin. Because wrasses are relatively small, common, and constantly on the go, underwater observers often fail to take note of their fascinating behaviors and exquisite beauty. By day, most wrasses swim busily in loose, often mixed feeding groups just about the bottom. At dusk, they are the first fishes to bed down and the last to rise after daybreak; smaller species typically dive beneath the sand to sleep, others wedge themselves in reef recesses.

During maturation most wrasses go through a series of changes that dramatically alter their colors, markings and body shapes. These transformations are marked by a JUVENILE PHASE (JP), INITIAL PHASE (IP) and the TERMINAL PHASE (TP), which represents the largest, brightest, most aggressive and least numerous individuals. Some species even display additional color patterns,

INTERMEDIATE, between the primary phases. IP consists of sexually mature females and, in some species, immature but sexually active males. Most wrasses are hermaphroditic and go through a sex change to become TP, while the males of other species simply mature into TP without changing sex. TP, always males, have reached the apex of sexual maturity and generally experience the greatest reproductive success.

Wrasses are all pelagic spawners that typically release gametes daily at traditional times and locations. The TP of many species protect and patrol the boundaries of home ranges encompassing the territories of from three to six feeding herds of IP females with which they attempt to exclusively mate. Chases of encroaching TP and IP males, which occur throughout the day and require costly energy, increase as spawning time approaches. In large populations of certain species young IP males become the dominant reproducers, spawning in mass with passing females while TP, unable to control the competitors, are forced to the periphery of the spawning grounds.



DOUBLE HEADER

Coris bulbifrons

SIZE: to 140 cm (4 1/2 ft.)

Wrasses - Labridae

ID: TP - Blue-gray to greenish; distinctive hump on forehead.
IP: Black with irregular white stripes, dashes and broken lines. Solitary. Rocky reefs and coral areas in 5-30 m.

Southwestern Pacific: New South Wales in S.E. Australia and Lord Howe I.



YELLOWTAIL CORIS

Coris gaimard

SIZE: to 38 cm (15 in.)

Wrasses - Labridae

ID: TP - Variable from shades of blue to green and red with yellow tail; bright yellow to green mid-body bar, brilliant blue spots rear body and tail base. Solitary. Sand and rubble bottoms adjacent to coral reefs in 3-50 m.

Indo-Pacific: Indonesia to Micronesia, Hawaii and French Polynesia. - S. Japan to Great Barrier Reef and Lord Howe I.



Yellowtail Coris - IP

SIZE: to 25 cm (10 in.)

ID: Reddish head, green body with blue rear body and base of tail, red dorsal and anal fins, yellow tail; brilliant blue spots rear body and base of tail, spike-like first dorsal fin spine on both IP and TP.

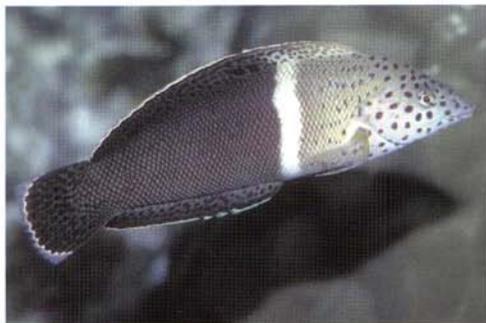


Yellowtail Coris - JP

SIZE: to 10 cm (4 in.)

ID: Bright red-orange; 5 black-edged white saddles across head and back. Solitary. Sand and rubble bottoms at base of reefs.

Wrasses



CLOWN CORIS

Coris aygula

SIZE: to 40 cm (16 in.)

Wrasses - Labridae

ID: **IP** - A white bar separates light gray head and forebody from dark gray rear body. **TP** - Large (to 4 ft.) with humped head; shades of gray, often with whitish body bar. Solitary. Sand and rubble patches near reefs in 2-30 m.

Indo-Pacific: E. Africa to Micronesia, Line Is., French Polynesia and east to Ducie I. - S. Japan to S.E. Australia and Lord Howe I.



Clown Coris - JP

SIZE: to 8 cm (3 in.)

ID: White head and forebody with black spots and pale gray rear body; 2 white-ringed black spots on dorsal fin, orange semicircles below on back. Solitary. Sand and rubble bottoms of reef flats, lagoons and outer reefs to 35 m.



WESTERN KING WRASSE

Coris auricularis

SIZE: to 40 cm (16 in.)

Wrasses - Labridae

ID: **TP** - Shades of red to maroon with white chin; white bar followed by scarlet bar behind pectoral fin, dark spot on rear gill cover, dark upper margin on pectoral fin. Solitary. Rocky reefs or coral areas in 2-40 m.

Localized: Abrolhos Is. south of Coral Bay in W. Australia.



Western King Wrasse - IP

ID: White with fine red to brown stripes and darkish brown to red back; broad dark stripe from snout through eye and along lateral line. Solitary or form groups, often in weedy areas.



PALE-BARRED CORIS

Coris dorsomacula

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: **TP** - Brown to green with narrow pale body bars; red to green markings on head, **black spot on base of rear dorsal fin** and upper gill cover, red to green streak extends from rear gill cover. Solitary. Sand and rubble bottoms in 5-25 m.

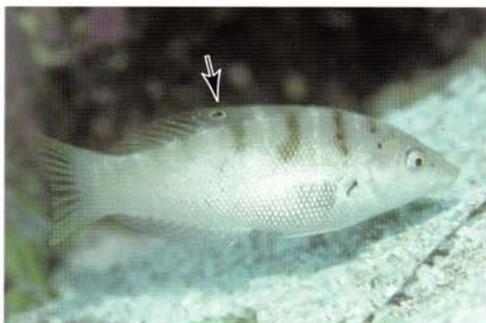
Asian Pacific: S. Japan, Indonesia, Philippines, Palau and Papua New Guinea.



Pale-barred Coris - IP

ID: White with darkish back; dark stripe extends from snout through eye to tail, narrow white bars on back extend across stripe, **dark spot on base of rear dorsal fin**, often display another dark spot on upper gill cover. Sand and rubble bottoms typically mixed with algae clumps in 5-25 m.

Swim with Pectoral Fins - Wrasses



BATU CORIS

SIZE: to 17 cm (6 3/4 in.)

ID: TP - Whitish to pale green; several dark bars and narrow white bars on upper body, **pale-rimmed black spot on mid-dorsal fin**. Solitary. Sand and rubble bottoms surrounding reefs of lagoons and seaward reefs to 30 m.

West Pacific: E. Africa to Micronesia and Tonga. - S. Japan to S.E. Australia.

Coris batuensis

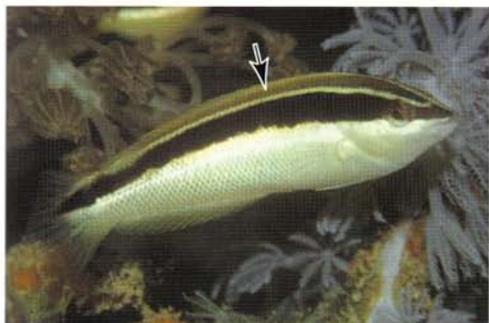
Wrasses - Labridae



Batu Coris - JP

SIZE: to 6.5 cm (2 1/2 in.)

ID: Whitish to pale green with darkish back; several dark bars and narrow white bars on upper body, scattered dark spots on mid and lower body, 3 pale-rimmed black spots on dorsal fin. Solitary or form small groups. Usually on sand bottoms near reefs.



PIXIE CORIS

SIZE: to 12 cm (5 in.)

ID: Black to dark brown upper body, white below, fins pale; **thin white line from top of eye to end of dorsal fin**. Solitary or form small groups. Sand and rubble bottoms near coral reefs in 10-30 m.

Asian Pacific: Philippines to Australia.

Coris pictoides

Wrasses - Labridae



CENTRAL PACIFIC CORIS

SIZE: to 30 cm (12 in.)

ID: TP/IP - Whitish with brownish mid-lateral stripe that is usually broken into separate blotches. TP - Usually with a second row of blotches above (pictured). Solitary. Commonly over sand and rubble bottoms of outer reefs in 5-46 m.

Central Pacific: Phoenix and Line Is. in eastern Central Pacific.

Coris centralis

Wrasses - Labridae



GOLDLINE CORIS

SIZE: to 11.5 cm (4 1/2 in.)

ID: TP - Alternating yellow and pale blue-green to green stripes; **ocellated (usually black) spot on upper base of tail**. IP - Similar with large ocellated spot on mid-dorsal fin. Rubble and sand bottoms with algae to 25 m.

Localized: S. Great Barrier Reef to New South Wales in S.E. Australia.

Coris aurilineata

Wrasses - Labridae



SPOTTAIL CORIS

SIZE: to 20 cm (8 in.)

ID: TP - White undercolor; 6-7 green to brown bars on back intersected by pale lateral line, black spot on front of dorsal fin, often dark spot on tail base. Solitary. Sand, rubble and weed-covered bottoms around coastal, lagoon and outer reefs to 25 m.

Indo-Asian Pacific: Red Sea and E. Africa to N.W. Australia and Indonesia.

Coris caudimaculata

Wrasses - Labridae

Wrasses



RUST-BANDED WRASSE *Pseudocoris aurantofasciatus*

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: TP - Dark blue-gray; several narrow black bars just behind pectoral fin (may have orange bars between), narrow white bar across rear body. Form groups. Outer reef slopes in 25-50 m.

Pacific: S. Japan and Indonesia to Tuamotu Is. in French Polynesia.



PHILIPPINE WRASSE

Pseudocoris bleekeri

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: TP - Green with combination of dark bars; elongate spots and saddles, **yellow patch on middle of side**. **IP** - Light brown with pale belly; black blotch on rear gill cover and upper tail base. Rubble and coral slopes of seaward reefs in 10-30 m.

Asian Pacific: Bali to Moluccan Is. in E. Indonesia, Philippines and S.W. Japan.



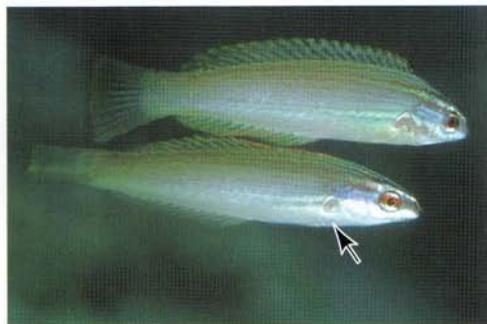
REDSLOT WRASSE *Pseudocoris yamashiroi*

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: TP - Shades of green with white belly; black spots and blotches on green areas, black borders on tail. Form aggregations above bottom. Edge of reef slopes in 5-30 m.

Indo-West Pacific: E. Africa to Australia and Samoa. - S. Japan to Kermadec Is.



Redspot Wrasse - IP

SIZE: to 15 cm (6 in.)

ID: Lavender-gray with wavy lines; pair of silver-white stripes on head above and below eye; **reddish spot on pectoral fin base**. Form large plankton-feeding aggregations with IP greatly outnumbering TP.



TRIPLETAIL WRASSE *Cheilinus trilobatus*

SIZE: to 45 cm (18 in.)

Wrasses - Labridae

ID: TP - Shades of green; ornate pattern of pink lines and spots cover head, two white to whitish bars on tail base; rounded tail fin with protruding upper and lower lobes. Solitary and wary. Lagoons, passes and outer reefs to 30 m.

Indo-Pacific: E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia and New Caledonia.



Tripletail Wrasse - IP

SIZE: to 45 cm (18 in.)

ID: Whitish undercolor with greenish brown head and 4 wide brownish bars on body; lack elongate lobes of TP.

Swim with Pectoral Fins - Wrasses



FLORAL WRASSE

Cheilinus chlorourus

SIZE: to 36 cm (14 1/4 in.)

Wrasses - Labridae

ID: Highly variable from orange-brown to green-brown; usually prominent horizontal rows of pink or white dots, often white to whitish blotches on back and tail. Solitary. Mixed sand, rubble and coral areas of lagoons and coastal reefs in 2-30 m.

Indo-Pacific: E. Africa to Micronesia and Tuamotu, Marquesas and Rapa Is. in French Polynesia. - S.W. Japan to E. Australia.



REDBREASTED WRASSE

Cheilinus fasciatus

SIZE: to 36 cm (14 1/4 in.)

Wrasses - Labridae

ID: Red-orange rear head and forebody; alternating white and blackish bars on body and tail. Solitary. Mixed sand, rubble and coral areas of lagoons and outer reefs in 3-40 m.

Indo-West Pacific: Red Sea to Micronesia and Samoa. - S.W. Japan to E. Australia and New Caledonia.



HUMPHEAD WRASSE

Cheilinus undulatus

SIZE: to 229 cm (7 1/2 ft.)

Wrasses - Labridae

ID: **TP** - Blunt head with maze-like markings, green body with dark vertical streaks; pronounced hump above eyes. Solitary or occasionally in pairs; wary. Lagoon and outer reefs in to 60 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia and New Caledonia.



Humphead Wrasse - IP

ID: Olive to bluish or greenish gray with dark vertical streaks on body; dark diagonal streak extends from front of lower eye, 2 dark lines extend from rear eye. An endangered species in many areas due to overfishing. Also commonly known as Napoleon Wrasse.



Humphead Wrasse - JP

SIZE: to 20 cm (8 in.)

ID: Pale brown to yellowish green with longitudinal rows of vertically elongate brown spots; 4-5 narrow white bars, diagonal line markings through eye. Unlike adults, JP are shy and inconspicuous. Shelter among dense stands of branching corals, gorgonians and sea grasses.



SNOOTY WRASSE

Cheilinus oxycephalus

SIZE: to 17 cm (6 3/4 in.)

Wrasses - Labridae

ID: Variable from greenish brown to red; **black spot on front of dorsal fin**, often a trio of small black spots on tail base, may have some red or white spots and/or whitish bars. Solitary or in pairs; secretive. Corals of lagoons and outer reefs to 40 m.

Indo-Pacific: E. Africa to Marquesas and Society Is. in French Polynesia. - Taiwan to Great Barrier Reef.

Wrasses



HARLEQUIN TUSKFISH

Choerodon fasciatus

SIZE: to 30 cm (12 in.)

Wrasses - Labridae

ID: White undercolor, rear body becomes dark with age; 6-9 blue edged orange bars extend from head to tail base, tail white with orangish margin. Solitary, territorial and often in caves. Coastal outer reefs to 15 m.

Localized: Two separate ranges - Taiwan and S.W. Japan to Palau. Also Great Barrier Reef and New Caledonia.



Harlequin Tuskfish - JP

SIZE: 3-6 cm (1 1/4 - 2 1/4 in.)

ID: Pale brown undercolor with 7-9 blue edged orangish brown bars, blue ringed black spots on front of dorsal, rear dorsal and anal fins; dark blotch on ventral fin.



GRAPHIC TUSKFISH

Choerodon graphicus

SIZE: to 46 cm (18 in.)

Wrasses - Labridae

ID: Tan to yellow undercolor; dark irregular spoke-like markings radiating from eye, dark inter-connected bars on sides. Solitary. Sand and rubble patches of coastal, lagoon and seaward reefs in 2-30 m.

Localized: Great Barrier Reef and New Caledonia.



BLUE TUSKFISH

Choerodon cyanodus

SIZE: to 70 cm (2 1/4 ft.)

Wrasses - Labridae

ID: Shades of gray often with yellowish or greenish tints; white chin and white spot on rear back, frequently display 4-5 faint bars on back. Solitary. Sand and rubble areas near coastal reefs in 2-35 m.

Indo-West Pacific: Sri Lanka to Papua New Guinea. - S.W. Japan to Australia and New Caledonia.



BALDCHIN TUSKFISH

Choerodon rubescens

SIZE: to 90 cm (3 ft.)

Wrasses - Labridae

ID: Gray with white chin; white patch on pectoral fin base. Solitary or form small groups. Coral and weed-covered rocky reefs in 3-40 m.

Localized: W. Australia between Geographe Bay and North West Cape.



BLACKSPOT TUSKFISH

Choerodon schoenleinii

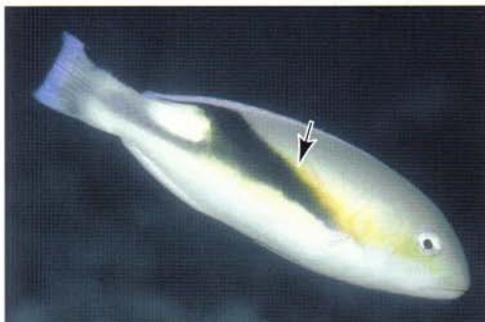
SIZE: to 90 cm (3 ft.)

Wrasses - Labridae

ID: Greenish gray with vertical blue streaks on body; small dark spot on base of mid-dorsal fin. Solitary. Sand, rubble and weedy areas on flat bottoms of lagoons and seaward reefs in 10-60 m.

Asian Pacific: Indonesia to Papua New Guinea. - S.W. Japan to N. Australia.

Swim with Pectoral Fins - Wrasses



BLACKWEDGE TUSKFISH

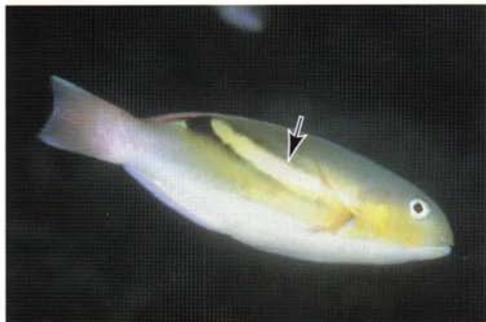
Choerodon jordani

SIZE: to 17 cm (6 3/4 in.)

Wrasses - Labridae

ID: Gray; **blackish wedge-shaped mark** surrounds large white spot below rear dorsal fin. Solitary or form small groups. Sand and rubble areas near reefs in passes and on outer slopes in 20-40 m.

West Pacific: S. Japan, Philippines, Australia and New Caledonia to Samoa.



DARKSTRIPE TUSKFISH

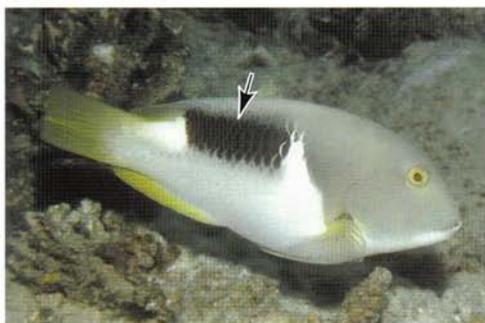
Choerodon zosterophorus

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: Gray upper body, yellowish mid-body, white below; **dark edged white band from pectoral to rear dorsal** with black blotch behind. Solitary or form small groups. Sand and rubble areas near coastal and lagoon reefs in 10-40 m.

Asian Pacific: Malaysian Peninsula, Indonesia and Philippines.



ANCHOR TUSKFISH

Choerodon anchorago

SIZE: to 38 cm (15 in.)

Wrasses - Labridae

ID: Gray head, lower body white to darkish gray; **rectangular black marking on back** surrounded by pearly white areas. Solitary. Mixed seagrass, sand, rubble and coral areas of coastal reefs, shallow flats and lagoons to 25 m.

Indo-West Pacific: India to Palau and Yap in Micronesia and New Guinea. - S.W. Japan to Australia and New Caledonia.



WHITESPOT TUSKFISH

Choerodon monostigma

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: Greenish back gradating to yellow below; black spot on back, large white spot below rear dorsal fin. Solitary or form small groups. Sand and rubble bottoms in 10-40 m.

Localized: N. Australia and New Guinea.



SINGAPORE TUSKFISH

Choerodon oligacanthus

SIZE: to 35 cm (14 in.)

Wrasses - Labridae

ID: Tan; pale yellow stripes on lower body, elongate white patch on middle of back, small black spot on tail base. Solitary or in pairs. Sand and rubble bottoms next to coastal reefs in 2-15 m.

Asian Pacific: Singapore, Malaysian Peninsula, Indonesia and Philippines.



DARKSTRIPE TUSKFISH

Choerodon vitta

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: Light gray to yellowish with yellow head; dark mid-lateral stripe, dark spot on tail base. Solitary or form small groups. Flat sand and rubble bottoms in vicinity of coastal reefs in 10-40 m.

Localized: Aru Is. in Indonesia, New Guinea and N. Australia.

Wrasses



BLUESIDED WRASSE

Cirrhilabrus cyanopleura

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: TP - Blue to blue-green upper head and forebody, orange to brown to green rear body, pale belly. Solitary or form aggregations. Mixed coral and rubble areas of lagoons and seaward slopes in 2-25 m.

East Indo - Asian Pacific: E. Andaman Sea to Papua New Guinea. - S.W. Japan to N.W. Australia and Great Barrier Reef.



Bluesided Wrasse - TP Variation

ID: A few TP develop bright orange patch on lower forebody and bluish belly.



Bluesided Wrasse - IP

ID: Dark green to red with white to light blue lower head and lower body; may display pale fine spotting, spot on upper tail base.



BACKSTRIPED WRASSE

Cirrhilabrus katherinae

SIZE: to 9 m (3 1/2 in.)

Wrasses - Labridae

ID: TP - Reddish to greenish brown with greenish stripe centered on back, pale belly; blue dorsal and anal fins with lavender borders. Solitary or form aggregations. Patch reefs on outer reef slopes and in clear lagoons in 10-40 m.

Asian Pacific: Micronesia from Palau to Pohnpei and Ryukyu and Izu Is. south of Japan.



Backstriped Wrasse - Variation

ID: Shades of green upper head and back, orange to red mid-body, pale underside, blue dorsal and anal fins with lavender borders.



Backstripe Wrasse - IP

SIZE: to 7.5 cm (3 in.)

ID: Reddish brown with pale stripe centered on back, pale underside.

Swim with Pectoral Fins - Wrasses



PENNANT WRASSE

Cirrhilabrus joanallenae

SIZE: to 6 cm (2 1/4 in.)

Wrasses - Labridae

ID: TP - Red upper head and body darkening toward rear, white below, blue tail; elongate 1st dorsal spine, large black ventral fins. Solitary or form small groups. Rubble bottoms in 12-25 m.

Localized: N. Sumatra in Indonesia.



Pennant Wrasse - IP

ID: Red upper head and body, white below, reddish tail; 4-5 thin stripes or rows of spots from head to tail.



REDBACK WRASSE

Cirrhilabrus condei

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: TP - Bright red upper body, white below; broad black outer margin on dorsal fin; older TP develop long filamentous ventral fins. Solitary or form small groups. Mixed coral and rubble areas of seaward slopes in 5-70 m.

Localized: Papua New Guinea and N. Great Barrier Reef.



JAVAN WRASSE

Cirrhilabrus filamentosus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: TP - Red upper body, white below, bluish throat; rounded blue tail, long filament extends from mid-dorsal fin. IP - Red with small black spot at upper tail base. Flat rubble bottoms next to coral patches in 10-35 m.

Localized: Java, Bali and Lesser Sunda Is. in Indonesia.



IRIAN JAYA WRASSE

Cirrhilabrus tonozukai

SIZE: to 7 cm (2 1/2 in.)

Wrasses - Labridae

ID: TP - Red upper body, white below with short filament extends from mid-dorsal fin. Solitary or form groups. Rubble areas near seaward reefs in 15-40 m.

Localized: Gulf of Tomini on E. Sulawesi and Irian Jaya in Indonesia.



YELLOWBAND WRASSE

Cirrhilabrus luteovittatus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: TP - Variable with maroon to red head and upper body, red to violet belly; broad pale red to yellow stripe from pectoral fin to tail base, black wedge-shaped mark below pectoral fin base. Form aggregations. Rubble around lagoon patch reefs in 7-30 m.

Localized: E. Caroline and Marshall Is. in Micronesia (rare at Johnston Atoll).

Wrasses



CORAL SEA WRASSE

SIZE: to 11 cm (4 1/4 in.)

ID: TP - Red upper body, yellowish to white below; purplish dorsal fin with broad black border and black blotch on front. Undescribed species. Form aggregations over rubble bottoms. Outer reefs in 5-30 m.

Localized: Coral Sea, off N.E. Australia.

Cirrhilabrus sp.

Wrasses - Labridae



SAMOA WRASSE

SIZE: to 10 cm (4 in.)

ID: TP - Blotchy orange-red with yellowish underside, yellowish dorsal fin and red tail with white spotted borders. Form aggregations over rubble bottoms. Seaward reefs in 5-30 m.

Localized: Known only from Samoa.

Cirrhilabrus walshi

Wrasses - Labridae



REDFIN WRASSE

SIZE: to 8 cm (3 in.)

ID: TP - Brownish red with pale red to white belly, brilliant scarlet dorsal, anal and ventral fins. **IP** - Similar, but less vivid; black saddle on tail base. Form groups. Rubble and coral areas at base of coastal reef slopes in 20-40 m.

Asian Pacific: Kalimantan (Borneo) and N. Sulawesi in Indonesia and Philippines.

Cirrhilabrus rubripinnis

Wrasses - Labridae



MAGENTA-STREAKED WRASSE

SIZE: to 11 cm (4 1/2 in.)

ID: TP - Pattern of curved red and yellow-orange lines on upper body, white below; diagonal magenta band at pectoral fin base. Solitary or form small groups. Rubble bottoms near coral reefs in 8-55 m.

Localized: Coral Sea, New Caledonia including Loyalty Is.

Cirrhilabrus laboutei

Wrasses - Labridae



RED-MARGINED WRASSE

SIZE: to 15 cm (6 in.)

ID: TP - Blue to lavender to pink; fine yellow lines on head, often rows of red spots on body, broad red margin on tail and rear half of dorsal fin. **IP** - Similar, but lack red tail margin. Form small groups. Sand and rubble with patch reefs in 25-52 m.

West Pacific: Indonesia and Palau to Fiji and Tonga, north to S.W. Japan.

Cirrhilabrus rubrimarginatus

Wrasses - Labridae



YELLOWFIN FAIRY FLASHER

SIZE: to 6.5 cm (2 1/2 in.)

ID: TP - White to pinkish with red upper head; 2 wide red bars on forebody, broad yellow margin on dorsal fin. **IP** - Red; small black spot on upper tail base. Rubble bottoms among coral patches in 12-30 m.

Asian Pacific: Indonesia and Philippines.

Cirrhilabrus flavianalis

Wrasses - Labridae

Swim with Pectoral Fins - Wrasses



EXQUISITE WRASSE

Cirrhilabrus exquisitus

Wrasses - Labridae

SIZE: to 12 cm (5 in.)

ID: TP - Shades of green; bright red margins on dorsal and anal fins, narrow blue stripe from mid-body to tail, large black spot on upper tail base, 2-3 blue line markings on head. Solitary. Seaward reefs in areas of current in 5-35 m.

Indo-Pacific: E. Africa to the Tuamotu Is. in French Polynesia. - S. Japan to Great Barrier Reef.



Exquisite Wrasse - IP

SIZE: to 7 cm (2 1/2 in.)

ID: Shades of brown; large black spot on upper tail base.



ORANGEBACK WRASSE

Cirrhilabrus lubbocki

Wrasses - Labridae

SIZE: to 8 cm (3 in.)

ID: TP - Orange to yellow upper head, back and dorsal fin, purplish white below; row of maroon to purple spots on back and another on middle of tail base with white stripe between. Solitary or form groups. Rubble bottoms next to seaward coral reefs in 4-45 m.

Asian Pacific: Indonesia and Philippines.



Orangeback Wrasse - TP Variation

ID: Bright yellow to orange upper head, back and dorsal fin, red to purple below; both variations have yellow pectoral fins. IP - Both variations have red area with small black spot on upper tail base.



DOTTED WRASSE

Cirrhilabrus punctatus

Wrasses - Labridae

SIZE: to 13 cm (5 in.)

ID: TP - Gray to blue-green with numerous light blue body spots; dark bar on base of pectoral fin, dark stripe along base of dorsal and anal fins; very long ventral fins. Solitary or from small groups. Rubble areas next to reefs in lagoons and on seaward slopes in 2-32 m.

West Pacific: Papua New Guinea and E. Australia to Tonga.



Dotted Wrasse - IP

ID: Red to reddish brown with numerous light blue body spots; black bar on base of pectoral fin and on front of dorsal fin. When transforming into a TP ventral fins elongate first after which colors change Juvenile - Red, but body spots of IP absent or less prominent; dark spot on base of pectoral another on fore dorsal fin and a 3rd on upper base of tail.

Wrasses



REDTAILED WRASSE

Cirrhilabrus scottorum

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: TP - Shades of green with pale yellow to reddish underside; red to reddish tail, red to yellow dorsal fin and dark blue anal fin; black speckles on upper forebody. Solitary or form groups. Coral or rubble of outer slopes in 3-40 m.

South Pacific: Coral Sea to Society and Tuamotu Is. in French Polynesia and east to Pitcairn Is.



Redtailed Wrasse - Variation

ID: Shades of dark blue-green with large brilliant red patch covering most of side, all variations have black speckles on upper forebody.



Redtailed Wrasse - Variation

ID: Shades of green with brilliant red mid-body patch on side, black speckles on upper forebody.



PEACOCK WRASSE

Cirrhilabrus temminckii

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: IP - Shades of brown to red, whitish belly; two narrow blue to green body stripes, red dorsal and anal fins with blackish bases, blue spots on tail. **TP** - Similar, but stripes thinner. Form groups with a few males. Rubble of seaward reefs in 6-20 m.

Asian Pacific: Indonesia to Papua New Guinea. - S. Japan to W. Australia.



WALINDI WRASSE

Cirrhilabrus walindi

SIZE: to 7 cm (2 1/2 in.)

Wrasses - Labridae

ID: TP - Pink with yellow wash on back; dorsal, anal and ventral fins yellowish with blue or magenta borders, two black blotches on dorsal fin. Solitary or form small groups. Rubble bottoms next to coral patches on seaward slopes in 10-65 m.

Localized: Papua New Guinea and Solomon Is.



Walindi Wrasse - IP

ID: Salmon to pinkish; small black spot on upper tail base. Form groups, often accompanied by a single male.

Swim with Pectoral Fins - Wrasses



MORRISON'S WRASSE

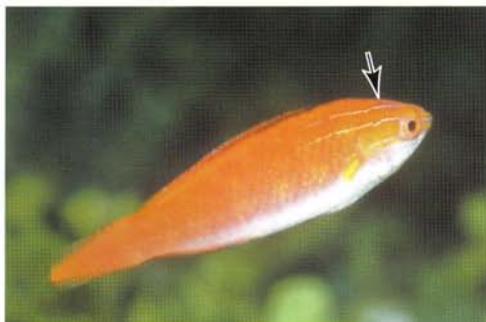
Cirrhilabrus morrisoni

Wrasses - Labridae

SIZE: to 8 cm (3 in.)

ID: TP - Reddish to purple-brown upper body, white below, black dorsal, anal and ventral fins; long heavy 1st dorsal spine. Form small groups. Rubble and *Halimeda* algae beds at base of seaward slopes in 20-40 m

Localized: Hibernia Reef off N.W. Australia.



Morrison's Wrasse - IP

SIZE: to 6 cm (2 1/4 in.)

ID: Red body, white belly; pair of narrow white or light blue lines on upper head and adjacent body. Usually form small groups accompanied by 1-2 males.



ORANGEBACK WRASSE

Cirrhilabrus aurantidorsalis

Wrasses - Labridae

SIZE: to 10 cm (4 in.)

ID: IP - Bright orange upper body and violet to blue lower body. TP - Develop long filamentous ventral fins. Form groups. Rubble bottoms and adjacent coral reefs of lagoons and seaward slopes in 10-25 m.

Localized: Togeang Is. in Tomini Bay, E. Sulawesi, Indonesia.



SOLOR WRASSE

Cirrhilabrus solorensis

Wrasses - Labridae

SIZE: to 12 cm (5 in.)

ID: TP - Upper body orange in highly variable amounts, head and lower body violet to lavender. Solitary or with several females. Rubble areas near coral reefs in 5-35 m.

Localized: Indonesia.



Solor Wrasse - TP Nuptial Phase

ID: When courting females TP can rapidly display yellow snout, orange nape, dark purple to blackish back and blue to blue-green body with white belly; broad black "chin strap". In some geographical locations TPs display this phase virtually all the time.



Solor Wrasse - IP

ID: Red to maroon upper head and forebody abruptly changing to orange behind, white belly.

Wrasses



PURPLE-LINED WRASSE

Cirrhilabrus lineatus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Pale purple to magenta body; dorsal, anal and tail fins yellow to orange with blue spots; bright blue lines and spots on head and forebody. **IP** - Similar, but less vivid. Solitary or form groups. Rubble bottoms near reefs in 8-55 m.

Localized: Great Barrier Reef, Coral Sea, New Caledonia and Loyalty Is.



RHOMBOID WRASSE

Cirrhilabrus rhomboidalis

SIZE: to 8.5 cm (3 1/4 in.)

Wrasses - Labridae

ID: **TP** - Yellow-orange body; blue wavy lines and thin stripes on head and forebody. **IP** - Similar markings, but base color salmon pink. Form groups. Sand and rubble patches of outer reefs in 35-50 m.

Localized: Kwajalein Atoll in Marshall Is., Micronesia.



RANDALL'S WRASSE

Cirrhilabrus randalli

SIZE: to 11 cm (4 1/4 in.)

Wrasses - Labridae

ID: Blue head with magenta back, violet belly and tail; broad yellow-orange stripe on side; rounded tail. Solitary or form groups. Rubble bottoms of lagoons and outer reefs in 10-40 m.

Localized: Offshore reefs of N.W. Australia.



BLUE FLASHER

Paracheilinus cyaneus

SIZE: to 7 cm (2 3/4 in.)

Wrasses - Labridae

ID: **TP** - Red with blue stripes; numerous blue spots on nape and back; 8-9 long filaments extend from dorsal fin rays, long filaments also extend from lunate tail lobes. Form aggregations. Rubble bottoms near coral reefs in 6-20 m.

Localized: N.E. Kalimantan (Borneo) and N. Sulawesi to Irian Jaya in Indonesia.



FILAMENTED FLASHER

Paracheilinus filamentosus

SIZE: to 8 cm (3 in.)

Wrasses - Labridae

ID: **TP** - Orange-red with pink to violet stripes, 5-6 long filaments extend from dorsal fin rays; deep lunate tail with filamentous lobes. Form small to large aggregations. Rubble areas of fringing reefs and outer slopes in 5-35 m.

Asian Pacific: Bali in Indonesia, Philippines, Papua New Guinea and Solomon Is.



Filamented Flasher - IP

SIZE: to 8 cm (3 in.)

ID: Red with thin purple stripes and occasionally pale blotches; lack dorsal fin filaments, nearly straight tail margin. Form aggregations with one or more TP. When courting, all TP Flashers Wrasse exhibit spectacular displays with intensified colors and extended fins.

Swim with Pectoral Fins - Wrasses



HYBRID FLASHER

SIZE: to 8 cm (3 in.)

ID: Probably a hybrid or undescribed species. Closely resembles Filamented Flasher [previous] but lacks long tail filaments and has **pink spots on anal fin**; tail similar to Angular Flasher [below right].

Localized: N. Sulawesi in Indonesia.

Paracheilinus sp.

Wrasses - Labridae



PINK FLASHER

SIZE: to 8 cm (3 in.)

ID: **TP** - Pink to reddish orange with magenta stripes; 4-6 long filaments extend from dorsal fin rays, **elongate dark patch on base of rear dorsal**; rounded tail. Form aggregations. Rubble bottoms at base of steep outer reef slopes in 12-40 m.

Localized: Philippines.

Paracheilinus carpenteri

Wrasses - Labridae



MCCOSKER'S FLASHER

SIZE: to 7 cm (2 1/2 in.)

ID: Orange-red or yellowish with violet to blue stripes, outer half of anal fin red; long filament extends from central dorsal fin, round tail. **IP** - Similar to Yellowfin Flasher [below]. Form aggregations. Rubble and weedy bottoms in 6-50 m.

Indian Ocean: Comoro, Maldives and Andaman Sea to N.W. Sumatra.

Paracheilinus mccoskeri

Wrasses - Labridae



ANGULAR FLASHER

SIZE: to 7 cm (2 1/2 in.)

ID: **TP** - Red with magenta stripes; elongate rear dorsal and anal fins give an angular profile. Form aggregations. Rubble bottoms of seaward reefs and lagoons in 10-40 m.

Asian Pacific: N.E. Kalimantan (Borneo) in Indonesia and Philippines.

Paracheilinus angulatus

Wrasses - Labridae



YELLOWFIN FLASHER

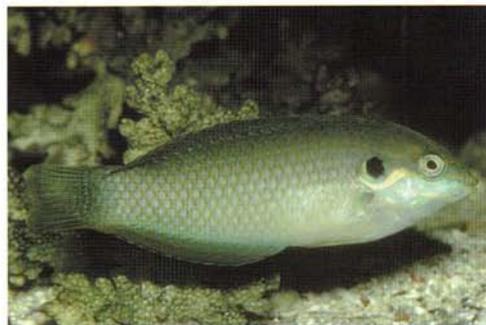
SIZE: to 7 cm (2 1/2 in.)

ID: **TP** - Orange-red or yellowish with violet to blue stripes, **anal fin yellow**; long red filament extends from central dorsal fin, round tail. Form aggregations. Rubble or weedy bottoms and base of seaward slopes in 6-35 m.

Localized: N. Sulawesi to Scott and Hibernia Reefs in the Timor Sea, Indonesia.

Paracheilinus flavianalis

Wrasses - Labridae



KUITER'S WRASSE

SIZE: to 10 cm (4 in.)

ID: **TP** - Whitish with orange scale margins; pale-edged black spot on rear gill cover; green bands on head. **IP** - Similar, but lack head bands. Solitary or form small groups. Base of dropoffs in deeper water.

Southwestern Pacific: S. Great Barrier Reef and New Caledonia to New South Wales in S.E. Australia.

Macropharyngodon kuiteri

Wrasses - Labridae

Wrasses



LEOPARD WRASSE

Macropharyngodon meleagris

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: TP - Dull orange-red to purple or green undercolor with black or blue-edged green spot on each body scale; blue-edged green bands on head, small black spot above pectoral. Solitary or form small groups. Coral and rubble bottoms in 2-30 m.

East Indo-Pacific: Cocos-Keeling Is. to Micronesia, Line and Pitcairn Is. (absent Indonesia). - S. Japan and S.E. Australia.



Leopard Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: White with leopard-like pattern of close-set brown to black spots; irregular red bands on front of head. Lagoon and seaward reefs in areas of mixed sand, rubble and coral.



BLACK WRASSE

Macropharyngodon negrosensis

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: TP - Black with translucent tail that may have dark borders; several pale saddle blotches on back and band markings on head. Solitary or form small groups. Mixed sand, rubble and coral areas in 8-32 m.

East Indo-West Pacific: Andaman Sea to Philippines and Samoa. - S.W. Japan to S.E. Australia.



Black Wrasse - IP

ID: Black with numerous small white spots, pale dorsal fin, translucent tail.



CHOAT'S WRASSE

Macropharyngodon choati

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: TP - White with red blotches and red stripes on lower head; large dark spot surrounded by yellow on gill cover. Solitary or small groups. Lagoons, passes and seaward reefs in 6-28 m.

Localized: S. Great Barrier Reef to N. New South Wales in Australia.



ORNATE WRASSE

Macropharyngodon ornatus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: TP - Black body with blue spot on each scale; head and fins orange with dark-edged blue bands. IP - Similar, but head pinkish and breast yellowish. Solitary or form small groups. Sand and rubble bottoms of coral reefs in 3-30 m.

East Indo-West Pacific: Andaman Sea to Samoa. - S.W. Japan to Australia.

Swim with Pectoral Fins - Wrasses



WHITE-SPOTTED WRASSE

Anampses melanurus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Black with rows of bluish white spots, yellow foretail; broad yellow irregular stripe extends from pectoral fin to tail. Solitary or in pairs; bury in sand at night. Outer reefs and lagoons, most common in shallow but occasionally to 30 m.

Pacific: Indonesia, S. Micronesia to French Polynesia and Easter Is. in southeastern Pacific. - S.W. Japan to Australia.



White-spotted Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Black with white spots or horizontal lines on sides, yellow foretail; black spot behind upper gill cover (also present on TP).



White-spotted Wrasse - JP

SIZE: to 3 cm (1 1/4 in.)

ID: Golden with dark worm-like markings; ragged white band behind gill cover. Swim with an erratic motion.



LINED WRASSE

Anampses lineatus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Black with white spots or horizontal lines on sides; white bar across base of black tail. **IP** - White bar across base of red tail. Solitary or form small groups; bury in sand at night. Outer reefs and lagoons in 20-45 m.

Indo-Asian Pacific: Red Sea and E. Africa to Bali in Indonesia.



YELLOWTAIL WRASSE

Anampses meleagrides

SIZE: to 22 cm (8 3/4 in.)

Wrasses - Labridae

ID: **TP** - Reddish to greenish brown with vertical blue streak on each scale; bluish crescent followed by white margin on tail. Usually solitary or form small groups with females. Solitary or small groups. Coral, rubble and sand of seaward reefs in 4-60 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S. Japan to Great Barrier Reef.



Yellowtail Wrasse - IP

SIZE: to 22 cm (8 3/4 in.)

ID: Black with horizontal rows of white spots, yellow tail; white ringed spots on rear dorsal and anal fins.

Wrasses



FEMININE WRASSE

Anampses femininus

SIZE: to 24 cm (9 in.)

Wrasses - Labridae

ID: TP - Dusky yellow to greenish brown body with blue linemarkings on scales, dark tail with blue markings, dark head with blue stripes. Form small groups. Coral and rocky reefs in 10-30 m.

Southern Pacific: S. Pacific from S.E. Australia to Easter I. in southeastern Pacific.



Feminine Wrasse - IP

SIZE: to 24 cm (9 in.)

ID: Yellow-orange becoming blue on tail base and tail; brilliant blue stripes on head and body. Named *femininus* because female more beautiful than male, an unusual characteristic in wrasses.



BLUE-SPOTTED WRASSE

Anampses caeruleopunctatus

SIZE: to 42 cm (17 in.)

Wrasses - Labridae

ID: TP - Green to brownish green with blue to blue-green vertical streak on each scale; yellow to lime-green bar on forebody. Solitary or with one or more females. Solitary or in pairs; bury in sand at night. Shallow coral or rocky reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Easter Is. in southeastern Pacific.



Blue-spotted Wrasse - IP

SIZE: to 42 cm (17 in.)

ID: Green to brownish green with horizontal rows of blue spots on side; blue bands on head, blue margins on fins. **JP** - Similar, but spots rather than bands on head.



YELLOW-BREADED WRASSE

Anampses twistii

SIZE: to 18 cm (7 in.)

Wrasses - Labridae

ID: TP - Purplish brown with horizontal rows of small white spots, yellow lower head and forebody; ragged yellow bar on mid-side. Solitary or in pairs. Lagoons and outer reefs in 3-30 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



Yellow-breasted Wrasse - IP

SIZE: to 14 cm (5 1/2 in.)

ID: Purplish brown with horizontal rows of small white spots, yellow lower head and forebody; twin spots on rear of dorsal and anal fins.

Swim with Pectoral Fins - Wrasses



GOLDSTRIPPED WRASSE

Anampses lennardi

SIZE: to 28 cm (11 in.)

Wrasses - Labridae

ID: **IP** - Blue with yellow-gold occasionally broken stripes and markings; blue margins on fins. **TP** - Blue with diffuse yellowish area above pectoral fin. Solitary, in pairs or small groups. Coastal reefs in 3-24 m.

Localized: N.W. Australia.



ELEGANT WRASSE

Anampses elegans

SIZE: to 30 cm (12 in.)

Wrasses - Labridae

ID: **IP** - Yellowish brown upper body with horizontal rows of small blue spots, abruptly white below. **TP** - Pale brown with blue streak on each scale and trio of broad blue stripes on head. Form small groups. Coral or rocky reefs in 10-40 m.

Southwestern Pacific: New South Wales, Lord Howe I. and N. New Zealand.



NEW GUINEA WRASSE

Anampses neoguinaicus

SIZE: to 17 cm (6 3/4 in.)

Wrasses - Labridae

ID: **TP** - Yellowish white with pale blue vertical lines on scales; upper head dark with blue line markings, salmon, blue and black spot behind edge of upper gill cover. Solitary. Coral-rich seaward slopes in 4-30 m.

West Pacific: E. Indonesia, Philippines and Palau in Micronesia to Fiji. - S.W. Japan to Great Barrier Reef and New Caledonia.



New Guinea Wrasse - IP

SIZE: to 13 cm (5 in.)

ID: Yellowish white with pale blue vertical lines or spots on scales and black back, dorsal and anal fins; blue ringed black spot behind upper edge of gill cover and on rear dorsal and anal fins.



GEOGRAPHIC WRASSE

Anampses geographicus

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: **TP** - Brown to olive with thin dark bluish outlines on scales; line markings on head, narrow bluish borders on dorsal, anal and tail fins. Solitary. Mix with algae and soft corals on reef tops and slopes to 25 m.

Indo-West Pacific: Mauritius and S.W. Australia to Caroline Is. in Micronesia and Fiji. - S.W. Japan to S.E. Australia.



Geographic Wrasse - IP

SIZE: to 15 cm (6 in.)

ID: Brown to olive with darkish outlines on scales; pale ringed black spot on rear dorsal and anal fins.

Wrasses



SLINGJAW WRASSE

Epibulus insidiator

SIZE: to 35 cm (14 in.)

Wrasses - Labridae

ID: **TP** - Deep body; white head and dark body with orange back from head to mid-body; diffuse yellow mid-body bar, black outline around scales, black streak through eye. Solitary. Coral-rich areas of lagoons and outer or seaward reefs to 42 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



Slingsjaw Wrasse - IP Yellow Phase

SIZE: to 26 cm (10 in.)

ID: Bright yellow head, body and fins.



BARRED THICKLIP

Hemigymnus fasciatus

SIZE: to 50 cm (20 in.)

Wrasses - Labridae

ID: **TP/IP** - Black body with 5 narrow white bars; green head with pink bands; thick lips. Solitary or form small groups. Mixed sand, rubble and coral areas of lagoons, passes and outer slopes to 25 m, more common on sheltered reefs.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Line Is. and Ducie I. east of French Polynesia. - S. Japan to S.E. Australia.



Slingsjaw Wrasse - IP Brown Phase

SIZE: to 26 cm (10 in.)

ID: Shades of pale to dark brown; black outline around scales.



BLACKEYE THICKLIP

Hemigymnus melapterus

SIZE: to 60 cm (2 ft.)

Wrasses - Labridae

ID: **TP** - Gray head and forebody, black rear body with pale streak or spot on most scales; often large dusky spot behind eye; large lips. **JP** - Similar, but with yellow tail. Solitary. Mixed sand, rubble and coral areas to 30 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and French Polynesia. - S.W. Japan to S.E. Australia and Lord Howe I.



Barred Thicklip - JP

SIZE: to 6 cm (2 1/4 in.)

ID: Light green head and brownish to dark green body; 5-6 narrow pale bars. Solitary. Among branching corals of lagoons and outer reefs.

Swim with Pectoral Fins - Wrasses



BIRD WRASSE

Gomphosus varius

Wrasses - Labridae

SIZE: to 28 cm (11 in.)

ID: **TP** - Slender body with greatly elongate snout; blue-green head, green body; dark streak on pectoral fin. Solitary. Coral-rich areas of lagoons and seaward reefs to 35 m.

Pacific: Indonesia to Hawaii, Marquesas and Rapa Is. in French Polynesia. - S. Japan to Australia.



Bird Wrasse - IP

SIZE: to 15 cm (6 in.)

ID: Slender body with greatly elongate orangish snout; whitish head and breast, body gray gradating to a nearly black tail base. Similar appearing Indian Ocean Bird Wrasse, *G. caeruleus*, in Indian Ocean, including Andaman and Java Seas.



WHITEBANDED PYGMY WRASSE

Wetmorella albofasciata

Wrasses - Labridae

SIZE: to 6 cm (2 1/4 in.)

ID: Brown; pair of inward slanting white bands on mid-side, pair of white bands radiate from eye, thin white bar on tail base, black spots on dorsal anal and ventral fins. Solitary. Crevices and recesses of lagoon and seaward reefs in 8-42 m.

Indo-Pacific: E. Africa to Hawaii and Society Is. in French Polynesia. - S. Japan to Australia.



SHARPNOSE WRASSE

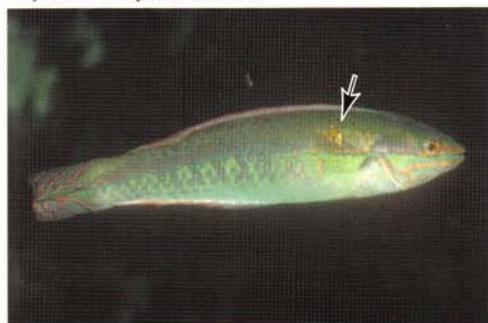
Wetmorella nigropinnata

Wrasses - Labridae

SIZE: to 8 cm (3 in.)

ID: Red to brownish; yellow bar behind eye and another across tail base, white-edged black spot on ventral, rear dorsal and anal fins. Solitary. Recesses, caves and crevices of lagoon and seaward reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. and Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



SHOULDERSPOT WRASSE

Leptojulius cyanopleura

Wrasses - Labridae

SIZE: to 13 cm (5 in.)

ID: **TP** - Green to blue-green; **diffuse yellowish blotch above pectoral fin**, blue-edged orange bands on head and tail. Form aggregations; feed on plankton 1-2 m above substrate. Sand and rubble areas and reefs in 6-45 m.

Indo-Asian Pacific: Gulf of Oman to Philippines and Great Barrier Reef.



Shoulderspot Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: White with pair of brown stripes. Form aggregations mixed with a few TP.

Wrasses



CIGAR WRASSE

Cheilio inermis

Wrasses - Labridae

SIZE: to 50 cm (20 in.)

ID: **TP** - Elongate; shades of green with several white spots along back. Solitary or with several females; often shadowed by other fish predators. Usually in weedy areas or seagrass beds of lagoons, reef flats and coastal reefs to 30 m.

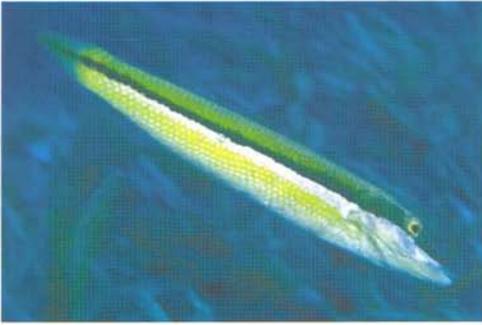
Indo-Pacific: Red Sea and E. Africa to Hawaii and Easter I. in southeastern Pacific. - S.W. Japan to S.E. Australia.



Cigar Wrasse - IP

SIZE: to 50 cm (20 in.)

ID: Elongate. Often unmarked green to yellow or brown; occasionally with dark mid-lateral stripe.



Cigar Wrasse - IP Variation

ID: Elongate; green with black and white bicolor mid-lateral stripe extends from head to tail.



CANDYSTRIPE WRASSE

Conniella apterygia

Wrasses - Labridae

SIZE: to 8 cm (3 in.)

ID: **TP** - White and red stripes; **unique among wrasses in lacking ventral fins**. Solitary or form groups of up to 10 individuals. Rubble bottoms with scattered coral heads on outer reefs in 25-50 m.

Localized: Offshore reefs of N.W. Australia.



RING WRASSE

Hologymnosus annulatus

Wrasses - Labridae

SIZE: to 40 cm (16 in.)

ID: **TP** - Elongate; dark green to greenish blue with purplish thin bars. **IP** - Narrow dark brown bars. Solitary. Seaward reef slopes in 8-40 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and Pitcairn Is. east of French Polynesia. - S. Japan to S.E. Australia.



Ring Wrasse - JP

SIZE: to 12 cm (5 in.)

ID: Elongate; pale yellowish upper body, dark brown below; narrow dark brown stripe along back from between eyes to upper tail base. Solitary. Sand and rubble areas.

Swim with Pectoral Fins - Wrasses



PASTEL RING WRASSE

Hologymnosus doliatus

SIZE: to 40 cm (16 in.)

Wrasses - Labridae

ID: TP - Elongate; light green; blue and green markings on head, numerous blue body bars, wide pale bar with blue borders on forebody, bicolor spot on edge of gill cover. Solitary. Mixed sand, rubble and coral areas to 30 m.

Indo-Pacific: E. Africa to Micronesia, Samoa and Line Is. in eastern Central Pacific. - S. Japan to S.E. Australia.



Pastel Ring Wrasse - IP

SIZE: to 25 cm (10 in.)

ID: Elongate; pale green; blue and green markings on head, numerous blue body bars (lack pale bar with blue borders of TP), bicolor spot on upper edge of gill cover.



Pastel Ring Wrasse - Intermediate JP/IP

SIZE: to 10 cm (4 in.)

ID: Elongate; whitish to pale green; 3 reddish stripes or rows of spots and thin bars on side. Solitary or form small groups. Sand and rubble bottoms.



Pastel Ring Wrasse - JP

SIZE: to 7 cm (2 1/2 in.)

ID: Elongate; yellowish with 3 red stripes. Frequently form small groups. Sand and rubble bottoms.



REDBACK RING WRASSE

Hologymnosus rhodonotus

SIZE: to 32 cm (13 in.)

Wrasses - Labridae

ID: IP - Elongate; white with 3-4 red stripes becoming yellow towards tail, white belly; dark "ear" spot. TP - Solid red upper half, white below. Solitary or form groups. Mixed rubble, coral and *Halimeda* algae in 15-40 m.

Asian Pacific: Hibernia Reef, Timor Sea in Indonesia, Philippines to S.W. Japan.



Redback Ring Wrasse - JP

SIZE: to 10 cm (4 in.)

ID: Elongate; white with 5 red to orange stripes, yellowish tail. TP - Often solitary, but JP/IP usually form groups of up to 20 individuals.

Wrasses



CANARY WRASSE

Halichoeres chrysus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **IP** - Bright golden yellow; 2-3 black spots on dorsal fin.
TP - Similar, but with only one black spot on front of dorsal fin and faint orange bands on head, breast and median fins. Form small groups. Sand and rubble edges of reefs to 60 m.

East Indo-Asian Pacific: Christmas I. to Indonesia and Micronesia. - S. Japan to N.W. & E. Australia.



Canary Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Bright golden-yellow with 3 pale-rimmed black spots on dorsal fin. Form small groups, Sand and rubble bottoms on steep slopes of deep lagoons and outer reefs in 15-20 m.



CANARYTOP WRASSE

Halichoeres leucoxanthus

SIZE: to 11 cm (4 1/4 in.)

Wrasses - Labridae

ID: **TP** - Bright golden-yellow upper body, white below.
IP - Similar, but with 3 black spots on dorsal fin. Form small groups. Sand and rubble fringes of coral reefs in 20-40 m.

Indian Ocean: Maldives and Andaman Sea to Bali.



PASTEL-GREEN WRASSE

Halichoeres chloropterus

SIZE: to 19 cm (7 1/2 in.)

Wrasses - Labridae

ID: **TP** - Pastel green with lavender scale spots; lavender markings on head, may display small yellow patch behind eye. Solitary. Protected, silty reefs of lagoons, sheltered coasts and adjacent sand and rubble bottoms to 10 m.

Asian Pacific: Sumatra in Indonesian, Micronesia to Solomon Is. - Philippines to Great Barrier Reef.



Pastel-green Wrasse - IP

SIZE: to 12 cm (5 in.)

ID: Yellow to green; usually with horizontal rows of small black spots, may display a large dark oval blotch on side. Commonly form small groups.



Pastel-green Wrasse - JP

SIZE: to 6 cm (2 1/8 in.)

ID: White with 3-4 dark green or brown stripes; often horizontal rows of small black spots are evident, which persist into the sub-adult and IP stages. Form aggregations. Sand and rubble fringes of reefs.

Swim with Pectoral Fins - Wrasses



PINSTRIPED WRASSE

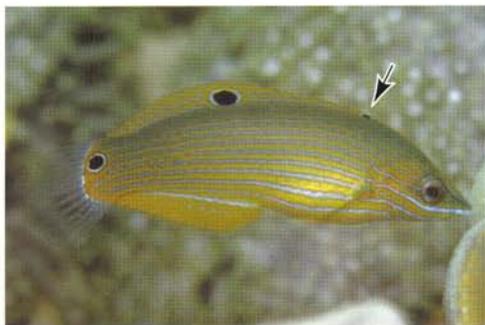
Halichoeres melanurus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Alternating green to blue-green and orange stripes; 3-6 narrow blue-green bars on upper side, large yellow spot on pectoral fin base, **black tail tip**. Solitary or form small groups. Sheltered reefs to 15 m.

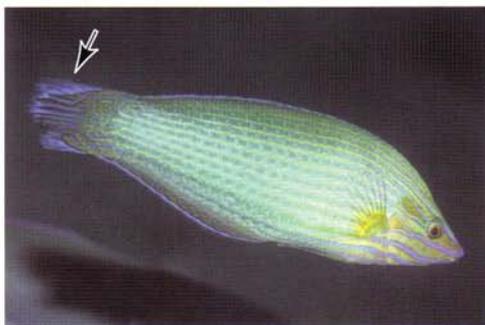
West Pacific: Indonesia, Micronesia to Samoa. - S.W. Japan to Great Barrier Reef.



Pinstriped Wrasse - IP

SIZE: to 11 cm (4 1/4 in.)

ID: Alternating yellow to orange and blue stripes; **small black spot on front dorsal fin**, large blue-edged black spot on mid-dorsal fin, similar but slightly smaller marking on upper tail base. IP Chain-lined Wrasse and Tailspot Wrasse [following] are nearly identical and are best distinguished by presence of nearby males of same species.



TAILSPOT WRASSE

Halichoeres richmondi

SIZE: to 19 cm (7 1/2 in.)

Wrasses - Labridae

ID: **TP** - Pale yellowish green; blue stripes on head, blue-green stripes on body, pectoral fin base yellow, **margin of tail blue**. Solitary or form small groups. Sheltered reefs of lagoons, channels and shorelines to 15 m.

Asian Pacific: S.W. Japan, Marshall Is. in Micronesia, Indonesia, Philippines and Papua New Guinea.



Tailspot Wrasse - IP

SIZE: to 13 cm (5 in.)

ID: Alternating orange to brown with blue stripes; somewhat elongate and pointed snout; large blue-edged black spot on mid-dorsal fin, similar but slightly smaller marking on upper tail base. IP Chain-lined Wrasse and Pinstriped Wrasse are nearly identical and are best distinguished by presence of nearby males.



CHAIN-LINED WRASSE

Halichoeres leucurus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Green with reddish spots on body scales; pink to orange bands on head, blue submarginal band on tail, **red spot on rear base of pectoral fin**, may display blue blotch behind pectoral fin. Solitary or in pairs. Silty coastal reefs to 15 m.

Asian Pacific: Indonesia, Philippines, Palau and Solomon Is.



Chain-lined Wrasse - IP

SIZE: to 11 cm (4 1/4 in.)

ID: Alternating green to blue and orange stripes from head to tail; pale-rimmed black spot on mid-dorsal fin, similar but smaller spot on upper tail base. IP Pinstripe Wrasse and Tailspot Wrasse [above] are nearly identical and may be best distinguished by presence of nearby males of same species.

Wrasses



YELLOWFACE WRASSE

SIZE: to 18 cm (7 in.)

ID: TP - Mauve to gray to nearly black body, yellowish head with pink bands; black spot on pectoral fin base, yellow-ringed black spot on front of dorsal fin. Coral-rich areas of shoreline, lagoon and seaward reefs in 10-40 m.

Asian Pacific: Indonesia and Philippines.

Halichoeres solorensis

Wrasses - Labridae



GREEN-HEADED WRASSE

SIZE: to 9 cm (3 1/2 in.)

ID: IP - Purple with narrow orange stripes. **TP** - Dark purple with orange stripes on lime-green head. Form small groups. Silty lagoon and coastal reefs in 15-30 m.

Localized: Togeang Is. in Tomini Bay, E. Sulawesi, Indonesia. Also Palawan in Philippines and Papua New Guinea.

Halichoeres chlorocephalus

Wrasses - Labridae



INDIAN PINSTRIPED WRASSE

SIZE: to 13 cm (5 in.)

ID: TP - Light green with darker green stripes of linked spots; 3-4 narrow greenish white bars on back, green and pink bands on head, yellow pectoral fin base. Solitary. Coral reefs in 2-20 m.

Indo-Asian Pacific: Maldives and Andaman Sea to Moluccan Is. in E. Indonesia.

Halichoeres vrolikii

Wrasses - Labridae



Indian Pinstriped Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Bluish with yellow to greenish yellow stripes; blue-ringed black spot on front of dorsal fin and another on rear dorsal fin.



GOLDSTRIPE WRASSE

SIZE: to 15 cm (6 in.)

ID: TP - Green; broad stripe of mauve gradating to orange, bright yellow marking around base of pectoral fin. Form small groups. Sand and rubble bottoms near reefs in 10-40 m.

Indo-West Pacific: Red Sea and Arabian Gulf to Samoa. - S. Japan to Australia.

Halichoeres zeylonicus

Wrasses - Labridae



Goldstripe Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Pinkish upper body, whitish below; broad yellow stripe from eye to tail base. Solitary or form small groups. Some authors consider Pacific populations as separate species: *Halichoeres hartfeldii*.

Swim with Pectoral Fins - Wrasses



ZIGZAG WRASSE

Halichoeres scapularis

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: TP - Pale green with blue to lavender scale margins; blue to lavender bands on head, large black diffuse spot on forebody. Solitary or form groups. Sand and rubble bottoms and seagrass beds near reefs to 20 m.

Asian Pacific: Red Sea and E. Africa to Papua New Guinea and Vanuatu. - S. Japan to Great Barrier Reef.



Zigzag Wrasse - IP/JP

SIZE: to 15 cm (6 in.)

ID: Whitish or pale green with continuous or interrupted zipper-like black stripe from head to tail base. Form groups. Sand and rubble bottoms or in weedy areas.



THREESPOT WRASSE

Halichoeres trimaculatus

SIZE: to 27 cm (10 3/4 in.)

Wrasses - Labridae

ID: TP - Pale yellowish green with lavender vertical streak on most scales; lavender bands on head, black spot on upper tail base and dusty to black spot on forebody. Solitary or form groups. Sand and rubble with isolated coral heads to 18 m.

East Indo-Pacific: Christmas I. to Micronesia, Line Is. and French Polynesia. - S. Japan to Australia and Lord Howe I.



Threespot Wrasse - IP

SIZE: to 20 cm (8 in.)

ID: White to pale green to pinkish scales with bluish markings, indistinct to green or lavender band markings on head, dark spot on upper tail base. Form aggregations. Sand and rubble areas.



BLACK-EARED WRASSE

Halichoeres melasmapomus

SIZE: to 14 cm (5 1/2 in.)

Wrasses - Labridae

ID: TP - Lavender body and red tail, green head with blue-edged orange bands; large blue-edged black spot behind eye, smaller spot on upper tail base. Solitary or form small groups. Steep outer reefs slopes in 10-56 m.

East Indo-Pacific: Christmas I. to N.W. Australia, Philippines, S. Japan, Micronesia and French Polynesia.



REDHEAD WRASSE

Halichoeres rubricephalus

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: TP - Bright red head, bluish black body. **IP** - Numerous orange stripes on side, pair of black spots on dorsal fin. Solitary or form small groups. Coastal patch reefs in 15-35 m.

Localized: Known only from Maumere area of Flores I. in Indonesia.

Wrasses



AXILSPOT WRASSE

Halichoeres podostigma

SIZE: to 19 cm (7½ in.)

Wrasses - Labridae

ID: **TP** - Pale brown upper head, white below and white tail base; black scales on body with contrasting yellow-brown margins; black spot on pectoral fin base and ventral fins. Solitary. Coastal and lagoon reefs in 2-12 m.

Asian Pacific: Indonesia, Sabah in N. Borneo and Philippines.



Axilspot Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Green with black-edged white stripes on head and forebody; black spot on pectoral fin base and ventral fins. Solitary. Sand and rubble fringe of coral reefs in 2-12 m.



TWOTONE WRASSE

Halichoeres prosopion

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Purplish head and forebody gradating to yellow rear body; black spot on front of dorsal fin. **IP** - Similar in appearance. Solitary or form groups. Coral-rich areas of lagoons, patch reefs and outer slopes in 2-40 m.

West Pacific: Indonesia and Palau to Samoa. - S.W. Japan to S.E. Australia.



Twotone Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: White with 4 black stripes interspersed between faint brown stripes; large black spot on front of dorsal fin. Sand and rubble fringe of coral reefs.



ARGUS WRASSE

Halichoeres argus

SIZE: to 11 cm (4¼ in.)

Wrasses - Labridae

ID: **TP** - Mauve with pale polygon on each scale and green back; intricate pattern of curved pink, red, orange and green markings on head. Usually form groups. Seagrass and weed-covered reefs near shore to 5 m.

Indo - West Pacific: Sri Lanka to Fiji. - Taiwan to Australia.



Argus Wrasse - JP/IP

SIZE: to 11 cm (4¼ in.)

ID: Dark green to greenish brown; white spots on scales, about 4 indistinct wide dark bars on sides. Form aggregations. Weedy areas or seagrass beds to 5 m.

Swim with Pectoral Fins - Wrasses



GREENBACK WRASSE

Halichoeres nigrescens

SIZE: to 14 cm (5 1/2 in.)

Wrasses - Labridae

ID: **TP** - Dark green upper body, pale below; 4-6 narrow pale bars, purple or reddish bands on head, stripes on upper forebody, bars on tail. Usually form groups. Silty or weedy reefs near shore to 10 m.

Indo-Asian Pacific: E. Africa to Australia, north to S. Japan.



Greenback Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Dark greenish brown with several white spots along mid-body. Form aggregations. Shallow weedy reefs.



Greenback Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Whitish with pair of dark brown stripes (may be broken into closely-linked spots) on back and side. Solitary or form small groups. Sand and rubble fringe of reefs.



NEBULOUS WRASSE

Halichoeres nebulosus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Shades of green; variable mauve markings including large blotch on mid-body, ocellated spot on mid-dorsal fin, boomerang-shaped pink marking below eye. Form groups. Shallow weedy areas near reefs to 40 m.

Indo-Asian Pacific: Red Sea and E. Africa to Papua New Guinea. - S. Japan to Australia.



DUSKY WRASSE

Halichoeres marginatus

SIZE: to 17 cm (6 3/4 in.)

Wrasses - Labridae

ID: **TP** - Green to brownish, tail green with ornate central bar; narrow blue bands on head, stripes of joined dark blue spots on body. Solitary or form small groups. Coral-rich areas of lagoons and outer reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Line Is. and Tuamotu Is. in French Polynesia. - S. Japan to S.E. Australia.



BLACK WRASSE

Halichoeres melanochir

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: **IP** - Purple with black spots and black scale margins on side; prominent black spot covering pectoral fin base. **TP** - Similar, but with yellow tail fin. Solitary or in pairs or small groups. Sand and rubble fringe of coral reefs in 5-25 m.

Asian Pacific: Indonesia and Philippines. - Taiwan to W. Australia.

Wrasses



PALE WRASSE

Halichoeres pallidus

SIZE: to 8 cm (3 in.)

Wrasses - Labridae

ID: **TP** - Pink with yellow tail base, large black spot on front of dorsal fin. **JP** - Similar, but with 3 pale-rimmed black spots on dorsal fin. Form small groups. Steep outer reef slopes in 30-70 m.

Pacific: E. Indonesia to Line Is. in eastern Central Pacific.



THREE-BLOTCH WRASSE

Halichoeres trispilus

SIZE: to 9 cm (3 1/2 in.)

Wrasses - Labridae

ID: **TP** - Pink; 2-3 white stripes through eye, 3 white-edged black spots on dorsal fin, also 2-3 small black spots on upper tail base. Solitary or form groups. Sand and rubble patches below overhanging reefs in 15-50 m.

Indian Ocean: S. Africa, Mauritius and Maldives to Java in Indonesia.



CHECKERBOARD WRASSE

Halichoeres hortulanus

SIZE: to 27 cm (10 3/4 in.)

Wrasses - Labridae

ID: **TP** - Green with blue bar on each scale; mauve or orange bands on head, pale green area behind head, yellow spot below front of dorsal fin. Solitary. Sand patches of lagoons and seaward reefs to 35 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Line Is. and French Polynesia. - S. Japan to S.E. Australia.



Checkerboard Wrasse - JP

SIZE: to 20 cm (8 in.)

ID: Bluish white body with blue bar on each scale, yellow tail; green and mauve or pink bars on head, 2-3 yellow saddle spots on back, black patch under front of dorsal fin. Solitary. Sand patches of lagoons and seaward reefs to 35 m.



Checkerboard Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Starting with white snout, wide alternating black and white bars encircle body, yellowish tail; gold ringed black spot on mid-dorsal fin. Solitary. Sand patches of lagoons and seaward reefs to 35 m.



WEEDY SURGE WRASSE

Halichoeres margaritaceus

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Shades of green with mauve scale spots forming a series of blotches along sides; pink diagonal band on cheek. **JP** - Similar in appearance. Form groups. Reef flats, shallow tops of patch reefs in areas exposed to surge to 3 m.

East Indo-Pacific: Cocos-Keeling Is. to Micronesia, Line Is. and Pitcairn Is. - S. Japan to N.W. & S.E. Australia.

Swim with Pectoral Fins - Wrasses



COSMETIC WRASSE

Halichoeres cosmetus

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Pale greenish with 6-7 bright orange stripes. **IP** - Similar with pair of pale rimmed black spots on dorsal fin. Solitary or form small loose groups. Lagoons and outer slopes in mixed coral and rubble areas to 30 m.

Indian Ocean: E. Africa to Andaman Sea and N.W. Sumatra in Indonesia.



Cosmetic Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Pale greenish with irregular orange spots and horizontal bands; black line behind eye, pair of pale-rimmed black spots on dorsal fin and another on upper tail base.



WISATA WRASSE

Halichoeres binotopsis

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Light green with 4-5 squarish dark bars on back; **red stripes on lower side**, bands on head and tail. Solitary or form small groups. Coral-rich areas of coastal reefs and lagoons in 2-8 m.

Localized: Bali to Papua New Guinea.



TWOSPOT WRASSE

Halichoeres biocellatus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Alternating red and green stripes on head fade onto forebody, darkish toward rear with 4 wide dusky bars. **IP/JP** - Similar, with two pale-ringed dark spots on dorsal fin. Form small groups. Seaward reefs in 6-35 m.

West Pacific: Indonesia, Philippines and Micronesia to Fiji. - Taiwan to N.W. Australia and S. Great Barrier Reef.



ORNATE WRASSE

Halichoeres ornatus

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: **TP/IP** - Greenish with lattice of inter-linked rose stripes and bars; irregular rose and green bands on head; small dark spot behind eye. **IP** - Less than 10 cm and have spot on middle dorsal fin. Solitary. Lagoon and seaward reefs in 10-40 m.

Pacific: Indonesia, Palau and Mariana Is. in Micronesia, Hawaii and French Polynesia. - S. Japan to Great Barrier Reef.



SEAGRASS WRASSE

Halichoeres papilionaceus

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: **TP** - Shades of green with variable mauve bar or blotch markings on back; pink bands on head, black tail margin. Form aggregations. Seagrass beds and weedy areas to 4 m.

Asian Pacific: Indonesia, Malaysian Peninsula, Philippines, Palau and Papua New Guinea.

Wrasses



CELEBES WRASSE

Oxycheilinus celebicus

SIZE: to 24 cm (9 in.)

Wrasses - Labridae

ID: Variegated shades of brown with several dark blotches on rear body; pink to orange lines radiating from eye; elongate snout. Solitary. Coral-rich areas on slopes of lagoon and seaward reefs in 3-30 m.

Asian Pacific: S. Japan, Kalimantan (Borneo) in Indonesia to Solomon Is.



TWOSPOT WRASSE

Oxycheilinus bimaculatus

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: Variable from shades of red to brown to green; dark spot bordered in red on front of dorsal fin, black mid-body spot, yellow base of pectoral; unusual tail shape. Form small groups. Rubble and weedy areas around rocky outcrops in 2-100 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and Marquesa Is. in French Polynesia. - S. Japan to S.E. Australia and Lord Howe I.



Linedcheeked Wrasse - Variation

ID: Red body variation without dark bar markings on scales. Other variations display indistinct white stripes from head to tail, both with or without bars. All variations can be identified by the diagonal lines on lower gill cover.



ORIENTAL WRASSE

Oxycheilinus rhodochrous

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: Variegated shades of brown; diffuse dark stripe from snout to tail base with adjacent whitish stripes, wavy diagonal dark lines on lower edge of gill cover, red spot on ventral fin. Solitary. Steep seaward slopes in 10-45 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa - S.W. Japan to E. Australia and New Caledonia.



LINEDCHEEKED WRASSE

Oxycheilinus digrammus

SIZE: to 30 cm (12 in.)

Wrasses - Labridae

ID: Variable color and markings; most commonly shades of brown, green and red with wide bar markings on back and dark bar markings on each scale; diagonal lines on lower gill cover. Solitary. Coral-rich lagoons and seaward reefs in 3-60 m.

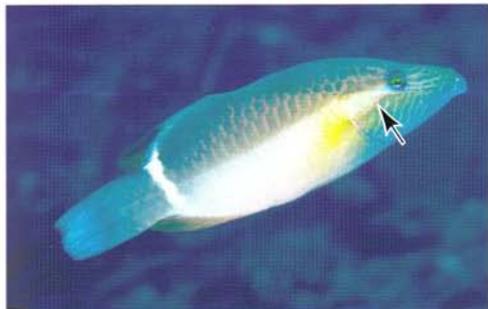
Indo-West Pacific: Red Sea and E. Africa to Micronesia, Samoa and Fiji. - S.W. Japan to New Caledonia.



Linedcheeked Wrasse - Variation

ID: Brilliant red variation with bright highlights.

Swim with Pectoral Fins - Wrasses



RINGTAIL WRASSE

Oxycheilinus unifasciatus

Wrasses - Labridae

SIZE: to 46 cm (18 in.)

ID: Shades of green to brown with white belly (capable of rapid and intense color change); **white band with red borders from eye to gill cover**, white bar across tail. Solitary. Lagoon and outer reefs to 60 m.

East Indo-Pacific: Christmas I. to Micronesia, Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



Ringtail Wrasse - IP

SIZE: to 28 cm (11 in.)

ID: Purplish brown; wide band with red borders from eye to over gill cover, pink or reddish bands on head, white bar across tail base, dark patch on ventral fins.



ARENATUS WRASSE

Oxycheilinus arenatus

Wrasses - Labridae

SIZE: to 19 cm (7 1/2 in.)

ID: Salmon to brown; dark stripe from eye to tail, orange base of pectoral fin; may change to white below dark stripe. Solitary and cryptic. Hide inside caves, recesses and protected areas of outer reefs and dropoffs in 25-46 m.

Indo-West Pacific: Red Sea to Samoa, north to Philippines and Micronesia.



SLENDER WRASSE

Oxycheilinus orientalis

Wrasses - Labridae

SIZE: to 17 cm (6 3/4 in.)

ID: Slender body; salmon to brown; several pale, somewhat indistinct, ragged body bars. Solitary or form small groups. Sand, rubble and areas of dense algae in lagoons and around reefs in 18-70 m.

West Pacific: Kalimantan (Borneo) in Indonesia to Samoa. - S.W. Japan to S.E. Australia.



BLACKMARGINED WRASSE

Oxycheilinus sp.

Wrasses - Labridae

SIZE: to 14 cm (5 1/2 in.)

ID: Slender red-brown body; 5 thin white bars on upper body, white spotting on belly and **black tail margin**. Solitary. Rubble bottoms, frequently with soft corals in 8-16 m. A scientifically undescribed species.

Localized: Java, Bali and Sulawesi in Indonesia.



JANSEN'S WRASSE

Thalassoma janseni

Wrasses - Labridae

SIZE: to 20 cm (8 in.)

ID: **TP/IP** - Large black patch from snout to behind pectoral fin followed by 2 wide black bars with white or yellow between, yellow on tail base; underside of head and forebelly white to green. Form groups. Coastal, lagoon and outer reefs to 10 m.

Indo-West Pacific: Maldives to Fiji. - S. Japan to E. Australia.

Wrasses



LADDER WRASSE

Thalassoma trilobatum

SIZE: to 30 cm (12 in.)

Wrasses - Labridae

ID: TP - Salmon-pink to orange; two stripes formed by vertically elongate green to blue-green rectangles. Solitary or in pursuit of females. Shallow reefs and rocky shores exposed to wave action.

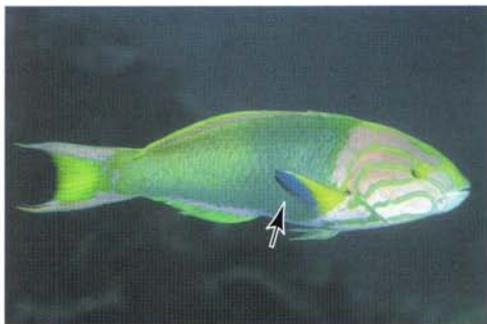
Indo-Pacific: E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Great Barrier Reef.



Ladder Wrasse - IP

SIZE: to 20 cm (8 in.)

ID: Greenish gray to pale green to green with 5-6 distinct or diffuse dark saddles on back; 2 distinct to diffuse dark stripes on side, dark vertical line markings on scales, line and spot markings on head, but lack the V-shaped mark on snout of similar Surge Wrasse IP [next page]. Form small fast-swimming groups.



SUNSET WRASSE

Thalassoma lutescens

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: Pink head with green bands, bluish green forebody, green rear and yellow-green tail, **yellow pectoral fin with blue outer edge**. Form groups. Sand, rubble and coral patches of lagoon and seaward reefs to 30 m.

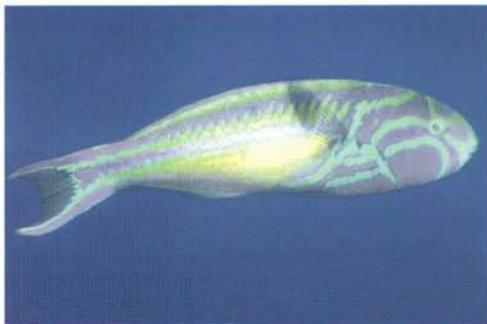
Indo-Pacific: E. Africa to Hawaii, French Polynesia and Panama. - S. Japan to Kermadec Is.



Sunset Wrasse - IP

SIZE: to 20 cm (8 in.)

ID: Yellow head with red bands and light green body. **JP/Small IP** - Yellow. Both TP and IP have faint vertical lines on scales.



FIVESTRIPE WRASSE

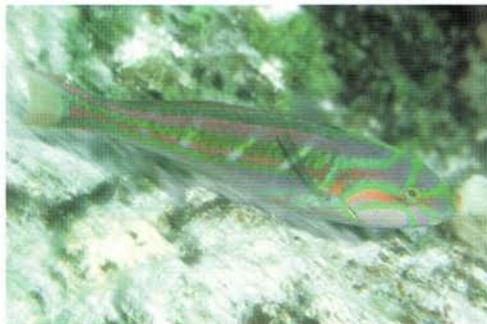
Thalassoma quinquevittatum

SIZE: to 16 cm (6 1/4 in.)

Wrasses - Labridae

ID: TP - Purple head with green bands, green upper body, yellow below; pair of purple wavy-edged stripes on upper body, purple tail borders. Form aggregations. Lagoon and seaward reefs to 18 m, often in surge channels less than 5 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and French Polynesia. - S. Japan to Australia and Lord Howe I.



Fivestripe Wrasse - IP

SIZE: to 13 cm (5 in.)

ID: Green with purple and green bands on head, upper body and belly; pair of violet stripes on upper body, 3-4 faint white diagonal bars; red curving band extends from lower eye to gill cover edge. Form groups, frequently accompanied by a male.

Swim with Pectoral Fins - Wrasses



SURGE WRASSE

Thalassoma purpurum

SIZE: to 43 cm (17 in.)

Wrasses - Labridae

ID: **TP** - Green to blue; pink to lavender bands on head, irregular purple stripe on back and pair of reddish stripes on side. Form groups. Old TP may lose stripe markings. Surge zone of reef flats and rocky coasts to 5 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii and Easter I. in the southeast Pacific. - S. Japan to Australia.



Surge Wrasse - IP

SIZE: to 25 cm (10 in.)

ID: Light green with 5-6 distinct or diffuse dark saddles on back; 2 distinct to diffuse dark stripes on side, dark vertical line markings on scales, line and spot markings on head with **V-shaped mark on side of snout** distinguishing this species from the similar Ladder Wrasse IP [previous page].



SIXBAR WRASSE

Thalassoma hardwicke

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: **TP/IP** - Pale green to whitish with 5-6 black saddles that gradually decrease in size towards tail; pink bands on head, purple to black band on rear edge of gill cover. Form groups. Coastal, lagoon and outer reefs to 15 m.

Indo - Pacific: E. Africa to Line Is., Austral and Tuamotu Is. in French Polynesia. - S. Japan to E. Australia.



CRESCENT WRASSE

Thalassoma lunare

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: **TP** - Blue to blue-green; **lavender to green bands on head**, lavender pectoral fins with blue margin; deep lunate tail with yellow center. **IP** - Similar, but more green. Solitary or form groups. Coastal, lagoon and outer reefs to 20 m.

Indo - Pacific: Red Sea and E. Africa to Line Is. in eastern Central Pacific. - S. Japan to Australia and N. New Zealand.



TWO-TONE WRASSE

Thalassoma amblycephalum

SIZE: to 14 cm (5 1/2 in.)

Wrasses - Labridae

ID: **TP** - Blue to green head, light greenish to yellowish "collar," bluish to red body with vertical green lines on scales; **two lines under eye**; forked tail. Form groups. Upper edge of lagoon and seaward reefs to 15 m.

Indo - Pacific: Chagos to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan to Australia and N. New Zealand.

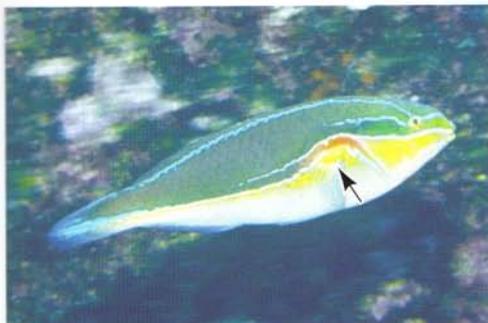


Two-tone Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Pale green back with broad dark brown mid-lateral stripe, white belly. Form harems consisting of a single TP and numerous IP. Commonly seen spawning above reef at dusk.

Wrasses



RED SHOULDER WRASSE

Stethojulis bandanensis

SIZE: to 16 cm (6 1/4 in.)

Wrasses - Labridae

ID: **TP** - Green to brownish gray upper body, pale belly; **bright red-orange patch above pectoral fin**, blue to green stripe markings radiate from eye. Form groups. Reef flats and coastal shallows to 20 m, but usually less than 3 m.

East Indo-Pacific: E. Andaman Sea and W. Australia to Tuamotu Is. in French Polynesia. - S. Japan to E. Australia.



Redshoulder Wrasse - IP

SIZE: to 16 cm (6 1/4 in.)

ID: Dark gray with small white dots on upper body; markings on scales of lower body form diamond-like netted pattern, often pair of whitish stripes extend from head onto body, small bright red-orange patch above pectoral fin base. Form groups.



THREE-LINE WRASSE

Stethojulis strigiventer

SIZE: to 14 cm (5 1/2 in.)

Wrasses - Labridae

ID: **TP** - Green back, pale belly with **dark green to yellow mid-body stripe bordered with thin blue stripes** and another on back; black spot on rear gill cover, another on tail base. Form groups. Sand mixed with seagrass or algae or reef flats to 3 m.

Indo-Pacific: E. Africa to Tuamotu Is. in French Polynesia. - S. Japan to Australia.



Three-line Wrasse - IP

SIZE: to 14 cm (5 1/2 in.)

ID: Pale blue to dark olive upper body with white stripes below; pale stripe under eye from snout tip to edge of gill cover, black spot on rear dorsal fin. **JP** - White stripe from above eye to upper tail base.



FOURLINE WRASSE

Stethojulis trilineata

SIZE: to 14 cm (5 1/2 in.)

Wrasses - Labridae

ID: **TP** - Shades of green with red dorsal fin; **yellow-orange around pectoral fin** and occasionally on back; 4 blue stripes, 3 from head to tail and one from snout to above pectoral. Solitary. Shallow reefs to 8 m.

Indo-West Pacific: Maldives to Australia and Samoa, north to S. Japan.



Fourline Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Dark gray with small white dots on upper body, **pale gray lower body**; white stripe below eye merges into a salmon stripe with a mid-row of black spots from pectoral fin to lower tail base.

Swim with Pectoral Fins - Wrasses



CUTRIBBON WRASSE

Stethojulis interrupta

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Orangish rust upper body, green below; pair of blue to green stripes, one on back, other extends from snout to tail usually interrupted on forebody. Form groups. Reef flats and coastal shallows to 18 m, but usually less than 3 m.

East Indo-Pacific: E. Andaman Sea and W. Australia to Tuamotu Is. in French Polynesia. - S. Japan to E. Australia.



Cutribbon Wrasse - IP

SIZE: to 13 cm (5 in.)

ID: Green to yellow upper body with pale spots, white below with darkish spots; thin white stripe from snout passes below eye and onto forebody.



SOUTHERN WRASSE

Stethojulis notialis

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: **IP** - Green back gradating to pale underside with fine dark reticulations; broad yellow stripe from upper head to upper tail base. **TP** - Similar but with 4 dark bars on mid-side. Small groups. Mixed bottoms of sand, rubble, weeds, and coral, usually less than 6 m.

West Pacific: Fiji, New Caledonia and Norfolk I.



TAILSPOT WRASSE

Pseudocheilinus ocellatus

SIZE: to 8.5 cm (3 1/4 in.)

Wrasses - Labridae

ID: **TP** - Magenta to red body; often display thin vertical white lines on side, white-ringed black ocellated spot on tail base, curved magenta spot surrounded by yellow markings below eye. Solitary. Outer reef areas in 20-60 m.

Pacific: S.W. Japan, Palau and Coral Sea to Pitcairn Is. east of French Polynesia.



EIGHTSTRIPE WRASSE

Pseudocheilinus octotaenia

SIZE: to 13.5 cm (5 1/4 in.)

Wrasses - Labridae

ID: **TP** - Pale to dark red to orange with light to dark purple stripes, sometimes with yellow stripes between. Solitary. Coral or rubble patches on seaward reefs in 2-50 m.

Indo-Pacific: E. Africa to Hawaii and Ducie I. east of French Polynesia. - S.W. Japan to Australia.



DISAPPEARING WRASSE

Pseudocheilinus evanidus

SIZE: to 8 cm (3 in.)

Wrasses - Labridae

ID: **TP** - Red to orange with thin white lines on side; white band under eye, bluish vertical streak on cheek, frequently with 5-6 diffuse pale bars. Solitary and cryptic. Rubble and coral patches on seaward slopes in 6-40 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and French Polynesia. - Izu Is. in S. Japan to Australia.

Wrasses



SIXSTRIPE WRASSE

Pseudocheilinus hexataenia

SIZE: to 7.5 cm (3 in.)

Wrasses - Labridae

ID: **TP** - Violet with 6 orange stripes on side; **small black spot on upper tail base**. Solitary or form small groups; cryptic, hide among coral branches. Lagoons and seaward reefs in 2-35 m.

Indo-Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



FOURSTRIPE WRASSE

Pseudocheilinus tetrataenia

SIZE: to 7.5 cm (3 in.)

Wrasses - Labridae

ID: **TP** - Four orange to green stripes alternate with 3 blue stripes on back; bluish to greenish to brownish belly. Solitary; cryptic, hide in small recesses of coral or rubble. Seaward reefs in 6-44 m.

Pacific: Bonin Is. in S. Japan to Palau, Hawaii and French Polynesia.



MIDGET WRASSE

Pseudocheilinops atania

SIZE: to 5 cm (2 in.)

Wrasses - Labridae

ID: **TP** - Red with 7-8 rose to orange stripes; **blue on ventral fin**. Form small groups; cryptic, stay close to shelter. Rubble and coral patches on protected reefs in 5-15 m.

Asian Pacific: Sulawesi and Flores in Indonesia, Philippines, Palau and Papua New Guinea.



Midget Wrasse - IP

ID: Rose to pink with whitish lower head and belly; 7-8 lavender stripes, darkish spot on ventral fin and bright yellow iris.



TORPEDO WRASSE

Pseudocoris heteroptera

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: **TP** - Blue-green head and forebody with **alternating yellow and blackish bars** behind; dark patch behind eye. Form groups well above bottom. Mixed sand, rubble and coral areas with periodic strong currents in 15-24 m.

Indo-Asian Pacific: Chagos to S. Japan and Papua New Guinea.



Torpedo Wrasse - IP

SIZE: to 16 cm (6 1/4 in.)

ID: Dark greenish brown, red anal fin; row of pale spots in dorsal fin, dark tail borders.

Swim with Pectoral Fins - Wrasses



SMALLTAIL WRASSE

Pseudojuloides cerasinus

SIZE: to 12 cm (5 in.)

Wrasses - Labridae

ID: **TP** - Green upper body, blue below; bicolor blue and yellow mid-body stripe, wide black tail margin. Form small groups. Rubble, weed and coral areas of lagoon and seaward reefs to 61 m, usually over 20 m.

Indo-West Pacific: E. Africa to Samoa and Hawaii. - S. Japan to Australia.



Smalltail Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Red to pink without markings.



KALEIDIOS WRASSE

Pseudojuloides kaleidios

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: **TP** - Green to bluish; broad blackish stripe on upper side and narrower blue stripe immediately below; bright blue snout followed by salmon stripe down back. Solitary or with groups of IP. Rubble bottoms in 15-40 m.

Indo - Asian Pacific: Maldives to Indonesia.



Kaleidios Wrasse - IP

SIZE: to 10 cm (4 in.)

ID: Red upper body, yellow to whitish below; dark reddish upper head. Form groups on rubble bottoms, often accompanied by at least one TP.



ROYAL WRASSE

Pseudojuloides sevensi

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: **TP** - Large dark patch from eyes to mid-body, blue, green and yellow behind; violet snout joins violet stripe below eye to beyond pectoral base, blue margins on tail. **IP** - Pink. Sand and rubble bottoms in 20-40 m.

Indo - Asian Pacific: Sri Lanka to Indonesia and Philippines, north to S.W. Japan.



ATAVIA WRASSE

Pseudojuloides atavia

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: **IP** - Upper head and back reddish brown, white below separated by bicolor black and pale blue stripe. **TP** - Pink forebody with orange spots or vertical streaks and bands on head, gray rear body and tail with white triangular rear margin. Solitary or groups. Outer reefs in 12-31 m.

South Central Pacific: French Polynesia to Pitcairn Is.

Wrasses



CRYPTIC WRASSE

SIZE: to 9.5 cm (3 7/8 in.)

ID: **TP/IP** - Mottled shades of red-brown with scattered dark spots; **white stripe from upper eye to above pectoral**, pale ocellated spot on gill cover. Solitary. Cryptic; branching stony corals, soft corals and weeds to 67 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - Philippines and Mariana Is. in Micronesia to Australia.

Pteragogus cryptus

Wrasses - Labridae



COCKEREL WRASSE

SIZE: to 12 cm (5 in.)

ID: **TP/IP** - Mottled shades of red-brown; dark spots on lateral line (may join to form thin stripe); ocellated brown spot on gill cover. **TP** - Filaments on 1st two dorsal rays. Solitary and cryptic. Among stony and soft corals and weeds in 3-25 m

Asian Pacific: Indonesia to Australia and Coral Sea, north to Mariana Is. in Micronesia.

Pteragogus enneacanthus

Wrasses - Labridae



FLAGFIN WRASSE

SIZE: to 20 cm (8 in.)

ID: **TP/IP** - Shades of green to yellow-orange with grayish scale spots; yellow-green lips and purplish markings on cheek; deep body. **TP** - 1st 2 dorsal spines with long filaments. Solitary and cryptic. Among branches of soft coral or weedy areas in 2-30 m.

Indo-Asian Pacific: E. Africa to Papua New Guinea. - S. Japan to Great Barrier Reef.

Pteragogus flagellifer

Wrasses - Labridae



NEILL'S HOGFISH

SIZE: to 20 cm (8 in.)

ID: Reddish brown head and upper forebody, white lower and rear body; large blackish and red blotch on middle of dorsal and anal fins. Solitary. Coastal reefs in 2-15 m.

Indian Ocean: Maldives to Andaman Sea.

Bodianus neilli

Wrasses - Labridae



AXILSPOT HOGFISH

SIZE: to 20 cm (8 in.)

ID: Purplish brown head and forebody, white rear body; **large black spot on base of pectoral fin and on rear dorsal and anal fins**. Solitary, rarely form small groups. Clear water lagoons and outer reefs in 2-40 m.

Indo-Pacific: Red Sea and E. Africa to Pitcairn Is. east of French Polynesia. - S. Japan to Australia.

Bodianus axillaris

Wrasses - Labridae



Axilspot Hogfish - JP

SIZE: to 6 cm (2 1/4 in.)

ID: Black; double row of large white spots and white snout. Solitary; occasionally act as cleaners. Shelter inside caves and crevices.

Swim with Pectoral Fins - Wrasses



BLACKBELT HOGFISH

SIZE: to 19 cm (7½ in.)

Bodianus mesothorax

Wrasses - Labridae

ID: Purplish brown head with **wide black band on forebody**, white to yellowish rear body; black spot on pectoral fin base. Lack black spots like similar Axilspot Hogfish [previous]. Solitary or small groups. Outer reef slopes and passes in 5-30 m.

East Indian - Asian Pacific: Christmas I. to Papua New Guinea. - S. Japan to Great Barrier Reef.



Blackbelt Hogfish - JP

SIZE: to 6 cm (2¼ in.)

ID: Purple to nearly black; double row of large black-edged yellow spots. Solitary. Shelter in caves and under ledges.



SADDLEBACK HOGFISH

SIZE: to 55 cm (22 in.)

Bodianus bilunulatus

Wrasses - Labridae

ID: **TP** - Pale undercolor with numerous dark reddish to greenish or grayish brown thin stripes; large dark or pale spot below rear dorsal fin. Solitary; feed on benthic invertebrates. Lagoons and outer reef slopes in 8-108 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn Is. east of French Polynesia. - S. Japan to Australia.



Saddleback Hogfish - IP

SIZE: to 55 cm (22 in.)

ID: White undercolor with thin red stripes on upper head and along sides, yellow to translucent tail; large black spot below rear dorsal fin.



Saddleback Hogfish - JP

SIZE: to 10 cm (4 in.)

ID: Yellow upper head and forebody, white below with thin red stripes, black rear body and white tail base. Solitary; occasional act as cleaners.



BLACKFIN HOGFISH

SIZE: to 40 cm (16 in.)

Bodianus loxozonus

Wrasses - Labridae

ID: Red to yellow upper head and back, pale below; numerous pale thin stripes run from head to tail, large diagonal black area across tail base; ventral fin and border of anal fin black. Solitary. Lagoon and seaward reef slopes in 3-40 m.

Pacific: Vietnam to French Polynesia. - S.W. Japan to E. Australia.

Wrasses



DIANA'S HOGFISH

Bodianus diana

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: Purple to red head and back, yellow to whitish below; 4-5 white spots on back, large black spots on ventral and anal fins. Solitary or in pairs. Outer reef slopes in 6-25 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S. Japan to E. Australia and New Caledonia.



Diana's Hogfish - JP

SIZE: to 7.6 cm (3 in.)

ID: Maroon undercolor with indistinct stripes formed by numerous white spots and blotches; black spots on ventral and anal fins. Solitary. Commonly around black coral or gorgonian fans.



LONGNOSE HOGFISH

Bodianus prognathus

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: Red upper body, paler below; 4-5 white spots on back and several pale spots on body; black spots on many scales; elongate snout. Solitary. Outer reefs in 7-20 m, juveniles usually below 30 m.

Localized: Line Is. in eastern Central Pacific.



LYRETAIL HOGFISH

Bodianus anthioides

SIZE: to 21 cm (8 in.)

Wrasses - Labridae

ID: Brown head and forebody, white rear body; scattered brown spots on white areas; deeply forked tail. Solitary; feed on benthic invertebrates. Steep outer slopes, often adjacent to dropoffs in 6-25 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



TWOSPOT SLENDER HOGFISH

Bodianus bimaculatus

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: Small and slender; variable from yellowish upper body and pink below to pink upper body and white below; may have thin red stripes, black spot on rear gill cover and often another on tail base. Form small groups. Steep outer reef slopes in 30-60 m.

Indo-Asian Pacific: Mauritius to Papua New Guinea. - S. Japan to Great Barrier Reef.



GOLDSPOT HOGFISH

Bodianus perditio

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: **JP** - Yellow; large black patch on rear back preceded by white bar. **TP** - Reddish; same markings as JP except bar is yellowish, to 80 cm (2⁷/₄ ft.). Solitary. Sand and rubble patches of seaward reefs in 13-40 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn Is. east of French Polynesia. - S. Japan to Australia.

Swim with Pectoral Fins - Wrasses



REDSTRIPE HOGFISH

Bodianus opercularis

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: Slender body; bold red and white candy-stripe pattern; black spot on rear edge of gill cover. Solitary or form small groups. Rubble bottoms on or adjacent to steep outer reef slopes in 35-70 m.

Indo - Asian Pacific: Red Sea to Palau and Marshall Is. in Micronesia.



CRESCENT-TAIL HOGFISH

Bodianus sp.

SIZE: to 10 cm (4 in.)

Wrasses - Labridae

ID: Red with white belly; 2 narrow white stripes from snout to tail, large black spot on tail base extends onto tail and is bordered by crescents of yellow, red and black, black spot on upper rear gill cover. Undescribed species. Deep reefs in 20-60m.

Localized: Known from scattered locations in Indonesia and at Christmas I. in the Central Pacific.



ROCKMOVER WRASSE

Novaculichthys taeniourus

SIZE: to 27 cm (10 3/4 in.)

Wrasses - Labridae

ID: TP/IP - Pale gray head, dark brown to black body with pale spot on each scale; white bar on tail base, may display lines radiating from eye. Solitary; turn over rocks in search of prey. Rubble bottoms next to reefs to 20 m.

Indo - Pacific: Red Sea and E. Africa to Micronesia, Hawaii, French Polynesia and Panama. - S.W. Japan to Australia.



Rockmover Wrasse - JP

SIZE: to 8 cm (3 in.)

ID: "Antlers" at front of dorsal fin; green to brown to maroon body with white irregular spots and 3 black bars; white banded head. Effectively mimic bits of drifting weed with "to and fro" swimming motion.



SEAGRASS RAZORFISH

Novaculichthys macrolepidotus

SIZE: to 15 cm (6 in.)

Wrasses - Labridae

ID: TP - Bright green with dark band and lines radiating from eye; several black spots usually just before tail base. IP - Similar, with dark mid-lateral stripe. Form aggregations in seagrass and weed beds. Lagoons and coastal areas to 5 m.

Indo - Asian Pacific: Red Sea and E. Africa to Micronesia and New Guinea. - S.W. Japan to S.E. Australia and Lord Howe I.



KNIFE RAZORFISH

Cymolutes praetextatus

SIZE: to 20 cm (8 in.)

Wrasses - Labridae

ID: Blunt snout; white, often with green to brown tint; faint irregular brown bars with white line running down back, may display broad yellow stripe. Solitary; dive into sand when alarmed and to sleep at night. Extensive sand or weedy areas near reefs or lagoons in 2-10 m.

Indo - Pacific: E. Africa to French Polynesia.

Wrasses



COLLARED RAZORFISH

SIZE: to 12 cm (5 in.)

Cymolutes torquatus

Wrasses - Labridae

ID: **TP** - Blunt snout; pale green to brown with numerous thin body bars; slanting dark bars just above pectoral fin "collar". Solitary; dive into sand when alarmed and to sleep at night. Extensive sand bottoms near reefs or lagoons in 2-15 m.

Indo-Asian Pacific: E. Africa to Papua New Guinea. - S. Japan to Australia.



Collared Razorfish - Variation

ID: Shades of brown with numerous narrow dusky brown bars, dark "collar" bar blends in with other bars.



WHITEPATCH RAZORFISH

SIZE: to 24 cm (9 in.)

Iniistius aneitensis

Wrasses - Labridae

ID: **TP** - Steep blunt snout; pale gray; large white patch on lower forebody, may display 3-4 dusky bars. Dive into sand when alarmed and to sleep at night. Open sand areas near reefs in 12-92 m.

Indo-West Pacific: Chagos Is. to Hawaii. - S.W. Japan and Micronesia to Australia.



Whitepatch Razorfish - JP

SIZE: to 6 cm (2 1/4 in.)

ID: Pale gray; 3 dark body bars and another behind eye, dark foretail, single or double spots on rear dorsal fin above two rear bars; some elongation of spinous dorsal fin forms "flag" when raised. Dive into sand when alarmed and to sleep at night.



Whitepatch Razorfish - JP Variation

SIZE: to 6 cm (2 1/4 in.)

ID: Green or pale yellow without distinctive markings.



Whitepatch Razorfish - JP Variation

SIZE: to 6 cm (2 1/4 in.)

ID: Dark brown to black without distinctive markings.

Swim with Pectoral Fins - Wrasses



FIVEFINGER RAZORFISH

Iniistius pentadactylus

SIZE: to 25 cm (10 in.)

Wrasses - Labridae

ID: TP - Greenish gray; 4-5 overlapping red spots (appear dark underwater) above pectoral fin, often whitish area followed by a dark blotch on forebody; steep blunt head. Solitary or form loose groups. Sand to mud slopes to 30 m.

Indo - Asian Pacific: Red Sea and E. Africa to Australia and Papua New Guinea, north to S. Japan.



Fivefinger Razorfish - IP

SIZE: to 20 cm (8 in.)

ID: Steep blunt head; greenish gray; **large white patch above belly with red-edged scales**. Similar TP Whitepatch Razorfish [previous page] lack these markings. Solitary or form loose groups. Both TP/IP dive into sand or mud bottom when alarmed and to sleep at night.



PEACOCK RAZORFISH

Iniistius pavo

SIZE: to 35 cm (14 in.)

Wrasses - Labridae

ID: TP - Steep blunt head; light gray; whitish patch on lower forebody with one or two black spots above, may display dusky bars. Solitary; dive into sand when alarmed and to sleep at night Open sand areas near reefs in 20 - 100 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii, French Polynesia and Central America. - S. Japan to Australia.



Peacock Razorfish - Sub-adult

SIZE: to 13 cm (5 in.)

ID: Long 1st dorsal spines, steep blunt head; whitish; white patch on lower forebody with dark spot above, faint bars, dark spots on mid and rear dorsal fin. Solitary or form loose groups. Open sand areas near reefs in 2 - 20 m.



Peacock Razorfish - JP Variation

SIZE: 4-8 cm (1 1/2 - 3 in.)

ID: Long 1st dorsal fin spines, steep blunt head; whitish with 3-4 brown bars on head and body; black ocellated spots on foreback, mid and rear dorsal fin. Solitary or form loose groups. Young mimic drifting plant debris. Open sand near reefs in 2 - 20 m.



Peacock Razorfish - JP Variation

SIZE: 3-6 cm (1 1/4 - 2 1/4 in.)

ID: Long 1st dorsal fin spines, steep blunt head; entirely olive to dark brown or with some whitish areas. Solitary or form loose groups. Open sand areas near reefs in 2 - 20 m. Mimic drifting plant debris.

Wrasses



BLACKBARRED RAZORFISH

SIZE: to 25 cm (10 in.)

ID: **IP** - White with 4-5 dark bars or blotches, 1st 2 dorsal rays form small separated pennant. **Large TP** - Lack bars, black spot above mid-lateral line. **JP** - Yellow, green or white with 2 ocellated spots on dorsal fin. Solitary or form groups. Coastal sand slopes to 20 m.

Asian Pacific: Indonesia to Philippines.

Iniistius tetrazona

Wrasses - Labridae



CELEBES RAZORFISH

SIZE: to 25 cm (10 in.)

ID: **TP** - Pale gray back and white below; large black patch on mid-forebody, horizontally elongate black streak on tail base. Solitary or form loose groups. Open over sand areas near reefs in 5-20 m.

Asian Pacific: Indonesia and Philippines to Taiwan and Marshall Is. in Micronesia.

Iniistius celebicus

Wrasses - Labridae



CHISELTOOTH WRASSE

SIZE: to 25 cm (10 in.)

ID: **TP** - Blue-green undercolor with dark spots on scales, orange-red to rust wash on forebody and back, yellow upper lip; pale yellow bar on tail base. Solitary or form small groups, including steep outer slopes in 3-40 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S. Japan to Australia.

Pseudodax mollucanus

Wrasses - Labridae



Chiseltooth Wrasse - JP

SIZE: to 8 cm (3 in.)

ID: Bluish green undercolor with dark scale row stripes; blue stripe from snout runs on back to near tail, another stripe on lower head and belly, pale bar across tail base. Act as cleaners.



TUBELIP WRASSE

SIZE: to 16 cm (6 1/4 in.)

ID: **TP** - Dark olive with numerous thin blue stripes; broad yellowish bar behind head. **IP** - Similar, but have yellow lips and lack yellowish bar. Solitary or form small groups; feed on coral polyps. Sheltered reefs with rich coral growth to 20 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan to Australia.

Labrichthys unilineatus

Wrasses - Labridae



Tubelip Wrasse - JP

SIZE: to 8 cm (3 in.)

ID: Dark brown to nearly black with thin white stripe from snout to tail; small juveniles have an additional stripe along lower edge of body. Forage around branching coral patches.

Swim with Pectoral Fins - Wrasses



YELLOWTAIL TUBELIP *Diproctacanthus xanthurus*
SIZE: to 8 cm (3 in.) Wrasses - Labridae

ID: **TP/IP** - White with yellow tail; dark brown stripe on back, black stripe from snout through eye to tail. **JP** - Similar, but black tail; act as cleaners. Solitary. Sheltered reefs in 3-25 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea to Great Barrier Reef.



WEDGE-TAILED WRASSE *Labropsis xanthonota*
SIZE: to 14 cm (5 1/4 in.) Wrasses - Labridae

ID: **TP** - Bluish gray to brown with yellow spot on each scale; blue markings on head, yellow edge on gill cover, white triangular marking centered on tail. Solitary. Coral-rich areas of clear lagoons to seaward reefs in 7-55 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan to Great Barrier Reef.



Wedge-tailed Wrasse - IP

SIZE: 5-8 cm (2-3 in.)

ID: Bluish gray to brown with orangish spot on each scale, yellow upper back and dorsal fin; bluish spot on front of dorsal; tail slightly forked with rounded corners.



Wedge-tailed Wrasse - JP

SIZE: 2-4 cm (1-1 1/2 in.)

ID: Dark blue to black with numerous thin bluish white stripes and yellow dorsal fin; tail rounded with wide black margin.



ALLEN'S TUBELIP *Labropsis alleni*
SIZE: to 10 cm (4 in.) Wrasses - Labridae

ID: **TP** - Slender; brown head, yellow green mid-body, white rear and tail; large ocellated spot at pectoral base, small black spot on front of dorsal fin and rear belly. Solitary or in pairs. Steep slopes of lagoon and seaward reefs in 4-52 m.

Asian Pacific: Indonesia and Philippines to Solomon Is. and Marshall Is. in Micronesia.



Allen's Tubelip - JP

SIZE: to 6 cm (2 1/4 in.)

ID: Slender; brown head, yellow green mid-body, white rear body and tail; large pale-edged black spot at pectoral base and on front of dorsal fin and rear belly, pair of yellow stripes from snout to tail base.

Wrasses



MICRONESIAN TUBELIP

Labropsis micromesica

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: TP - Orange-brown with dark scale margins, gray to blue-gray head with white lips, black tail with white margin. Solitary; occasionally act as cleaners. Clear lagoon or seaward reefs in 7-33 m.

Localized: Palau and Marshall Is. in Micronesia.



Micronesian Tubelip - JP

SIZE: to 4 cm (1½ in.)

ID: White with three dark brown to black stripes from snout to black tail. **IP** - Retain stripes, but head and body become gray to brownish. **JP** and **IP** best distinguished from similar Northern and Southern Tubelips [previous] by location. Juveniles act as cleaners.



SOUTHERN TUBELIP

Labropsis australis

SIZE: to 10.5 cm (4 in.)

Wrasses - Labridae

ID: Dark gray head and tail, golden-brown to orange body; pale fleshy lips, black spot on pectoral fin base. Solitary or occasionally in pairs. Coral-rich areas of lagoons, outer reefs and passes in 2-55 m.

West Pacific: Great Barrier Reef and Solomon Is. to Fiji and Samoa.



Southern Tubelip - JP

SIZE: to 5 cm (2 in.)

ID: White with three dark brown to black stripes from snout to black tail. **IP** - Retain stripes but head and body gray to brownish. Juveniles act as cleaners.



NORTHERN TUBELIP

Labropsis manabei

SIZE: to 13 cm (5 in.)

Wrasses - Labridae

ID: TP - Dark gray head, brown body, blue lips; large yellow patch at base of blue tail, black spot on pectoral fin base. **JP/IP** - Similar to Southern Tubelip [below]. Solitary or form small groups. Coral-rich areas in 15-30.

Asian Pacific: Hibernia Reef in Timor Sea, E. Indonesia and Papua New Guinea, north to S.W. Japan.



REDLIP CLEANER WRASSE

Labroides rubrolabiatius

SIZE: to 9 cm (3½ in.)

Wrasses - Labridae

ID: Variable from yellow to white head and brown body, black tail with blue borders; dark stripe from snout onto body and narrower stripe from head to dorsal fin base. Solitary cleaner; swim with jerky motion to attract clients. Coral reefs in 2-25 m.

Central Pacific: Fiji to Line Is. and Ducie I. east of French Polynesia.

Swim with Pectoral Fins - Wrasses



BICOLOR CLEANER WRASSE

Labroides bicolor

SIZE: to 14 cm (5½ in.)

Wrasses - Labridae

ID: Slender; blue lips gradating to black forebody, pale yellow to white rear body and tail; blue crescent on tail. Solitary or in pairs; cleaner, swim with jerky motion to attract clients. Coral reefs in 2-25 m.

Indo-Pacific: E. Africa to Micronesia, Line Is. and French Polynesia - S. Japan to east Australia and L. Howe I.



Bicolor Cleaner Wrasse - JP

SIZE: to 8 cm (3 in.)

ID: Black with yellow stripe running from snout to top of tail; tail pale. With maturity pale color of tail expands onto body and stripe disappears.



BLACKSPOT CLEANER WRASSE

Labroides pectoralis

SIZE: to 8 cm (3 in.)

Wrasses - Labridae

ID: Yellow head and back, white belly; dark stripe from snout becomes progressively wider toward tail, black spot below pectoral fin. Solitary cleaner; swim with jerky motion to attract clients. Coral reefs in 2-28 m.

East Indo-Pacific: Christmas I. to Line Is. and Pitcairn Is. east of French Polynesia. - Bonin Is. in S. Japan to Australia.



BLUESTREAK CLEANER WRASSE

Labroides dimidiatus

SIZE: to 11.5 cm (4½ in.)

Wrasses - Labridae

ID: TP - White to yellowish head and forebody becomes bluish toward tail; stripe from snout becomes progressively wider toward tail. Solitary or in pairs; establish cleaning stations, swim with jerky motion to attract clients. Coral reefs in 2-40 m.

Indo-Pacific: Red Sea and E. Africa to Ducie I. east of French Polynesia. - S. Japan to Australia.



Bluestreak Cleaner Wrasse - IP

SIZE: to 11.5 cm (4½ in.)

ID: Shades of brown to yellow; narrow dark stripe from snout becomes progressively wider toward tail, blue borders on tail. Pictured specimen cleaning a Twinstripe Fusilier.



Bluestreak Cleaner Wrasse - JP

SIZE: to 5 cm (2 in.)

ID: Navy blue; neon blue stripe from snout to upper border of tail, also neon blue lower tail border.

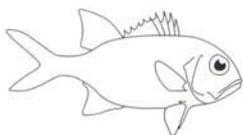
IDENTIFICATION GROUP 10

Reddish/Big Eyes Soldierfishes & Squirrelfishes - Bigeyes

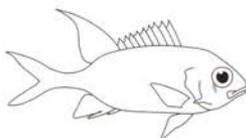
This ID Group consists of moderate-sized, predominantly reddish fishes with large eyes.

FAMILY: Soldierfishes & Squirrelfishes - Holocentridae

4 Genera – 32 Species Included



Soldierfishes - Typical Shape



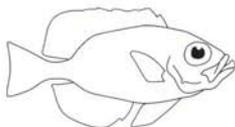
Squirrelfishes - Typical Shape

As their reddish color and large eyes indicate, family members are nocturnal feeders that typically lurk near or just inside reef pockets or branching corals during the day. Large squirrel-like eyes and a tall upright second dorsal fin reminiscent of a squirrel's tail provide squirrelfishes with their common name. Soldierfishes, represented by two genera in this book, can be distinguished from squirrelfishes by blunter snouts and the lack of a prominent pre-gill cover spine that are venomous in a few species. Although spine wounds can be quite painful they are not believed to be life threatening.

Soldierfishes feed in the water column after dark on large zooplankton, including crab larvae, while squirrelfishes forage the sea floor primarily in search of crabs, shrimps and small fishes. Soldierfishes in the genus *Myripristis* are major sound producers. However, virtually all their vocalizations, including pops, grunts and clicks, believed to function as intraspecies communications, are of such a low frequency that they are inaudible to divers.

FAMILY: Bigeyes - Priacanthidae

3 Genera – 4 Species Included



Typical Shape

Bigeyes have deep, compressed bodies, large upturned mouths with projecting lower jaws and large ventral fins connected to the belly by a membrane. Like soldierfishes, bigeyes are also nocturnal zooplankton feeders that move out and away from the reef after sunset to dine in open water on small squids and octopuses and a variety of crabs, shrimps, fishes and polychaete worm larvae. Primarily red by day as they shelter near the reef's base, they change to a pale or blotched pattern at night. Occasionally, during daylight hours, they acquire these alternate patterns, which can be switched on and off quite rapidly.



ROUGHSCALE SOLDIERFISH

Plectrypops lima

SIZE: to 16 cm (6 1/4 in.) Squirrelfishes - Holocentridae

ID: Bright red with clearish to reddish fins; small scales compared to other soldierfishes; **no dark margin on rear gill cover or white margins on fins.** Solitary; hide in deep recesses. Outer reef slopes in 5-40 m.

Indo-Pacific: E. Africa to Hawaii and Easter I. in southeastern Pacific. - S. Japan to E. Australia.



EAST INDIAN SOLDIERFISH

Myripristis trachyacron

SIZE: to 15 cm (6 in.) Squirrelfishes - Holocentridae

ID: Shades of red; reddish fins with narrow white margins, **blackish tips on rear lobes of dorsal, anal and tail fins**, only slight dusky margin on gill cover. Outer reef slopes in 3-50 m.

Asian Pacific: Indonesia, Philippines, Papua New Guinea and Solomon Is.



WHITETIP SOLDIERFISH

Myripristis vittata

SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Orange-red; **white tips on dorsal fin spines**, narrow white margins on fins, slightly darkened margin on gill cover. Commonly form groups. Steep outer reef slopes in 15-80 m.

Indo-Pacific: Seychelles to Hawaii and French Polynesia. - S.W. Japan to Australia and New Caledonia.



DOUBLE-TOOTH SOLDIERFISH

Myripristis hexagona

SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Red with **broad pink scale margins**, pale reddish fins have no white margins; broad dark red band on rear margin of gill cover. Coastal reefs and seaward slopes, often in turbid areas in 3-40 m.

Indo-West Pacific: E. Africa to Samoa. Philippines to Australia and New Caledonia.



SCARLET SOLDIERFISH

Myripristis pralinia

SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Red back shading to silvery on side with red scale margins and silver breast; red fins with narrow white margins, **brown margin confined to upper gill cover.** Coastal, lagoon and outer reefs in 2-40 m.

Indo-Pacific: E. Africa to Line Is. in eastern Central Pacific and French Polynesia. - S.W. Japan to Australia.



YELLOWFIN SOLDIERFISH

Myripristis chryseres

SIZE: to 25 cm (10 in.) Squirrelfishes - Holocentridae

ID: Red with darkish scale margins; **all fins (except pectorals) bright yellow**, dark brown rear margin on gill cover. Solitary or form groups. Seaward reef slopes in 30-200 m, rarely to 12 m.

Indo-West Pacific: E. Africa to Hawaii and Samoa. - S.W. Japan to Great Barrier Reef.

Squirrelfishes



EPAULETTE SOLDIERFISH *Myripristis kuntee*
 SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Orange-red with pearly scale centers; **scales small compared with other soldierfishes**, red fins with narrow white margins, dusky brown band along rear gill cover. Form loose groups. Coastal, lagoon and outer reefs in 2-35 m.

Indo-Pacific: Seychelles to Hawaii and French Polynesia. - S.W. Japan to Australia.



BLOTCHYEY SOLDIERFISH *Myripristis murdjan*
 SIZE: to 27 cm (10 3/4 in.) Squirrelfishes - Holocentridae

ID: Pink to silvery white with red scale margins; **red spiny dorsal fin**, narrow white margins on all fins (except pectorals), **gill cover with brown margin**. Solitary; hide inside caves during day. Coastal, lagoon and outer reefs in 2-40 m.

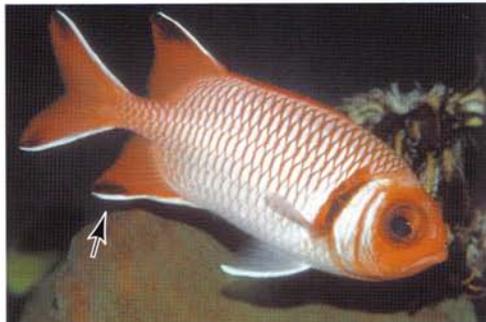
Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



BRICK SOLDIERFISH *Myripristis amaena*
 SIZE: to 32 cm (13 in.) Squirrelfishes - Holocentridae

ID: Red with dark scale margins, **red dorsal, anal and tail fins without white margins**; dark margin on rear gill cover. During day often form large aggregations under ledges or inside caves. Lagoons and outer slopes in 2-52 m.

Pacific: Micronesia to Hawaii and French Polynesia. - S.W. Japan to New Caledonia.



SPLENDID SOLDIERFISH *Myripristis botchea*
 SIZE: to 30 cm (12 in.) Squirrelfishes - Holocentridae

ID: White with red scale margins; **red dorsal, anal and tail fins with dark lobe tips** and narrow white margins, dark brown edge on gill cover. Bottom of slopes, dead reef areas and isolated coral formations in 20-65 m.

Indo-Asian Pacific: E. Africa to W. Australia, north to S. Japan's Bonin Is.



VIOLET SOLDIERFISH *Myripristis violacea*
 SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Silvery with violet sheen and prominent dark scale margins; fins red with narrow white margins (except pectorals), **light red band along margin of gill cover**. Coastal, lagoon and outer reefs in 3-30 m.

Indo-Pacific: E. Africa to Line Is. in eastern Central Pacific and French Polynesia. - S.W. Japan to Australia.



SHADOWFIN SOLDIERFISH *Myripristis adusta*
 SIZE: to 32 cm (13 in.) Squirrelfishes - Holocentridae

ID: Pale salmon-pink with dark scale margins; **black margin on rear dorsal and tail fins**, black spot on rear gill cover. Solitary or form small groups. Coastal, lagoon and outer reefs to 25 m.

Indo-Pacific: E. Africa to Line Is. and French Polynesia. - S.W. Japan to New Caledonia.



BIG-SCALE SOLDIERFISH

Myripristis berndti

SIZE: to 30 cm (12 in.)

Squirrelfishes - Holocentridae

ID: White with reddish tints and red scale margins; **yellow spiny dorsal fin**, narrow white margins on all fins (except pectorals), dark margin on rear gill cover. Lagoon and seaward reefs in 3-50 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and French Polynesia. - S.W. Japan to E. Australia and Kermadec Is.



EARLE'S SOLDIERFISH

Myripristis earlei

SIZE: to 30 cm (12 in.)

Squirrelfishes - Holocentridae

ID: Yellow dorsal fin; red margins on whitish body scales, dark margin on rear gill cover. Usually in groups that shelter in caves and under ledges during day. Seaward reefs slopes in 10-20 m.

Indo-West Pacific: Phoenix Is. in Central Pacific and Marquesas Is. in French Polynesia.



WHITESPOT SOLDIERFISH

Myripristis woodsi

SIZE: to 21 cm (8 in.)

Squirrelfishes - Holocentridae

ID: Reddish with red scale margins; **white spot above base of pectoral fin**, red fins with white margins (except pectoral), red-brown band on rear margin of gill cover to rear pectoral. Reef flats, lagoons and seaward reefs to 30 m.

Northwest to South Central Pacific: Japan's Bonin and Marcus Is. and Micronesia to Line Is. and French Polynesia.



BLACKFIN SQUIRRELFISH

Neoniphon opercularis

SIZE: to 35 cm (14 in.)

Squirrelfishes - Holocentridae

ID: Silvery with dark red to blackish scale spots; **black spiny dorsal fin with white tips** and white marks along base. Solitary or form small groups. Often within branches of staghorn corals in 3-25 m.

Indo-Pacific: E. Africa to French Polynesia. - S.W. Japan to Great Barrier Reef and New Caledonia.



SPOTFIN SQUIRRELFISH

Neoniphon sammara

SIZE: to 32 cm (13 in.)

Squirrelfishes - Holocentridae

ID: Silvery with thin dark red to blackish stripes; **reddish spiny dorsal fin with large black spot at front**, white spine tips and white spots along base. Solitary. Most common among staghorn coral patches in 3-40 m.

Indo-Pacific: Comoro Is. to Micronesia, Hawaii and French Polynesia - S.W. Japan to Great Barrier Reef and Lord Howe I.



CLEARFIN SQUIRRELFISH

Neoniphon argenteus

SIZE: to 19 cm (7 1/2 in.)

Squirrelfishes - Holocentridae

ID: Silvery with thin dark red to blackish stripes; **translucent spiny dorsal fin**. Solitary; commonly among branches of large staghorn corals. Coral-rich areas of reef flats, lagoons and sheltered seaward reefs to 20 m.

Indo-Pacific: E. Africa to S.W. Japan, Micronesia and French Polynesia.

Squirrelfishes



GOLD-LINED SQUIRRELFISH

Neoniphon aurolineatus

SIZE: to 25 cm (10 in.) Squirrelfishes - Holocentridae

ID: Silvery white to pinkish with yellow stripes between scale rows; yellow pectoral fin base, red bar across nape and gill cover. Solitary or form small groups. Steep outer reef slopes in 30-160 m.

Indo-Asian Pacific: Comoro Is. to Hawaii. - S.W. Japan to Great Barrier Reef.



BLACKSPOT SQUIRRELFISH

Sargocentron melanospilos

SIZE: to 25 cm (10 in.) Squirrelfishes - Holocentridae

ID: Pale golden to silvery white with orange scale margins; black spot at base of rear dorsal, rear anal, pectoral base and on tail fins; pair of thin white bars behind eye. Seaward slopes in 10-35 m.

Indo-West Pacific: Comoro Is. to Samoa. - S.W. Japan to E. Australia and New Caledonia.



THREE-SPOT SQUIRRELFISH

Sargocentron cornutum

SIZE: to 18 cm (7 in.) Squirrelfishes - Holocentridae

ID: Alternating red and white stripes; black spot on middle tail base, black streak on outer front edge of anal fin. Solitary or form small groups. Dropoffs and outer slopes in 6-40 m.

Asian Pacific: W. Australia and Java in Indonesia to Solomon Is. - Philippines to Great Barrier Reef.



CROWN SQUIRRELFISH

Sargocentron diadema

SIZE: to 17 cm (7 in.) Squirrelfishes - Holocentridae

ID: Alternating red and white stripes; dark red to black spiny dorsal fin with white spine tips and white streak through middle. Solitary or form small groups. Tidal flats and deeper areas of lagoon and seaward reefs to 40 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Pitcairn I. east of French Polynesia. - S.W. Japan to Australia.



SAMURAI SQUIRRELFISH

Sargocentron ittodai

SIZE: to 17 cm (6 1/4 in.) Squirrelfishes - Holocentridae

ID: Alternating red and white stripes; red spiny dorsal fin with row of white spots through middle. Solitary or form groups. Outer reef slopes in 5-70 m.

Indo-Pacific: Comoro Is. to French Polynesia. - S.W. Japan to E. Australia.



SMALLMOUTH SQUIRRELFISH

Sargocentron microstoma

SIZE: to 19 cm (7 1/2 in.) Squirrelfishes - Holocentridae

ID: Alternating red and white stripes; black markings on front of 1st dorsal fin and very long white margin on anal fin spine. Solitary or form loose groups. Reef flats and deeper coastal reefs, lagoons and outer slopes in 2-183 m.

Indo-Pacific: Maldives to Line Is. in eastern Central Pacific and French Polynesia. - Philippines to Australia.



PEPPERED SQUIRRELFISH *Sargocentron punctatissimum*
 SIZE: to 20 cm (8 in.) Squirrelfishes - Holocentridae

ID: Pink gradating to silvery belly with **fine spotting and indistinct stripes**; spiny dorsal fin with white tips, red border and row of white spots below. Solitary or form groups. Tide pools, reef flats and sub-tidal reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Easter I. in southeastern Pacific. - S. Japan to Australia.



YELLOW-STRIPED SQUIRRELFISH *Sargocentron ensiferum*
 SIZE: to 25 cm (10 in.) Squirrelfishes - Holocentridae

ID: Red with narrow yellow stripes dorsally and white stripes ventrally, yellow spiny dorsal fin with red margin. Solitary or form groups. Usually on seaward coral reefs or rocky bottoms in 18-50 m.

Pacific: Taiwan and S.W. Japan south to New Caledonia and Samoa; west to Hawaii and Pitcairn I. east of French Polynesia.



PINK SQUIRRELFISH *Sargocentron tieraoides*
 SIZE: to 16 cm (6 1/4 in.) Squirrelfishes - Holocentridae

ID: Alternating silvery pink and red stripes; **bright red spiny dorsal fin** with white spine tips, other fins mainly transparent to pinkish. Solitary or form small groups. Seaward and lagoon reefs in 6-45 m, usually below 15 m.

Indo-Pacific: E. Africa to Line Is. in eastern Central Pacific and French Polynesia. - S.W. Japan to E. Australia.



DWARF SQUIRRELFISH *Sargocentron iota*
 SIZE: to 8 cm (3 in.) Squirrelfishes - Holocentridae

ID: Red without distinctive markings; tail lobes rounded, scales with serrated edges. Solitary and cryptic; lurk in caves and recesses. Steep outer reef slopes to 34 m.

Indo-West Pacific: Christmas I. to Indonesia, Palau, Papua New Guinea, New Caledonia, Fiji and Hawaii.



TAHITIAN SQUIRRELFISH *Sargocentron tiera*
 SIZE: to 33 cm (13 in.) Squirrelfishes - Holocentridae

ID: Red with **iridescent blue stripes** (more evident on lower side); red spiny dorsal fin with white tips and white streaks on mid-fin. Solitary; hide inside caves and crevices during day. Lagoon and seaward reefs to 183 m.

Indo-Pacific: Comoro Is. to Hawaii and Pitcairn I. east of French Polynesia. - S.W. Japan to Australia.



TAILSPOT SQUIRRELFISH *Sargocentron caudimaculatum*
 SIZE: to 25 cm (10 in.) Squirrelfishes - Holocentridae

ID: Red with variable amount of silvery white on rear body and tail base; silver-white streak above upper edge of gill cover. Solitary or form loose groups. Coral-rich areas of outer reefs, frequently on steep dropoffs in 6-40 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia. - S. Japan to Great Barrier Reef.

Squirrelfishes - Bigeyes



VIOLET SQUIRRELFISH

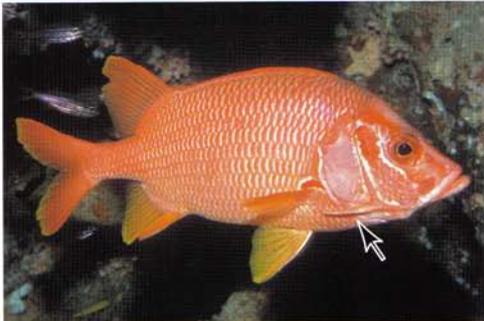
SIZE: to 25 cm (10 in.)

ID: Red head, body purplish to brownish red with vertical bluish streak on each scale; rear margin of gill cover blackish. Coral-rich clear water lagoons and seaward reefs to 25 m.

Indo-Pacific: E. Africa to Vanuatu, Samoa, Line Is. in eastern Central Pacific. - S.W. Japan to Australia.

Sargocentron violaceum

Squirrelfishes - Holocentridae



SABRE SQUIRRELFISH

SIZE: to 45 cm (18 in.)

ID: Large; red with vertical silvery streak on each scale, anal and ventral fins often yellowish; **prominent cheek spine**. Solitary or in pairs; often inside caves and ledges. Lagoon and seaward reefs to 122 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and French Polynesia. - S. Japan to S.E. Australia.

Sargocentron spiniferum

Squirrelfishes - Holocentridae



REDCOAT SQUIRRELFISH

SIZE: to 27 cm (10 3/4 in.)

ID: Alternating reddish brown and white stripes; often dark streak on tail base and on bases of rear dorsal and anal fins. Solitary or form small groups; drift next to coral reefs and wrecks in lagoons, bays and harbors to 84 m.

Indo-Asian Pacific: Red Sea and E. Africa to S.W. Japan, south to Australia, New Caledonia and Vanuatu.

Sargocentron rubrum

Squirrelfishes - Holocentridae



WHITEBAR BIGEYE

SIZE: to 35 cm (14 in.)

ID: Bright red rounded body with 5 narrow white bars, white dorsal spines; huge eye. Solitary. Rare within safe diving depths; normally on steep outer reef slopes in 70-100 m.

Indo-Pacific: Red Sea and E. Africa to Papua New Guinea. - S. Japan to Australia.

Pristigenys nipponia

Bigeyes - Priacanthidae



GLASSEYE

SIZE: to 32 cm (13 in.)

ID: Variable red to silvery with distinct to obscure bars or blotches; **fins lightly spotted or mottled**; tail slightly rounded. Solitary or form small groups; drift next to coral heads during day. Lagoon and seaward reefs in 3-20 m.

Circumtropical.

Heteropriacanthus cruentatus

Bigeyes - Priacanthidae



Glasseye - Dark Phase

ID: Dark red with silvery tints and narrow bars. Have ability to rapidly intensify or diminish color and markings. Tend to be around islands rather than continental coastlines.



BLOCH'S BIGEYE

Priacanthus blochii

SIZE: to 35 cm (14 in.)

Bigeyes - Priacanthidae

ID: Variable red to silvery with red blotches; fins generally plain without spots or mottling; slightly rounded tail. Solitary or form small groups. Under ledges or hover next to coral heads during day. Lagoon and seaward reefs in 15-30 m.

Indo-West Pacific: Gulf of Aden to Samoa. - Philippines to Australia.



Bloch's Bigeye - Pale Phase

ID: All silver except some reddish tinting on upper head and back. Have ability to rapidly intensify or fade color and markings.



Bloch's Bigeye - Blotched Phase

ID: Silvery blotched pattern. Have ability to rapidly intensify or diminish color and markings.



CRESCENT-TAIL BIGEYE

Priacanthus hamrur

SIZE: to 40 cm (16 in.)

Bigeyes - Priacanthidae

ID: Variable red to silvery occasionally with about 6 red bars or large spots; fins without spots or mottling; crescent tail. Solitary. Hover under ledges or next to coral heads during day. Lagoon and seaward reefs in 15-250 m.

Indo-West Pacific: Gulf of Aden to Samoa. - Philippines to E. Australia and Lord Howe I.



Crescent-tail Bigeye - Barred Phase

ID: Pinkish sliver with red bar under eye. Have ability to rapidly intensify or diminish color and markings.



Crescent-tail Bigeye - Pale Phase

ID: Silver with red bars and dark borders on dorsal, anal and tail fins. Have ability to rapidly intensify or fade color and markings.

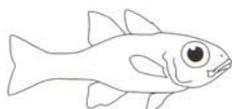
IDENTIFICATION GROUP 11

Cardinalfishes and Glassfishes

This ID Group consists of cardinalfishes and a small family known as glassfishes.

FAMILY: Cardinalfishes - Apogonidae

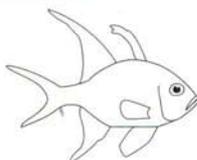
13 Genera - 109 Species Included



Typical Shape



Typical Shape



Typical Shape

Cardinalfishes are relatively small (from 5 to 15 cm [2 to 6 in.]), compared to most families of reef fishes, have large eyes, short snouts, moderately large oblique mouths, two short, widely separated dorsal fins, and double-edged preopercula. The family received its common name from the reddish color common to many species, however, shades of black, white, brown, silver and yellow are well represented. By day cardinalfishes shelter in the protection of corals, undercuts and crevices; a few associate with urchins, sea anemones, and gorgonian branches. Although typically solitary, in pairs or loose clusters, species in genus *Rhabdamia* occur in dense aggregations over isolated coral bommies. At dusk cardinalfishes leave their daytime refuges to feed throughout the night on zooplankton and small, bottom-dwelling crustaceans.

Male cardinalfishes are known for the unusual behavior of incubating egg masses inside their mouths. During the few days before hatching, brooding males can be recognized by their expanded jaws. Often their mouths are so engorged that the egg masses are clearly visible between open lips. At intervals brooding males shift their mouthfuls allowing the masses to aerate more evenly.

Glassfishes are a small family of small fishes that resemble semitransparent cardinalfishes, except for their larger more obvious scales. They often form large, closely packed aggregations above structures and among mangroves in the shallow water of estuaries.



CAPRICORN CARDINALFISH

Apogon capricornis

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Yellowish undercolor; pink to blue **scale margins form wavy vertical lines**, pair of blue stripes from eye, black spot on tail base. In pairs or small groups. Coral and rocky reefs in 2-20 m.

Southwestern Pacific: S. Great Barrier Reef and Coral Sea to S. New South Wales, Australia.



SPOTNAPE CARDINALFISH

Apogon notatus

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Purplish brown; black stripe from snout through eye and another on base of dorsal fin, **black spot on side of nape** and larger black spot on tail. Form aggregations. Coastal, lagoon and seaward reefs in 8-45 m.

Asian Pacific: S.W. Japan, Bali and Komodo I. in Indonesia, Papua New Guinea to Great Barrier Reef.

Cardinalfishes



ODDSCALE CARDINALFISH

Apogon evermanni

Cardinalfishes - Apogonidae

SIZE: to 12 cm (5 in.)
ID: Red with hint of 3-4 broad pale bars on side; dark stripe from snout to gill cover edge, **dark-edged white spot at base of last dorsal rays**. Solitary or in pairs; cryptic. Shelter inside caves of outer slopes in 5-70 m.

Indo-Pacific: E. Africa to Hawaii and French Polynesia. Also in western Atlantic.



TALBOT'S CARDINALFISH

Apogon talboti

Cardinalfishes - Apogonidae

SIZE: to 10 cm (4 in.)
ID: Bright red with **dusky brownish scale margins** and no distinctive markings. Solitary and cryptic. Inside deep caves and crevices of seaward reef slopes and dropoffs in 8-35 m.

Indo-Asian Pacific: E. Africa to Australia and Solomon Is., north to S.W. Japan.



REDSTRIPED CARDINALFISH

Apogon marginatophorus

Cardinalfishes - Apogonidae

SIZE: to 5.5 cm (2 1/4 in.)
ID: Red with white belly; broad white mid-lateral stripe with 2 narrower stripes above and fragmented stripe below. Form aggregations. Around rocks and crevices of weedy areas in coastal reefs and lagoons to 5 m.

Asian Pacific: Sumatra in Indonesia to Solomon Is., north to Philippines.



OBLIQUEBANDED CARDINALFISH

Apogon semiornatus

Cardinalfishes - Apogonidae

SIZE: to 7 cm (2 3/4 in.)
ID: Pinkish, translucent; broad reddish to dark brown and whitish bicolor band from eye to anus, broad brownish stripe on rear body. Solitary and cryptic. Inside caves and recesses of coastal reefs and seaward slopes in 3-30 m.

Indo-Asian Pacific: E. Africa and Red Sea to N. Australia, north to S. Japan.



RUBY CARDINALFISH

Apogon crassiceps

Cardinalfishes - Apogonidae

SIZE: to 6 cm (2 1/2 in.)
ID: Reddish, translucent; may display diffuse dusky mid-lateral stripe. Solitary and cryptic; rarely in open except at night. Coastal and offshore reefs in 1-20 m.

Pacific: Malaysian Peninsula to French Polynesia and east to Easter I. - S. Japan to Australia.



SEVENSTRIPED CARDINALFISH

Apogon novemfasciatus

Cardinalfishes - Apogonidae

SIZE: to 9 cm (3 1/2 in.)
ID: Alternating dark and light stripes; dark mid-lateral stripe extends onto tail and **dark stripes immediately above and below diagonal extends onto tail**. Form small groups. Reef flats and lagoons to 4 m.

East Indo-Pacific: Cocos-Keeling Is. to Samoa and Line Is. in eastern Central Pacific. - S.W. Japan to Great Barrier Reef.

Cardinalfishes



SPLIT-BANDED CARDINALFISH

Apogon compressus

SIZE: to 12 cm (5 in.)

Cardinalfishes - Apogonidae

ID: Pinkish with reddish brown stripes and blue eye, **short stripe from upper eye to above pectoral fin**. Form aggregations. Shelter within branching corals or inside crevices of protected lagoon and seaward reefs to 10 m.

Asian Pacific: Malaysian Peninsula to Solomon Is. - S.W. Japan to E. Australia.



Split-banded Cardinalfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: White with 4 black stripes; yellow tail base with centered black spot. Form groups. Effective mimics of cardinalfishes belonging to the genus *Cheilodipterus*.



BLACKSTRIPE CARDINALFISH

Apogon nigrofasciatus

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Alternating black and yellow stripes, dark mid-lateral stripe does not extend onto tail. Solitary or in pairs. Under ledges or inside caves of lagoon and seaward reefs and along steep dropoffs in 3-50 m.

Indo-Pacific: Red Sea to Tuamotu and Rapa Is. in French Polynesia. - S.W. Japan to E. Australia.



Blackstripe Cardinalfish - Variation

ID: Alternating black and white stripes. Generally as common as yellow-striped variation, but the two variations usually not together.



STRIPED CARDINALFISH

Apogon angustatus

SIZE: to 9 cm (3 1/2 in.)

Cardinalfishes - Apogonidae

ID: White with 5 dark brown stripes; **dark mid-lateral stripe enlarges into black spot on tail base**. Solitary or form small groups. Inside caves and crevices of clear water seaward reefs in 5-65 m.

Indo-Pacific: Red Sea and E. Africa to Line and Gambia Is. in eastern Central Pacific. - Taiwan to Australia.



REEF-FLAT CARDINALFISH

Apogon taeniophorus

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Alternating dark and light stripes; dark mid-lateral stripe does not extend onto tail. Habitat useful in distinguishing from Blackstripe Cardinalfish [above]. Shallow reef flats, usually in surge areas to 3 m.

Indo-Pacific: Mauritius to Line and Pitcairn Is. east of French Polynesia. - S.W. Japan to S.E. Australia.



SHORTSTRIPE CARDINALFISH *Apogon cooki*
SIZE: to 10 cm (4 in.) Cardinalfishes - Apogonidae
ID: Alternating dark and white stripes; **dark mid-lateral stripe enlarges in black spot on tail base**, short stripe from upper eye to mid-body. Solitary or form small groups. Shallow inshore reefs and protected lagoons to 10 m.
Indo - Asian Pacific: E. Africa to E. Australia, north to S.W. Japan.



COPPERSTRIPE CARDINALFISH *Apogon holotaenia*
SIZE: to 8 cm (3 in.) Cardinalfishes - Apogonidae
ID: Pinkish; 6 copper-brown stripes, **mid-lateral stripe extends onto tail**, short stripe from upper eye to mid-body; row of pearly spots on lower head and belly. Form aggregations. Coastal reefs and silty areas in 15-35 m.
Indo - Asian Pacific: Arabian Gulf to Gulf of Tomini, Sulawesi in Indonesia.



SIXSTRIPE CARDINALFISH *Apogon endekataenia*
SIZE: to 14 cm (5 1/2 in.) Cardinalfishes - Apogonidae
ID: Whitish; 6 red-brown stripes with **incomplete stripes or rows of spots** between, large black spot on tail base. Form small to large aggregations. Sheltered inshore reefs, often in silty areas, to 15 m.
Asian Pacific: Singapore, Malaysian Peninsula and E. Indonesia.



NARROWSTRIPE CARDINALFISH *Apogon doederleini*
SIZE: to 12 cm (5 in.) Cardinalfishes - Apogonidae
ID: Whitish with 4 narrow black stripes; pupil-sized black spot on mid-tail base. In pairs or small groups. Sheltered coastal reefs and kelp beds in 3-30 m.
Localized: S. Japan between Chiba and Nagasaki.



MANYLINED CARDINALFISH *Apogon multilineatus*
SIZE: to 10 cm (4 in.) Cardinalfishes - Apogonidae
ID: Brown head with white stripes, whitish body with numerous narrow dark brown stripes; may have faint dark spot on tail base. Solitary or form small groups. Around large coral heads of coastal reefs and lagoons in 2-25 m.
Asian Pacific: Sumatra in Indonesia to Solomon Is., north to Philippines.



Manylined Cardinalfish - Juvenile
SIZE: to 5 cm (2 in.)
ID: White with alternating wide and narrow dark stripes; black spot on mid-tail base. Solitary or form small groups. Shelter at night under ledges or inside crevices; feed over adjacent sand patches.

Cardinalfishes



YELLOWLINED CARDINALFISH

Apogon chrysoetaenia

Cardinalfishes - Apogonidae

SIZE: to 10 cm (4 in.)

ID: Pinkish yellow with indistinct bronze stripes; pair of silvery streaks through eye, **blue stripe across lower cheek**; very tall 2nd dorsal fin. Solitary. Reef flats, lagoons and outer slopes to 10 m.

Asian Pacific: N.W. Australia, Komodo I. in Indonesia to Papua New Guinea.



Yellowlined Cardinalfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: Well defined brown stripes of variable width, pair of pearl-white stripes from snout through eye, **blue stripe on lower cheek**, and darkish spot at mid-tail base.



WASSINKI CARDINALFISH

Apogon wassinki

Cardinalfishes - Apogonidae

SIZE: to 7 cm (2 3/4 in.)

ID: Dusky yellow orange; 5 silver-gray stripes, **lower stripe extends from head onto lower body**. Solitary, in pairs or small groups. Coastal reefs in 2-15 m, often in silty conditions.

Asian Pacific: N.W. Australia, Indonesia and Philippines.



CORAL CARDINALFISH

Apogon properupta

Cardinalfishes - Apogonidae

SIZE: to 7.5 cm (3 in.)

ID: Yellow orange; 5 narrow pale gray stripes, **lower stripe only on head**. In pairs. Sheltered rocky areas and coral reefs to 14 m, often in silty conditions.

Indo-Asian Pacific: Maldives to Indonesia, Papua New Guinea and E. Australia.



YELLOWSTRIPED CARDINALFISH

Apogon cyanosoma

Cardinalfishes - Apogonidae

SIZE: to 8 cm (3 in.)

ID: Bluish silver to mauve to pinkish white; 6 orange-yellow stripes (**stripe behind eye short**). Solitary, in pairs or aggregations. Around coral heads of sheltered coastal and lagoon reefs and seagrass beds to 40 m.

Asian Pacific: Bali and Komodo Is. in Indonesia to Great Barrier Reef and Coral Sea, north to S.W. Japan.



CAVITI CARDINALFISH

Apogon cavitiensis

Cardinalfishes - Apogonidae

SIZE: to 8 cm (3 in.)

ID: Pinkish; **bronze mid-lateral stripe with silvery white margins** and narrow yellow stripe on back, small dark spot on front middle of tail. Solitary or form small groups. Silty coastal reefs to 20 m.

Asian Pacific: Java and W. Australia to N.E. Queensland, north to Philippines.



RINGTAILED CARDINALFISH

SIZE: to 12 cm (5 in.)

Apogon aureus
Cardinalfishes - Apogonidae

ID: Yellow-orange gradating to pale upper back and tail base; pair of blue stripes through eye, **black bar on tail base narrows in middle**. Form aggregations. Sheltered coastal, lagoon and outer reefs to 40 m.

Indo-West Pacific: E. Africa to Tonga. - S.W. Japan to E. Australia.



KOMODO CARDINALFISH

SIZE: to 7 cm (2 3/4 in.)

Apogon komodoensis
Cardinalfishes - Apogonidae

ID: Golden yellow gradating to coppery brown on back and rear body; pair of blue-white stripes through eye, **red streak on upper gill-cover margin**. Form groups. Sheltered reefs with rich coral in 5-12 m.

Localized: Komodo Is. in Indonesia.



YELLOW CARDINALFISH

SIZE: to 5 cm (2 in.)

Apogon luteus
Cardinalfishes - Apogonidae

ID: Yellow-orange with 1-2 somewhat indistinct dusky stripes on back; pair of silver-blue stripes through eye. Form aggregations. Hide under ledges, inside holes or among sea urchin spines in sheltered lagoon and seaward reefs in 1-50 m.

Asian Pacific: Palau to Marshall Is. in Micronesia, north to Bonin Is. in S. Japan.



FLOWER CARDINALFISH

SIZE: to 11 cm (4 1/4 in.)

Apogon fleurieu
Cardinalfishes - Apogonidae

ID: Yellow-orange gradating to pale upper back and tail base; pair of blue stripes through eye, **black bar on tail base maintains uniform width**. Form aggregations. Sheltered coastal, lagoon and outer reefs to 30 m.

Indo-Asian Pacific: Red Sea and E. Africa to Solomon Is, north to Hong Kong and Taiwan.



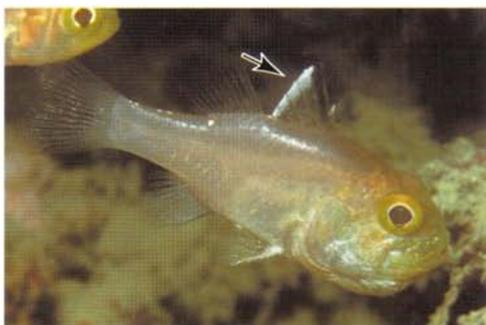
GOLDBELLY CARDINALFISH

SIZE: to 10 cm (4 in.)

Apogon apogonides
Cardinalfishes - Apogonidae

ID: Mauve back gradating to yellow-orange below; **scattered blue spots on side**. Form aggregations. Shelter among branching corals of coastal reefs and outer slopes in 3-40 m.

Indo-Asian Pacific: E. Africa to Great Barrier Reef and Coral Sea, north to Izu Is. in S. Japan.



FROSTFIN CARDINALFISH

SIZE: to 5 cm (2 in.)

Apogon hoevenii
Cardinalfishes - Apogonidae

ID: Pale yellowish brown head and mauve body; **white-edged 1st dorsal fin**, small white spot below base of last dorsal ray. Form groups. Shelter near corals, weeds and sea urchins of sheltered reef slopes to 30 m.

Asian Pacific: S.W. Japan and Kalimantan (Borneo) in Indonesia to Great Barrier Reef.

Cardinalfishes



SPOTGILL CARDINALFISH *Apogon chrysopomus*

SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Pale yellow; pair of brown stripes on upper side, small dark spot on mid-tail base, **yellow spots on lower gill cover**. Form aggregations. Often shelter among branching corals of protected reefs in 2-25 m.

Asian Pacific: Java and Kalimantan (Borneo) in Indonesia to Solomon Is., north to Philippines.



BARGILL CARDINALFISH *Apogon sealei*

SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Pale yellow; pair of thin brown stripes on upper side, small dark spot on mid-tail base, **2, short orange bars in bluish white patch on gill cover**. Form aggregations; shelter among branches of *Acropora* corals. Protected reefs in 2-25 m.

Asian Pacific: Indonesia, Philippines and Timor Sea reefs off N.W. Australia.



ORANGESPOT CARDINALFISH *Apogon rubrimaculatus*

SIZE: to 8 cm (3 in.) Cardinalfishes - Apogonidae

ID: Bluish silver to mauve to pinkish white; 5-6 orange-yellow stripes (**stripe behind upper eye short**); orange spot on mid-tail base displayed at night. Form groups. Clear water lagoon and seaward reefs to 33 m.

West Pacific: Papua New Guinea, Solomon Is., Vanuatu and New Caledonia.



RIFLE CARDINALFISH *Apogon kiensis*

SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Silvery white; pair of narrow dark stripes and adjacent white stripes on upper body, **the mid-lateral stripe extends onto tail**. Solitary or form small groups. Sandy slopes of coastal reefs and lagoons in 8-39 m.

Indo-Asian Pacific: E. Africa and Red Sea to Australia and Papua New Guinea, north to S. Japan.



MOLUCCAN CARDINALFISH *Apogon moluccensis*

SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Reddish brown; pair of pearl-white stripes through eye and white stripes on upper head, often narrow white to brown bars on lower side. Solitary. Sheltered reefs in 1-25 m.

West Pacific: Sumatra in Indonesia to Papua New Guinea and Solomon Is., north to Philippines.



FOURLINED CARDINALFISH *Apogon quadrfasciatus*

SIZE: to 10 cm (4 in.) Cardinalfishes - Apogonidae

ID: Pink to whitish; brown mid-lateral stripe darkens and extends onto tail and another on back, both bordered by thin white lines, white spots and marks lower body. Sand/mud bottoms, sometimes far from reefs in 8-80 m.

Indo-Asian Pacific: Red Sea and E. Africa to N. Australia, north to Indonesia and Philippines.



SIMILAR CARDINALFISH

Apogon sp.

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Brown with **7-8 thin pale bars**; wedge-shaped dark mark below eye, whitish tail base with dark bar. Form aggregations among branching corals of protected coastal reefs and lagoons in 1-15 m.

Asian Pacific: Komodo I. in Indonesia and Papua New Guinea, north to S. Japan.



Similar Cardinalfish - Variation

ID: Fins with yellow margins.



BANDA CARDINALFISH

Apogon bandanensis

SIZE: to 9 cm (3 1/2 in.)

Cardinalfishes - Apogonidae

ID: Brown with **3-4 narrow indistinct bars**, wedge-shaped dark mark below eye, whitish tail base with dark bar. Solitary or form small groups. Shelter among branching corals of protected reefs to 12 m.

East Indo-West Pacific: Cocos-Keeling Is. to Caroline Is. in Micronesia and Samoa. - S.W. Japan to Australia.



HOOKFIN CARDINALFISH

Apogon griffini

SIZE: to 14 cm (5 1/2 in.)

Cardinalfishes - Apogonidae

ID: Golden brown head, pinkish to purplish mid-body with dark scale margins and pale tail base, **orange to yellowish fins**; first rays of 2nd dorsal fin elongate. Around rock and weed areas with scattered coral to 10 m.

Localized: Philippines and N. Borneo.



SAMOAN CARDINALFISH

Apogon fuscus

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Brown, darker on back, usually with coppery or silvery reflections; **wedge-shaped bar below eye**, dark saddle on upper tail base. Form aggregations. Often shelter within staghorn corals of protected seaward slopes to 20 m.

Indo-Pacific: Red Sea to Line Is. and Tuamotu Is. in French Polynesia. - S.W. Japan to E. Australia.



GUAM CARDINALFISH

Apogon guamensis

SIZE: to 11 cm (4 1/4 in.)

Cardinalfishes - Apogonidae

ID: Pale brown; **narrow dark band below eye**, may display dark bar on tail base. Solitary or in pairs; cryptic, ventures in the open at night. Reef flats and shallow lagoons to 3 m.

Indo-West Pacific: E. Africa and Red Sea to Samoa. - S.W. Japan to Australia.

Cardinalfishes



NARROWSTRIPE CARDINALFISH

Apogon exostigma

SIZE: to 11 cm (4 1/4 in.) Cardinalfishes - Apogonidae

ID: Pinkish; tapering solid mid-lateral stripe, dark spot centered above mid-tail base. Lack yellow leading edge on first dorsal fin like Iridescent Cardinalfish [next]. Solitary or groups. Near coral heads and ledges of lagoon and seaward reefs in 3-20 m.

Indo-Pacific: Red Sea to Line Is. and French Polynesia. - Australia to S.W. Japan.



Narrowstripe Cardinalfish - Variation

ID: Same as "normal" pattern, except lack spot on tail base or spot is very faint. Formerly believed to be separate species, *A. abrogramma*.



Narrowstripe Cardinalfish - Night Phase

ID: Faint mid-lateral stripe bordered below with iridescent pale stripe, faint spot centered above mid-tail base, and iridescent yellow first dorsal fin. Feed at night over open sand bottoms next to reefs.



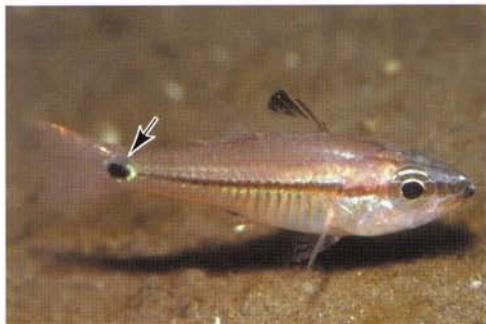
IRIDESCENT CARDINALFISH

Apogon kallopterus

SIZE: to 15 cm (6 in.) Cardinalfishes - Apogonidae

ID: Pale pinkish brown; dark mid-lateral stripe of uniform width, black spot centered above mid-tail base, **yellow leading edge on first dorsal fin**. Solitary or form small groups. Lagoon and seaward reefs in 3-45 m.

Indo-Pacific: Red Sea and East Africa to Hawaii and Pitcairn I. east of French Polynesia. - S. Japan to Australia.



LINESPOT CARDINALFISH

Apogon lineomaculatus

SIZE: to 6.5 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Pinkish sliver; thin dark stripe from eye to **black spot on tail base with pearly white leading edge**, black tip on 1st dorsal fin. Solitary or form small groups in crevices; ventures over open sand at night. Seaward slopes in 8-32 m.

Localized: Between Bali and Flores in Indonesia.



WHITESPOT CARDINALFISH

Apogon dispar

SIZE: to 5 cm (2 in.) Cardinalfishes - Apogonidae

ID: Pinkish silver, translucent; thin reddish brown mid-lateral stripe, **brown spot on mid-tail base with white spot above**. Form aggregations. Shelter inside black coral thickets on steep outer reef slopes in 15-50 m.

East Indo-West Pacific: Cocos-Keeling Is. to Fiji, north to Yaeyama Is. in S.W. Japan.



SPURCHEEK CARDINALFISH

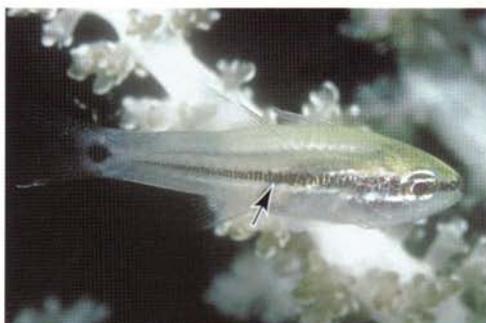
Apogon fraenatus

SIZE: to 11 cm (4 1/4 in.)

Cardinalfishes - Apogonidae

ID: Pinkish silver; tapering solid mid-lateral stripe, **dark spot centered on tail base**. Solitary or form groups. Near base of coral heads or under ledges of lagoon and seaward reefs in 3-25 m.

Indo-Pacific: Red Sea and East Africa to Line Is. and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



GORGONIAN CARDINALFISH

Apogon cladophilus

SIZE: to 6 cm (2 1/2 in.)

Cardinalfishes - Apogonidae

ID: Whitish to translucent; tapering dark brown **often fragmented mid-lateral stripe**, large black spot on tail base. Form groups. Shelter among urchin spines, black coral and gorgonian branches of protected reefs in 20-35 m.

West Pacific: Flores I. in Indonesia to Great Barrier Reef and New Caledonia.



MANGROVE CARDINALFISH

Apogon ceramensis

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Semitransparent with silver to gold sheen; black spot on mid-tail base. Form aggregations in mangroves to 3 m. Distinguished from similar Coastal Cardinalfish [next] by habitat. Form aggregations. Mangroves and sheltered bays to 3 m.

Asian Pacific: Java and Kalimantan (Borneo) in Indonesia to Papua New Guinea, north to Philippines.



COASTAL CARDINALFISH

Apogon lateralis

SIZE: to 11 cm (4 1/4 in.)

Cardinalfishes - Apogonidae

ID: Semitransparent with silvery reflections; narrow dark mid-lateral stripe, small spot on mid-tail base. Form aggregations. Coastal reefs to 15 m. Distinguished from similar Mangrove Cardinalfish [previous] by reef habitat. Form aggregations. Coastal reefs to 15 m.

Indo-West Pacific: E. Africa to Samoa, north to Taiwan.



AMBON CARDINALFISH

Apogon amboinensis

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Light brown; dark mid-lateral stripe and **thin dark stripe following lateral line**, dark leading edge on first dorsal fin, black spot on tail base. Rarely on reefs, usually in fresh or brackish water of river mouths to 3 m.

Asian Pacific: Singapore to Papua New Guinea.



BANDSPOT CARDINALFISH

Apogon selas

SIZE: to 5.5 cm (2 1/4 in.)

Cardinalfishes - Apogonidae

ID: Mauve-back; brown mid-lateral stripe with yellowish borders and dusky to reddish belly with speckles, large black spot on tail base. Form small groups. Inside or near caves and crevices of sheltered coastal reefs in 3-45 m.

Asian Pacific: Bali in Indonesia to Papua New Guinea, north to Philippines and S. Japan.

Cardinalfishes



LARVAL CARDINALFISH

Apogon neotes

SIZE: to 3 cm (1 1/4 in.)

Cardinalfishes - Apogonidae

ID: Silvery mauve, translucent; black stripe intermittently bordered with yellow or silver runs from above eye to black spot on mid-tail base. Form aggregations. Shelter in soft corals and sea fans of coastal, lagoon and seaward reefs in 15-25 m.

Asian Pacific: Flores I. in Indonesia to Papua New Guinea, north to Philippines.



TINY CARDINALFISH

Apogon nanus

SIZE: to 3.5 cm (1 1/2 in.)

Cardinalfishes - Apogonidae

ID: Silvery mauve, translucent to golden brown, mid-lateral stripe extends onto tail with pearly white stripe below. Form mid-water aggregations. Sheltered areas of silty coastal reefs and lagoons in 5-20 m.

Asian Pacific: Sumatra in Indonesia to Papua New Guinea, north to Philippines.



REDSPOT CARDINALFISH

Apogon parvulus

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Silvery, translucent; thin dark mid-lateral stripe often bordered with silvery or golden streaks, **bright red spot on mid-tail base**. Commonly form large mid-water aggregations. Coastal and lagoon reefs in 2-12 m.

Asian Pacific: Kalimantan (Borneo) to Irian Jaya in E. Indonesia, north to S. Japan.



FRAGILE CARDINALFISH

Apogon fragilis

SIZE: to 5.5 cm (2 1/4 in.)

Cardinalfishes - Apogonidae

ID: Translucent with silvery reflections; scattered blue spots and markings on head and front of body, small black spot on mid-tail base, often black spot on tips of tail lobes. Solitary or in pairs. Sheltered reefs to 15 m.

Indo-West Pacific: E. Africa to Samoa and Marshall Is. in Micronesia. - S.W. Japan to Great Barrier Reef.



FAINTBANDED CARDINALFISH

Apogon franssedai

SIZE: to 7.5 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Pinkish, translucent; **3 dark stripes on head**, thin brown mid-lateral stripe black spot on mid-tail base, may display an additional thin stripe on upper back. Form groups. Inside crevices and caves of seaward reefs in 12-40 m.

Indo-Asian Pacific: Maldives to Indonesia and Papua New Guinea.



TAILSPOT CARDINALFISH

Apogon ocellicaudus

SIZE: to 6 cm (2 1/2 in.)

Cardinalfishes - Apogonidae

ID: Pinkish, translucent; narrow brown, orange or yellow mid-lateral stripe, **white-edged black spot on mid-tail base**. In pairs or small groups. Under ledges or around coral outcroppings of sheltered coastal reefs in 15-30 m.

Asian Pacific: Riau Is. in Indonesia to Papua New Guinea, north to Philippines.



HARTZFELD'S CARDINALFISH

Apogon hartzfeldii

SIZE: to 12 cm (5 in.)

Cardinalfishes - Apogonidae

ID: Purplish brown; pair of silver-white stripes through eye and thin white stripes on upper head and back, black spot on mid-tail base. Form small groups. Shelter among sea urchin spines on coastal reefs and lagoons to 12 m.

Asian Pacific: Bali and Komodo Is. in Indonesia to Papua New Guinea, north to Philippines.



Hartzfeld's Cardinalfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: Brown; pair of white eye stripes continue onto body and white stripe on upper head and back, black spot on mid-tail base. Shelter among sea urchin spines or under rocky ledges of shallow reef flats in areas of mixed sand, weed and coral.



THREESPOT CARDINALFISH

Apogon trimaculatus

SIZE: to 15 cm (6 in.)

Cardinalfishes - Apogonidae

ID: Pale with darkish scale centers; **darkish spot on gill cover** and 2 more on fore and rear tail base, ragged band below 1st and 2nd dorsal fins with saddle between. Solitary or in pairs. Lagoons and outer slopes in 3-15 m.

West Pacific: Malaysian Peninsula to Samoa. - S.W. Japan to Australia.



Threespot Cardinalfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: Whitish to pale gray; markings similar to those of adult, but much darker and bars extend farther down side. Solitary. Both adults and juveniles feed at night over sand or rubble near reefs; lurk inside reef recesses during day.



FALSE THREESPOT CARDINALFISH

Apogon rhodopterus

SIZE: to 15 cm (6 in.)

Cardinalfishes - Apogonidae

ID: Pale with darkish scale centers; spot on rear tail base (**lack spot on gill cover**); ragged band below 1st and 2nd dorsal fins often with saddle between. Solitary. Crevices of lagoon and seaward reefs in 8-25 m.

West Pacific: Malaysian Peninsula and Indonesia to Marshall Is. in Micronesia and Solomon Is., north to S.W. Japan.



False Threespot Cardinalfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: Pale brown; markings similar to adults, but much darker and bars extend farther down side. Solitary. Both adults and juveniles feed at night over sand or rubble near reefs; lurk inside reef recesses during day.

Cardinalfishes



SANGI CARDINALFISH

Apogon thermalis

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Brown except pale lower head and belly; broad black stripe through eye, black leading edge on first dorsal fin, 3 tiny black spots along dorsal-fin base. Form aggregations. Sheltered, silty coastal reefs to 12 m.

Indo-Asian Pacific: E. Africa to Australia and Vanuatu, north to S.W. Japan.



Sangi Cardinalfish - Juvenile

SIZE: to 3.5 cm (1 1/2 in.)

ID: Brownish, translucent; markings similar to those of adults, large black spot on mid-tail base. Form small to large aggregations. Hover close above coral heads adjacent to mangroves or in seagrass habitat.



HUMPBACKED CARDINALFISH

Apogon hyalosoma

SIZE: to 20 cm (8 in.)

Cardinalfishes - Apogonidae

ID: Whitish to light pinkish brown; black leading edge on first dorsal fin, black spot on tail base. Form aggregations. Mangrove shores, estuaries and stream mouths to 3 m.

Asian Pacific: Sumatra in Indonesia to E. Australia and Solomon Is., north to S. Japan.



YELLOWEYED CARDINALFISH

Apogon monospilus

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: Reddish brown, yellow iris; pair of pearl-white stripes through eye and bluish stripe below eye. In pairs or groups. Weedy areas of sheltered coastal reefs to 30 m.

Asian Pacific: Kalimantan (Borneo) in Indonesia to Philippines, Papua New Guinea and N. Australia.



NORFOLK CARDINALFISH

Apogon norfolcensis

SIZE: to 10 cm (4 in.)

Cardinalfishes - Apogonidae

ID: Brown with darker scale margins; silvery stripe through eye, faint bar on side, black spot on mid-tail base; tall 2nd dorsal fin. Solitary or form groups. Lagoon and outer reefs in 3-25 m.

Localized: Norfolk I., Lord Howe I. and New Caledonia east of Australia.



GOBBLEGUTS

Apogon rueppellii

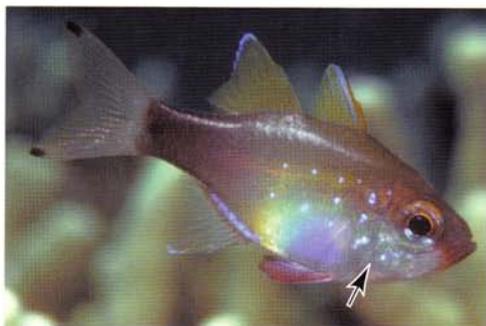
SIZE: to 12 cm (5 in.)

Cardinalfishes - Apogonidae

ID: Light silvery brown to mauve; row of dark spots along lateral line and another row on second dorsal fin, narrow brown band below eye. Form aggregations. In weedy areas of coastal reefs and estuaries to 10 m.

Localized: W. Australia to S. Papua New Guinea.

Cardinalfishes



GILBERT'S CARDINALFISH *Apogon gilberti*

SIZE: to 5.5 cm (2 1/4 in.) Cardinalfishes - Apogonidae

ID: Pale brown to mauve with bluish belly; **blue spots on head and front of body**, often black marks on tips of tail lobes. Form large aggregations. Shelter among branching corals of protected reefs in 2-10 m.

Asian Pacific: Indonesia, Philippines and Timor Sea reefs of N.W. Australia.



THREADFIN CARDINALFISH *Apogon leptacanthus*

SIZE: to 6 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Whitish, translucent with frosty iridescence on back, blue iris; **yellow-edged blue bands and bars on rear head and front of body**; long first dorsal-fin tip. Form groups. Shelter among branching corals of protected reefs in 2-12 m.

Indo-West Pacific: Red Sea and East Africa to Samoa. - S.W. Japan to New Caledonia.



PEARLY CARDINALFISH *Apogon perlitus*

SIZE: to 5.5 cm (2 1/4 in.) Cardinalfishes - Apogonidae

ID: Light brown with blue and yellow belly; blackish stripe along anal fin base, dusky area and **small spot on tail base**. Form aggregations. Shelter among branching corals of protected reefs in 3-12 m.

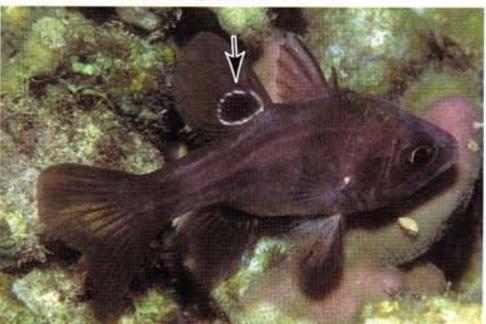
Asian Pacific: Indonesia, Philippines, Palau, Timor Sea reefs of N.W. Australia and Papua New Guinea.



Pearly Cardinalfish - Variation

ID: Pale gray, translucent; small black spot on mid-tail base.

Localized: N.W. Sumatra in Indonesia.

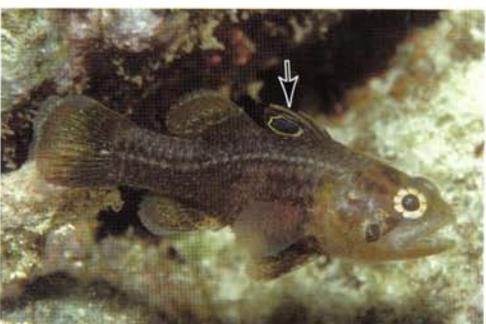


BLACK CARDINALFISH *Apogon melas*

SIZE: to 13 cm (5 in.) Cardinalfishes - Apogonidae

ID: Dark brown; tall rounded dorsal and anal fins and broad rounded tail lobes; **black ocellated spot on base of second dorsal fin**. Solitary. Sheltered coastal reefs and bays to 15 m.

East Indo-Asian Pacific: Cocos-Keeling Is. and N.W. Australia. - S.W. Japan to Palau and Papua New Guinea.



OCCELLATED CARDINALFISH *Apogonichthys ocellatus*

SIZE: to 3.5 cm (1 1/2 in.) Cardinalfishes - Apogonidae

ID: Dark brown; 3 dark brown bands radiate from rear eye, **large ocellated black spot on first dorsal fin**. Solitary and cryptic. Exposed reef flats and sheltered lagoons to 3 m.

Indo-Pacific: E. Africa to Marquesas and Rapā Is. in French Polynesia. - S. Japan to Great Barrier Reef.

Cardinalfishes



TIMOR CARDINALFISH *Apogon timorensis*
SIZE: to 8 cm (3 in.) Cardinalfishes - Apogonidae

ID: Shades of brown, fins yellowish; **short pale band behind eye with dark borders**, usually dark brown bar extends below 1st dorsal fin and another below 2nd dorsal fin. Solitary. Shallow reef flats and sea grass beds to 12 m.

Indo-Asian Pacific: Red Sea and East Africa to N. Australia and Great Barrier Reef, north to Japan.



ONESPOT CARDINALFISH *Apogon uninotatus*
SIZE: to 6 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Pale pinkish brown; faint spoke-like marks radiate from rear half of eye, **large dark brown spot on mid-body**. Solitary. Dead reefs and mangrove fringed estuaries and brackish lakes to 10 m.

Localized: Philippines.



TWINSPOT CARDINALFISH *Archamia biguttata*
SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Mauve to pinkish brown with narrow orange bars; **black spot above upper edge of gill cover and on mid-tail base**; black bar under eye. Form aggregations. Shelter inside caves and crevices of protected coastal reefs and lagoons in 3-18 m.

West Pacific: Sumatra in Indonesia to Samoa, north to S.W. Japan.



BLACKSPOT CARDINALFISH *Archamia melasma*
SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Mauve to pinkish with narrow orange bars; **black spot above upper edge of gill cover with diffuse bar below**, dusky bar under eye. Form small aggregations. Shelter among branching corals of protected coastal reefs in 2-12 m, often in silty areas.

Localized: N.W. Australia and S. Papua New Guinea.



NARROWLINED CARDINALFISH *Archamia fucata*
SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Mauve undercolor with orange head; numerous narrow orange bars, pair of blue stripes through eye, **black spot on tail base**. Form aggregations. Inside caves or above branching corals of coastal and lagoon reefs in 2-60 m.

Indo-West Pacific: Red Sea and East Africa to Samoa. - S.W. Japan to New Caledonia.



DUSKYTAILED CARDINALFISH *Archamia macroptera*
SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Pale gray with numerous close-set narrow orange bars; **blackish tail base**. Form dense aggregations. Hover above beds of *Porites* or other branching corals of sheltered coastal reefs and lagoons in 2-20 m.

West Pacific: Sumatra in Indonesia to Samoa, north to S.W. Japan.



GIRDLED CARDINALFISH *Archamia zosterophora*
 Cardinalfishes - Apogonidae

SIZE: to 8 cm (3 in.)
ID: Pale gray; pair of narrow reddish bars on gill cover, broad dark-brown bar on mid-side, small black spot on mid-tail base. Form aggregations. Shelter among branching corals of protected bays and lagoons in 2-15 m.

West Pacific: Java Sea and Kalimantan (Borneo) in Indonesia to New Caledonia, north to S.W. Japan.



Girdled Cardinalfish - Variation

ID: Pale gray; pair of narrow reddish bars on gill cover and hint of broad mid-body bar formed by pepper-like dark spots, small black spot on mid-tail base.



YELLOWMOUTH CARDINALFISH *Archamia goni*
 Cardinalfishes - Apogonidae

SIZE: to 9 cm (3 1/2 in.)
ID: Whitish with silvery reflections, translucent, yellowish snout; black spot on mid-tail base. Form aggregations. Hover above rocky outcroppings of coastal reefs in 10-30 m, typically in silty areas.

Asian Pacific: Sumatra to Flores in Indonesia, north to Taiwan.



BELTED CARDINALFISH *Achamia leai*
 Cardinalfishes - Apogonidae

SIZE: to 8 cm (3 in.)
ID: Mauve to brown to olive often with heavy yellowish tan speckling; 3 to 5 bars, the widest and most distinct below 2nd dorsal fin, pair of white stripes from snout through eye. Solitary. Shallow coastal and lagoon reefs to 15 m.

Localized: Great Barrier Reef and Coral Sea to New Caledonia.



SOLITARY CARDINALFISH *Cercamia eremia*
 Cardinalfishes - Apogonidae

SIZE: to 4 cm (1 1/2 in.)
ID: Slender; whitish, translucent with silvery reflections; pinkish brown gill cover. Solitary. During day shelter inside deep caves and crevices of clear water seaward reefs in 2-40 m.

Indo-Asian Pacific: Red Sea to Palau and Great Barrier Reef.



ALLEN'S CARDINALFISH *Cheilodipterus alleni*
 Cardinalfishes - Apogonidae

SIZE: to 12 cm (5 in.)
ID: Silvery gray with 8 red to brown stripes; black upper half of first dorsal fin. Solitary. Hover inside entrances of caves and under ledges of seaward reef slopes in 10-40 m.

Asian Pacific: E. Kalimantan (Borneo) in Indonesia to Papua New Guinea, north to Philippines.

Cardinalfishes



TIGER CARDINALFISH

Cheilodipterus macrodon

SIZE: to 20 cm (8 in.)

Cardinalfishes - Apogonidae

ID: Pale undercolor with 8 red-brown stripes; whitish tail base with dark to dusky bar; **large prominent pointed teeth**. Solitary; male shown mouth brooding eggs. Hover inside caves and under ledges of coastal, lagoon and outer reefs to 40 m.

Indo-Pacific: Red Sea to Pitcairn I. east of French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



Tiger Cardinalfish - Sub-adult

SIZE: to 9 cm (3 1/2 in.)

ID: Pale undercolor with 8 alternating pale red-brown and dark brown stripes, frequently yellow wash on head; white tail base surrounds faint black spot. **Large Juvenile** - Red-brown stripes are narrow, pale and not well defined, become wider darker and better defined with maturity.



Tiger Cardinalfish - Small Juvenile

SIZE: to 4 cm (1 1/2 in.)

ID: Yellow head gradating to whitish translucent rear body; 4 black stripes and large black spot covers entire tail base.



INTERMEDIATE CARDINALFISH

Cheilodipterus intermedius

SIZE: to 11 cm (4 1/4 in.)

Cardinalfishes - Apogonidae

ID: Slender; pale undercolor with 8 stripes; **white tail base with no hint of a bar**. Solitary or form small groups. Sheltered coastal, lagoon and outer reefs in 2-15 m.

Asian Pacific: S. China Sea and S.W. Japan to Coral Sea and Solomon Is.



WOLF CARDINALFISH

Cheilodipterus artus

SIZE: to 12 cm (5 in.)

Cardinalfishes - Apogonidae

ID: Pale undercolor with about 8 reddish brown stripes; **black tail base**. Form loose aggregations. Hover inside caves or just above coral branches of sheltered bays and lagoons in 3-25 m.

Indo-Pacific: E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



Wolf Cardinalfish - Phase

ID: Whitish to bluish undercolor with about 8 reddish brown stripes; black spot on yellow tail base. Adults capable of quick change from black tail base phase to yellow tail base variation. Young similar to yellow tail base variation but with larger black spot.

Cardinalfishes



FIVELINED CARDINALFISH *Cheilodipterus quinque-lineatus*

SIZE: to 12 cm (5 in.) Cardinalfishes - Apogonidae

ID: Light gray to whitish with 5 black stripes; **yellow tail base with black spot in line with mid-lateral stripe**; lack canine teeth at front of lower jaw. Form aggregations. Coastal, lagoon and outer reefs to 40 m.

Indo-Pacific: Red Sea and East Africa to Rapa I. in French Polynesia. - S. Japan to E. Australia.



SINGAPORE CARDINALFISH *Cheilodipterus singaporensis*

SIZE: to 17.5 cm (7 in.) Cardinalfishes - Apogonidae

ID: Pale undercolor with 5 dark stripes with diffuse edges; small black spot at mid-tail base, **small white spot below last dorsal fin ray**. Solitary; nocturnal feeder. Sheltered coastal and lagoon reefs in 2-10 m.

Asian Pacific: Sumatra in Indonesia to Philippines, Papua New Guinea and Marshall Is. in Micronesia.



TOOTHY CARDINALFISH *Cheilodipterus isostigmus*

SIZE: to 10 cm (4 in.) Cardinalfishes - Apogonidae

ID: Light gray to whitish with 5 black stripes; yellow tail base with **black spot slightly above line of mid-lateral stripe**; canine teeth at front of lower jaw. Form groups. Hover among branching corals of sheltered reefs in 4-40 m.

Asian Pacific: S. China Sea, Philippines, Marshall Is. in Micronesia to Vanuatu.



BLACKSTRIPED CARDINALFISH *Cheilodipterus nigrotaeniatus*

SIZE: to 8 cm (3 in.) Cardinalfishes - Apogonidae

ID: Yellow head and white body with 4 black stripes; often broken lines or black spots on tail base. Solitary or in pairs; swim with quick darting motion mimicking Striped Fangblenny. Sheltered reefs in 2-25 m.

Localized: Philippines and Sulu Sea.



MIMIC CARDINALFISH *Cheilodipterus parazonatus*

SIZE: to 7 cm (2 3/4 in.) Cardinalfishes - Apogonidae

ID: Light gray to whitish with white-edged black stripe from snout to tail base. Solitary or in pairs; swim with quick darting motion mimicking Blackstripe Fangblenny. Coastal reefs and sheltered lagoons in 2-25 m.

Asian Pacific: Papua New Guinea, Solomon Is. and Great Barrier Reef.



YELLOWBELLY CARDINALFISH *Cheilodipterus zonatus*

SIZE: to 7 cm (2 3/4 in.) Cardinalfishes - Apogonidae

ID: Gray back and yellow belly; white stripe above black mid-lateral stripe snout to tail. Solitary or in pairs; swim with quick darting motion mimicking Twin Fangblenny. Coastal reefs and sheltered lagoons in 2-25 m.

Asian Pacific: Malaysian Peninsula, Philippines and Solomon Is.

Cardinalfishes



VARIEGATED CARDINALFISH

Fowleria variegata

SIZE: to 5 cm (2 in.)

Cardinalfishes - Apogonidae

ID: Variegated shades of brown; wide pale bands radiate from rear eye, may display faint dark bars on side, **dark ocellated spot on gill cover**. Solitary or form small groups. Seagrass beds, mangroves and coastal reefs to 27 m.

Indo-West Pacific: Red Sea and East Africa to Mariana Is. in Micronesia and Samoa. - S.W. Japan to Great Barrier Reef.



SPOTLESS CARDINALFISH

Fowleria vaiulae

SIZE: to 5 cm (2 in.)

Cardinalfishes - Apogonidae

ID: Variegated shades of brown; often display alternating dark and light bars, alternating light and dark bands radiate from rear eye, **no gill cover spot**. Solitary. Sheltered coastal reefs and lagoons in 3-15 m.

Indo-Pacific: Red Sea to Marshall Is. in Micronesia and Society Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



BARRED CARDINALFISH

Fowleria marmorata

SIZE: to 4.5 cm (1 3/4 in.)

Cardinalfishes - Apogonidae

ID: Pale reddish brown with about 5-8 dusky reddish brown bars on side; **thin dark bands radiate from rear eye**, large ocellated black spot on gill cover. Solitary and cryptic. Hide in crevices and corals of coastal, lagoon and outer reefs in 1-20 m.

Indo-Pacific: Red Sea and East Africa to Line Is. and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



HYALINE CARDINALFISH

Foa hyalina

SIZE: to 5 cm (2 in.)

Cardinalfishes - Apogonidae

ID: Pinkish to mauve; **red-brown bands radiate from eye**, several red-brown bars of irregular width on front of body. Solitary. Shelter among *Sinularia* leather corals of coastal and lagoon reefs in 2-15 m.

Asian Pacific: E. Indonesia, Philippines, Palau and Papua New Guinea.



WEEDY CARDINALFISH

Foa fo

SIZE: to 3.5 cm (1 1/2 in.)

Cardinalfishes - Apogonidae

ID: Brown with numerous white blotches; **whitish irregular area on leading edge of dorsal and ventral fins**. Solitary or form small groups. Seagrass beds, weed, sand and rubble areas to 15 m.

Indo-Pacific: Maldives to Society Is. in French Polynesia. - S. Japan to Australia.



EIGHTSPINE CARDINALFISH

Neamia octospina

SIZE: to 5 cm (2 in.)

Cardinalfishes - Apogonidae

ID: Whitish to pinkish or beige, translucent; **3 short brown bands radiating from rear eye**. Solitary and cryptic. Hide deep inside crevices of sheltered reefs in 3-5 m.

Indo-Asian Pacific: Red Sea and East Africa to Palau and Papua New Guinea. - Philippines to Australia.

Cardinalfishes



PINSTRIPED CARDINALFISH *Pseudamia hayashii*

SIZE: to 7.5 (3 in.) Cardinalfishes - Apogonidae

ID: Slender body, long tail base, rounded tail; reddish brown with pinstripes formed by rows of tiny dark spots. Solitary and nocturnal. Coastal, lagoon and outer reefs in 2-64 m.

Indo-West Pacific: Gulf of Aden to Vanuatu and Samoa. - S. Japan to N. Australia.



GELATINOUS CARDINALFISH *Pseudamia gelatinosa*

SIZE: to 10 cm (4 in.) Cardinalfishes - Apogonidae

ID: Very slender body, long tail base and large rounded tail; shades of mauve to pink with stripes formed by rows of small dark spots; dusky spot on tail base. Solitary and nocturnal. Lagoons and sheltered coastal reefs in 1-40 m.

Indo-Pacific: Red Sea and East Africa to Line Is. and Rapa I. in French Polynesia. - S. Japan to Australia.



PADDLEFIN CARDINALFISH *Pseudamia zonata*

SIZE: to 9 cm (3 1/2 in.) Cardinalfishes - Apogonidae

ID: Slender body, long tail base, large fan-shaped tail, 2nd dorsal and anal fins; pair of broad black bars on side and narrower bar on tail base. Solitary. Lurk inside caves and crevices of seaward reef slopes in 10-35 m.

Asian Pacific: Bali in Indonesia to Solomon Is. and Vanuatu, north to S.W. Japan.

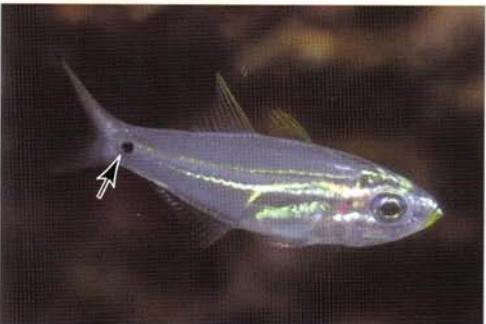


BLACK-NOSED CARDINALFISH *Rhabdamia cypselurus*

SIZE: to 6 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Translucent body with yellowish sheen on head and belly; black spot or short stripe on snout, darkish margins on tail. Form aggregations. Hover above coral patches and inside caves of sheltered coastal reefs and lagoons in 2-15 m.

Indo-Asian Pacific: Red Sea and Arabian Gulf to Marshall Is. in Micronesia. - S.W. Japan to Australia.



SLENDER CARDINALFISH *Rhabdamia gracilis*

SIZE: to 6 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Translucent body with silver sheen on head and belly; usually display small black spot on lower tail base and tips of tail lobes. Form aggregations. Sheltered coastal, lagoon and outer reefs in 2-15 m.

Indo-West Pacific: E. Africa to Marshall Is. in Micronesia and Fiji. - S. Japan to Australia.



GLASSY CARDINALFISH *Rhabdamia spilota*

SIZE: to 6 cm (2 1/2 in.) Cardinalfishes - Apogonidae

ID: Translucent body with silver sheen on head and belly; small dark spot above pectoral fin base; 1-2 faint brownish stripes on side of front of body. Form small groups. Seaward reefs in 17-45 m.

Localized: Indonesia from Bali to Flores, north to Sulawesi.

Cardinalfishes - Glassfishes



SAILFIN CARDINALFISH

Pterapogon mirifica

SIZE: to 14 cm (5 1/2 in.)

Cardinalfishes - Apogonidae

ID: Dark gray to blackish with white tail, pale gray head; saddles displayed only at night; **enlarged 2nd dorsal and ventral fins**. Solitary. Hide under ledges or large rocks in weedy areas of coastal reefs in 2-12 m.

Localized: N.W. Australia.



BANGGAI CARDINALFISH

Pterapogon kauderni

SIZE: to 6.5 cm (2 1/2 in.)

Cardinalfishes - Apogonidae

ID: White to cream with white spotting; 3 white-edged black bars through eye, 1st dorsal to ventral fin and 2nd dorsal to anal fin; black tail lobes bordered with white spots. Form aggregations. Shelter among urchin spines or anemones in protected rubble areas to 16 m.

Localized: Banggai Is. and Lembhe Strait, Sulawesi, Indonesia.



PAJAMA CARDINALFISH

Sphaeramia nematoptera

SIZE: to 8 cm (3 in.)

Cardinalfishes - Apogonidae

ID: White with yellow wash on head, **red iris**; dark mid-body bar and purple spots on rear body; elongate 2nd dorsal-fin tip. Form aggregations. Shelter among branching coral thickets of protected bays and lagoons in 1-14 m.

West Pacific: Java in Indonesia to Palau and Pohnpei in Micronesia and Fiji. - S.W. Japan to Great Barrier Reef.



Pajama Cardinalfish - Night Phase

ID: At night the purple spots on rear body are not displayed prominently.



ORBICULAR CARDINALFISH

Sphaeramia orbicularis

SIZE: to 11.5 cm (4 1/2 in.)

Cardinalfishes - Apogonidae

ID: Pale gray with silvery reflections; narrow dark mid-body bar and variable-sized dark spots on rear body. Form aggregations. Around mangroves, debris and under wharves of sheltered bays and shoreline reefs to 3 m.

Indo-Pacific: E. Africa to Kiribati in Central Pacific. - S.W. Japan to New Caledonia.



CORAL CARDINALFISH

Siphamia corallicola

SIZE: to 3.8 cm (1 1/2 in.)

Cardinalfishes - Apogonidae

ID: Silvery undercolor with large red-brown blotches; hint of large darkish spot on tail base. Form loose aggregations. Commonly shelter among thin branched coral colonies, *Seriatorpora hystrix*. Lagoons and coastal inlets in 6-22 m.

Asian Pacific: N. Kalimantan (Borneo) and Sabah to Papua New Guinea.



TUBED SIPHONFISH

Siphamia tubifer

SIZE: to 4 cm (1 1/2 in.) Cardinalfishes - Apogonidae

ID: Alternating silver-white and blackish stripes, two upper black stripes about equal width of white, **lower black stripe narrow**. Form groups. Shelter among *Diadema* and *Asthenosoma* urchin spines on sheltered reefs in 1-20 m.

Asian Pacific: Reliably known only from Indonesia and Papua New Guinea.



Tubed Siphonfish - Dark Phase

ID: Can rapidly change from striped phase to dark brown to black with transparent fins; **small white dot at rear of each dorsal fin**.



URCHIN SIPHONFISH

Siphamia versicolor

SIZE: to 4 cm (1 1/2 in.) Cardinalfishes - Apogonidae

ID: Silver-white with **3 narrow black stripes**, transparent fins; can rapidly change to black. Form groups. Shelter among *Diadema* and *Asthenosoma* urchin spines on sheltered reefs to 18 m.

Indo-Asian Pacific: Gulf of Oman to Indonesia and Philippines, north to S. Japan.



DUSKYLINED SIPHONFISH

Siphamia fuscolineata

SIZE: to 3.5 cm (1 1/2 in.)

Cardinalfishes - Apogonidae

ID: Alternating dark and silver-white **stripes of equal width**, transparent fins; can rapidly change to black. Form groups. Shelter among *Diadema* urchin spines on sheltered reefs to 18 m.

Asian Pacific: Philippines and Papua New Guinea to Marshall Is. in Micronesia, north to S. Japan.



ELONGATE SIPHONFISH

Siphamia elongata

SIZE: to 3.8 cm (1 1/2 in.) Cardinalfishes - Apogonidae

ID: Silvery undercolor with large red-brown blotches; hint of large darkish spot on tail base; more elongate than similar Coral Cardinalfish (opposite). Form aggregations. Sheltered lagoon and coastal reefs in 5-25 m.

Asian Pacific: Bali and Kalimantan (Borneo), north to Philippines.



LARGESPINED GLASSFISH

Ambassis macracanthus

SIZE: to 12 cm (5 in.)

Glassfishes - Ambassidae

ID: Translucent with narrow dark scale margins and silvery reflections on head and belly region. Form aggregations. Near stream mouths of coastal waters to 4 m.

Asian Pacific: Sumatra in Indonesia to N. Papua New Guinea.

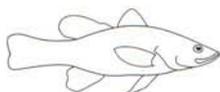
IDENTIFICATION GROUP 12

Cryptic Crevice Dwellers Basslets - Dottybacks - Devilfishes - Brotulas - Cuskeels

This ID Group consists of secretive fishes that live primarily within the confines of the reef's structure.

SUBFAMILY: Basslets - Serranidae/Liopropomatinae

Single Genus - 4 Species Included



Typical Shape

This small family of slender, diminutive seldom-sighted sea basses live secretive lives within recesses of the reef. Reddish coloration and large eyes indicate the shadowed existence of these small, invertebrate-eating carnivores. The shallow-water species included have distinctly separate two-part dorsal fins and pinstriped bodies. Several additional members of the subfamily have been collected from depths below 100 meters. Unlike most sea basses, basslets are believed to remain the same sex throughout life, although their gonad structure indicates a hermaphroditic heritage.

FAMILY: Dottybacks - Pseudochromidae

6 Genera - 32 Species Included



Typical Shape

These, small, elongate, and often brightly colored, crevice-dwellers only venture into the open momentarily from their cryptic haunts inside the reef's structure. The color of dottybacks is often variable within a species, which is frequently believed to relate to an individual's sex. Their diet consists of small crustaceans including zooplankton and polychaete worms. Sex reversal appears to be a common family trait. Females lay adhesive egg masses, which are guarded and regularly picked up in the mouths of the males to mix and aerate.

The Carpet Eel Blenny, *Congrogadus subducens*, a secretive cave and rocky crevice dweller, formerly classified in family Congrogadidae, has recently been placed in subfamily Congrogadinae and merged into Pseudochromidae.

FAMILY: Devilfishes (Longfins) - Plesiopidae

5 Genera – 7 Species Included



Typical Shape

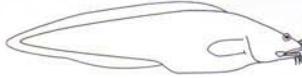


Comet

Devilfishes, also commonly known as longfins, are typically an unfamiliar family because of a limited number of family representatives and their secretive nature. Family members are characterized by a single, long dorsal fin, often with deeply indented membrane between the spines, and elongate ventral fins. Those in genus *Assessor* commonly swim upside down orienting their bellies to the ceiling of caves and overhangs, and the males incubate egg bundles inside their mouths (a behavior possibly common to other members of the family). Probably the most recognizable and sought-after member of the family is the elegant Comet, which is occasionally glimpsed gliding through crevices on walls and dropoffs. Comets are known for their ability to mimic the white-spotted head of the Whitemouth Moray, *Gymnothorax meleagris*, by inserting their heads inside crevices when frightened. This ploy leaves their elongate rear bodies and fins, which bear a prominent false eye-spot, exposed. The Comet's adhesive eggs are deposited on the ceiling of a crevice where they are attended by the male until hatching.

FAMILY: Viviparous Brotulas - Bythitidae

Single Genus – Single Species Included

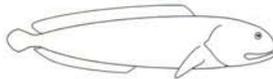


Typical Shape

Brotulas are one of the few families of bony fishes known to be viviparous (bearing live offspring). The 85 species of these curious little fishes inhabit a variety of habitats worldwide, including freshwater caves, estuaries, reefs and the deep sea. Brotulas swim by undulating fins that encircle the length of their bodies. The males' copulatory organs, located behind the anus and surrounded by two pairs of pseudoclaspers, are apparently derived from the anal fin. Embryos, closely packed like cordwood, develop inside the females' ovaries. It is not known whether the offspring disperse in the currents or remain near their birthplace.

FAMILY: Cuskeels - Ophidiidae

Single Genus – 2 Species Included



Typical Shape

These cryptic fishes have eel-like bodies with long dorsal and anal fins that join at the tail to encircle the body. Ventral fins are absent or consist of one or two filamentous rays. Some species have barbels extending from around their mouths. Unlike the similar-appearing members of family Bythitidae, cuskeels lay eggs. At night they occasionally leave the confines of the reef's nooks and crannies to hunt for crabs and fishes.

Basslets - Dottybacks



REDSTRIPED BASSLET *Liopropoma tonstrinum*

SIZE: to 6.5 cm (2 1/2 in.) Basslets - Liopropomatinae

ID: Pale reddish to yellowish head; two wide red stripes from head to tail with narrower white stripes between and on back. Solitary and cryptic. Caves and recesses of steep outer reef slopes in 11-50 m.

East Indo - West Pacific: Christmas I. to Palau, Caroline and Marshall Is. in Micronesia to Fiji and Samoa.



BLACKSTRIPED BASSLET *Liopropoma latifasciatum*

SIZE: to 16 cm (6 1/4 in.) Basslets - Liopropomatinae

ID: Yellow back and tail, pale below; black stripe from snout to tail. Solitary and cryptic deep-water dweller. Caves and recesses of outer slopes and dropoffs below 30 m.

North Asian Pacific: S. Japan and S. Korea to Palau.



MANYLINE BASSLET *Liopropoma multilineatum*

SIZE: to 7.6 cm (3 in.) Basslets - Liopropomatinae

ID: Pink head, yellowish body and red tail base; red longitudinal lines on scale rows and central white stripe below mid-rear dorsal and anal fins to tail. Solitary and cryptic. Caves and recesses of steep outer reef slopes in 20-46 m.

West Pacific: Rowley Shoals, 260 km west of N.W. Australia to Coral Sea and Fiji, north to Philippines.



STRIPED BASSLET *Liopropoma susumi*

SIZE: to 9 cm (3 1/2 in.) Basslets - Liopropomatinae

ID: Brownish gray to pale reddish with eight yellowish brown stripes. Solitary and cryptic. Caves and recesses in lagoon and outer reefs in 2-34 m.

Indo - Pacific: Red Sea and E. Africa to Samoa and Line Is. in eastern Central Pacific. - S.W. Japan to E. Australia.



LINED DOTTYBACK *Labracinus lineatus*

SIZE: to 25 cm (10 in.) Dottybacks - Pseudochromidae

ID: Orange-brown head, pinkish front of body gradating to gray on body and fins; numerous blue scale row stripes and spots on body, blue markings on head. Solitary. Coral patches or near ledges in coastal reefs in 2-15 m.

Localized: N.W. Australia.



WHITEBAR DOTTYBACK *Labracinus* sp.

SIZE: to 20 cm (7 3/4 in.) Dottybacks - Pseudochromidae

ID: Blue-gray diagonal lines on head and front of body, orangish mid-body followed by several light and dark bars, greenish tail. Possibly another variant of the Firetail [next]. Solitary, near reef crevices. Sheltered bays and lagoons in 3-15 m.

Localized: Raja Ampat Is. in Indonesia.

Cryptic Crevice Dwellers



FIRETAIL DOTTYBACK

Labracinus cyclophthalmus

SIZE: to 20 cm (8 in.) Dottybacks - Pseudochromidae

ID: Highly variable, this variation has bright red body and fins; dark blotch on middle of 1st dorsal fin; **all variations have blue-gray diagonal lines on head and front of body.** Solitary or in loose pairs. Coastal, lagoon and outer reefs to 15 m.

Asian Pacific: S.W. Japan, Indonesia and Philippines to N.W. Australia.



Firetail Dottyback - Variation

ID: Dark brown to nearly black with large reddish patch on belly and mid-side; 1-2 pale bars under front of dorsal fin, blue-gray diagonal lines on head and front of body. Lurk near crevices and recesses in reefs.

Asian Pacific: S.W. Japan, Indonesia and Philippines to N.W. Australia.



Firetail Dottyback - Variation

ID: Brick red with bright red fins; about 10 narrow black stripes; all variations, blue-gray diagonal lines on head and front of body.

Localized: Indonesia, Sabah and Philippines.



OBLIQUE-LINED DOTTYBACK

Cypho purpurascens

SIZE: to 7.5 cm (3 in.) Dottybacks - Pseudochromidae

ID: Male - Red; fine blue scale margins form diagonal lines on body, may have one or two ocellated spots on dorsal fin. Solitary or in pairs. Coral reefs in 5-35 m.

West Pacific: Papua New Guinea to Great Barrier Reef, Coral Sea and Vanuatu.



Oblique-lined Dottyback - Female

ID: Bluish gray on head and front of body gradating to pale orange-yellow behind; fine blue scale margins form diagonal lines on body; **yellow patch on gill cover.**



Oblique-lined Dottyback - Variation

ID: Males from N. New Britain resemble females with blue-gray head and yellowish body, but females distinguished by yellow patches on cheek and gill cover.

Localized: New Britain I., east of Papua New Guinea.

Dottybacks



MULTICOLORED DOTTYBACK *Ogilbyina novaehollandiae*

SIZE: to 10 cm (4 in.) Dottybacks - Pseudochromidae

ID: Male - Red head with olive body gradating to gray; **blue lines below eye**, and thin blue margin on fins. Solitary or in pairs. Lurk near protective holes lagoon and seaward reefs in 5-20 m.

Localized: S. Great Barrier Reef.



Multicolored Dottyback - Female

ID: Usually reddish, uncommonly dark gray to black with red belly; **bright blue lines below eye**.



QUEENSLAND DOTTYBACK *Ogilbyina queenslandiae*

SIZE: to 15 cm (6 in.) Dottybacks - Pseudochromidae

ID: Male - Reddish on head and front of body and purplish behind with bluish dorsal, anal and tail fins. Solitary or form small groups. Lagoon and seaward reefs in 10-20 m.

Localized: Great Barrier Reef.



Queensland Dottyback - Female

SIZE: to 15 cm (6 in.)

ID: Brownish to grayish head, yellow-orange mid-body and reddish behind; 5-6 brown bars on upper front of body. Solitary or form small groups.



SAILFIN DOTTYBACK *Ogilbyina velifera*

SIZE: to 12 cm (5 in.) Dottybacks - Pseudochromidae

ID: Male - Pale gray to yellowish or reddish with bluish upper head and pale yellow anal and tail fins; **blue blotch on front of dorsal fin**; large and long pointed tail. Solitary or form small groups. Lurk near and inside crevices and recesses in lagoon and seaward reefs in 12-35 m.

Localized: Great Barrier Reef.



Sailfin Dottyback - Young/Female

ID: Light mauve to pinkish with yellowish top of head extends to front of dorsal fin, bluish rear dorsal, anal and tail fins.

Cryptic Crevice Dwellers



SURGE DOTTYBACK

Pseudochromis cyanotaenia

SIZE: to 6 cm (2 1/2 in.) Dottybacks - Pseudochromidae

ID: **Male** - Blue with yellow area lower head to pectoral fin; yellow stripe on front lateral line, may display light blue bars on lower side. **Female** - Reddish gray, orange tail with yellow margin. Solitary or in pairs. Shallow wave-washed areas of outer reef flats and slopes to 10 m.

West Pacific: Indonesia to Fiji. - S.W. Japan to E. Australia.



Surge Dottyback - Male Variation

ID: Dark to navy blue body. Both male and female may display thin light blue to pale bars on side.



ANDAMAN DOTTYBACK

Pseudochromis andamanensis

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Yellowish brown head and front of body gradating to blue or purplish behind. Solitary and cryptic; often orient upside down to cave ceilings and the underside of ledge overhangs. Caves, and ledges of coastal, lagoon and seaward reefs to 25 m.

East Indian Ocean: E. Andaman Sea to offshore reefs of N.W. Australia.



WHITE-TAILED DOTTYBACK

Labracinus atrofasciatus

SIZE: to 20 cm (8 in.) Dottybacks - Pseudochromidae

ID: Dark brown with white tail base and pale tail; black spot on rear dorsal fin. Solitary. Silty coastal reefs in 1-8 m.

Localized: Calamianes Is., N. Palawan Province, Philippines.



RAJA DOTTYBACK

Pseudochromis sp.

SIZE: to 8 cm (3 in.) Dottybacks - Pseudochromidae

ID: **Male** - Whitish to light gray with bluish gray upper head and yellowish brown back; faint blue spot on most scales and dark mark behind eye (also on females). Solitary. Coral outcroppings on fringing reefs in 15-45 m.

Localized: Raja Ampat Is., Indonesia and Papua New Guinea.



Raja Dottyback - Female

ID: Bluish gray upper body, white below; dark gray to yellowish brown stripe from gill cover to tail base, yellow stripe on belly, dark mark behind eye. Solitary. Coral outcroppings of fringing reefs in 15-45 m.

Dottybacks



PURPLETOP DOTTYBACK *Pseudochromis diadema*

SIZE: to 6 cm (2 1/2 in.) Dottybacks - Pseudochromidae

ID: Bright yellow with magenta band from snout to end of dorsal fin. Solitary or small groups. Base of cliffs or inside crevices and caves on steep slopes and coastal and seaward reefs in 10-30 m.

Asian Pacific: E. Malaysian Peninsula, N. Borneo in Indonesia and Philippines.



ROYAL DOTTYBACK *Pseudochromis paccagnellae*

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Magenta head and front of body, yellow behind. Solitary or form small, loosely scattered groups. Base of steep dropoffs or in caves and recesses on steep slopes and coastal and outer reefs in 5 to 40 m, usually below 15 m.

Asian Pacific: Indonesia, Papua New Guinea and Australia.



MAGENTA DOTTYBACK *Pseudochromis porphyreus*

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Magenta. Solitary or form small, loosely scattered groups. Base of steep dropoffs or in caves and crevices in steep slopes and coastal and outer reefs in 5 to 40 m, usually below 15 m.

West Pacific: S.W. Japan, Philippines, Molucca Is. in Indonesia, Palau, N.W. Papua New Guinea to Samoa.



YELLOWFIN DOTTYBACK *Pseudochromis wilsoni*

SIZE: to 8 cm (3 in.) Dottybacks - Pseudochromidae

ID: **Male** - Blue to purplish; **yellow and red iris**. **Female** - Blue to brownish, lower half of dorsal fin yellow; yellow submarginal stripes on tail. Solitary. Inshore coastal reefs to 15 m.

Localized: N. Australia.



YELLOWTAIL DOTTYBACK *Pseudochromis flammicauda*

SIZE: to 5.5 cm (2 1/4 in.) Dottyback - Pseudochromidae

ID: **Male** - Tan to orange-red head, bluish gray body and yellow-orange tail. **Juvenile/Female** - Dark gray brown with no distinctive markings. Solitary or in pairs. Lurk near crevices and holes in lagoon and seaward reefs in 3-10 m.

Localized: Great Barrier Reef.



DOUBLESTRIPED DOTTYBACK *Pseudochromis bitaeniatus*

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Bluish gray to brown with yellowish brown head; broad pale to white stripe from gill cover to end of tail. Solitary. Crevices and caves in steep slopes and coastal and seaward reefs in 1-20 m.

Asian Pacific: Indonesia, Philippines to Papua New Guinea and Solomon Is.

Cryptic Crevice Dwellers



DUSKY DOTTYBACK

Pseudochromis fuscus

SIZE: to 9 cm (3 1/2 in.)

Dottybacks - Pseudochromidae

ID: **Dark Variation** - Dark brown with white to translucent tail; blue spots on scales form stripes. Solitary. Lurk near crevices and recesses in coastal, lagoon and seaward reefs in 1-30 m.

Indo-Asian Pacific: India to Solomon Is. - Taiwan to Australia.



Dusky Dottyback - Yellow Variation

ID: Pale tan to brilliant yellow; blue spots on scales form stripes.



THINSTRIPED DOTTYBACK

Pseudochromis howsoni

SIZE: to 10 cm (4 in.)

Dottybacks - Pseudochromidae

ID: **Male** - Orange-brown on head and front of body gradating to dark gray on rear body; spots on scales of upper front body form scale row stripes, **dark spot on rear gill cover**. Solitary or pair with females. Lurk near recesses in low coral outcroppings and rubble of seaward reefs to 30 m.

Localized: Ashmore Reef (Timor Sea).



Thin-striped Dottyback - Female

ID: Dark brown; black spot on rear edge of gill cover. Commonly pair with male.



STEENE'S DOTTYBACK

Pseudochromis steenei

SIZE: to 12 cm (5 in.)

Dottybacks - Pseudochromidae

ID: **Male** - Pinkish orange head and front of body with brown scale spots gradating to dark brown rear body; **narrow white bar behind eye**. Solitary or pair with females. Lurk near recesses in coral outcroppings and coastal reef slopes in 15-100 m.

Localized: Bali to Flores, Indonesia.



Steene's Dottyback - Female

SIZE: to 12 cm (5 in.)

ID: Dark brown to nearly black with yellow tail; narrow white bar behind eye, faint whitish patch on gill cover. Commonly pair with males.

Dottybacks



YELLOW DOTTYBACK

Pseudochromis moorei

SIZE: to 10 cm (4 in.) Dottybacks - Pseudochromidae

ID: **Male** - Yellow-orange with dark spot on central body scales; **dark spot at rear corner of gill cover.** **Female** - Dark brown. Solitary. Sand and rubble and low rocky outcroppings on coastal reefs in 12-25 m.

Localized: Philippines.



MIDNIGHT DOTTYBACK

Pseudochromis paranox

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Black with no distinctive markings. Flare dorsal and anal fins to mimic Pygmy Angelfish, *Centropyge nox*, the two species always occur in same area. Solitary. Lurk near recesses and crevices in coastal slopes in 5-30 m.

Asian Pacific: Papua New Guinea to Solomon Is. and Great Barrier Reef.



BLACKSTRIP DOTTYBACK

Pseudochromis perspicillatus

SIZE: to 12 cm (5 in.) Dottybacks - Pseudochromidae

ID: White to slightly yellowish; dark gray to black stripe from snout tip to below beginning of dorsal fin. Solitary. Coral outcroppings in sand and rubble areas of coastal reefs in 3-18 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



Blackstripe Dottyback - Variation

ID: Pale yellowish with dusky gray to brown upper head and back; black stripe from snout tip to below beginning of dorsal fin maybe nearly concealed in the dark upper head and back, **line formed by yellow spot on each lateral line scale becoming progressively smaller and less vivid toward rear.**



BORNEO DOTTYBACK

Pseudochromis alleni

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Pale yellow with dark gray upper head gradating to bluish back and dorsal fin; white scale row streak extends from gill cover onto back. Solitary and cryptic. Caves, recesses and under ledges of coastal fringing reefs in 15-30 m.

Localized: N. Kalimantan (Borneo) in Indonesia.



ORANGESPOTTED DOTTYBACK

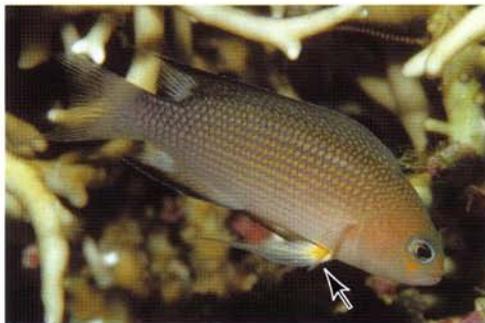
Pseudochromis marshallensis

SIZE: to 7 cm (2 3/4 in.) Dottybacks - Pseudochromidae

ID: Brown to brownish gray or bluish gray with yellowish tail, pale orange spots on scales forming scale row stripes. Solitary and cryptic. Caves, recesses and under ledges of coastal, lagoon and seaward reefs in 1-15 m.

West Pacific: Indonesia and Philippines to Marshall Is. in Micronesia and Vanuatu. - S. Japan to New Caledonia.

Cryptic Crevice Dwellers



LONGFIN DOTYBACK *Pseudochromis polynemus*

SIZE: to 12 cm (5 in.) Dottybacks - Pseudochromidae

ID: Brown to gray-brown with pale spots on scales forming scale row stripes; triangular orange mark below eye, **orange blotch at base of ventral fins**, black margins on dorsal and anal fins. Solitary. Outer slopes in 5-25 m.

Asian Pacific: Molucca Is. and Sulawesi in Indonesia, Philippines and Palau.



BROWNBACK DOTYBACK *Pseudochromis ransonneti*

SIZE: to 12 cm (5 in.) Dottybacks - Pseudochromidae

ID: Dull gray-brown with cream on lower head and lower front body; no distinctive markings. Solitary or form small groups. Silty coastal reefs in 1-12 m.

Localized: Gulf of Thailand and Singapore to Seribu Is. north of Jakarta on Java, Indonesia.



PINK DOTYBACK *Pseudoplestiops multisquamatus*

SIZE: to 7.5 cm (3 in.) Dottybacks - Pseudochromidae

ID: Red, pink or reddish brown; fins clearish except tail which is yellow with wide clearish margin. Solitary. Caves and crevices along outer reef walls to 25 m.

West Pacific: Indonesia to Micronesia and Great Barrier Reef.



SPLENDID DOTYBACK *Pseudochromis splendens*

SIZE: to 13 cm (5 in.) Dottybacks - Pseudochromidae

ID: Gray undercolor with orange to yellow spots on scales forming scale row stripes, yellow tail, pale snout; black eye bar. Solitary. Lurk near recesses and tubular sponges on steep reef slopes in 5-40 m.

Localized: E. Indonesia and offshore reefs of N.W. Australia



ELONGATE DOTYBACK *Pseudochromis elongatus*

SIZE: to 3.5 cm (1 1/2 in.) Dottybacks - Pseudochromidae

ID: Shades of brown to purple; rounded tail with yellow margin. Solitary. Caves or around rock outcroppings of coastal and seaward reefs in 5-60 m.

Localized: E. Indonesia.



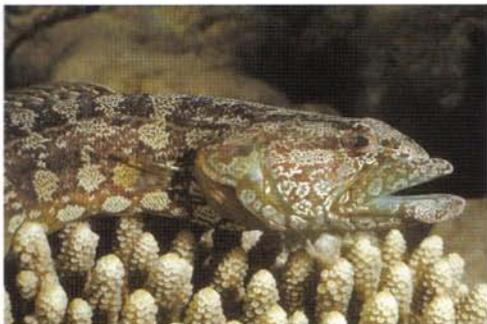
BEARDED DOTYBACK *Pseudoplestiops* sp.

SIZE: to 5 cm (2 in.) Dottybacks - Pseudochromidae

ID: Greenish yellow to bright yellow; **skin flap extends from chin**. Solitary and cryptic. Holes and recesses of seaward reefs to 15 m.

Indo-Asian Pacific: Maldives to Great Barrier Reef and Coral Sea.

Dottybacks - Devilfishes - Brotulas & Cuskeels



CARPET EEL BLENNY DOTTYBACK *Congrogadus subducens*

SIZE: to 45 cm (18 in.) Dottybacks - Pseudochromidae

ID: Shades of brown with numerous pale blotches and saddle markings, white tail base and pale tail; black spot on rear dorsal fin. Solitary and cryptic. Caves, crevices and deep recesses of silty coastal reefs in 1-8 m.

Asian Pacific: Malaysian Peninsula and Philippines to Australia.



BLUE DEVILFISH *Assessor macneilli*

SIZE: to 6 cm (2 1/2 in.) Devilfishes - Plesiopidae

ID: Dark blue; forked tail. Form small cryptic groups; often swim upside down orienting to the ceiling of caves; brood eggs in mouth. Caves, recesses and under ledges of coastal reefs and outer slopes in 5-20 m.

West Pacific: Great Barrier Reef, Coral Sea and New Caledonia.



RANDALL'S DEVILFISH *Assessor randalli*

SIZE: to 6 cm (2 1/2 in.) Devilfishes - Plesiopidae

ID: Dark blue to bluish green; forked tail. Form small cryptic groups; often swim upside down orienting to the ceiling of caves; brood eggs in mouth. Caves, recesses and under ledges of coastal reefs and outer slopes in 5-25 m.

Localized: Ryukyu Is. in S.W. Japan.



YELLOW DEVILFISH *Assessor flavissimus*

SIZE: to 5.5 cm (2 1/4 in.) Devilfishes - Plesiopidae

ID: Bright yellow to brownish yellow; forked tail. Form small cryptic groups; often swim upside down orienting to the ceiling of caves; brood eggs in mouth. Caves, recesses and under ledges of coastal reefs and outer slopes in 5-20 m.

Localized: N. Great Barrier Reef and S.E. Papua New Guinea.



RED-TIPPED LONGFIN *Plesiops coeruleolineatus*

SIZE: to 8 cm (3 in.) Devilfishes - Plesiopidae

ID: Brown; blue-edged black stripe on dorsal fin, red dorsal spine tips, dark line below eye and pair of dark spots behind eye. Solitary and cryptic. Crevices and recesses in outer reef areas to 23 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S.W. Japan to Australia.



BANDED SPINY BASSLET *Belonepterygium fasciolatum*

SIZE: to 5 cm (2 in.) Devilfishes - Plesiopidae

ID: Shades of brown with pale lower head; about 15 thin dark bars on body, broad white stripe from lip to under front of dorsal fin, pale-edged dark spot on gill cover. Solitary and cryptic. Caves and crevices in coastal reefs and lagoons to 10 m.

Localized: Australia and Lord Howe I.

Cryptic Crevice Dwellers



COMET

Callopleysiops altivelis

SIZE: to 13 cm (5 in.) Devilfishes - Plesiopidae

ID: Dark brown to nearly black; head, body and fins covered with small white spots, white ringed black spot on dorsal fin. Solitary and cryptic. Crevices on outer reefs in 3-45 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



Comet

ID: Egg guarding male. Appearance of rear body with prominent eye spot is believed to mimic head of Whitespotted Moray.



SPOTGILL LONGFIN

Plesiops corallicola

SIZE: to 16 cm (6 1/4 in.) Devilfishes - Plesiopidae

ID: Dark brown undercolor with numerous small blue spots on head, body and fins; pale-edged dark spot on gill cover. Solitary and cryptic. Crevices and recesses of outer reef areas in 1-23 m.

East Indo-West Pacific: Andaman Sea and Cocos-Keeling Is. to Tonga. - Taiwan to Australia.



BEARDED BROTLULA

Brotula multibarbata

SIZE: to 60 cm (2 ft.)

Brotulas - Ophidiidae

ID: Shades of gray to brownish gray; eel-like body with barbels "whiskers" around mouth; thread-like ventral fins. Solitary and cryptic; occasionally in open at night. Deep recesses and caves in coastal and outer reefs to 220 m.

East Indo-Pacific: Christmas I. to Micronesia, Hawaii and Pitcairn Is. east of French Polynesia. - S.W. Japan to E. Australia.



WEST AUSTRALIAN CUSKEEL

Ogilbia sp.

SIZE: to 8 cm (3 in.)

Brotulas - Ophidiidae

ID: Reddish orange; bulbous head; very long dorsal and anal fins and thread-like ventral fins. Solitary; common, but cryptic. Deep inside crevices and caves of coastal reefs in 3-20 m.

Localized: N.W. Australia.



YELLOW CUSKEEL

Ogilbia sp.

SIZE: to 8 cm (3 in.)

Brotulas - Ophidiidae

ID: Yellow to orange body; bulbous head; very long dorsal and anal fins and thread-like ventral fins. Solitary; common, but cryptic. Deep inside crevices and caves of coastal reefs in 1-25 m.

Asian Pacific: Indonesia, Philippines, Papua New Guinea and Australia.

IDENTIFICATION GROUP 13

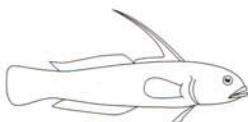
Elongate Sand & Burrow Dwellers

Dartfishes - Tilefishes - Dragonets - Sandperches - Lizardfishes - Others

This ID Group consists of fishes that typically inhabit sandy bottoms and often live in burrows. Shrimp gobies and sand gobies, which also live on the sand and in burrows, are presented in the next ID Group.

FAMILY: Dartfishes - Ptereleotridae

5 Genera – 18 Species Included

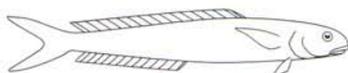


Typical Shape

Dartfishes are elegant little, elongate fishes with two-part dorsal fins, long anal fins and small upturned mouths. They generally hover alone, in pairs or small groups just above the bottom where they feed on water-borne zooplankton. When approached, they dart into burrows or under rocks.

FAMILY: Tilefishes - Malacanthidae

2 Genera – 9 Species Included

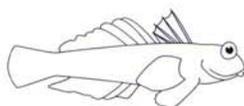


Typical Shape

Tilefishes, also known as sand tilefishes, are moderate-sized fishes with long, continuous, unnotched dorsal fins. They commonly occur in pairs on outer sand or rubble reef slopes. Those in genus *Hoplolatilus* pick plankton from the current a few feet above their bottom shelters where they dive for protection when threatened. The Flagtail Blanquillo, *Malacanthus brevirostris*, lives in rock mounds of their own construction.

FAMILY: Dragonets - Callionymidae

5 Genera – 17 Species Included



Typical Shape

Dragonets are small, charismatic bottom-dwelling fishes with two-part dorsal fins, somewhat flattened heads and bodies, and protrusible mouths used for snapping up tiny benthic invertebrates. Although generally cryptically patterned, several species are quite colorful. Males often display a slightly different pattern from the smaller females. The males also have taller, more elaborate first dorsal fins that are erected intermittently as they dart over the bottom and during evening courtship that culminates just after sunset in a brief spawning rise.

FAMILY: Sandperches - Pinguipedidae

Single Genus - 15 Species Included



Typical Shape

These elongate sand and rubble dwellers live in small harems with single dominant, territorial males. A few species have proven to be hermaphroditic, changing from females to males with age. The appealing fishes are easily approached and often perch near divers watching their activities.

FAMILY: Lizardfishes - Synodontidae

3 Genera - 8 Species Included



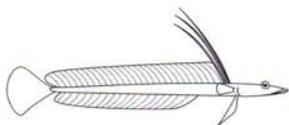
Typical Shape

Lizardfishes are voracious lie-in-wait predators with large, tooth-filled mouths. They have pointed snouts and long, cylindrical bodies bearing small, high first dorsal fins followed by tiny rear dorsal fins toward the tail. Experts at camouflage, pairs and solitary individuals rest motionless on the bottom, blending with their surroundings. Some species bury in the sand with only their heads protruding as they wait for unsuspecting prey. At times they attack quite large prey and are capable of taking fishes several meters above the bottom with lightning-fast strikes. Because they are similar in color and markings, especially in their pale phases, lizardfishes can be difficult to identify to species.

FAMILY: Others



Wormfishes - Microdesmidae



Sand Divers - Trichonotidae



Signalfishes - Percophidae



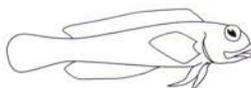
Bandfishes - Cepolidae



Convict Blennies - Pholidichthyidae



Pearlfishes - Carapidae



Jawfishes - Opistognathidae

Dartfishes



DECORATED DARTFISH

Nemateleotris decora

Dartfishes - Ptereleotridae

SIZE: to 8.5 cm (3 1/4 in.)
ID: White head and front body gradating to purplish rear body; violet snout and stripe to dorsal fin, violet and red marked fins; long 1st dorsal fin. Solitary or in pairs; shelter in sandy burrows. Sand and rubble patches at base of reefs in 28-68 m.

Indo-West Pacific: Mauritius to Marshall Is. in Micronesia, New Caledonia and Samoa, north to S.W. Japan.



HELFRICH'S DARTFISH

Nemateleotris helfrichi

Dartfishes - Ptereleotridae

SIZE: to 6.5 cm (2 1/2 in.)
ID: Yellow head and lavender body, yellowish rear dorsal, anal and tail fins; violet stripe on top of head, black ventral fin tips, long whitish and red 1st dorsal fin. Solitary or in pairs. Steep outer reef slopes in 25-70 m.

Pacific: S.W. Japan, Palau and Marshall Is. in Micronesia, Samoa to Tuamotu Is. in French Polynesia.



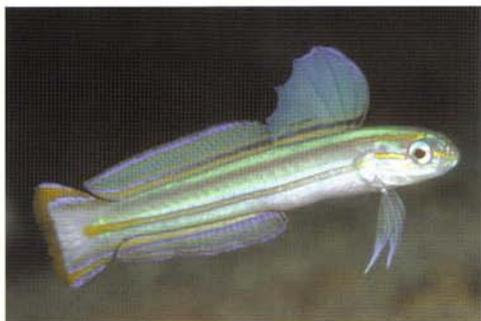
FIRE DARTFISH

Nemateleotris magnifica

Dartfishes - Ptereleotridae

SIZE: to 8 cm (3 in.)
ID: Yellow head, white front body gradating to reddish brown rear body, dark brown tail; very long 1st dorsal fin. Solitary or in pairs. Hover above burrows on patches of sand and rubble on outer reef slopes in 6-60 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn I. east of French Polynesia. - S. Japan to New Caledonia.



LINED DARTFISH

Ptereleotris grammica

Dartfishes - Ptereleotridae

SIZE: to 10 cm (4 in.)
ID: Pale blue-gray with greenish highlights; orange and blue stripes on body and fins; first dorsal fin relatively high and fan-shaped. Solitary or in pairs that share burrows. Sand and rubble slopes in 36-60 m.

Asian Pacific: E. Indonesia, Philippines and Papua New Guinea. - S. Japan to N. Great Barrier Reef.



TWOTONE DARTFISH

Ptereleotris evides

Dartfishes - Ptereleotridae

SIZE: to 13.5 cm (5 1/4 in.)
ID: Pale bluish gray head and front of body abruptly gradate to black rear body; pale forked tail with dark borders, iridescent blue markings on gill cover. Pairs share sandy burrows. Exposed lagoon and outer reef slopes in 2-25 m.

Indo-Pacific: Red Sea and E. Africa to Rapa I. in French Polynesia. - S.W. Japan to S.E. Australia.



Twotone Dartfish - Juvenile/Young Adult

SIZE: 3-6 cm (1-2 1/4 in.)

ID: Silvery gray with yellow-green wash; dark border on 2nd dorsal and anal fins and margins of tail, black spot on tail base. Pairs share sandy burrows.

Elongate Sand & Burrow Dwellers



THREADFIN DARTFISH

Ptereleotris hanae

SIZE: to 12 cm (5 in.)

Dartfishes - Ptereleotridae

ID: Pale bluish gray to bluish green upper body and darker blue below; tail of larger adults trail 1-6 filaments. Solitary or in pairs. Shelter under rocks or inside burrows shared with shrimp gobies. Sand and rubble bottoms near reefs in 3-50 m.

Pacific: Philippines to Samoa and Line Is. in east Central Pacific. - Taiwan and S. Japan to N. Australia.



BANDTAIL DARTFISH

Ptereleotris uroditaenia

SIZE: to 10 cm (4 in.)

Dartfishes - Ptereleotridae

ID: Pale blue; iridescent blue markings on head, stripe along base of dorsal fin, **pair of black bands with yellow between on tail**. Solitary or form small groups. Sand and rubble areas in 18-30 m.

Asian Pacific: Indonesia, Solomon Is. and Great Barrier Reef.



SPOTTAIL DARTFISH

Ptereleotris heteroptera

SIZE: to 12 cm (5 in.)

Dartfishes - Ptereleotridae

ID: Pale blue to bluish gray with iridescent blue marks on head; yellow to bluish **tail with large black spot on center**. Solitary, in pairs or colonies. Shelter in burrows on sand and rubble near reefs in 7-46 m.

Indo-Pacific: Red Sea and Mauritius to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



Spottail Dartfish - Variation

ID: The tail of this species may vary from blue [pictured] to a dirty yellow to bright yellow [previous].



MONOFIN DARTFISH

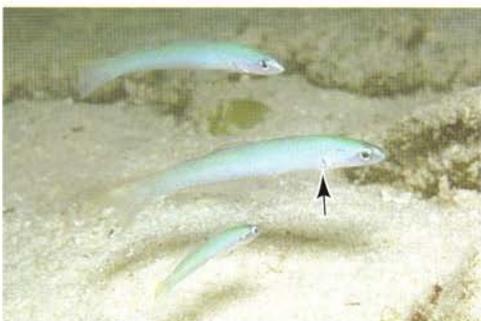
Ptereleotris monoptera

SIZE: to 15 cm (6 in.)

Dartfishes - Ptereleotridae

ID: Pale blue to green to yellow with wash of blue over belly; **broad blackish bar below eye**; tail of adults trail filaments from upper and lower lobes. Form loose colonies. Shelter in burrows on sand and rubble or hard bottoms in 6-15 m.

Indo-Pacific: Seychelles to Line Is. and Society Is. in French Polynesia. - S. Japan to S.E. Australia.



PEARLY DARTFISH

Ptereleotris microlepis

SIZE: to 13 cm (5 in.)

Dartfishes - Ptereleotridae

ID: Pale bluish to pinkish gray; usually several iridescent bluish stripes on head, **narrow black bar on base of pectoral fin**, numerous indistinct body bars. Form small to large colonies. Shelter in burrows on sand and rubble near reefs to 22 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and Tuamotu Is. in French Polynesia. - S.W. Japan to S.E. Australia.

Dartfishes - Wormfishes



ZEBRA DARTFISH

Ptereleotris zebra

SIZE: to 12 cm (5 in.) Dartfishes - Ptereleotridae

ID: Green to greenish gray with about 20 narrow orange to pink bars edged with blue; darkish bar below eye and across pectoral fin base. Usually form aggregations over hard bottoms. Exposed areas affected by surge in 2-10 m.

Indo - Pacific: Red Sea and Seychelles to Line Is. and Marquesas Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



YELLOW-STRIPED DARTFISH

Parioglossus formosus

Dartfishes - Ptereleotridae

SIZE: to 4 cm (1 1/2 in.)

ID: Broad yellowish stripe from snout to tail wedged between pair of dark brown to blackish stripes that converge to form point on tail. Form dense aggregations near surface. Sheltered bays, mangroves and marine lakes.

West Pacific: Indonesia, Philippines, Papua New Guinea, Great Barrier Reef, Vanuatu and Fiji, north to S.W. Japan.



NAKED DARTFISH

Parioglossus nudus

SIZE: to 2 cm (1 in.) Dartfishes - Ptereleotridae

ID: Translucent with light orange-brown mid-lateral stripe and white belly; slightly concave tail. Form aggregations. Sheltered coastal reefs in 5-35 m.

West Pacific: Philippines, Indonesia, Palau in Micronesia, Papua New Guinea, Solomon Is. to Fiji.



MINI DARTFISH

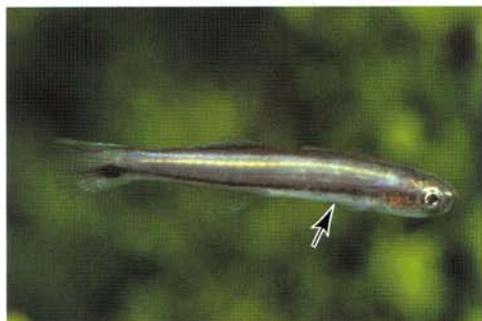
Aiollops megastigma

SIZE: to 3 cm (1 1/4 in.)

Dartfishes - Ptereleotridae

ID: Yellowish head, mauve back and brown lower side, bluish belly; black stripe along back and large black spot on tail. Form groups that hover over coral thickets. Sheltered shoreline and lagoon reefs in 2-10 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



INTERRUPTED DARTFISH

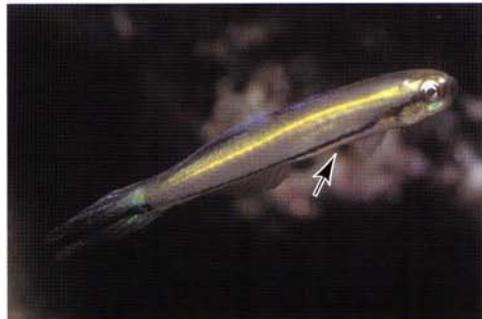
Parioglossus interruptus

SIZE: to 3 cm (1 1/4 in.)

Dartfishes - Ptereleotridae

ID: Brownish with white belly; yellow mid-lateral stripe, thin blackish stripe extends along lower body to black marking on tail. Forms aggregations near the surface. Marine lakes, tidal streams and mangrove swamps.

Asian Pacific: Indonesia, Philippines and Papua New Guinea, north to S. Japan.



RAO'S DARTFISH

Parioglossus raoi

SIZE: to 3 cm (1 1/4 in.)

Dartfishes - Ptereleotridae

ID: Light brown; yellow mid-lateral stripe, dark brown to blackish stripe extends diagonally from eye to light brown belly and along lower body to tail base. Form aggregations near surface. Sheltered rocky shorelines and mangroves.

Indo - West Pacific: Arabian Gulf to Indonesia, Micronesia, Fiji, north to S.W. Japan.

Elongate Sand & Burrow Dwellers



ROBUST RIBBONGOBY

Oxymetopon compressus

SIZE: to 20 cm (8 in.)

Dartfishes - Ptereleotridae

ID: Laterally compressed body; light blue-gray, dusky lower body and **blackish lower tail**; faint blue diagonal body bands, widely scattered blue markings on head. Form small groups. Shelter in burrows on mud bottoms in 15-40 m.

Asian Pacific: S. China, Indonesia and Philippines.



BLUE-BARRED RIBBONGOBY

Oxymetopon cyanoctenusum

SIZE: to 20 cm (8 in.)

Dartfishes - Ptereleotridae

ID: Light blue-gray with **wavy body bands**, pale yellowish gill cover and lower belly; blue markings on head. Solitary or form small groups. Shelter in burrows on silt or mud slopes in 20-45 m.

Asian Pacific: S. Japan, Indonesia, Papua New Guinea and N. Australia.



CURIOUS WORMFISH

Gunnelichthys curiosus

SIZE: to 12 cm (5 in.)

Wormfishes - Microdesmidae

ID: Elongate worm-like body; bluish white with broad orange stripe from snout to tail base; black spot on tail. Solitary or in pairs. Hover or swim with undulating motion just above sand and rubble at base of outer slopes in 9-60 m.

Indo-Pacific: Madagascar and Seychelles to Great Barrier Reef, Hawaii and Society Is. in French Polynesia.



ONESPOT WORMFISH

Gunnelichthys monostigma

SIZE: to 11 cm (4 1/4 in.)

Wormfishes - Microdesmidae

ID: Elongate worm-like body; light blue to tan; small dark spot on rear gill cover of head, blue semicircle under eye. Solitary or in pairs. Hover or swim with undulating motion just above sand and rubble bottoms of lagoons in 6-20 m.

Indo-Pacific: East Africa to Micronesia and Marquesas and Society Is. in French Polynesia. - S.W. Japan to N. Australia.



ONESTRIPE WORMFISH

Gunnelichthys pleurotaenia

SIZE: to 9 cm (3 1/2 in.)

Wormfishes - Microdesmidae

ID: Elongate worm-like body; pale gray to yellow-white with narrow orange-brown to black stripe from snout to tail base. Solitary or in pairs. Hover or swim with undulating motion just above sand bottoms of lagoons and sheltered reefs in 3-15 m.

West Pacific: Indonesia and Philippines to Samoa - S.W. Japan and Micronesia to Great Barrier Reef.



ORANGESTRIPE WORMFISH

Gunnelichthys viridescens

SIZE: to 10 cm (4 in.)

Wormfishes - Microdesmidae

ID: Elongate worm-like body; orange-brown to salmon with pearly mid-lateral stripe, orange lips, orange stripe through eye, bright orange stripe on mid-tail. Solitary or pairs. Hover or swim with undulating motion above sand and rubble slopes in 3-50 m.

Indo-Asian Pacific: Arabian Gulf and Seychelles to Marshall Is. and Palau in Micronesia and Great Barrier Reef.

Sand Divers - Bandfishes - Convict Blennies - Tilefishes



THREADFIN SAND DIVER

Trichonotus elegans

SIZE: to 18 cm (7 in.)

Sand Divers - Trichonotidae

ID: Male - Pale brown to gray with horizontal rows of spots, large whitish to yellow ventral fins; 3-4 very long spotted rays extend from darkish spot on front of dorsal fin. Loose aggregations form just above sand; bury in sand when alarmed. Sand slopes to 40 m.

West Pacific: S.W. Japan, Indonesia, Coral Sea to Fiji.



Threadfin Sand Diver - Female

ID: Pale brown to gray with horizontal rows of spots; short **black spot with white margin on front of dorsal fin**. Rest on sand when not swimming; bury at night or when threatened.



GOLDBAR SAND DIVER

Trichonotus halstead

SIZE: to 15 cm (6 in.)

Sand Divers - Trichonotidae

ID: Male - Tan with numerous white to gold spots on body and fins; **8-9 brown bars across back**, black shaded ventral fins, 1-2 large ocellated spots on dorsal fin, 5-6 long rays dorsal fin rays. Sand slopes in 12-35 m.

Localized: Sulawesi in Indonesia to Papua New Guinea.



Goldbar Sand Diver - Female

ID: Similar to males, but with white ventral fins and lack the dramatic dorsal fin markings and long rays.



SPOTTED SAND DIVER

Trichonotus setiger

SIZE: to 15 cm (6 in.)

Sand Divers - Trichonotidae

ID: Male - Tan with numerous white spots; **10-11 brown body bars**; dorsal fin translucent with white spots on rays; males have long front dorsal rays. Form loose aggregations just above sand; bury when alarmed. Sandy bottoms in 1-20 m.

Indo-Asian Pacific: Persian Gulf to Great Barrier Reef, Coral Sea and New Caledonia.



PEARLY SIGNALFISH

Not classified

SIZE: to 3 cm (1 1/4 in.)

Signalfishes - Percophididae

ID: Male - Silvery to pinkish brown; row of white spots on back with row of blue dashes below; very tall 1st dorsal fin. **Female** - Similar, but with much shorter black 1st dorsal fin. Both sexes rest on long ventral fins. Sand slopes in 30-50 m.

Asian Pacific: Indonesia and Philippines.

Elongate Sand & Burrow Dwellers



YELLOW-SPOTTED BANDFISH

Acanthocephala breviata

SIZE: to 20 cm (8 in.) Bandfishes - Cepolidae

ID: Eel-like body with short ventral fins; red to red-brown with narrow yellow to orange bars. Form colonies in separate burrows on mud or silt bottoms in 10-40 m.

Localized: Indonesia.



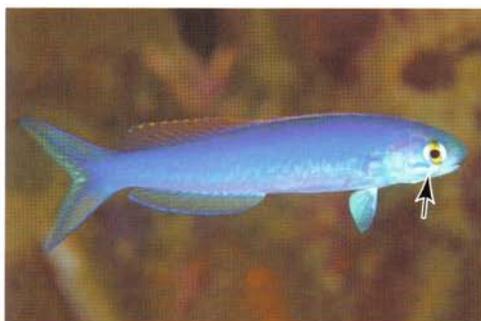
CONVICT BLENNY

Pholidichthys leucotaenia

SIZE: to 10 cm (4 in.) Convict Blennies - Pholidichthyidae

ID: **Juvenile** - Blackish with whitish stripe from eye to rear body. **Adults** - Black saddles and white bars, to 34 cm (14 in.). Form large schools that feed over sand and rubble bottoms; mimic Stripped Catfish. Coastal reefs in 3-30 m.

Indo - Pacific: Red Sea and Seychelles to Line Is. and Marquesas Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



CHLUPATY'S TILEFISH

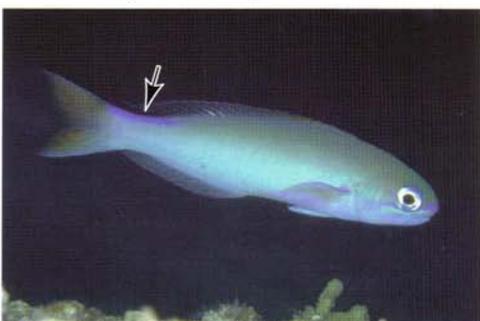
Hoplolatilus chlupaty

SIZE: to 15 cm (6 in.)

Tilefishes - Malacanthidae

ID: Sky blue with pair of darker blue stripes on cheek; **yellow bar on iris**, occasionally broad yellow area on back or with narrow yellow area on base of dorsal fin. Solitary. Rubble slopes in 30-55 m.

Asian Pacific: Indonesia and Philippines.



STOCKY TILEFISH

Hoplolatilus fronticinctus

SIZE: to 17 cm (6 3/4 in.)

Tilefishes - Malacanthidae

ID: Pale blue to green with **long blue patch from end of rear dorsal fin to tail**; stout/deep body compared to other tilefishes. Groups hover above huge constructed mounds of sand and rubble on deep sand and rubble slopes in 35-70 m.

Indo - Asian Pacific: Mauritius and India to Philippines and Solomon Is.



PALE TILEFISH

Hoplolatilus cuniculus

SIZE: to 15 cm (6 in.)

Tilefishes - Malacanthidae

ID: Pale gray to yellowish with fine blue margin on dorsal and anal fins. Solitary, in pairs or loose colonies; shy, quickly retreat to burrows when threatened. Rubble slopes on outer reefs in 25-115 m.

Indo-Pacific: E. Africa to Marshall Is. and Society Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



YELLOW TILEFISH

Hoplolatilus luteus

SIZE: to 11 cm (4 1/4 in.)

Tilefishes - Malacanthidae

ID: Yellow with whitish breast and belly; blue marking above eye, black spot on upper gill cover. Solitary or form small groups. Flat mud or fine silt bottoms well away from reefs in 30-40 m.

Localized: Known only from Maumere Bay, Flores I. in Indonesia.

Tilefishes - Dragonets



BLUEHEAD TILEFISH

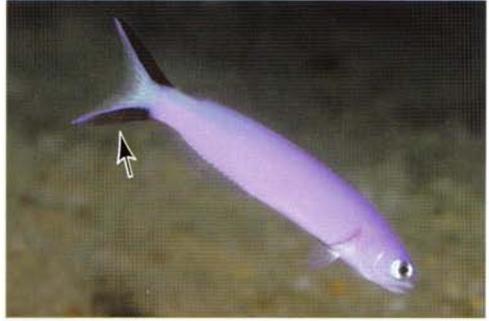
Hoplolatilus starcki

SIZE: to 15 cm (6 in.)

Tilefishes - Malacanthidae

ID: Yellowish tan with bright blue head and bright yellow tail.
Juvenile - Sky blue without marking. Similar to Purple Queen Anthias; often mix with anthias. Usually in pairs. Hover above burrows of sand and rubble on outer reef slopes in 20-105 m.

West Pacific: Indonesia, Philippines and Micronesia to N. Australia and Fiji.



PURPLE TILEFISH

Hoplolatilus purpureus

SIZE: to 12 cm (5 in.)

Tilefishes - Malacanthidae

ID: Lavender with **broad dark red to black upper and lower borders on tail**. Solitary or form small groups; shy, retreating to sandy burrow when threatened. Sand and rubble slopes of seaward reefs in 18-80 m.

Asian Pacific: Philippines and Solomon Is.



REDLINED TILEFISH

Hoplolatilus marcosi

SIZE: to 11 cm (4 1/4 in.)

Tilefishes - Malacanthidae

ID: White with vivid arching red stripe that narrows on rear body before widening on tail. Solitary or form small groups; shy, retreat to sandy burrow when threatened. Sand and rubble slopes of seaward reefs in 18-60 m.

Asian Pacific: Indonesia, Philippines, Palau in Micronesia, New Guinea and Solomon Is.



FLAGTAIL BLANQUILLO

Malacanthus brevirostris

SIZE: to 30 cm (12 in.)

Tilefishes - Malacanthidae

ID: Pale yellow head and pale blue body; pair of black stripes on tail, vague body bars. Usually in pairs; hover with undulating motion near sandy burrows typically constructed under rocks. Sand and rubble of seaward reefs in 14-45 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Panama. - S. Japan to E. Australia.



BLUE BLANQUILLO

Malacanthus latovittatus

SIZE: to 35 cm (14 in.)

Tilefishes - Malacanthidae

ID: Blue head with blue to blue-green back and pale underside; broad black mid-lateral stripe extends onto tail. Solitary or in pairs; swim away when threatened rather than retreating to burrows. Sand and rubble areas in 5-30 m.

Indo-Pacific: Red Sea to E. Africa and to Cook Is. and Line Is. in east Central Pacific. - S. Japan to New Caledonia.



Blue Blanquillo - Juvenile

SIZE: to 12 cm (5 in.)

ID: Primarily black with white stripe on back that extends onto upper edge of tail; with increased growth white areas expands and the black area is reduced to a thin mid-lateral stripe.

Elongate Sand & Burrow Dwellers



FINGERED DRAGONET

Dactylopus dactylopus

SIZE: to 15 cm (6 in.)

Dragonets - Callionymidae

ID: Male - Spotted in shades of brown; separated 1st ray of ventral fin used for "walking"; 1st dorsal fin with long filamentous rays and blue spot between 1st and 2nd rays. Solitary or in pairs on sandy bottoms in 3-55 m.

Asian Pacific: Andaman Sea to Indonesia and Philippines. Taiwan and S.W. Japan to N. Australia.



Fingered Dragonet - Female

ID: Spotted in shades of brown; alternating dark and light bands on tail, black ocellated spot on lower rear of long 1st dorsal fin and dark horizontal streaks on 2nd dorsal fin.



ORANGE & BLACK DRAGONET

Dactylopus kuiteri

SIZE: to 15 cm (6 in.)

Dragonets - Callionymidae

ID: Spotted in shades of brown; very long 1st dorsal fin with large ocellated spot near rear base, (Similar Finger Dragonet female [previous] has shorter 1st dorsal.); bright blue spots on anal fin. Solitary or in pairs. Sand bottoms to 40 m.

Localized: Bali to Flores and N. Sulawesi in Indonesia.



Orange & Black Dragonet - Juvenile

ID: Juvenile - White with black and orange marked dorsal fins, with maturity become females. **Female** - Body spotted in shades of brown and mostly yellow tail except dark margin. **Male** - Lose yellow in tail. All have orange lips.



PICTURESQUE DRAGONET

Synchiropus picturatus

SIZE: to 6 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: Light brown to greenish covered with large dark spots ringed with orange and green, blue-green band markings around eye. Form small loose groups. Rubble patches near living corals of coastal reefs in 2-10 m.

Asian Pacific: N.W. Australia, Indonesia and Philippines.



MANDARINFISH

Synchiropus splendidus

SIZE: to 6 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: Orange with ornate pattern of dark-edged green and blue bands and spots and a few yellow line markings on lower head. Small groups shelter among coral rubble. Come out of hiding at dusk to spawn. Sheltered coastal reefs and lagoons to 18 m.

Asian Pacific: S.W. Japan, Indonesia, Philippines, E. Caroline Is. in Micronesia and New Caledonia.

Dragonets



MORRISON'S DRAGONET

Synchiropus morrisoni

Dragonets - Callionymidae

SIZE: to 4.5 cm (1 3/4 in.)

ID: **Male** - Red to pink with random black blotches; **large black blotch at pectoral fin base**; vertical stripes on tall 1st dorsal fin. Solitary, in pairs or small groups. Algal-turf rocks of seaward reefs in 10-33 m.

West Pacific: S. Japan, Micronesia, W. Australia, Fiji and Samoa.



Morrison's Dragonet - Female

ID: Red to pink with random dark blotches, especially toward rear body; large dark blotch at pectoral base; **dusky fan-shaped first dorsal fin with vertical streaks**.



Morrison's Dragonet - Juvenile

SIZE: to 2.5 cm (1 in.)

ID: Tan to whitish head and back and gray or charcoal on lower side with white spots of various sizes. Young fish generally solitary on algal-covered rocks.



MOYER'S DRAGONET

Synchiropus moyeri

Dragonets - Callionymidae

SIZE: to 7.5 cm (3 in.)

ID: **Male** - Whitish undercolor with reddish brown blotches; large fan-shaped dorsal fin marked with concentric bands and pair of dark "eye" spots. Solitary or form small groups dominated by a single large male. Algae covered rocks in 3-30 m.

Asian Pacific: S. Japan, Indonesia, Palau in Micronesia, N.W. Australia and Great Barrier Reef.



Moyer's Dragonet - Female

ID: Whitish with red to reddish brown blotches; **small fan-shaped dorsal fin marked with dark brown to blackish bands**, pair of dark "eye" spots. Solitary or form small groups dominated by a single large male.



Moyer's Dragonet - Small Juvenile

SIZE: to 1.5 cm (1/2 in.)

ID: Red to pink undercolor with large white spots; **red bands around eyes**, black first dorsal fin with pair of orange streaks. Solitary on algae covered rocks.

Elongate Sand & Burrow Dwellers



BARTELS' DRAGONET

Synchiropus bartlesi

SIZE: to 4.5 cm (1 3/4 in.)

Dragonets - Callionymidae

ID: **Male** - Shades of brown to red; **row of white mid-lateral spots with black semicircular edge on upper portion of each spot**; tall dorsal fin. Solitary or in pairs. Lagoon and seaward reefs in 6-35 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



Bartels' Dragonet - Female/Red Phase

ID: Adults in all phases have tiny blue ocellated spots on back and the mid-lateral semicircular markings. Note low first dorsal fin characteristic of female.



OCCELLATED DRAGONET

Synchiropus ocellatus

SIZE: to 7 cm (2 1/2 in.)

Dragonets - Callionymidae

ID: Dark greenish brown to golden brown with irregular whitish saddles and blotches; blue dots on head. **Male** - Large fan-shaped dorsal fin with concentric bands and pair of dark ocellated spots. Solitary or in small groups. Sandy areas to 30 m.

Pacific: Vietnam and Micronesia to Pitcairn I. east of French Polynesia. - S.W. Japan to Great Barrier Reef.



Ocellated Dragonet - Small Juvenile

SIZE: to 2 cm (1 in.)

ID: White with dark brown to blackish areas, large area on mid-side with 2 large white spots; both the juvenile and female have **dark 1st dorsal fin except for clearish outer margin**. Rubble and algal-covered turf in 2-18 m.



STARRY DRAGONET

Synchiropus stellatus

SIZE: to 6 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: **Male** - Red with white and black blotches and saddles, **yellowish snout tip**; blue spots and lines on head; tall dorsal fin ornately banded with pale-edged spot in middle. Solitary or form small groups. Sandy areas in 5-20 m.

Indian Ocean: E. Africa to Andaman Sea and Sumatra in Indonesia.



Starry Dragonet - Juvenile

SIZE: to 3 cm (1 1/4 in.)

ID: White with red blotches; **red bands on 2nd dorsal and anal fin**, red bands around eye, short black first dorsal fin. **Female** - Similar, but red blotches more extensive.

Dragonets - Sandperches



LEAFY DRAGONET

Anaora tentaculata

SIZE: to 4.5 cm (1 3/4 in.)

Dragonets - Callionymidae

ID: Mottled and spotted shades of brown and gray; **numerous small skin flaps on side of body.** Solitary, expert at camouflage. Sand, rubble and weedy bottoms near coastal, lagoon and outer reefs in 1-30 m.

Asian Pacific: Indonesia, Philippines, Palau and Yap in Micronesia and Papua New Guinea.



SUPERB DRAGONET

Callionymus superbus

SIZE: to 15 cm (6 in.)

Dragonets - Callionymidae

ID: **Female** - Blotchy brown with numerous small pale spots of variable size; **1st dorsal fin low and triangular.** **Male** - Similar, but with long filamentous rays on 1st dorsal fin. Solitary or in pairs. Sand and rubble in 2-15 m.

Localized: Indonesia.



LONG FILAMENT DRAGONET

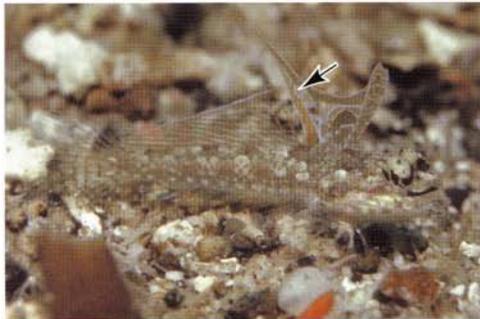
Callionymus keeleyi

SIZE: to 6 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: Mottled shades of brown; wavy dark bands on dorsal fins, **blue spots and lines on head;** 1st 2 dorsal fin spines trail long filamentous. Solitary or form small groups. Sand and rubble bottoms near reefs of coastal, lagoon and outer reefs in 5-60 m.

Asian Pacific: E. Indonesia, Philippines and Papua New Guinea.



LITTLE SAND DRAGONET

Callionymus parvus

SIZE: to 4.5 cm (1 3/4 in.)

Dragonets - Callionymidae

ID: **Male** - Spotted shades of brown; **ornately marked 1st dorsal fin has elongate orange rear edge.** In pairs or small groups. Sand and rubble bottoms near coastal reefs to 10 m.

Asian Pacific: S. Japan, Philippines, Indonesia and N. Australia.



FLOWERY DRAGONET

Callionymus sp.

SIZE: to 6 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: **Male** - Shades of brown; **pair of dark bars below eye,** flower-like markings on upper side, irregular dark markings on side and numerous vertical pale lines. Solitary or form small groups. Sand and rubble bottoms near coastal reefs in 5-20 m.

Asian Pacific: Indonesia, Papua New Guinea and N. Australia.



BLUE-SPOTTED DRAGONET

Callionymus sp.

SIZE: to 5.5 cm (2 1/4 in.)

Dragonets - Callionymidae

ID: Gray with dark and white spots and blotches; **short dark band on side of snout,** blue spots or lines on cheek, gill cover, lower sides and fins. Solitary, in pairs or small groups. Sand and rubble bottoms primarily of coastal reefs in 3-15 m.

Asian Pacific: Indonesia and Papua New Guinea.

Elongate Sand & Burrow Dwellers



GORAM DRAGONET

Diplogrammus goramensis

SIZE: to 8 cm (3 in.)

Dragonets - Callionymidae

ID: Shades of brown with flower like spots; blue-edged brown bars on cheek, **irregular blue marking on gill cover**; distinct horizontal ridge on lower side. Solitary or form small groups. Sand and rubble bottoms of lagoon and seaward reefs in 5-40 m.

West Pacific: Indonesia to Marshall Is. in Micronesia and Cook Is. - China to Great Barrier Reef.



NORTHERN DRAGONET

Diplogrammus xenicus

SIZE: to 7 cm (2 1/2 in.)

Dragonets - Callionymidae

ID: Shades of brown with irregular bands on body; blue scribble markings on snout and cheek; **horizontal ridge on lower side marked with alternating black and white bars**. Solitary or in pairs. Sand and rubble bottoms in 2-30 m.

Localized: W. Australia and Okinawa to mainland Japan.



LATTICED SANDPERCH

Parapercis clathrata

SIZE: to 17.5 cm (7 in.)

Sandperches - Pinguipedidae

ID: **Male** - Grayish tan back with darkish blotches, white below with row of black centered orangish brown bars or spots on lower body; dark ocellated spot above gill cover. Solitary or small groups. Sand and rubble of lagoon and seaward reefs in 3-50 m.

East Indo-West Pacific: Andaman Sea to Phoenix Is. and Samoa. - S.W. Japan to Australia.



Latticed Sandperch - Female

ID: Similar to male, but lack ocellated spot; both have tiny black spots on cheek and white or yellow streak in tail.



SPECKLED SANDPERCH

Parapercis hexophthalma

SIZE: to 28 cm (11 in.)

Sandperches - Pinguipedidae

ID: **Female** - White with grayish back; numerous dark lines, spots and speckles, **large black spot on tail**. **Male** - Dark wavy lines on cheek. Solitary or form small loose groups. Sand or rubble bottoms of coastal, lagoon and outer reefs in 8-25 m.

Indo-West Pacific: Red Sea and E. Africa and to Marshall Is. in Micronesia and Samoa. - S.W. Japan to Great Barrier Reef.



Speckled Sandperch - Variation

ID: Brown with narrow pale bars on back; row of large white spots on mid-side with central dark spot; row of dark spots on upper edge of white belly, **large black spot on tail (the consistent marking on all variations)**. **Male** - Wavy yellow lines on cheek.

Sandperches



HARLEQUIN SANDPERCH *Parapercis maculatus*

SIZE: to 20 cm (8 in.) Sandperches - Pinguipedidae

ID: Reddish to gray-brown back and whitish below; 6 large irregular dark reddish brown body bars, **curved blue lines on cheek**. Solitary. Sand and rubble bottoms of coastal reefs in 5-25 m.

Indo-North Asian Pacific: E. Africa and Oman to Hong Kong, Taiwan and Japan.



RETICULATED SANDPERCH *Parapercis tetracantha*

SIZE: to 26 cm (10 in.) Sandperches - Pinguipedidae

ID: Whitish with 7-8 squarish saddles on back connected to bars on lower body; **black blotches through lips and under eye**, 3 rows of black spots on dorsal fin. Solitary or form small groups. Sand and rubble bottoms near reefs in 12-25 m.

Indo-Asian Pacific: Bay of Bengal to Papua New Guinea, north to S. Japan.



PHOENIX SANDPERCH *Parapercis* sp.

SIZE: to 26 cm (10 1/4 in.) Sandperches - Pinguipedidae

ID: Whitish with about 9 narrow gray bars from rear head to tail base; dark band below eye, scattered small dark spots on top of head front of body. Solitary or form small groups. Sand and rubble bottoms of seaward reefs in 8-35 m.

Localized: Phoenix and Line Is. in eastern Central Pacific.



SPOTTED SANDPERCH *Parapercis millipunctata*

SIZE: to 18 cm (7 in.) Sandperches - Pinguipedidae

ID: Pale undercolor with intermingled dark and light brown blotches on back; **double row of large brown to blackish spots on mid-side and lower side**, white streak on tail. Solitary or small groups. Sand and rubble near reefs in 4-30 m.

Indo-Pacific: Mauritius and Maldives to Pitcairn I. east of French Polynesia. - S.W. Japan to Australia.



SHARPNOSE SANDPERCH *Parapercis cylindrica*

SIZE: to 23 cm (9 in.) Sandperches - Pinguipedidae

ID: Whitish undercolor; about 8 dark squarish bars on back and about 8 dark bars on lower body aligned between bars on back, **narrow dark bar below eye**. Solitary or form small groups. Silty sand, rubble and weedy bottoms to 20 m.

West Pacific: Gulf of Thailand to Marshall Is. in Micronesia and Fiji. - S. Japan to Australia.



RED-BARRED SANDPERCH *Parapercis multiplicata*

SIZE: to 12 cm (5 in.) Sandperches - Pinguipedidae

ID: Whitish with 8 narrow red bars below back each containing a pair of small dark spots; **red or black spot on belly above ventral fin base**. Solitary or form small groups. Sand and rubble bottoms of clear water reefs in 25-40 m.

Pacific: S.W. Japan, Indonesia, N. Australia, Papua New Guinea, New Caledonia to Pitcairn I. east of French Polynesia.

Elongate Sand & Burrow Dwellers



RED-SPOTTED SANDPERCH

Parapercis schauinslandi

SIZE: to 13 cm (5 in.)

Sandperches - Pinguipedidae

ID: White with 8-9 red to brownish bars or pairs of large spots, red 1st dorsal fin and pair of small dark spots on tail base; lunate tail. Solitary or form groups. Sand and rubble bottoms of seaward reef slopes in 10-50 m.

Indo-Pacific: E. Africa to Guam and Palau in Micronesia, Hawaii and Pitcairn I. in east Pacific. - S. Japan to Great Barrier Reef.



Red-spotted Sandperch - Variation

ID: Individuals below 15 m frequently exhibit pinkish hue. Unlike most sandperches that remain on the bottom, this species frequently hovers in mid-water feeding on zooplankton.



NOSESTRIP SANDPERCH

Parapercis lineopunctata

SIZE: to 12 cm (5 in.)

Sandperches - Pinguipedidae

ID: White with darkish saddles on back and narrow bars aligned between saddles on sides; **black stripe from snout through eye**. Solitary or form small groups. Usually on clean sand near reefs in 5-35 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



Nosestripe Sandperch - Juvenile

SIZE: to 5 cm (2 in.)

ID: White with narrow black stripe from snout through eye and on back to tail base, a 2nd narrow stripe below from eye to mid-body. This marking pattern occasionally occurs on adults.



JAVA SANDPERCH

Parapercis xanthozona

SIZE: to 23 cm (9 in.)

Sandperches - Pinguipedidae

ID: Mottled shades of reddish brown on back, white below with 10 red body bars each marked with central black spot; **3 bars on lower head**, yellowish streaks on tail. Solitary or form small groups. Sand and rubble bottoms near coastal reefs in 2-20 m.

Localized: Known only from Java and Bali in Indonesia.



YELLOWTAIL SANDPERCH

Parapercis sp.

SIZE: to 14 cm (5 1/2 in.)

Sandperches - Pinguipedidae

ID: White undercolor; irregular dark markings on back with 9 gray to black bars on side with 2 rows of black spots between; **yellow to greenish yellow tail**. Solitary or form small loose groups. Sand and rubble bottoms near coastal reefs in 3-20 m.

Localized: Bali and eastward in Indonesia.

Sandperches - Lizardfishes



BLACKFIN SANDPERCH

Parapercis snyderi

SIZE: to 11 cm (4 1/4 in.)

Sandperches - Pinguipedidae

ID: Whitish to reddish or pink undercolor with 5 brown to reddish brown saddles on back and 8-9 darkish bars on side; dark margin on tail, black 1st dorsal fin. Sand and rubble bottoms near reefs in 10-40 m.

Asian Pacific: S. Japan, Korea, Indonesia, Papua New Guinea and Great Barrier Reef.



Blackfin Sandperch - Variation

ID: Occasionally only faint bars on lower side and display a cluster of pearly spots on lower gill cover and belly. All variations have a pearly line marking in front and another under the eye.



WHITESTRIPE SANDPERCH

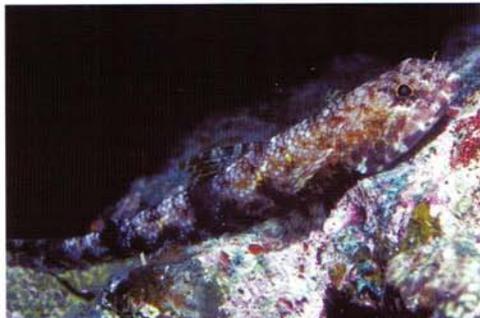
Parapercis sp.

SIZE: to 23 cm (9 in.)

Sandperches - Pinguipedidae

ID: **Male** - Whitish to brownish; about 6 U-shaped dark saddles on back and about 10 bars on lower side; whitish stripe from pectoral fin to upper tail base, orange bands on cheek. Solitary or form small groups. Silty bottoms near reefs in 10-25 m.

Asian Pacific: Singapore, Philippines, Indonesia and Palau in Micronesia.



SLENDER LIZARDFISH

Saurida gracilis

SIZE: to 28 cm (11 in.)

Lizardfishes - Synodontidae

ID: Mottled gray to brown; 3 dark or diffuse bars on rear body; line pattern on lips and visible teeth when mouth closed. Solitary. Sand or silty bottoms near protected reefs to 12 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



CLOUDED LIZARDFISH

Saurida nebulosa

SIZE: to 20 cm (8 in.)

Lizardfishes - Synodontidae

ID: Very similar to Slender Lizardfish [previous], but distinguished by its shorter pectoral fins, rear edge does not extend to above ventral fin base or 4-6 scales from 1st dorsal fin. Solitary. Sand and silt bottoms in 2-60 m.

Indo-Pacific: Mauritius to Mariana Is. and Palau in Micronesia, Hawaii and French Polynesia and Great Barrier Reef.



CLEARFIN LIZARDFISH

Synodus dermatogenys

SIZE: to 20 cm (8 in.)

Lizardfishes - Synodontidae

ID: Mottled gray to brown; 6 saddles across back, 8-9 dark diamond-shaped spots frequently with pale centers along mid-side, cluster of 6 dark spots on snout tip. Solitary, in pairs or small groups. Sand or rubble bottoms to 70 m.

Indo-Pacific: Red Sea and E. Africa and to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.

Elongate Sand & Burrow Dwellers



TWOSPOT LIZARDFISH

Synodus binotatus

SIZE: to 17 cm (6 3/4 in.)

Lizardfishes - Synodontidae

ID: Mottled gray to brown; pair of dark spots on tip of snout, several irregular brown to red bars on side and **row of blotches on lower side**. Solitary or in pairs. Rubble or living coral of seaward reefs in 1-30 m, but usually less than 10 m.

Indo-Pacific: Gulf of Aden to and Hawaii. Taiwan to Great Barrier Reef.



BLACKBLOTCH LIZARDFISH

Synodus jaculum

SIZE: to 14 cm (5 1/2 in.)

Lizardfishes - Synodontidae

ID: Mottled gray to brown with bars across back and diamond-shaped spots on sides; **distinguished by black band around tail base**. Solitary, in pairs or small groups.; occasionally swim high above bottom. Sand and rubble bottoms in 2-88 m.

Indo-Pacific: Red Sea and E. Africa and to Line Is. and Society Is. in French Polynesia. - S.W. Japan to Australia.



REEF LIZARDFISH

Synodus variegatus

SIZE: to 24 cm (9 in.)

Lizardfishes - Synodontidae

ID: Gray to brown to red with about 6 blotchy saddles; **darkish strip interspersed with pale blotches on mid-side, white stripe below interspersed with dark rectangular markings**. Solitary or in pairs. Usually on coral or rock bottoms in 5-60 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Ducie I. east of French Polynesia. - S.W. Japan to Australia.



Reef Lizardfish - Phase

ID: Often pale or darken markings.



REDMARBLED LIZARDFISH

Synodus rubromarmoratus

SIZE: to 8.5 cm (3 1/4 in.)

Lizardfishes - Synodontidae

ID: Relatively small compared to other lizardfishes; reddish brown with red or pink head markings, **series of irregular hourglass-shaped red body saddles**. Solitary or form small groups. Sand and rubble, mainly near seaward reefs in 5-50 m.

Asian Pacific: Taiwan, Indonesia, Philippines, Guam in Micronesia, New Guinea, Solomon Is. and Great Barrier Reef.



SNAKEFISH

Trachinocephalus myops

SIZE: to 25 cm (10 in.)

Lizardfishes - Synodontidae

ID: Brown to brownish yellow stripes alternate with pale blue stripes; dark to vague bars, black spot on upper rear gill opening; short rounded and upturned snout. Solitary, often buried except for eyes. Sand bottoms in 3-400 m.

Circumtropical: Absent in E. Pacific.

Pearlfishes - Jawfishes



SILVER PEARLFISH

Encheliophis homei

SIZE: to 14 cm (5 1/2 in.)

Pearlfishes - Carapidae

ID: Translucent with silvery head, dark body organs and backbone; elongate tapering body. Live in body cavity of large sea cucumbers, entering through anus, leave host to feed at night. Sand and rubble areas to 30 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Society Is. in French Polynesia. - S.W. Japan to Australia.



DARWIN JAWFISH

Opistognathus darwiniensis

SIZE: 45 cm (17 3/4 in.)

Jawfishes - Opistognathidae

ID: Tan with small brown spots and blotches; yellowish fins with prominent bands or spots, pale-rimmed black spot on front of dorsal fin. Solitary. Inhabit rock-lined burrows on tidal flats and coastal reefs to 10 m.

Localized: N.W. Australia to Gulf of Carpentaria, Queensland in Australia.



PAPUAN JAWFISH

Opistognathus papuensis

SIZE: to 45 cm (17 1/2 in.)

Jawfishes - Opistognathidae

ID: Pale brown to light gray with black round and elongate spots. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms near reefs in 5-60 m.

Localized: N. Australia and New Guinea.



WASS'S JAWFISH

Opistognathus sp.

SIZE: to 13 cm (5 in.)

Jawfishes - Opistognathidae

ID: Red brown; white blotches on head and double row of large white blotches on body, prominent white-edged black spot on front of dorsal fin. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms in 10-45 m.

West Pacific: Philippines, Indonesia, Papua New Guinea, Great Barrier Reef, Coral Sea and Fiji.



SOLOR JAWFISH

Opistognathus solorensis

SIZE: to 9 cm (3 1/2 in.)

Jawfishes - Opistognathidae

ID: Mottled in shades of tan to yellow-brown to red-brown; 1 or 2 dark oblong spots on front of dorsal fin, 4-5 white spots below dorsal fin, 2 faint bars on upper lip extend into upper mouth. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms in 10-45 m.

Asian Pacific: Taiwan, Philippines and Indonesia.



ANDAMAN JAWFISH

Opistognathus sp.

SIZE: to 13 cm (5 in.)

Jawfishes - Opistognathidae

ID: Dark brown head with blue spots, yellowish-brown front body gradating to blue rear body and yellow tail. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms near reefs in 5-25 m.

Localized: E. Andaman Sea off Sumatra, Malaysia, and Thailand.

Elongate Sand & Burrow Dwellers



YELLOWBARRED JAWFISH

Opistognathus sp.

SIZE: to 12 cm (4 3/4 in.)

Jawfishes - Opistognathidae

ID: Dark brown upper head and white body; 8-10 pale yellow to orange body bars, **bright yellow mark on front of upper iris**, yellowish dorsal, anal and tail fins, black spot on front of dorsal fin. Inhabit rock-lined burrows on sand and rubble bottoms near reefs in 5-30 m.

Asian Pacific: Borneo, Indonesia and Philippines.



Yellowbarred Jawfish - Male

ID: This species can be identified when only their heads protrude from burrows by the **bright yellow mark on front of upper iris**. Males mouthbrood clutches of eggs for five to seven days.



VARIABLE JAWFISH

Opistognathus sp.

SIZE: to 10 cm (4 in.) Jawfishes - Opistognathus

ID: Whitish, but during courtship males turn blue [pictured] and females orange; 8 evenly spaced double spots to blotches on lower dorsal fin and 7-8 darkish mid-lateral blotches. Solitary. Inhabit rock-lined burrows on sand and rubble bottom.

Asian Pacific: Indonesia, Philippines and Palau in Micronesia.



CHESTNUT JAWFISH

Opistognathus sp.

SIZE: to 10 cm (4 in.) Jawfishes - Opistognathidae

ID: Nearly uniform chestnut to yellowish brown; **bluish lower jaw, dorsal and ventral fins**. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms.

Asian Pacific: Indonesia, Philippines and Vanuatu.



BROWNBLOTCH JAWFISH

Opistognathus sp.

SIZE: to 10 cm (4 in.)

Jawfishes - Opistognathidae

ID: Whitish with brown mottling on upper head; **row of large brown mid-lateral blotches or spots**, darkish dorsal fin with whitish marks on spines. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms.

East Indo-Asian Pacific: Andaman Sea to Taiwan, Sulawesi and Waigeo I. in Indonesia.



DENDRITIC JAWFISH

Opistognathus dendriticus

SIZE: to 25 cm (9 3/4 in.)

Jawfishes - Opistognathidae

ID: Large; yellowish brown with dark brown spots and branching blotches; **brown "mask" through eye**, narrow white margin on dorsal fin and black blotch between 3rd and 5th spines. Solitary. Inhabit rock-lined burrows on sand and rubble bottoms near reefs in 2-40 m.

Asian Pacific: Sabah in N. Borneo and Philippines.

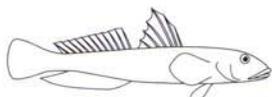
IDENTIFICATION GROUP 14

Small, Elongate Bottom Dwellers – Gobies

This ID Group consists of small, elongate, typically bottom-dwelling species in the family Gobiidae.

FAMILY: Gobies - Gobiidae

45 Genera – 191 Species Included



Typical Shape



Typical Shape



Genus *Gobiodon*

Gobies are the largest family of marine fishes with more than 1,600 species in 220 genera currently classified. Approximately 500 species in 212 genera inhabit the Indo-Pacific region; however, numerous species still remain undescribed.

Most of the small carnivores live on bottom habitats varying from coral reefs to sand flats. Gobies feed on tiny crustaceans, including shrimps, copepods, worms, sponges and mollusks. A few species dine on drifting plankton just above the bottom. Gobies have distinct two-part dorsal fins and ventral fins that join, or nearly join, beneath the body forming cup-shaped discs.

A large group of gobies live on the open sand. Because of the danger from roving predators, a few species excavate subterranean dwellings; however, a large number of species, known as shrimp gobies, survive by sharing burrows with snapping shrimps from genus *Alpheus*. The nearly-blind shrimps need the sharp-eyed gobies to warn of danger, while the gobies need a ready-made place to hide. Throughout the day the shrimps industriously maintain extensive winding tunnels connecting two or three enlarged chambers by continually hauling dirt up from below. Passages are typically one inch in diameter, two to four feet long and run a few inches beneath the surface. The instability of shifting sands in the upper sections requires constant maintenance and new burrow openings must be dug frequently. While the shrimps toil, the gobies perch near the burrow openings acting as sentinels, except, now and again, when they dart a few inches away to grab a mouthful of sand that is filtered for food. When the shrimps appear above ground, they nearly always keep at least one antenna in contact with the gobies' bodies, usually near their tails. Warning signals range from a slight tail twitch, indicating caution, to a thrash for alarm. Once the warning is given, the time it takes for the duo to disappear can be measured in tenths of a second.

Because of their vigilant nature, the burrowmates are difficult, but not impossible, to approach closely. Once a goby is sighted, remain still for a minute or two before moving slowly in its direction. To get a good view of the shrimps bulldozing their entranceways is worth the effort. They battle the shifting sands like power robots - heaving and hoisting, poking and plowing. Using their single enlarged snapping claws, the mini-titans lift shell fragments twice their weight, often to have the tunnel collapse for their efforts.

Small, Elongate Bottom Dwellers – Gobies



MAGNIFICENT SHRIMPGOBY

SIZE: to 12 cm (5 in.)

ID: Dark body with pale spots and bars; huge orangish or gray fan-shaped 1st dorsal fin with dark mosaic markings and huge orange fan-shaped tail with blue lines radiating from tail base. Share burrow with alpheid shrimp. Sand bottoms in 15-40 m.

Asian Pacific: S. Japan to Bali in Indonesia.

Flabelligobius sp.

Gobies - Gobiidae



RANDALL'S SHRIMPGOBY

SIZE: to 9 cm (3 1/2 in.)

ID: White with 6-7 orange bars on head and body; tall 1st dorsal fin with pale-edged black spot. Share burrow with alpheid shrimp. Under overhangs and shallow caves on steep outer reef slopes and dropoffs in 15-48 m.

West Pacific: Indonesia and Philippines to Fiji, north to S.W. Japan.

Amblyeleotris randalli

Gobies - Gobiidae



FLAGTAIL SHRIMPGOBY

Amblyeleotris yanoi

SIZE: to 12 cm (5 in.)

Gobies - Gobiidae

ID: White with 5 light brown diffuse bars, yellow and orange tail with blue line markings and blue stripes on 2nd dorsal and anal fins; dark bar markings on white iris. Share burrow with alpheid shrimp. Lagoon and seaward reef slopes in 3-35 m.

Asian Pacific: Bali in Indonesia to Palau and Papua New Guinea, north to S.W. Japan.



Flagtail Shrimpgoby - Variation

ID: Brownish yellow narrow bars between wide diffuse brown bars. All variations may have a yellow tail that lacks the dramatic markings seen to left.



AURORA SHRIMPGOBY

SIZE: to 9 cm (3 1/2 in.)

ID: White with 5 brown bands with diffuse margins, yellow tail with red markings; **oblique reddish brown band at rear corner of mouth**. Share burrow with alpheid shrimp. Sandy slopes of lagoons and seaward reefs in 5-40 m.

Indian Ocean: East Africa and Aldabra to Maldives and Andaman Sea.

Amblyeleotris aurora

Gobies - Gobiidae



SPOTTED SHRIMPGOBY

SIZE: to 9 cm (3 1/2 in.)

ID: White; bright orange spots on head and body, dark band under rear head and another on belly, whitish iris with black markings. Share burrow with alpheid shrimp. Sandy bottoms of lagoons and seaward reef slopes in 4-35 m.

West Pacific: Philippines and Indonesia to Samoa. - S.W. Japan to Australia.

Amblyeleotris guttata

Gobies - Gobiidae

Gobies



STEINITZ' SHRIMPGOBY

Amblyeleotris steinitzi

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: White with 5 brown bars on head and body; dark iris, tiny yellow spots on both dorsal fins, narrow orange bars between dark body bars. Share burrow with alpheid shrimp. Lagoon and outer reef slopes in 6-35 m.

Indo-West Pacific: Red Sea to Great Barrier Reef and Samoa, north to Micronesia and S.W. Japan.



REDBARRED SHRIMPGOBY

Amblyeleotris sp.

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Tan with 5 reddish brown bars, yellowish tail; **black band behind eye with blue line borders**, orange spots on dorsal fins. Share burrow with alpheid shrimp. Sand bottoms of lagoons and sheltered coastal reefs in 12-35 m.

Asian Pacific: Indonesia and Papua New Guinea.



NAKEDHEAD SHRIMPGOBY

Amblyeleotris gymnocephala

SIZE: to 10 cm (4 in.)

Gobies - Gobiidae

ID: Tan with 5 brown diffuse bars on side; **dark markings on back between bars**, may display dark brown stripe behind eye and thin brown bar below eye. Share burrow with alpheid shrimp. Lagoons and seaward slopes in 5-35 m.

Asian Pacific: E. Indonesia and N.W. Australia to Marshall Is. in Micronesia.



Steinitz' Shrimpgoby - Variation

ID: Brown bars slightly narrower and no narrow orange bars; **dark to black iris in all variations.**



SLANTBAR SHRIMPGOBY

Amblyeleotris diagonalis

SIZE: to 9 cm (3 1/2 in.)

Gobies - Gobiidae

ID: White with 5 brown bands on side and **2 narrow bands on head**, yellow anal fin with blue margin. Share burrow with alpheid shrimp. Sandy slope of lagoon and seaward reef slopes in 6-30 m.

Indo-Asian Pacific: E. Africa and Red Sea to Solomon Is. and Great Barrier Reef.



EYEBROW SHRIMPGOBY

Amblyeleotris sp.

SIZE: to 11 cm (4 1/4 in.)

Gobies - Gobiidae

ID: Pale tan with 5 reddish brown bars; brown spotting on pale spaces, **dark bar or blotch above and behind eye**, red edge and spots on dorsal fins, red border on anal fin. Share burrow with alpheid shrimp. Coastal sand slopes in 7-25 m.

Localized: Indonesia.

Small, Elongate Bottom Dwellers – Gobies



ARCFIN SHRIMP GOBY

Amblyeleotris arcuipinna

SIZE: to 8.5 cm (3 1/4 in.)

Gobies - Gobiidae

ID: Tan with 5 brown bars with diffuse edges; **arc-shaped mark on first dorsal fin**, dark wedge-shaped mark below eye, often dark brown speckling on back. Share burrow with alpheid shrimp. Sand bottoms of lagoons and sheltered reefs in 10-30 m.

Asian Pacific: Bali in Indonesia to New Britain and Milne Bay Province in E. Papua New Guinea.



FRECKLED SHRIMP GOBY

Amblyeleotris sp.

SIZE: to 8.5 cm (3 1/4 in.)

Gobies - Gobiidae

ID: Tan with 6 red-brown bars; orange spots on head, **pale-edged reddish spots on dorsal fins**, blue stripes on anal fin. Share burrow with alpheid shrimp. Coastal sand slopes in 8-28 m.

Asian Pacific: Indonesia and Philippines.



GIANT SHRIMP GOBY

Amblyeleotris fontanesii

SIZE: to 17 cm (6 1/4 in.)

Gobies - Gobiidae

ID: Large, about twice the length of similar species; white with 5 brown bars; **small orange spots on head**. Share burrow with alpheid shrimp. Sand bottoms of lagoons and sheltered reefs in 5-30 m.

Asian Pacific: Sumatra in W. Indonesia to Palau and Papua New Guinea, north to S.W. Japan.



FIVE-BAR SHRIMP GOBY

Amblyeleotris sp.

SIZE: to 6.5 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Tan with 5 dark brown bars with pale borders; dark wedge-shaped bar below eye, **black spot on base of first dorsal fin**. Share burrow with alpheid shrimp. Possibly juvenile *A. fontanesii*. Sandy lagoons in 5-40 m.

Localized: N. Papua New Guinea, including New Britain.



RED-MARGIN SHRIMP GOBY

Amblyeleotris sp.

SIZE: to 9 cm (3 1/2 in.)

Gobies - Gobiidae

ID: Pale brown with 5-6 light brown bars and dark speckles on back; upper iris and head behind eyes dark brown, **red margin on dorsal fins and upper tail**. Share burrow with alpheid shrimp. Coastal bays and estuaries in 2-20 m.

Localized: Currently known only from Bali in Indonesia.



BROAD-BANDED SHRIMP GOBY

Amblyeleotris periphthalmia

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Tan with six dark brown bars on head and side; irregular brown blotches between bars, dark-ringed orange spots on head. Share burrow with alpheid shrimp. Sand bottoms of lagoons and seaward slopes in 3-35 m.

East Indo-West Pacific: Andaman Sea to Samoa. - S.W. Japan to Great Barrier Reef.

Gobies



RED-BANDED SHRIMPGOBY

Amblyeleotris fasciata

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Whitish with 7 relatively narrow reddish bars, including through eye and on tail base; yellow spots on head and front of body. Share burrow with alpheid shrimp. Patches of coarse sand in lagoons and on outer slopes in 5-25 m.

East Indo-West Pacific: Christmas I. to Great Barrier Reef and Samoa, north to Mariana Is. in Micronesia.



VOLCANO SHRIMPGOBY

Amblyeleotris rhyax

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: White with 3 or more reddish brown body bars; rear slanting reddish brown band below eye, yellow spots on head and body. Share burrow with alpheid shrimp. Rubble and sand in caves and canyons of seaward reefs and slopes in 30-45 m.

Asian Pacific: Philippines, Palau and New Britain east of Papua New Guinea to Great Barrier Reef.



GORGEOUS SHRIMPGOBY

Amblyeleotris wheeleri

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Six dark red bars with yellowish spaces between; scattered red spots on head and blue spots on body, blue-edged red stripe on anal fin. Share burrow with alpheid shrimp. Lagoon and outer reef slopes in 2-28 m.

Indo-Asian Pacific: E. Africa and Red Sea to N.W. Australia and Great Barrier Reef, north to Marshall Is. and S. Japan.



WIDE-BARRED SHRIMPGOBY

Amblyeleotris latifasciata

SIZE: to 10 cm (4 in.)

Gobies - Gobiidae

ID: Brown, may have 3-4 broad dark bars; bluish spots on head, orange spots on body, pale-edged orange spots on 1st dorsal fin and on tips of 2nd. Share burrow with alpheid shrimp. Sand bottoms of lagoons and seaward reefs in 5-40 m.

Asian Pacific: Indonesia, Malaysian Peninsula and Philippines.



BLUE-SPECKLED SHRIMPGOBY *Cryptocentrus caeruleomaculatus*

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: About 8 irregular greenish brown bars with narrow pale spaces between; tiny blue spots and pink to reddish markings on head and body. Share burrow with alpheid shrimp. Lagoon and sheltered reefs to 6 m.

Indo-Asian Pacific: E. Africa to N.W. Australia and Great Barrier Reef, north to Mariana Is. in Micronesia and S. Japan.



Blue-speckled Shrimpgoby - Variation

ID: Greenish dorsal fins with reddish markings, body bars diffuse and indistinct. Both variations have tiny blue spots and pink to red markings on head and body and darkish bars on anal fin.

Small, Elongate Bottom Dwellers – Gobies



BANDED SHRIMPGOBY

SIZE: to 7 cm (2 1/2 in.)

Cryptocentrus cinctus

Gobies - Gobiidae

ID: Yellow to gold with white to blue spotting on head, upper body and dorsal fins; may display faint bars. Share burrow with alpheid shrimp. Sheltered sand and mud bottoms in 2-15 m.

East Indo-Asian Pacific: Andaman Sea to Australia, north to Palau and Chuuk in Micronesia and S.W. Japan.



Banded Shrimpgoby - Variation

ID: Dark brown; white spotting on head, pectoral, ventral and dorsal fins. All variations usually with one of two shrimp species: *Alpheus djeddensis* or *A. ochrostriatus*; shrimp commonly in pairs.



Banded Shrimpgoby - Variation

ID: Pale with 4-5 dark bars, occasionally with pale narrow bars between; white to blue spotting on head, dorsal, pectoral and ventral fins. Commonly in pairs of the same variation, but occasionally pair with other variations.



LAGOON SHRIMPGOBY

SIZE: to 14 cm (5 1/2 in.)

Cryptocentrus cyanotaenia

Gobies - Gobiidae

ID: Gray with 14-15 narrow white bars; white line and spot markings on head, yellow margin on 1st dorsal fin, blue streaks on 2nd dorsal, anal and tail fins. Share burrow with alpheid shrimp. Sheltered reefs to 10 m.

Asian Pacific: Java in Indonesia to Palau and Papua New Guinea.



BARRED SHRIMPGOBY

SIZE: to 8 cm (3 in.)

Cryptocentrus fasciatus

Gobies - Gobiidae

ID: Pale with 4 brown occasionally irregular bars; white or bluish streaks and spots on head, ventral and anal fins, unmarked dorsal fins. Share burrow with alpheid shrimp. Sheltered sand and mud bottoms to 15 m.

Indo-Asian Pacific: E. Africa and Red Sea to Solomon Is. and Great Barrier Reef.



Barred Shrimpgoby - Variation

ID: Dark brown with several whitish saddles on top of head and along back; small white or blue spots or streaks on head ventral and anal fins; unmarked dorsal fins.

Gobies



INEXPLICABLE SHRIMPGOBY *Cryptocentrus inexplicatus*

SIZE: to 7.5 cm (3 in.) Gobies - Gobiidae

ID: Grayish with several dark bars on side; 3-4 black spots on rear edge of gill cover, irregular dark markings on top of head (sometimes cheek) and upper body. Share burrow with alpheid shrimp. Sheltered reefs to 5 m.

Asian Pacific: Indonesia, Philippines and Palau, north to S.W. Japan.



AUSTRALIAN SHRIMPGOBY *Cryptocentrus insignitus*

SIZE: to 8 cm (3 in.) Gobies - Gobiidae

ID: Pale brown with white spotting; several irregular brown bars or saddles on body, large ocellated spot on 1st dorsal fin. Share burrow with alpheid shrimp. Sheltered sand and mud bottoms in 4-35 m.

Localized: N.W. Australia, from Kimberley coast to Darwin area.



PINK-SPOTTED SHRIMPGOBY *Cryptocentrus leptocephalus*

SIZE: to 10 cm (4 in.) Gobies - Gobiidae

ID: Pale brown with 6-7 brownish body bars; pink to red spots and smaller white spots on head, back and dorsal fins. Share burrow with alpheid shrimp. Sheltered sand and mud bottoms to 10 m, often near mangroves.

Asian Pacific: W. Australia and Indonesia to New Caledonia, north to S.W. Japan.



TARGET SHRIMPGOBY *Cryptocentrus strigilliceps*

SIZE: to 6 cm (2 1/4 in.) Gobies - Gobiidae

ID: Pale brown with broad irregular brown bands; several black spots on mid-side, 1st bordered with white spots. Share burrow with alpheid shrimp. Lagoon and shallow shoreline reefs to 10 m.

Indo-West Pacific: E. Africa to Australia and Samoa, north to Marshall Is. in Micronesia and S.W. Japan.



BLUE-TAILED SHRIMPGOBY *Cryptocentrus pavonioides*

SIZE: to 14 cm (5 1/2 in.) Gobies - Gobiidae

ID: Brown with faint narrow yellow body bars, yellow anal fin; white to blue spots on head, blue streaks on tail, **black spot near tip of 1st dorsal fin**. Share burrow with alpheid shrimp. Lagoon and outer reef slopes to 15 m.

Indo-Asian Pacific: India to Indonesia, Philippines and South China Sea.



BLACKTIP SHRIMPGOBY *Cryptocentrus polyophthalmus*

SIZE: to 9 cm (3 1/2 in.) Gobies - Gobiidae

ID: Pale gray with about 5 dark bands or mid-lateral blotches; dark brown bar below eye, brown spotting on back, ocellated spot on 1st dorsal fin. Share burrow with alpheid shrimp. Lagoon and seaward reefs in 2-20 m.

Asian Pacific: Indonesia and Papua New Guinea, including New Britain.

Small, Elongate Bottom Dwellers – Gobies



BLUESPOT SHRIMP GOBY

Cryptocentrus sp.

SIZE: to 7.5 cm (3 in.)

Gobies - Gobiidae

ID: **Two Variations** - Both brown with pale upper head and blue spots. **Variation 1** - About 8 narrow whitish body bars. **Variation 2** - Lack bars; 2 pale saddles below 1st dorsal fin. Share burrow with alpheid shrimp. Sand areas to 16 m.

Asian Pacific: Indonesia, Sabah in N. Borneo, Philippines and Palau, north to S.W. Japan.



YELLOW SHRIMP GOBY

Cryptocentrus sp.

SIZE: to 7.5 cm (3 in.)

Gobies - Gobiidae

ID: Yellow, including fins; lack distinguishing marks. Share burrow with alpheid shrimp. Sand areas of lagoons and coastal reefs in 5-25 m.

Localized: N. Papua New Guinea.



VENTRAL-BARRED SHRIMP GOBY

Cryptocentrus sp.

SIZE: to 10.5 cm (4 in.)

Gobies - Gobiidae

ID: Pale with dark brown bars (may run from back to belly or only on back); pair of brown spots behind mouth and on gill cover, bar on upper pectoral fin base. Share burrow with alpheid shrimp. Lagoon and shoreline reefs in 2-20 m.

East Indo-Asian Pacific: Andaman Sea to Palau in Micronesia and Papua New Guinea, north to S.W. Japan.



Ventral-barred Shrimpgoby - Variation

ID: Yellow to yellowish with blue spots on head, pale to yellow fins with no spots; often have fainter bars of previous variation; **all variations have pair of brown spots behind mouth and another on gill cover.**



SADDLED SHRIMP GOBY

Cryptocentrus leucostictus

SIZE: to 9 cm (3 1/2 in.)

Gobies - Gobiidae

ID: Dark brown with white lips, snout and top of head; several white saddles on back. Share burrow with a large undescribed alpheid shrimp. Sand bottoms of lagoons and seaward reefs in 2-25 m.

East Indo-West Pacific: Andaman Sea to Australia, Samoa and Tonga, north to S.W. Japan.



BLACK SHRIMP GOBY

Cryptocentrus sp.

SIZE: to 5.5 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Black with tiny blue spots on head and body; yellowish or white outer half of 1st dorsal fin, large black spots on pale 2nd dorsal fin. Share burrow with alpheid shrimp. Sand areas of sheltered lagoons in 6-15 m.

Asian Pacific: Palau in Micronesia, New Guinea and Vanuatu.

Gobies



GOLD-STREAKED SHRIMP GOBY *Ctenogobiops aurocingulus*

SIZE: to 5.5 cm (2 1/4 in.) Gobies - Gobiidae

ID: Pale gray with diffuse dusky blotches and **numerous orange lines and spots**; white spot on upper pectoral fin base and another on fin. Share burrow with alpheid shrimp. Lagoon and seaward reef slopes in 2-20 m.

West Pacific: Indonesia and Philippines to Samoa, north to S.W. Japan.



SILVERSPOT SHRIMP GOBY *Ctenogobiops crocineus*

SIZE: to 5 cm (2 in.) Gobies - Gobiidae

ID: Whitish with dusky elliptical spots encircled by tiny blue spots; **tiny orange spots behind eye**, white spot on pectoral fin. Share burrow with alpheid shrimp. Coarse sand and rubble areas of lagoons and coastal reefs to 15 m.

Indo - Asian Pacific: Red Sea to Palau and Great Barrier Reef, north to S.W. Japan.



SAND SHRIMP GOBY *Ctenogobiops feroculus*

SIZE: to 5.5 cm (2 1/4 in.) Gobies - Gobiidae

ID: Whitish with dusky elliptical spots encircled by tiny blue spots; 1st dorsal ray elongate in adults, white spot on pectoral fin; **lack orange spots on head of similar Silverspot Shrimpgoby** [previous]. Lagoon and coastal reefs in 1-10 m.

Asian Pacific: Red Sea to New Caledonia, north to Guam in Micronesia and S.W. Japan.



GOLD-SPECKLED SHRIMP GOBY *Ctenogobiops pomastictus*

SIZE: to 6 cm (2 1/4 in.) Gobies - Gobiidae

ID: Whitish with brown elliptical spots encircled by tiny blue spots; white spot on pectoral fin, **small orange spot between elliptical spots on mid-side**. Share burrow with alpheid shrimp. Sheltered reefs in 2-25 m.

Asian Pacific: N. Australia to Solomon Is., north to Mariana Is. in Micronesia and S.W. Japan.



TANGARAO SHRIMP GOBY *Ctenogobiops tangaroai*

SIZE: to 6 cm (2 1/4 in.) Gobies - Gobiidae

ID: Whitish with orange spots interspersed with tiny white or bluish spots; white spot on pectoral fin base; very tall 1st dorsal fin. Share burrow with alpheid shrimp. Lagoon and outer reef slopes in 2-40 m.

West Pacific: Indonesia and Philippines to E. Australia and Samoa, north to S.W. Japan.



WHITECAP SHRIMP GOBY *Lotilia graciliosa*

SIZE: to 4.5 cm (1 1/4 in.) Gobies - Gobiidae

ID: Dark brown with white band from snout to dorsal fin; ocellated spot on 1st dorsal fin, clear pectoral and tail fins with large brown spots. Share burrow with alpheid shrimp. Sand bottoms of lagoon and coastal reefs in 5-40 m.

Indo - West Pacific: Red Sea to Great Barrier Reef and Fiji, north to S.W. Japan.

Small, Elongate Bottom Dwellers – Gobies



FLAGFIN SHRIMPGOBY

Mahidolia mystacina

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: **Male** - Yellow to gray with dark body bands; tall pointed 1st dorsal fin with several dark spots on margins. Share burrow with alpheid shrimp. Fine silt bottoms of lagoon and seaward reef slopes in 5-25 m.

Indo-Pacific: E. Africa to Society Is. in French Polynesia. - S. Japan to Australia.



Flagfin Shrimpgoby - Female Variation

ID: Yellow-gold with dark body bands; large sail-like 1st dorsal fin with several band markings.



Flagfin Shrimpgoby - Female Variation

ID: Gray to brown with dark body bands; large sail-like 1st dorsal fin with band markings.



BLACKLINE SHRIMPGOBY

Myersina nigriVirgata

SIZE: to 10 cm (4 in.)

Gobies - Gobiidae

ID: Whitish to pale gray to pale brown or bright yellow; darkish brown to blackish stripe from eye to tail base, orange or white spots on head. Share burrow with alpheid shrimp. Sheltered bays and lagoons in 2-20 m.

Asian Pacific: Indonesia and Philippines, north to S. Japan.



BLUEFIN SHRIMPGOBY

Myersina larsonae

SIZE: to 6 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Gray; blue band or row of spots behind eye and thin blue mid-lateral stripe; tall blue 1st dorsal fin with red streaks and blue stripes in 2nd dorsal, anal and tail fins. Share burrow with alpheid shrimp. Sheltered reefs in 20-40 m.

Localized: Kimberley coast of N.W. Australia.



BLUE SHRIMPGOBY

Myersina sp.

SIZE: to 5 cm (2 in.)

Gobies - Gobiidae

ID: Brilliant blue in natural light; several filaments extend from spine of 1st dorsal fin, blue margins on fins. Share burrow with alpheid shrimp. Mud bottoms and estuaries in 3-20 m.

Localized: Bali to N. Sulawesi in Indonesia.

Gobies



BLACK SPEAR SHRIMPGOBY

SIZE: to 5 cm (2 in.)

ID: Grayish brown; very tall dark 1st dorsal spine with back front edge; pale stripe from eye to upper tail base, blue edge on 2nd dorsal and upper tail fins. Share burrow with alpheid shrimp. Sand and silt bottoms of sheltered reefs in 2-10 m.

Asian Pacific: Bali in Indonesia to Papua New Guinea, including New Britain.

Myersina lachneri

Gobies - Gobiidae



WHITE-EYE SHRIMPGOBY

SIZE: to 10 cm (4 in.)

ID: Brown to gray with several dark saddles along back; **white upper eye**, blue streaks on anal and tail fins. Generic classification uncertain. Share burrow with alpheid shrimp. Sand bottoms near coastal reefs in 2-40 m.

Asian Pacific: Indonesia and Philippines.

Myersina sp.

Gobies - Gobiidae



BLACK-RAYED SHRIMPGOBY

SIZE: to 6 cm (2 1/4 in.)

ID: White to pale brown with yellow snout and 4 pale edged black bands; tall black-edged 1st dorsal spine. Share burrow with alpheid shrimp. Lagoon and outer reef slopes in 5-25 m.

West Pacific: Indonesia and Philippines to E. Australia and Samoa, north to S.W. Japan.

Stonogobiops nematodes

Gobies - Gobiidae



YELLOWNOSE SHRIMPGOBY

SIZE: to 6 cm (2 1/4 in.)

ID: White with yellow snout and 4 black bands; sail-like 1st dorsal fin, often with black rear border extending from 2nd band. Share burrow with alpheid shrimp. Sand slopes of seaward reefs in 15-25 m.

West Pacific: Indonesia to Great Barrier Reef and Fiji, north to S. Japan.

Stonogobiops xanthurhinica

Gobies - Gobiidae



RED-STRIPED SHRIMPGOBY

SIZE: to 6 cm (2 1/4 in.)

ID: White with red stripes; tall 1st dorsal fin spine with triangular black spot on middle of fin, remaining fins yellowish or with yellow spotting. Share burrow with alpheid shrimp. Seaward sand slopes in 15-40 m.

Asian Pacific: Indonesia to Coral Sea, north to S. Japan.

Stonogobiops sp.

Gobies - Gobiidae



MARQUESAS SHRIMPGOBY

SIZE: to 6 cm (2 1/4 in.)

ID: White with yellow snout and nape; arching dark brown to blackish marking from gill cover to above pectoral fin base, row of dark spots along back. Share burrow with alpheid shrimp. Seaward sand slopes in 20-40 m.

Localized: Marquesas Is. in French Polynesia.

Stonogobiops medon

Gobies - Gobiidae

Small, Elongate Bottom Dwellers – Gobies



MONSTER SHRIMPGOBY

Tomiyamichthys oni

SIZE: to 10 cm (4 in.)

Gobies - Gobiidae

ID: **Male** - White with numerous large blackish blotches and small brown spots; **tall rounded 1st dorsal fin with pale-edged black spot**. Share burrow with alpheid shrimp. Sheltered sand slopes in 10-30 m.

East Indo-Asian Pacific: E. Andaman Sea to Indonesia and Palau, north to S. Japan.



Monster Shrimpgoby - Female

ID: White with scattering of large brown blotches and small spots; dark band extends from lower eye; **tall triangular 1st dorsal fin with small black and white spot**.



YELLOWFIN SHRIMPGOBY

Tomiyamichthys sp.

SIZE: to 7.5 cm (3 in.)

Gobies - Gobiidae

ID: **Male** - Several wide body bars, tall filamentous first dorsal fin, yellow pectoral fins. **Female** - Same as male but tall 1st dorsal fin not filamentous. Share burrow with alpheid shrimp. Sheltered sand slopes in 15-30 m.

Localized: Known only from Indonesia.



HIGHFIN SHRIMPGOBY

Tomiyamichthys sp.

SIZE: to 6 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Irregular brown saddles on upper body, white below with black blotches and brown bars; short filaments and **pair of black spots on 1st dorsal fin**. Share burrow with alpheid shrimp. Sheltered sand slopes in 15-40 m.

Asian Pacific: Indonesia, north to S. Japan.



RAYED SHRIMPGOBY

Tomiyamichthys sp.

SIZE: to 7.5 cm (3 in.)

Gobies - Gobiidae

ID: Mottled dark brown front body and pale brown blotched rear; fan-shaped 1st dorsal fin with protruding filaments and blue spot. Status of genus *Tomiyamichthys* questionable. Share burrow with alpheid shrimp. Sand and rubble bottoms in 3-20 m.

Localized: Kalimantan (Borneo) in Indonesia and Sabah in N. Borneo.



REDEYED SHRIMPGOBY

Not Classified

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Pale with diffuse bars on side; dense dark blotches on head and 1st dorsal fin, red pupil; elongate 1st dorsal spine and **elongate nostril tubes**. Status of genus and species uncertain. Share burrow with alpheid shrimp. Coastal sand slopes in 15-30 m.

Asian Pacific: Indonesia and Papua New Guinea.

Gobies



YELLOW-SPOTTED SHRIMPGOBY *Vanderhorstia macropteryx*

SIZE: to 6 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Whitish with 4 tapering brown saddles; numerous dark edged orange spots on head and body. Share burrow with alpheid shrimp. Sand and rubble areas in 5-18 m.

Asian Pacific: Philippines to S. Japan.



YELLOW-LINED SHRIMPGOBY

Vanderhorstia flavilineata

SIZE: to 4 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Pale mauve; yellow mid-lateral stripe, thinner yellow stripe on back and metallic blue stripe at base of dorsal fin, yellow spots on head. Share burrow with alpheid shrimp. Seaward sand slopes in 20-40 m.

Localized: Currently known only from Papua New Guinea, including New Britain.



SPANGLED SHRIMPGOBY

Vanderhorstia sp.

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: **Male** - Pale bluish covered with yellow and blue spots; neon-blue stripe from snout to 1st dorsal fin; large 1st dorsal fin. Share burrow with alpheid shrimp. Estuaries and sheltered reefs in 5-35 m.

Asian Pacific: Indonesia and Philippines to S. Japan.



Spangled Shrimpgoby - Female

ID: Pale bluish covered with yellow and blue spots; tall large dorsal fin marked with yellow streaks and dark blotch.



MAJESTIC SHRIMPGOBY

Vanderhorstia sp.

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: **Male** - Yellowish upper body, whitish below; neon stripe from snout to 1st dorsal, blue stripe on upper body breaks into spots on rear; tall 1st dorsal fin; Share burrow with alpheid shrimp. Sheltered sand or silt bottoms in 5-30 m.

Asian Pacific: Indonesia and Philippines.



Majestic Shrimpgoby - Female

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Pale yellowish back and whitish below; neon-blue stripe from snout to 1st dorsal fin; tall 1st dorsal fin with dark brown marking; **both sexes have blue and orange scribble markings on lower head and gill cover.**

Small, Elongate Bottom Dwellers – Gobies



LANCEOLATE SHRIMP GOBY *Vanderhorstia lanceolata*

SIZE: to 5 cm (2 in.)

ID: Pale gray to whitish; large brown blotches on mid-side, light brown spotting on back; **tall 1st dorsal fin with pair of pale-edged black spots**. Share burrow with alpheid shrimp. Lagoons and sheltered bays in 10-25 m.

Asian Pacific: Indonesia, Philippines and Palau, north to S. Japan.



ORNATE SHRIMP GOBY *Vanderhorstia ornatissima*

SIZE: to 6 cm (2 1/4 in.)

ID: Pale brown with blue-edged brown blotches; **scattered blue spots on head and ventral fins**; filamentous 1st dorsal fin. Share burrow with alpheid shrimp. Sandy shores, often in seagrass beds in 2-10 m.

Indo-West Pacific: E. Africa to Australia and Samoa, north to S.W. Japan.



AMBANORO SHRIMP GOBY *Vanderhorstia ambanoro*

SIZE: to 12 cm (5 in.)

ID: Pale gray or whitish; mid-lateral row of large black spots, smaller black spots and blotches on back, **blue bordered dark stripe on 2nd dorsal fin extends onto tail**. Share burrow with alpheid shrimp. Lagoon and seaward slopes in 4-25 m.

Indo-West Pacific: E. Africa to Barrier Reef and Samoa, north to S.W. Japan.



CHEEK-STREAKED GOBY *Echinogobius hayashii*

SIZE: to 12 cm (5 in.)

ID: Elongate; whitish body with brownish spots and blotches; **light blue or pearly lines/streaks on head and front of body**, blue rimmed spots on tail. Solitary on open sand or live in burrow without shrimp. Sheltered waters in 3-18 m.

Indo-Asian Pacific: East Africa and Seychelles to Indonesia and Papua New Guinea, north to S.W. Japan.



PADANG GOBY *Bathygobius padangensis*

SIZE: to 5 cm (2 in.)

ID: Blotchy tan with brown spotting concentrated on snout; pair of dark brown bars on upper body, mid-lateral row of horizontally-elongate brown blotches. Intertidal reef flats and exposed rocky shores to 2 m.

Indo-West Pacific: Maldives to Samoa. - S.W. Japan to Australia.



COCOS GOBY *Bathygobius cocosensis*

SIZE: to 5 cm (2 in.)

ID: Brown with numerous white blotches; bulbous cheeks. Intertidal reef flats and exposed rocky shores to 2 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn I. east of French Polynesia. - S.W. Japan to Australia.

Gobies



YELLOWSTRIPE GOBY

SIZE: to 5 cm (2 in.)

ID: Dark brown with 4 bright yellow stripes; black spot on 1st dorsal fin, yellow-edged black spot on 2nd dorsal fin and black spot on upper tail base. Solitary. Sand bottoms near base of reef formations in 3-30 m.

Indo - Asian Pacific: Red Sea and Aldabra to Indonesia and Palau, north to S.W. Japan.

Amblygobius hectori

Gobies - Gobiidae



OLD GLORY

SIZE: to 5.5 cm (2 1/4 in.)

ID: Charcoal-gray; 5 orange stripes, row of white spots on upper back, yellow-edged black spot on 2nd dorsal fin and black spot on upper tail base. Solitary or form small groups. Sand bottoms near base of reef formations in 3-30 m.

West Pacific: Indonesia and Philippines to Fiji. - Marshall Is. in Micronesia to Australia.

Amblygobius rainfordi

Gobies - Gobiidae



CROSSHATCH GOBY

SIZE: to 6 cm (2 1/4 in.)

ID: Pale bluish gray; about 9 orange body bars intersect about 5 orange stripes, 2 of the stripes extend onto head with dark borders, orange spot on tail base. Silt and mud and fine-sand bottoms of lagoons and sheltered bays in 3-25 m.

East Indo - Asian Pacific: Cocos-Keeling Is. to Australia and New Caledonia, north to S.W. Japan.

Amblygobius decussatus

Gobies - Gobiidae



BUAN GOBY

SIZE: to 6 cm (2 1/4 in.)

ID: Pale gray with 3 reddish to dark stripes on upper body; 5 diffuse dark gray blotches on mid to lower side, pair of white spots on tail base. Solitary or in pairs. Silty shores, often near mangroves to 3-25 m.

Asian Pacific: Indonesia, Palau in Micronesia and Papua New Guinea.

Amblygobius buanensis

Gobies - Gobiidae



NOCTURN GOBY

SIZE: to 5 cm (2 in.)

ID: Pale gray with orangish stripe from snout through eye and fading onto body. Solitary or in pairs. Silt and mud and fine-sand bottoms of lagoons and sheltered bays in 3-25 m.

Indo - Pacific: Arabian Gulf to Rapa and Tuamotu Is. in French Polynesia. - Australia to S.W. Japan.

Amblygobius nocturnus

Gobies - Gobiidae



Nocturn Gobies - Variation

ID: Pale gray with 2 reddish to orange stripes extending from head onto body and fading toward tail; small dark saddles on back. This variation most common in areas of black sand.

Small, Elongate Bottom Dwellers – Gobies



SPHYNX GOBY

Amblygobius sphynx

SIZE: to 16.5 cm (6½ in.)

Gobies - Gobiidae

ID: Yellowish or greenish brown; 5-6 dark brown bars interspersed with white bar-like markings. Solitary or in pairs. Sheltered sand bottoms or seagrass beds in 1-20 m.

Indo-Asian Pacific: E. Africa to Papua New Guinea and E. Australia, north to S.W. Japan.



HALF-BANDED GOBY

Amblygobius semicinctus

SIZE: to 14 cm (5½ in.)

Gobies - Gobiidae

ID: Dark greenish brown; 6 black-edged white bars on belly, irregular white spots on cheek and body, dark spot on upper tail base; filamentous 1st dorsal fin. Sand and rubble bottoms of reef flats and sheltered shores in 1-20 m.

Indian Ocean: E. Africa and Seychelles to Andaman Sea.



BANDED GOBY

Amblygobius phalaena

SIZE: to 13.5 cm (5¼ in.)

Gobies - Gobiidae

ID: Pale gray; greenish brown stripes on head and front of body, 5 white-edged gray body bars, **black spot on 1st dorsal fin**. Solitary or in pairs. Sand and rubble bottoms of reef flats and sheltered shores to 20 m.

Indo-Pacific: Cocos-Keeling Is. to Marquesas and Tuamotu Is. in French Polynesia. - Australia to S.W. Japan.



Banded Goby - Variation

ID: Dark brown with only vague stripes on head and front of body and bars on body; black area on 1st dorsal fin. Both phases may display a black spot behind upper rear gill cover and another on upper tail near base. This variation most common in areas of black sand.



FRECKLED GOBY

Amblygobius bynoensis

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Tan; 3 white-edged black stripes on head, several short black bar-like markings on back, black spot on tail base. Solitary or in pairs. Silty shores, often in turbid water to 5 m.

Asian Pacific: Australia, Singapore and Indonesia to Australia.



SNOUTSPOT GOBY

Amblygobius esakiae

SIZE: to 6.5 cm (2½ in.)

Gobies - Gobiidae

ID: Dull brownish to blue-gray; dark spots on snout, broken black stripe behind eye and another from gill cover through pectoral base onto body. In pairs. Silt or sand bottoms of estuaries and sheltered bays in 2-15 m.

Indo-Asian Pacific: Red Sea to Indonesia, Palau in Micronesia and Papua New Guinea.

Gobies



STRIPED GOBY

Asteropteryx striatus

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Brown upper body and white below; diffuse dark brown to blackish stripe from eye to tail, several rows of small blue spots on side. Solitary or form small groups. Rubble bottoms of sheltered coastal reefs in 10-30 m.

Asian Pacific: Indonesia, Philippines, Palau in Micronesia and Papua New Guinea.



BLUEDOT GOBY

Asteropteryx ensiferus

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Dark brown (appears blackish underwater) with rows of small blue spots. Commonly form large aggregations that perch on, or hover above, extensive areas of rubble. Slopes exposed to currents on seaward reefs in 6-40 m.

Indo-Pacific: Red Sea to Society Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



MANGROVE GOBY

Acentrogobius janthinopterus

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Light gray-brown with dark brown spots and gold flecks; sub-marginal band on tail. **Male** - Elongate 1st dorsal fin filaments. Solitary. Estuaries and brackish lakes, often in mangroves to 5 m.

Asian Pacific: Indonesia, Papua New Guinea and Australia, north to S.W. Japan.



STARRY GOBY

Asteropteryx semipunctatus

SIZE: to 6 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Greenish brown; dark brown blotches and scribbling, especially on back; rows of small blue spots on head, body and anal fin. Solitary or form small groups. Algal-covered rocks and rubble of sheltered inshore reefs to 15 m.

Indo-Pacific: E. Africa and Red Sea to Hawaii and Rapa I. in French Polynesia. - S. Japan to Australia.



TWINSPOG GOBY

Asteropteryx bipunctatus

SIZE: to 4 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Dusky pink with bright orange spots; white-edged dark blotch at base of 1st dorsal and another on tail base. Solitary. Sandy ledges on steep lagoon and seaward reef slopes in 4-32 m.

Indo-West Pacific: Chagos Is. to Papua New Guinea and Samoa, north to S.W. Japan.



CRESTED GOBY

Cristatogobius lophius

SIZE: to 7.5 cm (3 in.)

Gobies - Gobiidae

ID: Alternating gray and yellow body bars; cluster of white spots above pectoral fin, broad blackish margin on anal fin; thin flap of elevated skin on top of head. Solitary. Mangrove estuaries and brackish lakes to 5 m.

Asian Pacific: Kalimantan (Borneo) in Indonesia and Philippines to S. Japan.

Small, Elongate Bottom Dwellers – Gobies



BANDED FLAP-HEAD GOBY

Callogobius hasseltii

SIZE: to 6 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Tan to light brown; 3 brown bands: behind pectoral fin, under 2nd dorsal and on base of tail; **large brown spot on belly**, black spot upper front of tail. Solitary. Sand and rubble areas of lagoons and inshore reefs to 12 m, also tide pools.

Indo-West Pacific: India to Fiji. - S. Japan to Great Barrier Reef.



SADDLED GOBY

Callogobius clitellus

SIZE: to 4.5 cm (1 3/4 in.)

Gobies - Gobiidae

ID: Whitish; brown stripe from snout to bar behind head, brown bar below 1st dorsal fin, band from 2nd dorsal fin to anal fin; skin ridges on head. Solitary; hide in crevices and rubble. Coastal and seaward reefs in 3-20 m.

Asian Pacific: Philippines, Palau, Papua New Guinea and Solomon Is.



SPIKEFIN GOBY

Discordipinna griessingeri

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: White with dark spots on head; wide, spotted red upper borders on dorsal and anal fins and red border on pectoral fin; elongate red spike-like 1st dorsal fin. Solitary. Mixed coral, sand and rubble bottoms in 5-30 m.

Indo-Pacific: Red Sea to Great Barrier Reef, Marquesas and Gambier Is. in French Polynesia.



STORTHYNX GOBY

Eviota storthynx

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Translucent with dark brown belly area with white spots; red to brown spotting and blotches, 1 or 2 black "ear" spots, small dark spot at tail base. Solitary. Sand or rubble of sheltered reefs to 2 m.

Asian Pacific: W. Australia to Java in Indonesia, Palau and Yap in Micronesia, north to S. Japan.



PEPPERFIN PYGMYGOBY

Eviota prasina

SIZE: to 3 cm (1 1/4 in.)

Gobies - Gobiidae

ID: Translucent with rows of dark spots and narrow brown scale margins; tail and dorsal fins "peppered" with dark spots, black "ear" spot. **Lack spots on pectoral base like Queensland Pygmygoby** [next]. Solitary. Sheltered seaward reefs to 6 m.

Indo-Asian Pacific: Red Sea to S. Japan, south to Great Barrier Reef and Lord Howe I.



QUEENSLAND PYGMYGOBY

Eviota queenslandica

SIZE: to 3 cm (1 1/4 in.)

Gobies - Gobiidae

ID: Translucent with rows of dark spots and narrow brown scale margins, **pair of black spots on pectoral fin base**, black "ear" spot. Solitary or form small groups. Rubble bottoms of sheltered reefs to 6 m.

East Indo-West Pacific: E. Andaman Sea to Vanuatu. - S. Taiwan to Great Barrier Reef.

Gobies



EAR-SPOT PYGMYGOBY

Eviota smaragdus

SIZE: to 2.3 cm (1 in.)

Gobies - Gobiidae

ID: Translucent body, reddish belly and white head; 2 black "ear" spots, red eyes with gold scribble markings. Solitary. Tide pools to exposed seaward reefs to 15 m.

West Pacific: Guam and Marshall Is. to Samoa. - S.W. Japan to Norfolk I.



MELASMA PYGMYGOBY

Eviota melasma

SIZE: to 3.2 cm (1 1/4 in.)

Gobies - Gobiidae

ID: Translucent with 8-9 brownish bars and narrow white spaces between, pair of dark brown "ear" spots, gold ornate markings on iris. Solitary. Sponges or corals of seaward reefs slopes in 4-15 m.

East Indo-West Pacific: Cocos-Keeling Is. to Samoa. - S. Japan to Australia.



SIGILLATA PYGMYGOBY

Eviota sigillata

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Translucent, brown belly with large white spots; white and brown dash marks alternate on spinal column, white stripe on pectoral fin base. Solitary or form groups. Sand or rubble of sheltered reefs in 3-20 m.

Indo-Asian Pacific: Seychelles to Papua New Guinea and Australia, north to Caroline Is. in Micronesia.



STRIPED PYGMYGOBY

Eviota sebreei

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Translucent, dark brown to blackish mid-lateral stripe with row of white marks on top, silvery iris. Usually form small groups; rest on surface of large *Porites* coral heads. Lagoon and seaward reefs to 20 m.

Indo-West Pacific: Red Sea to Samoa. - S.W. Japan and Marshall Is. in Micronesia to Australia.



WHITESPOTTED PYGMYGOBY

Eviota lachdeberiei

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Brown with pale underside; red iris, row of small white spots on upper back, several white spots mid-laterally on front of body, blackish spot on tail base. Solitary or form small groups in crevices. Silty inshore reefs to 15 m.

Asian Pacific: E. Indonesia to Papua New Guinea, north to Guam in Micronesia and S.W. Japan.



BROWN-BANDED PYGMYGOBY

Eviota latifasciata

SIZE: to 2 cm (1 in.)

Gobies - Gobiidae

ID: Translucent with 6-7 broad brown bars or blotches on side (narrow white bars may also be evident); red bars or bands on head. Solitary. Exposed coastal reefs and outer slopes in 4-25 m.

East Indo-West Pacific: Christmas I. to Komodo I. in Indonesia and Gilbert Is., north to S.W. Japan.

Small, Elongate Bottom Dwellers – Gobies



NEON PYGMYGOBY

SIZE: to 2.5 cm (1 in.)

ID: Red mid-body and translucent back and underside; **pair of bright yellow stripes behind eye to mid-body**. Solitary or form small groups; often in shady spots near corals. Sheltered lagoon and coastal reefs in 3-20 m.

Asian Pacific: Indonesia, Papua New Guinea and Australia, north to Guam in Micronesia and Bonin Is. in S. Japan.

Eviota pellucida

Gobies - Gobiidae



YELLOW & WHITESTRIPED PYGMYGOBY

SIZE: to 2.5 cm (1 in.)

ID: Translucent with reddish head and mid-front of body, bright yellow mid-lateral stripe with **thinner white stripes above and below**. Usually form groups resting on live and dead coral formations. Lagoons and seaward reefs in 6-25 m.

Indian Ocean: Maldives to Andaman Sea.

Eviota mikiake

Gobies - Gobiidae



RED & WHITESPOTTED PYGMYGOBY

SIZE: to 2.5 cm (1 in.)

ID: Red with translucent back and underside; white spots and dashes on body, red spots on back. Form small groups. Rubble bottoms of lagoon and coastal reefs in 5-20 m.

West Pacific: E. Indonesia to Samoa. - Bonin Is. in S. Japan to Australia and New Caledonia.

Eviota prasites

Gobies - Gobiidae



REDSPOTTED PYGMYGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Translucent with fine red spotting; 2-3 red or red-brown bars on side of belly, dashed white line along spinal column. Solitary or form small groups. Lagoons and seaward reef channels and slopes to 8 m.

Indo-Pacific: E. Africa to Ducie I. east of French Polynesia. - S. Japan to Australia.

Eviota albolineata

Gobies - Gobiidae



SQUAREBELLY PYGMYGOBY

SIZE: to 2 cm (1 in.)

ID: Translucent with reddish brown to green diffuse bars; 3 large rectangular markings on belly, pale stripe behind eye, **yellowish markings on red iris**. Solitary. Coral, rubble and algae of sheltered reefs to 20 m.

West Pacific: Indonesia to Great Barrier Reef and Fiji, north to Philippines and Pohnpei and Palau in Micronesia.

Eviota punctulata

Gobies - Gobiidae



WHITESTRIPED PYGMYGOBY

SIZE: to 2.5 cm (1 in.)

ID: Translucent; white stripe from eye to rear belly; 3 red bars separated by pale bars on belly and white band on pectoral fin base, black and yellowish markings on red iris, peppered "ear" spot. Solitary or form groups. Lagoon and seaward reefs to 15 m.

Indo-West Pacific: Red Sea to Samoa. - S. Japan and Mariana Is. in Micronesia to Australia.

Eviota guttata

Gobies - Gobiidae

Gobies



BLACKBELLY PYGMYGOBY

SIZE: to 2.5 cm (1 in.)

ID: Red to dark brown sides with white to pale green back and belly; black blotch on tail base, black lips, pale upper iris. Form groups among branches of *Acropora* corals. Sheltered reefs in 4-20 m.

West Pacific: Java in Indonesia to Fiji. - Philippines to Australia and New Caledonia.

Eviota nigriventris

Gobies - Gobiidae



Blackbelly Pygmygoby - Juvenile

SIZE: to 2 cm (1 in.)

ID: Black lower two-thirds of body, pale lavender back; reddish upper iris. Form small groups among *Acropora* coral branches or on plate corals.



TWOSTRIPE PYGMYGOBY

SIZE: to 3 cm (1 1/4 in.)

ID: Translucent; pair of red stripes border white mid-lateral stripe, blackish blotch on lower tail base and white stripe on mid-snout. Form groups. Hover above branching corals of sheltered coastal reefs to 15 m.

Asian Pacific: Java in E. Indonesia, Philippines and Papua New Guinea to Great Barrier Reef.

Eviota bifasciata

Gobies - Gobiidae



FERRARIS' GOBY

SIZE: to 9.5 cm (3 3/4 in.)

ID: Brown to gray with brown spotting and lines; dark brown "ear" spot, 4 large dark blotches on side; tall sail-like 1st dorsal fin. Solitary or in pairs. Silty inshore reefs in 1-8 m.

Asian Pacific: Java and Bali in Indonesia, north to Philippines.

Exyrias ferraris

Gobies - Gobiidae



PUNTANG GOBY

SIZE: to 13.5 cm (5 1/4 in.)

ID: **Male** - Light brown with diffuse dark brown bars and scattered white spots; large filamentous 1st dorsal fin with dark dashes. Solitary or form groups. Mud and algal bottoms of mangrove shores, estuaries and brackish lakes to 5 m.

Indo-West Pacific: Sri Lanka to New Caledonia and Vanuatu, north to S.W. Japan.

Exyrias puntang

Gobies - Gobiidae



Puntang Goby - Female

ID: Dark brown with scattered dark brown and white spots; tall filamentous 1st dorsal fin.

Small, Elongate Bottom Dwellers – Gobies



BEAUTIFUL GOBY

Exyrias bellissimus

SIZE: to 13 cm (5 in.)

Gobies - Gobiidae

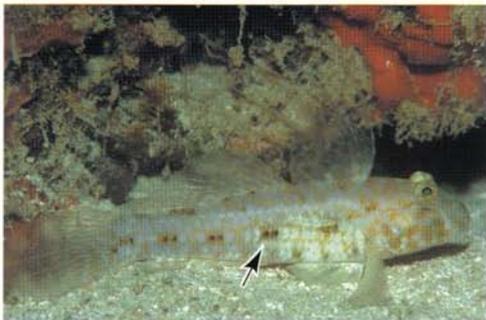
ID: Brown with row of dark diffuse spots on side and another on back, large dorsal fins with dash line and spot markings. Solitary or form groups. Mud bottoms of silty coastal reefs and lagoons to 30 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan and Micronesia to Australia.



Beautiful Goby - Variation

ID: With a greenish tint.



FILAMENTED GOBY

Exyrias sp.

SIZE: to 12 cm (5 in.)

Gobies - Gobiidae

ID: Tan; narrow orange stripes, row of double brown spots on side, orange spots on fins; tall large filamentous 1st dorsal fin. Solitary. Sand and light rubble areas near corals of sheltered reefs in 3-20 m.

Asian Pacific: Indonesia and Philippines.



THREADFIN GOBY

Papillogobius reichei

SIZE: to 4.5 cm (1 3/4 in.)

Gobies - Gobiidae

ID: Elongate, thread-like filament extends from 1st dorsal fin; light tan with brown and white spotting. Usually form small groups. Sandy shores of protected bays and lagoons to 5 m.

Indo-West Pacific: E. Africa to Vanuatu, north to S. Japan.



TWOSPOT GOBY

Coryphopterus duospilus

SIZE: to 5.5 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Translucent with numerous orangish brown spots of varying size; pair of black dash markings on 1st dorsal fin; triangular shaped snout. Solitary. Clean sand and rubble bottoms of seaward reefs to 42 m.

Indo-Pacific: E. Africa to Marquesas and Society Is. in French Polynesia. - S. Japan to Australia.



NEOPHYTE GOBY

Coryphopterus neophytus

SIZE: to 7 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Translucent with numerous reddish brown spots of varying size; short slanting bands below dorsal fins. Solitary or form small groups. Sand and rubble areas of coastal reefs and lagoons to 10 m.

Indo-Pacific: E. Africa to Marquesas and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.

Gobies



GOLDENSPOT GOBY

SIZE: to 7.5 cm (3 in.)

Coryphopterus aureus

Gobies - Gobiidae

ID: Whitish with orangish spots; **black dash on 1st dorsal spine** of rounded dorsal fin, row of tiny white spots centered on back, triangular-shaped snout. Solitary. Sand at base of corals of seaward reefs in 5-25 m.

East Indo-Asian Pacific: Andaman Sea to Papua New Guinea, north to Philippines.



GoldenSpot Goby - Variation

ID: Translucent with pale orange spots; black dash on 1st dorsal spine.



BLOTCHED GOBY

SIZE: to 7.5 cm (3 in.)

Coryphopterus inframaculatus

Gobies - Gobiidae

ID: **Male** - Translucent with small orange spots; 4-5 large internal blackish blotches, **white dash followed by black spot on tail base**; long 1st dorsal spine. Solitary. Sand at base of coral overhangs of seaward reefs in 5-25 m.

Asian Pacific: Indonesia to Great Barrier Reef, north to Guam in Micronesia and Taiwan.



Blotched Goby - Female

ID: Similar markings as male, but lack the long 1st dorsal spine.



SIGNALFIN GOBY

SIZE: to 3 cm (1 1/4 in.)

Coryphopterus signipinnis

Gobies - Gobiidae

ID: Translucent with tiny brown spots; red-brown iris, **red-brown to dark marking on 1st dorsal fin**; triangular-shaped snout. Solitary. Sand at base of coral formations of lagoon and seaward reefs in 3-30 m.

Asian Pacific: Indonesia to Great Barrier Reef, north to Guam in Micronesia and Philippines.



SHOULDERBAR GOBY

SIZE: to 4.5 cm (1 1/4 in.)

Gnatholepis cauerensis

Gobies - Gobiidae

ID: White with numerous horizontal rows of small close-set spots and blotches; thick bar through eye, **small orange "shoulder" spot**. Solitary or form small groups. Sand bottoms near rocky outcrops of sheltered reefs in 3-50 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn east of French Polynesia. - S.W. Japan to New Caledonia.

Small, Elongate Bottom Dwellers – Gobies



YELLOWBAR GOBY

Gnatholepis anjerensis

SIZE: to 5.5 cm (2 1/4 in.)

Gobies - Gobiidae

ID: White with numerous horizontal rows of small spots and blotches; thin bar through eye, **spotted dorsal and tail fins**. Solitary or form groups. On sand of lagoons and seaward reefs to 46 m.

Indo-Pacific: Red Sea to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to New Caledonia.



PAPILLA GOBY

Not Classified

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Elongate body with **protruding lower jaw**; translucent with numerous irregular brown bars; white speckles; tiny skin flaps (papillae) on cheek, back and lower body. Solitary. Open sand bottoms of sheltered coastal reefs in 4-10 m.

Localized: Known only from Bali in Indonesia.



ORANGETIP GOBY

Not Classified

SIZE: to 4.5 cm (1 3/4 in.)

Gobies - Gobiidae

ID: **Male** - Pale with brown spots and blotches; **black markings on upper iris**; tip of 1st dorsal fin orange with elongate dark mark and white filamentous extension. Solitary. Hide in coral crevices of lagoon and seaward reefs in 8-25 m.

Localized: Known from Bali in Indonesia to Papua New Guinea.



Orangetip Goby - Female

ID: Pale with brown spots and blotches; **4 large rectangular blotches on lower rear body** (also on male); filamentous extension on 3rd dorsal spine, 1st dorsal fin marked with white and orange dashes.



SAND GOBY

Heteroplopus barbatus

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Translucent with brown and white spotting including paired brown spots interspersed with white spots on rear lower side. Identification tentative. Solitary. Sand of sheltered reefs in 2-20 m.

Asian Pacific: Indonesia and Philippines to S. Japan.



SHORT-WHISKERED GOBY

Gobipsis exigua

SIZE: to 5 cm (2 in.)

Gobies - Gobiidae

ID: Elongate body; whitish with brown saddles on back and **row of brown spots along lower side**. Solitary and cryptic. Hide in coral crevices of seaward reefs in 4-25 m.

Indo-West Pacific: Comores and Amirante Is. to Fiji and Gilbert Is. in Central Pacific.

Gobies



LEMON CORALGOBY

Gobiodon citrinus

SIZE: to 5.5 cm (2 1/4 in.)

Gobies - Gobiidae

ID: Yellow; pair of blue bars through eye and 2nd pair across rear head. Solitary. Usually rest on branching *Acropora* corals such as *A. nobilis* in sheltered lagoons to 15 m.

Indo-West Pacific: Red Sea to Samoa. - S. Japan to Great Barrier Reef.



Lemon Coralgoby - Variation

ID: Variable from yellow to yellowish green, brown or black, all variations have pair of blue bars through eye, second pair across rear head; often a blue stripe along dorsal fin base, small dark spot on upper pectoral base.



NEEDLESPINE CORALGOBY

Gobiodon acicularis

SIZE: to 3.8 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Pale to medium brown without markings; long filamentous 1st dorsal spine. Perch among branches of *Porites* branching corals of shallow protected reef areas to 5 m.

Localized: Known only from Palau.



YELLOW CORALGOBY

Gobiodon okinawae

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Bright yellow; whitish patch under eye. Usually form small groups. Frequently perch on outer surface of corals such as tabletop *Acroporas* rather than among coral branches, like other species of *Gobiodon*. Sheltered reefs in 2-15 m.

East Indo-Asian Pacific: Cocos-Keeling Is. to Great Barrier Reef, north to Marshall Is. in Micronesia and S. Japan.



FIVE-LINED GOBY

Gobiodon quinquestrigatus

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Dark brown body and lighter brown to reddish head with 5 pale blue vertical lines. **Juvenile** - Vertical lines on body. Solitary or in pairs. Among branches of *Acropora* corals of lagoons and sheltered seaward reefs in 1-15 m.

Pacific: Indonesia and Philippines to Society Is. in French Polynesia. - S. Japan to Australia.



WHITE-LINED CORALGOBY

Gobiodon spilophthalmus

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: **Juvenile** - White with a pair of black stripes, black spots on head and tail. **Adult** - Blackish without markings. Solitary or form groups. On wide variety of corals of sheltered lagoons and coastal reefs in 3-20 m.

Indo-Asian Pacific: Sri Lanka to Papua New Guinea and Great Barrier Reef, north to S.W. Japan.

Small, Elongate Bottom Dwellers – Gobies



CERAM CORALGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Black without distinctive markings. Solitary or in pairs. Among coral branches (frequently *Stylophora pistillata*) in lagoons and sheltered coastal reefs in 2-15 m.

Asian Pacific: Indonesia, Philippines, Papua New Guinea and Great Barrier Reef.

Gobiodon ceramensis

Gobies - Gobiidae



BROADBARRED GOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Greenish undercolor with 4-5 brown to black bars on head and about 7 stripes often broken or formed of spot rows. Solitary among branches of *Acropora* corals. Reefs in 1-15 m.

Indo - Pacific: Red Sea to Samoa. - S. Japan Great Barrier Reef.

Gobiodon histrio

Gobies - Gobiidae



REDHEAD CORALGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Black to green body; green to pink to reddish head covered with tiny reddish bristles and may have light blue spots. Usually in small groups among branches of *Pocillopora*, *Seriatopora*, and *Stylophora* corals of lagoon and seaward reefs in 1-10 m.

Indo - Pacific: Red Sea to E. Africa and to Marquesas Is. In French Polynesia. - S.W. Japan to Australia.

Paragobiodon echinocephalus

Gobies - Gobiidae



ORANGESPOTTED GOBY

SIZE: to 9 cm (3 1/2 in.)

ID: Translucent-whitish with numerous small orangish brown and white spots, **mid-lateral row of slightly larger orangish brown double spots**. Solitary. Clean sand and rubble bottoms of lagoon and seaward reefs to 30 m.

West Pacific: Indonesia and Philippines to Fiji. - Marshall Is. in Micronesia to Great Barrier Reef.

Istigobius rigilius

Gobies - Gobiidae



DECORATED GOBY

SIZE: to 9 cm (3 1/2 in.)

ID: Whitish to pale tan with faint brown lines and several rows of small brown spots, **row of brown streaks link paired white spots on lower side**. Solitary. Clean white to black sand of lagoon and seaward reefs to 25 m.

Indo - West Pacific: E. Africa and Red Sea to Samoa. - Taiwan and Mariana Is. in Micronesia to Australia.

Istigobius decoratus

Gobies - Gobiidae



Decorated Goby - Dark Variation

ID: Similar to pale variety, but display distinct thin brown margins on scales. This variation occurs in black sand habitats.

Gobies



ORNATE GOBY

SIZE: to 9 cm (3 1/2 in.)

ID: Pale gray upper body with white below; numerous black streaks arranged in horizontal rows on side, yellowish tip on 1st dorsal fin. Solitary or form groups. Silt or mud bottoms of mangroves and protected bays to 2 m.

Indo-West Pacific: E. Africa and Red Sea to Fiji. - Taiwan and S. Japan to Australia.

Istigobius ornatus

Gobies - Gobiidae



LARGETOOTH GOBY

SIZE: to 6.5 cm (2 1/2 in.)

ID: Translucent to pale tan with dense network of small brown spots, several pairs of large brown spots in mid-lateral row, brown patch below eye. Solitary. Lagoons and sheltered coastal reefs to 10 m.

Indo-Pacific: Seychelles to Line Is. in eastern Central Pacific. - S.W. Japan and Marshall Is. in Micronesia to Australia.

Macrodontogobius wilburi

Gobies - Gobiidae



SPINECHEEK GOBY

SIZE: to 7.5 cm (3 in.)

ID: **Male** - Whitish with blue spots, streaks and dashes and orange spots; blue-edged black spot on rear of 1st dorsal fin, blue stripes on anal fin. Solitary or in pairs. Fine sand and silt bottoms of sheltered coasts to 12 m.

Indo-Pacific: Red Sea to Society Is. in French Polynesia. - S.W. Japan and Micronesia to Australia.

Oplopomus oplopomus

Gobies - Gobiidae



Spinecheek Goby - Female

ID: Translucent to brownish with tiny white and orange spots; widely-spaced brown spots on back, row of joined black spots and/or dashes behind pectoral fin with large darkish bordered white spots between.



CANINE GOBY

SIZE: to 6 cm (2 1/4 in.)

ID: Grayish with tiny white and orange spots; widely spaced black spots on back, row of joined black spots/and or short dashes behind pectoral fin with small white spots between. Solitary. Sand and rubble bottoms in 10-25 m.

Indo-Asian Pacific: Red Sea and E. Africa and to N. Australia, Indonesia and Philippines.

Oplopomus caninoides

Gobies - Gobiidae



ATHERINOID GOBY

SIZE: to 8.5 cm (3 1/4 in.)

ID: Translucent with peppering of brown and white spots. Solitary or form small groups, blend well into sandy surroundings. Sand and rubble bottoms in 3-15 m.

Indo-West Pacific: E. Africa to Canton I. in the central Pacific, north to S. Japan.

Oplopomops atherinoides

Gobies - Gobiidae

Small, Elongate Bottom Dwellers – Gobies



DWARF GOBY

SIZE: to 1.2 cm (1/2 in.)

ID: Translucent with scattered dark brown and white blotches; dark spot on upper pectoral fin base, often pepper-like spots on body. **Male** - Very tall dorsal fin pennant. Small groups among mangrove roots to 2 m.

Asian Pacific: Indonesia and Philippines.

Pandaka pusilla

Gobies - Gobiidae



BLACK-BARRED GOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Gray with black bars; semicircles of white spots on both dorsal fins and upper edge of tail. Solitary and cryptic. Hide inside coral crevices of seaward reef slopes in 8-30 m.

Indo-Pacific: Aldabra to Indonesia, Philippines, New Guinea and Marquesas Is. in French Polynesia.

Priolepis nocturna

Gobies - Gobiidae



GOLDEN GOBY

SIZE: to 6.5 cm (2 1/2 in.)

ID: Greenish gold with faint thin bars. Solitary, inhabit caves, crevices and recesses; may orient upside down on cave and recess ceilings. Shallow seaward reefs to 10 m.

Localized: Caroline Is. in Micronesia to Hawaii.

Priolepis aureoviridis

Gobies - Gobiidae



BRICK GOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Shades of brown; dark scale edges form netted pattern, pale bands on head form interconnected pattern, narrow pale bars encircle body. Solitary and cryptic. Hide in reef crevices in lagoon and outer reefs in 5-20 m.

Indo-Asian Pacific: East Africa to Great Barrier Reef, north to S.W. Japan.

Priolepis inhaca

Gobies - Gobiidae



CONVICT GOBY

SIZE: to 5 cm (2 in.)

ID: Brown with narrow dark-edged whitish bars; brown spotting on dorsal and tail fins. Solitary. Rocky crevices or among corals of coastal and outer reefs to 70 m.

Indo-Asian Pacific: E. Africa to Great Barrier Reef, north to Micronesia and S. Japan.

Priolepis cincta

Gobies - Gobiidae



ORANGE CONVICT GOBY

SIZE: to 7 cm (2 1/4 in.)

ID: Orange-brown with narrow white bars; brownish or yellowish fins, white margin on tail. **Male** - Dark spot at base of first dorsal fin. Solitary or in pairs. Silty mud substrates in river discharge debris of coastal waters in 2-15 m.

Localized: N.E. Sulawesi in Indonesia.

Priolepis sp.

Gobies - Gobiidae

Gobies



FROGFACE SLEEPERGOBY

Oxyurichthys papuensis

SIZE: to 20 cm (8 in.)

Gobies - Gobiidae

ID: **Male** - Brown to gray; large mouth, eyes on top of head; brown marking on pectoral fin base, 4 brown bars and blackish spot on tail base. Solitary. Silt or mud bottoms of sheltered shorelines and estuaries to 50 m.

Indo - Asian Pacific: Red Sea to New Caledonia, north to Micronesia and S.W. Japan.



Frogface Sleepergoby - Juvenile

SIZE: to 5 cm (2 in.)

ID: Brown to gray with scattered dark brown spots, row of dark brown spots behind pectoral fin base. Dive into soft sand, silt or mud bottoms to avoid danger.



DUSKY SLEEPERGOBY

Oxyurichthys sp.

SIZE: to 8.5 cm (3 1/4 in.)

Gobies - Gobiidae

ID: Shades of gray to brown; large black spot on rear of 1st dorsal fin, large diffuse brown blotches on side with blue streaks between, bluish above anal fin. Solitary. Soft bottoms of sheltered bays and estuaries in 5-20 m.

Asian Pacific: Indonesia and Papua New Guinea, including New Britain.



SIGNAL GOBY

Signigobius biocellatus

SIZE: to 6.5 cm (2 1/2 in.)

Gobies - Gobiidae

ID: Tan with brown blotches; twin "eye" spots on dorsal fins, brown bar below eye, blue-spotted black ventral and anal fins. Solitary or in pairs that share sand burrows. Silt or sand bottoms of sheltered coastal reefs and lagoons in 2-30 m.

Asian Pacific: Indonesia, Philippines, Palau, Great Barrier Reef and Vanuatu.



SHADOW GOBY

Yongeichthys nebulosus

SIZE: to 16 cm (6 1/4 in.)

Gobies - Gobiidae

ID: Brownish to grayish with brown "scribble" markings; 3 large dark brown blotches on side and tail base; filaments extend from 1st dorsal fin. Solitary; toxic skin. Sand or mud bottoms of coastal reefs and estuaries to 10 m.

Indo - Asian Pacific: Red Sea and E. Africa to N.W. Australia and Great Barrier Reef, north to Chuuk and Palau and S.W. Japan.



SKINSPOT DWARFGOBY

Trimma halonevum

SIZE: to 2.8 cm (1 in.)

Gobies - Gobiidae

ID: Light to dark salmon; **mid-lateral row of tiny dark brown spots**, a few scattered darkish spots on head and front of body. Solitary or form small groups. Sheltered coastal reefs and seaward slopes to 45 m.

Indo - Pacific: Maldives to Indonesia, Philippines, Micronesia and Society Is. in French Polynesia.

Small, Elongate Bottom Dwellers – Gobies



RINGEYE DWARFGOBY

SIZE: to 2.5 cm (1 in.)

ID: Red to orange with translucent fins; **thin white to lavender line encircling eye** often extends below eye across cheek. Solitary; rest on rocky bottoms. Steep seaward reef slopes in 5-50 m.

West Pacific: E. Indonesia to Australia, New Caledonia and Tonga, north to Marshall Is. in Micronesia.

Trimma benjamini

Gobies - Gobiidae



BIGEYE DWARFGOBY

SIZE: to 2.5 cm (1 in.)

ID: Darkish undercolor with dense red to orange spotting; **pair of large red spots on pectoral fin base**. Small groups in caves and under ledges. Seaward reef slopes in 5-35 m.

Indo-West Pacific: E. Africa to Fiji. - S. Japan to Australia.

Trimma macrophthalmum

Gobies - Gobiidae



OKINAWA DWARFGOBY

SIZE: to 2.8 cm (1 in.)

ID: Darkish undercolor with dense red to orange blotchy spotting; **lack red spots on pectoral fin base of Bigeye Dwarfgoby** [previous]. Form small groups. Inside caves and under ledges of seaward reef slopes in 8-35 m.

West Pacific: N. W. Australia and Great Barrier Reef to Rotuma I. in N. Fiji, north to Marshall Is. in Micronesia and S.W. Japan.

Trimma okinawae

Gobies - Gobiidae



STRIPEHEAD DWARFGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Maroon head and front of body with **red-orange stripes gradating to red mid-body to tail**; pale yellow spotting on 2nd dorsal and tail fins. Solitary or form small groups. Rest on bottom of rocky crevices of lagoon and seaward reefs in 10-30 m.

Indo-Asian Pacific: Maldives to Great Barrier Reef, north to Papua New Guinea, Palau and Philippines.

Trimma striata

Gobies - Gobiidae



BLACKSPOT DWARFGOBY

SIZE: to 2 cm (1 in.)

ID: Purplish head with pair of red bars below eye, reddish to golden to yellowish brown body; **white-edged black spot on 1st dorsal fin**. Solitary. Caves and ledges of steep outer reef slopes in 10-40 m.

Asian Pacific: Indonesia and Papua New Guinea.

Trimma sp.

Gobies - Gobiidae



YELLOWSTRIPE DWARFGOBY

SIZE: to 3 cm (1 1/4 in.)

ID: Reddish back, darker red mid-laterally and whitish below; **blue-green stripes below and between eyes**, may display yellow stripe from eye to tail base. Solitary or form small groups. On coral boulders inside sheltered coastal reefs in 25-40 m.

Asian Pacific: N. Sulawesi in Indonesia and Philippines.

Trimma sp.

Gobies - Gobiidae

Gobies



RED-SPOTTED DWARFGOBY

Trimma rubromaculatus

SIZE: to 2.2 cm (1 in.)

Gobies - Gobiidae

ID: Pinkish with red spots and blotches; dotted with several white spots and streaks and white stripe on center of snout. Usually form groups. Rest on rubble at base of steep lagoon and seaward slopes in 20-35 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



CAESIURA DWARFGOBY

Trimma caesiura

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Red-orange with pinkish head; double row of irregular white blotches on side, **network of gray line markings on head**. Solitary. Sand and rubble bottoms of caves and under ledges of coastal, lagoon and outer reefs in 5-30 m.

West Pacific: New Guinea and Great Barrier Reef to Samoa, north to Marshall and Mariana Is. in Micronesia.



CANDY CANE DWARFGOBY

Trimma sp.

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Whitish or light gray with 6-7 bright red to orange bars encircling head and body. Solitary or form small groups. Perch on surface of hard corals. Steep outer reef slopes in 12 to 35 m.

Asian Pacific: Indonesia, Palau and Papua New Guinea.



RUBBLE DWARFGOBY

Trimma naudei

SIZE: to 3 cm (1 1/4 in.)

Gobies - Gobiidae

ID: White with scattered heavy red to orange to yellow spots, blotches and markings. Solitary. Rest on sand or rubble bottoms of caves and under ledges of coastal, lagoon and outer reefs in 3-30 m.

Indo-West Pacific: Aldabra and Seychelles to Loyalty Is. just west of New Caledonia, north to Micronesia and S.W. Japan.



ORANGESPOTTED GOBY

Trimma sp.

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Pale mauve undercolor with numerous orange spots that may join to form areas of orange. Solitary. Reef and areas of rubble.

West Pacific: Wide spread in West Pacific.



BLUE-STRIPED DWARFGOBY

Trimma tevegae

SIZE: to 4 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Golden brown; **blue to bluish eye stripe extends to tail**, large dark blotch at tail base; elongate filament on 1st dorsal fin. Form hovering aggregations inside caves and under ledges of steep dropoffs of lagoons and outer slopes in 8-40 m.

Indo-Asian Pacific: Red Sea to N.W. Australia and Great Barrier Reef, north to Palau and Guam in Micronesia and S. Japan.

Small, Elongate Bottom Dwellers – Gobies



REDHEAD DWARFGOBY

SIZE: to 2.5 cm (1 in.)

ID: Translucent with reddish head and mid-body; **blue to lilac stripes and streaks on fins**, large dark spot at tail base; elongate filament on 1st dorsal fin. Form hovering aggregations in caves and under ledges of steep outer reef slopes in 15-40 m.

West Pacific: Indonesia and Philippines to Great Barrier Reef, New Caledonia and Fiji.

Trimma sp.

Gobies - Gobiidae



LONG-RAY DWARFGOBY

SIZE: to 2.3 cm (1 in.)

ID: Translucent with reddish head and mid-body; **silvery stripe on upper iris**; elongate filament extends from 1st dorsal fin. Form hovering aggregations in caves and under ledges. Lagoon and seaward reefs in 15-40 m.

Indo-Asian Pacific: Chagos Is. to Indonesia, Philippines and Papua New Guinea.

Trimma griffithsi

Gobies - Gobiidae



CAVE DWARFGOBY

SIZE: to 2.5 cm (1 in.)

ID: Reddish orange with violet highlights; **yellow band markings on red iris**. **Male** - Elongate dorsal ray and yellow spotting on dorsal and anal fins. Form hovering aggregations in caves; mix with other *Trimma*. Along dropoffs in 15-50 m.

Indo-Northern Pacific: Red Sea to Guam and Palau in Micronesia and Hawaii, north to S. Japan.

Trimma taylori

Gobies - Gobiidae



PALE DWARFGOBY

SIZE: to 2 cm (1 in.)

ID: Translucent with flesh colored hue; **black stripe across top of each iris**. Solitary. Rest on or hover just above bottom of outer reef dropoffs in 3-35 m.

Indo-West Pacific: Comores, Maldives and W. Australia to Fiji, north to Caroline Is. in Micronesia and Philippines.

Trimma anaima

Gobies - Gobiidae



FORKTAIL DWARFGOBY

SIZE: to 2.5 cm (1 in.)

ID: Pinkish orange with lavender or magenta markings on back and fins; **forked tail**. In pairs or form small groups. Swim upside-down under ledges and inside caves of steep outer reef slopes in 15-45 m.

Indo-Asian Pacific: Chagos Is. to Indonesia, Papua New Guinea and Great Barrier Reef.

Trimma hoesei

Gobies - Gobiidae



YELLOWHEAD DWARFGOBY

SIZE: to 2 cm (1 in.)

ID: **Yellow head**, mauve to grayish body; small dark "ear" spot on upper rear corner of gill cover. Solitary or form small groups. Inside caves and ledges of steep seaward slopes in 10-40 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.

Trimma stobbsi

Gobies - Gobiidae

Gobies



BLUESTREAK GOBY

Valenciennesa strigata

SIZE: to 15.5 cm (6 in.)

Gobies - Gobiidae

ID: White to pale gray with yellow snout and cheeks; bright blue stripe under eye and blue spots and/or bands below. Usually in pairs that share burrows. Sand and rubble areas on reef tops or sloping bottoms to 20 m.

Indo-Pacific: E. Africa to Line Is. and Tuamotu Is. in French Polynesia. - Micronesia to S.E. Australia.



GREENBAND GOBY

Valenciennesa randalli

SIZE: to 9 cm (3 1/2 in.)

Gobies - Gobiidae

ID: Pale gray to pale mauve; brilliant blue-green stripe below eye edged with orange and faint orange stripe along lower side to tail. Usually solitary. Silty bottoms of lagoons and sheltered seaward reefs in 8-35 m.

Asian Pacific: Singapore to Great Barrier Reef and New Caledonia, north to S.W. Japan.



YELLOW FILAMENT GOBY

Valenciennesa bella

SIZE: to 9 cm (3 1/2 in.)

Gobies - Gobiidae

ID: Pale gray with yellowish snout; 2-3 blue stripes on cheek; **yellow filaments on 1st dorsal fin.** **Male** - Black throat. Solitary or in pairs. Mixed rubble and sand bottoms of coastal reefs in 12-35 m.

Asian Pacific: E. Indonesia and Philippines, north to S.W. Japan.



Yellow Filament Goby - Juvenile

SIZE: to 4.5 cm (1 1/4 in.)

ID: Dark mauve body, yellowish fins and yellow filament on 1st dorsal fin; yellow lower head with blue stripe under eye and blue streaks and/or spots below.



TWOSTRIPE GOBY

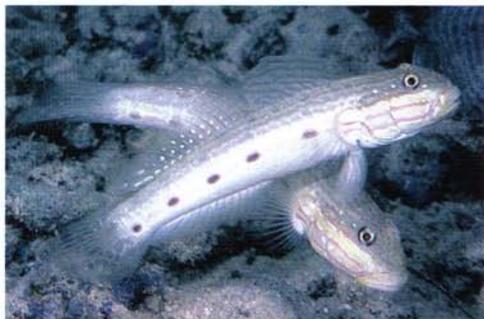
Valenciennesa helsdingenii

SIZE: to 14.5 cm (5 7/8 in.)

Gobies - Gobiidae

ID: Pale gray with **broad white mid-lateral stripe bordered by pair of black stripes**; large black spot on first dorsal fin and forked tail. Usually in pairs. Mixed sand and rubble bottoms, at base of outer reef dropoffs, in 5-40 m.

Indo-Pacific: E. Africa and Red Sea to Marquesas Is. in French Polynesia. - S. Japan to E. Australia.



LONG-FINNED GOBY

Valenciennesa longipinnis

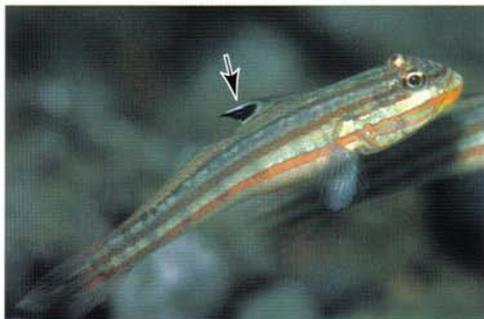
SIZE: to 15 cm (6 in.)

Gobies - Gobiidae

ID: White to pale gray; **mid-lateral row of about 5 widely space spots**, pair of stripes on cheek and gill cover, several faint darkish stripes down back. In pairs. Fine sand of protected lagoons and coastal reefs to 6 m.

West Pacific: W. Indonesia to Tonga. - S.W. Japan to Great Barrier Reef and New Caledonia.

Small, Elongate Bottom Dwellers – Gobies



MURAL GOBY

Valenciennea muralis

SIZE: to 11.5 cm (4 1/2 in.)

Gobies - Gobiidae

ID: Pale yellowish gradating to blotchy gray on back and top of head; pair of pinkish red stripes from head to tail, **black spot on rear 1st dorsal fin**. Usually in pairs. Fine sand or silt bottoms of sheltered bays and lagoons to 15 m.

East Indo-Asian Pacific: E. Andaman Sea to Indonesia, Micronesia and Solomon Is. - Philippines to Great Barrier Reef.



IMMACULATE GOBY

Valenciennea immaculata

SIZE: to 10.5 cm (4 in.)

Gobies - Gobiidae

ID: Yellowish white to pale mauve; pair of blue-edged orange stripes from snout and upper lip to tail base, and a 3rd stripe on back; **pointed lower lobe of tail**. Usually in pairs. Fine sand or mud bottoms of coastal reefs to 30 m.

Asian Pacific: Australia, Indonesia, Philippines, China and Taiwan.



MUD GOBY

Valenciennea limicola

SIZE: to 8 cm (3 in.)

Gobies - Gobiidae

ID: Mauve to gray with pair of bright orange stripes from eye and mouth to tail; white streak below eye, orange streaks on **rounded tail**. Solitary or in pairs. Fine sand or mud bottoms of coastal reefs in 5-30 m.

West Pacific: Gulf of Thailand and Indonesia to Fiji.



PARVA GOBY

Valenciennea parva

SIZE: to 6.5 cm (2 1/4 in.)

Gobies - Gobiidae

ID: White to pale gray; pair of **narrow orange stripes** from head to tail, blue/white stripe below eye, may display faint diffuse bars. In pairs or small groups. Clean sand around coral heads on coastal reefs to 20 m.

Indo-West Pacific: Seychelles to Samoa. - S.W. Japan to Australia.



ORANGE-DASHED GOBY

Valenciennea puellaris

SIZE: to 15.5 cm (6 in.)

Gobies - Gobiidae

ID: Pale gray with double row of large orange spots on side; smaller orange spots on back and blue streaks or spots on head. Usually in pairs. Sand bottoms in 8-25 m.

Indo-West Pacific: Red Sea and Madagascar to Indonesia and Samoa. - S. Japan to Australia.



Orange-Dashed Goby - Juvenile

ID: Pale blue-gray; blue spots and dashes on lower head and gill cover and occasionally orange stripe from corner of mouth to edge of gill cover, narrow orange bars on body join orange stripe on lower body.

Indian Ocean: This variety known from Red Sea and Madagascar to Andaman Sea.

Gobies



SIXSPOT GOBY

Valenciennea sexguttata

SIZE: to 11.5 cm (4 1/2 in.)

Gobies - Gobiidae

ID: White to gray; 6 or more blue to bluish spots on cheek, black tip on 1st dorsal fin. Often in pairs. Share burrows under rocks of fine sand bottoms of shoreline reefs to 10 m.

Indo-Pacific: E. Africa and Red Sea to Micronesia and Line Is. in eastern Central Pacific. - S.W. Japan to Great Barrier Reef, Fiji and Tonga.



ALLEN'S GOBY

Valenciennea alleni

SIZE: to 8.5 cm (3 1/4 in.)

Gobies - Gobiidae

ID: Pale gray; pair of blue-edged orange stripes on head, the lower stripe extending to tail base, black tip on first dorsal fin. Solitary or in pairs. Shelter in sand burrows under rocks of silty coastal reefs in 2-10 m.

Localized: N. Australia from Shark Bay in the west to N.E. Queensland.



WIDEBARRED GOBY

Valenciennea wardii

SIZE: to 10 cm (4 in.)

Gobies - Gobiidae

ID: Pale gray to whitish; 3 wide brown bars on side, blue band below eye, black "eye spot" on 1st dorsal fin, narrow brown bar on tail base, brown outer half of tail. In pairs. Silty bottoms in 12-35 m.

Indo-Asian Pacific: Red Sea and E. Africa to Australia, north to S. Japan.



DARTFISH GOBY

Tryssogobius colini

SIZE: to 5 cm (2 in.)

Gobies - Gobiidae

ID: Similar to members of dartfish family in appearance; pale gray to yellowish gray; pair of iridescent stripes through eye, tall 1st dorsal fin with blue leading edge and blue-edged orange stripe at base. Seaward sand slopes in 25-65 m.

Asian Pacific: Bali in Indonesia to New Guinea, Palau and S.W. Japan.



REDEYE HOVERING GOBY

Bryaninops natans

SIZE: to 2.5 cm (1 in.)

Gobies - Gobiidae

ID: Translucent body with bluish head and yellowish belly to above anal fin; **brilliant lavender to red eyes**. Form groups that hover a short distance above *Acropora* corals in 12-25 m.

Indo-West Pacific: Red Sea to Cook Is. - S.W. Japan and Micronesia to Great Barrier Reef.



TRANSLUCENT CORAL GOBY

Bryaninops erythroptus

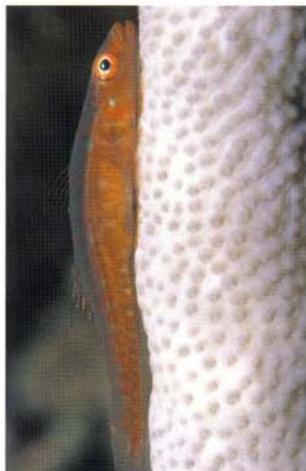
SIZE: to 2 cm (3/4 in.)

Gobies - Gobiidae

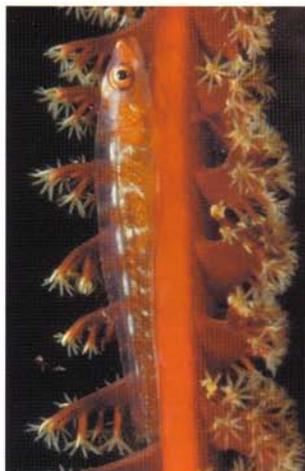
ID: Translucent grayish with dark speckles, red and white iris. On branching forms of fire coral, branching and massive forms of *Porities*. Shallow lagoons and protected reefs in 1-10 m.

Indo-Pacific: Red Sea to Samoa. - S.W. Japan to Great Barrier Reef.

Small, Elongate Bottom Dwellers – Gobies



LARGE WHIP GOBY
Bryaninops amplius
Gobies - Gobiidae
SIZE: to 5 cm (2 in.)
ID: Translucent reddish, blend in well with host gorgonian when viewed from above; iris has red outer and gold to white inner ring. On gorgonian sea whips and fans in areas of strong current in 5-30 m.
Indo-Pacific: Madagascar to Hawaii. - S. Japan to Great Barrier Reef.



Large Whip Goby - Variation
ID: Translucent with faint reddish bars and white markings between and along spinal column.



LOKI WHIP GOBY
Bryaninops loki
Gobies - Gobiidae
SIZE: 3 cm (1 1/4 in.)
ID: Color variable according to host gorgonian, but usually with **darkish spot on lower tail base**. Found on gorgonian fans and whips including *Junceella*, *Ellisella* and *Subergorgia* in 6-45 m.
Indo-West Pacific: Chagos Is. to Great Barrier Reef, New Caledonia and Samoa.



Loki Whip Goby - Variation
ID: Brown lower body and white bars, possibly associated with egg-guarding or other nuptial activity. **Note identifying spot on lower tail base.**



BLACK CORAL GOBY
Bryaninops tigris
Gobies - Gobiidae
SIZE: to 5.5 cm (2 1/4 in.)
ID: Elongate; translucent body with red to dark brown stripe (may be interrupted by white) from snout to lower tail base. Solitary. **Only on branches of black coral *Antipathes*** in 15-53 m.
Indo-Pacific: Oman and Chagos to Palau, Solomon Is. and Hawaii. Gulf of Thailand to Great Barrier Reef.



WIRE CORAL GOBY
Bryaninops yongei
Gobies - Gobiidae
SIZE: to 3.5 cm (1 1/2 in.)
ID: Translucent upper body and brownish lower body, usually with a few diffuse bars. Solitary, **only on the wire coral, *Cirripathes anguina***. Seaward and lagoon reefs in 3-45 m.
Indo-Pacific: Red Sea to Hawaii, Rapa and Marquesas Is. in French Polynesia. - S. Japan and Palau to Great Barrier.

Gobies - Sleepers



WOLFSNOUT GOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Elongate; translucent body with dense covering of pepper-like spots; **prominent snout overhangs lower jaw**. Solitary. On sponges, especially *Phyllospongia foliascens*, to 10 m.

Indo - West Pacific: Red Sea and E. Africa to Papua New Guinea, Great Barrier Reef and Fiji.

Luposicya lupus

Gobies - Gobiidae



FLATHEAD GOBY

SIZE: to 2.5 cm (1 in.)

ID: Translucent with scattered white flecks; wide flattened body. Usually in small groups, on and under flat leaf-like sponges, including *Phyllospongia*, in 2 - 18 m.

Indo - Asian Pacific: E. Africa to Solomon Is. - Philippines to Great Barrier Reef.

Phyllogobius platycephalus

Gobies - Gobiidae



SOFT CORAL GHOSTGOBY

Pleurosicya boldinghi

SIZE: 3.5 cm (1 1/2 in.)
Gobies - Gobiidae

ID: High body and pig-like snout profile; translucent tinted with color of host soft coral. Solitary or occasional in pairs. On *Dendronephthya* soft corals in 15-45 m.

Indo - Asian Pacific: E. Africa to New Guinea. - S. Japan and Micronesia to S.E. Australia and New Caledonia.



ELONGATE GHOSTGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Elongate with protruding snout (similar to Wolfsnout Goby [previous]); translucent body with tints similar to host sponge, fan-shaped *Ianthella basta*; usually dark spot and dash markings. Reefs in 10 - 40 m.

Asian Pacific: Indonesia, Ashmore Reef, Papua New Guinea and Great Barrier Reef.

Pleurosicya elongata

Gobies - Gobiidae



BIGLIP GHOSTGOBY

SIZE: to 3.5 cm (1 1/2 in.)

ID: Elongate flattened body, large upper lip; dusky with peppering of small brown spots. Usually in groups. Rest in channels on outer surface of large barrel sponges, *Xestospongia testudinaria*, in 5 - 35 m.

Indo - Asian Pacific: Sri Lanka to Indonesia, Philippines and Great Barrier Reef.

Pleurosicya labiata

Gobies - Gobiidae



STONYCORAL GHOSTGOBY

SIZE: to 2.5 cm (1 in.)

ID: Translucent with reddish brown mid-lateral stripe and white markings along spinal column. Solitary. On wide variety of hard corals of coral-rich reefs in 10 - 50 m.

Indo - West Pacific: Seychelles to Hawaii. - S.W. Japan to New Caledonia and Tonga.

Pleurosicya micheli

Gobies - Gobiidae

Small, Elongate Bottom Dwellers – Gobies



COMMON GHOSTGOBY

Pleurosicya mossambica

SIZE: to 3.5 cm (1 1/2 in.)

Gobies - Gobiidae

ID: Highly variable markings and color from brown to red, greenish and translucent; consistently display dark speckling, often white dash markings along spinal column. Solitary. Seagrass beds to coral reefs in 2-30 m.

Indo-Pacific: Red Sea and E. Africa and to Fiji and French Polynesia. - S. Japan to Australia.



Common Ghostgoby - Variation

ID: Not all variations display white dash markings along spinal column.



Common Ghostgoby - Variation

ID: Brown with dark grayish saddles and diffuse white blotches and markings. Note consistent dark speckling and white dash markings along spinal column.



Common Ghostgoby - Variation

ID: All variations may perch on algae, seagrasses, tunicates, sea pens, soft and hard corals and giant clams.



Common Ghostgoby - Variation

ID: Red saddles on back, reddish on lower half of sides and scattered white flecks. Note consistent dark speckling and white dash markings along spinal column.



DEEP-REEF GUDGEON

Calumia profunda

SIZE: to 2.3 cm (1 in.)

Sleepers - Eleotridae

ID: Goby-like, but has 2 separate pairs of ventral fins; grayish with orange spots and markings, 5 body bars and pair of black spots on tail base. Solitary and cryptic. Hide in crevices and fissures of steep outer slopes in 30-60 m.

Asian Pacific: Papua New Guinea, Solomon Is. and Vanuatu.

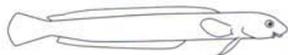
IDENTIFICATION GROUP 15

Small, Elongate Bottom Dwellers – Blennies

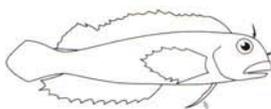
This ID Group consists of small, elongate, typically bottom-dwelling species in family Blenniidae.

FAMILY: Blennies - Blenniidae

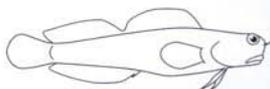
21 Genera – 107 Species Included



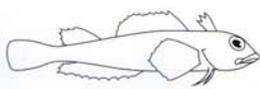
Fangblennies



Typical Shape



Genus *Ecsenius*



Triplefins

Because of similar elongate bodies and small size, species in the blenny and goby families, Gobiidae (previous ID Group), are often confused with one another. Blennies can be easily distinguished from gobies by noting their single, long continuous dorsal fins (except for a small group known as triplefins), ventral fins situated clearly in front of their pectoral fins, and their habit of resting on the bottom with curved bodies. Gobies have distinct, two-part dorsal fins and ordinarily perch with straight bodies.

Typical bottom-dwelling blennies also have blunt heads, long anal fins and fleshy, often branching appendages on their head, known as cirri. Most of these blennies have numerous, tiny comb-like teeth used for feeding on algae. Blennies classified in genera *Alticus*, *Entomacrodus* and *Istiblennius*, commonly known as rockskippers, inhabit tidal zones where they have the ability to jump between tide pools. Species in the rather large genus *Ecsenius*, generally inhabitants of coral-rich areas, are atypical for their members' limited distribution ranges. Possibly the most curious member of the blenny family is the Snake Blenny, *Xiphias setifer*, whose length can approach 50 cm (20 in.), resulting in an appearance more characteristic of eels rather than blennies.

The Indo-Pacific is home to a large contingent of blennies, known as fangblennies, that spend much of their day swimming above the sea floor. This group, also commonly called sabretooth blennies, have two large, curved canine teeth in the front of their lower jaws which are used for defense. Members of genus *Plagiotremus* utilize their imposing canines to sever flesh from the fins of fishes for food. The Mimic Blenny, *Aspidontus taeniatus*, skillfully impersonates the Bluestreak Cleaner Wrasse, *Labroides dimidiatus*, allowing it to closely approach unsuspecting fishes before darting in to take a nip. The violent reactions of victims, who often vigorously chase the offending fangblennies, attest to the painful nature of these encounters. Members of genus *Meiacanthus* have venom glands associated with their canines. This defensive adaptation allows virtually unmolested access to open water where they feed on planktonic worms and crustaceans. When not feeding in the water column or on benthic crustaceans, fangblennies rest in wormholes with only their heads exposed.

Small, Elongate Bottom Dwellers – Blennies



SLENDER SABRETOOTH BLENNY *Aspidontus dussumieri*

SIZE: to 12 cm (4 3/4 in.) Blennies - Blenniidae

ID: White with broad black stripe (sometimes segmented) on upper body, yellow dorsal and anal fins. Solitary and shy, retreat to safety of abandoned worm tubes when threatened. Lagoon and outer reefs to 20 m.

Indo-Pacific: E. Africa and Red Sea to the Tuamotu Is. in French Polynesia. - S. Japan to S.E. Australia.



FALSE CLEANERFISH *Aspidontus taeniatus*

SIZE: to 11.5 cm (4 1/2 in.) Blennies - Blenniidae

ID: White to light blue, may display yellowish upper body; black stripe enlarges from snout to tail. Solitary; mimic cleaner wrasse both as adult and juvenile to safely approach fish to feed on skin and scales. Coastal, lagoon and outer reefs to 25 m.

Indo-Pacific: E. Africa and Red Sea to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



YELLOWTAIL FANGBLENNY *Meiacanthus atrodorsalis*

SIZE: to 11 cm (4 3/4 in.) Blennies - Blenniidae

ID: Blue-gray head and front of body grading to pale yellow behind; **blue-edged black band from eye to front of dorsal fin.** Mimic the Bicolor Fangblenny. Solitary or in pairs. Coastal, lagoon and seaward reefs to 30 m.

West Pacific: S.W. Japan, Philippines, Bali in Indonesia to N.W. Australia, S. Great Barrier Reef, New Caledonia and Samoa.



SMITH'S FANGBLENNY *Meiacanthus smithi*

SIZE: to 8 cm (3 1/4 in.) Blennies - Blenniidae

ID: Pale gray; **black line from eye to dorsal fin** where it joins broad black stripe. Mimic Imposter Fangblenny and young of Two-lined Monocle Bream. Solitary or in pairs. Coastal, lagoon and outer reefs to 10 m.

Indian Ocean: Maldives and India to Sumatra and Java Sea in W. Indonesia.



TWIN FANGBLENNY *Meiacanthus geminatus*

SIZE: to 6.5 cm (2 1/2 in.) Blennies - Blenniidae

ID: Gray back and dorsal fin and yellow belly; white stripe above black mid-lateral stripe. Mimic the Yellowbelly Cardinalfish. Solitary. Sheltered coastal reefs in 1-15 m.

Localized: Sabah in N. Borneo and Sulu Archipelago to Philippines.



BLACKSTRIP FANGBLENNY *Meiacanthus vittatus*

SIZE: to 6.5 cm (2 1/2 in.) Blennies - Blenniidae

ID: Pale gray upper body and whitish below with black mid-lateral stripe. Mimic juvenile Pearly Monocle Bream and Mimic Cardinalfish. Mainly lagoon reefs in 1-20 m.

Localized: Papua New Guinea including the island of New Britain.

Blennies



TAILSPOT FANGBLENNY

Meiacanthus urostigmus

SIZE: to 5.5 cm (2 1/8 in.)

Blennies - Blenniidae

ID: Whitish to pale gray; narrow black mid-lateral stripe enlarges on yellow tail base. Mimic Five-lined Cardinalfish. Form small to large aggregations around coral outcroppings. Coastal reefs to 8 m.

Localized: Similan Is. in northeastern Indian Ocean to N. Sumatra.



BUNDOON FANGBLENNY

Meiacanthus bundoon

SIZE: to 8 cm (3 1/2 in.)

Blennies - Blenniidae

ID: Brown to gray to black; tapering yellowish green to yellow or tan stripe from head to tail base, black tail borders. Solitary or in pairs. Coral reefs in 5-20 m.

Localized: Philippines and Fiji.



KAMOHARA'S FANGBLENNY

Meiacanthus kamoharai

SIZE: to 8.5 cm (3 1/2 in.)

Blennies - Blenniidae

ID: Black with white stripe on upper head and body, 2 white stripes on lower head, light gray tail base. Solitary or in pairs. Coastal, lagoon and seaward reefs to 20 m.

Localized: Japan southwest to Ryukyu Is.



SULAWESI FANGBLENNY

Meiacanthus vicinus

SIZE: to 6.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: White with pair of black stripes on upper head and body. Solitary or in pairs. Sheltered coastal, lagoon and outer reefs to 10 m.

Localized: Southern half of Sulawesi and nearby Banggai Is. in Indonesia.



DOUBLEPORE FANGBLENNY

Meiacanthus ditrema

SIZE: to 6.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: White with silver reflections; 2 narrow black stripes, the lowermost splits on head. Form aggregations among branches of gorgonians or black coral. Sheltered coastal reefs in 3-20 m.

West Pacific: E. Indonesia and Philippines to Samoa. - S.W. Japan to N. Australia and Great Barrier Reef.



SULU FANGBLENNY

Meiacanthus abditus

SIZE: to 6.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: White with 3 black stripes and blackish dorsal fin. Form aggregations among gorgonians and black coral. Coastal reefs and steep slopes in 5-40 m.

Localized: Sabah in N. Borneo and Sulu Archipelago to Philippines

Small, Elongate Bottom Dwellers – Blennies



HAIRYTAIL FANGBLENNY

SIZE: to 6.5 cm (2½ in.)

Meiacanthus crinitus

Blennies - Blenniidae

ID: White with 3 black stripes and narrow black edge on dorsal fin. Solitary or in pairs; possibly mimic young of Three-striped Whiptail. Sheltered coastal reefs to 20 m.

Localized: Known only from the Raja Ampat Is. off the western tip of New Guinea.



FRESHWATER FANGBLENNY

SIZE: to 6.5 cm (2½ in.)

Meiacanthus anema

Blennies - Blenniidae

ID: White with 3 black stripes and narrow golden stripe on back. Solitary or in pairs. Fresh or brackish water in lower reaches of streams that flush onto coastal reefs.

Asian Pacific: Indonesia, Philippines, Papua New Guinea, Solomon Is. and Vanuatu.



STRIPED FANGBLENNY

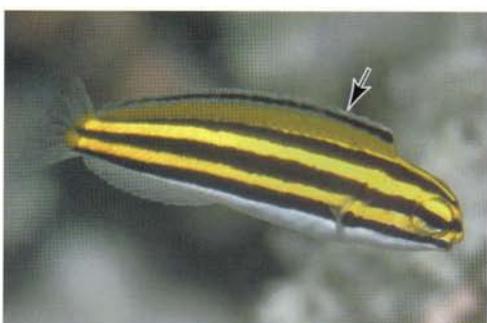
SIZE: to 10 cm (4 in.)

Meiacanthus grammistes

Blennies - Blenniidae

ID: White with yellowish head and upper body with 3 black stripes; black edges on dorsal and anal fins, **black spots on tail**. Mimic Shorthead Fangblenny [below]. Solitary or in pairs. Coastal, lagoon and outer slopes to 20 m.

Asian Pacific: S. China Sea, S.W. Japan, Indonesia, Palau, New Guinea to N.W. Australia to Great Barrier Reef.



LINED FANGBLENNY

SIZE: to 9.5 cm (3¾ in.)

Meiacanthus lineatus

Blennies - Blenniidae

ID: Bright yellow with white belly; 3 black stripes on head and body, **black sub-marginal stripe on dorsal fin**. Mimic Deceiver Blenny [next page], which lacks dorsal fin stripe. Solitary or in pairs. Lagoons and seaward reefs in 3-18 m.

Localized: Great Barrier Reef.



SHORTHEAD FANGBLENNY

SIZE: to 13 cm (5 in.)

Petroscirtes breviceps

Blennies - Blenniidae

ID: Variable, commonly white to yellow with 3 blackish stripes. Solitary or pairs; mimic Striped Fangblenny [above]. Shelter and nest in abandoned worm tubes, shells or small-necked bottles. Coastal and lagoon reefs, weed and sand areas to 15 m.

Indo-Asian Pacific: East Africa to Papua New Guinea. - S.W. Japan to N.W. Australia and New Caledonia.



Shorthead Fangblenny - Variation

ID: Light gray or whitish with bold black mid-lateral stripe and faint dark stripe above and below. Possibly mimic Blackstripe Fangblenny.

Localized: Known only from Papua New Guinea.

Blennies



DECEIVER FANGBLENNY

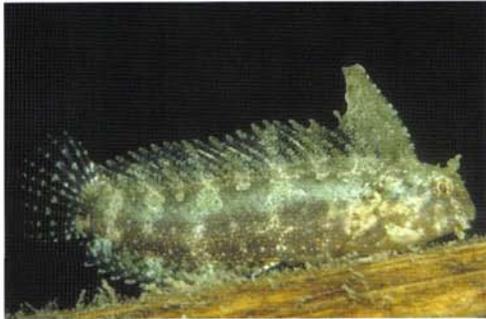
SIZE: to 9.5 cm (3³/₄ in.)

ID: White with 3 black stripes, yellowish dorsal fin. Solitary or with Lined Fangblenny [previous page], which they mimic. Lagoon and coastal reefs in 1-12 m.

Localized: Great Barrier Reef (south of 17- degrees S) and New South Wales.

Petroscirtes fallax

Blennies - Blenniidae



HIGHFIN FANGBLENNY

SIZE: to 15 cm (6 in.)

ID: Mottled shades of greenish brown; tall front dorsal fin. Solitary or small groups. Weedy habitats including beds of *Sargassum* algae in coastal and lagoon reefs to 5 m.

Indo - West Pacific: E. Africa and Red Sea to W. Australia, Samoa and Tonga. - S.W. Japan to Great Barrier Reef and New Caledonia.

Petroscirtes mitratus

Blennies - Blenniidae



VARIABLE FANGBLENNY

SIZE: to 7.5 cm (3 in.)

ID: Variable, commonly olive to greenish upper body and whitish to pale greenish yellow below; densely mottled and spotted, often large dark blotches on back. Solitary. Weedy areas of coastal and lagoon reefs to 5 m.

Indo - West Pacific: Sri Lanka to Fiji. - S.W. Japan to Great Barrier Reef.

Petroscirtes variabilis

Blennies - Blenniidae



SMOOTH FANGBLENNY

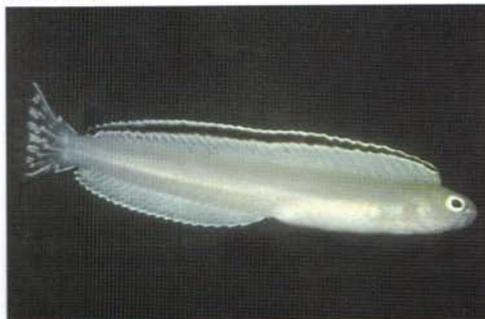
SIZE: to 9.5 cm (3³/₄ in.)

ID: White; densely mottled and spotted, irregular pearl and dark brown stripe from eye to tail base. Solitary. Sand, coral rubble and weed flats to 5 m.

Indo - Pacific: East Africa to Line Is. and Society Is. in French Polynesia. - Micronesia to Great Barrier Reef.

Petroscirtes xestus

Blennies - Blenniidae



IMPOSTER FANGBLENNY

SIZE: to 5 cm (2 in.)

ID: Pale gray with black submarginal stripe on dorsal fin. Solitary; mimic Smith's Fangblenny, but **lack line from eye to dorsal fin**. Coastal, lagoon and outer reefs to 10 m.

Indian Ocean: Maldives and Sri Lanka to Andaman Sea, south to N.W. Sumatra in Indonesia.

Plagiotremus phenax

Blennies - Blenniidae



PIANO FANGBLENNY

SIZE: to 13 cm (5 in.)

ID: White; wide black stripe from snout to tail base often formed by numerous short bars. Solitary; feed on skin and scales of other fishes, which they aggressively attack. Lagoon and seaward reefs in 1-20 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S. Japan to Great Barrier Reef and N. New Zealand.

Plagiotremus tapeinosoma

Blennies - Blenniidae

Small, Elongate Bottom Dwellers – Blennies



BICOLOR FANGBLENNY

Plagiotremus laudandus

SIZE: to 7.5 cm (3 in.)

Blennies - Blenniidae

ID: Blue-gray head and front of body gradating to yellow body and tail; dark border on dorsal fin. Solitary; mimic Yellowtail Fangblenny [previous], but **lack bar from eye to dorsal fin**. Coastal, lagoon and seaward reefs to 30 m.

West Pacific: N. W. Australia, E. Indonesia, Philippines and Micronesia to Gilbert Is. - S. Japan to E. Australia.



Bicolor Fangblenny - Fiji Variation

ID: Yellow with greenish tints on dorsal and anal fins. Very similar to yellow variation of Midas Blenny, distinguished by large eye located toward the extreme front of head. Classified as *P. laudandus flavus*.

Localized: Fiji and Tonga.



BLUESTRIPE FANGBLENNY

Plagiotremus rhinorhynchos

SIZE: to 12 cm (4 3/4 in.)

Blennies - Blenniidae

ID: **Dark Variation** - Variable from black to dark orange to orange; pair of neon-blue stripes from snout to tail. Solitary; young mimic Cleaner Wrasse. Coastal, lagoon and reefs to 40 m.

Indo-Pacific: E. Africa and to Micronesia, Line Is., Marquesas and Society Is. in French Polynesia. - S. Japan to Great Barrier Reef and Lord Howe I.



Bluestriped Fangblenny - Orange Variation

ID: Orange with pair of neon-blue to white stripes from snout to tail. All variations are commonly in the same geographical area. Feed on skin and scales of other fishes, which they aggressively attack. Occasionally bite divers.



SNAKE BLENNY

Xiphias setifer

SIZE: to 53 cm (21 in.)

Blennies - Blenniidae

ID: Greatly elongate, resemble an eel with a prominent dorsal fin; alternating dark and light brown bands. Solitary. Sand or mud bottoms near reefs in 2-20 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and French Polynesia. - S. Japan to Australia, New Caledonia and Vanuatu.



Snake Blenny

ID: Nocturnal; burrow during day, often with their heads exposed.

Blennies



MANGROVE OYSTER BLENNY *Omobranchus obliquus*

SIZE: to 7 cm (2 3/4 in.) Blennies - Blenniidae

ID: White to pale brown or gray undercolor with **narrow brown bars across throat** and slanting brown bands and chevron markings on side. Solitary or small groups. Coral, rock and rubble bottoms of coastal reefs and estuaries to 2 m.

East Indo-West Pacific: Nicobar Is. to Samoa, and New Caledonia to Mariana and Caroline Is.



ELONGATE OYSTER BLENNY *Omobranchus elongatus*

SIZE: to 5.5 cm (2 1/4 in.) Blennies - Blenniidae

ID: Gray; white diagonal line behind eye, **spots on throat**, dark ocellated spot on rear gill cover, dark bars on side separated by white lines. Solitary or form small groups. Rocky reefs and estuaries that support oyster growth to 2 m.

Indo-Asian Pacific: Persian Gulf and S. Africa to Solomon Is. - S. Japan to Australia.



FOUR-FINGERED BLENNY *Andamia tetradactylus*

SIZE: to 6.5 cm (2 1/2 in.) Blennies - Blenniidae

ID: Gray with clusters of small white spots forming about 10 bars; whitish band below eye; lower lip forms sucking device. Rocky shores exposed to wave action. Occasionally cling to rocks just above water line.

Localized: Indonesia.



DASHED-LINE BLENNY *Blenniella interrupta*

SIZE: to 8 cm (3 1/4 in.) Blennies - Blenniidae

ID: Pale to medium gray, olive or brown; A- or H-shaped dark bars and dark maroon dash lines on side, **dark maroon line markings on upper head**. Solitary or form groups. Rocky shores and intertidal flats to 2 m.

Indo-Asian Pacific: Bali, Palau and Philippines to Vanuatu, north to Taiwan.



BLUEDASHED ROCKSKIPPER *Blenniella paula*

SIZE: to 13 cm (5 in.) Blennies - Blenniidae

ID: Pale to medium gray, olive or brown; 8 H-shaped dark bars each containing one or more pale blue dark edged dashes or spots. Solitary; rest on bottom or in holes with only head protruding. Intertidal reef flats with cracks and reefs to 5 m.

Pacific: S. Sulawesi in Indonesia to French Polynesia. - Micronesia to Great Barrier Reef.



PICTURE ROCKSKIPPER *Blenniella gibbifrons*

SIZE: to 10 cm (4 in.) Blennies - Blenniidae

ID: Pale to medium gray, olive or brown; H-shaped dark bars on side, **numerous dark outlined white spots form netted pattern on head and front body**. Solitary; rest on bottom. Intertidal reef flats and areas of sand and algae to 5 m.

Northern Pacific: Marianas and Marcus Is. n Micronesia to Midway I., Hawaii and French Polynesia.

Small, Elongate Bottom Dwellers – Blennies



REDSPOTTED BLENNY

Blenniella periophthalmus

SIZE: to 14 cm (5 1/2 in.)

Blennies - Blenniidae

ID: Tan; red spots on head, dark brown "ear" spot, H-shaped bars on side with double row of silvery-blue streaks or spots. Solitary or form groups; rest on bottom or in holes with only heads exposed. Rocky shores and intertidal flats with waves.

Indo-Asian Pacific: Red Sea and E. Africa and W. Australia to Solomon Is., north to S.W. Japan.



Redspotted Blenny - Variation

ID: Red spots can be brilliant red to muted orange and cover only head or extend over half the body, double H-shaped bars may be wide and bold or narrow and lack H-crossbar, often double bar saddles on back and underside; can fade or intensify color and markings.



BROWN CORAL BLENNY

Atrosalarias fuscus holomelas

SIZE: to 14.5 cm (5 3/4 in.)

Blennies - Blenniidae

ID: **Juvenile** - Yellow to orange; to 4.5 cm (1 3/4 in.). **Adult** - Dark brown, except Great Barrier Reef population has yellow tail. Solitary; among branching corals. Lagoons and sheltered outer reef slopes in 2-12 m.

Indo-Pacific: Red Sea to Micronesia, Tonga and Society Is. in French Polynesia. - S.W. Japan to Australia and New Caledonia.



EARED BLENNY

Cirripectes auritus

SIZE: to 9 cm (3 1/2 in.)

Blennies - Blenniidae

ID: Brown to pinkish red; black "ear" spot and small dark spots on side; fringe-like cirri on nape. Solitary. Coastal fringing reefs and outer slopes, usually less than 10 m, but may reach 20 m.

Indo-Pacific: E. Africa to Taiwan, Philippines, Palau and Line Is. in eastern Central Pacific.



BARRED BLENNY

Cirripectes polyzona

SIZE: to 8.5 cm (3 1/4 in.)

Blennies - Blenniidae

ID: Gray head and front of body gradating to dark brown; reddish brown reticulations and bands on head, about 12 brown body bars. Solitary. Algal ridges and reef crests in surge channels of outer reefs to 3 m.

Indo-Pacific: Gulf of Aden to Samoa and Line Is. in eastern Central Pacific. - S. Japan to Great Barrier Reef.



Barred Blenny - Juvenile

SIZE: to 4 cm (1 1/2 in.)

ID: Dark gray back and pale gray below with dark mid-lateral stripe between; white spot above eye and white bar below.

Blennies



CHESNUT BLENNY

SIZE: to 12.5 cm (5 in.)

Cirripectes castaneus

Blennies - Blenniidae

ID: Gray to reddish brown; reddish brown bands on head and bars on body, ocellated "ear" spot; fringe-like cirri on nape. Solitary or in pairs. Surge zone of outer reef crests to about 3 m depth.

Indo-West Pacific: Red Sea and E. Africa to Tonga. - S. Japan to Australia and Norfolk I.



LADY MUSGRAVE BLENNY

SIZE: to 12 cm (4 3/4 in.)

Cirripectes chelomatus

Blennies - Blenniidae

ID: Dark brown with fine red dots on head and body; dark iris; fringe-like cirri on nape. Solitary or form small groups. Surge zone of outer reef crests to 3 m.

West Pacific: S.E. Papua New Guinea and Great Barrier Reef to Tonga and Fiji.



FILAMENTOUS BLENNY

SIZE: to 9 cm (3 1/2 in.)

Cirripectes filamentosus

Blennies - Blenniidae

ID: Dark brown; small red spots on cheek, **lines on snout**; gold iris, reddish ring around eye; fringe-like cirri on nape. Solitary or form small loose groups. Coral and rocky reefs to 16 m, but usually less than 7 m.

Indo-Asian Pacific: S. Red Sea, E. Africa and W. Australia to Great Barrier Reef, Solomon Is., north to Taiwan.



SPRINGER'S BLENNY

SIZE: to 8 cm (3 1/4 in.)

Cirripectes springeri

Blennies - Blenniidae

ID: Dark brown with small bright red spots on head and body; gold iris, **bright red ring around eye**; fringe-like cirri on nape. Solitary or small loose groups. Upper edge of outer reef slopes to 18 m, but usually less than 10 m.

Asian Pacific: E. Indonesia, Philippines, Papua New Guinea, and Solomon Is.



RED-SPECKLED BLENNY

SIZE: to 8 cm (3 in.)

Cirripectes variolosus

Blennies - Blenniidae

ID: **Male** - Dark reddish brown with bright red spots and short dash markings on head; **dark around eye with silver iris**, fringe-like cirri on nape. Solitary; often seek shelter in holes, fissures. Living corals on exposed seaward reefs to 5 m.

Pacific: Bonin Is. In S. Japan to Palau in Micronesia, Johnston Atoll and French Polynesia.



Red-speckled Blenny - Female

ID: Grayish brown without markings except for a few pale spots and dashes on head; silver iris.

Small, Elongate Bottom Dwellers – Blennies



RED-STREAKED BLENNY

Cirripectes stigmaticus

SIZE: to 13 cm (5 in.)

Blennies - Blenniidae

ID: Male - Dark brown; red to brown network of lines on head, scattered red lines and spots on body, gold iris; fringe-like cirri on nape. Solitary or small loose groups. Upper edge of seaward reef slopes to 20 m, but usually less than 10 m.

Indo - West Pacific: E. Africa to Samoa. - Micronesia to Great Barrier Reef and New Caledonia.



Red-streaked Blenny - Female

ID: Brown to reddish brown with dark brown reticulated pattern covering head and body, fringe-like cirri on nape.



AUSTRALIAN BLENNY

Ecsenius australianus

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Reddish brown; dark brown stripe with pale margins behind eye, double row of narrow rectangular white markings on side. Solitary or form small groups. Coral areas in lagoons and on outer slopes in 3 - 22 m.

Localized: S.E. Papua New Guinea, N. Great Barrier Reef and Coral Sea.



LUBBOCK'S BLENNY

Ecsenius lubbocki

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Shades of brown with dark bars and pale stripes; bright gold iris, row of white streaks on back. Solitary or in pairs. Coastal reefs encrusted with coralline algae in 3 - 12 m.

East Indian Ocean: E. Andaman Sea and N.W. Sumatra in Indonesia.



MONOCLE BLENNY

Ecsenius monoculus

SIZE: to 6 cm (2 1/2 in.)

Blennies - Blenniidae

ID: Pale brown undercolor with darker bars, bright yellow iris; pale yellow to white spots on side, black saddle on tail base. Solitary or small, loose groups. Algal-covered, steep-walled gutters in 2 - 10 m.

Asian Pacific: Molucca Is. in E. Indonesia, north to Philippines and S. China Sea.



SPOTTED-ROW BLENNY

Ecsenius collettei

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Brown to gray-brown; double row of black spots on sides and often another at base of dorsal fin, yellow marks on iris. Solitary or form small groups on coral outcroppings. Silty coastal reefs and lagoons to 10 m.

Localized: N. Papua New Guinea.

Blennies



TIGER BLENNY

Ecsenius tigris

SIZE: to 4 cm (1½ in.)

Blennies - Blenniidae

ID: Tan; narrow black bars or spots on upper body and row of black spots behind belly, row of white spots on back, white dash lines on mid-side. Solitary or form small groups. Lagoon reefs and channels to 10 m.

Localized: Coral Sea off E. Australia, including Osprey Reef.



ALLEN'S BLENNY

Ecsenius alleni

SIZE: to 8.5 cm (3½ in.)

Blennies - Blenniidae

ID: Shades of brown with white underside; **ocellated spot at pectoral fin base**, 10-12 narrow black saddles on back, brown bars on sides. Solitary or form small groups. Lagoon and outer reefs and isolated outcroppings to 15 m.

Localized: N.W. Australia, including Rowley Shoals, Scott and Ashmore Reefs.



FIJI CLOWN BLENNY

Ecsenius fijiensis

SIZE: 4 cm (1½ in.)

Blennies - Blenniidae

ID: Pale reddish brown front body gradating to yellow mid-body to tail; short white stripe above eye and another below, about 8 dark tear-shaped spot bars from mid-body to tail base. Solitary, perch on coral outcroppings. Coral reefs in 3-25 m.

Localized: Known only from Fiji



COMICAL BLENNY

Ecsenius opsifrontalis

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Reddish brown; brown stripe behind eye, double row of rectangular to rounded white spots. Distinguished from similar Australian Blenny [previous page] by location. Solitary or from small groups. Coral areas in lagoons and on outer slopes in 3-22 m.

West Pacific: Micronesia to Samoa.



CLOWN BLENNY

Ecsenius axelrodi

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Orange with dark upper head; **ocellated spot above pectoral fin base**, 10-12 spots on back become bars toward rear body, 2 pale body stripes. Solitary or small groups perch on coral outcroppings. Outer reef slopes in 8-30 m.

Localized: Sulawesi and Irian Jaya in Indonesia, Papua New Guinea and Solomon Is.



Clown Blenny - Gray Variation

ID: Gray with yellow head and pair of yellow stripes through eye; 3 black stripes and dusky spots on side. Also a yellow variation which may display striped or barred pattern. All variations have distinctive ocellated spot and **orange strip on pectoral fin base**.

Small, Elongate Bottom Dwellers – Blennies



BATH'S BLENNY

Ecsenius bathi

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Gray with yellow head; pair of yellow stripes through eye, 3 black body stripes. Solitary or form small groups on coral outcroppings, commonly around sponges and tunicates. Coastal reefs and outer slopes in 3-25 m.

Localized: Kalimantan (Borneo) to Irian Jaya in E. Indonesia.



Bath's Blenny - Orange-striped Variation

ID: Alternating orange and gray stripes are intersected by narrow brown bars forming rectangular "windows"; pair of white stripes through eye.

Localized: Kalimantan (Borneo) to Irian Jaya in E. Indonesia.

Does not overlap range of Philippines Blenny [next].



PHILIPPINES BLENNY

Ecsenius dilemma

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Alternating orange and gray stripes are intersected by narrow brown bars forming rectangular "windows"; narrow dark bars on back. Also has black striped variation same as Bath's Blenny [previous]. Coral reefs to 34 m, usually below 10 m.

Localized: Philippines. (Does not overlap range of Bath's Blenny [previous]).



THREE-LINED BLENNY

Ecsenius trilineatus

SIZE: to 3.5 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Shades of brown; 3 narrow dark brown body stripes with double row of white spots between, yellow-rimmed pupil with "spoke" marks on iris. Solitary or form small. Sheltered and seaward reefs in 2-10 m.

Localized: Molucca Is. in Indonesia to Papua New Guinea and Solomon Is.



TWINSPOB BLENNY

Ecsenius bimaculatus

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Shades of brown with pale lower head and belly; pair of black spots on the upper belly, pair of white stripes through eye, white mid-lateral stripe from eye to mid-body. Solitary or form small groups. Coastal reefs and outer slopes in 1-15 m.

Localized: Sabah in N. Borneo to Philippines.



BANDA BLENNY

Ecsenius bandanus

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Light brown with pale lower head and belly; pair of yellow stripes through eye, white mid-lateral stripe from eye to mid-body. Solitary or form small groups on coral outcroppings. Coastal reefs and outer slopes in 2-15 m.

Localized: Java Sea to Irian Jaya in E. Indonesia.

Blennies



BICOLOR BLENNY

Ecsenius bicolor

SIZE: to 10 cm (4 in.)

Blennies - Blenniidae

ID: The most common variation of this highly variable species has dark gray head and front body and bright yellow-orange rear body; long straight cirri. Solitary; often use abandoned worm tubes for burrows. Coastal, lagoon and outer reefs to 25 m.

Indo-Central Pacific: Maldives to Micronesia, Phoenix Is. in Central Pacific and Fiji. - S.W. Japan to S. Great Barrier Reef.



Bicolor Blenny - White-belly Variation

ID: Dark gray upper front body abruptly gradating to yellow toward rear; white belly. Also an all brown variation.



Bicolor Blenny - Brown Variation

ID: Entirely medium brown with reddish head and front body [pictured] to entirely dusky black are also common variations. The different variations can often be identified by the presence of an **orangish arched line behind and below the eye**.



BLACKSPOT BLENNY

Ecsenius lividanalis

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Variable from entirely yellow-orange to purplish gray-brown front body and yellow-orange behind; **dark spot around anus** (not visible in photo). Form small groups. Lagoons and sheltered coastal reefs to 12 m.

Asian Pacific: N.W. Australia to E. Indonesia, Papua New Guinea and Solomon Is.



EYESPOT BLENNY

Ecsenius ops

SIZE: to 5.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: Blue-gray head, brown body; white to bluish white line below eye; brilliant gold iris; **small black spot behind eye**. Solitary or form small groups. Sheltered coastal reefs to 15 m.

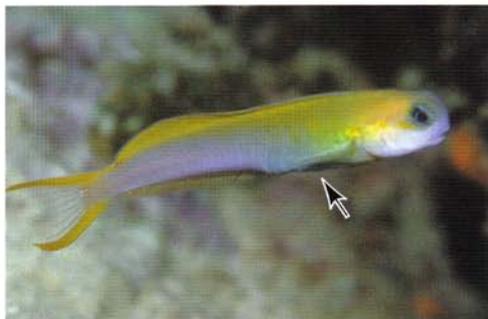
Localized: Java Sea to Flores, north to Banggai Is. E. of Sulawesi in Indonesia.



Eyespot Blenny - Bicolor Variation

ID: Blue-gray upper head and brown upper body, pale tan to nearly white lower body; white to bluish white line below eye, brilliant gold iris, small black spot behind eye.

Small, Elongate Bottom Dwellers – Blennies



MIDAS BLENNY

Ecsenius midas

SIZE: to 13 cm (5 in.)

Blennies - Blenniidae

ID: Highly variable in both color and pattern, but commonly in shades of yellow/gold, mauve and/or brown, colors may be mixed or uniform; occasionally display irregular bars, **dark spot in front of anus in all variations.** Seaward reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa and to Marquesas Is. in French Polynesia. - Philippines to N.E. Australia.



Midas Blenny - Variation

ID: All variations have the ability to rapidly change color and patterns; often uniformly gold (source of common name) or brown. Very similar to yellow variation of Bicolor Fangblenny distinguished by smaller eye located further back on mid-head. Form plankton feeding aggregations, often mixing with Anthias adopting their color pattern. Seaward reefs in 2-30 m.



Midas Blenny - Variation

ID: Occasionally display irregular bars. All commonly have long tips on tail lobes; also commonly known as Lyre-tail Blenny.



EYELINED BLENNY

Ecsenius melarchus

SIZE: to 6 cm (2 1/2 in.)

Blennies - blenniidae

ID: Light brown head, dark brown body, bright gold iris; black-edged pale gray to white stripe from lower eye to pectoral fin base with orange stripe just below. Solitary or form small groups. Sheltered coastal reefs in 1-30 m.

Localized: Java Sea in Indonesia, north to Sabah in N.E. Borneo and W. Philippines.



WHITE-LINED BLENNY

Ecsenius taeniatus

SIZE: to 4 cm (1 1/2 in.)

Blennies - Blenniidae

ID: Dark gray to black with white belly; narrow white stripe on back and wider mid-lateral white stripe, pair of yellow stripes on iris. Solitary or form small groups. Fringing reefs to 8 m.

Localized: Milne Bay in S.E. Papua New Guinea, including D'Entrecasteaux Is.



TRICOLOR BLENNY

Ecsenius tricolor

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Blue-gray front body, yellow-orange rear body; white stripe from below eye to mid-side, stripe on head is edged with blue above and orange below. Small loose groups. Seaward and sheltered reefs in 5-30 m.

Localized: Sabah in N. Borneo and Palawan and Calamianes Is. in W. Philippines.

Blennies



SADDLE BLENNY

Ecsenius sellifer

SIZE: to 4.5 cm (1 3/4 in.)

Blennies - Blenniidae

ID: Brown; several ocellated spots on upper rear body, several pale narrow stripes, black marks on edge of gill cover. Solitary or form small groups. Fringing reefs to depth of 8 m.

Localized: Palau, Trobriand Is. off S.E. Papua New Guinea to Solomon Is.



OCULAR BLENNY

Ecsenius oculus

SIZE: to 6 cm (2 1/2 in.)

Blennies - Blenniidae

ID: Brown with dark brown bars; several ocellated spots on rear body, several pale, wavy broken stripes. Solitary or form small groups. Coastal and lagoon reefs to 15 m.

Asian Pacific: Molucca Is. in Indonesia to Philippines and South China Sea.



LINED BLENNY

Ecsenius lineatus

SIZE: to 7 cm (2 3/4 in.)

Blennies - Blenniidae

ID: Gray gradating to dirty yellow upper body and light blue-gray below; black stripe from eye to tail composed of rectangular segments. Solitary or form small groups. Seaward reef slopes to 28 m.

Indo - Asian Pacific: Mauritius and Reunion Is. to W. Australia, and north to S.W. Japan.



FOURSTRIP BLENNY

Ecsenius kurti

SIZE: to 4.5 cm (1 3/4 in.)

Blennies - Blenniidae

ID: Pale brown; 4 thin black stripes break into spots on rear body, dark streaks on iris. Solitary or form small groups on coral outcroppings, often on species of *Porites*. Coastal fringing reefs and lagoons to 10 m.

Localized: Cuyo and Calamianes Is. in W. Philippines.



TAILSPOT BLENNY

Ecsenius stigmatura

SIZE: to 5.5 cm (2 1/4 in.)

Blennies - Blenniidae

ID: Shades of brown with pale lower head; white-edged black spot on tail base, yellow iris with outer rim of orange, white dark-edged line below eye. Solitary or form small groups. Coastal reefs and lagoons in 2-30 m.

Localized: Molucca and Raja Ampat Is. in Indonesia and Philippines.



STRIPED BLENNY

Ecsenius prooculis

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Pale brown to pale gray with 3 black stripes; bright yellow marks on iris. Solitary or small loose groups. Sheltered lagoon reefs to 10 m.

Localized: N. Papua New Guinea to Solomon Is.

Small, Elongate Bottom Dwellers – Blennies



SPOKE-EYE BLENNY

Ecsenius schroederi

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Pale brown to gray with wide dusky bars; white stripe from eye to above pectoral fin where it continues as a row of elongated spots; 3 thin dark body stripes. Solitary. Sheltered coastal and lagoon reefs in 2-12 m.

Localized: Outer shelf reefs of N.W. Australia to Molucca Is. in E. Indonesia.



YAEYAMA BLENNY

Ecsenius yaeyamaensis

SIZE: to 6 cm (2 in.)

Blennies - Blenniidae

ID: Shades of brown; 2 dark dashed-lines behind eye, black margin on cheek, "Y" marking on pectoral fin base, numerous white spots and blotches on side. Solitary or small groups. Boulder habitats in 2-15 m.

Indo-Asian Pacific: Sri Lanka and W. Australia to S.W. Japan and Vanuatu.



SPOTTED BLENNY

Ecsenius stictus

SIZE: to 5.5 cm (2 1/4 in.)

Blennies - Blenniidae

ID: Light gray; faint white mid-lateral stripe with dark borders, several rows of faint dark lines and spots, "Y" marking on pectoral fin base, dark margin on gill cover. Solitary. Reef flats and lagoons to 8 m.

Localized: Great Barrier Reef.



PICTUS BLENNY

Ecsenius pictus

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Pale brown head, dark brown body, yellowish tail base; numerous thin white stripes with white spots on upper stripe and mid-lateral stripe. Solitary or in pairs. Coastal and outer reef slopes in 11-40 m.

Asian Pacific: Molucca Is. in Indonesia and Philippines to Solomon Is.



YELLOWTAIL BLENNY

Ecsenius namiyei

SIZE: to 10 cm (4 in.)

Blennies - Blenniidae

ID: Blotchy brown to charcoal with either pale gray or yellow tail. Solitary and shy, perch on sponges and corals, commonly on isolated outcroppings. Lagoon and seaward reefs to 30 m.

Asian Pacific: Molucca Is. in E. Indonesia, Philippines to Solomon Is., north to Taiwan.



Yellowtail Blenny - Variation

ID: Charcoal to nearly black with pale gray tail.

Blennies



DELICATE BLENNY

Glyptoparus delicatulus

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: **Female** - Tan to pale gray; covered with scattered white spots and rows of brown spots on body; **brown to green bar wraps under chin and 2 elongate markings behind**. In pairs or form small groups. Dead reefs with algal turf in 2-8 m.

Indo-West Pacific: E. Africa to Fiji. - S.W. Japan to Great Barrier Reef.



Delicate Blenny - Male

ID: Tan to pale gray; covered with scattered white spots and rows of brown spots on body, brown to green bar wraps under chin and 2 elongated markings behind, several narrow brown bars on snout.



TRIPLESPOT BLENNY

Crossosalarias macrospilus

SIZE: to 8.5 cm (3 1/2 in.)

Blennies - Blenniidae

ID: Shades of brown with numerous spots and ovals; mid-lateral stripe formed by dark brown rectangular blotches, **large brown spot in front of dorsal fin, 2 ocellated spots on throat**. Solitary. Lagoon and outer reefs to 25 m.

West Pacific: Indonesia and Palau to Tonga. - S.W. Japan to Great Barrier Reef.



LEOPARD BLENNY

Exallias brevis

SIZE: to 14.5 cm (5 3/4 in.)

Blennies - Blenniidae

ID: Large with high arched back; pale gray to red undercolor with netted pattern of brown to red spots; branched cirri above eye and fringe-like cirri across nape. Solitary; commonly among branches of *Pocillopora* corals. Coral-rich reefs 3-20 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Australia and Fiji.



BEAUTIFUL ROCKSKIPPER

Istiblennius bellus

SIZE: to 15 cm (6 in.)

Blennies - Blenniidae

ID: **Male** - Charcoal-gray with alternating light and dark bars; **large sail-like skin flap on top of head, 2 unbranched cirri**. Solitary. Rocky shores and intertidal flats exposed to strong waves to 3 m.

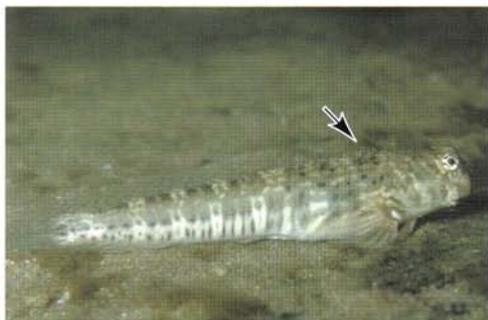
Scattered: E. Africa to Christmas I. in Indian Ocean: Marquesas Is., Polynesia: Vanuatu to Samoa and N. Tonga.



Beautiful Rockskipper - Female

ID: Gray upper body, pale gray below; numerous small black spots, may display several gray bars on rear body.

Small, Elongate Bottom Dwellers – Blennies



STREAKY ROCKSKIPPER

Istiblennius dussumieri

SIZE: to 12.5 cm (5 in.)

Blennies - Blenniidae

ID: Pale gray with series of gray rectangular markings and vertical lines combine to form unaligned bars; **black spots on forebody**; branched tentacle above eye. Solitary or form groups. Sheltered rocky shores to 1 m.

Indo-West Pacific: E. Africa to Fiji. - Taiwan to E. Australia and Norfolk Is.



RIPPLED ROCKSKIPPER

Istiblennius edentulus

SIZE: to 17 cm (6 3/4 in.)

Blennies - Blenniidae

ID: **Female** - White undercolor; about 6 paired unaligned bars with gray blotches between along lateral line; unbranched cirri above eye. **Male** - Skin flap on top of head. From groups. Rocky shores exposed to waves to 1 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and Pitcairn I. east of French Polynesia. - S. Japan to Australia.



LINED ROCKSKIPPER

Istiblennius lineatus

SIZE: to 14 cm (5 1/2 in.)

Blennies - Blenniidae

ID: **Female** - Gray with vertical black lines on head and horizontal gray to black lines on sides. **Male** - Skin flap on top of head. Usually in groups that graze algae from rocks. Rocky shores and intertidal zone exposed to waves to 2 m.

Indo-Pacific: Laccadive Is. and Maldives to Pitcairn I. east of French Polynesia. - S. Japan to Australia.



AMBON BLENNY

Paralticus amboinensis

SIZE: to 15 cm (6 in.)

Blennies - Blenniidae

ID: White undercolor covered with clusters of gray-brown spots; broad, leaf-like tentacle above eye; gray bars below eye. Solitary. Shoreline reefs or among mangroves, often on submerged logs to 1 m.

Localized: Sabah in N.E. Borneo to Biak I. north of Irian Jaya in Indonesia.



WHITE-SPOTTED BLENNY

Salaria alboguttata

SIZE: to 6.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: Grayish with numerous scattered white spots on head; rows of white spots and dash lines on side, **7-8 irregular dusky bars**; unbranched tentacle above eye. Solitary. Lagoon and sheltered coastal reefs to 8 m.

West Pacific: Philippines and Palau to Great Barrier Reef and Samoa.



FINE-SPOTTED BLENNY

Salaria guttatus

SIZE: to 14 cm (5 1/2 in.)

Blennies - Blenniidae

ID: Grayish undercolor covered with **network of lines forming spots of unequal size**; 3 horizontal rows of darkish blotches, 1-2 large white spots in front of pectoral base. Solitary on dead coral. Sheltered reefs to 5 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.

Blennies - Triplefins



PATZNER'S BLENNY

Salaria patzneri

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Covered with numerous white spots of unequal size; 8 pairs of irregular olive-brown bars, **large white spot on breast**; unbranched cirri above eye. Solitary; perch on corals. Sheltered shoreline reefs to 5 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



CELEBES BLENNY

Salaria celebicus

SIZE: to 6.5 cm (2 1/2 in.)

Blennies - Blenniidae

ID: Grayish mottled undercolor with 7 gray-brown bars; unbranched (or split near tip) pentacle above eye. Solitary; commonly on dead coral. Sheltered reefs to 6 m.

Localized: Sulawesi and nearby islands in E. Indonesia.



JEWELLED BLENNY

Salaria fasciatus

SIZE: to 14 cm (5 1/2 in.)

Blennies - Blenniidae

ID: White undercolor; 8 greenish brown irregular bars with white oval spots between, **wavy dark lines on mid-front body**. Solitary; on rock or coral outcroppings or among weeds. Coastal, lagoon, and outer reefs to 8 m.

Indo-West Pacific: Red Sea to Samoa. - S.W. Japan and Micronesia to Great Barrier Reef.



OBSCURE BLENNY

Salaria obscurus

SIZE: to 13 cm (5 in.)

Blennies - Blenniidae

ID: Dark brown except mottled light gray on snout and nape; indistinct dark wavy lines on side; branched cirri above eye. Solitary; perch on corals. Sheltered shoreline reefs, frequently in turbid water to 6 m.

Localized: Palawan Province in W. Philippines, including Cuyo and Calamianes Is.



STARRY BLENNY

Salaria ramosus

SIZE: to 5 cm (2 in.)

Blennies - Blenniidae

ID: Shades of brown, covered with numerous small white spots; highly branched tentacle above eye. Solitary; on rock or coral outcroppings. Sheltered areas with mixed sand and weed bottoms to 5 m.

Asian Pacific: N.W. Australia, Indonesia and Philippines.



Starry Blenny - Juvenile

SIZE: to 3 cm (1 in.)

ID: Dark brown head and front body gradating to orange or yellow rear body; numerous white spots of varying size cover head and body, horizontal rows of dark dash markings on body.

Small, Elongate Bottom Dwellers – Blennies



GRAY-BARRED BLENNY

Salaria sp.

SIZE: to 6 cm (2 in.)

Blennies - Blenniidae

ID: Gray with white spots on head; several narrow white bars on body; large black-edged white spot in front of pectoral fin base. Solitary; perch on dead coral surfaces. Sheltered shoreline reefs to 8 m.

Localized: Milne Bay in S.E. Papua New Guinea.



FRINGELIP BLENNY

Salaria sinuosus

SIZE: to 6 cm (2 1/4 in.)

Blennies - Blenniidae

ID: White undercolor; double row of brownish rectangular markings with pale spot in center, large dark-edged white spot below pectoral-fin base. Solitary. Dead reefs covered with algal growth to 5 m.

Indo-West Pacific: Sri Lanka to Tonga. - S.W. Japan to Australia.



SEGMENTED BLENNY

Salaria segmentatus

SIZE: to 7.5 cm (3 in.)

Blennies - Blenniidae

ID: Whitish undercolor, darkish head with white spots; 3 rows of large spots form 13-14 bars, several large white spots in front of pectoral fin. Solitary; on coral outcroppings. Sheltered reefs, often in turbid water to 8 m.

Asian Pacific: Kalimantan (Borneo) and Sulawesi in Indonesia to Palau and Solomon Is.



SEYCHELLES BLENNY

Stanulus seychellensis

SIZE: to 3.3 cm (1 1/4 in.)

Blennies - Blenniidae

ID: Light gray to olive with brown lines forming a netted pattern over body; tiny unbranched tentacle above eye. Solitary, pairs or form small groups. Coastal reef flats and outer reef areas exposed to surge to 8 m.

Indo-Pacific: Seychelles to Tuamotu Is. in French Polynesia. - Taiwan to Great Barrier Reef.



HELEN'S TRIPLEFIN

Ceratobregma helenae

SIZE: to 4.5 cm (1 1/2 in.)

Triplefins - Tripterygiidae

ID: Reddish brown head; 14-16 dark bands on side (poorly defined in photo), orange scale margins. Solitary. Lagoon and outer reef slopes to 40 m.

East Indo-West Pacific: Christmas I. to Philippines and Samoa. - S.W. Japan to S.E. Australia and New Caledonia.



YELLOWEYE TRIPLEFIN

Enneapterygius flavocipitis

SIZE: to 3.5 cm (1 1/2 in.)

Triplefins - Tripterygiidae

ID: **Female** - Reddish with fine speckling; 6-7 darkish bars (may be poorly defined), last bar black, white saddle on tail base, yellow-orange iris. **Male** - Black. Solitary or pairs. Lagoon and outer reefs to 25 m.

Asian Pacific: W. Australia and Java in Indonesia to New Caledonia, north to S.W. Japan.

Triplefins



MIRACLE TRIPLEFIN *Enneapterygius mirabilis*
SIZE: to 3.5 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: Translucent with 2-4 reddish brown pyramid-shaped bars; 1st dorsal fin tall. Solitary. Commonly on outer reef slopes in 8-37 m.
Localized: E. Indonesia, Papua New Guinea, N.E. Queensland to Vanuatu.



PALE-SPOTTED TRIPLEFIN *Enneapterygius pallidoserialis*
SIZE: to 3.5 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: **Female** - Translucent; dark brown saddles with dashes and blotches below; several white spots and streaks. **Male** - Dark brown or black. Solitary or in pairs. Coral reefs to 8 m.
West Pacific: S. Japan, Philippines to Chuuk (Truk) in Micronesia to Vanuatu.



PHILIPPINE TRIPLEFIN *Enneapterygius philippinus*
SIZE: to 3.5 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: **Male** - Green with black head; black dorsal and anal fins. **Female** - Light green; dorsal fins translucent without black pigment. Solitary or in pairs. Reef flats and tide pools to 4 m.
Indo-West Pacific: Seychelles and Mascarene Is. to S.W. Japan, New Caledonia and Samoa.



HIGHHAT TRIPLEFIN *Enneapterygius tutuilae*
SIZE: to 3 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: **Female** - Greenish translucent with white blotches or bars. **Male** - Lime green; white bar behind 2nd and 3rd dorsal fins; 1st dorsal fin tall. Solitary or small loose groups. Tide pools to outer slopes to 32 m.
Indo-Pacific: Red Sea and Madagascar to Society Is. in French Polynesia. - Taiwan to Australia.



BLACKSPOT TRIPLEFIN *Enneapterygius sp.*
SIZE: to 3 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: Translucent with darkish upper head and belly; reddish blotches on dorsal fins and black spot in 2nd. Solitary. Lagoons and outer slopes in 2-10 m.
Localized: Known only from Sukun I., Flores Sea in Indonesia.



ANDAMAN TRIPLEFIN *Helcogramma sp.*
SIZE: to 3.5 cm (1 1/2 in.) Triplefins - Tripterygiidae
ID: Translucent with reddish spots and white flecks on body; silvery white lower head and belly, white iris. Solitary. Perch on dead, algal-covered coastal reefs to 8 m.
Localized: Andaman Sea.

Small, Elongate Bottom Dwellers – Blennies



RHINOCEROS TRIPLEFIN

Helcogramma rhinoceros

SIZE: to 4 cm (1 1/2 in.)

Triplefins - Tripterygiidae

ID: **Males** - Translucent with reddish speckling and black lower body; blue stripe below eye; long fleshy extension from upper lip. **Females** - Lack enlarged lip and black color. Solitary or pairs. Coastal reefs to 5 m.

East Indo-Asian Pacific: West coast of Thailand to Indonesia, Philippines and Vanuatu.



STRIPED TRIPLEFIN

Helcogramma striatum

SIZE: to 5 cm (2 in.)

Triplefins - Tripterygiidae

ID: Red with whitish lower body; 3 white or bluish white stripes, bright yellow iris. Solitary or small groups. Coastal, lagoon, and outer reefs to 20 m.

East Indo-West Pacific: Andaman Sea to Kiribati in Central Pacific. - S. Japan to Australia.



VULCAN TRIPLEFIN

Helcogramma vulcanum

SIZE: to 4 cm (1 1/2 in.)

Triplefins - Tripterygiidae

ID: **Males** - Reddish brown; lower head black with blue stripe under eye, spots on pectoral fin base, 5 pairs of darkish bars on side, red iris. Solitary or with male partner. Rock bottoms exposed surge to 4 m.

Localized: Bali and Banda Sea in Indonesia.



Vulcan Triplefin - Female

ID: Translucent with 5 pairs of bars on side; red iris. Similar Redfin Triplefin [next] distinguished by reddish bands on dorsal fin.



REDFIN TRIPLEFIN

Helcogramma gymnauchen

SIZE: to 4.5 cm (1 3/4 in.)

Triplefins - Tripterygiidae

ID: Grayish translucent; 5-6 pairs of reddish brown bars on side; **dorsal fins with reddish bands**; large lips, short 1st dorsal fin. Solitary. Reef flats, lagoons and outer reefs to 8 m.

Localized: E. Indonesia, N. Australia and Papua New Guinea.



LARGEMOUTH TRIPLEFIN

Ucla xenogrammus

SIZE: to 5.5 cm (2 1/4 in.)

Triplefins - Tripterygiidae

ID: Translucent with 10-12 diffuse bars of fine red spots on side; pointed snout and protruding lower jaw. Solitary. Perch on coral heads in lagoon and outer reefs in 2-40 m.

East Indo-Pacific: Andaman Sea to Micronesia and Samoa to Rapa I. in S. French Polynesia. - S.W. Japan to Australia and New Caledonia.

IDENTIFICATION GROUP 16

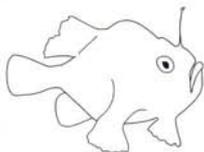
Odd-shaped Bottom Dwellers

Frogfishes - Scorpionfishes & Lionfishes - Stonefishes - Waspfishes - Flatheads - Flounders & Soles - Others

This ID Group consists of fishes that normally rest on the bottom and do not have typical fish-like shapes.

FAMILY: Frogfishes (Anglerfishes) - Antennariidae

5 Genera – 16 Species Included

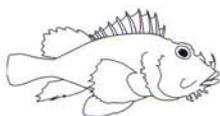


Typical Shape

Frogfishes, also known as anglerfishes, are globular in shape with large, extremely upturned mouths which can be opened to the width of their bodies to engulf prey. Their pectoral and ventral fins have evolved into webbed, hand-like appendages, which they use to grasp, perch or "walk." The small circular gill openings are located behind and/or below the pectoral fins. The first dorsal spine, located on the snout, has evolved into a thin, stalk-like structure (illicium) tipped with a lure (esca), which is wiggled energetically, much like a casting rod, to attract prey. Escas vary from realistic fish-like and shrimp-like shapes to nondescript tufts. Masters at camouflage, frogfishes can slowly change colors to match various backgrounds. At rest they often look like sponges or clumps of algae making the stationary, ambush predators difficult to sight. Subtle differences in body markings of several similar-appearing frogfishes often make identification difficult.

FAMILY: Scorpionfishes & Lionfishes - Scorpaenidae

13 Genera – 37 Species Included



Scorpionfishes - Typical Shape



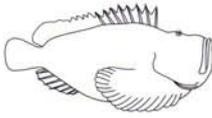
Lionfishes - Typical Shape

Scorpionfishes derived their name from venomous fin spines common to most species. Poison is produced by glands embedded in long grooves on both sides of the spines. The pain from wounds varies from uncomfortable to intense, and occasionally requires medical attention. Immersing the affected area in hot water offers some relief. Many of these solitary, ambush predators have stout bodies adorned with skin flaps and tassels that augment their abilities to change colors for better camouflage.

The visually flamboyant group of scorpionfishes, commonly known as lionfishes, are renown for their dramatically elongate, feather-like pectoral and dorsal fins. Lionfishes typically hover just above the bottom or nestle in crevices during the day. At night they become active hunters searching the bottom for crustaceans and small fishes. Most species of lionfishes can be easily identified; however, several of the similar-appearing, bottom-dwelling scorpionfishes present quite a problem differentiating between species.

FAMILY: Stonefishes - Synanceiidae

5 Genera – 9 Species Included



Stonefishes



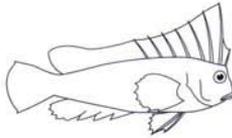
Genus *Inimicus*

The two stonefishes, in genus *Synanceia*, produce the most deadly fish venom known. The neurotoxin produced in glands at the base of the dorsal fin is injected through hollow spines. The deadly pair have poorly defined globular bodies that can exceed a foot in length. Most victims are shoeless waders in shallow tropical waters who fail to see the motionless fishes expertly camouflaged as algae-covered stones.

All fins and spines with bulging eyes and upturned snouts, members of genus *Inimicus*, commonly known as devilfishes, are among the most bizarre fishes inhabiting shallow seas. The bottom-oriented predators, also producers of powerful, but much less potent venom, spend much of the time buried beneath the sand. The three similar-appearing species are best distinguished by the patterns displayed on the inner surface of their spread pectoral fins.

FAMILY: Waspfishes - Tetrarogidae

4 Genera – 7 Species Included



Typical Shape

Waspfishes can be distinguished from the similar-appearing Leaf Fishes in the scorpionfish family by dorsal fins that begin above or in front of the eyes. The small ambush predators sway back and forth on the sand mimicking leaf debris as they wait for unsuspecting fish and crustaceans to venture close.

FAMILY: Flatheads - Platycephalidae

6 Genera – 11 Species Included



Typical Shape

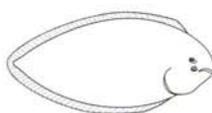
Flatheads are close relatives of scorpionfishes with dorsally-compressed bodies, two separate dorsal fins, and as their name implies, flattened heads. While resting on the bottom the ambush predators resemble miniature crocodiles. Their distinctive eyes are draped with an elaborate curtain of tassels that expand or contract as the intensity of sunlight dictates. The tasseled-structure also helps disguise the eyes' location from prey.

FAMILY: Flounders - Bothidae/Pleuronectidae/Paralichthyidae & Soles - Soleidae

12 Genera – 16 Species Included



Flounders - Typical Shape

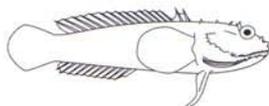


Soles - Typical Shape

Members of the Order Pleuronectiformes, the flatfishes, include flounders, soles and several other flat forms of fishes from temperate climates. Flatfishes have been placed in their respective families primarily by the location of their eyes. Bothidae are mainly shallow-water tropical species with both eyes on their left sides; righteye flounders, Pleuronectidae, typically live in temperate or deep waters, and Soleidae, the soles, have eyes on their left sides and slightly out of alignment. A few species from both families have "reversed" individuals whose eyes are located on the contrasting side.

To acquire their flattened bodies, flatfishes pull off one of the animal kingdom's most astonishing feats of developmental biology. While adrift in their pelagic larval stage, flounders have typical bilateral fish-shaped bodies, properly aligned fins and pigmented eyes - one on each side of the head. Weeks later, sometime before settling to the sea floor, muscles, skin, blood vessels and bones inexorably shift into the flattened shape of thumbnail-sized benthic juveniles. During the metamorphosis, one eye migrates across the head until next to the other, swimbladders disappear, the dorsal and anal fins line oval bodies, and a lone pectoral fin, often quite long on the males, extends from the center of their backs. The thin, pancake profile not only hides them from predators and prey but also allows them to bury quickly in the sand, leaving only their stalked, independently functioning, 180-degree-rotating, periscopic eyes exposed. But, without question, the tropical flounders' best defensive strategy is rapid adaptive camouflage. Once settled, after moving to a new location, visual cues from the immediate surroundings are transmitted via nerves to thousands of irregular-shaped cells in the skin, known as chromatophores, which change body patterns within seconds to match their environment.

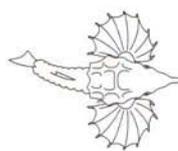
FAMILY: Others



Toadfishes - Batrachoididae



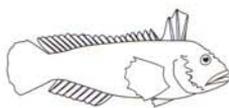
Batfishes - Ogocephalidae



Sea Moths - Pegasidae



Flying Gurnards - Dactylopteridae



Velvetfishes - Aploactinidae



Coral Crouchers - Caracanthidae



Stargazers - Uranoscopidae



Clingfishes - Gobiessocidae

Odd-Shaped Bottom Dwellers



GIANT FROGFISH

Antennarius commersoni

SIZE: to 30 cm (12 in.)

Frogfishes - Antennariidae

ID: Large with few warty projections; highly variable often acquiring color of surroundings. Solitary, frequently on sponges. Coastal, lagoon and outer reefs to 50 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and C. America. - S. Japan to Australia.



Giant Frogfish - Yellow Phase

ID: Most commonly in shades of tan and brown, but yellow, orange, pink, red, green, white and black individuals have all been reported. Color change can take from a few days to several weeks. May display pepper like spots and vague variably-sized spots.



Giant Frogfish - White Phase

ID: In all phases may develop scab-like patches.



Giant Frogfish - Brown Mottled Phase

ID: Occasionally acquire mottled colors with scab-like patches and a few warts. May develop fringe-like projections further enhancing their camouflage.



BRACKISH FROGFISH

Antennarius biocellatus

SIZE: to 15 cm (6 in.)

Frogfishes - Antennariidae

ID: Extremely variable from tan or yellowish to nearly black; pale-edged black spot on base of rear dorsal fin rays; short lure (shorter than adjacent dorsal fin ray); flat body profile with high back. Solitary. Brackish and fresh water to 10 m.

Asian Pacific: Sumatra in Indonesia to Solomon Is., north to S.W. Japan.



OCCELLATED FROGFISH

Antennarius sp.

SIZE: to 5 cm (2 in.)

Frogfishes - Antennariidae

ID: Black to brown with large pale to orange-edged black spot on base of rear dorsal fin rays that extends onto back; rod-shaped lure about same height as 2nd dorsal fin. Solitary. Sand and rubble areas to 30 m.

Localized: Unidentified, possibly undescribed species known only from Lembah Straits, Sulawesi, Indonesia.

Frogfishes



PAINTED FROGFISH

SIZE: to 16 cm (6 1/4 in.)

Antennarius pictus

Frogfishes - Antennariidae

ID: Similar to Warty Frogfish (previous), but **warts generally less pronounced and absent in juveniles**. Color and marking patterns highly variable, most have spots of varying size. Solitary. Variety of reef habitats to 73 m.

Indo-Pacific: E. Africa to Hawaii and Society Is. in French Polynesia. - S. Japan to Australia.



Painted Frogfish - Small Juvenile

ID: Small individuals commonly display ornate marking and color pattern of black with scattered orange spots and blue fin borders.



Painted Frogfish - Cream Phase

ID: Species often develop large scab-like patches on body.



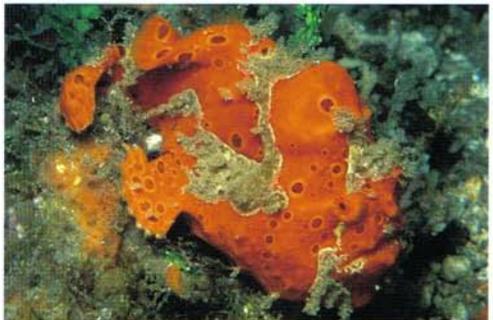
Painted Frogfish - Pink Phase

ID: Lure long, about twice the length of 2nd dorsal spine with filamentous tip that may resemble a small fish or shrimp. Note how the color matches almost perfectly the color of the background sponge.



Painted Frogfish - Black Phase

ID: The black phase is most commonly encountered in areas of black volcanic sand.



Painted Frogfish - Red Phase

ID: This species has the ability to change almost any color including white, black, red, pink, orange, yellow and brown.

Odd-Shaped Bottom Dwellers



WARTY FROGFISH

Antennarius maculatus

SIZE: to 9 cm (3 1/2 in.)

Frogfishes - Antennariidae

ID: Smallish with numerous knob-like warts; variable color usually with reddish brown saddles and blotches; commonly display darkish spots with pale borders. Solitary. Frequently among algae, sponges and soft corals of coastal reefs to 15 m.

Indo-Pacific: Mauritius to Hawaii. - S.W. Japan to Australia.



Warty Frogfish - Small Juvenile

SIZE: to 2 cm (1 in.)

ID: Frequently white with red-brown saddle and orange borders of rear dorsal and tail fins. Often in open on sand.



Warty Frogfish - Brown Phase

ID: Note numerous large knob-like warts.



Warty Frogfish - Pink Phase

ID: Color phases include white, pink, red, yellow, greenish yellow, many shades of brown and black; may display yellow or orange spots.



BANDTAIL FROGFISH

Antennarius dorehensis

SIZE: to 5 cm (2 in.)

Frogfishes - Antennariidae

ID: Small; color highly variable, but usually drab shades; often bands on tail. Solitary and cryptic. Wedge in cracks and crevices of sheltered reefs, usually in less than 1 m.

Indo-Pacific: Red Sea and E. Africa to C. America. - S.W. Japan to Australia.



HISPID FROGFISH

Antennarius hispidus

SIZE: to 18 cm (7 in.)

Frogfishes - Antennariidae

ID: Pom-pom like tip on lure and scattered filamentous skin appendages; variable beige, yellow, orange, white or black, often display zebra-like banding. Solitary. Often among leaf debris of coastal reefs to 69 m.

Indo-West Pacific: E. Africa to Fiji. - Taiwan to Australia.

Frogfishes



SPOTFIN FROGFISH

SIZE: to 10 cm (4 in.)

Antennarius nummifer

Frogfishes - Antennariidae

ID: Short angling rod, definite peduncle "stem" between dorsal and tail fins; variable coloration depending on background; **pale-ringed dark spot at base of rear dorsal fin.** Solitary; wedge in reef crevices. Inshore and offshore reefs to 176 m.

Indo-Pacific: Red Sea and E. Africa to C. America. - S.W. Japan to Australia.



Spotfin Frogfish - Red Phase

ID: May display only the pale-ringed dark spot at base of posterior, but often display a scattering of additional spots of varying size.



FRECKLED FROGFISH

SIZE: to 12 cm (5 in.)

Antennarius coccineus

Frogfishes - Antennariidae

ID: **Lack tail base (dorsal and anal fins end at start of tail)**, short lure half height of adjacent dorsal ray; highly variable color from drab shades to red. Solitary and cryptic. Reef crevices or among rubble of coastal, lagoon and outer reefs to 75 m.

Indo-Pacific: Red Sea and E. Africa to C. America. - S.W. Japan to Australia.



Freckled Frogfish - Phase

ID: Usually display a faint to distinct ocellated spot on back under rear dorsal fin; commonly have a scattering of small warts with short filaments.



STRIPED FROGFISH

SIZE: to 22 cm (8 3/4 in.)

Antennarius striatus

Frogfishes - Antennariidae

ID: Long lure with worm-like tip; highly variable coloration usually with dark zebra-like banding and often with filamentous skin appendages. Solitary. Frequently on sand or mud bottoms in depths to 218 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Society Is. in French Polynesia. - Japan to New Zealand.



Striped Frogfish - Hairy Variation

ID: Filamentous skin appendages are extremely well developed in some individuals. Usually produced on individuals living in areas with filamentous algae. Note extended **worm-like lure**.

Odd-Shaped Bottom Dwellers



RANDALL'S FROGFISH

Antennarius randalli

SIZE: to 4.5 cm (1⁷/₈ in.)

Frogfishes - Antennariidae

ID: Small; highly variable in shades of yellow to red to brown and black; consistently marked with **small white spot behind eye, another above pectoral fin and a 3rd on upper edge of tail.** Solitary. Seaward reefs in 8-30 m.

Pacific: Indonesia and Philippines to Marshall Is. in Micronesia, Hawaii and Easter I. in southeastern Pacific.



Randall's Frogfish - Dark Phase

ID: Color changeable to match surroundings. This dark individual photographed on black sand at Bali, Indonesia. Note consistent white spot markings, commonly a 2nd white spot on lower edge of tail opposite the upper spot.



Randall's Frogfish - Tan Phase

ID: Often display a dark spot on lower mid-dorsal fin extending onto back. A secretive species usually under ledges and reef recesses, rarely sits in the open.



BANFIN FROGFISH

Antennatus tuberosus

SIZE: to 8 cm (3 in.)

Frogfishes - Antennariidae

ID: Small; tan to brownish with reticulum of dark lines, may display patches of color to enhance camouflage, **dark bar on pectoral and tail fins.** Solitary. Stony coral branches in coral reefs to 73 m.

Indo-Pacific: E. Africa to Hawaii, French Polynesia and Pitcairn Is.



CRYPTIC FROGFISH

Histiophryne cryptacanthus

SIZE: to 8.5 cm (3¹/₄ in.)

Frogfishes - Antennariidae

ID: Lure inconspicuous, dorsal spines embedded in fleshy hump; highly variable coloration that blends with surroundings. Solitary. Often on sponges in reef crevices of coastal reefs in 4-130 m.

Asian Pacific: Taiwan, Indonesia and Philippines to Australia.



SARGASSUMFISH

Histrio histrio

SIZE: to 14 cm (5¹/₂ in.)

Frogfishes - Antennariidae

ID: Shades of brown to yellow with skin flaps, random lines, spots and dusky blotches. Usually solitary; several individuals may inhabit same float of Sargassum seaweed. In Sargassum or other algae patches near surface near shore to open ocean.

Circumtropical: All tropical seas except E. Pacific.

Frogfishes - Toadfishes - Batfishes - Sea Moths - Lionfishes



SPOT-TAIL FROGFISH

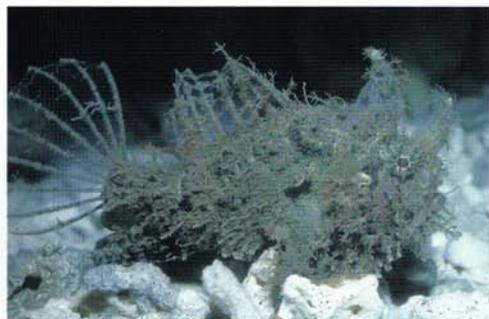
Lophiocharon trisignatus

SIZE: to 18 cm (7 in.)

Frogfishes - Antennariidae

ID: Shades of brown to green; curved lure; darkish reticulations on head, dark-edged white spots on tail. Large (2 mm) eggs attach to side of males [pictured]. Solitary. Often under wharf pilings or among debris of coastal reefs in 2-20 m.

Asian Pacific: N. Australia, Indonesia, Singapore, Philippines and Papua New Guinea.



BUTLER'S FROGFISH

Tathicarpus butleri

SIZE: to 12 cm (5 in.)

Frogfishes - Antennariidae

ID: Long angling rod, long separate 1st dorsal spines, transparent dorsal fin membranes (fleshy in most frogfishes); highly variable color. Solitary. Among weeds and rubble of coastal reefs in 7-146 m, but usually below 25 m.

Localized: New Guinea and N. Australia.



BANDED TOADFISH

Halophyme diemensis

SIZE: to 26 cm (10 in.)

Toadfishes - Batrachoididae

ID: Brown to gray with dark bands; scorpionfish-like body, but soft scaleless appearance and few spines and skin flaps on head. Solitary. Wedge in reef crevices, often in open at night, to 20 m.

East Indo-Asian Pacific: E. Andaman Sea to Papua New Guinea and N.E. Queensland in Australia.



ESTUARY BATFISH

Haliieutaea sp.

SIZE: to 9 cm (3 1/2 in.)

Batfishes - Ogcocephalidae

ID: Tan with pair of large dark diffuse areas on either side of back; bright yellow pectoral fin tips; flattened disk-shaped body, fringe of hair-like filaments on edge of head and body. Solitary. Soft bottoms of coastal waters in 1-50 m.

Localized: Indonesia.



DRAGON SEA MOTH

Eurypegasus draconis

SIZE: to 7 cm (2 1/2 in.)

Sea Moths - Pegasidae

ID: Hard bony carapace, long narrow flattened snout and wing-like pectoral fins often with pale border; brown with netted reticulations. "Walk" with finger-like pelvic fins. Solitary or in pairs. Sand, rubble and seagrass bottoms to 90 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas and Society Is. in French Polynesia. - Japan to Australia.



SLENDER SEA MOTH

Pegasus volitans

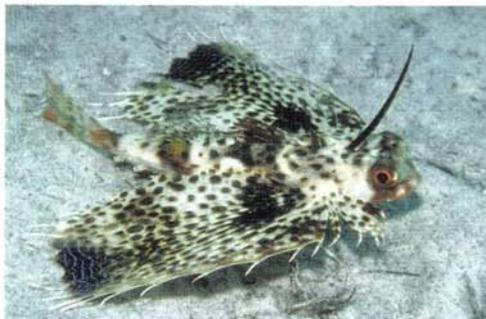
SIZE: to 11 cm (4 1/4 in.)

Sea Moths - Pegasidae

ID: Similar to Dragon Sea Moth [previous], but longer tapered snout and more slender and uniformly tapered body; brown with dark reticulations. Solitary or in pairs. Sand, rubble and seagrass bottoms of coastal reefs to 73 m.

Indo-Asian Pacific: E. Africa and Arabian Gulf to Australia, north to S. Japan.

Odd-Shaped Bottom Dwellers



HELMUT GURNARD

Dactyloptena orientalis

SIZE: to 38 cm (15 in.) Flying Gurnards - Dactylopteridae

ID: Elongate rigid body with antenna-like dorsal fin ray above head and large wing-like pectoral fins with protruding filamentous tips. Solitary, "walk" on bottom with finger-like pelvic rays. Sandy areas near reefs to 68 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia. - S. Japan to N. Australia.



Helmut Gurnard - Young

ID: Wing-like pectorals usually marked with bright ocellated spot near base that becomes a dark blotch with age; pectoral fins of both young and adult are typically marked with electric blue wavy lines and spots. When alarmed, fully extend pectoral fins and rapidly swim away.



SHORTFIN LIONFISH

Dendrochirus brachypterus

SIZE: to 17 cm (6 3/4 in.) Lionfishes - Scorpaenidae

ID: Red to brown and yellow with fan-like non-filamentous pectoral fins marked with 6-10 dark bands on males (4-6 on females); short skin flap below each eye. Solitary or form small groups. Sand of coastal reefs and lagoons in 2-30 m.

Indo-West Pacific: Red Sea and E. Africa to Tonga. - S. Japan to Australia.



Shortfin Lionfish - Red Variation

ID: All variations have white tips on 1st dorsal fin and dark and light lines marking translucent 2nd dorsal, anal and tail fins. Rest during day; actively feed at night.



Shortfin Lionfish - Yellow Variation

ID: Usually shades of red to brown, but on rare occasion bright yellow.



TWINSPOT LIONFISH

Dendrochirus biocellatus

SIZE: to 10 cm (4 in.)

Lionfishes - Scorpaenidae

ID: Brown body with wide bars and 2-3 wide dark bands; whitish fan-like non-filamentous pectoral fins, pair of eye spots on rear dorsal fin; long tentacle-like skin flap below each eye. Solitary. Caves and under ledges of coral-rich areas to 40 m.

Indo-Pacific: Mauritius to Society Is. in French Polynesia. - S. Japan to N.W. Australia (Scott Reef).

Lionfishes



COMMON LIONFISH

Pterois volitans

SIZE: to 38 cm (15 in.)

Lionfishes - Scorpaenidae

ID: Numerous reddish brown to nearly black bands with white lines between; long feather-like pectoral fin rays with light and dark bands, dark spotted dorsal, anal and tail fins. Solitary. Coastal, lagoon and seaward reefs to 50 m.

East Indo-Pacific: W. Australia and Malaysian Peninsula to Pitcairn Is. in southeastern Pacific. - S. Japan to Kermadec Is.



Common Lionfish - Juvenile

ID: Long slender pectoral fin rays (less feather-like than adults) often show same black coloration occasional displayed by adults. Juveniles and adults may be solitary or in small groups; during day often inside caves, under ledges or around wreckage.



INDIAN LIONFISH

Pterois muricata

SIZE: to 38 cm (15 in.)

Lionfishes - Scorpaenidae

ID: Identical to Common Lionfish (previous) except one less ray in rear dorsal and anal fins and slightly shorter pectoral fin rays. Distinguished by location. Solitary or form small groups. Coastal, lagoon and seaward reefs in 2-50 m.

Indian Ocean: Red Sea, E. Africa and Andaman Sea to Sumatra in Indonesia.



SPOTFIN LIONFISH

Pterois antennata

SIZE: to 20 cm (8 in.)

Lionfishes - Scorpaenidae

ID: Pale with numerous red-brown bands of varying width; whitish translucent fan-like pectoral fins with a few large spots and long filamentous rays. Solitary or form small groups in caves and crevices. Coastal, lagoon and outer reefs to 50 m.

Indo-Pacific: E. Africa to Marquesas and Austral Is. in French Polynesia. - S. Japan to Australia.



MOMBASA LIONFISH

Pterois mombasae

SIZE: to 16 cm (6 1/4 in.)

Lionfishes - Scorpaenidae

ID: Pale with numerous red-brown bands of varying width; whitish fan-like pectoral fins with semicircular bands formed of large spots and long filamentous rays. Solitary. Soft coral, sponge and rubble of sheltered reefs in 10-50 m.

Indo-Asian Pacific: E. Africa to N.W. Australia and Papua New Guinea.



CLEARFIN LIONFISH

Pterois radiata

SIZE: to 24 cm (9 in.)

Lionfishes - Scorpaenidae

ID: Wide brown bars with white lines between, horizontal band on tail base; long filamentous pectoral fin rays with connecting translucent tissue only near base. Solitary. Reef crevices of lagoon and seaward reefs in 3-15 m.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S.W. Japan to New Caledonia.

Odd-Shaped Bottom Dwellers



KODIPUNGI LIONFISH

Pterois kodipungi

SIZE: to 35 cm (14 in.)

Lionfishes - Scorpaenidae

ID: Pale with numerous red-brown bands of varying width; long free, **feather-like pectoral fin rays**; lack dark spots on dorsal, anal and tail fins. Solitary. Mud or fine sand bottoms of estuaries, bays and coastal waters in 3-35 m.

Localized: Indonesia.



CLEARTAIL LIONFISH

Pterois miles

SIZE: to 30 cm (12 in.)

Lionfishes - Scorpaenidae

ID: Similar to Kodipungi Lionfish (previous), but **feather-like pectoral rays** less free and 14 rays instead of 13; white areas between dark bars on body wider. Solitary. Mud or fine sand bottoms of estuaries, bays and coastal waters in 3-50 m.

Indo - Asian Pacific: E. Africa to N.W. Australia and Sumatra and Bali in Indonesia.



LONGSPINE LIONFISH

Pterois sp.

SIZE: to 40 cm (16 in.)

Lionfishes - Scorpaenidae

ID: Similar to Common Lionfish (previous) except **much taller dorsal spines**, 13 instead of 14 pectoral rays, sparsely scattered small black spots on rear dorsal, anal and tail fins. Solitary. Mud and fine sand of coastal waters in 3-30 m.

Localized: Flores, Banda Sea and Moluccas in Indonesia.



GURNARD LIONFISH

Parapterois heturus

SIZE: to 23 cm (9 in.)

Lionfishes - Scorpaenidae

ID: White with brown bars; **thread-like filaments on dorsal spines** and outermost rays of tail, non-filamentous fan-like pectoral fins with fine blue bands on interior surface. Solitary, sometimes partly buried. Mud and sand in 3-300 m.

Asian Pacific: Bali in Indonesia, north to S. Japan.



BLEEKER'S LIONFISH

Ebosia bleekeri

SIZE: to 22 cm (8 3/4 in.)

Lionfishes - Scorpaenidae

ID: Pale with 8 brown bars and spots between; whitish fan-like pectoral fins marked with semicircular bands and no ray filaments, reddish dorsal spines. Solitary or small groups. Open sand and mud slopes in 10-85 m, often in areas of cool upwellings.

Asian Pacific: S. Japan and Indonesia to E. Australia.



ZEBRA LIONFISH

Dendrochirus zebra

SIZE: to 18 cm (7 in.)

Lionfishes - Scorpaenidae

ID: White with wide brown body bars; **whitish fan-like pectoral fins with brownish radiating streaks** and short ray filaments. Solitary or form small groups; nocturnal feeders. Coral and rock of sheltered reefs to 35 m.

Indo - West Pacific: Red Sea and E. Africa to Samoa. - S. Japan to Australia.

Lionfishes - Scorpionfishes



PYGMY LIONFISH

Brachypterois serrulata

SIZE: to 12 cm (5 in.)

Lionfishes - Scorpaenidae

ID: Typical scorpionfish body with lionfish-like non-filamentous pectoral fin "wings"; blotchy shades of brown with dark spot on gill cover. Solitary. Mud bottoms of estuaries and offshore trawling grounds in 3-40 m.

Indo-Asian Pacific: E. Africa to Indonesia, north to S. Japan.



AMBON SCORPIONFISH

Pteroidichthys amboinensis

SIZE: to 12 cm (5 in.)

Scorpionfish - Scorpaenidae

ID: Commonly in shades of brown; very long cirrus above each eye, fan-like pectoral fins; usually numerous skin flaps and filaments on head, body and fins. Solitary. Algae, sand and mud bottoms in 3-40 m.

Asian Pacific: N. Australia to Indonesia and S. Japan.



Ambon Scorpionfish - Variation

ID: The length of skin flaps and filaments is highly variable, may be absent in habitats without filamentous algae.



Ambon Scorpionfish - Variation

ID: Color variations include shades of green, brown, yellow and red. This attractive pink variation features very long, drooping eye "tentacles".



LACEY SCORPIONFISH

Rhinopias aphanes

SIZE: to 24 cm (9 in.)

Scorpionfishes - Scorpaenidae

ID: Compressed body with upturned snout; maze-like color pattern; long cirrus above each eye, numerous skin flaps and filaments. Solitary, "walk" with pectoral and pelvic fins. Often associate with crinoids of seaward reefs in 5-30 m.

Asian Pacific: S. Japan to N.E. Australia and New Caledonia.



Lacey Scorpionfish - Variation

ID: Color of maze-like pattern highly variable and include contrasting shades of yellow, brown, green to nearly black. All variations have white spot below eye. Note lace-like structure of pectoral fins.

Odd-Shaped Bottom Dwellers



PADDLE-FLAP SCORPIONFISH

Rhinopias eschmeyeri

SIZE: to 19 cm (7 1/2 in.)

Scorpionfishes - Scorpaenidae

ID: Similar to Weedy Scorpionfish (previous) but more uniformly colored; **flat paddle-like generally unbranched skin flaps**. Solitary. Open sand or among weeds of seaward reefs in 2-40

Indo - Asian Pacific: Mauritius to Indonesia and Philippines.



Paddle-flap Scorpionfish - Variation

ID: Color highly variable including red, pink, orange, yellow, blue and lavender to purplish.



WEEDY SCORPIONFISH

Rhinopias frondosa

SIZE: to 23 cm (9 in.)

Scorpionfishes - Scorpaenidae

ID: Mottled shades often with dark outlined spots and irregular markings; compressed body with upturned snout and **numerous short branched skin flaps and filaments**. Solitary. Seaward reefs in 10-297 m.

Indo - Asian Pacific: E. Africa and Mauritius to Indonesia and Caroline Is. in Micronesia, north to S. Japan.



Weedy Scorpionfish - Variation

ID: Variable shades from brown to lavender to red and may lack bold marking pattern.



Weedy Scorpionfish - Variation

ID: Often earthtone shades without bold markings when blending with coral, rubble and algae.



DECOY SCORPIONFISH

Iracundus signifer

SIZE: to 13 cm (5 in.)

Scorpionfishes - Scorpaenidae

ID: Red to brown; **unique 1st dorsal fin mimics shape of small fish when extended**; fin used as lure. Solitary. Seaward reefs in 10-50 m.

Indo - Pacific: Oceanic islands from Mauritius to Hawaii and Pitcairn Is. in southeastern Pacific.

Scorpionfishes



MOZAMBIQUE SCORPIONFISH *Parascorpaena mossambica*

SIZE: to 10 cm (4 in.)

Scorpionfishes - Scorpaenidae

ID: Small with well developed cirri above eyes; blotchy shades of white to brown and lavender, no dark spot on dorsal fin. Solitary. Inside crevices or on sand and rubble bottoms of reef flats, lagoons and channels to 20 m.

Indo-Pacific: E. Africa to Society Is. in French Polynesia. - S.W. Japan to Australia.



PAINTED SCORPIONFISH *Parascorpaena picta*

SIZE: to 15 cm (6 in.)

Scorpionfishes - Scorpaenidae

ID: Mottled red to brown to greenish brown; large rounded head with short blunt snout; reddish bands in iris, cirri above eyes not always present, bands on lips. Solitary. Inside crevices of coastal reefs to 15 m.

Asian Pacific: Taiwan to N. Australia.



GUAM SCORPIONFISH *Scorpaenodes guamensis*

SIZE: to 14 cm (5 1/2 in.)

Scorpionfishes - Scorpaenidae

ID: Relatively elongate body; blotchy shades of brown with distinct dark spot on gill cover. Solitary and cryptic; nocturnal feeders. Rubble, rocks and coral crevices of reef flats and lagoons to 12 m.

Indo-Pacific: Red Sea and E. Africa to Pitcairn I. in southeastern Pacific. - S. Japan to Australia.



HAIRY SCORPIONFISH *Scorpaenodes hirsutus*

SIZE: to 7 cm (2 1/2 in.)

Scorpionfishes - Scorpaenidae

ID: Small relatively elongate body with scattered skin flaps on head; red with brown blotches, darkish blotch on pectoral fin. Solitary, rarely in open except at night. Caves and crevices of lagoon and outer reef slopes in 5-50 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Pitcairn I. in southeastern Pacific. - S.W. Japan to Australia.



CHEEKSPOT SCORPIONFISH *Scorpaenodes littoralis*

SIZE: to 8 cm (3 in.)

Scorpionfishes - Scorpaenidae

ID: Blotchy red body with variable brown markings on head; red iris and pale-edged dark spot on lower edge of gill cover. Solitary and nocturnal. Caves and crevices or among rocks of seaward reefs in 3-25 m.

Indo-Pacific: E. Africa to Hawaii. - S. Japan to Great Barrier Reef.



BLOTCHFIN SCORPIONFISH *Scorpaenodes varipinnis*

SIZE: to 7 cm (2 1/2 in.)

Scorpionfishes - Scorpaenidae

ID: Small; blotchy shades of dark brown; dark blotch on outer edge of rear dorsal fin spines, dark band on pectoral fin near base, red marks around eye. Solitary, in open at night. Reef crevices of reef flats, lagoons and seaward reefs to 200 m.

Indo-Asian Pacific: Red Sea and E. Africa to Coral Sea, north to Mariana Is. in Micronesia.

Odd-Shaped Bottom Dwellers



SHORTFIN SCORPIONFISH

Scorpaenodes parvipinnis

SIZE: to 13 cm (5 in.)

Scorpionfishes - Scorpaenidae

ID: Blotchy shades of red to brown; **very short dorsal fin** (longest spine usually less than the eye diameter). Solitary. Reef crevices of coastal, lagoon and outer reefs to 50 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



Shortfin Scorpionfish - Variation

ID: Occasionally display large pale saddle from rear of head to mid-upper body.



DEVIL SCORPIONFISH

Scorpaenopsis diabolus

SIZE: to 28 cm (11 in.)

Scorpionfishes - Scorpaenidae

ID: **Pronounced hump on back**; highly variable color, but generally drab shades blending with surroundings. Solitary or in pairs. Rubble or weed bottoms of coastal, lagoon and seaward reefs in 2-70 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S. Japan to Australia.



Devil Scorpionfish - Brown Phase

ID: Inner surface of pectoral fin is brilliant yellow and orange with isolated black spots, similar Flasher Scorpionfish [following page] has broad black border; length of snout about 1.3 - 1.5 eye diameter, similar Flasher's snout about equal to diameter of eye.



Devil Scorpionfish - Phase

ID: Color varies widely according to surroundings; some of most colorful examples, showing patches of pink, red and orange are found on coralline algal substrates.



BANDTAIL SCORPIONFISH

Scorpaenopsis neglecta

SIZE: to 15 cm (6 in.)

Scorpionfishes - Scorpaenidae

ID: Similar to Flasher Scorpionfish [following page], but bony ridge above eye serrated, head profile not as steep and snout more humped; colors highly variable. Solitary. Open sand and mud bottoms of seaward reefs to 40 m.

Asian Pacific: N.W. Australia and Indonesia to Taiwan and S. Japan.

Scorpionfishes



FLASHER SCORPIONFISH

Scorpaenopsis macrochir

SIZE: to 15 cm (6 in.)

Scorpionfishes - Scorpaenidae

ID: Similar to Devil Scorpionfish [previous], but much smaller maximum size, shorter snout and less pronounced hump on back; color highly variable. Solitary or in pairs. Rubble, weed and rocks of coastal reefs to 80 m.

Indo-Pacific: Mauritius to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



Flasher Scorpionfish - Orange Phase

ID: All species of *Scorpaenopsis* at times display colors that effectively mimic sponge growth. Tolerate brackish environments near river mouths; also occurs on deep offshore trawl grounds.



PAPUAN SCORPIONFISH

Scorpaenopsis papuensis

SIZE: to 22 cm (8 3/4 in.)

Scorpionfishes - Scorpaenidae

ID: Very similar to Tasseled Scorpionfish [previous], but larger scales (48-55 in lateral on side); best distinguished by location except in overlapping range of Indonesia, Palau and Philippines. Solitary. Seaward reefs to 40 m.

Pacific: Indonesia, New Guinea, Marshall Is. in Micronesia to French Polynesia. - S.W. Japan to Great Barrier Reef.



Flasher Scorpionfish - Gray-brown Phase

ID: Inner surface of pectoral fin is brilliant yellow-orange with isolated black spots and wide black border. Similar Devil Scorpionfish [previous] lacks this border.



TASSELED SCORPIONFISH

Scorpaenopsis oxycephala

SIZE: to 36 cm (14 1/4 in.)

Scorpionfishes - Scorpaenidae

ID: Long humped snout, eye cirri absent in adults, **prominent skin tassels on lower head**; small scales (60-65 in lateral row on side). Highly variable color and markings. Solitary. Coral and rocky bottoms to 43 m.

Asian Pacific: Red Sea and E. Africa to Indonesia, Palau (absent Papua New Guinea), north to Taiwan.



Papuan Scorpionfish - Young

SIZE: to 14 cm (5 1/2 in.)

ID: Young usually have long cirri above eyes and exaggerated facial skin appendages; color often mottled brownish red, but is highly variable and can be changed to match surroundings.

Odd-Shaped Bottom Dwellers



POSS'S SCORPIONFISH

Scorpaenopsis possi

SIZE: to 22 cm (8 1/2 in.)

Scorpionfishes - Scorpaenidae

ID: Similar to Tasseled Scorpionfish and Papuan Scorpionfish [previous], but shorter snout and only 17 pectoral rays (versus 19 or 20); eye cirri absent or shorter than eye diameter; usually drab shades blending with bottom. Coral reefs to 40 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. in French Polynesia. - Taiwan to Australia.



Poss's Scorpionfish - Young

SIZE: to 9 cm (3 1/2 in.)

ID: Young frequently display white patches on nape and below eye. Solitary. Reef crevices and under ledges during day. Mainly seaward reefs and passages.



RAGGY SCORPIONFISH

Scorpaenopsis venosa

SIZE: to 20 cm (8 in.)

Scorpionfishes - Scorpaenidae

ID: Similar Poss's Scorpionfish [previous], but usually with well-developed cirri above eyes. Solitary. Sheltered bays and lagoons in 2-72 m.

Indo-Asian Pacific: Arabian Sea and Sri Lanka to N. Australia, north to S. Japan.



Raggy Scorpionfish - Young

SIZE: to 9 cm (3 1/2 in.)

ID: Frequently with white patch on nape and exaggerated skin flaps on head and body. Occur along continental margins or islands associated with continents, absent from true oceanic islands.



YELLOW-SPOTTED SCORPIONFISH

Sebastapistes cyanostigma

SIZE: to 8 cm (3 in.)

Scorpionfishes - Scorpaenidae

ID: Pink to reddish body with numerous tiny white spots, yellow blotches and yellowish fins. Solitary or from small groups. Branches of *Pocillopora* coral heads in surge areas of outer reefs in 2-15 m.

Indo-Pacific: Red Sea and E. Africa to Samoa and Line Is. in eastern Central Pacific. - S.W. Japan to Australia.



MAURITIUS SCORPIONFISH

Sebastapistes mauritiana

SIZE: to 8 cm (3 in.)

Scorpionfishes - Scorpaenidae

ID: Small, deep pit on top of head behind eyes and pair of strong bony ridges associated with spine between eyes; color variable, usually red to greenish brown with white blotches. Solitary and cryptic. Exposed reef flats and lagoon margins to 5 m.

Indo-Pacific: E. Africa to Marquesa and Rapa Is. in French Polynesia. - Marshall Is. in Micronesia to Australia.

Scorpionfishes - Longfin Waspfishes - Stonefishes



LEAF SCORPIONFISH

Taenianotus triacanthus

SIZE: to 10 cm (4 in.)

Scorpionfishes - Scorpaenidae

ID: Strongly compressed head and body, tall dorsal fin beginning well behind eyes, leafy appendages above eyes; color highly variable. Solitary or in pairs. Coastal, lagoon and outer reefs to 134 m.

Indo-Pacific: E. Africa to Fiji and Hawaii. - S.W. Japan to Australia.



Leaf Scorpionfish - Yellow Variation

ID: Color variations including white, pink, yellow, tan, brown and black with mottling.



Leaf Scorpionfish - White Variation

ID: Perch in the entrance of caves or crevices, also on bottoms mixed with debris and on living corals. Usually sway back and forth with water movement to mimic leaf or drifting seaweed.



Leaf Scorpionfish - Reddish Brown Variation

ID: This species sheds skin at frequent intervals allowing a slight change of color, can also darken and pale depending on background.



BARCHIN SCORPIONFISH

Sebastapistes strongia

SIZE: to 6 cm (2 1/4 in.)

Scorpionfishes - Scorpaenidae

ID: Small; red to brownish with white blotches and bars and dark bars on lower jaw; cirrus above each eye. Solitary and cryptic; in open only at night. Sheltered coastal reefs, reef flats and lagoons to 18 m.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - Mariana Is. in Micronesia to Australia.



LONGFIN WASPFISH

Apistus carinatus

SIZE: to 8.8 cm (3 1/4 in.)

Longfin Waspfishes - Apistidae

ID: Shades of brown; elongate black area on mid-dorsal fin; large wing-like pectoral fins, chin "whiskers". Solitary or form groups, sometimes partly bury. Fine sand or mud bottoms of estuaries and offshore trawl grounds in 10-45 m.

Indo-Pacific: E. Africa to Hawaii. - S.W. Japan to Australia.

Odd-Shaped Bottom Dwellers



SPINY DEVILFISH

Inimicus didactylus

SIZE: to 18 cm (7 in.)

Stonefishes - Synanceiidae

ID: Uprturned snout and bulbous eyes set on top of head; fan-like pectoral fins, dorsal fin with isolated spiky spines except 1st 3 connected with membrane. Solitary or in pairs. Sand, rubble, silt and mud of protected inshore reefs in 5-40 m.

Asian Pacific: Thailand and S.E. China to Indonesia, Australia, New Caledonia and Vanuatu.



Spiny Devilfish - Variation

ID: Color highly variable, usually blend with background unless pectoral fins are flared exposing colorful inner surface. Note individual without flared fins. Walk on bottom with pelvic "fingers"; often bury in sand.



Spiny Devilfish - Variation

ID: Colors range from brown to gray and black on sand, mud and rubble bottoms and pink to red to orange when colorful sponges are present. Colors of inner surface of pectoral fins range from white to yellow to lavender to red.



Spiny Devilfish - Variation

ID: There are 3 species of similar appearing Devilfishes. They are best distinguished by the pattern on the inner surface of the pectoral fins. The Spiny Devilfish has a large dark semicircle around base followed by a wide pale band and a colorful band with spots on the outer edge.



CALEDONIAN DEVILFISH

Inimicus caledonicus

SIZE: to 25 cm (10 in.)

Stonefishes - Synanceiidae

ID: Similar to Spiny Devilfish [previous] and Spotted Devilfish [next]; best distinguished by pale to yellow inner surface of pectoral fin marked with dark band through middle and dark area around base. Solitary. Sand, rubble and mud in 15-60 m.

East Indo-Asian Pacific: Andaman Sea to Australia and New Caledonia.



SPOTTED DEVILFISH

Inimicus sinensis

SIZE: to 18 cm (7 in.)

Stonefishes - Synanceiidae

ID: Similar to Spiny Devilfish and Caledonian Devilfish [previous]; best distinguished by dark inner surface of pectoral fin with large pale to yellow spots (no bands of color). Solitary. Sand, rubble and mud in 5-90 m.

Asian Pacific: N.W. Australia and Indonesia, north to Taiwan and S. China.

Stonefishes - Waspfishes



REEF STONEFISH

Synanceia verrucosa

SIZE: to 35 cm (14 in.)

Stonefishes - Synanceiidae

ID: Globular and poorly defined, appear as algae-covered stone; prominent warts and skin flaps, eyes far apart with deep pit between. Solitary or small groups, venomous fin spines deadly; may bury in sand. Reef flats and outer slopes to 20 m.

Indo-Pacific: Red Sea and E. Africa to Austral Is. in French Polynesia. - S.W. Japan to Australia.



Reef Stonefish - Variation

ID: An ambush feeder that typically modifies color and skin flaps to blend with surroundings; however, it may display brilliant shades of red, lavender or orange. Dorsal, ventral and anal fin spines are highly venomous, wounds can be fatal.



ESTUARINE STONEFISH

Synanceia horrida

SIZE: to 30 cm (12 in.)

Stonefishes - Synanceiidae

ID: Globular and poorly defined, appear as algae-covered stone; prominent warts, **bony ridge above and between eyes**. Solitary, venomous spines deadly. Sand and rubble of coastal reefs and estuaries to 40 m.

Indo-Asian Pacific: India to S. China, Philippines and Australia.



DAMPIER STONEFISH

Dampierosa daruma

SIZE: to 13 cm (5 in.)

Stonefishes - Synanceiidae

ID: Large rounded head, no apparent scales with velvet-like skin texture; variable colors often with irregular white patches and usually banded pectoral fins. Solitary. Sand or mud bottoms of coastal reefs with large tides to 15 m.

Localized: N.W. Australia.



BLUE-EYED STINGFISH

Minous trachycephalus

SIZE: to 9 cm (3 1/2 in.)

Stonefishes - Synanceiidae

ID: Blotchy earthtones; lowest ray of pectoral fin separated and used for "walking", barbels on chin; **white irregular spot below eye**, bands on outer pectoral fin. Solitary. Fine sand or mud bottoms of coastal areas in 10-46 m.

Indo-Asian Pacific: Sri Lanka to Indonesia and South China Sea.



PAINTED STINGFISH

Minous pictus

SIZE: to 9 cm (3 1/2 in.)

Stonefishes - Synanceiidae

ID: Shades of brown with **reddish cheek and base of pectoral fin**; lowest ray of pectoral fin separated and used for "walking", barbels on chin; faint bands on fins. Solitary. Soft bottoms of coastal seas in 12-60 m.

Asian Pacific: Indonesia and Philippines.

Odd-Shaped Bottom Dwellers



MANY-BARBED STINGFISH *Chondactylus multibarbus*

SIZE: to 12 cm (5 in.) Stonefishes - Synanceiidae

ID: Large protruding eyes and blunt snout, 3 lowest pectoral fin rays unattached from fin are used for "walking"; variable colors, may be marbled or blotched. Solitary. Sand and mud bottoms of coastal waters in 10-40 m.

Indo-Asian Pacific: Red Sea and Arabian Gulf to Indonesia, Philippines and China.



SPINY WASPFISH *Ablabys macracanthus*

SIZE: to 18 cm (7 in.) Waspfishes - Tetraogidae

ID: Light to dark brown; compressed body, smooth-edged dorsal fin that begins above eye forming a triangular sail-like projection. Solitary or in pairs, sway with water motion. Sand or mud bottoms of coastal reefs in 8-50 m.

Asian Pacific: Indonesia and Philippines.

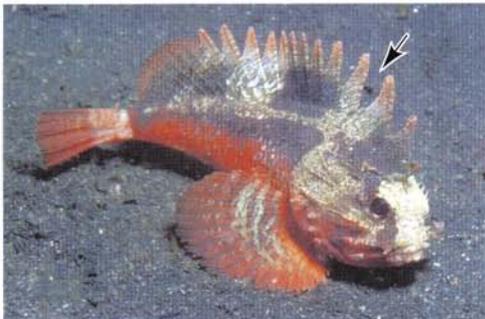


COCKATOO WASPFISH *Ablabys taenianotus*

SIZE: to 15 cm (6 in.) Waspfishes - Tetraogidae

ID: Similar to Spiny Waspfish [previous], difficult to distinguish except for higher number of dorsal spines (17 versus 15). Solitary or in pairs. Sand, mud, rubble and weed bottoms of coastal reefs to 20 m.

East Indo-West Pacific: Andaman Sea to Fiji. - S. Japan to Australia.



WHITEFACE WASPFISH *Richardsonichthys leucogaster*

SIZE: to 10 cm (4 in.) Waspfishes - Tetraogidae

ID: Blotchy shades of red to brown, dorsal fin deeply incised between each spine; has general appearance similar to other waspfishes except head and anterior body not nearly as compressed. Solitary. Mud and sand of coastal reefs in 3-18 m.

Indo-Asian Pacific: India to N. Australia, Indonesia and Papua New Guinea.



Spiny Waspfish - Pale Variation

ID: Light brown to nearly white with dark brown mask. Distinguished from similar Cockatoo Waspfish [next] dorsal fin count (15 versus 17).



Cockatoo Waspfish - Variation

ID: Dark brown with white "face" is common. All variations may also have one or more white spots on side as displayed on previous variation.

Waspfishes - Flatheads



LONGSPINE WASPFISH

Paracentropogon longispinus

SIZE: to 12 cm (5 in.)

Waspfishes - Tetraogidae

ID: Shades of reddish brown with white spots and blotches on body and banding on fins; **dorsal fin with V-shaped notches between spines**. Solitary. Silt and sand bottoms of coastal reefs in 7-30 m.

Indo-Asian Pacific: India to Australia, north to Philippines.



Longspine Waspfish - Variation

ID: Mottled reddish brown with only a few white spots and a white "face." This species is frequently found among weed beds during day, but hunts in open for small crustaceans at night.



Longspine Waspfish - Juvenile

SIZE: to 4.5 cm (1 3/4 in.)

ID: Red to reddish brown, usually displays white "face" and one or more white spots on body. Cryptic during day, but frequent on open sand and silt slopes at night.



SAILFIN WASPFISH

Paracentropogon sp.

SIZE: to 7.5 cm (3 in.)

Waspfishes - Tetraogidae

ID: Shades of reddish brown with dark blotches; V-shaped notches between most dorsal fin spines, but only shallow dip between 2nd and 3rd spine, membrane of 3rd spine attaches near base of 4th. Solitary. Coastal reefs in 3-10 m.

Localized: Indonesia.



ESTUARY WASPFISH

Tetraogee barbata

SIZE: to 11 cm (4 1/4 in.)

Waspfishes - Tetraogidae

ID: Rusty brown, **dark bands radiate from eye**; compressed body and shallow notch between dorsal spines. Solitary or in pairs. Mud, sand and gravel bottoms, often blend with dead leaves. Estuaries and freshwater streams to 3 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea.



BLACK WASPFISH

Tetraogee niger

SIZE: to 13.5 cm (5 1/4 in.)

Waspfishes - Tetraogidae

ID: Brown with scattered black spots, **white snout extends to dorsal fin**; compressed body, shallow notch between dorsal spines. Solitary or in pairs. Mud, sand and gravel bottoms of estuaries and freshwater streams to 3 m.

Indo-Asian Pacific: India to Indonesia, Papua New Guinea and Philippines.

Odd-Shaped Bottom Dwellers



CROCODILE FLATHEAD *Cymbacephalus beauforti*

SIZE: to 47 cm (18 3/4 in.) Flatheads - Platycephalidae

ID: Elongate flattened crocodile-like snout and head; earthtone camouflage markings. Solitary; pale, darken and change colors to blend with surroundings. Sand, rubble and seagrass near mangroves and reefs to 10 m.

Asian Pacific: Borneo and Philippines to Palau and Yap in Micronesia, south to New Caledonia.



JAPANESE FLATHEAD *Inegocia japonica*

SIZE: to 25 cm (10 in.) Flatheads - Platycephalidae

ID: Elongate and flattened head and snout; gray-brown back, frequently with 5-6 faint blackish saddles, **charcoal area along mid-side**, dark spots on dorsal, pectoral and tail fins. Solitary. Sand and mud bottoms of coastal waters in 5-85 m.

Indo-Asian Pacific: India and Sri Lanka to Papua New Guinea, - S. Japan to E. Australia.



LONGSNOOT FLATHEAD *Thysanophrys chiltonae*

SIZE: to 22 cm (8 3/4 in.) Flatheads - Platycephalidae

ID: Similar to Broadhead Flathead [previous] but eyes closer together, **space between eyes about 1/5th diameter of eye** vs. space about equal to diameter of eye on the Broadhead Flathead. Solitary. Sandy fringe of coral reefs in 5-38 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



Crocodile Flathead - Black Phase

ID: Although Crocodile Flatheads typically depend on camouflaged patterns to match the bottom, they are commonly sighted in a black phase.



BROADHEAD FLATHEAD *Thysanophrys arenicola*

SIZE: to 37 cm (15 in.) Flatheads - Platycephalidae

ID: Spotted shades of brown to gray; light and dark banding and spotting on pectoral and ventral fins, both light and dark bars below eye and on jaws; **space between eyes about the same width as diameter of eye**. Solitary. Sandy fringe of coral reefs in 3-30 m.

Indo-West Pacific: E. Africa to Fiji. - S. Japan to Australia.



HORNED FLATHEAD *Thysanophrys carbunculus*

SIZE: to 40 cm (16 in.) Flatheads - Platycephalidae

ID: Brown with 4-5 poorly defined dark saddles on back, spots and blotches on fins and lower sides; **long cirrus centered above each eye**. Solitary. Soft silt or mud bottoms of bays and estuaries in 5-40 m.

Indo-Asian Pacific: India to Singapore, Gulf of Thailand, Borneo and Indonesia.

Flatheads - Velvetfishes - Coral Crouchers - Stargazers



FRINGELIP FLATHEAD

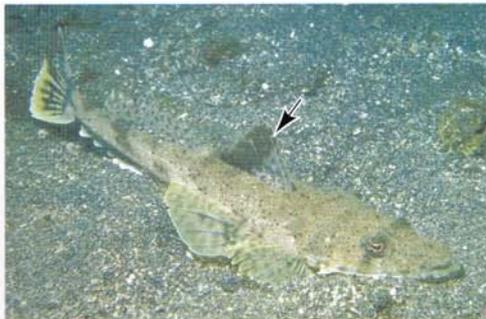
Thysanophrys otaitensis

SIZE: to 25 cm (10 in.)

Flatheads - Platycephalidae

ID: Spotted and blotch shades of brown to gray; brown and white bars only on lower lip; fringe of tiny skin flaps on lips. Solitary, usually buried in sand. Sandy fringe of coral reefs in 3-40 m.

Indo-Pacific: E. Africa to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan to N. Australia.



SPOTTED FLATHEAD

Cociella punctata

SIZE: to 35 cm (13 3/4 in.)

Flatheads - Platycephalidae

ID: Brownish gray with numerous small dark spots; broad dark margin on 1st dorsal fin, pale tail with dark spots or horizontal streaks. Solitary. Sand or mud bottoms of coastal waters in 3-250 m.

Indo-Asian Pacific: Red Sea and E. Africa to Vanuatu, north to Taiwan.



THORNY FLATHEAD

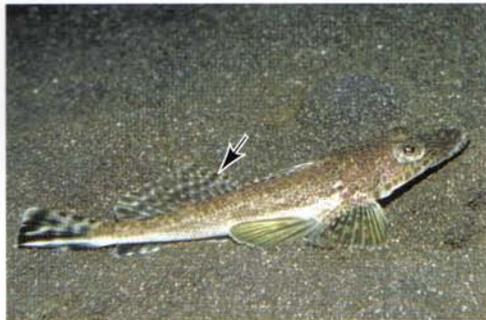
Rogadius pristiger

SIZE: to 21 cm (8 in.)

Flatheads - Platycephalidae

ID: Shades of reddish brown with faint body bars; spotted pectoral and dorsal fins, dark marks on tail; white bilobed lappet on upper eye. Solitary, usually bury during day. Sand bottoms of coastal waters in 10-25 m.

Indo-Asian Pacific: Red Sea and Madagascar to Papua New Guinea and New Caledonia, north to Philippines.



BLACK-BANDED FLATHEAD

Rogadius patriciae

SIZE: to 27 cm (10 3/4 in.)

Flatheads - Platycephalidae

ID: Spotted or blotched shades of brown; 3-4 wavy dark stripes on soft dorsal fin, dark spotted pectoral fins, dark streaks on ventral fins, several dark blotches on upper tail and stripes below. Solitary. Coastal sand bottoms in 10-100 m.

Asian Pacific: N. Australia to Indonesia, Philippines and E. China Sea.



WELANDER'S FLATHEAD

Rogadius welanderi

SIZE: to 13 cm (5 in.)

Flatheads - Platycephalidae

ID: Light brown with faint saddles and black spots on dorsal, pectoral and ventral fins; bi-lobed iris lappet, snout long compared to similar Spiny Flathead [next]. Solitary, bury in sand during day. Near sheltered coral reefs in 5-40 m.

West Pacific: Indonesia to Marshall Is. in Micronesia to Samoa.



SPINY FLATHEAD

Onigocia spinosa

SIZE: to 13 cm (5 in.)

Flatheads - Platycephalidae

ID: Red to brown with whitish mid-body bar and another near tail base; white margin on ventral fin; oversized head with numerous spines, short snout compared to Welander's Flathead [previous]. Solitary. Sand of coastal reefs in 5-250 m.

Asian Pacific: N.W. Australia to Indonesia and Philippines. - S. Japan to Coral Sea.

Odd-Shaped Bottom Dwellers



PHANTOM VELVETFISH

Paraploactis kagoshimensis

SIZE: to 12 cm (4 in.)

Velvetfishes - Aploactinidae

ID: Compressed body; dark brown to blackish; dorsal fin begins in front of eyes, no scales, bony knobs on head (instead of spines). Solitary, well camouflaged. Sand and rubble strewn bottoms of coastal reefs in 2-18 m.

Asian Pacific: Indonesia to S. Japan.



LEMBEH VELVETFISH

Paraploactis sp.

SIZE: to 8 cm (3 in.)

Velvetfishes - Aploactinidae

ID: Shades of gray with white speckling; **small orange to red spot on rear gill cover**; dorsal fin begins above eye, no scales, bony knobs on head (instead of spines). Solitary, well camouflaged. Sand and rubble strewn bottoms of coastal waters in 5-30 m.

Localized: Lembeh Strait, N. Sulawesi, Indonesia.



SPOTTED CROUCHER

Caracanthus maculatus

SIZE: to 5 cm (2 in.)

Coral Crouchers - Caracanthidae

ID: Nearly round with numerous short spines; light gray to pinkish with numerous red to maroon spots. Wedge body between branches of living *Acropora*, *Stylophora* and *Pocillopora* corals. Lagoon and seaward reefs to 10 m.

Pacific: Indonesia and Philippines to Line Is. and Austral Is. in French Polynesia. - S. Japan to Australia.



RETICULATE STARGAZER

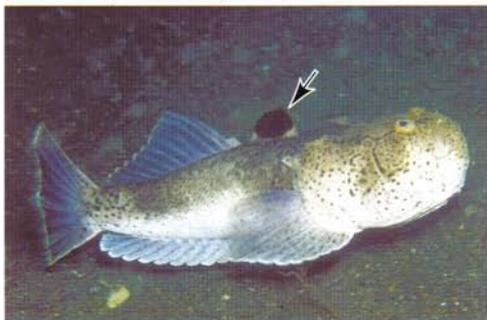
Uranoscopus sp.

SIZE: to 27 cm (10 3/4 in.)

Stargazers - Uranoscopidae

ID: White to pale gray with reddish brown to charcoal spots, also blotches and reticulations, 2 wide somewhat indistinct bars on side; large rounded head with upturned mouth, small eyes. Solitary, bury in sand. Coastal waters in 5 to at least 50 m.

Asian Pacific: N. Australia and Indonesia.



WHITEMARGIN STARGAZER

Uranoscopus sulphureus

SIZE: to 35 cm (14 in.)

Stargazers - Uranoscopidae

ID: Brown to grayish brown; **large black spot on 1st dorsal fin**, white margins on all fins; large, rounded head with upturned mouth and small eyes. Solitary. Sand bottoms of coastal waters in 5-150 m.

Indo-West Pacific: Red Sea to Marianas Is. in Micronesia and Samoa.



Whitemargin Stargazer

ID: Members of this family are ambush predators that typically bury in the sand with only their eyes, mouth and a small part of their head exposed as they wait for unsuspecting prey to pass close by.

Flounders - Soles



PEACOCK FLOUNDER

Bothus mancus

SIZE: to 42 cm (17 in.)

Lefteye Flounders - Bothidae

ID: Gray to brown with blue spots and circles; eyes widely spaced and **lower eye in front of upper eye**, male has elongate pectoral fin rays. Solitary on sandy bottoms or rocky surfaces to 80 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii and tropical East Pacific. - S.W. Japan to Australia.



LEOPARD FLOUNDER

Bothus pantherinus

SIZE: to 39 cm (15 1/2 in.)

Lefteye Flounders - Bothidae

ID: Brown to gray with dark-edged pale spots and florets, large diffuse dark blotch on mid-rear body; **eyes about equal to one eye diameter apart and lower eye nearly aligns with upper**; male has elongate pectoral fin. Solitary. Sand bottoms to 250 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S. Japan to Australia.



ANGLER FLATFISH

Asterorhombus fijiensis

SIZE: to 15 cm (6 in.)

Lefteye Flounders - Bothidae

ID: Mixed small spots in shades of brown and gray; ragged black spots with pale reticulations; frogfish-like angling device above mouth. Solitary. Sandy bottoms near coastal coral reefs in 1-30 m.

Indo - West Pacific: E. Africa and N.W. Australia to Fiji. - S.W. Japan to Great Barrier Reef.



Angler Flatfish - Lure Detail

ID: The 1st dorsal fin spine has been modified into a "fishing lure" similar to those on frogfish. While camouflaging on the substrate the spine is waved back and forth to lure in small fishes. This is the only flatfish known to have such a device.



LARGESCALE FLOUNDER

Engyprosopon grandisquama

SIZE: to 11 cm (4 1/4 in.)

Lefteye Flounders - Bothidae

ID: Brown to gray with numerous scattered dark and light spots and rings; **pair of large prominent jet-black spots on tail**. Solitary. Mud and sand bottoms of coastal seas in 10-100 m.

Indo - Asian Pacific: E. Africa to Australia and New Caledonia, north to Japan.



COCKATOO FLOUNDER

Samanis cristatus

SIZE: to 22 cm (8 3/4 in.)

Righteye Flounders - Pleuronectidae

ID: Brown, frequently with darker brown stripes and white spots on fins; elongate white dorsal fin rays above head spread across sand when threatened. Solitary. Sand and silt bottoms of sheltered bays and estuaries in 5-70 m.

Asian Pacific: Gulf of Thailand and Taiwan to Great Barrier Reef and New Caledonia.

Odd-Shaped Bottom Dwellers



THREESPOT FLOUNDER

Samariscus triocellatus

SIZE: to 9 cm (3 1/2 in.) Righteye Flounders - Pleuronectidae

ID: Elongate oval body; mottled with irregular light and dark brown markings and 2-3 dark-edged ocelli along midline of body. Solitary, frequently under ledges. Sand areas of lagoon and seaward reefs in 5-30 m.

Indo-Pacific: E. Africa to Hawaii and Marquesas Is. in French Polynesia. - Taiwan to Australia.



OCCELLATED FLOUNDER

Pseudorhombus dupliciocellatus

SIZE: to 40 cm (16 in.) Sand Flounders - Paralichthyidae

ID: Shades of brown with reticulum of lines, rings and spots; 2-4 pairs of large black spots ringed with white dots. Solitary. Sand and mud bottoms of coastal seas commonly in 50-150 m, but occasionally in shallows.

East Indo-Pacific: Nicobar Is. to northern Australia, north to Japan, primarily on continental shelves.



KAI SOLE

Aseraggodes kaianus

SIZE: to 14 cm (5 1/2 in.) Soles - Soleidae

ID: Shades of brown with dark-edged white markings and one or more dark blotches along midline of body. Solitary or form small groups, commonly in open during day. Sand flats, coastal sand slopes and estuaries in 4-25 m.

Asian Pacific: Indonesia, north to S. Japan.



Kai Sole - Juvenile

SIZE: to 3 cm (1 1/4 in.)

ID: Shades of brown with large (compared to adults) dark-edged white markings, scattered irregular dark spots and one or more dark blotches along midline of body.



Kai Sole - Phase

ID: May pale or darken markings and enlarge mid-body blotches.



BLACKSPOTTED SOLE

Aseraggodes melanostictus

SIZE: to 4 cm (1 1/2 in.) Soles - Soleidae

ID: Dirty white to pale brown or gray with thinly outlined white spots, black speckles and brown blotches on head, body and fins. Solitary. Protected sand bottoms of lagoons and around reefs in 1-73 m.

Indo-Pacific: Christmas Is. to Marshall Is. in Micronesia to Society Is. in French Polynesia.

Soles - Clingfishes



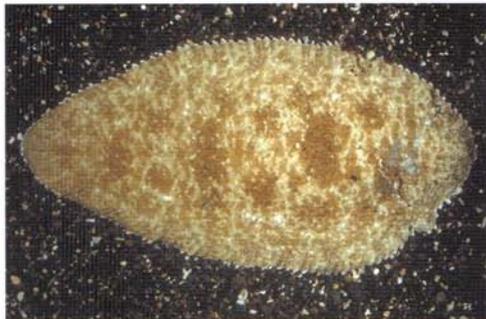
JUVENILE SOLE

SIZE: to 2.5 cm (1 in.)

ID: The appearance of many newly settled soles are not well studied and several are white and without distinctive markings, consequently they cannot be identified to species. The pictured specimen was photographed in the Lembah Straits, Sulawesi, Indonesia.

Aseraggodes sp.

Soles - Soleidae



MARGINED SOLE

SIZE: to 30 cm (12 in.)

ID: Blotchy brown with white edging or tips on fin rays around head and body; clusters of hair-like skin flaps on upper surface of body. Solitary and nocturnal. Sand patches of coastal waters in 4-50 m.

Indo - Asian Pacific: E. Africa to Indonesia, north to S. Japan.

Synaptura marginata

Soles - Soleidae



CARPET SOLE

SIZE: to 15 cm (6 in.)

ID: Shades of brown with scattered black speckles; undulating brown blotches and circles, pale spots and vague ocelli. Solitary. Silt or sand bottoms of estuaries and coastal sand slopes in 4-40 m.

Asian Pacific: Indonesia, north to Japan.

Liachirus melanospilus

Soles - Soleidae



Carpet Sole - Juvenile

SIZE: to 4.5 cm (1 3/4 in.)

ID: Similar to adults, but with darker and more bold markings, vague ocelli of adults generally absent.



BANDED SOLE

SIZE: to 15 cm (6 in.)

ID: Elongate; grayish with numerous thin brown bars and wide black margin on rear dorsal, anal and tail fins. Solitary; at night may swim in open water with undulating motion. Sand and coral areas of coastal reefs to 20 m.

Indo - West Pacific: Red Sea and E. Africa to S. Japan, Indonesia and Samoa.

Soleichthys heterorhinos

Soles - Soleidae



JUVENILE SOLE

SIZE: to 2.5 cm (1 in.)

ID: Members of this genus can be recognized by the elongate tubular nostril in front of the eyes; also dorsal and anal fins do not join tail except at base. Many juveniles of this genus have different colors and markings from adults and have yet to be described. This or a similar juvenile have been sighted in N. Sulawesi, Indonesia, Philippines and S.E. Papua New Guinea.

Soleichthys sp.

Soles - Soleidae

Odd-Shaped Bottom Dwellers



SPOTTED-TAIL SOLE

SIZE: to 25 cm (10 in.)

ID: Grayish brown with about 20 dark edged brown bars and silvery white spots that can be rapidly darkened, pale or eliminated; **black tail with yellow spots**. Solitary and nocturnal. Sand and silt bottoms of sheltered bays, estuaries and coastal areas 5-20 m.

Asian Pacific: Indonesia, Philippines and China.

Zebrias fasciatus

Soles - Soleidae



PEACOCK SOLE

SIZE: to 22 cm (8 3/4 in.)

ID: Reddish brown, with numerous dark-edged light spots (some forming ocelli) and random clusters of small yellow spots. Solitary, has toxic glands along base of dorsal and anal fins. Sand bottoms of coastal waters in 3-40 m.

Indo-West Pacific: Maldives to Samoa and Tonga. - S. Japan to Australia.

Pardachirus pavoninus

Soles - Soleidae



URCHIN CLINGFISH

SIZE: to 5 cm (2 in.)

ID: Red to dark red-brown; pair of white to yellow stripes from head to tail; long spatulate snout and elongate body. Solitary, shelter among spines of sea urchins or in branching corals. Coral reefs to 20 m.

Indo-Asian Pacific: Arabian Sea to New Caledonia. - S.W. Japan to N. Australia.

Diademichthys lineatus

Clingfishes - Gobiessocidae



RED CLINGFISH

SIZE: to 2.5 cm (1 in.)

ID: Bright red with white bands across back. Photographed in 10 m on offshore reef near Lombok in Indonesia. Possibly an undescribed species in genus *Lepadichthys*.

Not Classified

Clingfishes - Gobiessocidae



CRINOID CLINGFISH

SIZE: to 3 cm (1 1/4 in.)

ID: Elongate with short rounded snout; black to pale reddish brown; white to yellow stripe from eye to tail, occasionally a 3rd stripe down back. Solitary or in pairs, inhabit crinoids. Coral reefs in 8-20 m.

East Indo-West Pacific: Christmas I. to Fiji. - S.W. Japan to Great Barrier Reef.

Discotrema crinophila

Clingfishes - Gobiessocidae



Crinoid Clingfish - Orange Variation

ID: Typically display color of host crinoid.

IDENTIFICATION GROUP 17

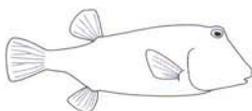
Odd-shaped Swimmers

Boxfishes - Goatfishes - Sweepers - Triggerfishes - Filefishes - Puffers - Porcupinefishes - Others

This ID Group consists of swimming fishes that do not have typical fish-like shapes.

FAMILY: Boxfishes - Ostraciidae

4 Genera – 11 Species Included



Typical Shape

Boxfishes, also commonly known as trunkfishes, are protected by a square, triangular or rounded bony carapace formed by a series of polygonal armor plates. A sharp spine over each eye of fishes in genus *Lactoria* provides the common name cowfishes. Boxfishes have small protruding mouths used for feeding during the day on a variety of attached bottom invertebrates, including sponges, tunicates, and algae. These relatively slow swimmers move with a sculling action of their dorsal, anal and pectoral fins. The broom-like tail is only brought into play when a burst of speed is required.

FAMILY: Goatfishes - Mullidae

3 Genera – 21 Species Included

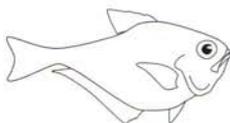


Typical Shape

Two food-searching, chemosensory appendages (barbels) extending from the chin give goatfishes their common family name. When not in use scouring the sand for worms, crustaceans, brittle stars and small fishes, barbels slip under the lower gill covers. Certain species feed during the day, others at night, and a few both day and night. During the day the nighttime feeders often form aggregations in open water or near the protection of the reef. Several goatfishes alter their normal color patterns dramatically when resting on the bottom or while attending cleaning stations.

FAMILY: Sweepers - Pempheridae

2 Genera – 5 Species Included

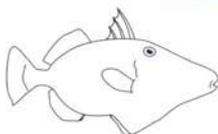


Typical Shape

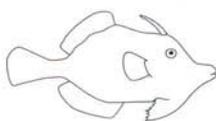
Sweepers, also commonly known as bulls-eyes, are easily recognized by their thin, hatchet-shaped bodies and tendency to gather in aggregations within caves and the deep shadows of the reef's structure during the day. At dusk they disperse to feed on current-borne zooplankton at the reef's periphery.

FAMILY: Triggerfishes - Balistidae

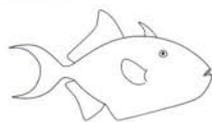
9 Genera – 20 Species Included



Typical Shape



Typical Shape

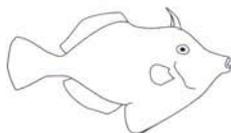


Typical Shape

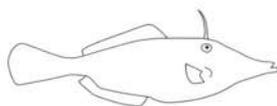
Triggerfishes have relatively large, laterally-compressed bodies with two-part dorsal fins. The first stout, elongate spine of the first dorsal fin can be held erect and locked in place by a rigid second spine, "trigger" that must be depressed to lower the first spine. The mechanism can be used as a formidable defense against predators or to lock the fish firmly inside a crevice. Triggerfishes are the largest demersal egg-layers. Several of the larger species blow shallow depressions in the sand for nests. Deposited eggs form a translucent gelatinous mass. Some species, including the Titan Triggerfish, attack and may seriously nip divers approaching their nesting areas.

FAMILY: Filefishes - Monacanthidae

14 Genera – 25 Species Included



Typical Shape

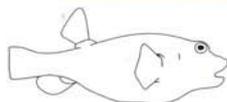


Typical Shape

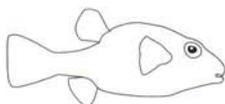
Filefishes and closely related triggerfishes are included together in superfamily Balistoidea. When raised, the filefishes' first elongate dorsal spine, which resembles a woodworker's rattail file, cannot be locked into place. Also unlike triggerfishes, filefishes can quickly alter their color and pattern to match their surroundings.

FAMILY: Puffers - Tetraodontidae

5 Genera – 27 Species Included



Typical Shape



Tobies - Typical Shape

Puffers are odd-shape fishes with tough, scaleless skin that, when molested, have the ability to greatly expand the size of their bodies by drawing water into the ventral portion of their stomachs. The family is divided into two subfamilies: larger puffers in Tetraodontinae and the smaller puffers, known as tobies, in Canthigasterinae. The family produces a potent poison (tetrodotoxin) in their tissue that is potentially deadly if ingested.

FAMILY: Porcupinefishes - Diodontidae

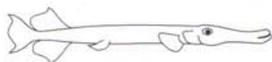
4 Genera – 7 Species Included



Typical Shape

Like puffers, porcupinefishes, also have the ability to inflate their bodies with water. But, unlike the closely related puffers, porcupinefishes are covered with short spines. These spines stand permanently erect in species of *Chilomycterus* and *Cylichthys*, commonly know as burrfishes. The spines of those in genus *Diodon* lay flat unless the body is inflated. Members of the family should be treated with respect because of their ability to inflict nasty bites with a plated mouth structure easily capable of crushing the shells of gastropods.

FAMILY: Others



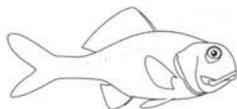
Trumpetfishes - Aulostomidae



Cornetfishes - Fistulariidae



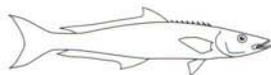
Shrimpfishes - Centriscidae



Flashlightfishes - Anomalopidae



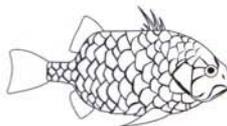
Eel-tailed Catfishes - Plotosidae



Cobias - Rachycentridae



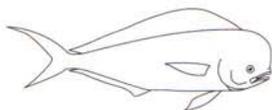
Remoras - Echeneidae



Pinecone fishes - Monocentridae



Molas - Molidae



Dolphinfishes - Coryphaenidae

Odd-Shaped Swimmers



LONGHORN COWFISH

Lactoria comuta

SIZE: to 46 cm (18 in.)

Boxfishes - Ostraciidae

ID: Pair of long horns in front of eye, a second pair on lower rear body; gray to brown, olive or yellow with blue or white spots. Solitary. Weed areas in 1-50 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



Longhorn Cowfish - Variation

ID: Yellow with whitish spots.



ROUNDBELLY COWFISH

Lactoria diaphana

SIZE: to 25 cm (10 in.)

Boxfishes - Ostraciidae

ID: Rounded belly; mottled shades of white, brown and gray with honeycomb net pattern; pairs of short horns in front of eyes and lower rear body and a single thorn on mid-back. Solitary. Coastal and outer reefs to 50 m.

Indo-Pacific: E. Africa to Hawaii, Panama and Peru. - Japan to Kermadec Is.



THORNBACK COWFISH

Lactoria fornasini

SIZE: to 15 cm (6 in.)

Boxfishes - Ostraciidae

ID: Tan with blue scrawl markings; pair of horns in front of eyes, a second pair on lower rear body and a single thorn on mid-back. Solitary. Sand, rubble and weed bottoms of coastal, lagoon and outer reefs to 30 m.

Indo-Pacific: E. Africa to Hawaii and Rapa I. in French Polynesia. - Japan to Australia.



SHORTNOSE BOXFISH

Rhynchostracion nasus

SIZE: to 30 cm (12 in.)

Boxfishes - Ostraciidae

ID: Bump on snout tip; gray to greenish brown with numerous small black spots some forming clusters around edge of pale blue spots, fins bluish with black spots. Solitary. Rock and sand bottoms near reefs in 2-80 m.

Indo-Asian Pacific: E. Africa to Australia, north to S. Japan.



Shortnose Boxfish - Juvenile

SIZE: 3-10 cm (1 1/4-4 in.)

ID: Small bump on snout tip; whitish to pale gray or brown with dark brown spots mainly concentrated on back and tail base.

Boxfishes



LARGENOSE BOXFISH *Rhynchostracion rhinorhynchus*

SIZE: to 30 cm (12 in.)

Boxfishes - Ostraciidae

ID: Juvenile - Bump on mid-snout (very large in adults); whitish with numerous large brown polygons and black spots.

Adult - Blue-gray with blue lined hexagon markings. Solitary or in pairs. Sand and rubble patches near reefs in 3-35 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan Australia



SPOTTED BOXFISH

Ostracion meleagris

SIZE: to 18 cm (7 in.)

Boxfishes - Ostraciidae

ID: Male - Black to dark brown back with white spots, blue head and sides with bright orange body spots, pale pinkish area below eye. Solitary or in pairs. Coastal, lagoon and outer reefs to 30 m.

Indo-Pacific: E. Africa to Hawaii, French Polynesia, Baja and Galapagos. - S. Japan to Great Barrier Reef and New Caledonia.



Spotted Boxfish - Male Variation

ID: Charcoal-brown with numerous small whitish spots on back and many bright orange spots on sides, pale patch below eye, spots on upper side may elongate and join to form broken stripe from eye to tail in both variations.



Spotted Boxfish - Female

ID: Dark brown to blackish with numerous white spots.



SOLOR BOXFISH

Ostracion solorensis

SIZE: to 11 cm (4 1/4 in.)

Boxfishes - Ostraciidae

ID: Male - Black back with light blue maze pattern, head below eyes and sides bluish to black with pale blue line and spots with black borders. Solitary or pairs. Seaward reefs to 20 m.

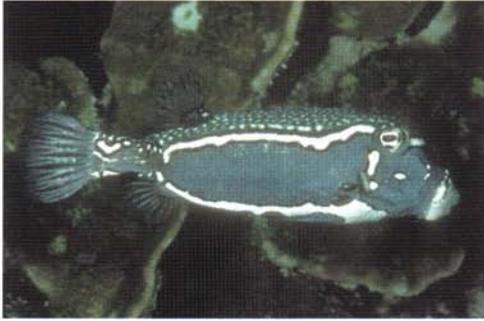
East Indo-Asian Pacific: Christmas I. to Indonesia, Philippines, Palau and Papua New Guinea. - S. Japan to N.W. Australia and N. Great Barrier Reef.



Solor Boxfish - - Female

ID: Black back with pale brown maze pattern, black upper side and yellowish brown below including head with dark spots and pale maze line markings.

Odd-Shaped Swimmers



WHITLEY'S BOXFISH

Ostracion whitleyi

SIZE: to 15.5 cm (6 in.)

Boxfishes - Ostraciidae

ID: Male - Bluish gray with dark-edged white margin along side, white spots on back. Solitary or in pairs. Rock and coral bottoms of lagoon and seaward reefs in 3-27 m.

Central Pacific: Hawaii and Johnston I. to French Polynesia. Rare except at Marquesas Is.



Whitley's Boxfish - Female

ID: Dark brown back and snout with white spots, pale brown lower body with brown spots and markings; white mid-lateral stripe from snout tip to tail base.



YELLOW BOXFISH

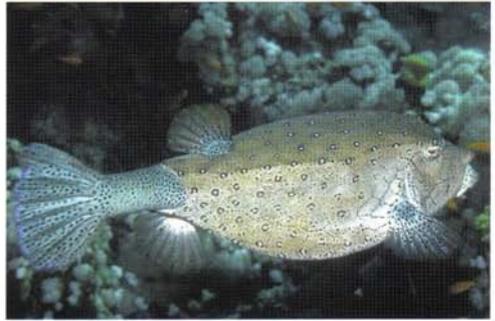
Ostracion cubicus

SIZE: 30-45 cm (12-18 in.)

Boxfishes - Ostraciidae

ID: Large Adult - Bump on snout tip; brownish purple with indistinct spots, often yellow crinkled line markings on head and yellowish tail base. Solitary. Coastal, lagoon and outer reefs to 35 m.

Indo-Pacific: Red Sea and E. Africa to Tuamotu and Rapa Is. in French Polynesia. - Japan to New Zealand.



Yellow Boxfish - Intermediate Adult

SIZE: 15-30 cm (6-12 in.)

ID: Bump on snout tip; tan to yellowish brown with dark ringed bluish spots; blue fins with black spots, may have black to blue or yellow crinkled line markings on head and around pectoral fin base. Similar Shortnose Boxfish [previous] distinguished by numerous black body spots.



Yellow Boxfish - Young Adult

SIZE: 9-15 cm (3 1/2 - 6 in.)

ID: Small bump on snout tip; yellowish brown to olive with black spots on head and a few dark ringed bluish spots on body.



Yellow Boxfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: Absent or a hint of bump on snout tip; bright yellow with black spots on head and body.

Boxfishes - Goatfishes



SMALLSPINE TURRETFISH

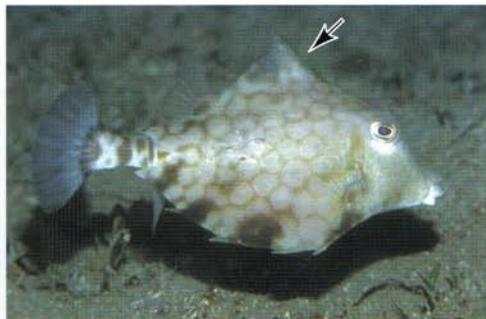
Tetrosomus concatenatus

SIZE: to 30 cm (12 in.)

Boxfishes - Ostraciidae

ID: Triangular carapace with pair of thorn-like spines on raised mid-dorsal ridge; gray to yellowish brown with dark network of hexagons and small blue spots. Solitary. Seagrass and weed bottoms of coastal reefs to 20 m.

Indo-Pacific: E. Africa to E. Australia, north to S. Japan.



HUMPBACK TURRETFISH

Tetrosomus gibbosus

SIZE: to 30 cm (12 in.)

Boxfishes - Ostraciidae

ID: Triangular carapace with tall dorsal ridge and single spine at tip; pale gray with brown network of hexagons, may display brown blotches. Solitary. Seagrass and weed bottoms of coastal reefs to 20 m.

Indo-Pacific: Red Sea and E. Africa to Marquesas and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



YELLOWFIN GOATFISH

Mulloidichthys vanicolensis

SIZE: to 38 cm (15 in.)

Goatfishes - Mullidae

ID: Bluish white with yellowish back, yellow fins; yellow stripe from eye to tail base. Form stationary daytime aggregations, but solitary when feeding on sand-dwelling animals at night. Coastal reefs, lagoons and outer slopes to 113 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Easter I. in southeastern Pacific. - S. Japan to Kermadec Is.



YELLOWSTRIP GOATFISH

Mulloidichthys flavolineatus

SIZE: to 40 cm (16 in.)

Goatfishes - Mullidae

ID: Silvery white with indistinct yellow stripes; can rapidly display or fade a black spot above below 1st dorsal fin. Form stationary daytime aggregations. Sandy areas of sheltered reefs and outer slopes to 35 m.

Indo-Pacific: E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Great Barrier Reef and Lord Howe I.



MIMIC GOATFISH

Mulloidichthys mimicus

SIZE: to 30 cm (12 in.)

Goatfishes - Mullidae

ID: Yellow with 4 blue stripes. Effective mimic of Bluestripe Snapper with which it aggregates during day; disperses at night to feed. Rocky reefs and coral areas to 35 m.

Localized: Known only from scattered locations - Seychelles in Indian Ocean and Line Is. and Marquesas Is. in Central Pacific.



RED GOATFISH

Mulloidichthys pfluegeri

SIZE: to 48 cm (19 in.)

Goatfishes - Mullidae

ID: Orange-red to pink; display red head and 3-4 dark red bars on side when feeding, fade when not feeding. Solitary or in pairs. Sand flats near coral reefs in 15-110 m.

Indo-Pacific: Primarily around oceanic islands from Réunion and Mauritius to Hawaii and Marquesas Is. in French Polynesia.

Odd-Shaped Swimmers



DOUBLEBAR GOATFISH

Parupeneus bifasciatus

SIZE: to 35 cm (14 in.)

Goatfishes - Mullidae

ID: White to purple or yellow with orange spots on scales; black patch around eye, pair of large black bars or spots, one below each dorsal fin the **1st extending no further than pectoral base**. Solitary. Coastal, lagoon and outer reefs to 80 m.

Pacific: Indonesia and Philippines to Hawaii and French Polynesia. - S. Japan to Australia.



INDIAN DOUBLEBAR GOATFISH

Parupeneus trifasciatus

SIZE: to 35 cm (14 in.)

Goatfishes - Mullidae

ID: White often with purplish or yellow tints with orange spots on scales; black patch around eye, pair of large black bars below dorsal fins the **1st bar extending past the pectoral base**. Solitary. Coastal, lagoon and outer reefs to 80 m.

Indian Ocean: Red Sea and Andaman Sea to E. Indonesia.



Goldsaddle Goatfish - Phase

ID: Mixed tan, purple and yellow combination, note bright yellow saddle behind 2nd dorsal fin. Usually solitary, but occasionally in pairs.



Doublebar Goatfish - Phase

ID: Have the ability to rapidly change from yellow to white or purple; often purple when resting on bottom. The large black bars or spots often form saddles across back.



GOldsADDLE GOATFISH

Parupeneus cyclostomus

SIZE: to 50 cm (20 in.)

Goatfishes - Mullidae

ID: Highly changeable, various combinations of purple, brown, gray, green and yellow; blue line markings around eye. often a yellow saddle is apparent on upper tail base. Coastal, lagoon and outer reefs in 2-92 m.

Indo - Pacific: Red Sea and E. Africa to Pitcairn Is. east of French Polynesia. - S.W. Japan to Australia.



Goldsaddle Goatfish - Phase

ID: Yellow to gold without markings except some blue lines around eye. Unlike most goatfishes that feed predominantly on small sand or rubble-dwelling invertebrates, Goldsaddles feed primarily on small fishes that are frightened from holes in the reefs by their probing barbels.

Goatfishes



BICOLOR GOATFISH

Parupeneus barberinoides

SIZE: to 25 cm (10 in.)

Goatfishes - Mullidae

ID: Head and front of body dark reddish brown with 2 diagonal whitish bands, rear white and yellow with black spot below rear dorsal fin. Adults solitary; juveniles often form schools. Rubble, weed and coral reefs to 15 m.

Asian Pacific: S. Japan, Philippines, Indonesia, Great Barrier Reef, New Caledonia and Samoa.



CINNABAR GOATFISH

Parupeneus heptacanthus

SIZE: to 36 cm (14 1/4 in.)

Goatfishes - Mullidae

ID: Brownish yellow to light red; lavender to iridescent blue stripes around eye and on upper sides, small dark spot on mid-side. Solitary. Turbid areas on silty sand or weedy bottoms in 15-100 m.

Indo - West Pacific: Red Sea and E. Africa to Samoa. - S. Japan and Micronesia to Australia.



MANYBAR GOATFISH

Parupeneus multifasciatus

SIZE: to 30 cm (12 in.)

Goatfishes - Mullidae

ID: Light gray to brownish, purplish or red; 3-4 alternating black to dusky red and white bars of variable width, black band behind eye. Solitary. Coral reefs and adjacent sand and rubble areas to 140 m.

Pacific: Indonesia to Hawaii and Pitcairn Is. east of French Polynesia. - S. Japan to Australia and Lord Howe I.



Manybar Goatfish - Phase

ID: Purplish with indistinct bars and only vague band behind eye. Feed primarily on crabs and shrimps during the day.



SIDESPOT GOATFISH

Parupeneus pleurostigma

SIZE: to 33 cm (13 in.)

Goatfishes - Mullidae

ID: Yellowish to purplish gray to light red; white oval patch preceded by large black patch on mid-body, blackish under 2nd dorsal fin. Solitary; feed during day. Sand and rubble bottoms near coral reefs in 5-42 m.

Indo - Pacific: E. Africa and Arabian Sea to Hawaii and Pitcairn Is. east of French Polynesia. - S. Japan to Australia.



ROSY GOATFISH

Parupeneus rubescens

SIZE: to 43 cm (17 in.)

Goatfishes - Mullidae

ID: Tan to light reddish brown; red to brown stripe from mouth through eye to front body, black saddle preceded by white spot on upper tail base. Solitary or groups. Silty sand, seagrass and weedy bottoms to 20 m.

Indian Ocean: Red Sea and E. Africa to E. Indonesia.

Odd-Shaped Swimmers



DASH-DOT GOATFISH

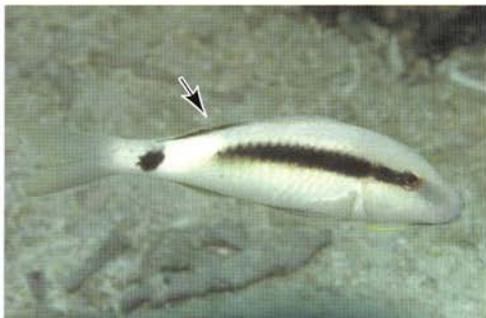
Parupeneus barberinus

SIZE: to 50 cm (20 in.)

Goatfishes - Mullidae

ID: White with pale gray to yellow on upper back; narrow black stripe extends from snout to below 2nd dorsal fin, large black spot on tail base. Solitary or form small groups. Sand and rubble bottoms near reefs to 100 m.

Indo-Pacific: E. Africa to Marquesas and Rapa Is. in French Polynesia. - S. Japan to N. Australia.



LONGBARBEL GOATFISH

Parupeneus macronemua

SIZE: to 32 cm (13 in.)

Goatfishes - Mullidae

ID: Yellowish to grayish white; wide black stripe from eye to below 2nd dorsal fin, large black spot at middle of tail base, **black stripe along base of 2nd dorsal**. Solitary or form small groups. Sand, rubble and weed bottoms in 3-40 m.

Indo-Asian Pacific: Red Sea and E. Africa to Indonesia, Philippines and Papua New Guinea.



CARDINAL GOATFISH

Parupeneus ciliatus

SIZE: to 38 cm (15 in.)

Goatfishes - Mullidae

ID: Light red or purplish to yellowish; pair of white bands extend from eye to below 2nd dorsal fin base; often display darkish saddle on upper tail base. Solitary. Lagoons, seaward reefs and seagrass beds to 40 m.

Indo-Pacific: E. Africa to Line Is. and Marquesas and Rapa Is. in French Polynesia. - S. Japan to Australia.



Cardinal Goatfish - Phase

ID: Have ability to rapidly change color; the red phase is quite common. Often display a white patch behind 2nd dorsal fin.



INDIAN GOATFISH

Parupeneus indicus

SIZE: to 35 cm (14 in.)

Goatfishes - Mullidae

ID: Bluish white to grayish or brownish; bright yellow oval patch on mid-body, large black spot on tail base. Form stationary daytime aggregations; solitary feeders at night. Coastal reefs, lagoons and outer slopes to 113 m.

Indo-West Pacific: E. Africa and Arabian Sea to Samoa. - S. Japan to Great Barrier Reef.



BLACKSPOT GOATFISH

Parupeneus spilurus

SIZE: to 35 cm (14 in.)

Goatfishes - Mullidae

ID: Alternating white and reddish brown to yellowish brown stripes; white patch behind 2nd dorsal fin precedes a black saddle spot on tail base. Solitary; rest on bottom most of day, active at night. Sandy areas and reefs to 30 m.

Southwestern Pacific: W. Australia to Great Barrier Reef, New Caledonia and New Zealand.

Goatfishes - Cornetfishes - Trumpetfishes - Shrimpfishes



BANDTAIL GOATFISH

Upeneus arge

SIZE: to 36 cm (14 1/4 in.)

Goatfishes - Mullidae

ID: Silvery with pair of orange-yellow stripes; about 10-12 black bands on tail. Usually form small groups. Sand bottoms near rock or coral reefs to 25 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and Tuamotu Is. in French Polynesia, mainly oceanic islands.



MOLUCCA GOATFISH

Upeneus moluccensis

SIZE: to 20 cm (8 in.)

Goatfishes - Mullidae

ID: Silvery pink or whitish with golden-yellow stripe from eye to upper base of tail; upper lobe of tail with 6-7 red cross bars, lower tail lobe red or streaked with red. Usually occurs in schools. Muddy bottoms in 10-80 m.

Indo-Asian Pacific: Red Sea and E. Africa to N. Australia and New Guinea, north to S. Japan.



FRECKLED GOATFISH

Upeneus tragula

SIZE: to 30 cm (12 in.)

Goatfishes - Mullidae

ID: Whitish or tan with heavy mottling of brown blotches and spots; dark yellowish to brown stripe from snout to tail, black bands on tail. Solitary or form groups. Sand and rubble to 25 m.

Indo-Asian Pacific: E. Africa and Persian Gulf to E. Australia and New Caledonia, north to Japan.



Freckled Goatfish - Red Phase

ID: May rapidly change to tan or red with dark red stripe from snout to tail. Change to red phase when being cleaned or sleeping at night.



STRIPED GOATFISH

Upeneus vittatus

SIZE: to 28 cm (11 in.)

Goatfishes - Mullidae

ID: Silvery with greenish or yellowish tints; 4 brassy yellow stripes and black bands on dorsal and tail fins. Solitary or form groups. Silt or mud bottoms in 5-100 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Society Is. in French Polynesia. - S. Japan to Australia.



CORNETFISH

Fistularia commersonii

SIZE: to 150 cm (5 ft.)

Cornetfishes - Fistulariidae

ID: Silvery with pale olive back; elongated snout, body and whip-like tail filament; may display blue mid-lateral stripe from head to tail base. Solitary or form schools. Virtually all habitats to 128 m.

Indo-Pacific: Red Sea to Baja, Galapagos, N. New Zealand, Rapa I. in French Polynesia and Easter I.

Odd-Shaped Swimmers



TRUMPETFISH

Aulostomus chinensis

SIZE: to 80 cm (2 3/4 ft.)

Trumpetfishes - Aulostomidae

ID: Elongate body with trumpet-like snout; commonly gray to reddish brown with whitish stripes; may display white bars, blackish tail base with white spots, yellow tail with 2 black spots. Solitary. Inshore and seaward reefs to 122 m.

Indo-Pacific: Red Sea and E. Africa to eastern Pacific. - S. Japan to N. New Zealand.



Trumpetfish - Golden Variation

ID: Bright yellow to yellow-gold is uncommon variation. Species often camouflage by drifting head down within gorgonian branches.



RAZORFISH

Aeoliscus strigatus

SIZE: to 15 cm (6 in.)
Shrimpfishes -
Centriscidae

ID: Silvery with brown mid-lateral stripe; thin elongate snout and flattened body, **1st dorsal spine extends from rear body with hinge allowing the rear half to angle in varying directions.** Head down schools. Reef to 42 m.

Indo-Asian Pacific: Seychelles to New Caledonia. - S. Japan to Great Barrier Reef and New South Wales.



RIGID SHRIMPFISH

Centriscus scutatus

SIZE: to 14 cm (5.5 in.)

Shrimpfishes - Centriscidae

ID: Very similar to Razorfish [previous], but **1st dorsal spine is rigid and straight lacking a hinge** and mid-lateral stripe brown to red. Form head down schools or shelter among urchins. Sheltered reefs in 1-25 m.

Indo-Asian Pacific: Aldabra and Seychelles to New Caledonia. - S. Japan to Great Barrier Reef.



TWOFIN FLASHLIGHTFISH

Anomalops katoptron

SIZE: to 35 cm (14 in.)

Flashlightfishes - Anomalopidae

ID: Dark red-brown with black head and fins; oval-shaped light organ below eye, **2 dorsal fins.** Individual to 12 cm form aggregations within caves on slopes to 40 m during moonless nights; larger individuals dwell in 200-400 m.

Pacific: Indonesia and Philippines to Tuamotu Is. in French Polynesia. - S. Japan to Australia.



ONEFIN FLASHLIGHTFISH

Photoblepharon palpebratus

SIZE: to 12 cm (5 in.)

Flashlightfishes - Anomalopidae

ID: Dark brown to nearly black; crescent-shaped light organ below eye, **single dorsal fin.** Form aggregations on outer reef slopes with caves to 40 m during moonless nights; usually below 15 m.

Pacific: Indonesia, Philippines, Marshall Is. in Micronesia to Society Is. in French Polynesia, south to Australia.

Catfishes - Cobias - Remoras - Pinecone-fishes - Sweepers



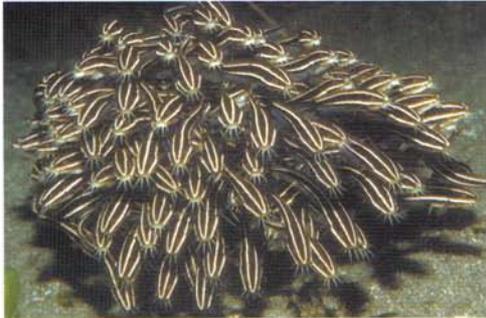
WHITE-LIPPED CATFISH

Paraplotosus albilabris

SIZE: to 130 cm (4 1/4 ft.) Eel-tailed Catfishes - Plotosidae

ID: Brown with 4 pairs of barbels around mouth (common to all plotosid catfishes). Most are under 40 cm. Solitary; commonly under rock ledges or in vegetation during day. Coastal reefs and weed areas, frequently turbid water, to 12 m.

Asian Pacific: Malaysian Peninsula, Singapore, Indonesia, Philippines, New Guinea and Great Barrier Reef.



STRIPED CATFISH

Plotosus lineatus

SIZE: to 32 cm (13 in.)

Eel-tailed Catfishes - Plotosidae

ID: Black to brown with white belly; pair of narrow white stripes extend from head to tail; 4 pairs of barbels around mouth. Young form tightly pack feeding schools that often contain hundreds of fish. Sand and seagrass near reefs to 35 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa. - S. Japan to Australia.



COBIA

Rachycentron canadum

SIZE: to 30 cm (11 3/4 in.)

Cobias - Rachycentridae

ID: **Juvenile** - Wide black stripe bordered with white expands onto tail, grayish back. Solitary. Coastal reefs in 5-40 m.

Circumtropical: Widespread in tropical seas, including Atlantic and Indo-Pacific.



REMORA

Remora sp.

SIZE: to 40 cm (16 in.)

Remoras - Echeneidae

ID: Elongate body with suction disk on top of head; dusky white to nearly black often with white speckles. Swim with or attached to turtles, sharks, mantas and other large fishes, occasionally free-swimming. May attempt to attach to divers. If attach, push forward to release. Open seas, occasionally near reefs to 50 m.

Circumtropical.



SHARKSUCKER

Echeneis naucrates

SIZE: to 100 cm (3 1/4 ft.)

Remoras - Echeneidae

ID: Elongate body with suction disk on top of head; pale gray to nearly black with white edged black stripe from head to tail. Swim with or attached to sharks, turtles, mantas and other large fishes, occasionally free-swimming. May attempt to attach to divers. If attach, push forward to release.

Circumtropical.



Sharksucker - Variation

ID: Pale gray with dusky stripe through eye. Suction disc clearly visible on top of head of free-swimming individual.

Odd-Shaped Swimmers



PINECONEFISH

Monocentris japonicus

SIZE: to 17 cm (6 3/4 in.) Pinecone fishes - Monocentridae

ID: Yellow with black scale margins; hard scales form bony carapace, **small rectangular light organ** powered by luminous bacteria near tip of lower jaw. Solitary or in pairs. Rocky reefs in caves and under ledges in 15-200 m.

Indo - West Pacific: Red Sea and S. Africa, Mauritius, Sri Lanka to Australia. - Japan to N. Zealand.



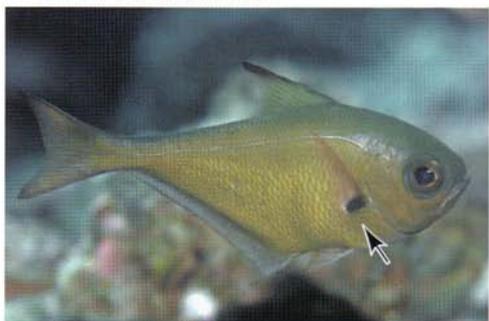
PINEAPPLEFISH

Cleidopus gloriarius

SIZE: to 22 cm (8 1/2 in.) Pinecone fishes - Monocentridae

ID: Yellowish with dark scale margins; hard scales form bony carapace, **ovular light organ** powered by luminous bacteria on side of lower jaw. Solitary or in pairs. Rocky reefs and occasional coral reefs in 5-50 m.

Localized: E. and W. Australia, primarily in warm temperate seas.



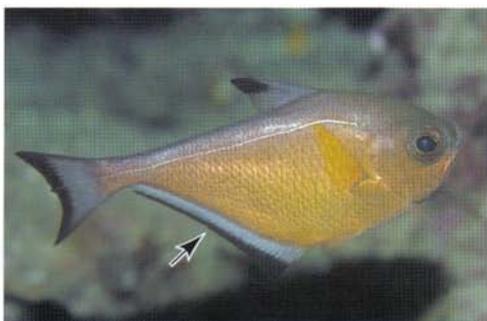
COPPER SWEEPER

Pempheris oualensis

SIZE: to 22 cm (8 3/4 in.) Sweepers - Pempheridae

ID: Copper-brown; leading edge and tip of 1st dorsal fin blackish, **black spot on pectoral fin base** (no black margin on anal fin or tail). Form aggregations in caves or under ledges. Lagoon and seaward reefs to 35 m.

Indo - Pacific: Red Sea to Micronesia and French Polynesia. - S.W. Japan to S.E. Australia and Lord Howe I.



VANIKORO SWEEPER

Pempheris vanicolensis

SIZE: to 20 cm (8 in.) Sweepers - Pempheridae

ID: Copper-brown, broad black tip on 1st dorsal fin, **black margin on anal fin** and tail. Form aggregations in caves or under ledges. Lagoon and seaward reefs to 25 m.

Indo - West Pacific: Red Sea to Philippines, Vanuatu and Samoa.



DUSKY SWEEPER

Pempheris adusta

SIZE: to 17 cm (6 1/2 in.) Sweepers - Pempheridae

ID: Copper-brown with silvery to brassy reflections; black tip on 1st dorsal fin and **black stripe along base of anal fin**; steep curve in lateral line below 1st dorsal fin. Form aggregations in caves or under ledges. Lagoon and seaward reefs to 30 m.

Indo-Asian Pacific: East Africa to east New Guinea.



SILVER SWEEPER

Pempheris schwenkii

SIZE: to 15 cm (6 in.) Sweepers - Pempheridae

ID: Silvery, occasionally coppery; purplish tinting on back and head, often lavender and greenish iridescence; in coppery phase distinguished from similar species by only 3-4 scale rows above lateral line. Form schools in protected areas. Lagoon and seaward reefs to 40 m.

Indo-West Pacific: Africa to Fiji. - Philippines to Great Barrier Reef.

Sweepers - Triggerfishes



GOLDEN SWEEPER

Parapriacanthus ransonneti

SIZE: to 10 cm (4 in.)

Sweepers - Pempheridae

ID: Golden brown translucent body with yellowish head; cardinalfish-like appearance, but with single dorsal fin. Form huge schools in caves, under ledges or under *Acropora* plate corals. Coastal, lagoon and outer reefs in 3-30 m.

Asian Pacific: Indonesia to Marshall Is. in Micronesia. - S.W. Japan N. W. & E. Australia and New Caledonia.



TITAN TRIGGERFISH

Balistoides viridescens

SIZE: to 75 cm (2 1/2 ft.)

Triggerfishes - Balistidae

ID: Dark body with yellow-green to blue crosshatches, yellow-green snout and cheek, whitish rear body and tail base; dark "moustache" band above mouth. Solitary; nesting females will attack divers. Lagoon and outer reefs in 3-50 m.

Indo-Pacific: Red Sea and E. Africa to Line and Tuamotu Is. in French Polynesia. - S. Japan to Australia.



CLOWN TRIGGERFISH

Balistoides conspicillum

SIZE: to 50 cm (19 3/4 in.)

Triggerfishes - Blastidae

ID: Black undercolor with large white spots on lower body; orange lips, yellowish band across top of snout, pale patch with dark spots on back. Solitary. Clear waters and Coral-rich areas of outer reef slopes to 75 m.

Indo-West Pacific: E. Africa to Samoa. - S. Japan to Australia.



Clown Triggerfish - Juvenile

SIZE: 4-8 cm (1 1/2 - 3 in.)

ID: Black with large white spots, yellow snout; white band across top of snout, bright yellow patch on back. Young inhabit caves below 20 m on steep slopes, but may be shallower on rare occasions.



STARRY TRIGGERFISH

Abalistes stellatus

SIZE: to 60 cm (2 ft.)

Triggerfishes - Balistidae

ID: Grayish undercolor with yellow to yellow-brown network; 3-4 alternating blackish and white blotches on back; narrow tail base. Solitary. Muddy or fine silt and sand bottoms, occasionally near reefs in 4-120 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S. Japan to Australia.



Starry Triggerfish - Juvenile

SIZE: to 5 cm (2 in.)

ID: White with yellow spots; black back with 4 white blotches extend from behind eye to tail base. Juveniles inhabit isolated patch reefs in silty areas.

Odd-Shaped Swimmers



BLUE TRIGGERFISH

Pseudobalistes fuscus

SIZE: to 55 cm (22 in.)

Triggerfishes - Balistidae

ID: Blue to bluish gray often with yellowish scale spots; pale blue to muddy red margins on all fins. Solitary; nesting females very aggressive and may attack divers. Sheltered inner reefs and seaward slopes to 50 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and French Polynesia. - S. Japan to S. Great Barrier Reef and New Caledonia.



Blue Triggerfish - Juvenile

SIZE: 8-15 cm (3-6 in.)

ID: Yellow-orange with maze of iridescent blue lines, blue dorsal, anal and tail fins with yellow-orange spots.



YELLOWMARGIN TRIGGERFISH

Pseudobalistes flavimarginatus

SIZE: to 60 cm (2 ft.)

Triggerfishes - Balistidae

ID: Tan body with dark spots and crosshatch pattern, pale orangish snout and cheeks; yellow to orange margins on fins. Solitary; nest in sand and rubble channels. Coastal reefs, lagoons and sheltered outer reefs in 2-50 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Samoa and French Polynesia. - S. Japan to Great Barrier Reef.



Yellowmargin Triggerfish - Sub-adult

SIZE: 8-20 cm (3-8 in.)

ID: Tan with yellowish tints; variable-sized dark spots on body and dusky gray dorsal, anal and tail fins with yellow margins.



Yellowmargin Triggerfish - Small Juvenile

SIZE: 3-5 cm (1-2 in.)

ID: White back with yellow below; 4 black bars or saddles on back; scattered blue spots on body. Solitary; very shy, retreat into reef when approached.



ORANGE-LINED TRIGGERFISH

Balistapus undulatus

SIZE: to 30 cm (12 in.)

Triggerfishes - Balistidae

ID: Dark green to brown with diagonally curved orange bands; large black spot on tail base. Solitary; feed on coral, algae, sponges, worms, crabs, urchins and fishes. Coral-rich areas of lagoons and outer reefs in 2-50 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia. - S. Japan to Australia.

Triggerfishes - Filefishes



BRIDLED TRIGGERFISH

Sufflamen fraenatus

SIZE: to 38 cm (15 in.)

Triggerfishes - Balistidae

ID: Changeable light to dark brown with no distinctive markings except narrow pale yellow to pink band under chin. Solitary. Seaward reefs, over open bottoms with sand and rubble patches in 8-186 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii and French Polynesia. - S. Japan to Australia and Lord Howe I.



Bridled Triggerfish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: White with dark brown back; wavy horizontal brown lines on body.



FLAGTAIL TRIGGERFISH

Sufflamen chrysopterus

SIZE: to 22 cm (8 3/4 in.)

Triggerfishes - Balistidae

ID: Dark brown, changeable to yellowish brown; bluish chin and belly, narrow yellow-orange bar behind eye, white edged yellow-brown tail. Solitary. Lagoon and seaward reefs in 2-30 m.

Indo-West Pacific: E. Africa to Samoa. - S. Japan to E. Australia and Lord Howe I.



Flagtail Triggerfish - Small Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: White with brown back, dark horseshoe-shaped marking on tail. Usually seen in areas of mixed coral and rubble; quickly retreat to rocky holes when threatened.



SCYTHE TRIGGERFISH

Sufflamen bursa

SIZE: to 24 cm (9 in.)

Triggerfishes - Balistidae

ID: Gray to brown with white chin and belly; yellow or brown scythe-shaped marking behind eye. Solitary. Seaward reefs in mixed coral, sand and rubble areas in 3-90 m.

Indo-Pacific: E. Africa to Hawaii and Marquesa and Rapa Is. in French Polynesia. - S. Japan Great Barrier Reef.



Scythe Triggerfish - Phase

ID: Has the ability to rapidly change scythe-markings from bright yellow-orange to dark brown, also may darken or lighten or change shades of body color.

Odd-Shaped Swimmers



BLACKPATCH TRIGGERFISH

Rhinecanthus verrucosus

SIZE: to 23 cm (9 in.)

Triggerfishes - Balistidae

ID: Brownish upper body, white below; tapering dark bar through eye, large black patch on lower body, 3 rows of black dots on tail base. Solitary or form loose groups. Sheltered areas of mixed coral and rubble or seagrass to 20 m.

Indo - West Pacific: Seychelles and Chagos Is. to Vanuatu. - S. Japan to Great Barrier Reef.



PICASSO TRIGGERFISH

Rhinecanthus aculeatus

SIZE: to 25 cm (10 in.)

Triggerfishes - Balistidae

ID: Snout and back shades of tan with white below; yellow-orange band from snout intersects black bar below eye, black mid-body patch with black bands extending to anal fin. Solitary or form groups. Lagoon and reef flats to 4 m.

Indo - Pacific: E. Africa to Hawaii and French Polynesia. - S. Japan to E. Australia and Lord Howe I.



HALFMOON TRIGGERFISH

Rhinecanthus lunula

SIZE: to 28 cm (11 in.)

Triggerfishes - Balistidae

ID: White with gray back and upper snout; yellowish stripe from snout to rear body with interrupting black spot below eye, black ring on tail base, black 1st dorsal fin, black spot over anus. Solitary. Seaward reefs in 10-25 m.

South Pacific: Great Barrier Reef and New Caledonia to Samoa, Society and Tuamotu Is. in French Polynesia.



WEDGETAIL TRIGGERFISH

Rhinecanthus rectangulus

SIZE: to 25 cm (10 in.)

Triggerfishes - Balistidae

ID: Light brown snout and back, white below; black band through eye enlarges and runs to anal fin, black triangular mark on tail base. Solitary or form groups. Surge-affected reef flats and seaward reefs to 12 m.

Indo - Pacific: Red Sea and E. Africa to Micronesia, Hawaii and Ducie I. east of French Polynesia. - S.W. Japan to E. Australia.



CROSSHATCH TRIGGERFISH

Xanthichthys mento

SIZE: to 22 cm (8 3/4 in.)

Triggerfishes - Balistidae

ID: **Male** - Yellow-gold with black scale margins forming crosshatch pattern, bright red tail; blue lines on cheek. Form groups. Seaward reefs above dropoffs in 10-100 m, below 40 m at many locations.

Pacific: Japan and Micronesia to E. Pacific (most common around subtropical islands including Hawaii and Galapagos).



Crosshatch Triggerfish - Female

ID: Similar to male, but bright yellow-gold tail and red rear dorsal and anal fin margins (yellow on males).

Filefishes



GILDED TRIGGERFISH *Xanthichthys auromarginatus*

SIZE: to 22 cm (8 $\frac{3}{4}$ in.) Triggerfishes - Balistidae

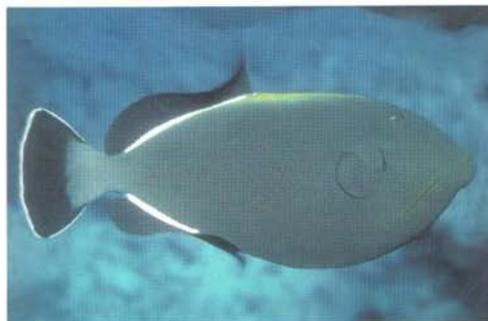
ID: Male - Steel blue with white scale spots; large blue patch on lower head, yellow margins on dorsal, anal and tail fins. Form groups that feed on zooplankton above bottom. Outer reef slopes in 15-140 m, usually below 20 m.

Indo-West Pacific: Mauritius to S.W. Japan, Micronesia, Hawaii and New Caledonia; mainly islands.



Gilded Triggerfish - Female

ID: Steel blue with white scale spots; maroon stripe on base of dorsal and anal fins and margin on tail. On steep slopes, often on the upper edge of dropoffs below 20 m.



INDIAN TRIGGERFISH *Melichthys indicus*

SIZE: to 24 cm (9 in.) Triggerfishes - Balistidae

ID: Dark grayish black with jet black fins; white band at base of dorsal and anal fins, white margin around tail. Solitary or form groups. Coral-rich areas of outer reefs slopes in 2-20 m.

Indo-Asian Pacific: Red Sea, E. Africa and W. Thailand to Sumatra and Bali in Indonesia.



BLACK TRIGGERFISH *Melichthys niger*

SIZE: to 35 cm (14 in.) Triggerfishes - Balistidae

ID: Black with bluish scale margins; pale blue to white band at base of dorsal and anal fins, may display blue markings on upper head and yellow marking on cheek. Solitary or form loose groups. Outer reefs in 2-70 m.

Circumtropical.



PINKTAIL TRIGGERFISH *Melichthys vidua*

SIZE: to 30 cm (12 in.) Triggerfishes - Balistidae

ID: Brown with yellowish snout and pectoral fins, white dorsal and anal fins with black margins, white tail with wide pink margin. Solitary or form loose groups; feed on algae, mixed invertebrates and fishes. Outer reefs in 4-60 m.

Indo-Pacific: E. Africa to Hawaii and Galapagos in eastern Pacific. - S. Japan to Great Barrier Reef and New Caledonia.



REDTOOTH TRIGGERFISH *Odonus niger*

SIZE: to 40 cm (16 in.) Triggerfishes - Balistidae

ID: Pale blue head, dark blue to purplish body; 2 blue lines extend from eye toward mouth; lunate tail with long lobes in adult. Form plankton-feeding aggregations above reef, retreat to reef recesses when threatened. Outer reefs slopes in 5-40 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and French Polynesia. - S. Japan to Great Barrier Reef and New Caledonia

Odd-Shaped Swimmers



OCEANIC TRIGGERFISH

Canthidermis maculatus

SIZE: to 30 cm (12 in.)

Triggerfishes - Balistidae

ID: Elongate body; pale gray to blackish often with white spots; large dark diffuse spot around pectoral fin base. Form schools. Steep outer reef slopes in 15-55 m. or around large floating objects in open sea.

Circumtropical.



BROOM FILEFISH

Amanses scopas

SIZE: to 20 cm (8 in.)

Filefishes - Monacanthidae

ID: Dark brown with black tail; several blackish bars on mid-side. **Males** - Patch of long black spines in front of tail base. **Females** - Patch of short bristles in front of tail base. Solitary or in pairs. Seaward reefs in 3-18 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Tuamotu Is. French Polynesia. - S. Japan to S. Great Barrier Reef.



SCRAWLED FILEFISH

Aluterus scriptus

SIZE: to 75 cm (2 1/2 in.)

Filefishes - Monacanthidae

ID: Mottled to nearly uniform shades of gray to brown to olive; irregular blue spot and line markings and black spots; tall slender first dorsal spine. Solitary. Coastal, lagoon and outer reefs in 2-80 m.

Circumtropical.



UNICORN FILEFISH

Aluterus monoceros

SIZE: to 75 cm (2 1/2 in.)

Filefishes - Monacanthidae

ID: Gray with faint spotting; tall slender 1st dorsal spine. **Juvenile** - Reticulate pattern of pale lines and gray blotches. Solitary; usually in open water, often around floating debris. Outer reefs to 80 m.

Circumtropical.



RHINO FILEFISH

Pseudalutarius nasicornis

SIZE: to 18 cm (7 in.)

Filefishes - Monacanthidae

ID: **Male** - Elongated with dorsal spine in front of eye; white with small gold spots; pair of dark stripes and blackish tail patch. Solitary, in pairs or small groups. Usually in seagrasses or weeds of sheltered coastal areas in 2-55 m.

Indo-Asian Pacific: E. Africa to E. Australia, north to S. Japan.



Rhino Filefish - Female

ID: Elongate with dorsal spine in front of eye, more slender than male; white without gold spots; pair of dark often brown stripes from snout to tail, black patch on tail.

Filefishes



YELLOWEYE FILEFISH

SIZE: to 35 cm (14 in.)

ID: Brownish gray to blue-gray; faint dark bars on rear body, yellow iris, 4 yellowish spines on tail base, black line marking above pectoral fin base. Usually in pairs; feed on live corals. Coastal, lagoon and outer reefs to 35 m.

Indo-Pacific: E. Africa to Micronesia, Hawaii, Mexico and Ducie I. east of French Polynesia. - S. Japan to Australia.

Cantherhines dumerili

Filefishes - Monacanthidae



Yelloweye Filefish - Juvenile

SIZE: 3-8 cm (1 1/4 - 3 in.)

ID: Gray with white spots; yellow iris, yellow fins and black line marking above pectoral fin base.



SPECTACLED FILEFISH

SIZE: to 23 cm (9 in.)

ID: Mottled light to dark gray and yellowish brown; black band between dark blotches around eyes, white band on tail base. Solitary; shy remain close to cover. Outer reefs to 40 m, usually below 15 m.

Indo-Asian Pacific: East Africa to Papua New Guinea and Marshall Is. in Micronesia, north to S. Japan.

Cantherhines fronticinctus

Filefishes - Monacanthidae



WIREDNET FILEFISH

SIZE: to 25 cm (10 in.)

ID: Bluish gray to bluish brown with bluish stripes on head and pale blue netted pattern on body; usually white spot on upper tail base. Solitary. Outer reefs in 2-20 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Ducie I. in French Polynesia. - S. Japan to Australia and Lord Howe I.

Cantherhines pardalis

Filefishes - Monacanthidae



FAN-BELLIED FILEFISH

SIZE: to 38 cm (15 in.)

ID: Pale brown with medium brown blotches covered with dark brown spots; large fan-shaped ventral skin flap, concave snout. Solitary. Sheltered coastal reefs and rocky areas, frequently in weed beds to 20 m.

West Pacific: Indonesia and Malaysian Peninsula to Samoa. - S. Japan to E. Australia.

Monacanthus chinensis

Filefishes - Monacanthidae



LONGNOSE FILEFISH

SIZE: to 9 cm (3 1/2 in.)

ID: Blue-green with rows of orange spots; black spot on tail; elongated snout with small upturned mouth. In pairs or small groups among *Acorpora* coral branches on which it feeds. Lagoons and seaward reefs to 35 m.

Indo-West Pacific: E. Africa to Samoa and Tonga. - S.W. Japan to Australia.

Oxymonacanthus longirostris

Filefishes - Monacanthidae

Odd-Shaped Swimmers



MIMIC FILEFISH

Paraluteres prionurus

SIZE: to 10 cm (4 in.)

Filefishes - Monacanthidae

ID: White with brown to black spots; 2 dark brown saddles across back, often with narrow extensions onto belly. Mimic Black-Saddled Toby which lacks file-like 1st dorsal fin. Solitary or small groups. Seaward reefs to 25 m.

Asian Pacific: E. Africa to Great Barrier Reef and New Caledonia, north Micronesia and S. Japan.



ANDAMAN MIMIC FILEFISH

Paraluteres arquatus

SIZE: to 8 cm (3 in.)

Filefishes - Monacanthidae

ID: Dark brown upper body, white below with numerous small white spots. Mimic the Sharpnose Toby which lacks file-like 1st dorsal fin. Solitary. Coral reefs in 5-20 m.

East Indian Ocean: E. Andaman Sea at Similan Is. and Phuket in Thailand.



LEAFY FILEFISH

Chaetodermis penicilligera

SIZE: to 31 cm (12 1/2 in.)

Filefishes - Monacanthidae

ID: Brown to brownish yellow; shaggy, covered with numerous skin flaps; wavy brown lines on side, black dots on transparent dorsal anal and tail fins. Solitary. Weed-covered bottoms of coastal reefs in 2-25 m.

Asian Pacific: S. Japan, Indonesia and Malaysian Peninsula to Great Barrier Reef.



Leafy Filefish - Variation

ID: Mottled brown and bluish gray.



MINUTE FILEFISH

Rudarius minutus

SIZE: to 3 cm (1 1/4 in.)

Filefishes - Monacanthidae

ID: Tiny; pale gray with numerous pale brown spots and fine speckling. Males have dark spot with pale rim above anal-fin base. Solitary or form small groups among gorgonian, soft coral or fire coral branches. Coastal reefs and lagoons in 2-15 m.

Localized: Known only from Borneo, Flores in Indonesia, Palau and Great Barrier Reef.



DIAMOND FILEFISH

Rudarius excelsus

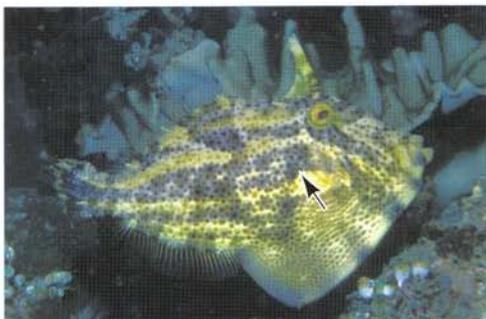
SIZE: to 2.5 cm (1 in.)

Filefishes - Monacanthidae

ID: Tiny and nearly circular; green to brown with numerous small skin flaps. Males have long bristles on tail base. Very rare, known from this photograph, 2 trawl specimens and occasional sightings. Weed bottoms near reefs in 8-25 m.

Localized: Known only from Great Barrier Reef.

Filefishes



STRAPWEED FILEFISH *Pseudomonacanthus macrurus*

SIZE: to 24 cm (9 in.)

Filefishes - Monacanthidae

ID: Mottled shades of yellow to brown, greenish brown, tan and grayish white; covered with numerous brown spots, usually darkish blotch behind and below eye. Solitary. Reef flats, lagoons and weed or seagrass beds to 10 m.

Asian Pacific: Malaysian Peninsula, Indonesia, Philippines and New Guinea.



Strapweed Filefish - Phase

SIZE: 5-10 cm (2-4 in.)

ID: Mottled shades of tan, pale and dark spots; dark blotch behind and below eye.



BLACKHEADED FILEFISH *Pervagor melanocephalus*

SIZE: to 10 cm (4 in.)

Filefishes - Monacanthidae

ID: Dark brown head, orange body with red or orange tail; orange spots on snout. Solitary or in pairs; remain close to shelter. Seaward reefs in 3-40 m.

West Pacific: Indonesia to Fiji and Tonga. - S.W. Japan to Australia.



Strapweed Filefish - Phase

ID: Colors can be rapidly change, intensified or pale; usually a blue spotted border on extendible belly appendage.



BLACKBAR FILEFISH

Pervagor janthinosoma

SIZE: to 14 cm (5 1/2 in.)

Filefishes - Monacanthidae

ID: Brown to olive with dark horizontal lines, orangish tail; dark bar above pectoral fin base. Solitary and secretive. Lagoon and seaward reefs to 20 m.

Indo - West Pacific: E. Africa to Mariana Is. in Micronesia, Tonga and Samoa. - S.W. Japan to Great Barrier Reef and New Caledonia.



ORANGETAIL FILEFISH

Pervagor aspricaudus

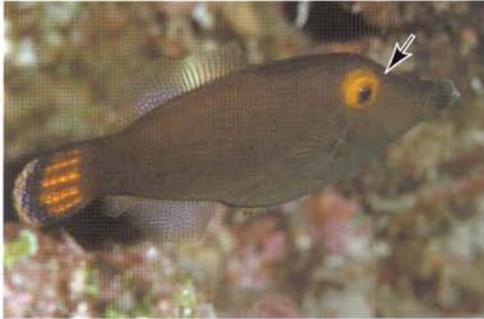
SIZE: to 12 cm (5 in.)

Filefishes - Monacanthidae

ID: Blue-gray head and front of body with numerous tiny black spots, orange rear body and tail. Solitary. Corals and rubble areas of lagoons and outer reef slopes to 25 m.

Indo - Pacific: Mauritius to Taiwan, Japan, Marshall Is. in Micronesia and Hawaii, south to New Caledonia.

Odd-Shaped Swimmers



YELLOWEYE FILEFISH

Pervagor alternans

SIZE: to 16 cm (6 1/4 in.)

Filefishes - Monacanthidae

ID: Dark brown with black horizontal lines; **orange iris and adjacent ring around eye**, orange tail markings with a black submarginal band. Solitary. Coral and rocky reefs to 15 m.

Asian Pacific: Marshall Is. in Micronesia to Great Barrier Reef, New Caledonia and Lord Howe I.



BLACK-LINED FILEFISH

Pervagor nigrolineatus

SIZE: to 10 cm (4 in.)

Filefishes - Monacanthidae

ID: Brown with **white stripe from snout to dorsal fin base**; frequently curved white band below eye to mid-body. Solitary and secretive; often around soft corals. Lagoon and outer reefs in 3-25 m.

Asian Pacific: Offshore reefs of N.W. Australia, Indonesia and Philippines to Solomon Is.



JAPANESE FILEFISH

Paramonacanthus japonicus

SIZE: to 10 cm (4 in.)

Filefishes - Monacanthidae

ID: Tan with tiny brown spots and dark brown rectangular marking below beginning of soft dorsal fin. Solitary. Sandy or weed-covered bottoms of coastal reefs in 1-20 m.

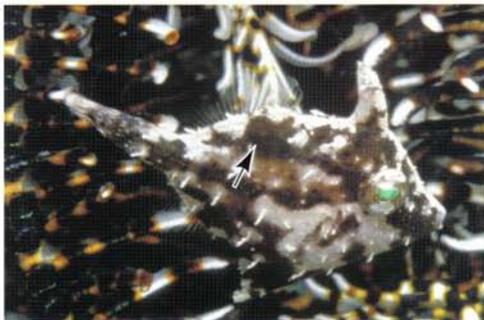
Asian Pacific: Indonesia, Philippines and New Guinea. - S. Japan to Australia.



Japanese Filefish - Juvenile

SIZE: 3-4.5 cm (1 1/4 - 1 3/4 in.)

ID: White to tan with wide brown stripe from eye to upper base of tail interspersed with a dark rectangular marking below beginning of soft dorsal fin, brown mid-lateral stripe. Can rapidly change, darken or pale both colors and markings.



WHITEBAR FILEFISH

Paramonacanthus choirocephalus

SIZE: to 13 cm (5 in.)

Filefishes - Monacanthidae

ID: White to gray with brown to black blotches; **usually dark blotch below beginning of 2nd dorsal fin**; deep diamond shaped body. Solitary or form groups; often shelter among crinoid arms. Sea grass beds and sandy slopes to 25 m.

Indo-Asian Pacific: India to Indonesia and N. Coral Sea.



BEARDED FILEFISH

Anacanthus barbatus

SIZE: to 35 cm (13 3/4 in.)

Filefishes - Monacanthidae

ID: Elongate with long dark barbel (beard) extending from chin; shades of brown with netted pattern of dark markings and dusky bars. Solitary or small groups in mixed sand-weed areas. Coastal reefs and mangrove estuaries in 3-20 m.

Indo-Asian Pacific: India to N.W. Australia and Indonesia.

Filefishes - Puffers



BRISTLE-TAILED FILEFISH *Acreichthys tomentosus*

SIZE: to 10 cm (4 in.) Filefishes - Monacanthidae

ID: Mottled green, brown and white; usually dark V-shaped marking on mid-side; numerous skin flaps on body. Solitary. Sheltered reefs and seagrass beds to 15 m.

Indo-West Pacific: E. Africa to Fiji. - S.W. Japan to Australia.



RADIAL FILEFISH *Acreichthys radiatus*

SIZE: to 7 cm (2 3/4 in.) Filefishes - Monacanthidae

ID: Mottled brown and gray with irregular white line markings; numerous short skin flaps on body and first dorsal fin. Solitary; frequently near soft corals. Coastal and lagoon reefs in 2-12 m.

Asian Pacific: S.W. Japan, Indonesia and Philippines to Great Barrier Reef and New Caledonia.



BLUE-SPOTTED PUFFER *Arothron caeruleopunctatus*

SIZE: to 70 cm (2 1/4 ft.) Puffers - Tetraodontidae

ID: Yellowish brown back, bluish below and covered with small blue spots; alternating light and dark rings around eye, black patch with white spots on pectoral-fin base. Solitary. Seaward reef slopes in 5-35 m.

Indo-Asian Pacific: Maldives to Papua New Guinea, Palau and Marshall Is. in Micronesia.



Blue-Spotted - Variation

ID: Brown with only a few blue spots, except on fins; alternating light and dark rings around eye, network of line markings on back, black patch with white spots on pectoral fin base.



WHITE-SPOTTED PUFFER *Arothron hispidus*

SIZE: to 48 cm (19 in.) Puffers - Tetraodontidae

ID: Gray to greenish brown upper body, paler below covered with white spots; white ring around eye, large white-edged black spot around pectoral-fin base. Solitary. Mixed coral, sand, rubble and weed bottoms in 1-50 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Hawaii, French Polynesia and Panama. - Japan to Australia.



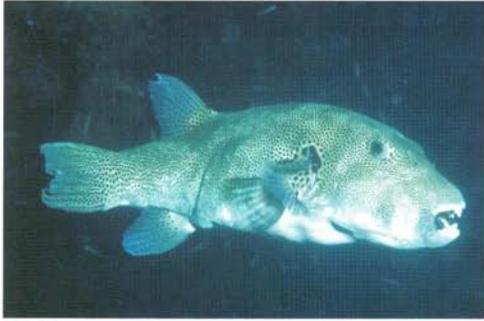
RETICULATED PUFFER *Arothron reticularis*

SIZE: to 30 cm (12 in.) Puffers - Tetraodontidae

ID: Brown with white spots on back and rear body and tail, white bands encircle eye and pectoral fin base, white curved bands run from head to belly. Solitary. Mangrove estuaries, tidal creeks and open sand or mud bottoms to 20 m.

Indo-West Pacific: India to Fiji. - S.W. Japan to Australia.

Odd-Shaped Swimmers



STAR PUFFER

Arothron stellatus

SIZE: to 90 cm (3 ft.)

Puffers - Tetraodontidae

ID: Pale gray with dense covering of black spots; larger black spots or irregular blotches around pectoral fin base. Solitary. Lagoon and seaward reefs in 3-58 m.

Indo-Pacific: Red Sea and E. Africa to Tuamotu Is. in French Polynesia. - S. Japan to N. New Zealand.



Star Puffer - Older Juvenile

SIZE: 4-10 cm (1 1/2 - 4 in.)

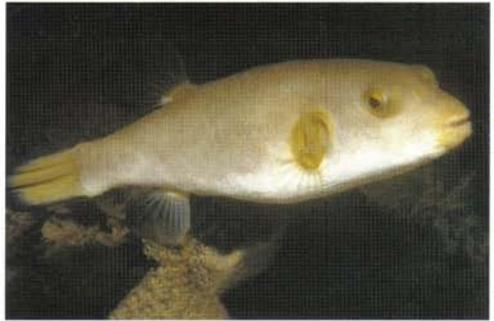
ID: Gray to light gray to yellowish tan with numerous black spots; yellow to orange patches and curved blackish bands on belly disappear with age. Solitary in shallow sand, rubble or weedy areas near protected inner reefs.



Star Puffer - Young Juvenile

SIZE: 2.5-3 cm (1-1 1/4 in.)

ID: Orange covered with curving black line markings. Solitary in shallow sand, rubble and weedy areas near protected inner reefs.



IMMACULATE PUFFER

Arothron immaculatus

SIZE: to 28 cm (11 in.)

Puffers - Tetraodontidae

ID: Brown gradating to white underside; large yellowish brown spot around pectoral fin base (may be edged in black), black-edged yellowish tail. Solitary. Coastal mangroves, seagrass and weedy and silt bottoms near reefs in 3-30 m.

Indo-Asian Pacific: Red Sea and E. Africa to Indonesia, north to S.W. Japan and China.



STRIPED PUFFER

Arothron manilensis

SIZE: to 31 cm (12 1/2 in.)

Puffers - Tetraodontidae

ID: Brown with dark brown to yellowish stripes; large dark spot around pectoral fin base, may display darkish blotches. Coastal mangroves, seagrass beds, weedy areas and sand and silt bottoms near reefs in 2-20 m.

West Pacific: W. Australia to Kalimantan (Borneo) in Indonesia to Tonga. - S.W. Japan and Micronesia to E. Australia.



MAP PUFFER

Arothron mappa

SIZE: to 60 cm (2 ft.)

Puffers - Tetraodontidae

ID: Gray with black maze markings, white to yellowish belly; spoke-like lines radiate from eye, irregular black blotch around pectoral fin base and another on belly. Solitary. Lagoon and seaward reefs in 4-30 m.

Indo-West Pacific: E. Africa to Samoa. - S.W. Japan to Great Barrier Reef and New Caledonia.

Puffers



GUINEAFOWL PUFFER

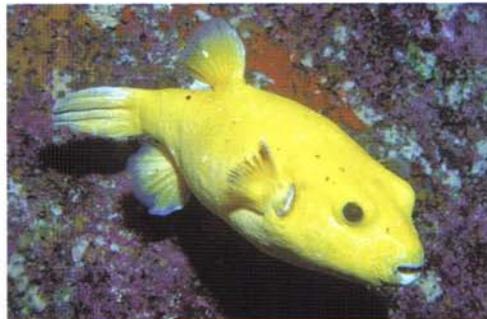
Arothron meleagris

SIZE: to 50 cm (20 in.)

Puffers - Tetraodontidae

ID: Black covered with small white spots. Solitary; feeds mainly on live tips of branching corals. Coral-rich areas and rocky bottoms of coastal, lagoon and outer reefs to 20 m.

Indo-Pacific: E. Africa to Hawaii, French Polynesia, Galapagos and Baja. - S. Japan to Australia.



Guineafowl Puffer - Variation

ID: Entirely bright yellow-gold, may display a few scattered black spots. This variation makes up about 25 percent of population.



Guineafowl Puffer - Juvenile

SIZE: 2.5 - 3 cm (1 - 1 1/4 in.)

ID: Black with bright orange-yellow spots.



BLACKSPOTTED PUFFER

Arothron nigropunctatus

Puffers-Tetraodontidae

SIZE: to 33 cm (13 in.)

ID: Highly variable in wide combination of colors; **consistent markings include black lips**, black pectoral fin base and a few scattered black spots. Solitary. Coral-rich areas of lagoons to seaward reefs in 3 - 25 m.

Indo-Pacific: E. Africa to Line Is. in Central Pacific. - S.W. Japan to E. Australia and New Caledonia.



Blackspotted Puffer - Variation

ID: Olive back and orange below; dark patch around eye and another around mouth are commonly displayed; the band across snout and dark dorsal fin with dark patch below are less common markings. Feed heavily on living corals, occasionally on other cnidarians, crustaceans and molluscs.



Blackspotted Puffer - Variation

ID: Blue-gray with irregular black blotches and spots (an uncommon variation), but common at Weh I., off the extreme northwestern tip of Sumatra in Indonesia.

Odd-Shaped Swimmers



WHITEBELLY TOBY

Canthigaster bennetti

SIZE: to 10 cm (4 in.)

Puffers - Tetraodontidae

ID: Brown upper body, whitish below; blue lines radiate from eye often interspersed with orange, blue-edged black spot at base of dorsal fin. Solitary or form groups. Sand and rubble bottoms of sheltered coastal reefs, reef flats and lagoons to 15 m.

Indo-Pacific: E. Africa to Hawaii, Society Is. in French Polynesia and Galapagos. - S. Japan to S.E. Australia and Lord Howe I.



PAPUAN TOBY

Canthigaster papua

SIZE: to 9 cm (3 1/2 in.)

Puffers - Tetraodontidae

ID: Red-brown; covered with white to blue to green spots including tail, white to blue to green lines on snout and back, ocellated black spot on dorsal fin base, **orange around mouth**. Solitary or in pairs. Coral reefs to 35 m.

Asian Pacific: Indonesia, Philippines and Palau to Great Barrier Reef and New Caledonia.



FINGERPRINT TOBY

Canthigaster compressa

SIZE: to 10 cm (4 in.)

Puffers - Tetraodontidae

ID: Brown, paler underside, orangish tail with bluish bars; numerous wavy white to blue to green lines cover body, ocellated black spot below dorsal fin base. Silty bays and harbours, often around wharf pilings in 2-25 m.

Asian Pacific: Indonesia to Solomon Is. and Vanuatu, north to Mariana Is. in Micronesia and S.W. Japan.



SPOTTED TOBY

Canthigaster solandri

SIZE: to 10.5 cm (4 in.)

Puffers - Tetraodontidae

ID: Brown; covered with white to blue to green spots; white to blue to green line markings on snout and back, ocellated spot on dorsal fin base. Solitary; feed mainly on algae, corals and benthic invertebrates. Lagoon and seaward reefs in 1-35 m.

Indo-Pacific: E. Africa to Line Is. and French Polynesia. - S.W. Japan and Micronesia (except Palau) to Tonga.



Papuan Toby - Variation

ID: This species and the similar Spotted Toby [previous] can have spots on the back instead of lines. This species can be distinguished by orange around mouth. Red-brown with white to blue to green spots; line markings between eyes.



Fingerprint Toby - Variation

ID: Brown, paler underside, yellow tail with bluish bars; numerous small white to blue to green spots cover body except wavy white to blue to green lines on upper head, ocellated black spot below dorsal fin.

Puffers



AMBON TOBY

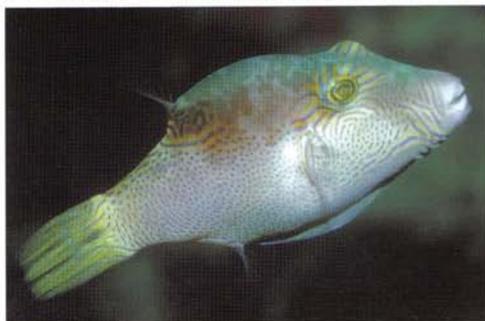
Canthigaster amboinensis

SIZE: to 14 cm (5 1/2 in.)

Puffers - Tetraodontidae

ID: Brown to orange-brown with bluish hue on underside; dark brown to blue spots and bands on head, small blue and blackish spots on body. Solitary. Shallow outer reefs affected by surge to 10 m.

Indo-Pacific: E. Africa to Hawaii, Society Is. in French Polynesia and Galapagos. - S. Japan and Micronesia to S.E. Australia.



LANTERN TOBY

Canthigaster epilampra

SIZE: to 11 cm (4 1/4 in.)

Puffers - Tetraodontidae

ID: Whitish except darkish upper back, blue streaked yellow tail; yellowish around eye with blue radiating lines, blue lines on snout, tiny blue spots on body. Solitary, usually in caves and under ledges. Steep outer reefs slopes in 9-60 m.

East Indo-Pacific: Christmas I. to Micronesia, Hawaii and French Polynesia. - S.W. Japan to Australia and New Caledonia.



LEOPARD TOBY

Canthigaster leoparda

SIZE: to 7 cm (2 3/4 in.)

Puffers - Tetraodontidae

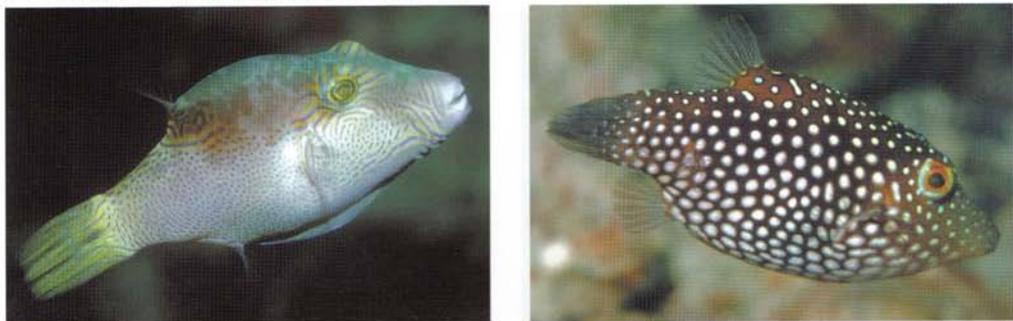
ID: Pale brown; blue lines on snout and nape, blue-ringed brown spot on upper nape, clusters of brown blotches and small blue spots on side. Solitary or in pairs; usually in caves or under ledges. Steep outer reefs in 30-50 m.

East Indo-Asian Pacific: Christmas I. to Molucca Is. in Indonesia, Philippines and Mariana Is. in Micronesia.

Ambon Toby - Juvenile

SIZE: 4-8 cm (1 1/2-3 in.)

ID: Brown; small white spots on cheek and larger white spots on body, white lines radiate from eye and wrap around snout.



HONEYCOMB TOBY

Canthigaster janthinoptera

SIZE: to 9 cm (3 1/2 in.)

Puffers - Tetraodontidae

ID: Brown with dense covering of white spots. Solitary or in pairs; usually close to shelter or in caves and crevices. Lagoon and seaward reefs to 30 m.

Indo-Pacific: Red Sea and E. Africa to Line Is. and Marquesas Is. in French Polynesia. - S. Japan to Australia.



TYLER'S TOBY

Canthigaster tyleri

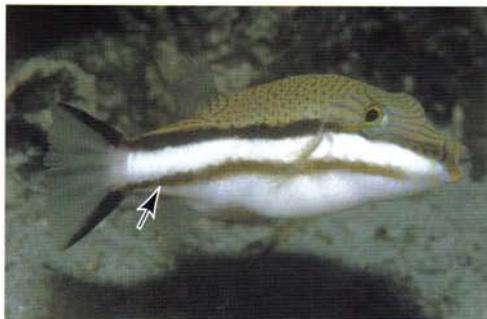
SIZE: to 8 cm (3 in.)

Puffers - Tetraodontidae

ID: Pale brown to orange; blue lines on snout and nape, large brown spots cover body. Solitary; usually in caves or under ledges. Steep outer reef slopes in 8-40 m.

Indo-Asian Pacific: Tanzania, Comores, Mauritius, Christmas I. to Molucca Is. in E. Indonesia.

Odd-Shaped Swimmers



CLOWN TOBY

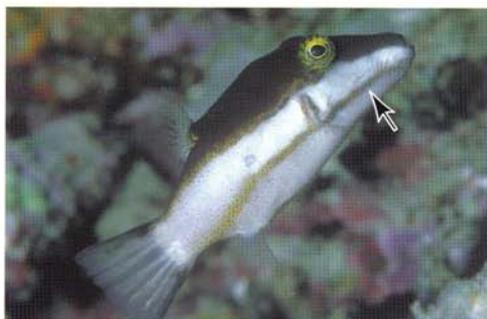
Canthigaster callisterna

SIZE: to 24 cm (9 in.)

Puffers - Tetraodontidae

ID: Brown upper body with bluish stripes and spots separated by black stripe from white lower body; 2nd brown stripe below. Solitary or in pairs. Rocky bottoms of coastal and offshore reefs in 10-40 m.

Southwestern Pacific: New South Wales in S.E. Australia, Lord Howe I., Norfolk I. and N. New Zealand.



BICOLORED TOBY

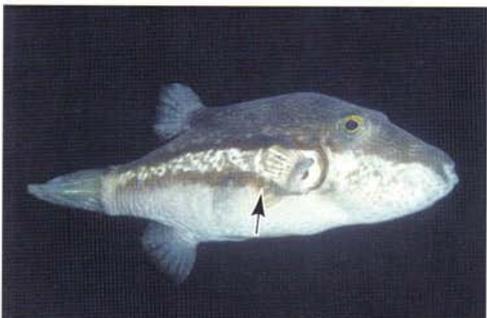
Canthigaster smithae

SIZE: to 13 cm (5 in.)

Puffers - Tetraodontidae

ID: Brown back with white below; brown to yellowish stripe from chin to lower tail base, yellow iris with blue "spokes," dark margins on tail. Solitary. Seaward reefs slopes in 20-40 m.

Indian Ocean: E. Africa and islands of W. Indian Ocean to Andaman Sea and W. Sumatra in Indonesia.



RIVULATED TOBY

Canthigaster rivulata

SIZE: to 18 cm (7 in.)

Puffers - Tetraodontidae

ID: Brown upper body with dark line markings, white lower body with dark stripe from pectoral fin base to tail. Primarily found on rocky reefs to 100 m.

Indo-North Asian Pacific: E. Africa, Seychelles and W. Australia to Taiwan, Korea and Japan, also Hawaii (mainly confined to subtropical locations).



SHY TOBY

Canthigaster ocellincta

SIZE: to 6.5 cm (2 1/2 in.)

Puffers - Tetraodontidae

ID: Brown; 2 dark brown to black saddles extend to belly, black spot on dorsal fin base, bluish line markings on head, dark spots on body. Solitary; in caves and crevices. Steep seaward reef slopes in 20-53 m.

West Pacific: Indonesia to Solomon Is. and Fiji. - Philippines to Great Barrier Reef.



CROWN TOBY

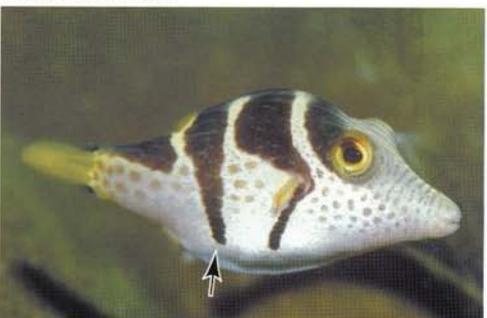
Canthigaster coronata

SIZE: to 13.5 cm (5 1/4 in.)

Puffers - Tetraodontidae

ID: White with dark brown bar between eyes and 3 wedge-shaped, dark brown saddles on back outlined with yellow-orange spots. Similar Blacksaddle Toby [next!], saddles extend onto side. Solitary. Sand and rubble of seaward reefs in 10-80 m.

Indo-West Pacific: Red Sea and E. Africa to Micronesia and Hawaii. - S. Japan to S.E. Australia.



BLACK-SADDLED TOBY

Canthigaster valentini

SIZE: to 9 cm (3 1/2 in.)

Puffers - Tetraodontidae

ID: White with light brown spots and 4 dark brown to blackish saddles, the middle two extend onto lower side. Mimicked by Mimic Filefish. Solitary or form small groups. Lagoon and seaward reefs to 50 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia and Tuamotu Is. in French Polynesia. - S. Japan to S.E. Australia.

Puffers - Porcupinefishes - Molas - Dolphinfishes



SHORTFIN PUFFER

Torquigener brevipinnis

SIZE: to 14 cm (5½ in.)

Puffers - Tetraodontidae

ID: Brown back with numerous whitish spots, white to tan below; four bars below eye extend from mouth to pectoral fin. Form small groups. Shallow rubble, sand, weed and seagrass areas to 100 m.

West Pacific: S. Japan and Indonesia to Great Barrier Reef and New Caledonia.



MILKSPOTTED PUFFER

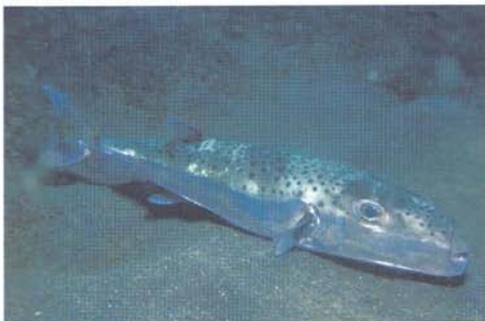
Chelonodon patoca

SIZE: to 33 cm (13 in.)

Puffers - Tetraodontidae

ID: Greenish brown undercolor with large oval white spots, white to pale yellow underside. Solitary. Estuaries and mangrove areas, occasionally around sheltered inshore coral reefs to 15 m.

Indo-Asian Pacific: Arabian Gulf to New Guinea and Australia, north to S.W. Japan.



SILVER PUFFER

Lagocephalus scleratus

SIZE: to 85 cm (2¾ ft.)

Puffers - Tetraodontidae

ID: Elongate bright silver; back with greenish to bluish tinting and dark spots or blotches. Usually form pelagic schools to 100 m; occasionally over shallow sand areas around reefs and may rest on bottom. Can be aggressive and bite divers.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S. Japan to Australia.



SPOTTED BURRFISH

Chilomycterus reticulatus

SIZE: to 55 cm (22 in.)

Porcupinefishes - Diodontidae

ID: Brown to gray with white underside; numerous fixed triangular spines, body and fins covered with black spots, 3 dusky body bars and dusky bar under eye. Solitary. Rocky and coral reefs in 3-25 m.

Circumglobal: Tropical (rare), subtropical and warm temperate seas.



YELLOWSPOTTED BURRFISH

Cyclichthys spilostylus

SIZE: to 34 cm (13¾ in.)

Porcupinefishes - Diodontidae

ID: Brown to gray with white underside; numerous fixed triangular spines with a yellow or dark spot around base, occasionally 3 large dusky blotches on side. Solitary. Coral, sand and rubble and weed bottoms in 3-90 m.

Indo-Pacific: Red Sea and E. Africa to Galapagos. - Japan to Australia.



ORBICULAR BURRFISH

Cyclichthys orbicularis

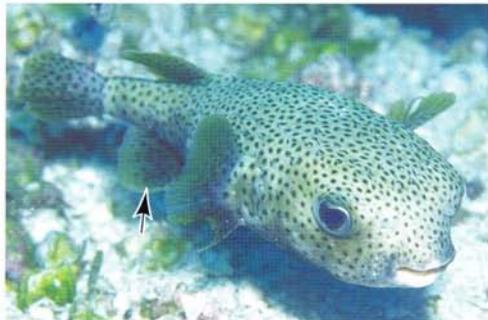
SIZE: to 15 cm (6 in.)

Porcupinefishes - Diodontidae

ID: Whitish undercolor with close-set brown to red-brown spots; numerous fixed spike-like spines; several large darkish gray to red-brown blotches. Solitary. Sand and rubble bottoms in 5-30 m.

Indo-Asian Pacific: Red Sea and E. Africa to Great Barrier Reef, north to Japan.

Odd-Shaped Swimmers



PORCUPINEFISH

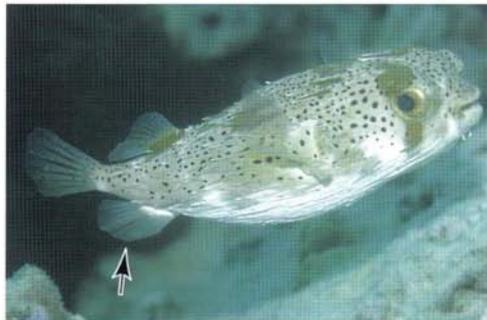
Diodon hystrix

SIZE: to 71 cm (2 1/4 ft.)

Porcupinefishes - Diodontidae

ID: Yellow-brown to brown, olive or gray with white underside; numerous short to medium movable spines; **numerous small black spots on head, body and fins.** Solitary, except when courting. Coral and rocky reefs to 50 m.

Circumglobal: Tropical, subtropical and warm temperate seas.



BALLOONFISH

Diodon holocanthus

SIZE: to 29 cm (12 in.)

Porcupinefishes - Diodontidae

ID: Light gray-brown with white underside; numerous long moveable spines; **covered with small black spots except fins**, brown bar under eye, several brown blotches on back. Solitary. Coral reefs and open sand to 100 m.

Circumglobal: Tropical, subtropical and warm temperate seas.



BLACK-BLOTCHED PORCUPINEFISH

Diodon liturosus

SIZE: to 50 cm (20 in.)

Porcupinefishes - Diodontidae

ID: Brown with numerous short to long movable spines; large dark brown to black blotches with white margins on back and around and below eye. Solitary. Coral reefs to 90 m.

Indo-Pacific: Red Sea and E. Africa to Micronesia, Society Is. in French Polynesia. - S. Japan to S.E. Australia.



BLACKLIP PORCUPINEFISH

Lophodiodon calori

SIZE: to 30 cm (12 in.)

Porcupinefishes - Diodontidae

ID: Brown with white underside; short movable spines on head and belly and fixed spines on back and sides; **black lips**, blackish bar below eye, 2-3 dusky dark patches on lower side. Solitary. Sand and rubble bottoms in 10-50 m.

Indo-Asian Pacific: E. Africa, Arabian Sea and N.W. Australia to Indonesia and S. China Sea.



OCEAN SUNFISH

Mola mola

SIZE: to 308 cm (10 ft.)

Molas - Molidae

ID: Broad oval body with long dorsal and anal fins and no tail; silver to gray to gray-brown gradating to whitish belly. Solitary or in pairs. Generally oceanic, often near surface, occasionally near reefs to be cleaned.

Circumglobal: Tropical and temperate seas.



DOLPHINFISH

Coryphaena hippurus

SIZE: to 162 cm (5 1/4 ft.)

Dolphinfishes - Coryphaenidae

ID: Bluish silver with yellow tinting; long continuous dorsal fin from above eye to tail base, long ventral fins and large forked tail. **Male** - Large blunt head. **Female** - Torpedo-shaped head. Form groups; pelagic, often under sargassum floats.

Circumtropical.

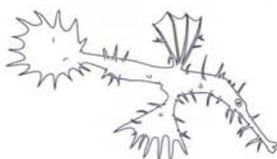
IDENTIFICATION GROUP 18

Pipefishes & Seahorses

This ID Group consists of fishes with long tubular snouts and elongate bodies encased in bony ring-like body segments.

FAMILY: Ghost Pipefishes - Solenostomidae

Single Genus - 6 Species Included



Ornate Ghost Pipefishes

Ghost pipefishes must rank among the most exotic creatures inhabiting the Earth's shallow seas. Unfortunately, both the classification and natural history of these close relatives of pipefishes and seahorses lack adequate investigation. At present, only four forms are considered to be valid species. Adding confusion, each form appears to have several distinct variations. The little presently known about the natural history of the genus is briefly discussed in the Ornate Ghost Pipefish gallery on the facing page.

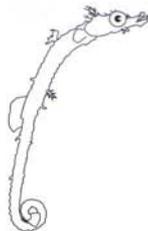
FAMILY: Pipefishes & Seahorses - Syngnathidae

Pipefish Subfamily - Syngnathinae, 13 Genera - 33 Species Included

Seahorse Subfamily - Hippocampinae, Single Genus - 11 Species Included



Pipefishes



Pipehorses



Seahorses

Pipefishes and seahorses have slender bodies fashioned by encircling bony segments, elongate snouts, and a single spineless dorsal fin. The heads of seahorses angle down from the body's main axis, and their bodies end with curved prehensile tails. Pipefishes have basically straight bodies generally culminating with small, rounded, flat tails. Both groups are carnivorous feeding on tiny crustaceans, which are sucked whole into their mouths. Seahorses generally attach to a holdfast near the bottom where they blend expertly with their surroundings. Pipefishes characteristically slip over the bottom searching for prey; however, species in genus *Doryrhamphius*, commonly known as flagtail pipefishes, hover in pairs or small groups inside crevices or under overhangs where they act as cleaners, removing small parasites from client fishes.

The family's reproductive behavior equals the members' peculiar appearance. An extended, harmonized courtship dance culminates with intertwined bodies. Female seahorses deposit from 50 to 500 eggs into an enclosed abdominal pouch of males where fertilization occurs. The eggs of pipefishes are attached to an external abdominal patch on males where the mass is easily observed. Highly developed offspring hatch after an extended incubation period.

Pipefishes & Seahorses



ORNATE GHOST PIPEFISH *Solenostomus paradoxus*

SIZE: to 11 cm (4 1/4 in.) Ghost Pipefishes - Solenostomidae

ID: Male - Short skin filaments on snout and body and fins with jagged edges giving "spiky appearance." Solitary, small groups or more commonly in male/female pairs; usually remain in restricted home range. Coastal, lagoon and outer reefs in 4-35 m.

Indo-West Pacific: E. Africa to Indonesia, Philippines, Marshall Is. in Micronesia, Solomon Is., E. Australia and Fiji.



Ornate Ghost Pipefish

ID: Female Variation - It is believed that Ghost Pipefishes have an annual life cycle, with the majority of their life spent in the pelagic as larvae before settling to the bottom and becoming sexually mature.



Ornate Ghost Pipefish

ID: Male Variation - Highly variable colors usually dependent on habitat. The most common color pattern is displayed by the first individual pictured in this series.



Ornate Ghost Pipefish

ID: Female Variation - Anecdotal evidence suggest that all ghost pipefishes settle as males and later, with proper environmental or social cues some change into females. The sexual change signals a growth spurt and the development of a large brooding pouch formed by the ventral fins attached to the abdomen wall, which many hold up to 300 fertilized eggs and larvae in varying developmental stages.



Ornate Ghost Pipefish

ID: Female Variation - Frequently hover head down among arms of crinoids, black corals, gorgonians and soft corals. Feed primarily on tiny crustaceans which are snapped from open water or off the bottom.



Ornate Ghost Pipefish

ID: Juvenile - The species is almost fully grown when they settle to the sea floor after a lengthy pelagic larval stage. Recently settled individuals have large wispy transparent tails with silver to white tips on the tail and dorsal fin spines. As they mature, in days or weeks after settling, the large rounded tails gradually become smaller and acquire pigmentation.

Ghost Pipefishes - Pipefishes



HALIMEDA GHOST PIPEFISH

Solenostomus halimeda

SIZE: to 7 cm (2 1/2 in.) Ghost Pipefishes - Solenostomidae

ID: **Female** - Green to whitish gray; fin lobes rounded resembling the leaf-like segments of *Halimeda* algae where they shelter. Solitary or in pairs. Sheltered coastal and lagoon reefs in 3-23 m.

Indo-West Pacific: Maldives, Rowley Shoals off N.W. Australia, Indonesia, Papua New Guinea, Marshall Is. in Micronesia and Fiji.



Halimeda Ghost Pipefish - Male Variation

ID: In areas with stands of dead algal patches, change color to camouflage with surroundings.



ROBUST GHOST PIPEFISH

Solenostomus cyanopterus

SIZE: to 16 cm (6 1/4 in.) Ghost Pipefishes - Solenostomidae

ID: **Female/Male Pair** - Red, green, purplish, yellow or brown, often with darker mottling; long narrow dorsal fin, fan-like ventral and tail fins, **short tail base**. Solitary or in pairs. Coastal and lagoon reefs in 4-20 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S. Japan to Australia.



Robust Ghost Pipefish - Young Female Variation

SIZE: to 16 cm (6 1/4 in.) Ghost Pipefishes - Solenostomidae

ID: Red, a relatively rare variation.



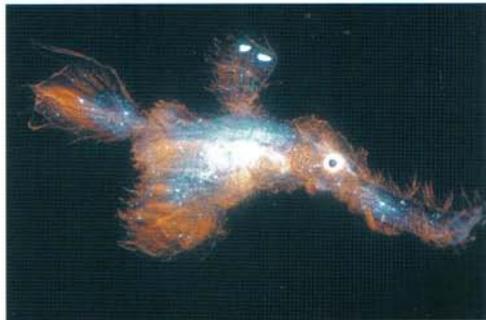
ROUGHSNOUT GHOST PIPEFISH

Solenostomus paegnius

SIZE: to 12 cm (5 in.) Ghost Pipefishes - Solenostomidae

ID: Shades of brown, light tan and green with skin filaments on snout and body (often long and hair-like); long thin tail base. Solitary or in pairs. Sand and rubble areas often with filamentous algae in 8-20 m.

Indo-West Pacific: E. Africa to Solomon Is. and Fiji. - S. Japan to E. Australia.



Roughsnout Ghost Pipefish - Variation

ID: Extent of "hairy" growth variable, occasionally individuals have their outline entirely obscured. Hairy variety more common on and around objects covered with filamentous algae, usually in sand or rubble areas. Possibly a separate species. This variations is also commonly known as the Irish Setter Ghost Pipefish or Rufus Ghost Pipefish.

Pipefishes & Seahorses



VELVET GHOST PIPEFISH

Solenostomus sp.

SIZE: to 5 cm (2 in.)
Ghost Pipefishes - Solenostomidae

ID: Classification uncertain; possibly a variation of the Robust Ghost Pipefish.

Asian Pacific: Indonesia.



THIN GHOST PIPEFISH

Solenostomus sp.

SIZE: to 5 cm (2 in.)
Ghost Pipefishes - Solenostomidae

ID: Classification uncertain; possibly a variation of the Robust Ghost Pipefish, but with long tail base.

West Pacific: Indonesia to Fiji.



SHORTPOUCH PYGMY PIPEHORSE

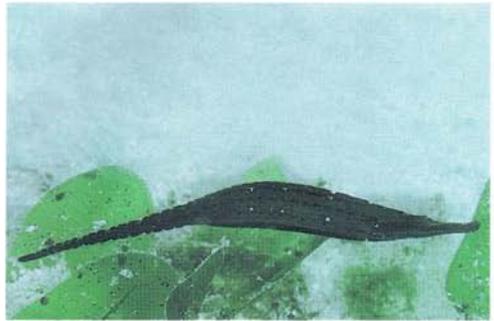
Acentronura breviperula

SIZE: to 5 cm (2 in.)

Pipefishes - Syngnathidae

ID: Brown to nearly black with white speckling; slightly expanded seahorse-like "chest," pale snout, skin flaps of various sizes and shapes on head and body. Solitary or in pairs. Sparse seagrass near sheltered reefs to 20 m.

Asian Pacific: Indonesia, Philippines and Papua New Guinea, but possibly more widespread.



SHORT-BODIED PIPEFISH

Choerichthys brachysoma

SIZE: to 6.5 cm (2 1/2 in.)

Pipefishes - Syngnathidae

ID: Male - Brown with scattered small white spots; short with wide body, tail base about equal in length to body. **Female** - Slender body with 2 rows of black spots on side. Solitary. Lagoon, seaward reefs and seagrass areas to 20 m.

Indo-Pacific: Red Sea and E. Africa to Indonesia, Philippines, Marshall Is. in Micronesia, Australia and French Polynesia.



BARRED PIPEFISH

Choerichthys cinctus

SIZE: to 8 cm (3 in.)

Pipefishes - Syngnathidae

ID: White to yellow with dark body bars, bars on tail formed by spots; short with body and tail base about equal in length. Solitary. Reef crevices with sponges in lagoon and seaward reefs in 10-40 m.

West Pacific: Indonesia, Papua New Guinea and Australia to Samoa.



BROWN-BANDED PIPEFISH

Corythoichthys amplexus

SIZE: to 9.5 cm (3 3/4 in.)

Pipefishes - Syngnathidae

ID: Whitish to pale gray; broad reddish brown bars with tiny white spots encircle body. Solitary or form loose groups. Lagoon and seaward reefs in 3-20 m.

Indo-West Pacific: Seychelles to Samoa. - Philippines to N. Australia.

Pipefishes



BROKEN-BANDS PIPEFISH

Corythoichthys sp.

SIZE: to 8.5 cm (3 3/4 in.)

Pipefishes - Syngnathidae

ID: White with darkish tiny pale spots encircling body bars that are often incomplete, head and snout spotted. In pairs. Shallow reef crests in 5-20 m.

Localized: Great Barrier Reef.



MESSMATE PIPEFISH

Corythoichthys intestinalis

SIZE: to 18 cm (7 in.)

Pipefishes - Syngnathidae

ID: Whitish to pale yellowish with dark wavy or reticulated line stripes (absent on back); diffuse dark body bars. Usually in pairs, but occasionally form small aggregations. Coastal and lagoon reefs with corals and sponges in 3-12 m.

Indo-West Pacific: Indonesia, Philippines to Samoa. - Marshall and Mariana Is. in Micronesia to Australia.



BANDED MESSMATE PIPEFISH

Corythoichthys sp.

SIZE: to 17 cm (6 3/4 in.)

Pipefishes - Syngnathidae

ID: White with yellowish tint; short horizontal lines align to form encircling dark body bars, line marking on head. Solitary or form small aggregations. Sand and rubble and protected coral reefs to 15 m.

Localized: Flores and Moluccas in Indonesia to Palau.



YELLOWSPOTTED PIPEFISH

Corythoichthys polynotatus

SIZE: to 16 cm (6 1/4 in.)

Pipefishes - Syngnathidae

ID: Pale gray with red tail; yellow-spot pattern on back, diffuse body bars, dark wavy lines or joined network of lines and spots on side. Solitary or in pairs. Rubble, weed and seagrass bottoms around sheltered reefs to 5 m.

Asian Pacific: Indonesia, Philippines and Palau in Micronesia.



NETWORK PIPEFISH

Corythoichthys flavofasciatus

SIZE: to 18 cm (7 in.)

Pipefishes - Syngnathidae

ID: Pale yellowish undercolor with line stripes; black stripes on head and about 20 dusky bands encircle body. Pacific and Indian Ocean variations may prove to be separate species. Solitary, in pairs or groups. Sheltered reefs in 2-25 m.

Indo-Pacific: Madagascar, Seychelles and Red Sea to Society Is. in French Polynesia. - S. Japan to Australia.



Network Pipefish - Variation

ID: Pale yellowish tan undercolor with about 20 reticulated encircling bands.

Pipefishes & Seahorses



BLACK-BREASTED PIPEFISH *Corythoichthys nigrippectus*
 SIZE: to 11 cm (4 1/4 in.) Pipefishes - Syngnathidae

ID: Pale gray undercolor; 4-5 wide lavender to orange body bars before dorsal fin, **orange gill cover**, black mark on breast. Solitary or in pair. Among coral and algal patches primarily in clear water outer reefs in 5-30 m.

Pacific: Caroline, Marshall and Mariana Is. in Micronesia to Fiji and Society Is. in French Polynesia.



ORANGE-SPOTTED PIPEFISH *Corythoichthys ocellatus*
 SIZE: to 11 cm (4 1/4 in.) Pipefishes - Syngnathidae

ID: Tan with numerous dark-edged orange rectangular spots, white speckles; widely spaced narrow whitish bars encircle body; long snout. Solitary or in pairs. Sand, rubble and weed bottoms around reefs to 12 m.

West Pacific: Indonesia, Philippines, Palau, Papua New Guinea, Solomon Is., N. Australia and Fiji.



SCHULTZ'S PIPEFISH *Corythoichthys schultzi*
 SIZE: to 16 cm (6 1/4 in.) Pipefishes - Syngnathidae

ID: Pale tan with numerous dark-edged orange to brown rectangular spots (**lack white speckles**), widely spaced narrow whitish bars encircle body; long snout. Solitary or in pairs. Sand and rubble around reefs in 2-15 m.

Indo-West Pacific: Red Sea and E. Africa to Tonga. - S. Japan to Australia.



Schultz's Pipefish - Variation

ID: Brown horizontally elongate dark-edged markings. **Note the long snout, which distinguishes this species from other members of the genus.**



REEFTOP PIPEFISH *Corythoichthys haematopterus*
 SIZE: to 18 cm (7 in.) Pipefishes - Syngnathidae

ID: Whitish with dark wavy line stripes forming netted pattern, **white-edged reddish tail**; about 15 wide dark bars often with pale centers. Solitary, in pairs or small groups. Sand, rubble and weeds in 2-15 m.

Indo-West Pacific: E. Africa to Vanuatu and Fiji. - S. Japan to N. Australia.



BLUESTRIPE PIPEFISH *Doryrhamphus excisus*
 SIZE: to 7 cm (2 1/2 in.) Pipefishes - Syngnathidae

ID: Orange-brown; wide blue stripe from snout to tail base, **circular tail with orange fan marking on base with single spot** behind. Solitary or in pairs; a cleaner. Ceiling of caves or under ledges in coastal, lagoon and outer reefs to 45 m.

Indo Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia

Pipefishes



HONSHU PIPEFISH

Dorythampus japonicus

SIZE: to 7 cm (2 1/8 in.)

Pipefishes - Syngnathidae

ID: Orange-brown; black margined narrow blue strip from snout to tail base, **circular tail with 3 orange spots**. Solitary or in pairs; a cleaner. Often near sponges and *Diadema* urchins in coastal, lagoon and outer reefs to 30 m.

Asian Pacific: Indonesia to Papua New Guinea, north to S. Japan.



CLEANER PIPEFISH

Dorythampus janssi

SIZE: to 13 cm (5 in.)

Pipefishes - Syngnathidae

ID: Orange mid-body with blue head and rear body; **black tail with white margin and center spot**. Solitary or in pairs; an active cleaner. Reef crevices of primarily seaward reef slopes in 5-35 m.

Asian Pacific: Gulf of Thailand to Solomon Is. - Philippines to Australia.



FLAGTAIL PIPEFISH

Dorythampus negrosensis

SIZE: to 5.5 cm (2 1/4 in.)

Pipefishes - Syngnathidae

ID: Blue to blue-gray; pale stripe on top of snout and head, blackish tail with orange base and white margin. Solitary, in pairs or small groups. Inside reef crevices or shelter among sea urchin spines of protected reefs to 20 m.

Asian Pacific: N. Borneo, Philippines, Palau, N. Papua New Guinea and Micronesia.



RINGED PIPEFISH

Dorythampus dactyliophorus

SIZE: to 18 cm (7 in.)

Pipefishes - Syngnathidae

ID: Red to maroon and white alternating bars encircle body, **red tail with white margin and central white spot**. Solitary, in pairs or small aggregations. Caves or ledges of coastal, lagoon and outer reefs to 55 m.

Indo-Pacific: Red Sea and E. Africa ad to Austral Is. in French Polynesia. - S. Japan to Australia.



ORANGE-BANDED PIPEFISH

Dorythampus pessuliferus

SIZE: to 16 cm (6 1/4 in.)

Pipefishes - Syngnathidae

ID: Numerous alternating narrow red to black and yellow-orange bars encircle body, **red tail with yellow central spot and white upper margin**. Solitary or in pairs. Isolated coral patches on sand and mud slopes of coastal reefs in 15-35 m.

Asian Pacific: N.W. Australia, Sulawesi and Bali in Indonesia and Sulu Archipelago in Philippines.



MANY-BANDED PIPEFISH

Dorythampus multiannulatus

SIZE: to 18 cm (7 in.)

Pipefishes - Syngnathidae

ID: Numerous alternating narrow red to blackish and white to pinkish bars encircle body, **white-edged red tail**. Solitary, in pairs or small aggregations. Crevices of lagoon and seaward slopes to 45 m.

Indian Ocean: Red Sea and E. Africa to Andaman Sea and Sumatra in Indonesia.

Pipefishes & Seahorses



BROAD-BANDED PIPEFISH

Dunckerocampus boylei

SIZE: to 16 cm (6 1/4 in.)

Pipefishes - Syngnathidae

ID: Red to maroon and white alternating bars with thin black margins encircle body, white margined red tail. **Lack central white spot on tail like Ringed Pipefish [previous page].** Solitary or pairs. Caves and crevices of seaward reefs in 20-40 m.

Indian Ocean: Red Sea and Mauritius to Bali in Indonesia.



BROCK'S PIPEFISH

Halicampus brocki

SIZE: to 11.5 cm (4 1/2 in.)

Pipefishes - Syngnathidae

ID: Whitish unmarked body, occasionally brown; branched filaments on head and skin flaps on body; brown variation has about 15 white saddles on back. Solitary and cryptic. Coral and algae patches of coastal reefs in 3-45 m.

Asian Pacific: S.W. Japan, Marshall and Mariana Is. in Micronesia to N. Australia.



WINGED PIPEFISH

Halicampus macrohynchus

SIZE: to 16 cm (6 1/4 in.)

Pipefishes - Syngnathidae

ID: Variably colored, but commonly shades of red, yellow, green or brown; **8-10 pairs of skin flaps on back** may resemble small "wings;" long snout. Solitary or in pairs. sand and weed bottoms of coastal and lagoon reefs in 4-25 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Panama.



Winged Pipefish - Variation

ID: Red variation, wings become smaller with age and size.



Winged Pipefish - Juvenile

ID: The wing-like skin flaps on back are particularly exaggerated in juveniles.



SAMOAN PIPEFISH

Halicampus mataafa

SIZE: to 15 cm (6 in.)

Pipefishes - Syngnathidae

ID: Very short snout, skin flap appendages (most noticeable on head), tiny tail; brown to nearly black with narrow whitish saddles along back. Solitary. Inside crevices and under rocks and debris of coastal, lagoon and outer reefs to 15 m.

Indo-West Pacific: Red Sea and E. Africa to Marshall Is. in Micronesia and Samoa. - Taiwan to Australia.

Pipefishes - Seahorses



GLITTERING PIPEFISH

Halicampus nitidus

SIZE: to 7.5 cm (3 in.)

Pipefishes - Syngnathidae

ID: Very short snout; silvery white; dark brown alternating bars encircle head and body. Solitary and cryptic. Inside crevices and under rocks of coastal, lagoon and outer reefs to 20 m.

West Pacific: Vietnam, S.W. Japan and Indonesia to Australia and Fiji.



ESTUARY PIPEFISH

Hippichthys cyanospilus

SIZE: to 16 cm (6 1/4 in.)

Pipefishes - Syngnathidae

ID: Yellow to greenish or nearly black; white and dark bars on lower half of snout; 12-15 whitish saddles or spots on back and mid-side. Solitary. Tidal estuaries, mangroves and brackish creeks to 4 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - S.W. Japan to N. Australia.



SHORTNOSE PIPEFISH

Micrognathus andersonii

SIZE: to 6 cm (2 1/4 in.)

Pipefishes - Syngnathidae

ID: Snout short, small thin skin flaps primarily on head; brown with several black-edged pale bars across back and on upper side; tiny tail. Solitary and cryptic. Inside crevices and among rubble of coastal reefs to 10 m.

Indo-West Pacific: Red Sea and E. Africa to Tonga. - S. Japan to N.E. Australia.



PYGMY PIPEFISH

Micrognathus pygmaeus

SIZE: to 6 cm (2 1/4 in.)

Pipefishes - Syngnathidae

ID: Snout short, skin flaps absent except for tiny flaps on head, tiny tail; brown with about 10 narrow whitish saddles on back and upper side. Solitary and cryptic. Inside caves and crevices of coastal, lagoon and outer reefs to 10 m.

East Indo-Pacific: Cocos-Keeling Is. to Society Is. in French Polynesia. - Palau and Marshall Is. to N.E. Australia.



FOXY PIPEFISH

Phoxocampus tetraphthalmus

SIZE: to 8 cm (3 in.)

Pipefishes - Syngnathidae

ID: Short snout, skin flaps absent, saw-like edges on rear body rings; tiny tail; dark brown with 8-10 faint whitish saddles on upper side. Solitary and cryptic. Inside reef crevices of sheltered coastal reefs to 10 m.

East Indo-Pacific: Cocos-Keeling Is. to French Polynesia. - Palau and Marshall Is. in Micronesia to N.E. Australia.



DOUBLE-ENDED PIPEFISH

Syngnathoides biaculeatus

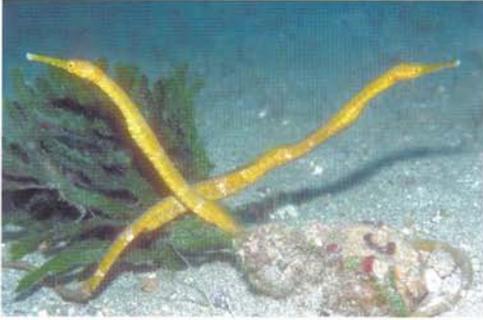
SIZE: to 28 cm (11 in.)

Pipefishes - Syngnathidae

ID: Mottled green; rear body tapers to a tailless point. Solitary, in pairs or groups. Within seagrasses and floating or attached *Sargassum* algae of sheltered coastal reefs and lagoons to 10 m.

Indo-West Pacific: Red Sea and E. Africa to Samoa and Tonga. - S. Japan to Australia.

Pipefishes & Seahorses



SHORT-TAILED PIPEFISH *Trachyrhamphus bicoarctatus*

SIZE: to 40 cm (16 in.) Pipefishes - Syngnathidae

ID: Slender with tiny tail, head often raised with a bent neck posture; shades of green, brown, white and yellow with fine speckling and usually pale saddles. Solitary. Sand, rubble, and weeds of sheltered coastal reefs and lagoons to 25 m.

Indo-Asian Pacific: Red Sea and E. Africa to Australia and New Caledonia, north to S. Japan.

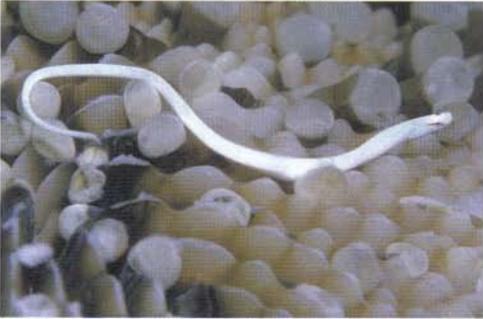


SLENDER PIPEFISH *Trachyrhamphus longirostris*

SIZE: to 40 cm (16 in.) Pipefishes - Syngnathidae

ID: Gray to brown; whitish scribble marking on head, white specks on body, thin whitish diamond-shaped marking on side. Solitary. Mud or sand bottoms of estuaries and other sheltered areas, also trawling grounds to 90 m.

Indo-Asian Pacific: Red Sea and E. Africa to Australia, north to S. Japan.



MUSHROOM CORAL PIPEFISH *Siokunichthys nigrolineatus*

SIZE: to 8 cm (3 in.) Pipefishes - Syngnathidae

ID: White and unmarked except for thin dark band through eye; worm-like body. Solitary or small groups. Among tentacles of mushroom corals (primarily *Heliofungia actiniformes*) of coastal reefs and lagoons in 8-20 m.

Asian Pacific: E. Indonesia, Philippines and Papua New Guinea.



THORNY SEAHORSE *Hippocampus hystrix*

SIZE: to 15 cm (6 in.) Seahorses - Syngnathidae

ID: Spines protrude from head and body ridges, elongate snout usually with a few white bars; variable shades of red, brown, yellow or green, often with gold speckling. Solitary. Sponges, gorgonians, soft corals and weeds of coastal reefs in 10-25 m.

Asian Pacific: S. Japan and Indonesia to Coral Sea.



Thorny Seahorse - Variation

ID: Whitish with tints of pink and brown. Lack the gold speckling that is common on many individuals [see previous].



Thorny Seahorse - Variation

ID: Bright yellow; another common color variation.

Seahorses



PYGMY SEAHORSE

Hippocampus bargibanti

SIZE: to 2 cm ($\frac{3}{16}$ in.)

Seahorses - Syngnathidae

ID: Tiny; pinkish with large orange to red warts and spots, encircling bands on tail. Solitary or form small groups. Sea fans of similar color especially *Muricella* spp. of reefs and slopes in 10-40 m.

Asian Pacific: S. Japan and Indonesia to N. Australia and New Caledonia.



Pygmy Seahorse - Variation

ID: Orangish yellow without markings and poorly developed warts. First thought to represent a separate species, but intermediate specimens confirm it to be *Hippocampus bargibanti*.



GORGONIAN PYGMY SEAHORSE

Hippocampus sp.

SIZE: to 5 mm ($\frac{1}{8}$ in.)

Seahorses - Syngnathidae

ID: Exceedingly tiny with excellent camouflage coloration, knobs and raised ridges on body. Solitary or small groups. Organ pipe coral, antipatharians (black corals), and gorgonian sea fans. Coral reefs in 10-50 m.

Localized: Milne Bay Province in Papua New Guinea.



COLMAN'S PYGMY SEAHORSE

Hippocampus sp.

SIZE: 1 cm ($\frac{3}{16}$ in.)

Seahorses - Syngnathidae

ID: Tiny size, smooth skin texture, protruding belly, and whitish color with widely scattered, faint reddish spots. Solitary or small groups. Among algae near coral or rocky reefs in 8-15 m.

Localized: Lord Howe I. and Milne Bay Province in Papua New Guinea.



ZEBRA-SNOUT SEAHORSE

Hippocampus barbouri

SIZE: to 15 cm (6 in.)

Seahorses - Syngnathidae

ID: Tan to pale yellow with black speckles, **profuse line markings on snout**; spiny crown on top of head, pair of spines above eyes and thick spine in front of eyes. Solitary; cling to living corals. Shallow coastal reefs in 5-12 m.

Asian Pacific: Philippines and N. Indonesia.



COMMON SEAHORSE

Hippocampus taeniopterus

SIZE: to 22 cm (8 $\frac{3}{16}$ in.)

Seahorses - Syngnathidae

ID: Dusky brown to blackish; covered with tiny black and white spots, females sometimes yellowish with several dark spots; **back-swept relatively smooth crown**. Solitary. Seagrass beds and mangroves to 15 m.

Asian Pacific: E. Indonesia, Papua New Guinea and N. Australia.

Pipefishes & Seahorses



ESTUARY SEAHORSE

Hippocampus kuda

Seahorses - Syngnathidae

SIZE: to 15 cm (6 in.)

ID: Drab brown to black with sprinkling of small dark spots; **blunt crown**, often long filaments on crown and snout, smooth knobs on body ridges, black sub-marginal band on dorsal fin. Solitary. Estuaries, mangroves and bays to 10 m.
Indo-Asian Pacific: Maldives to S.W. Japan and N. Australia.



Estuary Seahorse - Female Variation

ID: Usually black, occasionally yellow with sprinkling of small dark spots.



MOLUCCAN SEAHORSE

Hippocampus moluccensis

Seahorses - Syngnathidae

SIZE: to 16 cm (6 1/4 in.)

ID: Variable from brown, purplish, reddish, orangish or yellow; frequently white saddles on neck and back, white striations around eye; **knobby crown often with filaments**. Solitary. Open sand and mud bottoms of coastal areas to 20 m.

Localized: Sulawesi and Moluccas in E. Indonesia.



SMOOTH SEAHORSE

Hippocampus kampylotrachelos

Seahorses - Syngnathidae

SIZE: to 22 cm (8 3/4 in.)

ID: Dusky brown with white speckles, lines radiate from pupil; **poorly developed crown**, slender body without thorny projections. Solitary. Estuaries and offshore sand and mud bottoms in 3-30 m.

Localized: Sumatra and Bali in Indonesia, possibly Sulawesi.



TIGERTAIL SEAHORSE

Hippocampus comes

SIZE: 16 cm (5 1/4 in)

Seahorses - Syngnathidae

ID: **Large Adults** - Frequently bright yellow occasionally with darker blotches. **Males** - Often black with yellow blotches; darkish bars often encircle rear body. In pairs; cling to soft corals, in open at night. Reefs rich with soft corals to 20 m.

East Indo-North Asian Pacific: Andaman Sea to South China Sea and Philippines.



FLORES SEAHORSE

Hippocampus polytaenia

SIZE: to 9 cm (3 1/2 in)

Seahorses - Syngnathidae

ID: Small and slender; shades of yellow with indistinct pinkish spots and bands with small whitish spots. Solitary. *Sargassum* algae and silty habitats of Coastal areas, occasionally on reef flats to 5 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Panama. - S. Japan to Australia.

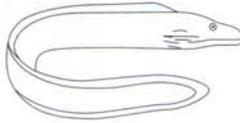
IDENTIFICATION GROUP 19

Eels

This ID Group consists of fishes with long snake-like bodies.

FAMILY: Morays - Muraenidae

12 Genera – 43 Species Included



Typical Shape

Morays have no pectoral or ventral fins; their dorsal, tail and anal fins form a single, long continuous fin that begins behind the head, encircles the tail and extends midway down the belly. Their elongate, scaleless bodies are coated with a clear, protective mucous layer.

Morays constantly open and close their mouths, a behavior often perceived as a threat, but in reality the action simply moves water through their gills for respiration. By nature morays are not aggressive, although they can inflict a nasty bite if molested, and will swim off the bottom to greet approaching divers in areas where fish feeding occurs. During the day, most species are reclusive and tend to hide in dark recesses. Normally they are sighted with only their heads extending from holes.

Species in genera *Gymnothorax* and *Enchelycore* have long pointed teeth for feeding on fishes and octopuses. In most cases octopuses with less than the prescribed eight legs have been victims of moray encounters. Those species with blunt crushing teeth, such as members of genus *Echidna*, prey on crustaceans, primarily crabs. Translucent, ribbon-like larval eels, known as leptocephali, have a lengthy pelagic stage. Once settled to the sea floor younger morays tend to be more slender than older adults.

FAMILY: Snake Eels - Ophichthidae

8 Genera – 15 Species Included

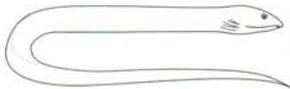


Typical Shape

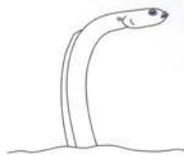
Most species of snake eels are virtually without fins and strongly resemble snakes. Their pointed snouts and sharp bony tails allow them to burrow forward or backward beneath the sediment where they spend most of their lives. During the day they are often seen with only their heads extending from the bottom. A few species prowl in the open at night.

FAMILY: Conger Eels & Conger Eels/Garden Eels - Congridae

5 Genera – 11 Species Included



Conger Eels - Typical Shape



Garden Eels - Typical Shape

Like morays, the dorsal, anal and tail fins of conger eels join to form a single continuous fin that encircles most of their bodies; but, unlike morays, most conger eels have pectoral fins. The nocturnal predators primarily feed on crustaceans and fishes.

Those species in subfamily Heterocongrinae, commonly known as garden eels, are typically pencil thin with reduced or absent pectoral fins and small upturned mouths. They form small to large colonies on sand plains and slopes where they extend their front bodies from burrows to pick plankton from the currents.



DRAGON MORAY

Enchelycore pardalis

SIZE: to 80 cm (2 1/4 ft.)

Morays - Muraenidae

ID: Pale brownish yellow to orange with numerous dark-ringed white spots; curved jaws with many dagger-like teeth, pair of long tubular nostrils above eyes. Solitary. Inhabit reef crevices of outer reefs in 15-50 m.

Indo-Pacific: Reunion to Hawaii, Line Is. and Society Is. in French Polynesia. - S. Korea to New Caledonia.



HOOKEJAW MORAY

Enchelycore bayeri

SIZE: to 60 cm (2 ft.)

Morays - Muraenidae

ID: Uniform brown; curved or "hooked" jaws with many dagger-like teeth. Solitary. Inhabit reef crevices of exposed reef flats and outer reef slopes in 1-64 m.

Indo-Pacific: Red Sea to Marquesas Is. in French Polynesia. - S.W. Japan to Australia and New Caledonia.



BENTJAW MORAY

Enchelycore schismatorhynchus

SIZE: to 120 cm (4 ft.)

Morays - Muraenidae

ID: Light tan to gray with white margin on fins; curved or "hooked" jaws with many dagger-like teeth. Solitary, usually in open only at night. Inhabit crevices of lagoon and outer reefs in 5-35 m.

Indo-Pacific: Chagos Is. to Marquesas and Society Is. in French Polynesia, north to S.W. Japan.



MOSAIC MORAY

Enchelycore lichenosa

SIZE: to 92.5 cm (3 ft.)

Morays - Muraenidae

ID: Dark brown to black undercolor with mosaic pattern of brownish gold patches composed of small spots and flecks; curved jaws with many dagger-like teeth. Solitary, lurk in dark recesses. Reef and rocky boulder strewn areas to 80 ft.

Localized: Taiwan to Japan, and a second limited range in Galapagos.

Morays



VIPER MORAY

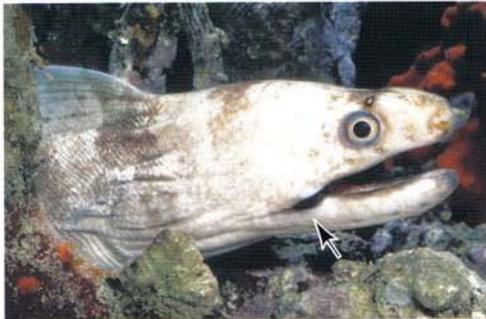
Enchelynassa canina

SIZE: to 154 cm (5 ft.)

Morays - Muraenidae

ID: Reddish brown to gray; "wrinkled skin" with darkish lines in grooves; curved jaws with many dagger-like teeth. Solitary and nocturnal. During day inhabit deep reef recesses of reefs and reef flats in areas of surge to 15 m.

Indo-Pacific: Chagos Is. to Tonga, Hawaii, Pitcairn Is. and Panama.



BARRED MORAY

Echidna polyzona

SIZE: to 60 cm (2 ft.)

Morays - Muraenidae

ID: Lightly mottled shades of brown with 25-30 indistinct often encircling bars; dark patch on corner of jaw. Solitary. Inhabit crevices of reef flats and lagoons in 1-15 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



Barred Moray - Small Adult

ID: With age bars become progressively obscure and white undercolor becomes lightly mottled shades of brown



Barred Moray - Juvenile

ID: White with 25-30 dark brown bars most encircling body and fins, dark patch extends from dark bar over corner of mouth.



SNOWFLAKE MORAY

Echidna nebulosa

SIZE: 75 cm (2 1/2 ft.)

Morays
- Muraenidae

ID: Whitish with pattern of large black blotches containing yellow spots and numerous small blackish spots and scribble markings between. Solitary, often in open. Reef flats and rocky shorelines in 1-18 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Panama. -S.W. Japan to Australia.



FINESPECKLED MORAY

Echidna delicatula

SIZE: to 65 cm (2 1/4 ft.)

Morays - Muraenidae

ID: Tan to dark brown with fine yellowish speckles; speckles of young [pictured] join to form reticulations. Solitary and cryptic. Inhabit cracks, crevices and deep recesses of inshore reefs and reef flats to 15 m.

Indo-West Pacific: Sri Lanka to Samoa, north to S. Japan.

**MASKED MORAY***Gymnothorax breedeni***SIZE:** to 75 cm (2½ ft.)

Morays - Muraenidae

ID: Brown with tan flecks; black blotchy band from eye to behind mouth and black blotch over gill opening. Solitary, can be aggressive toward divers. Inhabit reef crevices of outer reef slopes in 4 - 25 m.

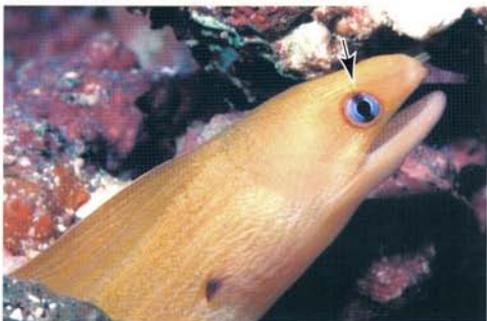
Indo-Pacific: E. Africa and Seychelles to Line Is. and French Polynesia, mainly around oceanic islands.

**CHLAMYDATUS MORAY***Gymnothorax chlamydatus***SIZE:** to 80 cm (2½ ft.)

Morays - Muraenidae

ID: White with 13 black encircling bars; small black spots and blotches on head and in white spaces between bars. Solitary, enter sand burrows tail first, head often exposed. Inhabit sand areas in 12-30 m.

Asian Pacific: Indonesia to Philippines and S.W. Japan.

**DWARF MORAY***Gymnothorax melatremus***SIZE:** to 20 cm (8 in.)

Morays - Muraenidae

ID: Variable from brown to yellow sometimes with dark brown markings; **bluish iris with bar and dark ring around eye.** Solitary and secretive, rarely in open. Inhabit reef crevices, primarily outer reef slopes in 9-56 m.

Indo-Pacific: E. Africa to Hawaii and Pitcairn Is. in southeast Pacific. - S.W. Japan to Australia.

**PALECHIN MORAY***Gymnothorax herrei***SIZE:** to 30 cm (12 in.)

Morays - Muraenidae

ID: Brown with **whitish lower head** and pale tail tip. Solitary or form groups in reef crevices; engage in mass spawning with multiple males entwined around a single female. Coastal reefs and tide pools in 1-10 m, often in turbid water.

Indo-Asian Pacific: Red Sea and Maldives to Australia and Papua New Guinea, north to Philippines.

**LATTICETAIL MORAY***Gymnothorax buroensis***SIZE:** to 33 cm (13 in.)

Morays - Muraenidae

ID: Small; light brown head and front body becoming dark brown over rear with small black spots and white flecks, yellow fin margins. Solitary. Inhabit coral branches, crevices and algal beds of lagoon and seaward reef slopes in 2-24 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii, Tuamotu Is. in French Polynesia and Panama, north to S.W. Japan.

**WHITE-MARGINED MORAY***Gymnothorax albimarginatus***SIZE:** to 100 cm (3½ ft.)

Morays - Muraenidae

ID: Brown with distinctive **white margin on fins**; white spot surrounding each sensory pore of jaws, pale iris. Solitary, possibly has venomous bite. Inhabit reef crevices of lagoons and outer reefs in 5-25 m.

North Pacific: Indonesia to Hawaii, north to S. Japan.

Morays



FIMBRIATED MORAY

Gymnothorax fimbriatus

SIZE: to 80 cm (2 $\frac{3}{4}$ ft.)

Morays - Muraenidae

ID: Shades of brown to dirty white with highly variable pattern of widely spaced irregular dark brown to black spots, partial bars and bands. Solitary. Reef crevices and debris such as coconut logs and wood planks of lagoon and outer reefs in 7-50 m.

Indo-Pacific: Seychelles and Mauritius to Society Is. in French Polynesia. - S.W. Japan to Great Barrier Reef.



Fimbriated Moray - Variation

ID: Head coloration is usually darker than the body. The yellowish brown variation [pictured] is less common than the brownish green variation [previous]. Also, compare and note the variability in markings.



SLENDERTAIL MORAY

Gymnothorax gracilicauda

SIZE: to 32 cm (13 in.)

Morays - Muraenidae

ID: Whitish to pale brown with over 30 dark bars which do not extend over the dorsal fin as on similar Enigmatic Moray [following]. Solitary, hide inside crevices and reef recesses during day. Lagoon reefs and fore-reef slopes to 20 m.

Pacific: W. Australia to Hawaii, Line Is. and French Polynesia. - Marianas Is. in Micronesia to Great Barrier Reef.



MINOR MORAY

Gymnothorax minor

SIZE: to 60 cm (2 ft.)

Morays - Muraenidae

ID: Whitish with brown mottling and numerous pale flecks; approximately 18 dark brown bars encircle body and fins. Solitary. Inhabit reef crevices of coastal, lagoon and outer reefs in 2-100 m.

Asian Pacific: Taiwan, Hong Kong, Japan, Australia.



YELLOW-HEADED MORAY

Gymnothorax rueppelliae

SIZE: to 80 cm (2 $\frac{3}{4}$ ft.)

Morays - Muraenidae

ID: White to light grayish brown with 16-21 dark brown bars encircling body and fins; top of head yellow to brownish yellow, dark spot on rear corner of mouth. Solitary, nocturnal. Inhabit reef crevices of lagoon and outer reefs in 1-30 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Tuamotu Is. in French Polynesia, north to S.W. Japan.



ENIGMATIC MORAY

Gymnothorax enigmaticus

SIZE: to 58 cm (23 $\frac{3}{4}$ in.)

Morays - Muraenidae

ID: Whitish with brown mottling and approximately 20 dark bars encircling body and fins, bars often dark on dorsal fin and faint on body. **Juveniles** - Bright white with black encircling bars. Solitary, in open at night. Lagoon and outer reefs in 1-15 m.

Indo-West Pacific: E. Africa and Gulf of Aden to New Guinea and Samoa. - S.W. Japan to Australia.



YELLOWMARGIN MORAY *Gymnothorax flavimarginatus*

SIZE: to 150 cm (5 ft.) Morays - Muraenidae

ID: Yellowish orange body densely mottled with dark brown, dark purplish brown front of head; black blotch over gill opening, orange iris. Solitary and curious, head frequently protrudes from reef recess. Lagoon and outer reefs in 1-150 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii, French Polynesia and Panama, north to S.W. Japan.



WHITEMOUTH MORAY *Gymnothorax meleagris*

SIZE: to 120 cm (4 ft.)

Morays - Muraenidae

ID: Dark brown with numerous close-set white spots; inside of mouth and tip of tail white. Solitary, head frequently protrudes from reef recess. Lagoon and outer reefs in 1-36 m.

Indo - Pacific: E. Africa to Hawaii and Galapagos Is. - S. Japan to Australia.



YELLOWMOUTH MORAY *Gymnothorax nudivomer*

SIZE: to 180 cm (6 ft.) Morays - Muraenidae

ID: Light brown head and front body gradating to dark brown toward rear with numerous small white spots; inside of mouth yellow, dark blotch on gill open. Solitary, produces skin toxin. Inhabit crevices of mainly outer reefs in 5-165 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii and Marquesas Is. in French Polynesia. - S.W. Japan to Australia.



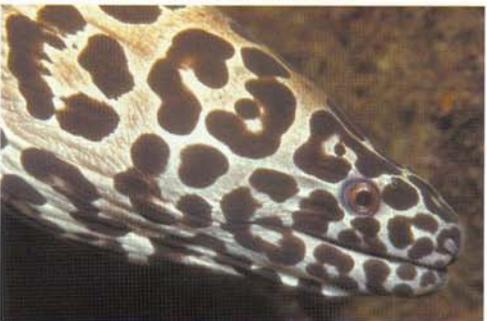
GIANT MORAY *Gymnothorax javanicus*

SIZE: to 239 cm (7 $\frac{3}{4}$ ft.)

Morays - Muraenidae

ID: Brown with irregular dark brown spots on head, body and fins; black blotch on gill opening. Solitary, most common large moray. Inhabit reef holes of lagoon and outer reefs in 1-46 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii and Pitcairn Is. in southeast Pacific, north to S.W. Japan.



SPOTTED MORAY *Gymnothorax isingteena*

SIZE: to 180 cm (6 ft.) Morays - Muraenidae

ID: Whitish with irregular black spots occasionally joining to form circular markings. Solitary, heads often protrude from crevices. Inhabit coral outcroppings of coastal reefs and outer slopes in 3-30 m.

Asian Pacific: Sumatra in Indonesia to Papua New Guinea, north to S. Japan.



BLACKSPOTTED MORAY *Gymnothorax favagineus*

SIZE: to 180 cm (6 ft.)

Morays - Muraenidae

ID: White to yellow with black leopard-like spotting; young have larger and fewer spots; large adults have smaller spots that form honeycomb-like pattern. Solitary. Inhabit reef crevices of lagoon and outer reefs in 1-50 m.

Indo-Asian Pacific: E. Africa and Oman to Australia and Papua New Guinea.

Morays



STOUT MORAY

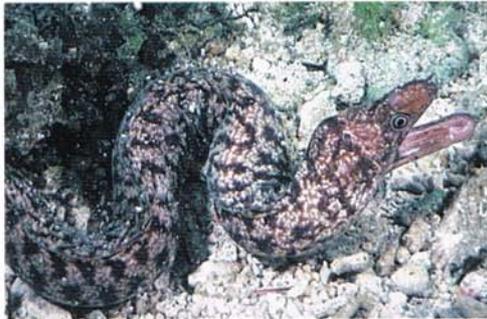
SIZE: to 65 cm (2 1/4 ft.)

ID: White to yellowish brown with dark irregular netted markings and spots becoming darker toward tail. Solitary. Inhabit reef crevices of rocky shores and seaward reefs in 1-25 m.

Indo-Pacific: E. Africa to Hawaii and Easter I. in southeastern Pacific. - S. Japan to Australia.

Gymnothorax eurostus

Morays - Muraenidae



WHITELIP MORAY

SIZE: to 50 cm (20 in.)

ID: Mottled reddish brown and white with irregular dark brown bars and blotches; several sensory pores on jaws frequently surrounded by large white spots. Solitary. Inhabit crevices and fissures of lagoon and outer reefs slopes in 1-45 m.

Indo-Asian Pacific: Gulf of Oman to Indonesia and Australia.

Gymnothorax chilospilus

Morays - Muraenidae



RETICULATED MORAY

SIZE: to 32 cm (13 in.)

ID: White to tan with dense brown reticulum on head, body and fins. Solitary. Inhabit reef crevices and rubble of shallow reef flats and estuaries in 1-12 m.

Indo-Pacific: Red Sea and E. Africa to Cook Is. and Society Is. in French Polynesia, north to S.W. Japan.

Gymnothorax richardsoni

Morays - Muraenidae



AUSTRALIAN MORAY

SIZE: to 47 cm (18 3/4 in.)

ID: Pale brown with darker irregular netted pattern on body and fins; dark irregular, but well defined spots behind eye. Solitary. Inhabit crevices and recesses during day, hunt in open at night. Tide pools, lagoons, bays and fore-reef slopes to 15 m.

Localized: West Australia and Great Barrier Reef.

Gymnothorax cribrosus

Morays - Muraenidae



INDIAN MUD MORAY

Gymnothorax tile

SIZE: 53 cm (21 in.)

Morays - Muraenidae

ID: Mottled brown with whitish flecks especially evident on head. Solitary. Around debris on soft bottoms of muddy estuaries and lower portion of rivers in 1-10 m.

Indo-Asian Pacific: India to Singapore and W. Indonesia.



UNDULATED MORAY

SIZE: to 150 cm (5 ft.)

ID: Pale brown to yellowish brown to brown with close-set irregular dark brown blotches and small spots, blotches often merge to form irregular bars rear body and fins. Solitary. Inhabit reef flats, lagoons and outer slopes to 50 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii, Austral Is. and Panama, north to S.W. Japan.

Gymnothorax undulatus

Morays - Muraenidae

**BARRED-FIN MORAY***Gymnothorax zonipectis***SIZE:** to 80 cm (2 3/4 ft.)

Morays - Muraenidae

ID: Tan with 2-4 longitudinal rows of brown blotches on body and bands on fins; **pale bands and blotches on jaws**, dark brown band at rear edge of eye. Solitary. Inhabit reef crevices, mainly of outer slopes in 4-40 m.

Indo-Pacific: E. Africa to Marquesas and Society Is. in French Polynesia. - Philippines to Australia.

**LONG-JAWED MORAY***Channomuraena vittata***SIZE:** 150 cm (5 ft.)

Morays - Muraenidae

ID: Light brown with wide black bars encircling body; large mouth gape, eyes far forward, no fins. Solitary and secretive. Inhabit ledges and caves of outer reef slopes in 7-40 m.

East Indo-Pacific: Tropical seas from Christmas I. to Hawaii.

**WHITE RIBBON EEL***Pseudechidna brummeri***SIZE:** to 103 cm (3 1/2 ft.)

Morays - Muraenidae

ID: Long laterally compressed body; pale brown to pale green with small dark spots on head; narrow white margin on fins. Solitary and cryptic, rarely in open except at night. Sand and rubble bottoms of sheltered coastal reefs and reef flats in 1-8 m.

Indo-West Pacific: E. Africa to Fiji and Cook Is, north to Mariana and S.W. Japan.

**RIBBON EEL***Rhinomuraena quaesita***SIZE:** 65-85 cm (2 1/4 - 2 3/4 ft.)

Morays - Muraenidae

ID: **Male** - Brilliant blue body with yellow dorsal fin, snout, lower jaw and eye; large fan-shaped nostrils and chin barbels. Solitary or pairs. Inhabit sandy burrows of coastal, lagoon and seaward reefs in 1-57 m.

Indo-Pacific: E. Africa to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.

**Ribbon Eel - Female****SIZE:** 85-120 cm (2 3/4-4 ft.)

ID: This species is a protandrous hermaphrodite (males changing into females). At approximately 85 cm males begin to develop female sex organs and change color to yellowish blue to entirely yellow (pictured specimen is in the process of changing). Females are uncommon.

**Ribbon Eel - Juvenile****SIZE:** to 65 cm (2 1/4 ft.)

ID: Jet-black bodies with yellow dorsal fin; flared translucent nostrils, white stripe on lower jaw. Rarely sighted outside protection of crevices. Juveniles were once thought to be a separate species *R. amboinensis*.

Morays - Snake Eels



ZEBRA MORAY

Gymnomuraena zebra

SIZE: to 154 cm (5 ft.)

Morays - Muraenidae

ID: Dark brown with numerous narrow white bars encircling head, body and fins. Solitary, often in open; feed mainly on crabs. Inhabit reef crevices and under ledges of exposed reef flats and seaward slopes in 1 - 40 m.

Indo - Pacific: Red Sea and E. Africa to Hawaii, Society Is. in French Polynesia and Panama, north to S.W. Japan.



TIGER SNAKE MORAY

Scuticaria tigrina

SIZE: to 120 cm (4 ft.)

Morays - Muraenidae

ID: Yellowish to reddish tan with large rough edged spots and scattered smaller spots between; nearly cylindrical with fins (except at tail tip). Solitary. Inhabit ledges and crevices of lagoon and seaward reefs in 8 - 25 m.

Indo - Pacific: E. Africa to Hawaii, Society Is. in French Polynesia and Panama, north to Philippines.



WHITE-EYED MORAY

Siderea thyoidea

SIZE: to 65 cm (2 1/4 ft.)

Morays - Muraenidae

ID: Whitish or pale yellow-brown with dense scattering of small brown spots; **purplish gray head with distinctive white iris.** Solitary or small groups. Inhabit crevices of shallow reef flats to 7 m.

Pacific: Sumatra in Indonesia to Tuamotu Is. in French Polynesia. - S.W. Japan to Australia.



GIANT ESTUARINE MORAY

Strophidon sathete

SIZE: to 375 cm (12 1/4 ft.)

Morays - Muraenidae

ID: Very large; grayish brown without markings; small canine teeth in 2 rows along side of upper and front of lower jaws. **Young** - White stripe on dorsal fin. Solitary. Inhabit burrows in mud bottoms of estuaries and river mouths.

Indo - West Pacific: Red Sea to Queensland in N.E. Australia, New Caledonia and Fiji, north to Guam and S.W. Japan.



OKINAWAN SNAKE MORAY

Scuticaria okinawae

SIZE: to 93 cm (3 ft.)

Morays - Muraenidae

ID: Gray-brown without markings; nearly cylindrical with no fins (except at tail tip). Solitary. Inhabit reef crevices of rocky shores and mainly seaward reefs in 5 - 30 m.

Indo - North Pacific: Mauritius to Indonesia, S. Japan and Hawaii.



PEPPERED MORAY

Siderea picta

SIZE: to 120 cm (4 ft.)

Morays - Muraenidae

ID: White to light gray with dense dark brown to blackish spotting. **Small Juveniles** - Relatively large spots in about 3 longitudinal rows. Solitary, inhabit crevices in rock; feed mainly on crabs. Shallow reef flats to 3 m.

Indo - Pacific: E. Africa to Hawaii and E. Pacific. - S.W. Japan to Australia.



LARGEHEAD SNAKE MORAY *Uropterygius macrocephalus*

SIZE: to 40 cm (16 in.) Morays - Muraenidae

ID: Brown with dense network of lichen-like white to yellowish blotches; no fins (except at tail tip). Solitary and secretive, rarely in open during day. Inhabit reef crevices of lagoon and seaward reefs in 1-14 m.

East Indo-Pacific: Christmas I. to Indonesia, Hawaii and Panama, north to S. Japan.



BARRED SNAKE MORAY *Uropterygius fasciolatus*

SIZE: to 53 cm (21 in.) Morays - Muraenidae

ID: Brown with network of wavy dark lines; no fins (except at tail tip). Solitary, rarely in open. Inhabit reef crevices and branches of tightly branching corals of coastal patch reefs and lagoons in 1-7 m.

Asian Pacific: Belau and Molucca Is. in Indonesia to New Guinea to and Solomon Is.



REPTILIAN SNAKE EEL *Brachysomophis henshawi*

SIZE: to 106 cm (3 1/2 ft.) Snake Eels - Ophichthidae

ID: Variable from mottled red to yellowish or whitish; head flattened except for an abrupt depression behind eye. Solitary, bury in sand with only heads protruding to ambush prey. Lagoons and seaward sand patches in 1-30 m.

Indo-Pacific: Arabian Sea to Hawaii, Marquesas and Society Is. in French Polynesia. - S. Japan to Coral Sea.



CROCODILE SNAKE EEL *Brachysomophis crocodilinus*

SIZE: to 82 cm (2 3/4 ft.) Snake Eels - Ophichthidae

ID: Whitish to brown often with dark flecks; head flattened, and not deeply depressed behind eyes; eyes set far forward on snout; branched skin flaps along upper lip. Solitary, bury in sand with only heads protruding. Sand patches in 1-15 m.

Indo-Pacific: Madagascar to Johnston Atoll and Society Is. in French Polynesia. - S.W. Japan to Australia.



STARGAZER SNAKE EEL *Brachysomophis cirocheilos*

SIZE: to 125 cm (4 1/4 ft.) Snake Eels - Ophichthidae

ID: Light brown with irregular lighter patches on back and sides; fine black spots on head and a line of white spots on back of head; numerous fine teeth protrude. Solitary, bury in sand with only heads protruding to ambush prey. Sand to 10 m.

Indo-Asian Pacific: Red Sea to Indonesia and Papua New Guinea, north to S. Japan.



SHARPSNOUT SNAKE EEL *Apterichtus klazingai*

SIZE: to 40 cm (16 in.) Snake Eels - Ophichthidae

ID: White with numerous orange-brown spots; very pointed snout, lack pectoral fins. Solitary, bury completely in sand, seldom in open. Inhabit extensive sand areas of seaward slopes in 2-15 m.

Indo-Asian Pacific: E. Africa to Marshall Is. in Micronesia and Great Barrier Reef.

Snake Eels



BLACK-STRIPED SNAKE EEL

Callechelys catostoma

SIZE: to 85 cm (2 3/4 in.)

Snake Eels - Ophichthidae

ID: Pale tan with **two brown to black body stripes**; dark margin on dorsal fin; overhanging snout with prominent tubular nostrils, no pectoral fins. Solitary, bury in sand. Inhabit sandy patches near reefs in 1-15 m.

Indo-Pacific: Maldives to Society Is. in French Polynesia. - S. Japan to Australia.



SPOTTED SNAKE EEL

Myrichthys maculosus

SIZE: to 100 cm (3 1/4 ft.)

Snake Eels - Ophichthidae

ID: Yellowish to cream with **large dark oval spots**; overhanging snout with long tubular nostrils, small pectoral fins. Solitary, occasionally in open during day, but more commonly out at night. Lagoon and seaward sand in 1-262 m.

Indo-Pacific: Red Sea and E. Africa to Hawaii and Rapa I. in French Polynesia. - S. Japan to Australia.



CONVICT SNAKE EEL

Elapsopsis versicolor

SIZE: to 52 cm (20 3/4 in.)

Snake Eels - Ophichthidae

ID: White with broad blackish saddles centered with narrow yellowish bars; overhanging snout with prominent tubular nostrils, no pectoral fins. Solitary, bury in sand. Sandy patches near reefs to 18 m.

Asian Pacific: Indonesia and Philippines to Great Barrier Reef.



MARBLED SNAKE EEL

Callechelys marmorata

SIZE: to 90 cm (3 ft.)

Snake Eels - Ophichthidae

ID: Yellowish with numerous black spots and blotches; overhanging snout with prominent tubular nostrils, no pectoral fins. Solitary, bury in sand with only head protruding. Inhabit lagoon and seaward sand patches in 1-15 m.

Indo-Pacific: E. Africa to Marshall and Mariana Is. in Micronesia and French Polynesia, south to Australia.



BANDED SNAKE EEL

Myrichthys colubrinus

SIZE: to 90 cm (3 ft.)

Snake Eels - Ophichthidae

ID: White with brown to black (usually encircling) bars occasionally with black spots between; overhanging snout, small pectoral fins. Solitary, mimics sea snake. Inhabit sandy patches of lagoons and seaward reefs in 1-30 m.

Indo-Pacific: Red Sea and E. Africa to Johnston Atoll and Society Is. in French Polynesia. - S.W. Japan to Australia.



SADDLED SNAKE EEL

Leiuranus semicinctus

SIZE: to 60 cm (2 ft.)

Snake Eels - Ophichthidae

ID: Whitish with wide rounded dark brown saddles that do not quite encircle body on belly. Solitary, bury completely in sand, but occasionally emerge during both day and night to feed. Lagoons and near coastal reefs in 1-10 m.

Indo-Pacific: East Africa to Hawaii, Marquesas Is. in French Polynesia. - S. Japan to S.E. Australia.

**NAPOLEON SNAKE EEL***Ophichthus bonaparti***SIZE:** to 75 cm (2 1/2 ft.)

Snake Eels - Ophichthidae

ID: Dirty white with dark brown encircling bars and occasional spots between; head has dark-edged bronze spots and blotches. Solitary, bury in sand often with heads exposed; occasionally in open at night. Coastal sand slopes in 5-20 m.

Indo-Pacific: E. Africa to Indonesia and Society Is. in French Polynesia, S. Japan.

**Napoleon Snake Eel - Head detail**

ID: Easily identified by distinctive dark-edged bronze spots and blotches with only head exposed.

**BLACK-FINNED SNAKE EEL***Ophichthus melanochir***SIZE:** to 80 cm (2 3/4 ft.)

Snake Eels - Ophichthidae

ID: Yellowish brown with white encircling bar behind head, black pectoral fins; overhanging snout with large gray tubular nostrils. Solitary; bury in sand, often with head protruding; Coastal sand patches to 10 m.

East Indo-Pacific: E. Malaysian Peninsula to Marshall Is. in Micronesia and French Polynesia. - S. Japan to Australia.

**Black-Finned Snake Eel - Head Detail**

ID: Can be identified when only head exposed by a pale patch in front of eye. Similar Blacksaddle Snake Eel [next] lack this features.

**BLACKSADDLE SNAKE EEL***Ophichthus cephalozona***SIZE:** to 108 cm (3 1/2 ft.)

Snake Eels - Ophichthidae

ID: Shades of brown with black encircling saddle widely bordered with white behind head; whitish pectoral fins. Solitary, hide in crevices or bury in sand, often with head protruding; frequent shrimp cleaning stations. Coastal areas in 8-26 m.

Pacific: Indonesia, Mariana Is. in Micronesia to Society Is. in French Polynesia, south to Queensland in N. E. Australia.

**LARGE-SPOTTED SNAKE EEL***Ophichthus polyophthalmus***SIZE:** to 35 cm (14 in.)

Snake Eels - Ophichthidae

ID: Reddish brown to pale salmon with numerous dark-edged yellow spots; overhanging snout with prominent pale nostrils. Solitary, bury in sand and rubble often with heads protruding. Lagoon and seaward sand patches in 1-20 m.

Indo-Pacific: Mauritius to Marquesas and Society Is. in French Polynesia.

Snake Eels - Conger/Garden Eels



LONGFIN SNAKE EEL

Pisodonophis cancrivorus

SIZE: to 75 cm (2½ ft.)

Snake Eels - Ophichthidae

ID: Gray to brown; covered with skin wrinkles highlighted by pale and darker shades; overhanging snout with tubular nostrils. Solitary or in pairs, bury in sand often with heads protruding. Coastal sand and silt patches in 1-25 m.

Indo-West Pacific: E. Africa to Samoa. - S. Japan and Mariana Is. in Micronesia to Australia.



BIGEYE CONGER

Ariosoma anagoides

SIZE: to 40 cm (16 in.)

Conger Eels - Congridae

ID: Brown to gray with blackish translucent fins and faint bars on head; **large eye with vertically elongate pupil**, well-developed pectoral fins. Solitary and cryptic, in open at night. Sand or mud bottoms of sheltered bays in 5-20 m.

Asian Pacific: Indonesia and Philippines.



SCHEELE'S CONGER

Ariosoma scheelei

SIZE: to 20 cm (8 in.)

Conger Eels - Congridae

ID: Gray to brown with **row of pale spots along base of dorsal fin**, all fins translucent; well-developed pectoral fins, large eye with white iris. Solitary and cryptic, occasionally in open at night. Sheltered bays and lagoon reefs in 1-10 m.

Indo-West Pacific: E. Africa to Great Barrier Reef, Samoa and Marshall Is. in Micronesia.



MOUSTACHE CONGER

Conger cinereus

SIZE: to 130 cm (4¼ ft.)

Conger Eels - Congridae

ID: Brown to gray with black well developed pectoral fins; **black streak below eye on upper lip**; may display dark bands. Solitary, occasionally in open at night. Inhabit ledges and crevices of coral reefs in 1-80 m.

Indo-Pacific: Red Sea and E. Africa to French Polynesia and Easter I., in southeastern Pacific. - S. Japan to Australia.



BARRED SAND CONGER

Poecilococong fasciatus

SIZE: to 60 cm (2 ft.)

Conger Eels - Congridae

ID: White to light brown with numerous brown spots on head and about 12 irregular double brown bars on body; relatively pointed snout and well developed pectoral fins. Solitary. Inhabit sand in lagoons to near seaward reefs in 2-32 m.

Indo-Pacific: Madagascar to Sulawesi in Indonesia, Marshall Is. in Micronesia, Hawaii and Society Is. in French Polynesia.



ORANGE-BARRED GARDEN EEL

Gorgasia preclara

SIZE: 40 cm (16 in.)

Conger/Garden Eels - Congridae

ID: Prominently marked with alternating white to light gray and orange to brilliant yellow-orange encircling bars. Solitary or form small colonies on sand and rubble bottoms near reefs in 18-75 m.

Indo-West Pacific: Maldives to S.W. Japan, Philippines, Coral Sea, Guam and Palau in Micronesia and Fiji.

**SPAGHETTI GARDEN EEL***Gorgasia maculata***SIZE:** 55 cm (22 in.)
Conger/Garden Eels - Congridae**ID:** Gray to light tan covered with small yellow-tan flecks; head and lateral line pores surrounded by white spots and forming larger white blotches on head. Form large colonies on sand slopes near coastal and seaward reefs in 15-40 m.**Indo-Asian Pacific:** Comoro Is. to Indonesia, Papua New Guinea, Philippines, and N. Coral Sea.**BANDED GARDEN EEL***Heteroconger polyzona***SIZE:** to 40 cm (16 in.) Conger/Garden Eels - Congridae**ID:** White with numerous close-set narrow dark bars (most do not completely encircle body). Form colonies on sand bottoms near reefs in sheltered bays and on coastal slopes in 1-10 m.**West Pacific:** Bali in Indonesia to Vanuatu and Fiji, north to S.W. Japan.**SPOTTED GARDEN EEL***Heteroconger hassi***SIZE:** to 70 cm (2 1/4 ft.) Conger/Garden Eels - Congridae**ID:** Whitish with dense covering of small black spots; large black patch over gill opening, on back and over anus. Form large colonies on sandy bottoms in lagoons and around seaward reefs in 5-50 m.**Indo-Pacific:** Comoro Is. and Seychelles to Tonga and Line Is. in eastern Pacific. - S.W. Japan to Australia.**TAYLOR'S GARDEN EEL***Heteroconger taylori***SIZE:** 40 cm (16 in.)
Conger/Garden Eels - Congridae**ID:** Whitish with covering of small close-set dark spots on head body and dorsal fin. Solitary or form small groups on silty sand plains adjacent to coastal reefs in 5-15 m.**Localized:** Kalimantan (Borneo) in Indonesia to Papua New Guinea.**MANY-TOOTHED GARDEN EEL***Heteroconger perissodon***SIZE:** to 60 cm (2 ft.) Conger/Garden Eels - Congridae**ID:** Mottled brown flecked with irregular white to bluish gray spots; **white patch on gill cover**, narrow white margin on dorsal fin. Solitary or form colonies on sand or mud bottoms in sheltered bays and coastal slopes in 1-35 m.**Asian Pacific:** Indonesia and Philippines.**DUSKY GARDEN EEL***Heteroconger enigmaticus***SIZE:** 45 cm (18 in.)
Conger/Garden Eels - Congridae**ID:** Brown to gray with numerous tiny white to yellowish flecks, translucent fins. Solitary or form small groups on sandy bottoms near reefs in sheltered bays and on coastal slopes in 3-25 m.**Localized:** Flores and Molucca Is. in Indonesia to Papua New Guinea.

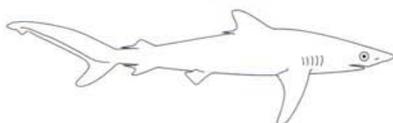
IDENTIFICATION GROUP 20

Sharks & Rays

This ID Group consists of fishes whose skeletons are composed of cartilage rather than bone, and are therefore called cartilaginous fishes.

FAMILY: Requiem Sharks - Carcharhinidae

3 Genera – 12 Species Included

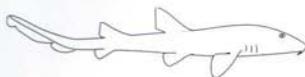


Typical Shape

When thinking of sharks most people imagine the sleek, powerful image of a requiem shark. Members of the large family, represented worldwide by 48 species in 12 genera, have pointed snouts, first dorsal fins positioned in front of ventral fins, round eyes with nictitating membranes and a lower lobe on the tail fin. Family members are responsible for approximately half of all shark attacks and several species should be considered potentially dangerous. Requiem sharks are often difficult to identify. Identification clues include positions of fins, snout shape and color and position of fin markings.

FAMILY: Bamboo & Epaulette Sharks - Hemiscylliidae

2 Genera – 7 Species Included

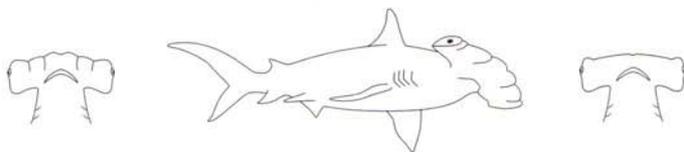


Typical Shape

These small, slender sharks have small, straight mouths set in front of the eyes, short nasal barbels and rounded anal fins. The bottom-oriented fishes have strong, well-developed paired fins that allow them to "walk" about on the sea floor. The banded patterns of juvenile bamboo sharks, genus *Chiloscyllium*, fade with age. As they mature, the bands on young epaulette sharks, genus *Hemiscyllium*, change into a spotted pattern with two large prominent eyespots.

FAMILY: Hammerhead Sharks - Sphyrnidae

2 Genera – 7 Species Included



Scalloped

Typical Shape

Great

Hammerheads are the most highly evolved of all sharks. The exact functions of their distinctive T-shaped heads are not completely understood. It is thought that the odd anatomy possibly improves vision, smell, electroreception, as well as, helping pin their favorite food, stingrays, to the sea floor while they are being eaten. The shape of the front edge of their wide heads is used for species identification.

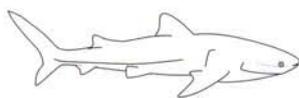
SHARK FAMILIES: Other



Wobbegongs - Orectolobidae



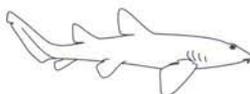
Cat Shark - Scyliorhinidae



Whale Shark - Rhincodontidae

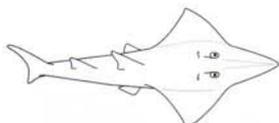


Zebra Sharks - Stegostomatidae



Nurse Sharks - Ginglymostomatidae

Order: Rays - Rajiformes



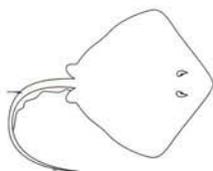
Wedgefishes - Rhinidae



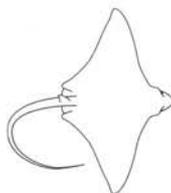
Guitarfishes - Rhinobatidae



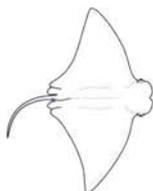
Coffin Rays - Hypnidae



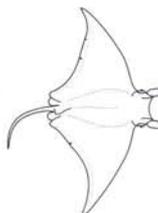
Stingrays - Dasyatidae



Eagle Rays - Myliobatidae



Cownose Rays - Rhinopteridae



Mantas - Mobulidae

Sharks



TASSELLED WOBBERGONG *Eucrossorhinus dasyopogon*
SIZE: 125 cm (4 1/4 ft.)
 Wobbegongs - Orectolobidae
ID: Intricate network of dark-edged spots in shades of brown; broad, flattened head with **continuous fringe of branched tentacles around mouth**. Solitary. Rest on bottom of sheltered coastal and barrier reefs in 1-15 m.
Localized: N. Australia, Indonesia and S. New Guinea.



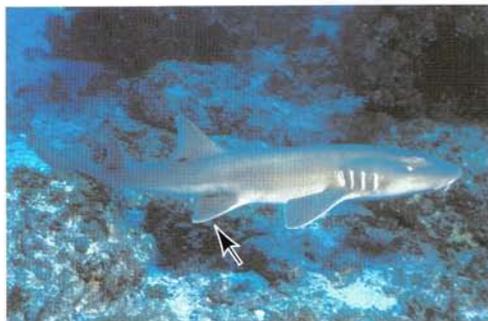
ORNATE WOBBERGONG *Orectolobus ornatus*
SIZE: to 290 cm (9 1/2 ft.)
 Wobbegongs - Orectolobidae
ID: Mottled and blotched spotted brown; wide irregular bar between head and 1st dorsal fin and bars below both dorsal fins and base of tail; flattened head with **clusters of flap-like tentacles**. Solitary. Rest on coral and rocky reefs to 30 m.
Asian Pacific: Indonesia, New Guinea and Australia.



SPOTTED WOBBERGONG *Orectolobus maculatus*
SIZE: to 320 cm (10 1/2 ft.)
 Wobbegongs - Orectolobidae
ID: Brown with dark saddles and pale irregular circular markings; broad flattened head with mostly **unbranched tentacles in clusters**, pair of longer and wider tentacles near snout tip. Solitary. Rest on coral and rocky reefs to 110 m.
Localized: S. & E. Australia.



NORTHERN WOBBERGONG *Orectolobus wardi*
SIZE: to 25 cm (4 ft.)
 Wobbegongs - Orectolobidae
ID: Brown with saddles or bars and dense reticulum of dark spots; **several widely scattered skin flaps on side of broad flattened head**, pair of nasal barbels longer than skin flap. Solitary and sluggish. Rest on bottom of coastal and lagoon reefs to 5 m.
Localized: Northern half of Australia.



BROWN-BANDED BAMBOO SHARK *Chiloscyllium punctatum*
SIZE: to 105 cm (3 1/2 ft.)
 Bamboo Sharks - Hemiscylliidae
ID: Brown to grayish brown, may retain hint of juvenile banded pattern [next]; long slender body with **pectoral and ventral fins forward of dorsal fins**. Solitary, in open at night. Rest on bottom of coastal reefs and trawling grounds in 1-85 m.
Indo-Asian Pacific: Madagascar and India to Indonesia and Philippines, north to S. Japan.



Brown-Banded Bamboo Shark - Juvenile
ID: Alternating black or brown and white banding (with maturity white bands become brown); long slender body.



WHITESPOTTED BAMBOO SHARK *Chiloscyllium plagiosum*

SIZE: to 95 cm (3 1/4 ft.) Bamboo Sharks - Hemiscylliidae

ID: Alternating tan and dark brown encircling bars and scattered white spots; long slender body with pectoral and ventral fins forward of dorsal fins. Solitary, hide in crevices during day and move into open at night. Reefs to 30 m.

Indo-Asian Pacific: India to Thailand, Indonesia and Japan.



Whitespotted Bamboo Shark - Juvenile

ID: Dark gray to nearly black with pale saddles and numerous small white spots. With maturity the pale saddles enlarge to become pale encircling bars alternating with dark bars.



HOODED CARPET SHARK *Hemiscyllium strahani*

SIZE: to 80 cm (2 3/4 ft.) Bamboo Sharks - Hemiscylliidae

ID: Brown with white spots and dusky dark bands on body and tail; **lower head dark with white band below eye**, incomplete ocelli above pectoral fin; long slender body, pair of nasal barbels. Solitary. Coral reefs in 3-13 m.

Localized: S.E. Papua New Guinea.

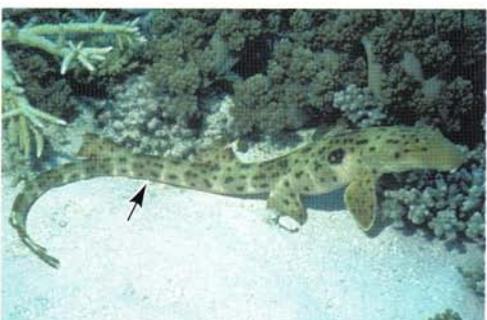


RAJA EPAULETTE SHARK *Hemiscyllium freycineti*

SIZE: to 72 cm (2 1/2 ft.) Bamboo Sharks - Hemiscylliidae

ID: Brown with **numerous brown spots on rear head and body**, but sparse on snout, poorly defined ocellus-like marking above pectoral fin; long slender body, pair of short nasal barbels. Solitary. Rest on bottom of sheltered reefs to 4 m.

Localized: Irian Jaya in Indonesia.



EPAULETTE SHARK *Hemiscyllium ocellatum*

SIZE: to 107 cm (3 1/2 ft.) Bamboo Sharks - Hemiscylliidae

ID: **Tan patches with pale outlines** and numerous scattered small dark spots; large black spot with pale outline above pectoral fin; long slender body, pair of short nasal barbels. Solitary. Rest on bottom of reefs to 10 m, often in stands of staghorn corals.

Localized: Queensland and N. Australia to New Guinea.



MILNE BAY EPAULETTE SHARK *Hemiscyllium* sp.

SIZE: to 77 cm (2 1/2 ft.) Bamboo Sharks - Hemiscylliidae

ID: White with **brown polygons**, large dark patch above pectoral fin and pair of dark blotches on leading edge of each dorsal fin; long slender body, pair of short nasal barbels. Solitary. Rest on the bottom, often under ledges, of coastal and platform reefs in 3-15 m.

Localized: Milne Bay Province in S.E. Papua New Guinea.

Sharks



SPECKLED CARPET SHARK *Hemiscyllium trispeculare*
SIZE: to 79 cm (2 3/4 ft.) Bamboo Sharks - Hemiscylliidae

ID: Brown with numerous small spots joining to form polygons on rear half of body; large white-ringed black spot above pectoral fin; long slender body, pair of short nasal barbels. Solitary. Rest on bottom of sheltered reefs to 4 m.
Localized: Northern half of Australia.



CORAL CAT SHARK *Atelomycterus marmoratus*
SIZE: to 60 cm (2 ft.) Cat Sharks - Scyliorhinidae

ID: Variable mixture of spots, stripes and bands in shades of brown to gray to black; white tips or borders on all fins; no barbels. Solitary. Crevices and holes of coastal reefs in 1-15 m.
Indo-Asian Pacific: Arabian Sea to Papua New Guinea, north to Philippines and Taiwan.



WHALE SHARK *Rhincodon typus*
SIZE: to 1800 cm (59 ft.) Whale Sharks - Rhincodontidae

ID: Huge; dark gray with white underside; numerous white spots scattered on head and arranged in rows and bars on body; broad mouth, ridges on side of body, enormous tail. Solitary. Open clear waters in 0-40 m, often near surface and occasionally around reefs.

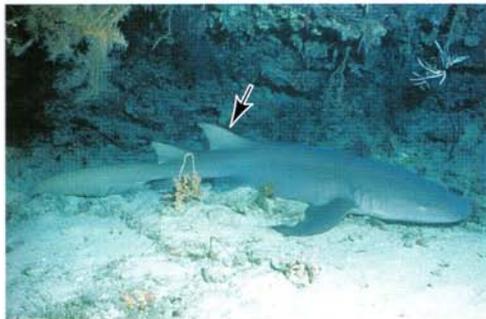
Circumtropical.



BLOTCHY SWELL SHARK *Cephaloscyllium umbratile*
SIZE: to 100 cm (3 1/4 ft.) Cat Sharks - Scyliorhinidae

ID: Pale brown with darker saddles and widely scattered dark brown spots; stout body with relatively small dorsal, anal and tail fins, no barbels or flaps on head. Solitary. Rock or sand bottoms of primarily continental shelf waters in 18-220 m.

Asian Pacific: China, Japan and New Guinea.



TAWNY NURSE SHARK *Nebrius ferrugineus*
SIZE: to 320 cm (10 ft.) Nurse Sharks - Ginglymostomatidae

ID: Shades of gray to brown without markings; pair of short nasal barbels, smallish mouth well in front of eyes, **close-set dorsal fins of nearly same height**. Solitary or small groups. Often rest on bottom of lagoon and seaward reefs in 1-70 m.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S. Japan to Australia.



ZEBRA SHARK *Stegostoma fasciatum*
SIZE: to 354 cm (11 1/2 ft.) Zebra Sharks - Stegostomatidae

ID: Pale gray with numerous leopard-like spots; huge long tail nearly half of total length, pair of nasal barbels, ridges on body. **Juvenile** - Black with white bands. Solitary, often rest on bottom; not considered dangerous. Coastal and offshore reefs in 1-70 m.

Indo-Asian Pacific: Red Sea and E. Africa to Australia and New Caledonia, north to S. Japan.

Sharks & Rays

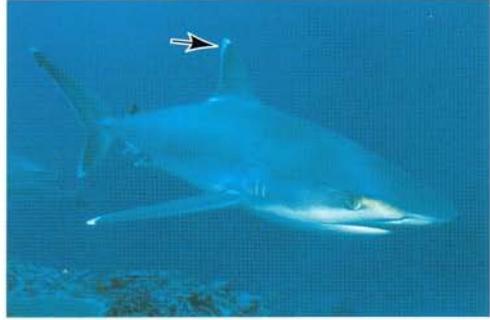


TIGER SHARK *Galeocerdo cuvier*

SIZE: to 550 cm (18 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with dusky bars and patches; large head and mouth with short bluntly rounded snout, long slender tail with pointed tip. Solitary and considered dangerous. Coastal and offshore reefs to at least 75 m.

Circumglobal: Tropical and temperate seas.



SILVERTIP SHARK *Carcharhinus albimarginatus*

SIZE: to 300 cm (9 3/4 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with pale underside; **white tips on 1st dorsal, pectoral and tail fin lobes**. Solitary or small groups; considered dangerous. Outer reef slopes, usually below about 20 m.

Indo-Pacific: Red Sea and E. Africa to Society Is. in French Polynesia. - S. Japan to Australia.

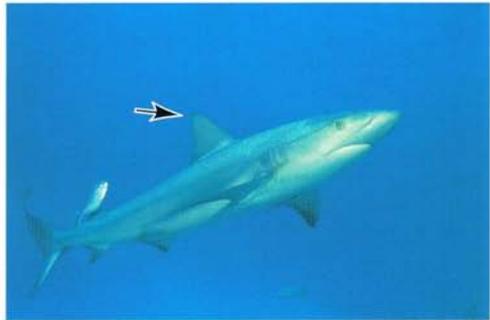


GRAY REEF SHARK *Carcharhinus amblyrhynchos*

SIZE: to 240 cm (7 3/4 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with white underside; **broad black tail margin**, 2nd dorsal, anal and underside of pectoral fins usually black. Solitary or form aggregations; occasionally aggressive and dangerous. Outer reef slopes in 1-274 m.

Indo-Pacific: Madagascar and Seychelles to Hawaii and Pitcairn I. east of French Polynesia. - China to Australia.

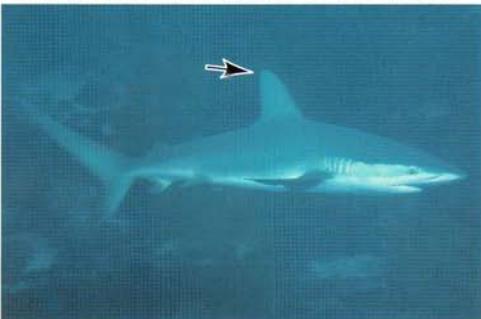


DUSKY SHARK *Carcharhinus obscurus*

SIZE: to 420 cm (14 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with pale underside; fin tips often dusky, especially underside of large pectoral fins; **dorsal fin pointed and slightly shorter than Galapagos Shark** [next]. Solitary or form groups in mid-water; occasionally aggressive and dangerous. Primarily along continental coastlines to 400 m.

Circumtropical.

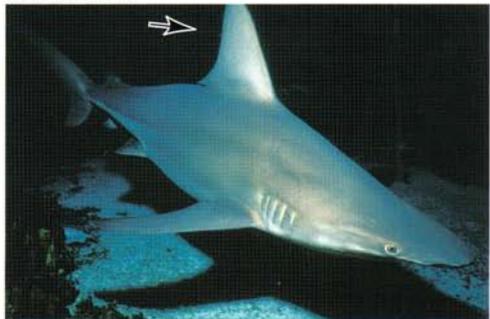


GALAPAGOS SHARK *Carcharhinus galapagensis*

SIZE: to 370 cm (12 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with white underside; fin tips often dusky, especially underside of large pectoral fins; **tall dorsal fin pointed or sharply rounded**. Solitary or form groups in mid-water; at times aggressive and dangerous. Primarily around islands in 2-180 m.

Circumglobal: Tropical and warm temperate seas.



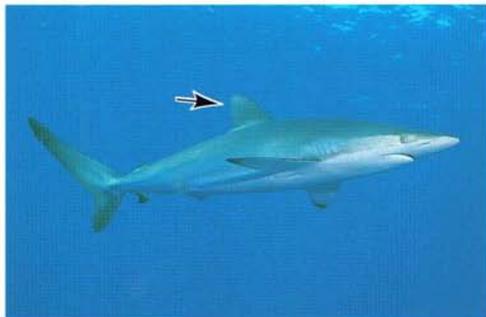
SANDBAR SHARK *Carcharhinus plumbeus*

SIZE: to 240 cm (8 ft.) Requiem Sharks - Carcharhinidae

ID: Gray to grayish brown with pale underside; no dusky markings on fins, **very tall pointed dorsal fin**, ridge between 1st and 2nd dorsal fins; short snout. Solitary to large schools, usually over sand or mud bottoms, occasionally near reefs to 280 m.

Circumglobal: Tropical and subtropical seas.

Sharks - Rays



SILKY SHARK *Carcharhinus falciformis*

SIZE: to 330 cm (11 ft.) Requiem Sharks - Carcharhinidae

ID: Gray with white underside; lack distinctive markings except often with black tips on underside of pectoral and dusky tail fin lobe tips; **1st dorsal fin low rounded and starts behind pectoral fin**, long trailing edge on 2nd dorsal. Solitary. Usually in open water to 500 m.

Circumglobal:

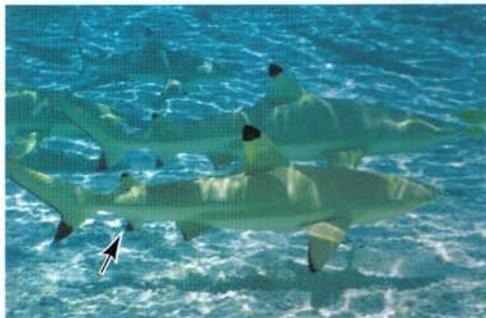


BULL SHARK *Carcharhinus leucas*

SIZE: to 340 cm (11 ft.) Requiem Sharks - Carcharhinidae

ID: **Large stout body, very short bluntly rounded snout and small eyes**; gray gradating to white underside, no markings on fins. Solitary or form groups in mid-water; considered dangerous. Coastal reefs and estuaries to 152 m.

Circumglobal: Tropical and warm temperate seas.



BLACKTIP REEF SHARK *Carcharhinus melanopterus*

SIZE: to 180 cm (7 $\frac{3}{4}$ ft.) Requiem Sharks - Carcharhinidae

ID: Brownish gray with white underside; **black tip on 1st dorsal, 2nd dorsal, pectoral, anal and lower lobe of tail fins**. Solitary or groups, usually not dangerous. Coastal, lagoon, and outer slopes, usually in 1-20 m.

Indo-Pacific: E. Africa and Red Sea to Hawaii and Pitcairn I. east of French Polynesia. - S. Japan to Australia.

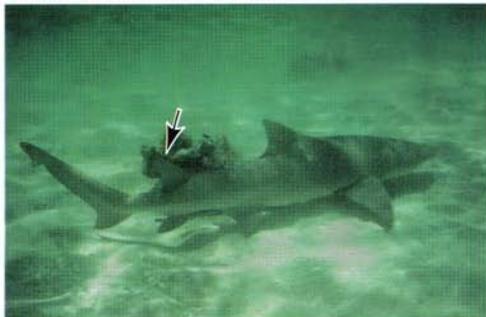


BLACKTIP SHARK *Carcharhinus limbatus*

SIZE: to 260 cm (8 $\frac{1}{2}$ ft.) Requiem Sharks - Carcharhinidae

ID: Gray with white underside; **anal fin pale to white**, black tips on 2nd dorsal, pectoral and ventral fins and lower tail lobe, silver-white streak on flank. Solitary. Lagoons, inshore waters and reef channels to 50 m.

Circumglobal: Tropical and subtropical seas.



SICKLEFIN LEMON SHARK *Negaprion acutidens*

SIZE: to 310 cm (10 ft.) Requiem Sharks - Carcharhinidae

ID: Pale yellow-brown with pale underside without distinctive markings; short snout, **pair of widely spaced dorsal fins of nearly equal height**. Solitary and considered dangerous. On or near bottom of bays, estuaries and offshore reefs in 1-30 m.

Indo-Pacific: E. Africa and Red Sea to Society Is. in French Polynesia. - Marshall Is. in Micronesia to Australia.



WHITETIP REEF SHARK *Triaenodon obesus*

SIZE: to 200 cm (6 $\frac{1}{2}$ ft.) Requiem Sharks - Carcharhinidae

ID: Gray with white underside; white tips on **1st dorsal fin and upper tail lobe**, occasional dark spots on sides; slender with rounded snout. Solitary or form small groups. Usually rest on bottom of coastal, lagoon and outer reef slopes in 3-122 m.

Indo-Pacific: E. Africa and Red Sea to Hawaii and E. Pacific. - S. Japan to Australia.

Sharks & Rays



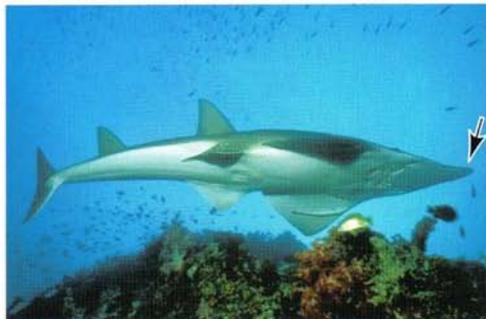
SCALLOPED HAMMERHEAD *Sphyrna lewini*
SIZE: to 400 cm (13 3/4 ft.) Hammerhead Sharks - Sphyrnidae
ID: Gray with white underside; head flattened and extended to either side with **prominent central indentation on front edge and pair of lesser indentations on each side**. Solitary or form groups; not generally considered dangerous. Open water of seaward reefs, around seamounts and islands in 1-275 m.
Circumglobal: Tropical and warm temperate seas.



GREAT HAMMERHEAD *Sphyrna mokarran*
SIZE: to 420 cm (14 ft.) Hammerhead Sharks - Sphyrnidae
ID: Gray with white underside; head flattened and extended to either side with **front edge slightly curved**, rear edge of ventral fin curved. Similar Scalloped Hammerhead [previous] distinguished by deeply scalloped "hammer". Solitary and considered dangerous. Oceanic, rarely on reefs in 3-75 m.
Circumglobal: Tropical and warm temperate seas.



SHARK RAY *Rhina ancylostoma*
SIZE: to 270 cm (8 3/4 ft.) Wedgefishes - Rhinidae
ID: Large gray shark-like ray; **broad rounded head** with body ridges above eyes and along center line, large broad-based pectoral fins; white spotting on body and fins. Solitary. On or near bottom of coastal seas, occasionally near reefs in 3-90 m.
Indo-Asian Pacific: E. Africa and Red Sea to Australia and New Guinea, north to Japan.



GIANT GUITARFISH *Rhynchobatus djiddensis*
SIZE: to 310 cm (10 1/4 ft.) Wedgefishes - Rhinidae
ID: Tan to gray to black with white spots and white underside; often white-ringed large black spot above base of pectoral fin; **pointed triangular snout**. Solitary. Often rests on bottom of sandy areas in lagoons and around reefs to 50 m.
Indo-West Pacific: Red Sea to New Caledonia and Fiji. - S. Japan to S.E. Australia.

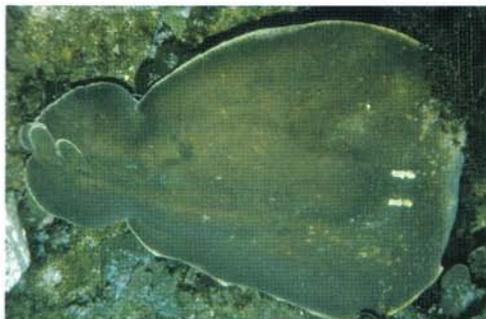


LONG-SNOOT SHOVELNOSE RAY *Aptychotrema rostrata*
SIZE: to 120 cm (4 ft.) Guitarfishes - Rhinobatidae
ID: Shades of gray to brown with **large somewhat indistinct spots**; long pointed triangular snout merges into rounded "wings" below eyes. Solitary. Rest on bottom of sand and sea grass beds of bays, along shorelines and around reefs to 60 m.
Localized: Queensland to Victoria in S.E. Australia.



GIANT SHOVELNOSE RAY *Rhinobatos typus*
SIZE: to 270 cm (8 3/4 ft.) Guitarfishes - Rhinobatidae
ID: Light brown with **pale snout**; large triangular head merges with rounded pectoral fins, tapering body with pair of relatively small dorsal fins. Solitary. Sand and mud of coastal waters and continental shelf to 100 m.
Indo-Asian Pacific: India to Indonesia, Australia, New Guinea and Solomon Is.

Rays



COFFIN RAY *Hypnos monopterygium*
SIZE: to 60 cm (2 ft.)
 Coffin Rays - Hypnidae

ID: Brown to gray; large disc followed by a much smaller secondary disc (formed by merged ventral fins) supports a very small tail and pair of tiny dorsal fins. Produces electric shock. Solitary. Rest on sand and mud of coastal waters in 1-220 m.

Localized: Australia only, primarily in temperate and subtropical seas.



BLUE-SPOTTED RIBBONTAIL RAY *Taeniura lymna*
SIZE: disc to 90 cm (3 ft.)
 Stingrays - Dasyatidae

ID: Yellow-brown with numerous blue spots; oval-shaped disc, flattened ribbon-like tail about 1.5 times disc width with 2 spines. Solitary. Rest on sand bottoms, under ledges or in reef holes of coastal, lagoon and outer slopes in 1-20 m.

Indo - Asian Pacific: E. Africa and Red Sea to Australia and New Guinea, north to Philippines.



COWTAIL STINGRAY *Pastinachus sephen*
SIZE: disc to 180 cm (6 ft.)
 Stingrays - Dasyatidae

ID: Uniform dark brown to black; rounded snout and "wing" tips, broad fleshy tail with single spine and flattened tip. Solitary. Rest on sand of estuaries, coastal sand flats and near coral reefs to 60 m.

Indo - Asian Pacific: E. Africa and Red Sea to Australia, north to Philippines and Taiwan.



BLUE-SPOTTED STINGRAY *Dasyatis kuhlii*
SIZE: disc to 50 cm (20 in.)
 Stingrays - Dasyatidae

ID: Brown to olive with blue spots and small black spots; short pointed snout and sharply rounded "wings"; tapering tail as long or longer than diameter of disc and marked with white bars. Solitary. Rest on sand of lagoons and seaward reefs to 90 m.

Indo - Asian Pacific: E. Africa to Australia and Micronesia, north to Japan.



BLACK-BLOTCHED STINGRAY *Taeniura meyeni*
SIZE: disc to 164 cm (5 1/2 ft.)
 Stingrays - Dasyatidae

ID: Gray with variable pattern of dense black spots, blotches and mottling; large ovate disc, short tail about same length as disc with single spine. Solitary. rest on sand bottoms of coastal, lagoon and near outer reefs in 2-500 m.

Indo - Pacific: E. Africa and Red Sea to Australia and E. Pacific, north to S. Japan.

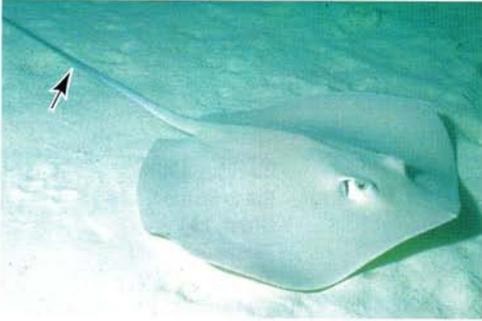


WHITETAIL STINGRAY *Himantura granulata*
SIZE: disc to 100 cm (3 1/2 ft.)
 Stingrays - Dasyatidae

ID: Dark slate gray, often with scattered white spots and pale borders on disc; stingers (usually 2) and tail behind white. Solitary. On sand bottoms of lagoons, bays and protected areas around shallow reefs

Indo - Asian Pacific: Seychelles to N.W. Australia and Great Barrier Reef.

Sharks & Rays



TAHITIEN STINGRAY

Himantura fai

SIZE: disc to 100 cm (3 1/4 ft.)

Stingrays - Dasyatidae

ID: Light gray to pinkish brown, occasionally blotched or mottled; snout bluntly pointed, rounded "wings" and long tapering tail can be nearly 3 times disc diameter. Solitary or form aggregations. Sand and rubble of lagoons to 20 m.

Indo-Pacific: India to Thailand and Society Is. in French Polynesia.



THORNY STINGRAY

Urogymnus asperrimus

SIZE: disc to 100 cm (3 1/4 ft.)

Stingrays - Dasyatidae

ID: Pale gray to dark brown with numerous thorns on surface; scattering of white spots; ovate disc with humped central portion, tail about equal to disc length. Solitary, often partially buried in sand. Coastal, lagoon and outer reefs to 130 m.

Indo-West Pacific: Red Sea and E. Africa to Fiji. - Philippines to Australia.



SPOTTED EAGLE RAY

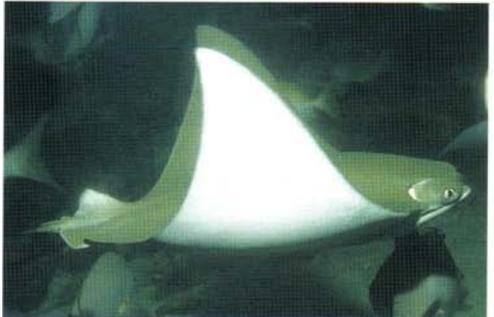
Aetobatus narinari

SIZE: disc to 350 cm (11 1/2 ft.)

Eagle Rays - Myliobatidae

ID: Gray-brown to nearly black with numerous white spots and white underside; nearly triangular disc or "wings" with protruding head and long slender tail with single spine. Solitary. Open water of coastal, lagoon and outer reefs in 1-80 m.

Circumglobal: Tropical and warm temperate seas.



JAVANESE COWNOSE RAY

Rhinoptera javanica

SIZE: disc to 150 cm (5 ft.)

Cownose Rays - Rhinopterae

ID: Brown with white underside; nearly triangular disc or "wings" with protruding head and short slender tail about equal to disc length with single spine. Solitary or form groups. Open coastal waters in 1-50 m.

Indo-Asian Pacific: E. Africa to Indonesia and Philippines, north to S. Japan.



GIANT MANTA

Manta birostris

SIZE: disc to 670 cm (22 ft.)

Mantas - Mobulidae

ID: Blackish, occasionally with some pale or dark patches and white underside (rarely black); large triangular "wings" and protruding snout with mouth on front of head and pair of movable flaps extending from either side, short tail. Solitary or form groups in open water to 24m.

Circumtropical.



DEVIL RAY

Mobula tarapacana

SIZE: disc to 305 cm (10 ft.)

Mantas - Mobulidae

ID: Blackish back rhomboidal disc with graceful pectoral "wings", pair of flaps protruding on either side of mouth; similar to Giant Manta, but mouth on underside instead of front of head. Solitary or groups. Open water of lagoons and outer reefs.

Indo-Pacific: Tropical Indo-Pacific and E. Atlantic Oceans

COMMON NAME INDEX

- A**
- Anemonefish, Barrier Reef, 66
Clark's, 65
Clown, 67
False Clown, 67
McCulloch's, 66
Northwest Australian, 67
Orange, 64
Orange-finned, 64
Pink, 64
Red and Black, 65
Red Saddleback, 66
Saddleback, 66
Sebae, 66
Skunk, 64
Spinecheek, 67
Threeband, 64
Tomato, 65
White-Bonnet, 64
Wide-band, 66
- Angelfish, Ballina, 39
Bicolor, 33
Black Velvet, 39
Black-spot, 40
Blackstriped, 41
Blacktail, 34
Blue-girdled, 36
Blue-ringed, 36
Blue-spotted, 38
Blue-stripe, 37
Blueback Pygmy, 32
Brown Pygmy, 34
Conspicuous, 38
Emperor, 36
Flame, 35
Golden, 35
Golden-spotted, 31
Half-banded, 40
Japanese Pygmy, 32
Japanese Swallow, 41
Keyhole, 33
Lemonpeel, 33
Midnight, 34
Multi-barred, 32
Multicolor Pygmy, 32
Ocellated Pygmy, 32
Orange-faced, 38
Orangehead Pygmy, 32
Orangepeel, 35
Ornate, 39
Pearl-scaled, 34
Pewter, 39
Pinstriped, 41
Purple-mask, 31
Queensland Yellowtail, 38
- Regal, 36
Rusty, 35
Scribbled, 38
Semicircle, 37
Six-banded, 37
Three-spot, 31
Two-spined, 35
Vermiculated, 39
Western Yellowtail, 38
White-belted, 31
White-tailed Pygmy, 34
Yellow Bannerfin, 33
Yellow Pygmy, 33
Yellow-mask, 37
Yellowfin Pygmy, 34
Zebra, 40
- Anthias, Barrier Reef, 144
Bartlett's, 142
Bicolor, 144
Dottyback, 144
Flame, 145
Golden, 148
Hawk, 150
Longfin, 143
Lori's, 150
Luzon, 148
Magenta Slender, 142
Olive, 148
Painted, 145
Princess, 150
Purple, 146
Purple Queen, 145
Randall's, 147
Red Slender, 142
Redfin, 145
Redstripe, 150
Scalefin, 147
Shen's, 144
Silverstreak, 149
Squarespot, 143
Stocky, 146
Sunset, 149
Threadfin, 146
Twospot, 143
Whitespotted, 148
Yellowback, 142
Yellownose Slender, 142
Yellowspotted, 150
- Archerfish, Banded, 135
- B**
- Balloonfish, 421
Bandfish, Yellow-spotted, 287
Bannerfish, Humphead, 28
Longfin, 28
Masked, 28
Pennant, 28
Phantom, 28
Schooling, 28
Singular, 27
- Barracuda, Bigeye, 130
Blackfin, 130
Brass Striped, 130
Great, 130
Pickhandle, 130
Yellowtail, 130
- Barramundi, 163
- Basslet, Blackstriped, 270
Manyline, 270
Redstriped, 270
Striped, 270
- Batfish, Estuary, 368
- Bigeye, Bloch's, 245
Crescent-tail, 245
Glasseye, 244
Whitebar, 244
- Blenny, Allen's, 348
Ambon, 355
Australian, 347
Banda, 349
Barred, 345
Bath's, 349
Beautiful Rockskipper, 354
Bicolor, 350
Bicolor Fangblenny, 343
Blackspot, 350
Blackstripe Fangblenny, 339
Bluedashed Rockskipper, 344
Bluestriped Fangblenny, 343
Brown Coral, 345
Bundoon Fangblenny, 340
Celebes, 356
Chesnut, 346
Clown, 348
Comical, 348
Dashed-line, 344
Deceiver Fangblenny, 342
Delicate, 354
Doublepore Fangblenny, 340
Eared, 345
Elongate Oyster, 344
Eyelined, 351
Eyespot, 350
False Cleanerfish, 339
Fiji Clown, 348
Filamentous, 346
Fine-spotted, 355
Four-fingered, 344
Fourstripe, 352

- Freshwater Fangblenny, 341
 Fringelip, 357
 Gray-barred, 357
 Hairytail Fangblenny, 341
 Highfin Fangblenny, 342
 Imposter Fangblenny, 342
 Jewelled, 356
 Kamohara's Fangblenny, 340
 Lady Musgrave, 346
 Leopard, 354
 Lined, 352
 Lined Fangblenny, 341
 Lined Rockskipper, 355
 Lubbock's, 347
 Mangrove Oyster, 344
 Midas, 351
 Monocle, 347
 Obscure, 356
 Ocular, 352
 Patzner's, 356
 Philippines, 349
 Piano Fangblenny, 342
 Picture Rockskipper, 344
 Pictus, 353
 Red-speckled, 346
 Red-streaked, 347
 Redspotted, 345
 Rippled Rockskipper, 355
 Saddle, 352
 Segmented, 357
 Seychelles, 357
 Shorthead Fangblenny, 341
 Slender Sabretooth, 339
 Smith's Fangblenny, 339
 Smooth Fangblenny, 342
 Snake, 343
 Spoke-eye, 353
 Spotted, 353
 Spotted-row, 347
 Springer's, 346
 Starry, 356
 Streaky Rockskipper, 355
 Striped, 352
 Striped Fangblenny, 341
 Sulawesi Fangblenny, 340
 Sulu Fangblenny, 340
 Tailspot, 352
 Tailspot Fangblenny, 340
 Three-lined, 349
 Tiger, 348
 Tricolor, 351
 Triplespot, 354
 Twin Fangblenny, 339
 Twinspot, 349
 Variable Fangblenny, 342
 White-lined, 351
 White-spotted, 355
 Yaeyama, 353
 Yellowtail, 353
 Yellowtail Fangblenny, 339
 Bonito, Long-jawed, 132
 Oriental, 131
 Boxfish, Largenose, 394
 Shortnose, 393
 Solor, 394
 Spotted, 394
 Whitley's, 395
 Yellow, 395
 Bream, Arabian Monocle, 114
 Blacknape Large-eye, 117
 Blue-lined Large-eye, 117
 Blue-lined Large-eye Bream, 117
 Bluespotted Large-eye, 117
 Bridled Monocle, 113
 Fork-tailed Threadfin, 112
 Gray Large-eye, 117
 Humnose Bigeye, 116
 Lattice Monocle, 113
 Monogram Monocle, 115
 Pale Monocle, 115
 Pearl-streaked Monocle, 115
 Pearly Monocle, 114
 Rainbow Monocle, 113
 Striped Large-eye, 116
 Striped Monocle, 115
 Three-lined Monocle, 113
 Whitecheek Monocle, 116
 Whitestreak Monocle, 114
 Yellowsnout Large-eye, 117
 Yellowstripe Monocle, 116
 Bristletooth, Blue-spotted, 53
 Bluelipped, 52
 Hawaiian, 52
 Lined, 52
 Orangetip, 53
 Twospot, 53
 Brotula, Bearded, 279
 Burrfish, Orbicular, 420
 Spotted, 420
 Yellowspotted, 420
 Butterflyfish, Andaman, 20
 Asian, 22
 Black, 23
 Black & White, 22
 Black & Yellow, 22
 Black-backed, 18
 Blackcap, 21
 Blacklip, 21
 Blue-spot, 20
 Brown-banded, 27
 Chevroned, 17
 Crosshatch, 19
 Dot & Dash, 24
 Dotted, 21
 Easter Island, 23
 Eastern Triangular, 19
 Eclipse, 20
 Eight-banded, 26
 Fourspot, 25
 Goldbarred, 27
 Golden-striped, 27
 Indian, 20
 Indian Redfin, 19
 Indian Vagabond, 17
 Japanese, 23
 Latticed, 21
 Lined, 25
 Lord Howe, 27
 Marquesan, 22
 Meyer's, 26
 Oriental, 21
 Ornate, 26
 Oval-spot, 20
 Pacific Double-saddle, 25
 Panda, 18
 Raccoon, 21
 Redfin, 19
 Reticulated, 23
 Saddleback, 25
 Saddled, 24
 Speckled, 24
 Spot-banded, 24
 Spot-Nape, 25
 Spot-tail, 18
 Spotted, 24
 Tahiti, 23
 Teardrop, 20
 Threadfin, 17
 Three-stripe, 18
 Tinker's, 22
 Triangular, 19
 Vagabond, 17
 West Australian, 17
 White Collar, 26
 Wrought Iron, 23
 Yellow-crowned, 22
 Yellow-dotted, 18
 Yellowback, 19
 Yellowrimmed, 18

C

- Cardinalfish, Allen's, 261
 Ambon, 255
 Banda, 253
 Bandspot, 255
 Banggai, 266
 Bargill, 252
 Barred, 264
 Belted, 261
 Black, 259

Black-nosed, 265
 Blackspot, 260
 Blackstripe, 248
 Blackstriped, 263
 Brown-blotch, 266
 Caviti, 250
 Coastal, 255
 Copperstriped, 249
 Coral, 250
 Duskylined Siphonfish, 267
 Duskytailed, 260
 Eightspine, 264
 Elongate Siphonfish, 267
 Faintbanded, 256
 False Threespot, 257
 Fivelined, 263
 Flower, 251
 Fourlined, 252
 Fragile, 256
 Frostfin, 251
 Gelatinous, 265
 Gilbert's, 259
 Girdled, 261
 Glassy, 265
 Gobbleguts, 258
 Goldbelly, 251
 Gorgonian, 255
 Guam, 253
 Hartzfeld's, 257
 Hookfin, 253
 Humpbacked, 258
 Hyaline, 264
 Intermediate, 262
 Iridescent, 254
 Komodo, 251
 Larval, 256
 Linespot, 254
 Mangrove, 255
 Manylined, 249
 Mimic, 263
 Moluccan, 252
 Narrowlined, 260
 Narrowstripe, 249
 Norfolk, 258
 Obliquebanded, 247
 Ocellated, 259
 Oddscale, 247
 Onespot, 260
 Orangespot, 252
 Orbicular, 266
 Paddlefin, 265
 Pajama, 266
 Pearly, 259
 Pinstripe, 265
 Redspot, 256
 Redstriped, 247
 Reef-flat, 248
 Rifle, 252
 Ringtailed, 251
 Ruby, 247
 Sailfin, 266
 Samoan, 253
 Sangi, 258
 Sevenstripe, 247
 Shortstripe, 249
 Similar, 253
 Singapore, 263
 Sixstripe, 249
 Slender, 265
 Solitary, 261
 Split-banded, 248
 Spotgill, 252
 Spotless, 264
 Spurcheek, 255
 Striped, 248
 Tailspot, 256
 Talbot's, 247
 Threadfin, 259
 Threespot, 257
 Tiger, 262
 Timor, 260
 Tiny, 256
 Toothy, 263
 Twinspot, 260
 Urchin Siphonfish, 267
 Variegated, 264
 Wassinki, 250
 Weedy, 264
 Whitespot, 254
 Wolf, 262
 Yellow, 251
 Yellowbelly, 263
 Yelloweyed, 258
 Yellowlined, 250
 Yellowmouth, 261
 Yellowstriped, 250
 Catfish, Striped, 402
 White-lipped, 402
 Chromis, Allen's, 84
 Ambon, 81
 Barrier Reef, 86
 Bicolor, 83
 Black-axil, 81
 Blackbar, 86
 Blue-axil, 83
 Blue-green, 81
 Darkfin, 82
 Deep Reef, 84
 Doublebar, 85
 Green, 84
 Indian Half-and-Half, 82
 Lined, 85
 Malayan, 82
 Midget, 83
 Ovate, 82
 Pacific Half-and-Half, 82
 Pale-tail, 83
 Pearlspot, 80
 Philippines, 81
 Reef, 80
 Scaly, 84
 Smoky, 85
 Spiny, 86
 Stout-body, 83
 Ternate, 81
 Twinspot, 84
 Vanderbilt's, 85
 Weber's, 85
 West Australian, 80
 White-spotted, 80
 White-tailed, 84
 Yellow, 81
 Yellow-axil, 82
 Yellow-speckled, 80
 Yellow-spotted, 80
 Clingfish, Crinoid, 389
 Red, 389
 Urchin, 389
 Cobia, 402
 Conger Eels, Barred Sand, 446
 Bigeye, 446
 Moustache, 446
 Scheele's, 446
 Convict Blenny, 289
 Coralfish, Beaked, 29
 Big Longnose, 30
 Black Pyramid, 30
 Gray, 30
 Highfin, 29
 Long-beaked, 29
 Longnose, 30
 Margined, 29
 Ocellated, 27
 Orange-banded, 29
 Pyramid, 30
 Two-eyed, 29
 Coris, Batu, 191
 Central Pacific, 191
 Clown, 190
 Goldline, 191
 Pale-barred, 190
 Pixie, 191
 Spottail, 191
 Yellowtail, 189
 Cornetfish, 400
 Cowfish, Longhorn, 393
 Roundbelly, 393
 Thornback, 393

Croucher, Spotted, 385
Cuskeel, West Australian, 279
Cuskeel, Yellow, 279

D

Damsel, Alexander's, 97
Ambon, 89
Andaman, 92
Australian, 93
Azure Demoiselle, 74
Banded, 79
Banggai Demoiselle, 63
Barhead, 70
Batuna's, 62
Big-lip, 67
Black, 69
Black-banded Demoiselle, 63
Black-margined, 96
Blackbar, 71
Blackspot, 94
Blackvent, 78
Bleeker's Demoiselle, 73
Blue, 92
Blue Devil, 75
Blue-spotted, 93
Blueback, 98
Blueline Demoiselle, 72
Bluespot, 97
Bluespot Demoiselle, 76
Borneo, 91
Brackish, 98
Brighteye, 71
Brown, 90
Brown Demoiselle, 88
Burrough's, 90
Carlson's, 68
Charcoal, 97
Chinese Demoiselle, 87
Colin's, 89
Colombo, 91
Coral Demoiselle, 88
Cross's, 68
Darwin, 79
Freshwater Demoiselle, 88
Fusilier, 87
Goldback, 96
Goldbelly, 92
Golden, 62
Goldhead, 99
Goldtail Demoiselle, 74
Gray Demoiselle, 76
Green, 63
Guam Reef, 87
Guardian, 63
Honeyhead, 78
Imitator, 96
Indonesian, 99

Java, 94
Javanese, 69
Jewel, 71
Johnston, 70
King Demoiselle, 73
Komodo, 89
Kuiters' Demoiselle, 76
Lagoon, 71
Lemon, 98
Miller's, 91
Milne Bay Demoiselle, 75
Monarch, 79
Muddy, 93
Multispine, 69
Nagasaki, 96
Neon, 92
Obscure, 94
Ocellated, 68
Onespot Demoiselle, 72
Palespot, 79
Philippine, 96
Phoenix, 71
Princess, 94
Regal Demoiselle, 88
Reid's, 93
Richardson's Reef, 87
Rolland's Demoiselle, 73
Saksono's, 95
Scaly, 96
Silver-streaked, 63
Similar, 92
Sinclair's Demoiselle, 75
Smith's, 99
Smoky, 99
South Seas Devil, 74
Speckled, 95
Springer's Demoiselle, 75
Staghorn, 62
Starck's Demoiselle, 74
Surge Demoiselle, 72
Sweetwater Demoiselle, 89
Talbot's Demoiselle, 73
Ternate, 62
Thai, 91
Threeband Demoiselle, 76
Threespot, 99
Tracey's Demoiselle, 75
Twinspot, 93
Twospot Demoiselle, 76
Violet Demoiselle, 88
Ward's, 99
Wedgespot, 97
White, 78
White-belly, 63
Whiteband, 71
Whitespot, 89
Whitetail, 95
Yellow Crown Demoiselle, 73

Yellow-breasted, 99
Yellowfin Demoiselle, 74
Yellowtail, 68
Yellowtail Demoiselle, 87
Dart, Small-spotted, 128
Dartfish, Bandtail, 283
Blue-barred Ribbongoby, 285
Decorated, 282
Fire, 282
Helfrich's, 282
Interrupted, 284
Lined, 282
Mini, 283
Monofin, 283
Naked, 284
Pearly, 283
Rao's, 284
Robust Ribbongoby, 287
Spottail, 285
Threadfin, 285
Twotone, 284
Yellow-striped, 286
Zebra, 286
Dascyllus, Black-tailed, 77
Humbug, 77
Indian, 78
Orangfin, 77
Reticulated, 78
Three-spot, 77
Yellow-tailed, 77
Devilfish, Banded Spiny Basslet, 278
Blue, 278
Caledonian, 379
Comet, 279
Randall's, 278
Red-tipped Longfin, 278
Spiny, 379
Spotgill Longfin, 279
Spotted, 379
Yellow, 278
Diamondfish, 134
Dolphinfish, 421
Dottyback, Andaman, 273
Bearded, 277
Blackstripe, 276
Borneo, 276
Brownback, 277
Doublestriped, 274
Dusky, 275
Elongate, 277
Firetail, 271
Lined, 270
Longfin, 277
Magenta, 274
Midnight, 276
Multicolored, 272
Oblique-lined, 271

Orangespotted, 276
Pink, 277
Purpletop, 274
Queensland, 272
Raja, 273
Royal, 274
Sailfin, 272
Splendid, 277
Steene's, 275
Surge, 273
Thinstriped, 275
White-tailed, 273
Whitebar, 270
Yellowfin, 274
Yellowtail, 274
Dragonet, Bartels', 291
Blue-spotted, 292
Fingered, 289
Flowery, 292
Goram, 293
Leafy, 292
Little Sand, 292
Long Filament, 292
Mandarinfish, 289
Morrison's, 290
Moyer's, 290
Northern, 293
Ocellated, 291
Orange & Black, 289
Picturesque, 289
Starry, 291
Superb, 292
Drummer, 132
Gray, 132
Lowfin, 132
Stripey, 133
Topsail, 132
Western, 133

E

Emperor, Ambon, 121
Blackblotch, 120
Grass, 120
Longface, 118
Longfin, 121
Longspine, 120
Orange-striped, 119
Ornate, 121
Pinkear, 119
Slender, 121
Smalltooth, 119
Spangled, 118
Spotcheek, 118
sweetlip, 120
Thumbprint, 118
Yellowfin, 120
Yellowtail, 121

F

False Scorpionfish, 166
Filefish, Andaman Mimic, 411
Barred, 410
Bearded, 413
Black-lined, 413
Blackbar, 412
Blackheaded, 412
Bristle-tailed, 414
Broom, 409
Diamond, 411
Fan-bellied, 410
Japanese, 413
Leafy, 411
Longnose, 410
Mimic, 411
Minute, 411
Orangetail, 412
Radial, 414
Rhino, 409
Scrawled, 409
Spectacled, 410
Strapweed, 412
Unicorn, 409
Whitebar, 413
Wirenet, 410
Yelloweye, 413
Flagtail, Barred, 136
Plain, 136
Flashlightfish, Onefin, 401
Twofin, 401
Flathead, Black-banded, 384
Broadhead, 383
Crocodile, 383
Fringelip, 384
Horned, 383
Japanese, 383
Longsnout, 383
Spiny, 384
Spotted, 384
Thorny, 384
Welander's, 384
Flounder, Angler Flatfish, 386
Cockatoo, 386
Largescale, 386
Leopard, 386
Ocellated, 387
Peacock, 386
Threespot, 387
Frogfish, Bandfin, 367
Bandtail, 365
Brackish, 363
Butler's, 368
Cryptic, 367
Freckled, 366
Giant, 363
Hispid, 365

Ocellated, 363
Painted, 364
Randall's, 367
Sargassumfish, 367
Spot-tail, 368
Spotfin, 366
Striped, 366
Warty, 365

Fusilier, Blue and Yellow, 141
Bluestreak, 139
Double-lined, 139
Goldband, 140
Lunar, 141
Mottled, 140
Narrowstripe, 140
Randall's, 140
Ruddy, 139
Scisortail, 141
Slender, 140
Threestripe, 139
Twinstripe, 139
Variable-lined, 141
Wide-band, 140
Yellowback, 141
Yellowtail, 141

G

Garden Eel, Banded, 447
Dusky, 447
Many-toothed, 447
Orange-banded, 446
Spaghetti, 447
Spotted, 447
Taylor's, 447
Ghost Pipefish, Halimeda, 424
Ornate, 423
Robust, 424
Roughsnout, 424
Thin, 425
Velvet, 425
Glassfish, Largespined, 267
Goatfish, Bandtail, 400
Bicolor, 398
Blackspot, 399
Cardinal, 399
Cinnabar, 398
Dash-dot, 399
Doublebar, 397
Freckled, 400
Goldsaddle, 397
Indian, 399
Indian Doublebar, 397
Longbarbel, 399
Manybar, 398
Mimic, 396
Molucca, 400
Red, 396
Rosy, 398

Sidespot, 398
 Striped, 400
 Yellowfin, 396
 Yellowstripe, 396
 Goby, Allen's, 334
 Ambanoro Shrimpgoby, 313
 Arcfin Shrimpgoby, 303
 Atherinoid, 326
 Aurora Shrimpgoby, 301
 Australian Shrimpgoby, 306
 Banded, 315
 Banded Flap-head, 317
 Banded Shrimpgoby, 305
 Barred Shrimpgoby, 305
 Beautiful, 321
 Bigeye Dwarfgoby, 329
 Biglip Ghostgoby, 336
 Black Coral, 335
 Black Shrimpgoby, 307
 Black Spear Shrimpgoby, 310
 Black-barred, 327
 Black-rayed Shrimpgoby, 310
 Blackbelly Pygmygoby, 320
 Blackline Shrimpgoby, 309
 Blackspot Dwarfgoby, 329
 Blacktip Shrimpgoby, 306
 Blotched, 322
 Blue Shrimpgoby, 309
 Blue-speckled Shrimpgoby, 304
 Blue-striped Dwarfgoby, 330
 Blue-tailed Shrimpgoby, 306
 Bluedot, 316
 Bluefin Shrimpgoby, 309
 Bluespot Shrimpgoby, 307
 Bluestreak, 332
 Brick, 327
 Broad-banded Shrimpgoby, 303
 Broadbarred, 325
 Brown-banded Pygmygoby, 318
 Buan, 314
 Caesiura Dwarfgoby, 330
 Candycane Dwarfgoby, 330
 Canine, 326
 Cave Dwarfgoby, 331
 Ceram Coralgoby, 325
 Cheek-streaked, 313
 Cocos, 313
 Common Ghostgoby, 337
 Convict, 327
 Crested, 316
 Crosshatch, 314
 Dartfish, 334
 Decorated, 325
 Dusky Sleepergoby, 328
 Dwarf, 327
 Ear-spot Pygmygoby, 318
 Elongate Ghostgoby, 336
 Eyebar, 323
 Eyebrow Shrimpgoby, 302
 Ferraris', 320
 Filamented, 321
 Five-bar Shrimpgoby, 303
 Five-lined, 324
 Flagfin Shrimpgoby, 309
 Flagtail Shrimpgoby, 301
 Flathead, 336
 Forktail Dwarfgoby, 331
 Freckled, 315
 Freckled Shrimpgoby, 303
 Frogface Sleepergoby, 328
 Giant Shrimpgoby, 303
 Gold-speckled Shrimpgoby, 308
 Gold-streaked Shrimpgoby, 308
 Golden, 327
 Goldenspot, 322
 Gorgeous Shrimpgoby, 304
 Greenband, 332
 Half-banded, 315
 Highfin Shrimpgoby, 311
 Immaculate, 333
 Inexplicable Shrimpgoby, 306
 Lagoon Shrimpgoby, 305
 Lanceolate Shrimpgoby, 313
 Large Whip, 335
 Largetooth, 326
 Lemon Coralgoby, 324
 Loki Whip, 335
 Long-finned, 332
 Long-ray Dwarfgoby, 331
 Magnificent Shrimpgoby, 301
 Majestic Shrimpgoby, 312
 Mangrove, 316
 Marquesas Shrimpgoby, 310
 Melasma Pygmygoby, 318
 Monster Shrimpgoby, 311
 Mud, 333
 Mural, 333
 Nakedhead Shrimpgoby, 302
 Needlespine Coralgoby, 324
 Neon Pygmygoby, 319
 Neophyte, 321
 Nocturn, 314
 Okinawa Dwarfgoby, 329
 Old Glory, 314
 Orange Convict, 327
 Orange-dashed, 333
 Orangespotted, 325
 Orangespotted Goby, 330
 Orangetip, 323
 Ornate, 326
 Ornate Shrimpgoby, 313
 Padang, 313
 Pale Dwarfgoby, 331
 Papilla, 323
 Parva, 333
 Pepperfin Pygmygoby, 317
 Pink-spotted Shrimpgoby, 306
 Puntang, 320
 Queensland Pygmygoby, 317
 Randall's Shrimpgoby, 301
 Rayed Shrimpgoby, 311
 Red & Whitespotted Pygmygoby, 319
 Red-banded Shrimpgoby, 304
 Red-margin Shrimpgoby, 303
 Red-spotted Dwarfgoby, 330
 Red-striped Shrimpgoby, 310
 Redbarred Shrimpgoby, 302
 Redeye Hovering, 334
 Redeyed Shrimpgoby, 312
 Redhead Coralgoby, 325
 Redhead Dwarfgoby, 331
 Redspotted Pygmygoby, 319
 Ringeye Dwarfgoby, 319
 Rubble Dwarfgoby, 330
 Saddled, 317
 Saddled Shrimpgoby, 307
 Sand, 323
 Sand Shrimpgoby, 308
 Shadow, 328
 Short-whiskered, 323
 Shoulderbar, 322
 Sigillata Pygmygoby, 318
 Signal, 328
 Signalfin, 322
 Silverspot Shrimpgoby, 308
 Sixspot, 334
 Skinspot Dwarfgoby, 328
 Slantbar Shrimpgoby, 302
 Snoutspot, 315
 Soft Coral Ghostgoby, 336
 Spangled Shrimpgoby, 312
 Sphynx, 315
 Spikefin, 317
 Spinecheek, 326
 Spotted Shrimpgoby, 301
 Squarebelly Pygmygoby, 319
 Starry, 316
 Steinitz' Shrimpgoby, 302
 Stonycoral Ghostgoby, 336
 Storthynx, 317
 Striped Pygmygoby, 318
 Stripehead Dwarfgoby, 329
 Tangaroa Shrimpgoby, 308
 Target Shrimpgoby, 306
 Threadfin, 321
 Translucent Coral, 334
 Twinspot, 316
 Twospot, 321
 Twostripe, 332
 Twostripe Pygmygoby, 320
 Ventral-barred Shrimpgoby, 307
 Volcano Shrimpgoby, 304
 White-eye Shrimpgoby, 309

- White-lined Coralgoby, 324
 Whitecap Shrimpgoby, 308
 Whitespotted Pygmygoby, 318
 Whitestriped Pygmygoby, 319
 Wide-barred Shrimpgoby, 304
 Widebarred, 334
 Wire Coral, 335
 Wolfsnout, 336
 Yellow & White Striped
 Pygmygoby, 319
 Yellow Coralgoby, 324
 Yellow filament, 332
 Yellow Shrimpgoby, 307
 Yellow-lined Shrimpgoby, 312
 Yellow-spotted Shrimpgoby, 312
 Yellowfin Shrimpgoby, 311
 Yellowhead Dwarfgoby, 331
 Yellownose Shrimpgoby, 310
 Yellowstripe, 314
 Yellowstripe Dwarfgoby, 329
- G**
 Gregory, Australian, 101
 Bluntsnout, 101
 Coral Sea, 100
 Dusky, 101
 Golden, 100
 Gulf, 101
 Japanese, 101
 Pacific, 100
 Western, 100
 Whitebar, 101
- Grouper, Areolate, 159**
 Blacksaddle, 159
 Blacksaddle Coral, 165
 Blacktip, 163
 Bluelined, 155
 Bluespotted, 154
 Brown-marbled, 162
 Brown-spotted, 157
 Camouflage, 160
 Chocolate, 155
 Cloudy, 160
 Coral, 156
 Coral Rock, 158
 Duskytail, 158
 Flagtail, 155
 Foursaddle, 160
 Freckled, 157
 Giant, 162
 Greasy, 159
 Halfmoon, 163
 Harlequin, 155
 Hexagon, 160
 Highfin, 161
 Highfin Coral, 164
 Honeycomb, 159
 Indonesian, 157
 Leopard, 155
 Leopard Coral, 164
- Longfin, 159
 Longspine, 158
 Malabar, 162
 Masked, 157
 Netfin, 160
 One-blotch, 160
 Orange-spotted, 162
 Palemargin, 158
 Peacock, 154
 Potato, 162
 Redmouth, 163
 Roving Coral, 165
 Saddle, 156
 Slender, 154
 Snubnose, 158
 Speckled, 158
 Spotted Coral, 164
 Squaretail Coral, 165
 Strawberry, 155
 Surge, 157
 Tomato, 156
 Twinspace, 159
 Wavy-lined, 162
 Whiteblotched, 161
 Whitespotted, 161
 Whitestreaked, 161
- Grunter, Crescent-banded, 134**
 Silver, 134
- Gudgeon, Deep-reef, 339**
- Gurnard, Helmut, 369**
- H**
 Halfbeak, Dussumier's, 135
 Estuarine, 135
- Hawkfish, Arc-eye, 168**
 Dwarf, 167
 Flame, 168
 Freckled, 169
 Golden, 167
 Halfspotted, 169
 Longnose, 166
 Lyretail, 168
 Nisus, 168
 Pixy, 167
 Splendid, 168
 Threadfin, 167
 Twinspace, 167
 Yellow, 169
- Hogfish, Axilspot, 228**
 Blackbelt, 229
 Blackfin, 229
 Crescent-tail, 231
 Diana's, 230
 Goldspot, 230
 Longnose, 230
 Lyretail, 230
 Neill's, 228
- Redstripe, 231
 Saddleback, 229
 Twospot Slender, 230
- J**
Jack, Almaco, 127
 Amberjack, 127
 Barcheek Trevally, 125
 Bigeye Trevally, 126
 Black, 126
 Bludger Trevally, 124
 Blue Trevally, 126
 Bluefin Trevally, 126
 Brassy Trevally, 126
 Coachwhip Trevally, 125
 Giant Trevally, 127
 Gold-spotted Trevally, 124
 Golden Trevally, 128
 Orange-spotted Trevally, 125
 Silver Trevally, 127
 Whitetongue, 126
 Yellow-spotted Trevally, 125
 Yellowtail Amberjack, 127
- Jawfish, Andaman, 298**
 Brownblotch, 299
 Chestnut, 299
 Darwin, 298
 Dendritic, 299
 Papuan, 298
 Solor, 298
 Variable, 299
 Wass's, 298
 Yellowbarred, 299
- L**
Lionfish, Bleeker's, 371
 Clearfin, 370
 Cleartail, 371
 Common, 370
 Gurnard, 371
 Indian, 370
 Kodipungi, 371
 Longspine, 371
 Mombasa, 370
 Pygmy, 372
 Shortfin, 369
 Spotfin, 370
 Twinspace, 369
 Zebra, 371
- Lizardfish, Blackblotch, 297**
 Clearfin, 296
 Clouded, 296
 Redmarbled, 299
 Reef, 297
 Slender, 296
 Twospot, 297
- Lyretail, White-edged, 164**
 Yellow-edged, 164

M

Mackerel, Double-lined, 131
 Narrow Barred Spanish, 131

Manta, Devil Ray, 457
 Giant, 457

Milkfish, 129

Moorish Idol, 55

Moray, Australian, 440
 Barred, 436
 Barred Snake, 443
 Barred-fin, 441
 Bentjaw, 435
 Blackspotted, 439
 Chlamydatus, 437
 Dragon, 435
 Dwarf, 437
 Enigmatic, 438
 Fimbriated, 438
 Finespeckled, 436
 Giant, 439
 Giant Estuarine, 442
 Hookjaw, 435
 Indian Mud, 440
 Largehead Snake, 443
 Latticetail, 437
 Long-jawed, 441
 Masked, 437
 Minor, 438
 Mosaic, 435
 Okinawan Snake, 442
 Palechin, 437
 Peppered, 442
 Reticulated, 440
 Ribbon, 441
 Slendertail, 438
 Snowflake, 436
 Spotted, 439
 Stout, 440
 Tiger Snake, 442
 Undulated, 440
 Viper, 436
 White Ribbon, 441
 White-eyed, 442
 White-margined, 437
 Whitelip, 440
 Whitemouth, 439
 Yellow-headed, 438
 Yellowmargin, 439
 Yellowmouth, 439
 Zebra, 442

Mullet, Acute-jawed, 133
 Diamond-scale, 133
 Dwarf, 133
 Fringelip, 133

N

Needlefish, Crocodile, 135
 Keeltail, 135
 Reef, 135

P

Parrotfish, Bicolor, 179
 Bleeker's, 175
 Blue-barred, 182
 Bluepatch, 181
 Bower's, 176
 Bridled, 181
 Bullethead, 176
 Bumphead, 187
 Chameleon, 181
 Dark-capped, 180
 East Indies, 182
 Eclipse, 184
 Festive, 187
 Filament-fin, 186
 Greenhead, 175
 Greenlip, 187
 Greensnout, 184
 Greenthroat, 182
 Highfin, 187
 Indian, 175
 Japanese, 178
 Longnose, 179
 Marbled, 178
 Marquesan, 187
 Pacific Longnose, 179
 Palenose, 183
 Quoy's, 187
 Raggedtooth, 178
 Red, 185
 Redlip, 185
 Roundhead, 177
 Stareye, 178
 Steephead, 177
 Surf, 183
 Swarthy, 186
 Tan-faced, 178
 Tricolor, 185
 Violet-lined, 183
 Yellow-barred, 180
 Yellowbar, 184

Pearl-perch, Threadfin, 137

Pearlfish, Silver, 298

Perchlet, Chequered, 151
 Dwarf, 151
 Longfin, 151
 Painted, 151
 Redblotch, 151

Pilotfish, 128

Pineapplefish, 403

Pinecone-fish, 403

Pipefish, Banded Messmate, 426
 Barred, 425
 Black-breasted, 427
 Bluestripe, 427
 Broad-banded, 429
 Brock's, 429
 Broken-bands, 426
 Brown-banded, 425
 Cleaner, 428
 Double-ended, 430
 Estuary, 430
 Flagtail, 428
 Foxy, 430
 Glittering, 430
 Honshu, 428
 Many-banded, 428
 Messmate, 426
 Mushroom Coral, 431
 Network, 426
 Orange-banded, 428
 Orange-spotted, 427
 Pygmy, 430
 Reeftop, 427
 Ringed, 428
 Samoan, 429
 Schultz's, 427
 Short-bodied, 425
 Short-tailed, 431
 Shortnose, 430
 Slender, 431
 Yellowspotted, 426

Pipehorse, Shortpouch Pygmy, 425

Pompano, African, 124
 Snubnose, 128

Ponyfish, Orangefin, 137

Porcupinefish, 421
 Black-blotched, 421
 Blacklip, 421

Puffer, Blackspotted, 416
 Blue-spotted, 414
 Guineafowl, 416
 Immaculate, 415
 Map, 415
 Milkspotted, 420
 Reticulated, 414
 Shortfin, 420
 Silver, 420
 Star, 415
 Striped, 415
 White-spotted, 414

Q

Queenfish, Double-spotted, 128
 Talang, 128

R**Rabbitfish, Barred, 56**

- Bicolor, 59
- Blackeye, 57
- Coral, 57
- Dusky, 58
- Fine-spotted, 57
- Forktail, 58
- Foxface, 59
- Gold-spotted, 57
- Golden, 56
- Honeycomb, 57
- Java, 56
- Lined, 56
- Magnificent, 59
- Masked, 56
- Onespot, 59
- Randall's, 57
- Scribbled, 58
- Vermiculate, 58
- Virgate, 56
- White-spotted, 58

Rainbow Runner, 127**Ray, Blue-spotted, 456**

- Blue-spotted Ribbontail, 456
- Coffin, 456
- Giant Guitarfish, 455
- Giant Shovelnose, 455
- Javanese Cownose, 457
- Long-snout Shovelnose, 455
- Shark, 455
- Spotted Eagle, 457

Razorfish, Blackbarred, 234

- Celebes, 234
- Chiseltooth, 234
- Collared, 232
- Fivefinger, 233
- Knife, 231
- Peacock, 233
- Seagrass, 231
- Whitepatch, 232

Remora, 402**S****Sand Bass, 134****Sand Diver, Goldbar, 286**

- Spotted, 286
- Threadfin, 286

Sandperch, Blackfin, 296

- Harlequin, 294
- Java, 295
- Latticed, 295
- Nosestripe, 295
- Phoenix, 294
- Red-barred, 294
- Red-spotted, 295
- Reticulated, 294

- Speckled, 294
- Sharpnose, 294
- Spotted, 294
- Whitestripe, 296
- Yellowtail, 295

Scad, Bigeye, 129

- Mackerel, 129
- Oxeye, 129
- Russell's Mackerel, 129
- Yellowstripe, 129

Scat, Banded, 59

- Spotted, 59

Scorpionfish, Ambon, 372

- Bandtail, 375
- Barchin, 378
- Blotchfin, 374
- Cheekspot, 374
- Decoy, 373
- Devil, 375
- Flasher, 376
- Guam, 374
- Hairy, 374
- Lacey, 372
- Leaf, 378
- Mauritius, 377
- Mozambique, 374
- Paddle-flap, 373
- Painted, 374
- Papuan, 376
- Poss's, 377
- Raggy, 377
- Shortfin, 375
- Tasseled, 376
- Weedy, 373
- Yellow-spotted, 377

Sea Moth, Dragon, 368

- Slender, 368

Seabream, River, 121**Seahorse, Colman's Pygmy, 432**

- Common, 432
- Estuary, 433
- Flores, 433
- Gorgonian Pygmy, 432
- Moluccan, 433
- Pygmy, 432
- Smooth, 433
- Thorny, 431
- Tigertail, 433
- Zebra-snout, 432

Sergeant, Banded, 61

- Bengal, 61
- Black-tail, 61
- Blackspot, 61
- Green, 62
- Indo-Pacific, 62
- Scissortail, 61
- Yellowtail, 61

Shark, Blacktip, 454

- Blacktip Reef, 454
- Blotchy Swell, 452
- Brown-banded Bamboo, 450
- Bull, 454
- Coral Cat, 452
- Dusky, 453
- Epaulette, 451
- Galapagos, 453
- Gray Reef, 453
- Great Hammerhead, 455
- Hooded Carpet, 451
- Milne Bay Epaulette, 451
- Raja Epaulette, 451
- Sandbar, 453
- Scalloped Hammerhead, 455
- Sicklefin Lemon, 454
- Silky, 454
- Silvertip, 453
- Speckled Carpet, 452
- Tawny Nurse, 452
- Tiger, 453
- Whale, 452
- Whitespotted Bamboo, 451
- Whitetail Reef, 454
- Zebra, 452

Sharksucker, 402**Shrimpfish, Rigid, 401**

- Razorfish, 401

Shrimpgoby, Ambanoro, 313

- Arcfin, 303
- Aurora, 301
- Australian, 305
- Banded, 305
- Barred, 305
- Black, 307
- Black Spear, 310
- Black-rayed, 310
- Blackline, 309
- Blacktip, 306
- Blue, 309
- Blue-speckled, 304
- Blue-tailed, 306
- Bluefin, 309
- Bluespot, 307
- Broad-banded, 303
- Eyebrow, 302
- Five-bar, 303
- Flagfin, 309
- Flagtail, 301
- Freckled, 303
- Giant, 303
- Gold-speckled, 308
- Gold-streaked, 308
- Gorgeous, 304
- Highfin, 311
- Inexplicable, 306
- Lagoon, 305

Lanceolate, 313
 Magnificent, 301
 Majestic, 312
 Marquesas, 310
 Monster, 311
 Nakedhead, 302
 Ornate, 313
 Pink-spotted, 306
 Randall's, 301
 Rayed, 311
 Red-banded, 304
 Red-margin, 303
 Red-striped, 310
 Redbarred, 302
 Redeyed, 312
 Saddled, 307
 Sand, 308
 Silverspot, 308
 Slantbar, 302
 Spangled, 312
 Spotted, 301
 Steinitz, 302
 Tangaroa, 308
 Target, 306
 Ventral-barred, 307
 Volcano, 304
 White-eye, 309
 Whitecap, 308
 Wide-barred, 304
 Yellow, 307
 Yellow-lined, 312
 Yellow-spotted, 312
 Yellowfin, 311
 Yellownose, 310
 Signalfish, Pearly, 286
 Silver Biddy, Blacktip, 136
 Deep-bodied, 136
 Longtail, 136
 Oblong, 136
 Silverside, Robust, 137
 Slender, 137
 Striped, 137
 Snake Eel, Banded, 444
 Black-finned, 445
 Black-striped, 444
 Blacksaddle, 445
 Convict, 444
 Crocodile, 443
 Large-spotted, 445
 Longfin, 446
 Marbled, 444
 Napoleon, 445
 Reptilian, 443
 Saddled, 444
 Sharpsnout, 443
 Spotted, 444
 Stargazer, 443
 Snakefish, 297
 Snapper, Bengal, 104
 Bigeye, 105
 Black, 108
 Black-banded, 107
 Blackspot, 104
 Blacktail, 106
 Bluestripe, 104
 Brownstripe, 106
 Button, 105
 Checkered, 107
 Chinamanfish, 109
 Dark-tailed, 106
 False Fusilier, 109
 Five-lined, 104
 Golden-lined, 105
 Green Jobfish, 110
 Humpback, 103
 Indian, 105
 Longspot, 104
 Lunartail, 106
 Malabar, 103
 Mangrove Red, 106
 Midnight, 108
 Onespot, 105
 Pinjalo, 108
 Pygmy, 106
 Red, 107
 Red Emperor, 103
 Russell's, 107
 Sailfin, 109
 Slender Pinjalo, 109
 Smalltooth Jobfish, 110
 Spanish Flag, 104
 Timor, 103
 Two-spot, 105
 Yellowtail False Fusilier, 109
 Soapfish, Arrowhead, 165
 Doublebanded, 165
 Mottled, 166
 Ocellated, 166
 Six-lined, 166
 Spotted, 166
 Soldierfish, Big-scale, 241
 Blotcheye, 240
 Brick, 240
 Double-tooth, 239
 Earl's, 241
 East Indian, 239
 Epauvette, 240
 Roughscale, 239
 Scarlet, 239
 Shadowfin, 240
 Splendid, 240
 Violet, 240
 Whitespot, 241
 Whitetip, 239
 Yellowfin, 239
 Sole, Banded, 388
 Blackspotted, 387
 Carpet, 388
 Juvenile, 388
 Kai, 387
 Margined, 388
 Peacock, 389
 Spotted-tail, 389
 Spadefish, Batavia, 43
 Circular, 42
 Golden, 42
 Longfin, 42
 Pinnate, 43
 Shortfin, 43
 Squirrelfish, Blackfin, 241
 Blackspot, 242
 Clearfin, 241
 Crown, 242
 Dwarf, 243
 Gold-lined, 241
 Peppered, 243
 Pink, 243
 Redcoat, 244
 Sabre, 244
 Samurai, 242
 Smallmouth, 242
 Spotfin, 241
 Tahitian, 243
 Tailspot, 243
 Three-spot, 242
 Violet, 244
 Yellow-striped, 243
 Stargazer, Reticulate, 385
 Whitemargin, 385
 Stingray, Black-blotched, 456
 Cowtail, 456
 Tahitian, 457
 Thorny, 457
 Whitetail, 456
 Stonefish, Blue-eyed Stingfish, 380
 Dampier, 380
 Estuarine, 380
 Many-barbed Stingfish, 381
 Painted Stingfish, 380
 Reef, 380
 Sunfish, Ocean, 421
 Surgeonfish, Blackspine, 49
 Blackstreak, 48
 Blue-lined, 47
 Brown, 50
 Dark, 47
 Eyestripe, 48
 Fine-lined, 49
 Indian Mimic, 46
 Japanese, 47
 Mimic, 46

Orange-socket, 49
Orangeband, 45
Pale-lipped, 49
Palette, 50
Powderblue, 47
Ringtail, 49
Roundspot, 48
Striped, 48
Tennent's, 49
White-freckled, 50
White-spotted, 45
Whitebar, 46
Whitefin, 50
Whitetail, 48
Yellowfin, 48
Yellowmask, 47
Sweeper, Copper, 403
 Golden, 404
 Mangula, 403
 Silver, 403
 Vanikoro, 403
Sweetlips, Blubberlip, 173
 Diagonal-banded, 170
 Dotted, 172
 Giant, 171
 Gold-spotted, 171
 Goldstriped, 170
 Indonesian, 173
 Many-lined, 170
 Many-Spotted, 172
 Oriental, 170
 Ribbon, 171
 Silver, 173
 Somber, 172
 Striped, 171

T

Tang, Achilles, 45
 Brushtail, 51
 Convict, 50
 Indian Sailfin, 51
 Longnose, 50
 Pacific Sailfin, 51
 Yellow, 51
Tarpon, Indo-Pacific, 134
Threadfin, Sixfeeler, 134
Tilefish, Blue Blanquillo, 288
 Bluehead, 288
 Chlupaty's, 287
 Flagtail Blanquillo, 288
 Pale, 287
 Purple, 288
 Redlined, 288
 Stocky, 287
 Yellow, 287
Toadfish, Banded, 368

Toby, Ambon, 418
 Bicolored, 419
 Black-saddled, 419
 Clown, 419
 Crown, 419
 Fingerprint, 417
 Honeycomb, 418
 Lantern, 418
 Leopard, 418
 Papuan, 417
 Rivulated, 419
 Shy, 419
 Spotted, 417
 Tyler's, 418
 Whitebelly, 417
Toothpony, 137

Triggerfish, Black, 408
 Blackpatch, 407
 Blue, 405
 Bridled, 406
 Clown, 404
 Crosshatch, 407
 Flagtail, 406
 Gilded, 408
 Halfmoon, 407
 Indian, 408
 Oceanic, 409
 Orange-lined, 405
 Picasso, 407
 Pinktail, 408
 Redtooth, 408
 Scythe, 406
 Starry, 404
 Titan, 404
 Wedgetail, 407
 Yellowmargin, 405

Triplefin, Andaman, 358
 Blackspot, 358
 Helen's, 357
 Highhat, 358
 Largemouth, 359
 Miracle, 358
 Pale-spotted, 358
 Philippine, 358
 Redfin, 359
 Rhinoceros, 359
 Striped, 359
 Vulcan, 359
 Yelloweye, 357

Trumpetfish, 401

Tuna, Dogtooth, 131
 Yellowfin, 131

Turretfish, Humpback, 396
 Smallspine, 396

Tuskfish, Anchor, 195
 Baldchin, 194

Blackspot, 194
Blackwedge, 195
Blue, 194
Darkstripe, 195
Graphic, 194
Harlequin, 194
Singapore, 195
whitespot, 195
Whitestripe, 195

U

Unicornfish, Barred, 55
 Bignose, 55
 Blackspine, 54
 Bluespine, 54
 Bluetail, 53
 Gray, 53
 Humpback, 54
 Humpnose, 55
 Orangespine, 55
 Sleek, 54
 Slender, 53
 Spotted, 54
 Whitemargin, 54

V

Velvetfish, Lembeh, 385
 Phantom, 385

W

Wahoo, 131
Waspfish, Black, 382
 Cockatoo, 381
 Estuary, 382
 Longfin, 378
 Longspine, 382
 Sailfin, 382
 Spiny, 381
 Whiteface, 381
Whiptail, Butterfly, 111
 Coral, 112
 Double, 110
 Japanese, 111
 Northwest Australian, 111
 Paradise, 111
 Small-toothed, 111
 Striped, 112
 Three-striped, 112
 White-shouldered, 112
 Yellow-striped, 110
Wobbegong, Northern, 450
 Ornate, 450
 Spotted, 450
 Tasselled, 450
Wormfish, Curious, 285
 Onespot, 285
 Onestripe, 285
 Orangestripe, 285

Wrasse, Allen's Tubelip, 235
Angular Flasher, 203
Arenatus, 221
Argus, 216
Atavia, 227
Axilspot, 216
Backstriped, 196
Barred Thicklip, 208
Bicolor Cleaner, 237
Bird, 209
Black, 204
Black Spot, 217
Blackspot Cleaner, 237
Black-eared, 215
Blackeye Thicklip, 208
Blackmargined, 221
Blue Flasher, 202
Blue-spotted, 206
Bluesided, 196
Bluestreak Cleaner, 237
Canary, 212
Canarytop, 212
Candystripe, 210
Celebes, 220
Chain-lined, 213
Checkerboard, 218
Choat's, 204
Cigar, 210
Cockerel, 228
Coral Sea, 198
Cosmetic, 219
Crescent, 223
Cryptic, 228
Cutribbon, 225
Disappearing, 225
Dotted, 199
Double Header, 189
Dusky, 217
Eightstripe, 225
Elegant, 207
Exquisite, 199
Feminine, 206
Filamented Flasher, 202
Fivestripe, 222
Flagfin, 228
Floral, 193
Fourline, 224
Fourstripe, 226
Geographic, 207
Goldstripe, 214
Goldstripped, 207
Green-headed, 214
Greenback, 217
Greyhead, 213
Humphead, 193
Hybrid Flasher, 203
Indian Pinstriped, 214

Irian Jaya, 197
Jansen's, 221
Javan, 197
Kaleidios, 227
Kuiters, 203
Ladder, 222
Leopard, 204
Lined, 205
Linedcheeked, 220
Lubbock's, 199
Magenta-streaked, 198
Mccosker's Flasher, 203
Micronesian Tubelip, 236
Midget, 226
Morrison's, 201
Nebulous, 217
New Guinea, 207
Northern Tubelip, 236
Orangeback, 201
OrangeHead, 204
Oriental, 220
Ornate, 219
Pale, 218
Pastel Ring, 211
Pastel-green, 212
Peacock, 200
Pennant, 197
Philippine, 192
Pink Flasher, 203
Pinstriped, 213
Purple-Lined, 202
Randall's, 202
Red-margined, 198
Redback, 197
Redback Ring, 211
Redbreasted, 193
Redfin, 198
Redlip Cleaner, 236
Redhead, 215
Redshoulder, 224
Redspot, 192
Redtailed, 200
Rhomboid, 202
Ring, 210
Ringtail, 221
Rockmover, 231
Royal, 227
Rust-banded, 192
Samoa, 198
Seagrass, 219
Sharpnose, 209
Shoulderspot, 209
Sixbar, 223
Sixstripe, 226
Slender, 221
Slingjaw, 208
Smalltail, 227

Snooty, 193
Solor, 201
Southern, 225
Southern Tubelip, 236
Sunset, 222
Surge, 223
Tailspot, 225
Three-blotch, 218
Three-line, 224
Threespot, 215
Torpedo, 226
Tripletail, 192
Tubelip, 234
Two-spotted, 219
Two-tone, 223
Twospot, 220
Twotone, 216
Walindi, 200
Wedge-tailed, 235
Weedy Surge, 218
Western King, 190
White-spotted, 205
Whitebanded Pygmy, 209
Wisata, 219
Yellow-breasted, 206
Yellowband, 197
Yellowface, 214
Yellowfin Fairy, 198
Yellowfin Flasher, 203
Yellowtail, 205
Yellowtail Tubelip, 235
Zigzag, 215

SCIENTIFIC NAME INDEX

- A**
- Abalistes stellatus*, 404
- Ablabys macracanthus*, 381
taenianotus, 381
- Abudedefduf bengalensis*, 61
lorenzi, 61
notatus, 61
septemfasciatus, 61
sexfasciatus, 61
sordidus, 61
vaigiensis, 62
whitleyi, 62
- Acanthocephala breviata*, 287
- Acanthochromis polyacanthus*, 86
- Acanthocybium solandri*, 131
- Acanthopagrus berda*, 121
- Acanthurus achilles*, 45
albipectoralis, 50
auranticavus, 49
bariene, 48
blochii, 49
dussumieri, 48
fowleri, 49
grammoptilus, 49
guttatus, 45
japonicus, 47
leucocheilus, 49
leucopareius, 46
leucosternon, 47
lineatus, 48
maculiceps, 50
mata, 47
nigricans, 47
nigricaudus, 48
nigrofuscus, 50
nigroris, 47
nubilus, 47
olivaceus, 45
pyroferus, 46
tennenti, 49
thompsoni, 48
triestegus, 50
tristis, 46
xanthopterus, 48
- Acentrogobius janthinopterus*, 316
- Acentronura breviperula*, 425
- Acreichthys radiatus*, 414
tomentosus, 414
- Aeoliscus strigatus*, 401
- Aethaloperca rogae*, 163
- Aetobatus narinari*, 457
- Aioliops megastigma*, 284
- Alectis ciliaris*, 124
- Altrichthys azurelineatus*, 63
curatus, 63
- Aluterus monoceros*, 409
- scriptus*, 409
- Amanses scopas*, 409
- Ambassis macracanthus*, 267
- Amblycirrhitus bimacula*, 167
- Amblyeleotris arcupinna*, 303
diagonalis, 302
fasciata, 304
fontanesii, 303
gymnocephala, 302
latifasciata, 304
periophthalmia, 303
rhyax, 304
steinitzii, 302
wheeleri, 304
- Amblyglyphidodon curacao*, 62
indicus, 63
leucogaster, 63
ternatensis, 62
- Amblygobius buanensis*, 314
bynoensis, 315
decussatus, 314
esakiae, 315
hectori, 314
nocturnus, 314
phalaena, 315
rainfordi, 314
semicinctus, 315
sphinx, 315
- Amblypomacentrus*
breviceps, 63
clarus, 63
- Amphichaetodon howensis*, 27
- Amphiprion akallopisos*, 64
akindynos, 66
biaculeatus, 67
chrysopterus, 64
clarkii, 65
ephippium, 66
frenatus, 65
latezonatus, 66
leucokranos, 64
mccullochi, 66
melanopus, 65
ocellaris, 67
percula, 67
perideraion, 64
polymnus, 66
rubrocinctus, 67
sandaracinos, 64
sebae, 66
tricinctus, 64
- Anacanthus barbatus*, 413
- Anampses*
caeruleopunctatus, 206
elegans, 207
femininus, 206
geographicus, 207
- lennardi*, 207
lineatus, 205
meleagrides, 205
neoguinaicus, 207
twistii, 206
- Anaora tentaculata*, 292
- Andamia tetradactylus*, 344
- Anomalops katoptron*, 401
- Antennarius biocellatus*, 363
coccineus, 366
commersoni, 363
cryptacanthus, 367
dorehensis, 365
hispidus, 365
maculatus, 365
nummifer, 366
pictus, 364
randalli, 367
striatus, 366
tuberosus, 367
- Anyperodon*
leucogrammicus, 154
- Aphareus furca*, 110
- Apistus carinatus*, 378
- Apogon amboinensis*, 255
angustatus, 248
apogonides, 251
aureus, 251
bandanensis, 253
capricornis, 246
cavitiensis, 250
ceramensis, 255
chrysopomus, 252
chrysotaenia, 250
cladophilus, 255
compressus, 248
cookii, 249
crassiceps, 247
cyanosoma, 250
dispar, 254
emiornatus, 247
endekataenia, 249
evermanni, 247
exostigma, 254
fleurieu, 251
fraenatus, 255
fragilis, 256
franssedai, 256
fuscus, 253
gilberti, 259
griffini, 253
guamensis, 253
hartzfeldii, 257
hoevenii, 251
holotaenia, 249
hyalosoma, 258
kallopterus, 254
kiensis, 252

- komodoensis*, 251
lateralis, 255
leptacanthus, 259
lineomaculatus, 254
luteus, 251
margaritophorus, 247
melas, 259
moluccensis, 252
monospilus, 258
multilineatus, 249
nanus, 256
neotes, 256
nigrofasciatus, 248
norfolcensis, 258
notatus, 246
novemfasciatus, 247
ocellatus, 259
ocellicaudus, 256
oederleini, 249
parvulus, 256
perlitus, 259
properupta, 250
quadrifasciatus, 252
rhodopterus, 257
rubrimacula, 252
rueppellii, 258
sealei, 252
selas, 255
taeniophorus, 248
talboti, 247
thermalis, 258
timorensis, 260
trimaculatus, 257
uninotatus, 260
wassinki, 250
- Apolemichthys griffisi*, 31
trimaculatus, 31
xanthopunctatus, 31
- Aprion virescens*, 110
- Apterichtus klazingai*, 443
- Aptychotrema rostrata*, 455
- Archamia biguttata*, 260
fucata, 260
goni, 261
leai, 261
macroptera, 260
melasma, 260
zosterophora, 261
- Ariosoma anagoides*, 446
- Arothron caeruleopunctatus*, 414
hispidus, 414
immaculatus, 415
manilensis, 415
mappa, 415
meleagris, 416
nigropunctatus, 416
reticularis, 414
stellatus, 415
- Aseraggodes kaianus*, 387
melanostictus, 387
Aseraggodes sp., 388
- Aspidontus dussumieri*, 339
taeniatus, 339
- Assessor flavissimus*, 278
macneilli, 278
randalli, 278
- Asterorhombus fijiensis*, 386
- Asterropteryx bipunctatus*, 316
ensiferus, 316
semipunctatus, 316
striatus, 316
- Atelomycterus marmoratus*, 452
- Atherinomorus*
endrachtensis, 137
lacunosus, 137
- Atrosalarias fuscus*, 345
- Aulostomus chinensis*, 401
- B**
- Balistapus undulatus*, 405
- Balistoides conspicillum*, 404
viridescens, 404
- Belonepterygium*
fasciolatum, 278
- Belonoperca chabanaudi*, 165
- Blenniella gibbifrons*, 344
interrupta, 344
paula, 344
periophthalmus, 345
- Bodianus anthioides*, 230
axillaris, 228
bilunulatus, 229
bimaculatus, 230
diana, 230
loxozonus, 229
mesothorax, 229
opercularis, 231
perditio, 230
prognathus, 230
- Bothus mancus*, 386
pantherinus, 386
- Brachypterois serrulata*, 372
- Brachysomophis*
cirrocheilus, 443
crocodilinus, 443
henshawi, 443
- Brotula multibarbata*, 279
- Bryaninops amplus*, 335
erythroptis, 334
loki, 335
natans, 334
tigris, 335
yongei, 335
- Bulbometopon muricatum*, 187
- C**
- Caesio caeruleaurea*, 141
cuning, 141
lunaris, 141
- teres*, 141
varilineata, 141
xanthonota, 141
- Callechelys catostoma*, 444
marmorata, 444
- Callionymus keeleyi*, 292
parvus, 292
superbus, 292
- Callogobius clitellus*, 317
hasseltii, 317
- Calloplelesops altivelis*, 279
- Calotomus carolinus*, 178
spindens, 178
- Calumia profunda*, 337
- Cantherhines dumerili*, 410
fronticinctus, 410
pardalis, 410
- Canthidermis maculatus*, 409
- Canthigaster amboinensis*, 418
bennetti, 417
callisterna, 419
compressa, 417
coronata, 419
epilampra, 418
janthinoptera, 418
leoparda, 418
ocellicincta, 419
papua, 417
rivulata, 419
smithae, 419
solandri, 417
tyleri, 418
valentini, 419
- Caracanthus maculatus*, 385
- Carangoides bajad*, 125
fulvoguttatus, 124
gymnostethus, 124
oblongus, 125
orthogrammus, 125
plagiotaenia, 125
- Carangoides ferdau*, 126
- Caranx ignobilis*, 127
melampygus, 126
papuensis, 126
sexfasciatus, 126
ugubris, 126
- Carcharhinus albimarginatus*, 453
amblyrhynchus, 453
falciformis, 454
galapagensis, 453
leucas, 454
limbatus, 454
melanopterus, 454
obscurus, 453
plumbeus, 453
- Centriscus scutatus*, 401
- Centrogenys vaigiensis*, 166
- Centropyge aurantius*, 35
bicolor, 33

- bispinosus*, 35
colini, 32
eibli, 34
ferrugatus, 35
flavicauda, 34
flavipectoralis, 34
flavissimus, 33
heraldi, 33
hotumatua, 32
interruptus, 32
loricula, 35
multicolor, 32
multispinis, 34
nigricellus, 32
nox, 34
shepardi, 35
tibicen, 33
vroliki, 34
woodheadi, 33
- Cephalopholis argus*, 154
boenak, 155
cyanostigma, 154
formosa, 155
leopardus, 155
microprion, 157
miniata, 156
polleni, 155
sexmaculata, 156
sonnerati, 156
spiloparaea, 155
urodeta, 155
- Cephaloscyllium umbratile*, 452
Ceratobregma helenae, 357
Cercamia eremia, 261
Cetoscarus bicolor, 179
Chaetodermis penicilligera, 411
Chaetodon adiergastos, 18
argentatus, 22
assarius, 17
aureofasciatus, 27
auriga, 17
auripes, 21
baronessa, 19
bennetti, 20
burgessi, 22
- Chaetodon*, 26
citrinellus, 24
collare, 26
daedalma, 23
declivis, 22
decussatus, 17
ephippium, 24
falcula, 25
flaviostris, 23
flavocoronatus, 22
guentheri, 18
guttatissimus, 24
interruptus, 20
kleinii, 21
lineolatus, 25
litus, 23
- lunula*, 21
lunulatus, 19
melannotus, 18
mertensii, 19
meyersi, 26
modestus, 27
nippon, 23
ocellicaudus, 18
ornatissimus, 26
oxycephalus, 25
pelewensis, 24
plebeius, 20
punctatofasciatus, 24
quadrimaculatus, 25
rafflesi, 21
rainfordi, 27
reticulatus, 23
selene, 18
semeion, 21
smithi, 22
speculum, 20
tinkeri, 22
triangulum, 19
trichrous, 23
tricinctus, 18
trifascialis, 17
trifasciatus, 19
ulietensis, 25
unimaculatus, 20
vagabundus, 17
wiebeli, 21
xanthurus, 19
- Chaetodontoplus ballinae*, 39
caeruleopunctatus, 38
chrysocephalus, 38
conspicillatus, 38
dimidiatus, 39
douboulayi, 38
melanosoma, 39
meredithi, 38
mesoleucus, 39
personifer, 38
septentrionalis, 37
- Chanos chanos*, 129
Cheilinus chlorourus, 193
fasciatus, 193
oxycephalus, 193
trilobatus, 192
undulatus, 193
- Cheilio apterygia*, 210
inermis, 210
- Cheilodipterus alleni*, 261
artus, 262
intermedius, 262
isostigmus, 263
macrodon, 262
nigrotaeniatus, 263
parazonatus, 263
quinquelineatus, 263
singaporensis, 263
zonatus, 263
- Cheiloprion labiatus*, 67
Chelmon marginalis, 29
muelleri, 29
rostratus, 29
- Chelonodon patoca*, 420
Chilomycterus orbicularis, 420
reticulatus, 420
spilostylus, 420
- Chiloscyllium freycineti*, 451
ocellatum, 451
plagiosum, 451
trispeculare, 452
- Chlorurus bleekeri*, 175
bowersi, 176
capistratoides, 175
frontalis, 178
japanensis, 178
microrrhinos, 177
sordidus, 176
strongycephalus, 177
trochelii, 175
- Choerodon anchorago*, 195
cyanodus, 194
fasciatus, 194
graphicus, 194
jordani, 195
monostigma, 195
oligacanthus, 195
rubescens, 194
schoenleinii, 194
vitta, 195
zosterophorus, 195
- Choeroichthys brachysoma*, 425
cinctus, 425
- Choridactylus multibarbus*, 381
- Chromis acares*, 83
agilis, 80
albomaculata, 80
alleni, 84
alpha, 80
amboinensis, 81
analis, 85
atripectoralis, 81
atripes, 82
caudalis, 83
chrysur, 83
cinerascens, 84
delta, 84
dimidiata, 82
elerae, 84
flavipectoralis, 82
flavomaculata, 80
fumea, 81
iomelas, 82
lepidolepis, 84
leucura, 84
lineata, 85
margaritifera, 83
nitida, 86
notata, 80
opercularis, 85

- ovatiformes*, 82
retrofasciata, 86
scotochiloptera, 81
ternatensis, 81
vanderbilti, 85
viridis, 81
weberi, 85
westaustralis, 80
xanthochira, 82
xanthura, 83
- Chrysiptera biocellata*, 76
bleekeri, 73
brownriggii, 72
caeruleolineata, 72
cyanea, 75
cymatilis, 75
flavipinnis, 74
glauca, 76
hemicyanea, 74
kuiteri, 76
oxycephala, 76
parasema, 74
rex, 73
rollandi, 73
sinclairi, 75
springeri, 75
starcki, 74
talboti, 73
taupou, 74
traceyi, 75
tricincta, 76
unimaculata, 72
- Cirrhilabrus aurantidorsalis*, 201
condei, 197
cyanopleura, 196
exquisitus, 199
filamentosus, 197, 202
flavianalis, 198
joanallенаe, 197
katherinae, 196
laboutei, 198
lineatus, 202
lubbocki, 199
luteovittatus, 197
morrisoni, 201
punctatus, 199
randalli, 202
rhomboidalis, 202
rubrimarginatus, 198
rubripinnis, 198
scottorum, 200
solorensis, 201
temminckii, 200
tonozukai, 197
walindi, 200
walshi, 198
- Cirrhichthys aprinus*, 167
aureus, 167
falco, 167
oxycephalus, 167
pinnulatus, 168
polyactis, 168
splendens, 168
- Cirripectes auritus*, 345
castaneus, 346
chelomatus, 346
filamentosus, 346
polyzona, 345
springeri, 346
stigmaticus, 347
variolosus, 346
- Cleidopus gloriamaris*, 403
Cociella punctata, 384
Conger cinereus, 446
Congrogadus subducens, 278
Coradion altivelis, 29
chrysozonus, 29
melanopus, 29
Coris auricularis, 190
aurilineata, 191
aygula, 190
batuensis, 191
caudimacula, 191
dorsomacula, 190
pictoides, 191
Coryphaena hippurus, 421
Coryphopterus aureus, 322
duospilus, 321
inframaculatus, 322
neophytus, 321
signipinnis, 322
Corythoichthys, 423
amplexus, 423
flavofasciatus, 424
haematopterus, 425
intestinalis, 424
nigripectus, 425
ocellatus, 425
polynotatus, 424
schultzi, 425
Crenimugil crenilabis, 133
Cristatagobius lophius, 316
Cromileptes altivelis, 163
Crossosalarias macrospilus, 354
Cryptocentrus
caeruleomaculatus, 304
cinctus, 305
cyanotaenia, 305
fasciatus, 305
inexplicatus, 306
insignitus, 306
leptocephalus, 306
leucostictus, 307
pavonioides, 308
polyophthalmus, 306
strigilliceus, 306
Ctenochaetus binotatus, 53
cyanocheilus, 52
hawaiiensis, 52
marginatus, 53
striatus, 52
tominiensis, 53
Ctenogobiops aurocingulus, 308
crocineus, 308
feroculus, 308
pomastictus, 308
tangaroai, 308
Cymbacephalus beauforti, 383
Cymolutes praetextatus, 231
torquatus, 232
Cypho purpurascens, 271
- D**
Dactyloptena orientalis, 369
Dactylopus dactylopus, 289
kuiteri, 289
Dampierosa daruma, 380
Dascyllus aruanus, 77
auripinnis, 77
carneus, 78
chrysoepocilus, 79
flavicaudus, 77
melanurus, 77
reticulatus, 78
trimaculatus, 77
Dasyatis kuhlii, 456
Decapterus macarellus, 129
russelli, 129
Dendrochirus biocellatus, 369
brachypterus, 369
zebra, 371
Diagramma pictum, 173
sp., 172
Diodon holocanthus, 421
hystrix, 421
liturosus, 421
Diplogrammus goramensis, 293
xenicus, 293
Diploprion bifasciatum, 165
Diproctacanthus xanthurus, 235
Dipterygonatus balteatus, 140
Dischistodus darwinensis, 79
fasciatus, 79
melanotus, 78
perspicillatus, 78
prosopotaenia, 78
pseudochrysoepocilus, 79
Discordipinna griessingeri, 317
Doryrhamphus boylei, 429
dactylophorus, 428
excisus, 427
janssi, 428
japonicus, 428
multiannulatus, 428
negrosensis, 428
pessuliferus, 428
- E**
Ebosia bleekeri, 371
Echeneis naucrates, 402

- Echidna albimarginatus*, 437
breedeni, 437
buroensis, 437
chilospilus, 440
chlamydatus, 437
cribroris, 440
delicatula, 436
enigmaticus, 438
eurostus, 440
favagineus, 439
fimbriatus, 438
flavimarginatus, 439
gracilicauda, 438
herrei, 437
isingteena, 439
javanicus, 439
melatremus, 437
meleagris, 439
minor, 438
nebulosa, 436
nudivomer, 439
polyzona, 436
richardsoni, 440
rueppelliae, 438
tile, 440
undulatus, 440
vittata, 441
zonipectis, 441
- Echinogobius hayashii*, 313
- Ecsenius alleni*, 348
australianus, 347
axelrodi, 348
bandanus, 349
bathi, 349
bicolor, 350
bimaculatus, 349
collettei, 347
dilemma, 349
fijiensis, 348
kurti, 352
lineatus, 352
lividanalis, 350
lubbocki, 347
melarchus, 351
midas, 351
monoculus, 347
namiyei, 353
oculus, 352
ops, 350
opsifrontalis, 348
pictus, 353
prooculis, 352
schroederi, 353
sellifer, 352
stictus, 353
stigmatura, 352
taeniatus, 351
tigris, 348
tricolor, 351
trilineatus, 349
yaeyamaensis, 353
- Elagatis bipinnulatus*, 127
- Elapsopsis versicolor*, 444
- Encheliophis homei*, 298
- Enchelycore bayeri*, 435
lichenosa, 435
pardalis, 435
schismatorhynchus, 435
- Enchelynassa canina*, 436
- Engyprosopon grandisquama*, 386
- Enneapterygius flavoccipitis*, 357
mirabilis, 358
pallidoserialis, 358
philippinus, 358
tutuillae, 358
- Epibulus insidiator*, 208
- Epinephelus areolatus*, 159
bilobatus, 159
bleekeri, 158
bontoides, 158
caeruleopunctatus, 161
chlorostigma, 157
coioides, 162
corallicola, 158
cyanopodus, 158
erythrurus, 160
fasciatus, 163
fuscoguttatus, 162
hexagonatus, 160
howlandi, 159
lanceolatus, 162
longispinis, 158
macrospilus, 158
maculatus, 161
malabaricus, 162
melanostigma, 160
merra, 159
miliaris, 160
multinotatus, 161
ongus, 161
polyphekadion, 160
quoyanus, 159
rivulatus, 163
socialis, 157
spilotoceps, 160
tauvina, 159
tukula, 162
undulosus, 162
waandersi, 157
- Eucrossorhinus dasyopogon*, 450
- Eurypegasmus draconis*, 368
- Eviota alboineata*, 321
- Eviota*, 320
guttata, 319
lachdeberei, 318
latifasciata, 318
melasma, 318
mikiae, 319
nigriventris, 320
pellucida, 319
- prasina*, 317
prasites, 319
punctulata, 319
queenslandica, 317
sebreei, 318
sigillata, 318
smaragdus, 318
storthynx, 317
- Exallias brevis*, 354
- Exyrias bellisimus*, 321
ferrarisii, 320
puntang, 320
- F**
- Fistularia commersonii*, 400
- Foa fo*, 264
hyalina, 264
- Forcipiger flavissimus*, 30
longirostris, 30
- Fowleria marmorata*, 264
vaiulae, 264
variegata, 264
- G**
- Galeocerdo cuvier*, 453
- Gazza minuta*, 137
- Gicananthus bellus*, 39
caudovittatus, 40
lamarck, 41
melanospilus, 40
semicinctus, 40
semifasciatus, 41
watanabei, 41
- Gerres acinaces*, 136
erythrourus, 136
oblongus, 136
oyena, 136
- Glaucosoma magnificum*, 137
- Glyptoparus delicatulus*, 354
- Gnathanodon speciosus*, 128
- Gnathodentex aureolineatus*, 116
- Gnatholepis anjerensis*, 325
cauerensis, 324
- Gobiodon exigua*, 323
- Gobipsis exigua*, 323
acicularis, 324
ceramensis, 325
citrinus, 324
histro, 325
okinawae, 324
quinquestrigatus, 324
spilophthalmus, 324
- Gomphosus varius*, 209
- Gorgasia maculata*, 447
preclara, 446
- Gracila albomarginata*, 157
- Grammatorcynus bilineatus*, 131
- Gunnelichthys curiosus*, 285
monostigma, 285

- pleurotaenia*, 285
viridescens, 285
Gymnocaesio gymnoptera, 140
Gymnocranius euanus, 117
frenatus, 117
grandoculis, 117
griseus, 117
microdon, 117
Gymnomuraena zebra, 442
Gymnosarda unicolor, 131
- H**
- Halicampus brocki*, 429
macrorhynchus, 429
matafae, 429
nitidus, 430
Halichoeres argus, 216
binotopsis, 219
biocellatus, 219
chlorocephalus, 214
chloropterus, 212
chrysus, 212
cosmetus, 219
hortulanus, 218
leucoxanthus, 212
leucurus, 213
margaritaceus, 218
marginatus, 217
melanochir, 217
melanurus, 213
melasmapomus, 215
nebulosus, 217
nigrescens, 217
ornatissimus, 219
pallidus, 218
papilionaceus, 219
podostigma, 216
prosopeion, 216
richmondi, 213
rubricephalus, 215
scapularis, 215
solorensis, 214
trimaculatus, 215
trispilus, 218
vrolikii, 214
zeylonicus, 214
Haliutaea sp., 368
Halophyrne diemensis, 368
Helcogramma gymnauchen, 359
rhinoceros, 359
striatum, 359
vulcanum, 359
Hemiglyphidodon
plagiometopon, 71
Hemigymnus fasciatus, 208
melapterus, 208
Hemiscyllium strahani, 451
Hemitaurchthys polylepis, 30
zoster, 30
- Heniochus acuminatus*, 28
chrysostomus, 28
diphreutes, 28
monoceros, 28
pleurotaenia, 28
singularius, 27
varius, 28
Heteroconger enigmaticus, 447
hassi, 447
perissodon, 447
polyzona, 447
taylori, 447
Heteroploporus barbatus, 323
Heteropriacanthus cruentatus, 244
Himantura fai, 457
granulata, 456
Hippichthys cyanospilus, 430
Hippocampus barbouri, 432
bargibanti, 432
comes, 433
hystrix, 431
kampylotrachelos, 433
kuda, 433
moluccensis, 433
polytaenia, 433
taeniopterus, 432
Hipposcarus harid, 179
longiceps, 179
Histrio histrio, 367
Hologymnosus annulatus, 210
doliatus, 211
rhodonotus, 211
Hoplolatilus chlupatyi, 287
cuniculus, 287
fronticinctus, 287
luteus, 287
marcosi, 288
purpureus, 288
starcki, 288
Hypnos monopterygium, 456
Hypoatherina barnesi, 137
Hyporhamphus dussumieri, 135
- I**
- Inegocia japonica*, 383
Iniiustus aneitensis, 232
celebicus, 234
pavo, 233
pentadactylus, 233
tetrazona, 234
Inimicus caledonicus, 379
didactylus, 379
sinensis, 379
Iracundus signifer, 373
Istiblennius bellus, 354
dussumieri, 355
edentulus, 355
lineatus, 355
Istigobius decoratus, 325
ornatus, 326
rigilius, 325
- K**
- Kuhlia mugil*, 136
petit, 136
Kyphosus bigibbus, 132
cinerascens, 132
cornelii, 133
vaigiensis, 132
- L**
- Labracinus atrofasciatus*, 273
cyclophthalmus, 271
lineatus, 270
Labrichthys unilineatus, 234
Labropsis alleni, 235
australis, 236
bicolor, 237
dimidiatus, 237
manabei, 236
micronesica, 236
pectoralis, 237
rubrolabiatus, 236
xanthonota, 235
Lactoria comuta, 393
diaphana, 393
fornasini, 393
nasus, 393
Lagocephalus sceleratus, 420
Leiognathus bindus, 137
Leiuranus semicinctus, 444
Lepidozygus tapeinosoma, 87
Leptoscarus vaigiensis, 178
Lethrinus amboninensis, 121
atkinsoni, 121
erythracanthus, 120
erythropterus, 121
genivittatus, 120
harak, 118
laticaudis, 120
lentjan, 119
microdon, 119
miniatus, 120
nebulosus, 118
obsoletus, 119
olivaceus, 118
ornatus, 121
rubrioperculatus, 118
semicinctus, 120
variegatus, 121
xanthochilus, 118
Liachirus melanospilus, 388
Liopropoma latifasciatus, 270
multilineatum, 270
susumi, 270
tonstrinum, 270
Liza vaigiensis, 133

Lophiocharon trisignatus, 368
Lophodiodon calori, 421
Lotilia graciliosa, 308
Luposicya lupus, 336
Lutjanus argentimaculatus, 106
 bengalensis, 104
 biguttatus, 105
 bohar, 107
 boutton, 105
 carponotatus, 104
 decussatus, 107
 ehrenbergii, 104
 fulviflamma, 104
 fulvus, 106
 gibbus, 103
 kasmira, 104
 lemniscatus, 106
 lunulatus, 106
 lutjanus, 105
 madras, 105
 malabaricus, 103
 maxweberi, 106
 monostigma, 105
 quinquelineatus, 104
 rufolineatus, 105
 russelli, 107
 sebae, 103
 semicinctus, 107
 timorensis, 103
 vitta, 106
Luzonichthys earlei, 142
 waitei, 142
 whitleyi, 142

M

Macolor macularis, 108
 niger, 108
Macrodonogobius wilburi, 326
Macropharyngodon choati, 204
 kuiteri, 203
 meleagris, 204
 negrosensis, 204
 ornatus, 204
Mahidolia mystacina, 309
Malacanthus brevirostris, 288
 latovittatus, 288
Manta birostris, 457
Megalops cyprinoides, 134
Meiacanthus abditus, 340
 anema, 341
 atrodorsalis, 339
 bundoon, 340
 crinitus, 341
 ditrema, 340
 geminatus, 339
 grammistes, 341
 kamoharai, 340
 lineatus, 341
 smithi, 339

urostigmus, 340
 vicinus, 340
 vittatus, 339
Melichthys indicus, 408
 niger, 408
 vidua, 408
Mesopristes argenteus, 134
Microcanthus strigatus, 133
Micrognathus andersonii, 430
 pygmaeus, 430
Minous pictus, 380
 trachycephalus, 380
Mobula tarapacana, 457
Mola mola, 421
Monacanthus chinensis, 410
Monocentris japonicus, 403
Monodactylus argenteus, 134
Monotaxis grandoculis, 116
Myersina lachneri, 310
 larsonae, 309
 nigrivirgata, 309
Myrichthys colubrinus, 444
 maculosus, 444
Myripristis adusta, 240
 amaena, 240
 berndti, 241
 botche, 240
 chryseres, 239
 earlei, 241
 hexagona, 239
 kuntee, 240
 murdjani, 240
 pralinia, 239
 trachyacron, 239
 violacea, 240
 vittata, 239
 woodsii, 241

N

Naso annulatus, 54
 brachycentron, 54
 brevirostris, 54
 caeruleacauda, 53
 caesius, 53
 hexacanthus, 54
 lituratus, 55
 lopezi, 53
 minor, 54
 thynnoides, 55
 tuberosus, 55
 unicornis, 54
Naucrates ductor, 128
Neamia octospina, 264
Nebrius ferrugineus, 452
Negaprion acutidens, 454
Nemateleotris decora, 282
 helfrichi, 282
 magnifica, 282

Nemipterus furcosus, 112
Neocirrhitis armatus, 168
Neoglyphidodon bonang, 68
 carlsoni, 68
 crossi, 68
 melas, 69
 nigroris, 68
 oxyodon, 69
 polyacanthus, 69
 thoracotaeniatus, 70
Neomyxus leuciscus, 133
Neoniphon argenteus, 241
 aurolineatus, 241
 opercularis, 241
 sammara, 241
Neopomacentrus aquadulcis, 89
 azysron, 87
 bankieri, 87
 cyanomos, 88
 filamentosus, 88
 nemurus, 88
 taeniurus, 88
 violascens, 88
Novaculichthys macrolepidotus, 231
 taeniourus, 231

O

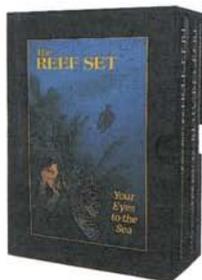
Odonus niger, 408
Ogilbia sp., 279
Ogilbyina novaehollandiae, 272
 queenslandiae, 272
 velifera, 272
Omobranchus elongatus, 344
 obliquus, 344
Onigocia spinosa, 384
Ophichthus bonaparti, 445
 cephalozona, 445
 melanochir, 445
 polyophthalmus, 445
Opistognathus darwiniensis, 298
 dendriticus, 299
 papuensis, 299
 solorensis, 299
Oplopomops atherinoides, 326
Oplopomops caninoides, 326
 oplopomus, 326
Orectolobus maculatus, 450
 ornatus, 450
 wardi, 450
Ostracion concatenatus, 396
 cubicus, 395
 gibbosus, 396
 meleagris, 394
 mimicus, 396
 pflugeri, 396
 solorensis, 394
 vanicolensis, 396
 whitleyi, 395

- Oxycheilinus arenatus*, 221
bimaculatus, 220
celebicus, 220
digrammus, 220
orientalis, 221
rhodochrous, 220
unifasciatus, 221
- Oxycirrhites typus*, 166
- Oxymetopon compressus*, 285
cyanoctenosum, 285
- Oxymonacanthus longirostris*, 410
- Oxyurichthys papuensis*, 328
- P**
- Pandaka pusilla*, 327
- Papillogobius reichei*, 321
- Paracaesio sordida*, 109
xanthura, 109
- Paracanthurus hepatus*, 50
- Paracentropogon longispinus*, 382
- Paracentropyge multifasciata*, 32
venusta, 31
- Parachaetodon ocellatus*, 27
- Paracheilinus angulatus*, 203
carpenteri, 203
cyaneus, 202
flavianalis, 203
mccoskeri, 203
- Paracirrhites arcatus*, 168
hemistictus, 169
nisus, 168
xanthus, 169
- Paragobiodon echinocephalus*, 325
- Paralticus amboinensis*, 355
- Paraluteres arquat*, 411
prionurus, 411
- Paramonacanthus choirocephalus*, 413
japonicus, 413
- Parapercis clathrata*, 293
cylindrica, 294
hexophthalma, 293
lineopunctata, 295
maculatus, 294
millipunctata, 294
multiplicata, 294
schauinslandi, 295
snyderi, 296
tetracantha, 294
xanthozona, 295
- Paraploactis kagoshimensis*, 385
- Paraplotosus albilabris*, 402
- Parapriacanthus ranssoneti*, 404
- Parapterois heturus*, 371
- Parascorpaena mossambica*, 374
picta, 374
- Parioglossus formosus*, 284
interruptus, 284
nudus, 284
raoi, 284
- Parupeneus barberinoides*, 398
barberinus, 399
bifasciatus, 397
ciliatus, 399
cyclostomus, 397
heptacanthus, 398
indicus, 399
macronemua, 399
multifasciatus, 398
pleurostigma, 398
rubescens, 398
spilurus, 399
trifasciatus, 397
- Pastinachus sephen*, 456
- Pegasus volitans*, 368
- Pempheris mangula*, 403
oualensis, 403
schwenkii, 403
vanicolensis, 403
- Pentapodus aureofasciatus*, 110
bifasciatus, 112
caninus, 111
emeryii, 110
nagasakiensis, 111
paradiseus, 111
porosus, 111
setosus, 111
trivittatus, 112
- Pervagor alternans*, 413
aspricaudus, 412
janthinosoma, 412
melanocephalus, 412
nigrolineatus, 413
- Petrosirtes breviceps*, 341
fallax, 342
mitratus, 342
variabilis, 342
xestus, 342
- Pholidichthys leucotaenia*, 287
- Photoblepharon palpebratus*, 401
- Phoxocampus tetrophthalmus*, 430
- Phyllogobius platycephalops*, 336
- Pinjalo lewisi*, 109
pinjalo, 108
- Pisodonophis cancrivorus*, 446
- Plagiotremus laudandus*, 343
phenax, 342
rhinorhynchos, 343
tapeinosoma, 342
- Platax batavianus*, 43
boersii, 42
orbicularis, 42
pinnatus, 43
teira, 42
- Platybelone argalus*, 135
- Plectorhinchus albovittatus*, 171
chaetodonoides, 172
chrysotaenia, 170
flavomaculatus, 171
lessonii, 171
lineatus, 170
multivittatum, 170
picus, 172
polytaenia, 171
unicolor, 173
vittatus, 170
- Plectranthias inermis*, 151
longimanus, 151
nanus, 151
winniensis, 151
- Plectroglyphidodon dickii*, 71
imparipennis, 71
johnstonianus, 70
lacrymatos, 71
leucozonus, 71
phoenixensis, 71
- Plectropomus areolatus*, 165
laevis, 165
leopardus, 164
maculatus, 164
oligacanthus, 164
pessuliferus, 165
- Plectrypops lima*, 239
- Plesiops coeruleolineatus*, 278
- Plesiops corallicola*, 279
- Pleurosicya boldinghi*, 336
elongata, 336
labiata, 336
miceli, 336
mossambica, 337
- Plotosus lineatus*, 402
- Poeciloconger fasciatus*, 446
- Pogonoperca punctata*, 166
- Polydactylus sexfilis*, 134
- Pomacanthus annularis*, 36
imperator, 36
navarchus, 36
semicirculatus, 37
sexstriatus, 37
xanthometopon, 37
- Pomacentrus adelus*, 94
albimaculus, 89
alexanderae, 97
alleni, 92
amboinensis, 89
armillatus, 91
auriventris, 92
aurifrons, 99
australis, 93
azuremaculatus, 93
bankanensis, 95
brachialis, 97

- burroughi*, 90
chrysurus, 95
coelestis, 92
colini, 89
cuneatus, 97
geminospilus, 93
grammorhynchus, 97
imitator, 96
javanicus, 94
komodoensis, 89
lepidogenys, 96
limosus, 93
littoralis, 99
melanochir, 99
milleri, 91
moluccensis, 98
nagasakiensis, 96
nigromanus, 96
nigromarginatus, 96
opisthostigma, 90
pavo, 92
philippinus, 96
polyspinus, 91
proteus, 91
reidi, 93
saksonoi, 95
similis, 92
simsiang, 98
smithi, 99
spilotoceps, 89
stigma, 94
taeniometopon, 98
tripunctatus, 99
vaiuli, 94
wardi, 99
xanthosternus, 99
- Pomachromis guamensis*, 87
richardsoni, 87
- Priacanthus blochii*, 245
hamrur, 245
- Priolepis aureoviridis*, 327
cincta, 327
inhaca, 327
nocturna, 327
- Pristigenys niphonina*, 244
- Pristotis obtusirostris*, 101
- Psammoperca waigiensis*, 134
- Pseudalutarius nasicornis*, 409
- Pseudamia gelatinosa*, 265
hayashii, 265
zonata, 265
- Pseudanthias aurentulus*, 148
bartlettorum, 142
bicolor, 144
bimaculatus, 143
cooperi, 149
dispar, 145
engelhardi, 144
evansi, 142
- fasciatus*, 150
flavoguttatus, 150
huchti, 146
hutomoi, 148
hypselosoma, 146
ignitus, 145
lori, 150
luzonensis, 148
olivaceus, 148
parvirostris, 149
pascalus, 145
pictilis, 145, 151
pleurotaenia, 143
randalli, 147
rubrizonatus, 149
sheni, 144
smithvanizi, 150
squamipinnis, 147
tuka, 146
venator, 144
ventralis, 143
- Pseudechidna brummeri*, 441
- Pseudobalistes*
flavimarginatus, 405
fuscus, 405
- Pseudocaranx dentex*, 127
- Pseudocheilinus ataenia*, 226
evanidus, 225
hexataenia, 226
ocellatus, 225
octotaenia, 225
tetrataenia, 226
- Pseudochromis alleni*, 276
andamanensis, 273
bitaeniatus, 274
cyanotaenia, 273
elongatus, 277
flammicauda, 274
fuscus, 275
howsoni, 275
marshallensis, 276
moorei, 276
paccagnellae, 274
paranox, 276
perspicillatus, 276
polynemus, 277
porphyreus, 274
- Pseudochromis*, 274
ransonneti, 277
splendens, 277
steenei, 275
wilsoni, 274
- Pseudocoris*
aurantiofasciatus, 192
bleekeri, 192
heteroptera, 226
yamashiroi, 192
- Pseudodax mollucanus*, 234
- Pseudogramma*
polyacanthum, 166
- Pseudojuloides*, 227
atavai, 227
cerasinus, 227
kaleidios, 227
severnisi, 227
- Pseudomonacanthus*
macrurus, 412
- Pseudoplesiops*
multisquamatus, 277
- Pseudorhombus*
dupliciocellatus, 387
- Pteragogus cryptus*, 228
enneacanthus, 228
flagellifer, 228
- Pterapogon kauderni*, 266
mirifica, 266
- Ptereleotris evides*, 282
grammica, 282
hanae, 283
heteroptera, 283
microlepis, 283
monoptera, 283
uroditaenia, 283
zebra, 284
- Pterocaesio chrysozona*, 140
digramma, 139
lativittata, 140
marri, 139
pisang, 139
randalli, 140
tessellata, 140
tile, 139
trilineata, 139
- Pteroidichthys amboinensis*, 372
- Pterois antennata*, 370
kodipungi, 371
miles, 371
mombasae, 370
muricata, 370
radiata, 370
volitans, 370
- Pygoplites diacanthus*, 36
- ## R
- Rachycentron canadum*, 402
- Rastrelliger kanagurta*, 132
- Remora*, 402
- Rhabdamia cypselurus*, 265
gracilis, 265
spilota, 265
- Rhina ancylostoma*, 455
- Rhincodon typus*, 452
- Rhinecanthus aculeatus*, 407
lunula, 407
rectangulus, 407
verrucosus, 407
- Rhinobatos typus*, 455

- Rhinomuraena quaesita*, 441
Rhinopias aphanes, 372
 eschmeyeri, 373
 frondosa, 373
Rhinoptera javanica, 457
Rhynchobatus djiddensis, 455
Rhynchostracion
 rhinorhynchus, 394
Richardsonichthys
 leucogaster, 381
Rogadius patriciae, 384
 pristiger, 384
 welanderi, 384
Rudarius excelsus, 411
 minutus, 411
- S**
- Salarias alboguttatus*, 355
 celebicus, 356
 fasciatus, 356
 guttatus, 355
 obscurus, 356
 patzneri, 356
 ramosus, 356
 segmentatus, 357
 sinuosus, 357
Samaris cristatus, 386
Samariscus triocellatus, 387
Sarda orientalis, 131
Sargocentron
 caudimaculatum, 243
 cornutum, 242
 diadema, 242
 ensiferum, 243
 iota, 243
 ittodai, 242
 melanospilos, 242
 microstoma, 242
 punctatissimum, 243
 rubrum, 244
 spiniferum, 244
 tiere, 243
 tiereoides, 243
 violaceum, 244
Saurida gracilis, 296
 nebulosa, 296
Scaevius milii, 112
 vitta, 112
Scarus altipinnis, 186
 chameleon, 181
 dimidiatus, 180
 festivus, 187
 flavipectoralis, 180
 forsteni, 181
 frenatus, 181
 ghobban, 182
 globiceps, 183
 hypsleopterus, 182
 koputea, 187
 longipinnis, 187
 niger, 186
 oviceps, 180
 prasiognathos, 182
 psittacus, 183
 quoyi, 187
 rivulatus, 183
 rubroviolaceus, 185
 russellii, 184
 schlegeli, 184
 spinus, 184
 tricolor, 185
 viridifucatus, 187
 xanthopleura, 185
Scatophagus argus, 59
 scheelei, 446
Scopelogadus affinis, 115
 auratus, 116
 bilineatus, 113
 ciliatus, 114
 ghanam, 114
 lineatus, 115
 margaritifera, 114
 monogramma, 115
 taeniopterus, 113
 temporalis, 113
 trilineatus, 113
 vosmeri, 116
 xenochrous, 115
Scorpaenodes
 commersonianus, 128
 lysan, 128
Scorpaenomorus commerson, 131
Scorpaenodes diabolus, 375
 guamensis, 374
 hirsutus, 374
 littoralis, 374
 macrochir, 376
 neglecta, 375
 oxycephala, 376
 papuensis, 376
 parvipinnis, 375
 possii, 377
 varipinnis, 374
 venosa, 377
Scuticaria okinawae, 442
 tigrina, 442
Sebastapistes cyanostigma, 377
 mauritiana, 377
Selar boops, 129
 crumenophthalmus, 129
Selaroides leptolepis, 129
Selenotoca multifasciata, 59
Seriola dumerili, 127
 lalandi, 127
 riivoliana, 127
Serranocirrhitis latus, 150
Siderea picta, 442
Siganus argenteus, 58
 canaliculatus, 58
 corallinus, 57
 doliatus, 56
 fuscescens, 58
 guttatus, 56
 javus, 56
 lineatus, 56
 magnificus, 59
 puelloides, 57
 puellus, 56
 punctatissimus, 57
 punctatus, 57
 randalli, 57
 spinus, 58
 stellatus, 57
 unimaculatus, 59
 uspi, 59
 vermiculatus, 58
 virgatus, 56
 vulpinus, 59
Signigobius biocellatus, 328
Siokunichthys nigrolineatus, 431
Siphamia corallicola, 266
 elongata, 267
 fuscolineata, 267
 tubifer, 267
 versicolor, 267
Soleichthys heterorhinos, 388
Solenostomus cyanopterus, 424
 halimeda, 424
 paegnius, 424
 paradoxus, 423
Sphaeramia nematoptera, 266
 orbicularis, 266
Sphyræna barracuda, 130
 flavicauda, 130
 forsteri, 130
 helleri, 130
 jello, 130
 qenie, 130
Sphyrna lewini, 455
 mokarran, 455
Stanulus seychellensis, 357
Stegastes albifasciatus, 101
 altus, 101
 apicalis, 101
 aureus, 100
 fasciolatus, 100
 gascoynei, 100
 lividus, 101
 nigricans, 101
 obreptus, 100
Stegostoma fasciatum, 452

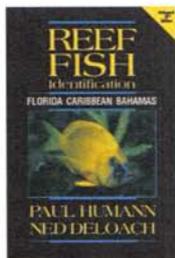
- Stethojulis bandanensis*, 224
interrupta, 225
notialis, 225
strigiventer, 224
trilineata, 224
- Stenogobiops medon*, 310
nematodes, 310
xanthorhinica, 310
- Strongylura incisa*, 135
- Strophidon sathete*, 442
- Sufflamen bursa*, 406
chrysopterus, 406
fraenatus, 406
- Symphorichthys spilurus*, 109
- Symphorus nematophorus*, 109
- Synanceia horrida*, 380
verrucosa, 380
- Synaptura marginata*, 388
- Synchiropus bartlesi*, 291
morrisoni, 290
moyeri, 290
ocellatus, 291
picturatus, 289
splendidus, 289
stellatus, 291
- Syngnathoides biaculeatus*, 430
- Synodus binotatus*, 297
dermatogenys, 296
jaculum, 297
rubromarmoratus, 297
variegatus, 297
- T**
- Taenianotus triacanthus*, 378
strongia, 378
- Taeniura lymma*, 456
meyeni, 456
- Tathicarpus butleri*, 368
- Terapon jarbua*, 134
- Tetraroge barbata*, 382
niger, 382
- Thalassoma*, 221
amblycephalum, 223
hardwicke, 223
janseni, 221
lunare, 223
lutescens, 222
purpureum, 223
quinquevittatum, 222
trilobatum, 222
- Thunnus albacares*, 131
- Thysanophrys arenicola*, 383
carbunculus, 383
chiltonae, 383
otaitensis, 384
- Tomiyamichthys oni*, 311
- Torquigener brevipinnis*, 420
- Toxotes jaculatrix*, 135
- Trachinocephalus myops*, 297
- Trachinotus bailloni*, 128
blochi, 128
- Trachyrhamphus*
bicoarctatus, 431
longirostris, 431
- Triaenodon obesus*, 454
- Trichonotus elegans*, 286
halstead, 286
setiger, 286
- Trimma anaima*, 331
benjamini, 329
caesiura, 330
griffithsi, 331
halonevum, 328
hoesei, 331
macrophthalma, 329
naudei, 330
okinawae, 329
rubromaculatus, 330
stobbsi, 331
striata, 329
taylori, 331
tevegae, 330
- Tryssogobius colini*, 334
- Tylosurus crocodilus*, 135
- U**
- Ucla xenogrammus*, 359
- Upeneus*, 400
arge, 400
moluccensis, 400
tragula, 400
vittatus, 400
- Uranoscopus sulphureus*, 385
- Uraspis helvola*, 126
- Urogymnus*, 457
asperrimus, 457
- Uropterygius*, 443
fasciolatus, 443
macrocephalus, 443
- V**
- Valamugil engeli*, 133
- Valenciennea*, 334
alleni, 336
bella, 334
helsdingenii, 334
immaculata, 335
limicola, 335
longipinnis, 334
muralis, 335
parva, 335
puellaris, 335
randalli, 334
- sexguttata*, 336
strigata, 334
wardii, 336
- Vanderhorstia*, 314
ambanoro, 315
flavilineata, 314
lanceolata, 315
macropteryx, 314
ornatissima, 315
- Variola*, 164
albmarginata, 164
louti, 164
- W**
- Wetmorella*, 209
albofasciata, 209
cyanopleura, 209
nigropinnata, 209
- X**
- Xanthichthys*, 407
auromarginatus, 408
mento, 407
- Xiphasia setifer*, 343
- Y**
- Yongeichthys nebulosus*, 330
- Z**
- Zabidius novemaculeatus*, 43
- Zanclus cornutus*, 55
- Zebrasoma*, 50
desjardini, 51
flavescens, 51
rostratum, 50
scopas, 51
veliferum, 51
- Zenarchopterus dispar*, 135



THE REEF SET

by Paul Humann and Ned DeLoach

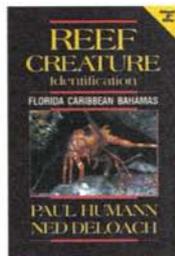
With more than 2,000 photographs, the learning adventure never ends. Durable, cloth-stitched flexi-binding.



REEF FISH IDENTIFICATION

FLORIDA-CARIBBEAN-BAHAMAS 3rd Edition

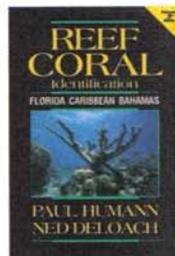
The book that revolutionized fishwatching just got better! Many new species and a Brazilian Fish Appendix. 512 pp. 825 color plates. **\$39.95**



REEF CREATURE IDENTIFICATION

FLORIDA-CARIBBEAN-BAHAMAS 2nd Edition

The most comprehensive and accurate visual identification guide of reef invertebrates ever published. 448 pp, 650 color plates. **\$39.95**



REEF CORAL IDENTIFICATION

FLORIDA-CARIBBEAN-BAHAMAS 2nd Edition

Stony, soft, fire and black corals. Includes an appendix of marine plants, coral diseases and coral reproduction. 272 pp, 550 color plates. **\$34.95**

Shelf Case for the Three Volume REEF SET \$10.00

Three Volume REEF SET with Shelf Case \$120.00

Weather-resistant, canvas Traveler's Case for the REEF SET \$25.00

Three Volume REEF SET with Traveler's Case \$135.00



REEF FISH BEHAVIOR

FLORIDA-CARIBBEAN-BAHAMAS

This groundbreaking text offers underwater naturalists a detailed overview of the behavior and ecology of reef fish. **\$39.95**

FISH IN A POCKET SERIES FLORIDA CARIBBEAN BAHAMAS

Now you can take your books with you underwater. 3 mini-books available — Reef Fish (Florida Caribbean Bahamas) Reef Creature/Coral (Florida Caribbean Bahamas) and Reef Fish (Tropical Pacific). 4 3/4" x 6". **\$9.95 each**



Many more marine life books available at www.fishid.com or call 1-800-737-6558

New World Publications

1861 Cornell Road, Jacksonville, Florida 32207

Quick Reference Index

- | | | |
|----------------------|----------------------|-----------------------|
| Anemonefishes 64 | Flounders 386 | Scats 59 |
| Angelfishes 32 | Frogfishes 363 | Scorpionfishes 379 |
| Anthias 142 | Fusiliers 139 | Sea Basses 154 |
| Archerfishes 135 | Garden Eels 446 | Sea Moths 368 |
| Bandfishes 289 | Ghost Pipefishes 423 | Seabreams 121 |
| Bannerfishes 27 | Goatfishes 396 | Seahorses 431 |
| Barracudas 130 | Gobies 303 | Sharks 450 |
| Basslets 270 | Groupers 154 | Shrimp Gobies 303 |
| Bigeyes 244 | Grunters 134 | Shrimpfishes 401 |
| Blennies 339 | Gurnards 369 | Silversides 137 |
| Boxfishes 393 | Hawkfishes 167 | Snake Eels 443 |
| Brotulas 279 | Hogfishes 228 | Snappers 103 |
| Butterflyfishes 18 | Jacks 124 | Snooks 134 |
| Cardinalfishes 246 | Jawfishes 300 | Soapfishes 165 |
| Catfishes 402 | Lionfishes 369 | Soldierfishes 239 |
| Chubs 132 | Lizardfishes 298 | Soles 387 |
| Clingfishes 389 | Milkfishes 129 | Spadefishes 42 |
| Cobias 402 | Mojarras 136 | Squirrelfishes 242 |
| Conger Eels 446 | Molas 421 | Stargazers 385 |
| Coral Breems 118 | Moorish Idol 55 | Stonefishes 372 |
| Coral Crouchers 385 | Morays 435 | Surgeonfishes 45 |
| Cornetfishes 400 | Mulletts 133 | Sweepers 403 |
| Cuskeels 279 | Needlefishes 135 | Sweetlips 170 |
| Damselfishes 61 | Parrotfishes 175 | Tarpons 134 |
| Dartfishes 284 | Pearl Perches 137 | Threadfins 134 |
| Devilfishes 278 | Pearlfishes 300 | Tilefishes 289 |
| Diamondfishes 134 | Pinecone-fishes 403 | Toadfishes 368 |
| Dolphinfishes 421 | Pipefishes 425 | Tobies 417 |
| Dottybacks 271 | Ponyfishes 137 | Triggerfishes 404 |
| Dragonets 291 | Porcupinefishes 420 | Trumpetfishes 401 |
| Eels 435 | Puffers 414 | Tunas & Mackerels 125 |
| Emperors 116 | Rabbitfishes 56 | Tuskfishes 194 |
| Filefishes 409 | Razorfishes 231 | Velvetfishes 385 |
| Flagtails 136 | Remoras 402 | Waspfishes 381 |
| Flashlightfishes 401 | Sand Divers 288 | Wormfishes 287 |
| Flatheads 383 | Sandperches 291 | Wrasses 189 |



**The most comprehensive field guide ever
compiled for identifying tropical Pacific fishes, with
more than 2500 photographs of 2000 species
taken in their natural habitats.**

Reef Fish Identification - Tropical Pacific
Includes Australia, Indonesia, Malaysia, Thailand, Vietnam,
Philippines, Micronesia, Papua New Guinea, Solomon
Islands, New Caledonia, Vanuatu, Fiji, Samoa, Tonga, French
Polynesia and beyond.



New World Publications, Inc.
1861 Cornell Road
Jacksonville, Florida 32207
www.fishid.com

Odyssey Publishing
11558 Rolling Hills Dr.
El Cajon, CA 92020.
(619) 579-8405.

ISBN 1-878348-36-1

\$ 45.00 US