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FISHES OF THE PELICAN CAYS, BELIZE

BY

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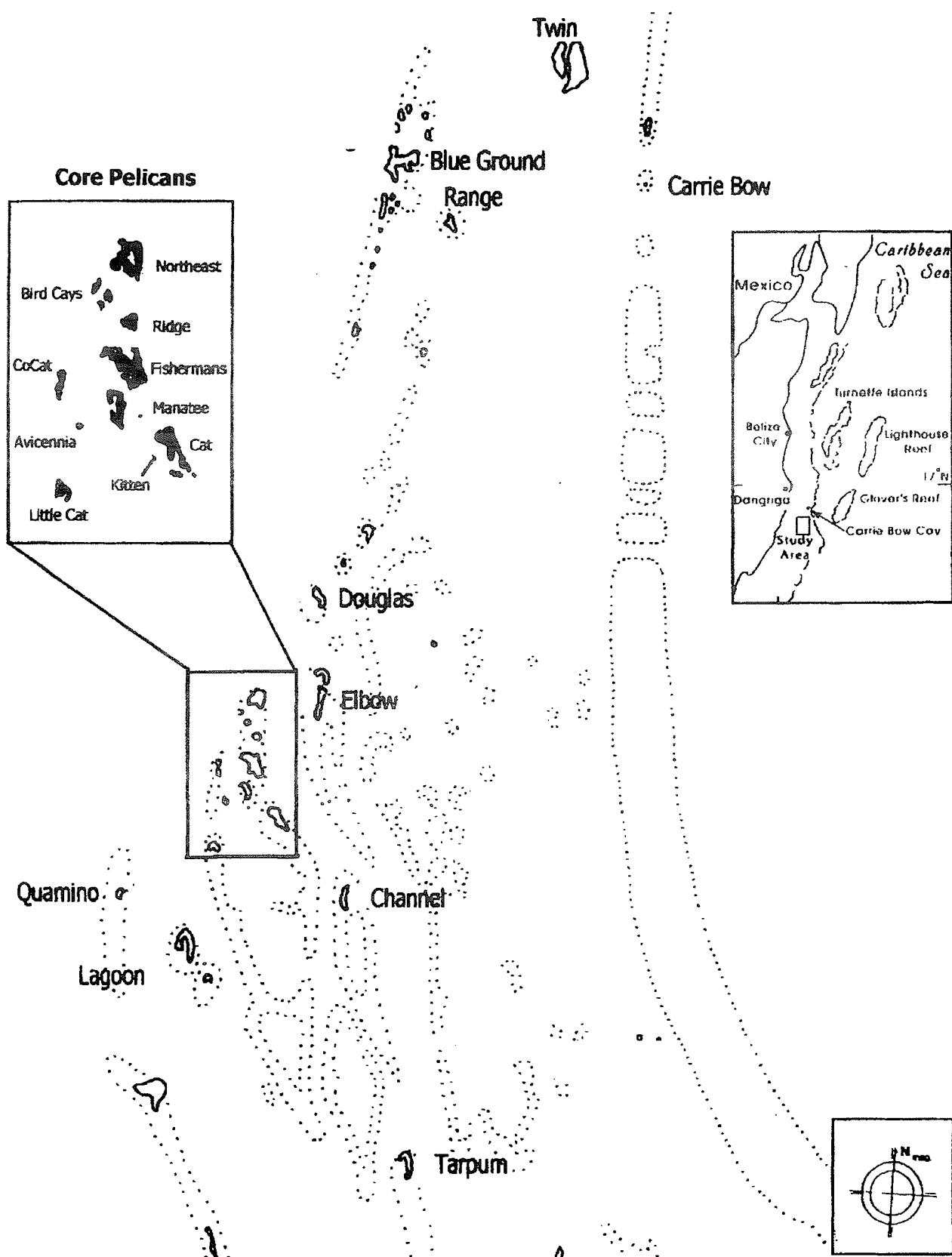


Figure 1. The Rhomboidal Cays and surrounding areas. The Core Pelican Cays are Northeast, Bird, Ridge, Co-Cat, Fisherman's, Avicennia, Manatee, Little Cat, Kitten, and Cat Cays. The Peripheral Rhomboidal Cays are Douglas, Elbow, Channel, Tarpum, Lagoon, and Quamino Cays.

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ABSTRACT

The Pelican Cays are a distinctive group of mangrove islands in the south central part of the Belize Barrier Reef Complex. As part of a coordinated investigation of biodiversity in the Pelican Cays, we sampled fishes using a combination of small rotenone stations and visual censuses. The Pelican Cays are part of a structurally defined larger group called the Rhomboidal Cays. We have records of 193 species of fishes from the Rhomboidal Cays, 168 from the Core Pelican Cays and 123 from the Peripheral Rhomboidal Cays. By contrast, 293 species are known from the Offshore Banks, 339 from the Barrier Reef, 106 from the Mid-Shelf area exclusive of the Peripheral Rhomboidal Cays, and 150 from the Coastal Marine region, a total of 497 from the entire region.

Twelve wide-ranging species recorded from the Pelican Cays have not been found in the other nearby areas. An undescribed species of wrasse, *Halichoeres* sp., is known only from the Rhomboidal Cays, and an undescribed serranid, *Hypoplectrus* sp., is abundant in the Pelican Cays, with a single record from Wee-Wee Cay. Other special features of the Pelican Cays are the conspicuous absence of some common species, such as the bluehead wrasse, *Thalassoma bifasciatum*, and differences in habitat of the blenny *Acanthemblemaria aspera*.

INTRODUCTION

This study is part of a series of investigations of the natural history of the Pelican Cays, Belize, coordinated by Ian G. Macintyre and Klaus Rützler of the Smithsonian Institution, and an outgrowth of the early interest in the Pelicans by Anthony (Tony) and Therese Rath, then of the Pelican Beach Hotel (now of Naturalight Productions) in Dangriga, Belize.

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The distinctive honeycomb pattern visible on maps of the Rhomboidal Cays is the result of underlying Pleistocene karst relief, which has been exaggerated by Holocene coral accumulations (Macintyre et al., 2000).

The mangrove islands of the Rhomboidal Cays differ from most of the other mangrove islands between the inshore coastline and the outer barrier reef in that the mangroves are anchored on top of a live and lush coral reef rather than to mud (Macintyre and Rützler, 2000). This is reflected in a great diversity of organisms in several groups, including algae, foraminifera, sponges, gnathostomulids, echinoderms, and ascidians, that have been studied by others.

The objectives of this study have been to determine if the Rhomboidal Cays support a correspondingly high diversity of fishes and if the fish fauna of the Pelican Cays (which form a compact group in the northern part of the Rhomboidal Cays) differs from that of the surrounding Mid-Shelf area.

METHODS

Sources

In addition to our own censuses and collections, this list is compiled from museum records of voucher specimens, especially from the National Museum of Natural History of the Smithsonian Institution, the Field Museum of Natural History, the Florida Museum of Natural History, and the American Museum of Natural History. Nearly all of the museum collections are the result of ichthyocide (rotenone) sampling.

Rotenone collections and systematic sight surveys were made in the Pelican Cays and nearby areas in October 1997, January–February 2000, and January–February 2001; a few specimens were collected by William P. Davis using microspears and traps. Some collected specimens of common and unmistakable species were identified but not retained. Other sight records were made during preliminary surveys by James C. and Diane M. Tyler and Arthur Sundberg in March 1994 and March 1995, and sporadic qualitative sight records were made by C. Lavett Smith at Carrie Bow Cay over a period of many years during the past decade.

Sampling effort for Belize fishes has been extremely variable. The offshore banks and the coastline marine environments of Belize have been thoroughly sampled by David W. Greenfield, Robert Karl Johnson and their co-workers from the Field Museum of Natural History. The immediate area of Carrie Bow Cay has been intensively sampled by investigators from the Smithsonian's National Museum of Natural History and by personnel from the Field Museum of Natural History. Sampling of the mid-shelf areas has been sporadic, and the only systematic collections and observations of fishes from the Pelican Cays are those we made in 1997, 2000, and 2001.

Sampling

Rotenone collections are the only effective way to collect small cryptic species but such collections are not effective for those species whose primary defense is flight.

As an example, a visual census at Grovers Reef by C. L. Smith and J. C. Tyler in November 1988 added 27 species to those known from there in spite of the very intensive rotenone sampling at Grovers by D.W. Greenfield, R.K. Johnson, et al. Visual censuses have the opposite drawback; small cryptic species cannot be observed and recorded effectively.

Our visual censuses were made by observers SCUBA diving along the edge of the slope beyond the reef crest. Our usual routine was to descend to approximately 50 feet and swim along the slope at that level, with one observer somewhat above the other. When the visibility was good we could see at least 20 feet above and below that level, i.e., from 30 to 70 feet. When half of our air supply was gone we would return to our starting point, this time centering our effort on the 30-foot contour. Species seen were recorded on plastic slates. This was a purely qualitative count; no effort was made to enumerate the individuals of each species.

Visual censuses have many sources of bias. Individual observers tend to concentrate on particular microhabitats. In our case, C.L. Smith tended to concentrate on benthic and partially cryptic species while R.S. Jones tended to specialize in species higher in the water column. Identification of some species is difficult or impossible in the field. For example, adult "dusky" damselfishes, *Stegastes adustus* and *S. diencaeus*, were especially troublesome. Ross Robertson of the Smithsonian Tropical Research Institute in Panama has since informed us of field characters to distinguish them of which we were unaware at the time of our observations. Small juveniles of these species, however, are very different from one another and easily distinguished in visual surveys. Other especially troublesome species are noted in the annotated list of species below.

Our rotenone collections were made using small amounts (approximately 1 kilogram) of powdered rotenone premixed with sea water and kitchen detergent and deployed in selected areas of the various habitats so that sampling was thorough but the number of fishes affected was limited. For most stations, specimens were recovered by two SCUBA divers with some additional help from snorkelers. Specimens from these collections are deposited at the National Museum of Natural History, Smithsonian Institution (USNM).

Species lists were entered into tables in the Corel Paradox database management system for sorting and comparisons.

ANNOTATED LIST OF THE FISHES OF THE PELICAN CAYS AND RELATED AREAS

In this list we include the scientific name with author and date, the common name (a few of which are coined herein), and documentation of occurrences in the Barrier Reef Complex. With a few exceptions the scientific nomenclature follows the on-line version of the California Academy of Sciences Catalog of Fishes (www.calacademy.org/research/ichthyology), based on Eschmeyer (1998).

For our purposes, we recognize the following subdivisions:

Barrier Reef: The immediate vicinity of the outer edge of the barrier reef complex: Tobacco Cay, South Water Cay(e), Carrie Bow Cay(e) including Curlew Cay and Bank, and some of the more northern cays including Ambergris Cay and the Hol Chan reserve.

Mid-Shelf: Mid-Shelf Cays include Tobacco Range, Twin Cays, Cocoa Plum, Man of War, Ragged Cay, Blue Ground Range, Stewart Cay, Wee Wee Cay, Spruce Cay, Peter Douglas Cay (listed herein as Douglas Cay) and the Peripheral Rhomboidal Cays, the latter being the Elbow Cays, Channel Cay, Tarpum Cay, the Lagoon Cays, and Quamino Cay (Figure 1).

Pelican Cays: The Core Pelican Cays are defined as the northern group of cays in the Rhomboidal Cays area: Northeast Cay, Bird Cays, Ridge Cay, Fisherman's Cay, Co-Cat Cay, Manatee Cay, Avicennia Cay, Cat Cay, a small island close to Cat Cay we have designated as "Kitten Cay", and Little Cat Cay. Our original hypothesis was that the Core Pelicans supported a distinctive fish fauna.

Coastline Marine: Near-shore coastline marine collections, mostly from the Field Museum of Natural History, with some records from Amatique Bay provided by the American Museum of Natural History.

Offshore Banks: Grovers Reef, Lighthouse Reef, and Turneffe.

Voucher specimen data are given in the following format: museum catalog number followed in parentheses by location and, for our own collections, year of collection. Except for Pelican Cays, the word cay usually is omitted. Pelican Cays records are listed in the following order: catalog number with specific cay, and year of collection in parentheses. Catalog numbers are given for at least one lot from each museum although that institution may have additional specimens from the same area. Sight records are given as: observer (location, date). Literature citations are given in parentheses.

Locations of the major cays are shown on the Smithsonian Carrie Bow Research Areas map. Smaller cays connected to a larger cay by shallow water (< 1 m deep) are considered part of the larger cay and not listed separately. Some species are recorded from "shot holes" east of Twin Cays. These are circular sandy openings in the seagrass areas that have resulted from the use of explosives during seismic surveys conducted in the 1960s.

Acronyms: AMNH — American Museum of Natural History
 FMNH — Field Museum of Natural History
 RD — Specimens collected by rotenone and discarded after identification.

SR — Sight record

J/S - R.S. Jones and C. L. Smith, recorded by both
observers during the particular time period.

RSJ - Robert S. Jones
CLS - C. Lavett Smith
JCT - James C. Tyler
WPD - William P. Davis
DGS - David G. Smith
CB - Carole C. Baldwin
KC - Kathleen S. Cole
CT - Cheryl L. Thacker
ML - Michael A. Lang
MT - Milan K. Tyler

UF — University of Florida.

USNM — United States National Museum (collections now in
the National Museum of Natural History, Smithsonian
Institution)

Systematic List

Ginglymostomatidae

Ginglymostoma cirratum (Bonnaterre, 1878) — nurse shark

Barrier Reef: SR J/S (Carrie Bow, 2001).

Pelican Cays: SR CLS (Manatee, 1997); SR J/S (Manatee, 2000).

Rhincodon typus Smith, 1828 — whale shark

Barrier Reef: SR ML and KC (Carrie Bow).

Carcharhinidae

Carcharhinus perezii (Poey, 1876) — reef shark

Barrier Reef: AMNH 79908 (Carrie Bow).

Offshore Banks: AMNH 79919 (Glovers Reef).

Carcharhinus leucas (Müller and Henle, 1839) — bull shark

Barrier Reef: AMNH 79914 (Carrie Bow).

Carcharhinus limbatus (Müller and Henle, 1839) — blacktip shark

Barrier Reef: AMNH 79913 (Carrie Bow).

Negaprion brevirostris (Poey, 1868) — lemon shark

Mid-Shelf: SR WPD (Spruce, 2000).

Rhizoprionodon terraenovae (Richardson, 1836) — Atlantic sharpnose shark

Barrier Reef: FMNH 97448 (Carrie Bow); AMNH 79911 (Carrie Bow).

Sphyrnidae

Sphyrna lewini (Griffith and Smith, 1834) — scalloped hammerhead
 Barrier Reef: FMNH 97449 (Carrie Bow).

Dasyatidae

Dasyatis americana Hildebrand and Schroeder, 1928 — southern stingray
 Barrier Reef: SR J/S (Carrie Bow, 2001).
 Mid-Shelf: SR J/S (Douglas, 2000).
 Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Dasyatis guttata (Bloch and Schneider, 1801) — longnose stingray
 Coastline Marine: AMNH 83640 (Bahia de Amatique).

Himantura schmardae (Werner, 1904) — Caribbean stingray

Barrier Reef: SR WPD (Carrie Bow, 1997).
 There are few local records of this species and this observation needs confirmation.

Urolophidae

Urobatis jamaicensis (Cuvier, 1816) — yellow stingray
 Barrier Reef: USNM 326659 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001);
 SR J/S (patch reef south of Carrie Bow, 2000); SR J/S (Carrie Bow, 2001).
 Mid-Shelf: SR J/S (Lagoon, 2000).
 Pelican Cays: SR J/S (Little Cat, 2000); SR J/S (Cat, 2001).
 Offshore Banks: FMNH 89488 (Glovers Reef).

Myliobatidae

Aetobatis narinari (Euphrasen, 1790) — spotted eagle ray
 Pelican Cays: SR CT (Cat, 2000).

Albulidae

Albula nemoptera (Fowler, 1911) — shafted bonefish
 Coastline Marine: AMNH 83644 (Bahia de Amatique).

Albula vulpes (Linnaeus, 1758) — bonefish

Barrier Reef: USNM 354548 (Carrie Bow); SR RSJ (Carrie Bow, 2000);
 AMNH 93356 (Carrie Bow).
 Coastline Marine: FMNH 89486 (Belize City).

Megalopidae

Elops sp. — ladyfish

Barrier Reef: USNM 354549 (Carrie Bow).

Megalops atlanticus Valenciennes, 1847 — tarpon

Barrier Reef: SR CB and DGS (Carrie Bow).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Moringuidae

Moringua edwardsi (Jordan and Bollman, 1889) — spaghetti eel

Barrier Reef: USNM 267811 (Carrie Bow); FMNH 108317 (Carrie Bow);

FMNH 108358 (Ambergris); FMNH 108314 (Sergeant's); AMNH 223153 (Carrie Bow).

Offshore Banks: FMNH 108315 (Glovers Reef); FMNH 108329 (Turneffe).

Ophichthidae

Ahlia egmontis (Jordan, 1884) — key worm eel

Barrier Reef: USNM 296366, FMNH 99221 (Carrie Bow); AMNH 224958 (Carrie Bow).

Mid-Shelf: USNM 360479 (Douglas, 2000); USNM 360598 (Spruce, 2000); FMNH 99197 (Blue Ground Range).

Pelican Cays: USNM 360512 (Co-Cat, 2000); USNM 346212 (Cat, 1997); USNM 360565 (Cat, 2000); USNM 365195 (Cat, 2001).

Offshore Banks: FMNH 108340 (Glovers Reef); FMNH 99239 (Turneffe).

Aprognathodon platyventris (Böhlke, 1967) — stripe eel

Barrier Reef: USNM 316040 (Carrie Bow).

Offshore Banks: FMNH 99188 (Glovers Reef).

Ichthyapus ophioneus (Evermann and Marsh, 1900) — surf eel

Barrier Reef: USNM 235090 (Carrie Bow).

Myrichthys breviceps (Richardson, 1848) — sharptail eel (*M. acuminatus* is a synonym.)

Barrier Reef: USNM 235091 (Carrie Bow); FMNH 99223 (Carrie Bow).

Offshore Banks: FMNH 108316 (Glovers Reef).

Myrichthys ocellatus (Lesueur, 1825) — goldspotted eel

Barrier Reef: FMNH 99224 (Carrie Bow).

Mid-Shelf: RD (Spruce, 2000).

Offshore Banks: FMNH 99159 (Glovers Reef).

Myrophis anterodorsalis McCosker, Böhlke and Böhlke, 1989 — longfin worm eel

Pelican Cays: USNM 346447 (Manatee, 1997).

Myrophis platyrhynchos Breder, 1927 — broadnose worm eel

Barrier Reef: USNM 353136 (Carrie Bow).

Mid-Shelf: USNM 360599 (Spruce, 2000).

Pelican Cays: USNM 346448 (Manatee, 1997).

Myrophis punctatus Lütken, 1852 — speckled worm eel

Barrier Reef: USNM 235085 (Carrie Bow).

Mid-Shelf: FMNH 99210 (Cayo Negro).

Pelican Cays: USNM 346449 (Manatee, 1997); USNM 364854 (Fisherman's, 2001); USNM 365196 (Cat, 2001).

Coastline Marine: FMNH 83119 (Belize City); FMNH 99262 (Gales Point).

Muraenidae

Echidna catenata (Bloch, 1795) — chain moray

Barrier Reef: FMNH 99113 (South Water); FMNH 99060 (Ambergris); AMNH 87168 (Ambergris).

Offshore Banks: FMNH 108314 (Glovers Reef).

Enchelycore carychroa Böhlke and Böhlke, 1976 — chestnut moray

Barrier Reef: USNM 267813 (Carrie Bow); FMNH 98961 (Carrie Bow); FMNH 108250 (Ambergris).

Offshore Banks: FMNH 98900 (Glovers Reef) FMNH 99005 (Turneffe).

Enchelycore nigricans (Bonnaterre, 1788) — viper moray

Barrier Reef: USNM 349056 (Carrie Bow); FMNH 99111 (Carrie Bow); FMNH 99058 (Ambergris); FMNH 99004 (Sergeant's).

Offshore Banks: FMNH 108309 (Glovers Reef); FMNH 98924 (Lighthouse).

Gymnothorax funebris Ranzani, 1840 — green moray

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001); FMNH 99068 (Ambergris).

Mid-Shelf: USNM 346446, USNM 360576 (Douglas, 2000); USNM 360600 (Spruce, 2000); FMNH 98994 (Spanish).

Pelican Cays: USNM 346446 (Manatee, 1997).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Gymnothorax miliaris (Kaup, 1856) — goldentail moray

Barrier Reef: USNM 278176 (Carrie Bow); FMNH 98970 (Carrie Bow);

FMNH 108356 (Ambergris).

Offshore Banks: FMNH 98904 (Glovers Reef); FMNH 99078 (Turneffe).

Gymnothorax moringa (Cuvier, 1829) — spotted moray

Barrier Reef: USNM 285820 (Carrie Bow); FMNH 99117 (South Water); USNM 365197 (3.1 mi. south of Carrie Bow, 2001); AMNH 224950 (Carrie Bow).

Mid-Shelf: FMNH 99110 (Twin).

Pelican Cays: SR J/S (Avicennia, 2001).

Coastline Marine: FMNH 98917 (Belize City); FMNH 99011 (Punta Gorda).

Offshore Banks: FMNH 98988, 101106 (Glovers Reef).

Gymnothorax vicinus (Castelnau, 1855) — purplemouth moray

Barrier Reef: USNM 327553 (Carrie Bow); FMNH 99106 (Carrie Bow); FMNH 108357 (Ambergris); AMNH 223154 (Carrie Bow).

Coastline Marine: FMNH 101103 (Punta Gorda).

Offshore Banks: FMNH 108360 (Glovers Reef).

Uropterygius macularius (Lesueur, 1825) — marbled moray

Barrier Reef: USNM 278165 (Carrie Bow); FMNH 108359 (Ambergris).

Offshore Banks: FMNH 108321 (Glovers Reef); FMNH 99078 (Turneffe).

Congridae

Conger triporiceps Kanazawa, 1958 — manytooth conger

Barrier Reef: FMNH 99185 (Carrie Bow).

Heteroconger longissimus Günther, 1870 — garden eel (formerly *H. halis* and *H. discus*)

Barrier Reef: USNM 316037 (Carrie Bow); SR CLS (Carrie Bow, 2000).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Chlopsidae

Kaupichthys hyoprorooides (Strömann, 1896) — reef eel

Barrier Reef: USNM 267815 (Carrie Bow); AMNH 225082 (Carrie Bow).

Offshore Banks: FMNH 98803 (Glovers Reef).

Kaupichthys muchalis Böhlke, 1967 — collared eel

Barrier Reef: USNM 267817 (Carrie Bow).

Engraulidae

Anchoa cayorum (Fowler, 1906) — key anchovy

Coastline Marine: FMNH 99467 (Belize City).

Anchoa cubana (Poey, 1868) — Cuban anchovy

Coastline Marine: FMNH 99468 (Belize City).

Anchoa hepsetus (Linnaeus, 1758) — striped anchovy
 Coastline Marine: FMNH 99470 (Belize City).

Anchoa lamprotaenia Hildebrand, 1943 — bigeye anchovy
 Mid-Shelf: AMNH 58677 (Twin).
 Coastline Marine: FMNH 99450 (Belize City).

Anchovia clupeoides (Swainson, 1839) — zabaleta anchovy
 Coastline Marine: FMNH 80409 (Belize City).

Cetengraulis edentulus (Cuvier, 1829) — Atlantic anchoveta
 Coastline Marine: FMNH 10750 (Belize City).

Clupeidae

Harengula clupeola (Cuvier, 1829) — false pilchard
 Pelican Cays: USNM 347657 (Manatee, 1997); USNM 360510 (Co-Cat, 2000);
 USNM 348657 (Manatee, 1997).
 Offshore Banks: FMNH 89490 (Glovers Reef).

Harengula humeralis (Cuvier, 1829) — redear sardine
 Barrier Reef: AMNH 224988 (Carrie Bow).
 Pelican Cays: USNM 347367 (Manatee, 1997); USNM 360509 (Co-Cat, 2000);
 SR J/S (Manatee, 2000).

Harengula jaguana Poey, 1865 — scaled herring
 Coastline Marine: FMNH 96001 (Belize City); AMNH 83638 (Bahia de
 Amatique).

Jenkinsia lamprotaenia (Gosse, 1851) — dwarf herring
 Barrier Reef: USNM 349064 (Carrie Bow); SR J/S (Carrie Bow, 2000);
 AMNH 224999 (Carrie Bow).
 Pelican Cays: USNM 347311 (Cat 1997). Probably this species: SR J/S (Cat,
 2000); SR J/S (Manatee, 2000).

Jenkinsia stolifera (Jordan and Gilbert, 1884) — shortband herring
 Barrier Reef: USNM 353552 (Carrie Bow).
 Pelican Cays: USNM 346450 (Manatee, 1997).

Opisthonema oglinum (Lesueur, 1818) — Atlantic thread herring
 Coastline Marine: FMNH 77807 (Belize City).

Characidae

Astyanax aeneus (Günther, 1860) — central tetra

Coastline Marine: FMNH 103761, (Belize City).

Ariidae

Ariopsis assimilis (Günther, 1864) — Mayan catfish

Coastline Marine: FMNH 95979 (Belize City); FMNH 77788 (mouth of Stann Creek, Dangriga).

Bagre marinus (Mitchill, 1815) — gafftopsail catfish

Coastline Marine: FMNH 103769 (Belize City).

Synodontidae

Saurida suspicio Breder, 1927 — suspicious lizardfish

Barrier Reef: USNM 353556 (Carrie Bow).

Synodus foetens (Linnaeus, 1766) — inshore lizardfish

Coastline Marine: AMNH 83647 (Bahia de Amatique).

Synodus intermedius (Spix and Agassiz, 1829) — sand diver

Barrier Reef: USNM 327555 (Carrie Bow); SR J/S (Carrie Bow, 2001).

Mid-Shelf: SR J/S (Tarpum, 2001); SR J/S (Channel, 2001).

Pelicans: SR RSJ (Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001).

Synodus saurus (Linnaeus, 1758) — bluestriped lizardfish

Barrier Reef: USNM 276220 (Carrie Bow).

Mid-Shelf: SR RSJ (Lagoon, 2000).

Pelican Cays: USNM 347395 (Cat, 1997).

Offshore Banks: FMNH 104634 (Glovers Reef).

Synodus synodus (Linnaeus, 1758) — red lizardfish

Barrier Reef: USNM 276206 (Carrie Bow); AMNH 225071 (Carrie Bow).

Offshore Banks: FMNH 77864 (Glovers Reef).

Synodus sp.

Mid-Shelf: USNM 360490 (SE Lagoon, 2000).

Ophidiidae

Lepophidium brevibarbe (Cuvier, 1829) — blackedge cusk-eel

Coastline Marine: AMNH 83468 (Bahia de Amatique).

Parophidion schmidti (Woods and Kanazawa, 1951) — dusky cusk-eel

Barrier Reef: USNM 351301 (Carrie Bow).

Offshore Banks: FMNH 104690 (Glovers Reef).

Carapidae

Carapus bermudensis (Jones, 1874) — pearlfish

Barrier Reef: AMNH 98280 (Carrie Bow).

Tenuis larvae were taken in set plankton nets at Carrie Bow Cay but we found no adults in more than 50 holothurians examined.

Bythitidae

Calamopteryx goslinei Böhlke and Cohen, 1966 — longarm brotula

Barrier Reef: USNM 3210772 (Carrie Bow).

Offshore Banks: FMNH 71086 (Glovers Reef); FMNH 77583 (Lighthouse).

Grammonus claudaei (Torre y Huerta, 1930) — reef-cave brotula

Offshore Banks: FMNH 89499 (Glovers Reef).

Ogilbia sp.

Barrier Reef: FMNH 89680 (Carrie Bow); FMNH 77538 (Gallows Point Reef).

Mid-Shelf: USNM 360536 (Douglas, 2000); USNM 360537 (SE Lagoon, 2000).

Pelican Cays: USNM 360535 (Cat, 2000).

Coastline Marine: FMNH 89652 (Tarpon).

Offshore Banks: FMNH 71099 (Glovers Reef); FMNH 94879 (Turneffe).

Petrotyx sanguineus (Meek and Hildebrand, 1928) — redfin brotula

Barrier Reef: USNM 276205 (Carrie Bow); FMNH 89667 (Carrie Bow);

AMNH 224991 (Carrie Bow).

Offshore Banks: FMNH 71081 (Glovers Reef).

Batrachoididae

Batrachoides gilberti Meek and Hildebrand, 1928 — Central American toadfish

Coastline Marine: FMNH 71317 (Belize City); FMNH 86555 (Gales Point).

Opsanus beta (Goode and Bean, 1880) — gulf toadfish

Barrier Reef: USNM 321075 (Carrie Bow).

Opsanus dichrostomus Collette, 2001 — bicolor toadfish

Coastline Marine: USNM 361063 (Belize City).

Porichthys pauciradiatus Caldwell and Caldwell, 1963 — lowcount toadfish

Pelican Cays: USNM 360497 (Cat, 2000); USNM 365038 (Cat, 2001).

Sanopus astrifer (Robins and Starck, 1965) — whitespotted toadfish
 Offshore Banks: FMNH 71318 (Glovers Reef).

Sanopus barbatus (Meek and Hildebrand, 1928) — bearded toadfish
 Mid-Shelf: USNM 360639 (SE Lagoon, 2000).
 Coastline Marine: FMNH 105004 (Punta Gorda).

Sanopus greenfieldorum Collette, 1983 — whitelined toadfish
 Barrier Reef: USNM 213555 (Carrie Bow); FMNH 94575 (Carrie Bow);
 AMNH 215988 (Carrie Bow).

Triathalassothia gloverensis (Greenfield and Greenfield, 1973) — reef toadfish
 Barrier Reef: USNM 261602 (Carrie Bow); FMNH 104581 (Carrie Bow);
 FMNH 104593 (Goff's); FMNH 104590 (Ambergris).
 Mid-Shelf: FMNH 104589 (Blue Ground Range).
 Pelican Cays?: USNM 346478 (? catalog entry reads: N of East Cut in the
 Rhomboidal Cays; probably not Pelican Cays, 1997).
 Offshore Banks: FMNH 91035 (Glovers Reef); FMNH 104594 (Turneffe).

Antennariidae

Antennarius multiocellatus (Valenciennes, 1837) — longlure frogfish
 Barrier Reef: USNM 353632 (Carrie Bow).
 Offshore Banks: FMNH 91755 (Glovers Reef).

Antennarius ocellatus (Bloch and Schneider, 1801) — ocellated frogfish
 Offshore Banks: FMNH 86561 (Glovers Reef) (recorded as *Antennarius triocellatus*, which is not listed by Pietsch and Grobecker, 1987).

Antennarius pauciradiatus Schultz, 1957 — dwarf frogfish
 Barrier Reef: USNM 276195 (Carrie Bow).
 Offshore Banks: FMNH 91757 (Glovers Reef).

Antennarius striatus (Shaw in Shaw and Nodder, 1794) — striated frogfish
 Offshore Banks: FMNH 91775 (Glovers Reef).

Ogcocephalidae

Ogcocephalus declivirostris Bradbury, 1980 — slopesnout batfish
 Coastline Marine: AMNH 83650 (Bahia de Amatique).

Ogcocephalus nasutus (Valenciennes, 1829) — shortnose batfish
 Offshore Banks: FMNH 91246 (Glovers Reef).

Mugilidae

Mugil curema Valenciennes, 1836 — white mullet

Coastline Marine: FMNH 103743 (Belize City); FMNH 103742 (Dangriga);
FMNH 77693, FMNH 77693 (South Lagoon).

Mugil trichodon Poey, 1875 — fantail mullet

Coastline Marine: FMNH 100640 (Belize City).

Mugil liza Valenciennes, 1836 — liza (formerly *Mugil brasiliensis*)

Coastline Marine: FMNH 103745, 96083 (Belize City).

Atherinidae

Atherinomorus stipes (Müller and Troschel, 1848) — hardhead silverside

Barrier Reef: USNM 276217 (Carrie Bow); USNM 364862 (3.1 mi. south of Carrie Bow, 2001); FMNH 108689 (South Water); AMNH 224956 (Carrie Bow).

Mid-Shelf: USNM 365177 (Quamino, 2001).

Pelican Cays: USNM 346455 (Manatee, 1997); USNM 360513 (Co-Cat, 2000); USNM 364861 (Cat, 2001).

Coastline Marine: FMNH 96107 (Belize City).

Offshore Banks: FMNH 39637 (Glovers Reef); FMNH 39610 (Turneffe).

Hypoatherina harringtonensis (Goode, 1877) — reef silverside

Barrier Reef: USNM 349221 (Carrie Bow); SR J/S (Carrie Bow, 2001); USNM 364864 (3.1 mi. south of Carrie Bow, 2001); AMNH 224953 (Carrie Bow).

Mid-Shelf: USNM 360638 (Douglas, 2000); USNM 365178 (Quamino, 2001); USNM 364863 (North Elbow).

Offshore Banks: FMNH 39612 (Turneffe); SR CLS and JCT (Glovers Reef, 1988).

Belonidae

Ablennes hians (Valenciennes, 1846) — flat needlefish

Barrier Reef: USNM 323235 (Carrie Bow); SR RSJ (Carrie Bow, 2001).

Platybelone argalus argalus (Lesueur, 1821) — keeltail needlefish

Barrier Reef: USNM 349226 (Carrie Bow).

Strongylura marina (Walbaum, 1792) — Atlantic needlefish

Coastline Marine: FMNH 97250 (Pelican Beach, Dangriga); FMNH 35414 (Belize City).

Strongylura notata notata (Poey, 1860) — redfin needlefish

Barrier Reef: USNM 327560 (Carrie Bow); FMNH 97502 (Carrie Bow); SR J/S (Carrie Bow, 2001).
 Mid-Shelf: USNM 365194 (Quamino, 2001).
 Pelican Cays: USNM 360514 (Co-Cat, 2000); SR RSJ (Manatee, 2000).
 Coastline Marine: FMNH 77800 (Belize City); FMNH 97508 (Punta Gorda).
 Offshore Banks: FMNH 97515, 77527 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Strongylura timucu (Walbaum, 1792) — timucu

Barrier Reef: FMNH 97525 (Carrie Bow); FMNH 97528 (Ambergris).
 Mid-Shelf: FMNH 97536 (Twin).
 Pelican Cays: USNM 360515 (Co-Cat, 2000).
 Coastline Marine: FMNH 97522, (Belize City); FMNH 97535 (Punta Gorda); FMNH 7722 (mouth of Stann Creek, Dangriga); FMNH 97531 (Middle Snake).
 Offshore Banks: FMNH 97523 (Glovers Reef); FMNH 97533 (Turneffe).

Tylosurus crocodilus crocodilus (Péron and Lesueur, 1821) — houndfish

Barrier Reef: USNM 344629 (Carrie Bow); SR J/S (Carrie Bow, 2001); FMNH 97548 (Ambergris).
 Pelican Cays: SR CLS (Cat, 1997).
 Offshore Banks: FMNH 97550 (Glovers Reef).

Hemiramphidae

Hemiramphus brasiliensis (Linnaeus, 1758) — ballyhoo

Barrier Reef: USNM 343865 (Carrie Bow); SR RSJ (Carrie Bow, 2000, 2001).

Hyporhamphus roberti hildebrandi Jordan and Evermann, 1929 — Central American halfbeak

Coastline Marine: FMNH 97483 (Belize City).

Hyporhamphus unifasciatus (Ranzini, 1841) — silverstripe halfbeak

Pelican Cays: USNM 360516 (Co-Cat, 2000).
 Coastline Marine: FMNH 97537 (Belize City).
 Offshore Banks: FMNH 39618 (Turneffe).

Aplocheilidae

Rivulus marmoratus Poey, 1880 — mangrove rivulus

Barrier Reef: FMNH 104450 (St. George's).
 Mid-Shelf: Trapped by WPD (Twin, 2000, 2001).

Poeciliidae

Belonesox belizanus Knerr, 1860 — pike killifish

Mid-Shelf: AMNH 225066 (Twin).

Coastline Marine: FMNH 103754 (Belize City); FMNH 89277 (South Lagoon).

Gambusia nicaraguensis Günther, 1866 — Nicaraguan mosquitofish

Coastline Marine: FMNH 87626 (Belize City); FMNH 87625 (Placentia).

Gambusia punctata Poey, 1854 — spotted mosquitofish

Mid-Shelf: USNM 360477 (SE Lagoon, 2000).

Gambusia yucatana (Regan, 1914) — Southern Yucatan mosquitofish (*Gambusia puncticulata yucatana* of Greenfield, Greenfield, and Wildrick, 1982, *Gambusia yucatana australis* Greenfield, 1985).

Barrier Reef: FMNH 104466 (St. George's); FMNH 93919 (Ambergris).

Mid-Shelf: (Heath, Turner, and Davis, 1993) (Twin).

Coastline Marine: FMNH 95086 (Belize City); FMNH 87664 (South Lagoon); FMNH 93916 (East Snake).

Poecilia orri Fowler, 1943 — mangrove molly

Barrier Reef: FMNH 104511 (St. George's); FMNH 104512 (Ambergris).

Mid-Shelf: USNM 360478 (SE Lagoon, Feb 2000).

Coastline Marine: FMNH 105413 (Belize City); FMNH 103750 (Pelican Beach, Dangriga).

Cyprinodontidae

Cyprinodon artifrons Hubbs, 1936 — Yucatan pupfish

Barrier Reef: (Greenfield and Thomerson, 1997) (Cay Caulker).

Mid-Shelf: (Heath, Turner, and Davis, 1993) (Twin); AMNH 222861 (Twin).

Floridichthys polyommus Hubbs, 1936 — ocellated killifish

Barrier Reef: (Greenfield and Thomerson, 1997) (Ambergris).

Mid-Shelf: (Heath, Turner, and Davis, 1993) (Twin); AMNH 225060 (Twin).

Coastline Marine: (Greenwood and Thomerson, 1997) (Southern Lagoon).

Jordanella pulchra (Hubbs, 1936) — orange flagfish

Mid-Shelf: (Heath, Turner, and Davis, 1993) (Twin); AMNH 225064 (Twin).

Holocentridae

Holocentrus adscensionis (Osbeck, 1765) — squirrelfish

Barrier Reef: SR J/S (Carrie Bow, 2000); SR J/S (Carrie Bow, 2001).

Mid-Shelf: SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001); SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); RD (Elbow, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Co-Cat, 2001); SR J/S (Avicennia, 2001).

Offshore Banks: FMNH 89481 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Holocentrus rufus (Walbaum, 1792) — longspine squirrelfish

Barrier Reef: USNM 267790 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 77835 (Gallows Point); FMNH 108292 (Ambergris); AMNH 224972 (Carrie Bow).

Mid-Shelf: SR J/S (Lagoon, 2000); SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Manatee); SR J/S (Little Cat, 2000); SR J/S (Cat, 2001); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39795 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Myripristis jacobus Cuvier, 1829 — blackbar soldierfish

Barrier Reef: USNM 327563 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Offshore Banks: FMNH 89472 (Glovers Reef).

Neoniphon marianus (Cuvier, 1829) — longjaw squirrelfish

Barrier Reef: USNM 267791 (Carrie Bow); SR RSJ (Carrie Bow, 2000, 2001); FMNH 108297 (Ambergris); FMNH 108290 (English).

Offshore Banks: FMNH 77832 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Plectrypops retrospinis (Guichenot, 1853) — cardinal soldierfish

Barrier Reef: USNM 277810 (Carrie Bow); FMNH 89693 (Carrie Bow); FMNH 108297 (Ambergris).

Offshore Banks: FMNH 77740 (Glovers Reef); FMNH 77827 (Lighthouse).

Sargocentron coruscum (Poey, 1860) — reef squirrelfish

Barrier Reef: USNM 31646 (Carrie Bow); FMNH 108289 (Ambergris).

Mid-Shelf: USNM 360637 (Douglas, 2000).

Offshore Banks: FMNH 89477 (Glovers Reef).

Sargocentron vexillarium (Poey, 1860) — dusky squirrelfish

Barrier Reef: USNM 276222 (Carrie Bow); FMNH 89672; SR J/S (Carrie Bow, 2001); FMNH 10823 (Ambergris); FMNH 89682 (Gallows Point).

Pelican Cays: USNM 347325 (Cat, 1997); USNM 360568 (Cat, 2000).

Offshore Banks: FMNH 89671 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Syngnathidae

Acentronura dendritica (Barbour, 1905) — pipehorse
Barrier Reef: USNM 353960 (Carrie Bow).

Bryx dunckeri (Metzelaar, 1919) — pugnose pipefish

Mid-Shelf: USNM 365354 (North Elbow, 2001); USNM 365352 (Channel, 2001).

Pelican Cays: USNM 365353 (Cat, 2001).

Offshore Banks: FMNH 83891 (Glovers Reef).

Bryx randalli (Herald, 1965) — ocellated pipefish

Mid-Shelf: USNM 360491 (Douglas, 2000); USNM 360644 (SE Lagoon, 2000); USNM 365351 (North Elbow, 2001).

Pelican Cays: USNM 347308 (Cat, 1997); USNM 360584 (Cat, 2000).

Offshore Banks: FMNH 93579 (Glovers Reef).

Cosmocampus albirostris (Kaup, 1856) — whitenoose pipefish

Barrier Reef: USNM 353146 (Carrie Bow).

Offshore Banks: FMNH 84588 (Glovers Reef).

Cosmocampus brachycephalus (Poey, 1868) — crested pipefish

Mid-Shelf: USNM 360601 (Spruce); USNM 365348 (sand spit between Spruce and Wee Wee, 2001); USNM 365349 (Channel, 2001); FMNH 83879 (Robinson).

Pelican Cays: USNM 360517 (Co-Cat, 2000); USNM 365350 (Cat, 2001).

Coastline Marine: FMNH 83843 (Placentia); FMNH 83885 (Punta Gorda).

Offshore Banks: FMNH 83890 (Glovers Reef).

Cosmocampus elucens (Poey, 1868) — shortfin pipefish

Pelican Cays: USNM 346452 (Manatee, 1997); USNM 365347 (Fisherman's, 2001).

Offshore Banks: FMNH 83848 (Glovers Reef).

Hippocampus erectus Perry, 1810 — lined seahorse

Coastline Marine: AMNH 83645 (Bahia de Amatique).

Hippocampus reidi Ginsburg, 1933 — longsnout seahorse

Pelican Cays: USNM 365198 (North Elbow, 2001).

Halicampus crinitis (Jenyns, 1842) — banded pipefish

Barrier Reef: USNM 276073 (Carrie Bow).

Offshore Banks: FMNH 83880 (Glovers Reef).

Anarchopterus tectus (Dawson, 1978) — insular pipefish

Barrier Reef: FMNH 83862 (Carrie Bow) (cataloged as *Micrognathus tectus*).

Penetopteryx nanus (Rosén, 1911) — worm pipefish

Barrier Reef: USNM 346207 (Carrie Bow).

Syngnathus caribbaeus Dawson, 1979 — Caribbean pipefish

Coastline Marine: FMNH 93580 (Placentia).

Syngnathus floridae (Jordan and Gilbert, 1882) — dusky pipefish

Barrier Reef: FMNH 83845 (Gallows Point).

Pelican Cays: USNM 360518 (Co-Cat, 2000).

Offshore Banks: FMNH 83846 (Glovers Reef).

Syngnathus scovellii (Evermann and Kendall, 1896) — Gulf pipefish (*S. rousseau* is

probably a synonym.)

Coastline Marine: FMNH 83844 (Belize City).

Aulostomidae

Aulostomus maculatus Valenciennes, 1837 — trumpetfish

Barrier Reef: USNM 267794 (Carrie Bow); SR RSJ (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Channel, 2001).

Pelican Cays: SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 77570 (Glovers Reef).

Synbranchidae

Ophisternon aenigmaticum Rosen and Greenwood, 1976 — swamp eel

Mid-Shelf: USNM 329295 (Twin).

Coastline Marine: FMNH 103756 (Belize City).

Dactylopteridae

Dactylopterus volitans (Linnaeus, 1758) — flying gurnard

Barrier Reef: AMNH 225007 (Carrie Bow).

Scorpaenidae

Scorpaena albifimbria Evermann and Marsh, 1900 — coral scorpionfish

Barrier Reef: USNM 276145 (Carrie Bow); FMNH 105023 (Carrie Bow);

FMNH 105036 (Ambergris); FMNH 77754 (Gallows Point).

Offshore Banks: FMNH 77858 (Glovers Reef); FMNH 105048 (Turneffe).

Scorpaena bergii Evermann and Marsh, 1900 — goosehead scorpionfish

Barrier Reef: USNM 353631, FMNH 105436 (Carrie Bow).

Offshore Banks: FMNH 105033 (Glovers Reef).

Scorpaena brasiliensis Cuvier, 1829 — barbfish

Barrier Reef: FMNH 105267 (South Water).

Offshore Banks: FMNH 105437 (Glovers Reef).

Coastline Marine: AMNH 83643 (Bahia de Amatique).

Scorpaena dispar Longley and Hildebrand, 1940 — hunchback scorpionfish

Offshore Banks: FMNH 105034 (Glovers Reef).

Scorpaena grandicornis Cuvier, 1829 — plumed scorpionfish

Pelican Cays: USNM 346466 (Manatee, 1997).

Offshore Banks: FMNH 86509 (Glovers Reef).

Scorpaena inermis Cuvier, 1829 — mushroom scorpionfish

Mid-Shelf: USNM 360606 (Spruce, 2000).

Offshore Banks: FMNH 105016, 86506 (Glovers Reef).

Scorpaena plumieri Bloch, 1789 — spotted scorpionfish

Barrier Reef: USNM 276203, FMNH 105457 (Carrie Bow); SR J/S (Carrie Bow, 2001); FMNH 86511 (Gallows Point); FMNH 105038 (Ambergris); FMNH 105449 (Sergeant's).

Mid-Shelf: SR RSJ (Spruce, 2000); FMNH 105448 (Spanish).

Coastline Marine: FMNH 105450 (Punta Gorda); FMNH 105456 (Tarpon, north of Frenchman's).

Offshore Banks: FMNH 86510 (Glovers Reef); FMNH 105041 (Turneffe); FMNH 105008 (Lighthouse).

Scorpaenodes caribbaeus Meek and Hildebrand, 1928 — reef scorpionfish

Barrier Reef: USNM 276188, FMNH 105484 (Carrie Bow); FMNH 105465 (Sergeant's); FMNH 105035 (Ambergris).

Offshore Banks: FMNH 105040 (Glovers Reef); FMNH 105474 (Turneffe).

Scorpaenodes tredecimspinosis (Metzelaar, 1919) — deepreef scorpionfish

Barrier Reef: USNM 267808, FMNH 105056 (Carrie Bow); FMNH 105039 (Ambergris).

Offshore Banks: FMNH 105012 (Glovers Reef); FMNH 105042 (Turneffe).

Triglidae

Bellator militaris (Goode and Bean, 1896) — horned searobin
Coastline Marine: AMNH 83641 (Bahia de Amatique).

Centropomidae

Centropomus ensiferus Poey, 1860 — swordspine snook
Coastline Marine: FMNH 77805 (Belize City); FMNH 104082 (Dangriga).

Centropomus parallelus Poey, 1860 — fat snook
Coastline Marine: FMNH 104651 (Belize City).

Centropomus pectinatus Poey, 1860 — tarpon snook
Coastline Marine: FMNH 77804 (Belize City); FMNH 104652 (South Lagoon).

Centropomus poeyi Chávez, 1961 — Mexican snook
Coastline Marine: FMNH 80423 (Belize City).

Centropomus undecimalis (Bloch, 1792) — common snook
Coastline Marine: FMNH 103872 (Belize City).

Serranidae

Cephalopholis cruentata (Lacepède, 1802) — graysby
Barrier Reef: USNM 274908, FMNH 95833 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 95847 (English); FMNH 95866 (Ambergris).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Elbow, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 95837, 95840 (Glovers Reef); FMNH 95878 (Turneffe); FMNH 95928 (Lighthouse).

Cephalopholis fulva (Linnaeus, 1758) — coney

Barrier Reef: USNM 349057 (Carrie Bow); SR CLS (Carrie Bow, 2001); FMNH 95919 (Ambergris); FMNH 95935 (Hol Chan); AMNH 83085 (Ambergris).

Offshore Banks: FMNH 95944 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Diplectrum bivittatum (Valenciennes, 1828) — dwarf sandperch

Barrier Reef: USNM 354569 (Carrie Bow).

Epinephelus adscensionis (Osbeck, 1765) — rock hind
 Barrier Reef: SR RSJ (Carrie Bow, 2000).

Epinephelus guttatus (Linnaeus, 17858) — red hind
 Barrier Reef: USNM 276225 (Carrie Bow); SR J/S (Carrie Bow, 2000).
 Offshore Banks: FMNH 95803 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Epinephelus itajara (Lichtenstein, 1822) — jewfish
 Pelican Cays: SR CLS (Cat, 1997).
 Coastline Marine: FMNH 103771 (Belize City).

Epinephelus morio (Valenciennes, 1828) — red grouper
 Pelican Cays: SR J/S (Avicennia, 2001); SR J/S (Co-Cat, 2001).

Epinephelus striatus (Bloch, 1792) — Nassau grouper
 Barrier Reef: AMNH 93324 (Carrie Bow).
 Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Tarpum, 2001); SR J/S (Elbow, 2001).
 Pelican Cays: SR JCT et al. (Cat, 1995); SR J/S (Cat, 2000); SR CLS (Cat, 1997).
 Offshore Banks: FMNH 39719 (Glovers Reef.); SR CLS and JCT (Glovers Reef, 1988).

Hoplolepterus aberrans Poey , 1868 — yellowbellied hamlet
 Barrier Reef: USNM 327573 (Carrie Bow).
 Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR CLS (Lagoon, 2000); SR J/S (Tarpum, 2001).
 Pelican Cays: USNM 347373 (Manatee, 1997); SR J/S (Little Cat, 2000); SR J/S (Cat, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001).

Hoplolepterus chlorurus (Cuvier, 1828) — yellowtail hamlet
 Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Quamino, 2001).
 Pelican Cays: SR J/S (Cat, 2000); SR CLS (Cat, 1997).

Hoplolepterus indigo (Poey, 1851) — indigo hamlet
 Barrier Reef: USNM 349063 (Carrie Bow); SR J/S (Carrie Bow, 2001).
 Offshore Banks: SR CL and JCT (Glovers Reef, 1988).

Hoplolepterus sp. nov. — Mayan hamlet. (Figure 2) (This species is being described by P. Lobell.)
 Mid-Shelf: Record from P. Lobell (pers. comm.) (Wee Wee).

Pelican Cays: USNM 360467 (Manatee, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR CLS (Cat, 1997).

Hypoplectrus nigricans (Poey, 1852) — black hamlet

Barrier Reef: USNM 327572 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 95953 (English).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347371 (Manatee, 1997); USNM 347414 (Cat, 1997); SR J/S (Cat, 2000, 2001); SR CLS (Cat, 1997); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 95954 (Turneffe); SR CLS and JCT (Glovers Reef, 1988).

Hypoplectrus puella (Cuvier, 1828) — barred hamlet

Barrier Reef: USNM 327575 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: USNM 360630 (Douglas, 2000); SR J/S (Douglas, 2000); USNM 360640 (SE Lagoon, 2000); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347327 (Cat, 1997); USNM 347413 (Cat, 1997); USNM 347464 (Manatee, 1997); SR J/S (Manatee, 2000, 2001); USNM 360586 (Cat, 2000); SR J/S (Cat, 2000, 2001); USNM 347372 (Manatee, 1997); USNM 347364 (Manatee, 1997); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 95947 (Glovers Reef).

Hypoplectrus unicolor (Walbaum, 1792) — butter hamlet

Barrier Reef: USNM 327574 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Mid-Shelf: USNM 360641 (SE Lagoon, 2000); SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001); SR J/S (Elbow, 2001).

Pelican Cays: USNM 360646 (Little Cat, 2000); SR J/S (Cat 2000); SR J/S (Little Cat, 2000); SR CLS (Cat, 1997); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 95775 (Placentia).

Offshore Banks: FMNH 95770 (Glovers Reef); FMNH 95771 (Turneffe); SR CLS and JCT (Glovers Reef, 1988).

Hypoplectrus “blueback hybrid?”

Mid-Shelf: SR J/S (Elbow, 2001).

Liopropoma carmabi (Randall, 1963) — candy basslet

Offshore Banks: FMNH 70945 (Glovers Reef).

Liopropoma mowbrayi Woods and Kanazawa, 1951 — cave bass

Barrier Reef: USNM 267786 (Carrie Bow).

Offshore Banks: FMNH 95669 (Glovers Reef); FMNH 95673 (Lighthouse).

Liopropoma rubre Poey, 1861 — peppermint bass

Barrier Reef: USNM 267787, FMNH 95600 (Carrie Bow); FMNH 95618
(Ambergris); AMNH 225020 (Carrie Bow).

Offshore Banks: FMNH 95602, 77757 (Glovers Reef); FMNH 95606
(Turneffe); FMNH 95597 (Lighthouse).

Mycteroperca bonaci (Poey, 1860) — black grouper

Pelican Cays: SR J/S (Kitten, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Mycteroperca phenax Jordan and Swain, 1884 — scamp (formerly cataloged as *M. falcata*)

Offshore Banks: FMNH 39714 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Mycteroperca tigris (Valenciennes, 1833) — tiger grouper

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Mycteroperca venenosa (Linnaeus, 1758) — yellowfin grouper

Barrier Reef: SR J/S (Carrie Bow, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Pseudogramma gregoryi (Breder, 1927) — reef bass

Barrier Reef: USNM 274897, FMNH 95398 (Carrie Bow); FMNH 95354
(Gallows Point); FMNH 95492 (Goff's); FMNH 95383 (Ambergris);
FMNH 95370 (Sergeant's).

Offshore Banks: FMNH 95643 (Glovers Reef); FMNH 95371 (Turneffe);
FMNH 90196 (Lighthouse).

Rypticus bistrispinus (Mitchill, 1818) — freckled soapfish

Mid-Shelf: AMNH 223158 (Twin Cays shot hole).

Coastline Marine: FMNH 95451 (Belize City, Salt Creek approach channel).

Rypticus bornoi Beebe and TeeVan, 1928 — largespotted soapfish

Barrier Reef: USNM 321040 (Carrie Bow).

Pelican Cays: USNM 347375 (Manatee, 1997).

Rypticus randalli Courtenay, 1967 — Randall's soapfish

Coastline Marine: FMNH 95439 (Placentia); FMNH 95455 (Punta Gorda).

Rypticus saponaceus (Schneider, 1801) — greater soapfish

Offshore Banks: FMNH 95450 (Glovers Reef).

Rypticus subbifrenatus (Gill, 1861) — spotted soapfish

Barrier Reef: USNM 276231, FMNH 90188 (Carrie Bow); FMNH 95470 (Ambergris); FMNH 90174 (Gallows Point Reef); FMNH 95452 (Goff's); AMMNH 224971 (Carrie Bow).

Coastline Marine: FMNH 95454 (Punta Gorda).

Offshore Banks: FMNH 95445 (Glovers Reef); FMNH 95665 (Turneffe).

Serranus baldwini (Evermann and Marsh, 1899) — lantern bass

Barrier Reef: USNM 354564, FMNH 87967 (Carrie Bow); FMNH 95472 (Ambergris); AMNH 224994 (Carrie Bow).

Offshore Banks: FMNH 87962 (Glovers Reef); FMNH 95745 (Turneffe); SR CLS and JCT (Glovers Reef, 1988).

Serranus flaviventris (Cuvier, 1829) — two-spot bass (Figure 3)

Mid-Shelf: USNM 360485 (SE Lagoon, 2000); USNM 364874 (Quamino, 2001); SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); FMNH 95726 (Blue Ground Range).

Pelican Cays: USNM 347302 (Cat, 1997); USNM 360587 (Cat, 2000); USNM 360486 (Little Cat, 2000); USNM 364873 (Cat, 2001); SR J/S (Avicennia, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 95723 (Belize City); FMNH 95724 (Punta Gorda); FMNH 95722 (Frenchman's).

Serranus tabacarius (Cuvier, 1829) — tobacco fish

Barrier Reef: USNM 349079 (Carrie Bow); SR CLS (Carrie Bow, 2000); FMNH 95728 (English); FMNH 95730 (Ambergris).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); SR J/S (Channel, 2001); SR J/S (Elbow, 2001).

Pelican Cays: USNM 347302 (Cat, 1997); USNM 360595 (Cat, 2000); SR J/S (Cat, 2000,2001); SR J/S (Manatee, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Co-Cat, 2001); SR J/S (Ridge, 2001); SR CLS (Cat, 1997).

Offshore Banks: FMNH 87986 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Serranus tigrinus (Bloch, 1790) — harlequin bass

Barrier Reef: USNM 276229, FMNH 87980 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 95704 (Ambergris); FMNH 95704 (Hol Chan).
 Mid-Shelf: SR J/S (Tarpum, 2001).
 Pelican Cays: SR J/S (Co-Cat, 2001).
 Offshore Banks: FMNH 87968 (Glovers Reef); FMNH 87985 (Turneffe); FMNH 87974 (Lighthouse); SR CLS and JCT (Glovers Reef, 1988).

Serranus tortugarum Longley, 1935 — chalk bass (Figure 4)

Barrier Reef: USNM 349231 (Carrie Bow); SR J/S (Carrie Bow, 2000).
 Mid-Shelf: SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Tarpum, 2001).
 Pelican Cays: USNM 347388 (Cat, 1997); USNM 360588 (Cat, 2000); SR JCT et al. (Cat 1995); USNM 360596 (Cat, 2000); USNM 347374 (Manatee, 1997); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Grammatidae

Gramma loreto Poey, 1868 — royal gramma

Barrier Reef: USNM 267803, FMNH 89438 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 95234 (English); FMNH 95254 (Hol Chan); FMNH 95255 (Ambergris); AMNH 225026 (Carrie Bow).
 Offshore Banks: FMNH 95225 (Glovers Reef); FMNH 95235 (Turneffe); FMNH 89447 (Lighthouse); SR CLS and JCT (Glovers Reef, 1988).

Gramma melanura Böhlke and Randall, 1963 — blackcap basslet

Barrier Reef: USNM 317454 (Carrie Bow).
 Offshore Banks: FMNH 95292 (Glovers Reef); FMNH 95299 (Turneffe); FMNH 89460 (Lighthouse); SR CLS and JCT (Glovers Reef, 1988).

Lipogramma anabantoides Böhlke, 1960 — dusky basslet

Barrier Reef: USNM 267783 (Carrie Bow); FMNH 95411 (English).
 Offshore Banks: FMNH 95399 (Glovers Reef); FMNH 95418 (Turneffe).

Lipogramma trilineatum Randall, 1963 — threeline basslet

Barrier Reef: USNM 317479, FMNH 95406 (Carrie Bow).
 Offshore Banks: FMNH 95409 (Glovers Reef).

Lobotidae

Lobotes surinamensis (Bloch, 1790) — tripletail (Figure 5).

Barrier Reef: Juvenile caught by C. Daniel Miller on 6 February 2001 (Carrie Bow).

Opistognathidae

Lonchopisthus micrognathus (Poey, 1860) — swordtail jawfish

Pelican Cays: USNM 347305 (Cat, 1997).

Opistognathus aurifrons (Jordan and Thompson, 1905) — yellowhead jawfish

Barrier Reef: USNM 327597 (Carrie Bow); SR CLS (Carrie Bow, 2000).

Offshore Banks: FMNH 82577 (Glovers Reef).

Opistognathus gilberti Böhlke, 1967 — yellow jawfish

Barrier Reef: USNM 287969 (Carrie Bow).

Opistognathus maxillosus Poey, 1860 — mottled jawfish

Barrier Reef: USNM 321014 (Carrie Bow).

Offshore Banks: FMNH 82581 (Glovers Reef).

Opistognathus whitehurstii (Longley, 1927) — dusky jawfish

Mid-Shelf: USNM 360605 (Spruce, 2000); USNM 365167 (Channel, 2001).

Pelican Cays: USNM 360498 (Cat, 2000); USNM 365168 (Cat, 2001).

Coastline Marine: FMNH 82580 (Frenchman's).

Priacanthidae

Heteropriacanthus cruentatus (Lacepède, 1801) — glasseye snapper

Barrier Reef: USNM 276154 (Carrie Bow); SR J/S (Carrie Bow, 2000); FMNH 89637 (Gallows Point).

Offshore Banks: FMNH 89491 (Glovers Reef).

Apogonidae

Apogon aurolineatus (Mowbray, 1927) — bridle cardinalfish

Barrier Reef: FMNH 86068 (Gallows Point).

Pelican Cays: USNM 347392 (Cat, 1997); USNM 360494 (Cat, 2000); USNM 364857 (Manatee, 2001).

Offshore Banks: FMNH 98091 (Glovers Reef); FMNH 98147 (Lighthouse).

Apogon binotatus (Poey, 1867) — barred cardinalfish

Barrier Reef: FMNH 98459 (Carrie Bow).

Mid-Shelf: USNM 360628 (Douglas, 2000); USNM 364858 (North Elbow, 2001).

Pelican Cays: USNM 347319 (Cat, 1997); USNM 360533 (Cat, 2000); USNM 360534 (Little Cat, 2000).

Coastline Marine: FMNH 98406 (Punta Gorda).

Offshore Banks: FMNH 98227 (Glovers Reef).

Apogon lachneri Böhlke, 1959 — whitestar cardinalfish

Barrier Reef: USNM 267803, FMNH 98260 (Carrie Bow); FMNH 97255 (Ambergris); FMNH 97207 (English); AMNH 22019 (Carrie Bow).
Offshore Banks: FMNH 97167 (Glovers Reef); FMNH 98385 (Turneffe); FMNH 98145 (Lighthouse).

Apogon leptocaulus Gilbert, 1972 — slendertail cardinalfish

Offshore Banks: FMNH 98356 (Glovers Reef).

Apogon maculatus (Poey, 1860) — flamefish

Barrier Reef: USNM 276174, FMNH 98831 (Carrie Bow); FMNH 98504 (Ambergris); SR J/S (Carrie Bow, 2001); FMNH 97237 (Sergeant's); FMNH 98055 (Gallows Point); FMNH 98392 (Goff's); FMNH 98504 (Ambergris); FMNH 98531 (Hol Chan).
Mid-Shelf: FMNH 98470 (Twin); USNM 365175 (Tarpum, 2001).
Coastline Marine: FMNH 97185 (Punta Gorda).
Offshore Banks: FMNH 98568 (Glovers Reef); FMNH 98388 (Turneffe).

Apogon mosavi Dale, 1977 — dwarf cardinalfish

Mid-Shelf: UF 10388 (Twin Cays shot hole).

Apogon phenax Böhlke and Randall, 1968 — mimic cardinalfish

Barrier Reef: FMNH 98829 (Carrie Bow); FMNH 98393 (English); FMNH 98535 (Ambergris).
Pelican Cays: USNM 347391 (Cat, 1997); USNM 360609 (Little Cat, 2000); USNM 365176 (Avicennia, 2001).
Offshore Banks: FMNH 98345, 98349 (Glovers Reef); FMNH 98580 (Turneffe); FMNH 98154 (Lighthouse).

Apogon pillionatus Böhlke and Randall, 1968 — broadsaddle cardinalfish

Offshore Banks: FMNH 97220 (Glovers Reef).

Apogon planifrons Longley and Hildebrand, 1940 — pale cardinalfish

Barrier Reef: FMNH 98465 (Carrie Bow); FMNH 98562 (Ambergris); AMNH 225075 (Carrie Bow).
Mid-Shelf: USNM 364859 (North Elbow, 2001).
Offshore Banks: FMNH 98570 (Glovers Reef); FMNH 98590 (Turneffe); FMNH 98149 (Lighthouse).

Apogon pseudomaculatus Longley, 1932 — twospot cardinalfish

Barrier Reef: USNM 349045 (Carrie Bow); FMNH 98395 (English).
Offshore Banks: FMNH 97180 (Glovers Reef).

Apogon quadrisquamatus Longley, 1934 — sawcheek cardinalfish

Barrier Reef: FMNH 98466 (Carrie Bow); FMNH 98546 (Ambergris).

Pelican Cays: USNM 347393 (Cat, 1997); USNM 360594 (Cat, 2000); USNM 364860 (Manatee, 2001).

Offshore Banks: FMNH 98241 (Glovers Reef).

Apogon robbii Gilbert and Tyler, 1997 — lined cardinalfish

Barrier Reef: SR JCT (Carrie Bow).

Mid-Shelf: USNM 338013 (Twin Cays shot hole).

Apogon townsendi (Breder, 1927) — belted cardinalfish

Barrier Reef: USNM 349046, FMNH 97275 (Carrie Bow); FMNH 98505 (Ambergris); FMNH 98532 (Hol Chan); FMNH 98396 (English); AMNH 225023 (Carrie Bow).

Mid-Shelf: USNM 360629 (Douglas, 2000).

Offshore Banks: FMNH 97249, 98161 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 98389 (Turneffe); FMNH 97200 (Lighthouse).

Astrapogon alutus (Jordan and Gilbert, 1882) — bronze cardinalfish

Pelican Cays: USNM 347362 (Manatee, 1997).

Offshore Banks: FMNH 98574 (Turneffe).

Astrapogon puncticulatus (Poey, 1867) — blackfin cardinalfish

Barrier Reef: USNM 327993 (Carrie Bow); FMNH 98506 (Ambergris).

Mid-Shelf: FMNH 98379 (Robinson Point Cay).

Coastline Marine: FMNH 98400 (Punta Gorda).

Offshore Banks: FMNH 98347 (Glovers Reef); FMNH 98615 (Turneffe).

Astrapogon stellatus (Cope, 1867) — conchfish

Barrier Reef: FMNH 98317 (Carrie Bow); FMNH 98383 (Sergeant's); FMNH 98312 (Cay Caulker).

Pelican Cays: USNM 360569 (Cat, 2000).

Coastline Marine: FMNH 98402 (Punta Gorda).

Offshore Banks: FMNH 98230 (Glovers Reef); FMNH 98591 (Turneffe).

Phaeoptyx conklini (Silvester, 1915) — freckled cardinalfish

Barrier Reef: USNM 276141 (Carrie Bow); FMNH 98468 (Carrie Bow); FMNH 98507 (Ambergris); FMNH 98534 (Hol Chan); FMNH 98391 (Goff's); FMNH 98384 (Sergeant's); FMNH 98054 (Gallows Point Reef); AMNH 225076 (Carrie Bow).

Mid-Shelf: USNM 360626 (Douglas, 2000); USNM 365171 (North Elbow, 2001).

Coastline Marine: FMNH 97265 (Belize City); FMNH 98404 (Punta Gorda).
 Offshore Banks: FMNH 98346 (Glovers Reef); FMNH 98583 (Turneffe);
 FMNH 98146 (Lighthouse).

Phaeoptyx pigmentaria (Poey, 1860) — dusky cardinalfish
 Barrier Reef: USNM 267807, FMNH 98830, 98239 (Carrie Bow); AMNH 225085 (Carrie Bow).
 Mid-Shelf: USNM 360627 (Douglas, 2000); USNM 365172 (North Elbow, 2001).
 Pelican Cays: USNM 347318 (Cat, 1997); USNM 347465 (Cat, 1997).
 Offshore Banks: FMNH 98572 (Glovers Reef); FMNH 98387 (Turneffe);
 FMNH 98155 (Lighthouse).

Phaeoptyx xenus (Böhlke and Randall, 1968) — sponge cardinalfish
 Barrier Reef: FMNH 329553 (Carrie Bow); FMNH 98398 (English); FMNH 98559 (Ambergris); FMNH 98056 (Gallows Point Reef).
 Mid-Shelf: USNM 360642 (SE Lagoon, 2000); USNM 365174 (Channel, 2001).
 Pelican Cays: USNM 347394 (Cat, 1997); USNM 360484 (Cat, 2000); USNM 365169 (Cat, 2001); USNM 360508 (Little Cat, 2000); USNM 365170 (Ridge, 2001); USNM 365173 (Manatee, 2001).
 Coastline Marine: FMNH 98399 (Punta Gorda); FMNH 98162 (Frenchman's).
 Offshore Banks: FMNH 98828 (Glovers Reef); FMNH 98612 (Turneffe);
 FMNH 98152 (Lighthouse).

Malacanthidae

Malacanthus plumieri (Bloch, 1786) — sand tilefish
 Barrier Reef: USNM 349069 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001);
 AMNH 225686 (Carrie Bow).
 Offshore Banks: FMNH 89485 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Echeneidae

Echeneis naucrates Linnaeus, 1758 — sharksucker
 Barrier Reef: SR J/S (Carrie Bow 2000).
 Coastline Marine: AMNH 83639 (Bahia de Amatique).

Carangidae

Carangoides bartholomaei Cuvier, 1833 — yellow jack
 Mid-Shelf: SR RSJ (Lagoon, 2000); SR J/S (Quamino, 2001).
 Pelican Cays: SR J/S (Cat, 2000); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).
 Coastline Marine: FMNH 89506 (Belize City).

Carangoides ruber (Bloch, 1793) — bar jack

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001).
 Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Channel, 2001); SR J/S (Elbow, 2001).
 Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2000); SR CLS (Cat, 1997); SR J/S (Kitten, 2001); SR J/S (Co-Cat, 2001).
 Offshore Banks: FMNH 39813 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Caranx cryos (Mitchill, 1815) — blue runner

Pelican Cays: SR RSJ (Cat, 2000).

Caranx hippos (Linnaeus, 1766) — crevalle jack

Mid-Shelf: SR J/S (Quamino, 2001).
 Coastline Marine: FMNH 89507 (Belize City).

Caranx latus Agassiz, 1831 — horse-eye jack

Pelican Cays: SR CLS (Cat, 1997).
 Coastline Marine: FMNH 89504 (Belize City); FMNH 77697 (South Lagoon).
 Offshore Banks: FMNH 39717 (Glovers Reef.); SR CLS and JCT (Glovers Reef, 1988).

Chloroscombrus chrysurus (Linnaeus, 1766) — Atlantic bumper

Coastline Marine: AMNH 83654 (Bahia de Amatique).

Decapterus macarellus (Cuvier, 1833) — mackerel scad

Barrier Reef: USNM 327581 (Carrie Bow).
 Mid-Shelf: SR RSJ (Quamino, 2001).
 Pelican Cays: SR RSJ (Manatee, 2001).

Oligoplites saurus (Bloch and Schneider, 1801) — leatherjack

Coastline Marine: FMNH 89505 (Belize City); FMNH 77540 (South Lagoon).

Selar crumenophthalmus (Block, 1793) — bigeye scad

Offshore Banks: FMNH 89502 (Glovers Reef).

Selene vomer (Linnaeus, 1758) — lookdown

Coastline Marine: FMNH 89508 (Belize City).

Trachinotus falcatus (Linnaeus, 1758) — permit

Mid-Shelf: SR RSJ (Quamino, 2001).
 Pelican Cays: USNM 360524 (Co-Cat, 2000).

Coastline Marine: FMNH 89503 (Belize City).

Lutjanidae

Lutjanus analis (Cuvier, 1828) — mutton snapper

Barrier Reef: SR J/S (Carrie Bow, 2000).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Channel, 2001); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 77720 (Belize City).

Offshore Banks: FMNH 39721 (Glovers Reef).

Lutjanus apodus (Walbaum, 1792) — schoolmaster

Barrier Reef: USNM 356238 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 84542 (Ambergris).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Elbow, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 346463 (Manatee, 1997); USNM 360521 (Co-Cat, 2000); SR J/S (Manatee, 2000); SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001); SR J/S (Avicennia, 2001).

Coastline Marine: UF 206781 (Belize City); FMNH 103789 (Southern Lagoon).

Offshore Banks: FMNH 39820 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Lutjanus buccanella (Cuvier, 1828) — blackfin snapper

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Lutjanus cyanopterus (Cuvier, 1828) — cubera snapper

Pelican Cays: SR CLS (Cat, 1997).

Lutjanus griseus (Linnaeus, 1758) — gray snapper

Barrier Reef: USNM 327582 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Mid-Shelf: SR J/S (Elbow, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); USNM 347351 (Manatee, 1997); SR J/S (Avicennia, 2001).

Coastline Marine: FMNH 89644 (Belize City); FMNH 77845 (Southern Lagoon).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Lutjanus jocu (Bloch and Schneider, 1801) — dog snapper

Barrier Reef: SR CLS (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001).

Pelican Cays: SR CLS (Cat, 1997); SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001).

Coastline Marine: FMNH 103788 (Belize City).

Offshore Banks: FMNH 104657 (Glovers Reef).

Lutjanus mahogoni (Cuvier, 1828) — mahogany snapper

Barrier Reef: USNM 349068 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 224984 (Carrie Bow).

Mid-Shelf: SR J/S (Quamino, 2001).

Lutjanus synagris (Linnaeus, 1758) — lane snapper

Barrier Reef: USNM 356240 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Channel, 2001); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001).

Pelican Cays: USNM 347303 (Cat, 1997); SR J/S (Cat, 2000); USNM 360522 (Co-Cat, 2000); USNM 347352 (Manatee, 1997); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 77748 (Belize City); AMNH 83642 (Bahia de Amatique).

Offshore Banks: FMNH 89639 (Glovers Reef).

Ocyurus chrysurus (Bloch, 1791) — yellowtail snapper

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); USNM 347354 (Manatee, 1997); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 89650 (Belize City).

Offshore Banks: FMNH 39736 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Haemulidae

Anisotremus virginicus (Linnaeus, 1758) — porkfish

Barrier Reef: USNM 343869 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Elbow, 2001); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); SR J/S (Channel, 2001).

Pelican Cays: USNM 360496 (Little Cat, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Kitten, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 104661 (Punta Gorda).

Haemulon aurolineatum Cuvier, 1830 — tomate

Barrier Reef: USNM 349060 (Carrie Bow, 2001); AMNH 224986 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001);

Pelican Cays: USNM 347390 (Cat, 1997); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Kitten, 2001); SR J/S (Acicennia, 2001).

Offshore Banks: FMNH 104660 (Glovers Reef).

Haemulon carbonarium Poey, 1860 — caesar grunt

Barrier Reef: SR J/S (Carrie Bow, 2000).

Pelican Cays: SR J/S (Cat, 2000).

Haemulon chrysargyreum Günther, 1859 — smallmouth grunt

Barrier Reef: USNM 349061 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Haemulon flavolineatum (Desmarest, 1823) — French grunt (Figure 6)

Barrier Reef: USNM 327584 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); ANMH 224992.

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347356 (Manatee, 1997); SR J/S (Manatee, 2000, 2001); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39815 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Haemulon macrostomum Günther, 1859 — Spanish grunt

Barrier Reef: SR J/S (Carrie Bow, 2000).

Mid-Shelf: RD (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Manatee, 2000).

Haemulon parra (Desmarest, 1823) — sailors choice

Barrier Reef: SR RSJ (Carrie Bow, 2001).

Haemulon plumieri (Lacepède, 1801) — white grunt

Barrier Reef: USNM 327585 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001).

Pelican Cays: USNM 347355 (Manatee, 1997); USNM 360495 (Cat, 2000); USNM 365186 (Fisherman's, 2001); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39764 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Haemulon sciurus (Shaw, 1803) — bluestriped grunt

Barrier Reef: USNM 327583 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 83090 (Ambergris); AMNH 224998 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 346464, 348658 (Manatee, 1997); SR J/S (Cat, 2000); SR J/S (Manatee, 2000, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39809 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Gerridae

Diapterus rhombeus (Cuvier, 1830) — silver mojarra

Coastline Marine: FMNH 71370 (Belize City); FMNH 77645 (Southern Lagoon); AMNH 83632 (Bahia de Amatique).

Eucinostomus argenteus Baird and Girard, 1855 — spotfin mojarra

Barrier Reef: FMNH 104685 (South Water); FMNH 104683 (Cay Caulker); AMNH 224969 (Carrie Bow).

Mid-Shelf: USNM 360602 (Spruce, 2000); USNM 365188 (unnamed sand spit between Spruce and Wee Wee, 2001).

Pelican Cays: USNM 346458 (Manatee, 1997); USNM 360519 (Co-Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 77654 (Belize City); FMNH 104621 (Placentia); FMNH 103784 (Pelican Beach, Dangriga); FMNH 77648 (Southern Lagoon).

Offshore Banks: FMNH 77650 (Glovers Reef).

Eucinostomus lefroyi (Goode, 1874) — mottled mojarra

Barrier Reef: AMNH 224970 (Carrie Bow).

Eucinostomus gula (Quoy and Gaimard, 1824) — silver jenny
 Barrier Reef: FMNH 104687 (Cay Caulker).
 Pelican Cays: USNM 347366 (Manatee, 1997).
 Coastline Marine: FMNH 77704 (Belize City); FMNH 77646 (Southern Lagoon).

Eucinostomus melanopterus (Bleeker, 1863) — flagfin mojarra
 Coastline Marine: FMNH 104623 (Belize City); FMNH 104688 (Pelican Beach, Dangriga); FMNH 77661 (Southern Lagoon).

Eugerres plumieri (Cuvier, 1830) — striped mojarra
 Coastline Marine: FMNH 71369 (Belize City).

Gerres cinereus (Walbaum, 1792) — yellowfin mojarra
 Barrier Reef: USNM 343870 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 104630 (St. Georges).
 Mid-Shelf: AMNH 225062 (Twin).
 Coastline Marine: FMNH 104629 (Belize City); FMNH 104631 (Placentia).
 Offshore Banks: FMNH 104628 (Glovers Reef).

Inermiidae

Inermia vittata Poey, 1860 — boga
 Barrier Reef: USNM 319705 (Carrie Bow).

Sparidae

Archosargus probatocephalus (Walbaum, 1792) — sheepshead
 Pelican Cays: SR CLS (Cat, 2000).
 Coastline Marine: FMNH 77758 (Belize City); FMNH 103768 (Southern Lagoon).

Archosargus rhomboidalis (Linnaeus, 1758) — sea bream
 Coastline Marine: FMNH 77761 (Belize City).

Calamus bajonado (Bloch and Schneider, 1801) — jolthead porgy
 Offshore Banks: FMNH 39715 (Glovers Reef).

Calamus calamus (Valenciennes, 1830) — saucereye porgy
 Barrier Reef: USNM 343864 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).
 Mid-Shelf: SR RSJ (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Elbow, 2001); SR J/S (Tarpum, 2001).
 Pelican Cays: SR RSJ (Cat, 2000); SR RSJ (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001).

Calamus penna (Valenciennes, 1830) — sheepshead porgy
Coastline Marine: FMNH 89648 (Belize City).

Calamus pennatula Guichenot, 1868 — pluma porgy
Barrier Reef: SR RSJ (Carrie Bow, 2000).

Calamus proridens Jordan and Gilbert, 1844 — littlehead porgy
Offshore Banks: FMNH 39734 (Glovers Reef).

Sciaenidae

Bairdiella ronchus (Cuvier, 1830) — ground croaker
Coastline Marine: FMNH 77867 (Belize City); FMNH 103764 (Dangriga);
FMNH 89664 (Southern Lagoon).

Cynoscion leiarchus (Cuvier, 1830) — smooth weakfish
Coastline Marine: FMNH 104666 (Belize City).

Equetus lanceolatus (Linnaeus, 1758) — jackknife-fish
Pelican Cays: USNM 365187 (Fisherman's, 2001); SR CLS (Little Cat, 2000).

Equetus punctatus (Bloch and Schneider, 1801) — spotted drum
Barrier Reef: USNM 349058 (Carrie Bow).
Mid-Shelf: SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001); SR J/S (Elbow,
2001).

Larimus breviceps Cuvier, 1830 — shorthead drum
Coastline Marine: AMNH 83652 (Bahia de Amatique).

Odontoscion dentex (Cuvier, 1830) — reef croaker
Barrier Reef: FMNH 77869 (Gallows Point Reef).
Mid-Shelf: USNM 360624 (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S
(Lagoon, 2000); SR J/S (Tarpum, 2001).
Pelican Cays: SR J/S (Co-Cat, 2001).
Coastline Marine: FMNH 104665 (Belize City).

Ophioscion punctatissimus Meek and Hildebrand, 1925 — dotted croaker
Coastline Marine: AMNH 83649 (Bahia de Amatique).

Stellifer colonensis Meek and Hildebrand, 1925 — stardrum
Coastline Marine: FMNH 83839 (Belize City); FMNH 83840 (Dangriga).

Mullidae

Mulloidichthys martinicus (Cuvier, 1829) — yellow goatfish

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001).

Offshore Banks: FMNH 39724 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Pseudupeneus maculatus (Bloch, 1793) — spotted goatfish

Barrier Reef: USNM 327587 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: USNM 360603 (Spruce, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 104664 (Belize City).

Offshore Banks: FMNH 77848 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Pempheridae

Pempheris schomburgkii Müller and Troschel, 1848 — glassy sweeper

Barrier Reef: USNM 276232 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 93773 (Sergeant's).

Coastline Marine: FMNH 93774 (Punta Gorda).

Offshore Banks: FMNH 93772 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Kyphosidae

Kyphosus sectator (Linnaeus, 1758) — Bermuda chub

This species is difficult to distinguish from *Kyphosus incisor*, the yellow chub, and sight records may be unreliable.

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001).

Pelican Cays: SR J/S (Kitten, 2001).

Offshore Banks: FMNH 39862 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Polynemidae

Polydactylus virginicus (Linnaeus, 1758) — barbu

Barrier Reef: USNM 349277 (Carrie Bow, 2000).

Coastline Marine: FMNH 77750 (Belize City); FMNH 94868 (Pelican Beach, Dangriga).

Cirrhitidae

Amblycirrhitus pinos (Mowbray, 1927) — redspotted hawkfish

Barrier Reef: USNM 274917, FMNH 89679 (Carrie Bow).

Offshore Banks: FMNH 89662 (Glovers Reef).

Chaetodontidae

Prognathodes aculeatus (Poey, 1860) — longsnout butterflyfish

Offshore Banks: FMNH 104667 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Chaetodon capistratus Linnaeus, 1758 — foureye butterflyfish

Barrier Reef: USNM 327588 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 83086 (Ambergris).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347361 (Manatee, 1997); USNM 360571 (Cat, 2000, 2001); SR J/S (Cat, 2000); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 70949 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Chaetodon ocellatus Bloch, 1787 — spotfin butterflyfish

Barrier Reef: USNM 349051 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Chaetodon striatus Linnaeus 1758 — banded butterflyfish

Barrier Reef: USNM 327589 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Pelican Cays: SR JCT et al. (Cat, 1995).

Offshore Banks: FMNH 39810 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Pomacanthidae

Centropyge argi Woods and Kanazawa, 1951 — cherubfish

Barrier Reef: SR CLS (seen at Carrie Bow in rubble nest of *Malacanthus*).

Holacanthus ciliaris (Linnaeus, 1758) — queen angelfish

Barrier Reef: USNM 327591 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: UF 27751 (Blue Ground Range); SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Tarpum, 2001); SR J/S (Quamino, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Holacanthus tricolor (Bloch, 1795) — rock beauty

Barrier Reef: USNM 343868 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Pomacanthus arcuatus (Linnaeus, 1758) — gray angelfish

Barrier Reef: USNM 327590 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); UF 27757 (Blue Ground Range); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR JCT et al. (Cat, 1995); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Pomacanthus paru (Bloch, 1787) — French angelfish

Barrier Reef: SR J/S (Carrie Bow, 2000).

Mid-Shelf: SR J/S (Douglas, 2000).

Pelican Cays: SR J/S (Kitten, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Cichlidae

Cichlasoma urophthalmum (Günther, 1862) — Mayan cichlid

Barrier Reef: FMNH 104565 (Ambergris); FMNH 97681 (St. George's).

Mid-Shelf: SR WPD (Twin, 2001).

Coastline Marine: FMNH 83142 (Belize City); FMNH 83151 (Southern Lagoon).

Pomacentridae

Abudefduf saxatilis (Linnaeus, 1758) — sergeant major

Barrier Reef: USNM 349037 (Carrie Bow); FMNH 84932 (South Water); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 86562 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Abudefduf taurus (Müller and Troschel, 1848) — night sergeant

Barrier Reef: SR J/S (Carrie Bow, 2000).

Chromis cyanea (Poey, 1860) — blue chromis

Barrier Reef: USNM 267799 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 225078 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000).

Pelican Cays: SR JCT et al. (Cat, 1995).

Offshore Banks: FMNH 70954 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Chromis insolata (Cuvier, 1830) — sunshinefish

Barrier Reef: USNM 267797 (Carrie Bow); SR J/S (Carrie Bow, 2001); AMNH 225022 (Carrie Bow).

Offshore Banks: FMNH 89492 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Chromis multilineata (Guichenot, 1853) — brown chromis

Barrier Reef: USNM 327592 (Carrie Bow); SR RSJ (Carrie Bow, 2000).

Microspathodon chrysurus (Cuvier, 1830) — yellowtail damselfish

Barrier Reef: USNM 276059 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Offshore Banks: FMNH 89641 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Stegastes adustus (Troschel, 1865) — dusky damselsfish

Barrier Reef: USNM 276062 (Carrie Bow); FMNH 86589 (Gallows Point Reef); USNM 365037 (3.1 mi. south of Carrie Bow, 2001); SR RSJ (Carrie Bow, 2000); SR J/S (Carrie Bow, 2001).

Mid-Shelf: USNM 360631 (Douglas, 2000); USNM 365180 (North Elbow, 2001).

Offshore Banks: FMNH 86590 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Stegastes diencaeus (Jordan and Rutter, 1897) — longfin damselsfish

Barrier Reef: USNM 276038 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: USNM 365181 (North Elbow, 2001).

Pelican Cays: USNM 360570 (Cat, 2000); SR J/S (Little Cat, 2000).

Offshore Banks: FMNH 86580 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Stegastes leucostictus (Müller and Troschel, 1848) — beaugregory

Barrier Reef: USNM 306516, FMNH 86598 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 86132 (Gallows Point Reef); AMNH 224961 (Carrie Bow).

Mid-Shelf: USNM 360634 (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 360589 (Cat, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39589 (Glovers Reef).

Stegastes partitus (Poey, 1868) — bicolor damselfish

Barrier Reef: USNM 267796 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 86632 (Gallows Point Reef); AMNH 224983 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Quamino, 2001).

Pelican Cays: USNM 347320 (Cat, 1997); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 86639 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Stegastes planifrons (Cuvier, 1830) — threespot damselfish

Barrier Reef: USNM 276034 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 86650 (Buttonwood); AMNH 84543 (Ambergris).

Mid-Shelf: USNM 360632 (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 86647 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Stegastes variabilis (Castelnau, 1855) — cocoa damselfish

Barrier Reef: USNM 327596 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 84326 (Carrie Bow).

Mid-Shelf: USNM 360578 (Douglas, 2000); SR J/S (Channel, 2001); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347321 (Cat, 1997); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 71314 (Glovers Reef).

Labridae

Bodianus rufus (Linnaeus, 1758) — Spanish hogfish

Barrier Reef: USNM 276204 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Clepticus parrae (Bloch and Schneider, 1801) — creole wrasse

Barrier Reef: USNM 327600 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Doratonotus megalepis Günther, 1862 — dwarf wrasse

Barrier Reef: USNM 353543 (Carrie Bow); USNM 364872 (3.1 mi. south of Carrie Bow, 2001).

Offshore Banks: FMNH 89684 (Glovers Reef).

Halichoeres bivittatus (Bloch, 1791) — slippery dick

Barrier Reef: USNM 327599 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347322 (Cat, 1997); USNM 360492 (Cat, 2000); USNM 360520 (Co-Cat, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 70925 (Glovers Reef); FMNH 39765 (Lighthouse); SR CLS and JCT (Glovers Reef, 1988).

Halichoeres cyancephalus (Bloch, 1791) — yellowcheek wrasse (Figure 7)

Barrier Reef: SR with photograph by CLS (Carrie Bow, 1988).

Halichoeres garnoti (Valenciennes, 1839) — yellowhead wrasse

Barrier Reef: USNM 274926 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 225084 (Carrie Bow).

Mid-Shelf: SR J/S (Channel, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Little Cat, 2000); SR J/S (Kitten, 2001).

Offshore Banks: FMNH 70998 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Halichoeres maculipinna (Müller and Troschel, 1848) — clown wrasse

Barrier Reef: USNM 329838 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 224975 (Carrie Bow).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Halichoeres pictus (Poey, 1860) — rainbow wrasse

Barrier Reef: USNM 306536 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Halichoeres poeyi (Steindachner, 1867) — blackear wrasse

Barrier Reef: SR J/S (Carrie Bow, 2000).

Mid-Shelf: SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Kitten, 2001).

Halichoeres radiatus (Linnaeus, 1758) — puddingwife

Barrier Reef: USNM 327598 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Offshore Banks: FMNH 39733 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Halichoeres sp. nov — schooling wrasse (Figure 8)

This species is being described by J. Randall and P. Lobel. It resembles the non-supermale form of *H. pictus* and was so recorded in our notes for 2000.

Mid-Shelf: SR J/S (Lagoon, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347385 (Manatee 1997); USNM 347274 (Cat, 1997); USNM 360487 (Cat, 2000); USNM 360488 (Cat, 2000); USNM 360489 (Little Cat, 2000); USNM 365182 (Avicennia, 2001); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Lachnolaimus maximus (Walbaum, 1792) — hogfish

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001); AMNH 93323 (Carrie Bow).

Mid-Shelf: SR J/S (Tarpum, 2001).

Pelican Cays: SR JCT et al. (Cat, 1995); SR J/S (Cat, 2000); SR J/S (Kitten, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Thalassoma bifasciatum (Bloch, 1791) — bluehead

Barrier Reef: USNM 276237 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 89683 (Gallows Point Reef); AMNH 83087 (Ambergris); AMNH 225077 (Carrie Bow).

Offshore Banks: FMNH 71001 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Xyrichtys novacula (Linnaeus, 1758) — pearly razorfish

Barrier Reef: USNM 349220 (Carrie Bow).

Mid-Shelf: SR RSJ (Twin Cays shot hole, 2000).

Scaridae

Cryptotomus roseus Cope, 1871 — bluelip parrotfish

Barrier Reef: USNM 353878 (Carrie Bow).

Scarus coeruleus Valenciennes, 1840 — midnight parrotfish

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Scarus coeruleus (Bloch, 1786) — blue parrotfish

Offshore banks: SR CLS and JCT (Glovers Reef, 1988).

Scarus guacamaia Cuvier, 1829 — rainbow parrotfish

Offshore Banks: FMNH 39755 (Glovers Reef).

Scarus iserti (Bloch, 1789) — striped parrotfish (formerly *S. croicensis*) (Figures 9, 10, 11)

Barrier Reef: USNM 349137 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: USNM 360597 (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347323 (Cat, 1997); USNM 347384 (Manatee, 1997); USNM 347350 (Manatee, 1997); USNM 360572 (Cat, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 89642 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Scarus taeniopterus Desmarest, 1831 — princess parrotfish

Barrier Reef: SR J/S (Carrie Bow, 2000).

Pelican Cays: USNM 347411 (Cat, 1997).

Scarus vetula Bloch and Schneider, 1801 — queen parrotfish

Barrier Reef: USNM 306488 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 93322 (Carrie Bow).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Sparisoma aurofrenatum (Valenciennes, 1840) — redband parrotfish

Barrier Reef: USNM 306544 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 224997 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Manatee, 2000, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Sparisoma chrysopterum (Bloch and Schneider, 1801) — redtail parrotfish

Barrier Reef: USNM 274910 (Carrie Bow); USNM 365377 (3.1 mi. south of Carrie Bow, 2001); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 360573 (Cat, 2000); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39727 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Sparisoma radians (Valenciennes, 1840) — bucktooth parrotfish

Barrier Reef: FMNH 89636 (Gallows Point Reef).

Mid-Shelf: SR J/S (Elbow, 2001).

Pelican Cays: USNM 365376 (Fisherman's, 2001); SR J/S (Ridge, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Sparisoma rubripinne (Valenciennes in Cuvier and Valenciennes, 1840) — redfin parrotfish

Barrier Reef: SR J/S (Carrie Bow, 2000, 2001); AMNH 224995 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000).

Pelican Cays: SR J/S (Cat, 2000); SR CLS (Manatee, 2000); SR J/S (Co-Cat, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Sparisoma viride (Bonnaterre, 1788) — stoplight parrotfish

Barrier Reef: USNM 306491 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 224962 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000); SR J/S (Little Cat, 2000); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39730 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Tripterygiidae

Enneanectes altivelis Rosenblatt, 1960 — lofty triplefin

- Barrier Reef: USNM 274894, FMNH 89349 (Carrie Bow); FMNH 89403 (Gallows Point); FMNH 94317 (Sergeant's); FMNH 94038 (Hol Chan); FMNH 94034 (Ambergris); AMNH 225074 (Carrie Bow).
- Mid-Shelf: USNM 360302 (SE Lagoon, 2000); USNM 365158 (Quamino, 2001).
- Offshore Banks: FMNH 86149, 90432 (Glovers Reef); FMNH 94327 (Turneffe).

Enneanectes atrorus Rosenblatt, 1960 — blackedge triplefin

- Barrier Reef: USNM 274898 (Carrie Bow).
- Mid-Shelf: USNM 360305 (SE Lagoon, 2000); USNM 364837 (North Elbow, 2001); USNM 364838 (Tarpum, 2001).
- Offshore Banks: FMNH 86128, 90441 (Glovers Reef); FMNH 94381 (Turneffe); FMNH 86127 (Lighthouse).

Enneanectes boehlkei Rosenblatt, 1960 — roughhead triplefin

- Barrier Reef: USNM 274930, FMNH 89288 (Carrie Bow); FMNH 86114 (Gallows Point); FMNH 90454 (Sergeant's); FMNH 90458 (Goff's); FMNH 94049 (Ambergris); AMNH 224996 (Carrie Bow).
- Coastline Marine: FMNH 87894 (Punta Gorda).
- Offshore Banks: FMNH 82590 (Glovers Reef); FMNH 90457 (Turneffe); FMNH 86112 (Lighthouse).

Enneanectes jordani (Evermann and Marsh, 1899) — mimic triplefin

- Barrier Reef: FMNH 89363 (Carrie Bow); FMNH 86130 (Buttonwood).
- Offshore Banks: FMNH 86129 (Glovers Reef).

Enneanectes pectoralis (Fowler, 1941) — redeye triplefin

- Barrier Reef: USNM 276050, FMNH 89289 (Carrie Bow); FMNH 94052 (Ambergris); FMNH 90462 (Goff's); FMNH 86152 (Gallows Point).
- Coastline Marine: FMNH 86155 (Placentia); FMNH 87901 (Punta Gorda); FMNH 86155 (Bugle); FMNH 86156 (Tarpon).
- Offshore Banks: FMNH 86154 (Glovers Reef); FMNH 90461 (Turneffe); FMNH 86153 (Lighthouse).

Dactyloscopidae

Dactyloscopus tridigitatus Gill, 1859 — sand stargazer

- Barrier Reef: FMNH 83919 (Carrie Bow).

Gillellus uranidea Böhlke, 1968 — warteye stargazer

- Barrier Reef: USNM 274931, FMNH 83928 (Carrie Bow).

Mid-Shelf: USNM 360636 (Douglas, 2000); USNM 365164 (Quamino, 2001).
 Offshore Banks: FMNH 83926 (Glovers Reef).

Platygillellus rubrocinctus (Longley, 1934) — saddle stargazer
 Barrier Reef: USNM 276230, FMNH 93891 (Carrie Bow).
 Offshore Banks: FMNH 93888 (Glovers Reef).

Labrisomidae

Labrisomus albigenys Beebe and Tee-Van, 1928 — whitecheek blenny
 Barrier Reef: USNM 274924 (Carrie Bow); FMNH 93837 (Carrie Bow).

Labrisomus bucciferus Poey, 1868 — puffcheek blenny
 Barrier Reef: USNM 329830, FMNH 89281 (Carrie Bow); FMNH 90376
 (Sergeants); FMNH 90377 (Goff's); FMNH 94057 (Ambergris); AMNH
 224957 (Carrie Bow).
 Offshore Banks: FMNH 90374 (Glovers Reef); FMNH 89409 (Lighthouse).

Labrisomus filamentosus Springer, 1960 — quillfin blenny
 Barrier Reef: USNM 328245 (Carrie Bow).

Labrisomus gobio (Valenciennes, 1836) — palehead blenny
 Barrier Reef: USNM 321012, FMNH 89295 (Carrie Bow); FMNH 90387
 (Sergeant's); FMNH 90388 (Goff's).
 Mid-Shelf: USNM 360580 (Douglas, 2000); USNM 360301 (SE Lagoon, 2000);
 USNM 365163 (Tarpum, 2001).
 Pelican Cays: USNM 360574 (Cat, 2000).
 Offshore Banks: FMNH 77604 (Glovers Reef).

Labrisomus guppyi (Norman, 1922) — mimic blenny
 Barrier Reef: USNM 276041, FMNH 89388 (Carrie Bow); FMNH 90396
 (Sergeant's); FMNH 90398 (Goff's); FMNH 90472 (Ambergris);
 FMNH 70921 (Gallows Point Reef).
 Mid-Shelf: USNM 346486 (Lagoon, 1997); USNM 364834 (Tarpum, 2001).
 Offshore Banks: FMNH 90391, 77609 (Glovers Reef); FMNH 90397
 (Turneffe); FMNH 77608 (Lighthouse).

Labrisomus haitiensis Beebe and Tee-Van, 1928 — longfin blenny
 Barrier Reef: USNM 276040 (Carrie Bow); FMNH 90411 (English); FMNH
 93853 (Carrie Bow); FMNH 94078 (Ambergris).
 Mid-Shelf: USNM 360635 (Douglas, 2000); USNM 365161 (North Elbow,
 2001); USNM 365162 (Tarpum, 2001).
 Offshore Banks: FMNH 86044 (Glovers Reef); FMNH 90409 (Turneffe);
 FMNH 77614 (Lighthouse).

Labrisomus kalisherae (Jordan, 1904) — downy blenny

Barrier Reef: USNM 320996 (Carrie Bow).

Coastline Marine: FMNH 86051 (Placentia); FMNH 79293 (Punta Gorda).

Labrisomus nigricinctus Howell Rivero, 1936 — spotcheek blenny

Barrier Reef: USNM 327605, FMNH 89293 (Carrie Bow); FMNH 86026
(Gallows Point Reef).

Offshore Banks: FMNH 86053 (Glovers Reef).

Labrisomus nuchipinnis (Quoy and Gaimard, 1824) — hairy blenny

Barrier Reef: FMNH 90421 (South Water); FMNH 90424 (Carrie Bow); FMNH
90420 (Goff's); FMNH 90419 (Sergeant's); FMNH 94086 (Ambergris);
AMNH 224964 (Carrie Bow).

Mid-Shelf: USNM 360579 (Douglas, 2000); USNM 364835 (sand spit between
Spruce and Wee Wee, 2001); FMNH 90417 (Spanish).

Coastline Marine: FMNH 86060 (Placentia); FMNH 87830 (Punta Gorda).

Offshore Banks: FMNH 86058 (Glovers Reef); FMNH 94337 (Turneffe).

Malacoctenus aurolineatus Smith, 1957 — goldline blenny

Barrier Reef: USNM 317474, FMNH 89283 (Carrie Bow); FMNH 94089
(Ambergris); FMNH 90271 (Sergeant's); FMNH 90272 (Goff's);
FMNH 77626 (Gallows Point Reef).

Offshore Banks: FMNH 85988 (Glovers Reef); FMNH 77621 (Lighthouse).

Malacoctenus boehlkei Springer, 1959 — diamond blenny

Barrier Reef: FMNH 89311 (Carrie Bow); FMNH 90278 (English); FMNH
94094 (Ambergris).

Pelican Cays: SR JCT et al. (Cat, 1995).

Coastline Marine: FMNH 86023 (Frenchman's).

Offshore Banks: FMNH 85981 (Glovers Reef); FMNH 90277 (Turneffe);
FMNH 77622 (Lighthouse).

Malacoctenus delalandii (Valenciennes in Cuvier and Valenciennes, 1836) — banded
blenny

Mid-Shelf: FMNH 90279 (Spanish).

Pelican Cays: USNM 360582 (Co-Cat, 2000).

Coastline Marine: FMNH 85986 (Belize City); FMNH 85984 (Placentia);
FMNH 78146 (Punta Gorda).

Malacoctenus erdmani Smith, 1957— imitator blenny

Barrier Reef: FMNH 89285 (Carrie Bow); FMNH 94095 (Ambergris); FMNH 89411 (Gallows Point Reef); FMNH 90282 (Sergeant's); FMNH 90283 (Goff's).
 Offshore Banks: FMNH 90281 (Glovers Reef).

Malacoctenus gilli (Steindachner, 1867) — dusky blenny

Barrier Reef: FMNH 90289 (South Water); FMNH 94101 (Ambergris); FMNH 89299 (Carrie Bow); FMNH 90291 (Sergeant's).
 Pelican Cays: USNM 360527 (Co-Cat, 2000); USNM 364847 (Cat, 2001).
 Coastline Marine: FMNH 85991 (Placentia); FMNH 78150 (Punta Gorda).
 Offshore Banks: FMNH 85993 (Glovers Reef); FMNH 94338 (Turneffe); FMNH 77624 (Lighthouse).

Malacoctenus macropus (Poey, 1868) — rosy blenny

Mid-Shelf: USNM 346487 (Lagoon, 1997); USNM 360312 (Spruce, 2000); USNM 360311 (SE Lagoon, 2000); USNM 365165 (Channel, 2001); FMNH 93856 (Blue Ground Range); USNM 365375 (North Elbow, 2001); SR J/S (Elbow, 2001).
 Pelican Cays: USNM 344847 (Cat, 1997); USNM 346460 (Manatee, 1997); USNM 360528 (Co-Cat, 2000); USNM 360575 (Cat, 2000); USNM 364848 (Fisherman's 2001); USNM 365166 (Cat, 2001); SR CLS (Manatee, 2000).
 Coastline Marine: FMNH 78155 (Punta Gorda); FMNH 94339 (Northern Lagoon); FMNH 86005 (Tarpon).
 Offshore Banks: FMNH 90290, 77620 (Glovers Reef); FMNH 94351 (Turneffe).

Malacoctenus triangulatus Springer, 1959 — saddled blenny

Barrier Reef: USNM 274938 (Carrie Bow); FMNH 89299 (Carrie Bow); FMNH 94109 (Ambergris); FMNH 70922 (Gallows Point Reef); FMNH 86000 (Buttonwood); FMNH 90298 (Goff's); SR RSJ (Carrie Bow, 2000, 2001).
 Mid-Shelf: USNM 364850, 365374 (North Elbow, 2001).
 Pelican Cays: SR J/S (Manatee, 2000).
 Coastline Marine: FMNH 85999 (Placentia); FMNH 79217 (Punta Gorda).
 Offshore Banks: FMNH 85997 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 90297 (Turneffe); FMNH 86067 (Lighthouse).

Malacoctenus versicolor (Poey, 1876) — barfin blenny

Barrier Reef: USNM 349071 (Carrie Bow).
 Mid-Shelf: USNM 364849 (Quamino, 2001).
 Pelican Cays: USNM 360306 (Co-Cat, 2000).

Paraclinus barbatus Springer, 1955 — goatee blenny

Barrier Reef: USNM 267819 (Carrie Bow); FMNH 94019 (Ambergris).

Offshore Banks: FMNH 90299 (Glovers Reef); FMNH 94401 (Turneffe).

Paraclinus cingulatus (Evermann and Marsh, 1899) — coral blenny

Barrier Reef: USNM 306528 (Carrie Bow); FMNH 90305 (Sergeant's); FMNH 90304 (Goff's).

Offshore Banks: FMNH 90302 (Glovers Reef).

Paraclinus fasciatus (Steindachner, 1876) — banded blenny

Barrier Reef: FMNH 94117 (Ambergris).

Mid-Shelf: FMNH 93858 (Blue Ground Range); USNM 364844 (North Elbow, 2001).

Pelican Cays: USNM 346459 (Manatee, 1997).

Coastline Marine: FMNH 90306 (Belize City); FMNH 86030 (Placentia); FMNH 87834 (Punta Gorda).

Offshore Banks: FMNH 87838 (Glovers Reef); FMNH 94373 (Turneffe).

Paraclinus infrons Böhlke, 1960 — bald blenny

Barrier Reef: USNM 267820, FMNH 89414 (Carrie Bow); FMNH 90311 (English); FMNH 94119 (Ambergris).

Pelican Cays: USNM 364845 (Avicennia, 2001).

Offshore Banks: FMNH 71116 (Glovers Reef); FMNH 94402 (Turneffe).

Paraclinus marmoratus (Steindachner, 1876) — marbled blenny

Barrier Reef: USNM 327607 (Carrie Bow).

Mid-Shelf: USNM 364846 (North Elbow, 2001).

Offshore Banks: FMNH 86027 (Glovers Reef).

Paraclinus naeorhegmis Böhlke, 1960 — surf blenny

Barrier Reef: FMNH 94020 (Ambergris).

Paraclinus nigripinnis (Steindachner, 1867) — blackfin blenny

Barrier Reef: USNM 354545, FMNH 90317 (Carrie Bow); FMNH 90314 (Spanish); FMNH 90315 (Sergeant's); FMNH 90316 (Goff's); FMNH 94123 (Ambergris); USNM 364843 (3.1 mi. south of Carrie Bow, 2001).

Mid-Shelf: USNM 360581 (Douglas, 2000); USNM 364842 (North Elbow, 2001); USNM 360465 (SE Lagoon, 2000); USNM 360466 (Spruce, 2000); USNM 364839 (sand spit between Spruce and Wee Wee, 2001); USNM 364840 (Channel, 2001).

Pelican Cays: USNM 347315 (Cat, 1997); USNM 360529 (Co-Cat, 2000); USNM 364841 (Cat, 2001).

Coastline Marine: FMNH 86038 (Placentia); FMNH 87846 (Punta Gorda).

Offshore Banks: FMNH 86034 (Glovers Reef); FMNH 94396 (Turneffe);
FMNH 86033 (Lighthouse).

Starksia atlantica Longley, 1934 — smootheye blenny

Barrier Reef: USNM 274892, FMNH 89298 (Carrie Bow); FMNH 89405
(Gallows Point Reef); FMNH 94129 (Ambergris); FMNH 94128 (Hol
Chan).

Pelican Cays: USNM 364832 (Ridge, 2001).

Offshore Banks: FMNH 90336 (Glovers Reef); FMNH 94334 (Turneffe);
FMNH 77630 (Lighthouse).

Starksia elongata Gilbert, 1971 — barred blenny

Barrier Reef: FMNH 89386 (Carrie Bow).

Offshore Banks: FMNH 90342 (Glovers Reef); FMNH 94335 (Turneffe).

Starksia sp. nov. — dice blenny (This allopatric sister species of *Starksia fasciata* is
being described by J. Williams and J. Mount.)

Barrier Reef: USNM 349080 (Carrie Bow).

Starksia hassi Klausewitz, 1958 — ringed blenny

Offshore Banks: FMNH 86014 (Glovers Reef); FMNH 96872 (Turneffe).

Starksia lepicoelia Böhlke and Springer, 1961 — blackcheek blenny

Barrier Reef: USNM 274922, FMNH 89296 (Carrie Bow); FMNH 94136
(Ambergris); AMNH 225081 (Carrie Bow).

Offshore Banks: FMNH 90347 (Glovers Reef); FMNH 90357 (Turneffe);
FMNH 77702 (Lighthouse).

Starksia nanodes Böhlke and Springer, 1961 — dwarf blenny

Barrier Reef: FMNH 94568 (Carrie Bow); USNM 267824, FMNH 90366
(English); FMNH 94149 (Hol Chan); FMNH 94150 (Ambergris).

Offshore Banks: FMNH 90361, 86018 (Glovers Reef); FMNH 90365
(Turneffe).

Starksia occidentalis Greenfield, 1979 — barredlip blenny

Barrier Reef: USNM 321068 (Carrie Bow); FMNH 90367 (Sergeant's); FMNH
90304 (Goff's); FMNH 84385 (Gallows Point).

Mid-Shelf: USNM 360303 (Douglas, 2000); USNM 364604 (North Elbow,
2001); USNM 364829 (Quamino, 2001); USNM 360831 (Tarpum,
2001); USNM 360304 (SE Lagoon, 2000).

Pelican Cays: USNM 360310 (Little Cat, 2000); USNM 364603 (Fisherman's,
2001); USNM 364605 (Cat, 2001); USNM 364830 (Avicennia, 2001).

Coastline Marine: FMNH 84386 (Placentia); FMNH 87871 (Punta Gorda).

Starksia ocellata (Steindachner, 1876) — checkered blenny
Barrier Reef: USNM 276039 (Carrie Bow).

Starksia sluiteri (Metzelaar, 1919) — pallid blenny
Barrier Reef: USNM 317476, FMNH 89394 (Carrie Bow); FMNH 90421
(Ambergris); FMNH 90371 (Sergeant's); FMNH 90372 (Goff's);
FMNH 86021 (Gallows Point).
Offshore Banks: FMNH 86022 (Glovers Reef).

Starksia starcki Gilbert, 1971 — key blenny
Barrier Reef: FMNH 93834 (Carrie Bow); FMNH 94024 (Ambergris).
Offshore Banks: FMNH 94023 (Glovers Reef).

Chaenopsidae

Acanthemblemaria aspera (Longley, 1927) — roughhead blenny (Figure 12)
Barrier Reef: USNM 274915, FMNH 89350 (Carrie Bow); FMNH 93967
(Ambergris); FMNH 86101 (Buttonwood).
Mid-Shelf: USNM 360308 (Douglas, 2000); USNM 360309 (SE Lagoon, 2000).
Pelican Cays: USNM 347316 (Cat, 1997); USNM 346461 (Manatee, 1997);
USNM 344843 (Manatee, 1997); USNM 360307 (Manatee, 2000); SR
JCT et al. (Cat, 1995).
Coastline Marine: FMNH 86099 (Placentia); FMNH 87908 (Punta Gorda);
FMNH 86098 (Middle Snake).
Offshore Banks: FMNH 90482 (Glovers Reef); FMNH 90489 (Turneffe).

Acanthemblemaria greenfieldi Smith-Vaniz and Palacio, 1974 — stalk blenny
Barrier Reef: USNM 276042, FMNH 90862 (Carrie Bow); FMNH 93973
(Ambergris); FMNH 90492 (Sergeant's); FMNH 90495 (Goff's).
Pelican Cays: USNM 344841 (Manatee, 1997).
Offshore Banks: FMNH 90490 (Glovers Reef); FMNH 90494 (Turneffe).

Acanthemblemaria maria Böhlke, 1961 — secretary blenny
Barrier Reef: USNM 290670 (Carrie Bow).

Acanthemblemaria medusa Smith-Vaniz and Palacio, 1974 — medusa blenny
Barrier Reef: USNM 321071 (Carrie Bow).

Acanthemblemaria paula Johnson and Brothers, 1989 — dwarf spinyhead
Barrier Reef: USNM 290669, FMNH 89328 (Carrie Bow); FMNH 98295
(Ambergris); FMNH 107501 (Sergeant's); FMNH 86085 (Buttonwood).
Offshore Banks: FMNH 77558 (Glovers Reef).

Acanthemblemaria spinosa Metzelaar, 1919 — spinyhead blenny
 Barrier Reef: USNM 308398, FMNH 90864 (Carrie Bow); FMNH 90500
 (Sergeant's); FMNH 93979 (Hol Chan).
 Mid-Shelf: USNM 364600 (Quamino, 2001); USNM 364602 (Tarpum, 2001);
 USNM 364598 (North Elbow, 2001).
 Pelican Cays: USNM 344842 (Manatee, 1997); USNM 364601 (ridge between
 Little Cat and Co-Cat, 2001).
 Offshore Banks: FMNH 86087 (Glovers Reef); FMNH 90592 (Turneffe).

Chaenopsis limbaughi Robins and Randall, 1965 — yellowface pikeblenny
 Mid-Shelf: AMNH 225006 (Twin Cays shot hole).

Chaenopsis ocellata (Poey, 1865) — bluethroat pikeblenny
 Offshore Banks: FMNH 83930 (Glovers Reef).

Coralliozetus cardonae Evermann and Marsh, 1899 — twinhorn blenny
 Barrier Reef: USNM 308441, FMNH 89395 (Carrie Bow); FMNH 94017
 (Ambergris).

Emblemaria caldwelli Stephens, 1970 — Caribbean blenny
 Barrier Reef: USNM 267823, FMNH 89303 (Carrie Bow); FMNH 93983
 (Ambergris); FMNH 90509 (English).
 Offshore Banks: FMNH 86069, 90505 (Glovers Reef); FMNH 94385
 (Turneffe); FMNH 77589 (Lighthouse).

Emblemaria pandionis Evermann and Marsh, 1900 — sailfin blenny
 Barrier Reef: USNM 308399 (Carrie Bow); SR J/S (Carrie Bow, 2000); FMNH
 93989 (Ambergris); AMNH 220560 (Carrie Bow).
 Offshore Banks: FMNH 90510, 82521 (Glovers Reef); SR CLS and JCT
 (Glovers Reef, 1988).

Emblemaria piratula Ginsburg and Reid, 1942 — pirate blenny
 Barrier Reef: USNM 296362 (Carrie Bow).

Emblemariopsis bahamensis Stephens, 1961 — blackhead blenny
 Barrier Reef: USNM 317464 (Carrie Bow).

Emblemariopsis sp. nov. — redflag blenny (Figure 13) (This species is being described
 by J. Tyler and D. Tyler.)
 Mid-Shelf: USNM 365355 (North Elbow, 2001); USNM 365365 (Blue Ground
 Range).
 Pelican Cays: USNM 365356 (coral ridge between Little Cat and Co-Cat, 2001).

Emblemariopsis diaphana Longley, 1927 — glass blenny
Offshore Banks: FMNH 108697 (Glovers Reef).

Emblemariopsis leptocirris Stephens, 1970 — thinfrill blenny
Barrier Reef: USNM 274928 (Carrie Bow); FMNH 89417 (Carrie Bow);
FMNH 94801 (English).
Pelican Cays: USNM 344848 (Cat, 1997).
Offshore Banks: FMNH 86178 (Glovers Reef); FMNH 94360 (Turneffe).

Emblemariopsis occidentalis Stephens, 1970 — redspine blenny
Barrier Reef: USNM 345355 (Carrie Bow).

Emblemariopsis pricei Greenfield, 1975 — seafan blenny
Barrier Reef: USNM 276061, FMNH 89419 (Carrie Bow); FMNH 90518
(Sergeant's); FMNH 93997 (Ambergris).
Offshore Banks: FMNH 86180 (Glovers Reef); FMNH 90519 (Turneffe).

Emblemariopsis ruetzleri Tyler and Tyler, 1997 — Carrie Bow blenny
Barrier Reef: USNM 325489 (Carrie Bow).

Emblemariopsis signifera (Ginsburg, 1942) — highfin blenny
Barrier Reef: USNM 2760878, FMNH 89421 (Carrie Bow); FMNH
94005 (Ambergris); FMNH 94007 (Hol Chan); FMNH 86072
(Buttonwood).
Offshore Banks: FMNH 87927 (Glovers Reef); SR CLS and JCT (Glovers Reef,
1988).

Hemiemblemaria simulus Longley and Hildebrand, 1940 — wrasse blenny
Barrier Reef: USNM 308395 (Carrie Bow); FMNH 94010 (Ambergris); FMNH
90534 (Sergeant's).
Offshore Banks: FMNH 90523 (Glovers Reef); FMNH 94386 (Turneffe).

Lucayablennius zingaro (Böhlke, 1957) — arrow blenny
Barrier Reef: USNM 267826, FMNH 89302 (Carrie Bow); FMNH 90532
(English); FMNH 94013 (Ambergris); AMNH 225021 (Carrie Bow).
Mid-Shelf: SR CLS (Douglas, 2000); SR J/S (Quamino, 2001).
Pelican Cays: USNM 347306 (Cat, 1997); USNM 364836 (Manatee, 2001); SR
J/S (Little Cat, 2000); SR J/S (Co-Cat, 2001).
Offshore Banks: FMNH 86176, 90527 (Glovers Reef); SR CLS and JCT
(Glovers Reef, 1988); FMNH 94382 (Turneffe); FMNH 77565
(Lighthouse).

Stathmonotus gymnodermis Springer, 1955 — smoothskin blenny
Offshore Banks: FMNH 86010 (Glovers Reef).

Stathmonotus hemphillii Bean, 1885 — blackbelly blenny
Barrier Reef: FMNH 94026 (Ambergris).
Offshore Banks: FMNH 90319 (Glovers Reef).

Stathmonotus stahli (Evermann and Marsh, 1899) — eelgrass blenny
Barrier Reef: USNM 276218 (Carrie Bow); FMNH 89317 (South Water);
FMNH 90330 (Carrie Bow); FMNH 94157 (Ambergris); FMNH 90323
(Sergeant's); FMNH 90324 (Goff's).
Mid-Shelf: USNM 360313 (Douglas, 2000); USNM 365159 (North Elbow,
2001); USNM 360314 (SE Lagoon, 2000); USNM 365160 (Quamino,
2001).
Coastline Marine: FMNH 86008 (Placentia).
Offshore Banks: FMNH 86007 (Glovers Reef); FMNH 94323 (Turneffe).

Blenniidae

Entomacrodus nigricans Gill, 1859 — pearl blenny
Barrier Reef: USNM 276035 (Carrie Bow); FMNH 89282 (Carrie Bow);
FMNH 93951 (Ambergris); FMNH 90467 (Sergeant's); FMNH 90469
(Goff's).
Mid-Shelf: FMNH 90466 (Spanish).
Offshore Banks: FMNH 86074 (Glovers Reef); FMNH 90468 (Turneffe);
FMNH 77573 (Lighthouse).

Hyleurochilus pseudoaequipinnis Bath, 1994 — oyster blenny
Barrier Reef: FMNH 93956 (Ambergris).
Pelican Cays: USNM 365036 (Ridge, 2001).
Coastline Marine: FMNH 87952 (Punta Gorda); FMNH 86170 (Frenchman's).
Offshore Banks: FMNH 94292 (Glovers Reef); FMNH 96873 (Turneffe).

Hyleurochilus springeri Randall, 1966 — orangespotted blenny
Barrier Reef: FMNH 89386 (Carrie Bow); FMNH 87959 (Sergeant's); FMNH
93957 (Ambergris).
Offshore Banks: FMNH 86167 (Glovers Reef); FMNH 87960 (Turneffe).

Lupinoblennius vinctus (Poey, 1867) — mangrove blenny
Barrier Reef: FMNH 93958 (Ambergris).
Coastline Marine: FMNH 89412 (Belize City); FMNH 86080 (Southern
Lagoon).

Ophioblennius atlanticus macclurei (Silvester, 1915) — redlip blenny

Barrier Reef: USNM 276044, FMNH 89310 (Carrie Bow); SR CLS (Carrie Bow, 2000, 2001); FMNH 93961 (Ambergris); FMNH 90478 (Goff's); FMNH 86078 (Gallows Point).

Pelican Cays: SR CLS (Manatee, 2000).

Coastline Marine: FMNH 86159 (Placentia); FMNH 87941 (Punta Gorda).

Offshore Banks: FMNH 89516 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 90477 (Turneffe); FMNH 77577 (Lighthouse).

Parablennius marmoreus (Poey, 1876) — seaweed blenny

Mid-Shelf: USNM 365157 (Quamino, 2001).

Coastline Marine: FMNH 87948 (Punta Gorda); FMNH 86165 (Frenchman's).

Scartella cristata (Linnaeus, 1758) — molly miller

Coastline Marine: FMNH 87950 (Punta Gorda).

Gobiesocidae

Acyrtops beryllinus (Hildebrand and Ginsburg, 1926) — emerald clingfish

Barrier Reef: FMNH 84633 (Carrie Bow); FMNH 84320 (Cay Caulker).

Acyrtus artius Briggs, 1955 — papillate clingfish

Barrier Reef: USNM 274895, MNH 84334 (Carrie Bow); FMNH 83938 (Ambergris); FMNH 84327 (Sergeant's).

Offshore Banks: FMNH 84323 (Glovers Reef).

Gobiesox barbatulus Starks, 1913 — lobelip skilletfish

Coastline Marine: FMNH 83895 (Placentia); FMNH 83896 (Belize City).

Gobiesox punctulatus (Poey, 1876) — stippled clingfish

Barrier Reef: USNM 353633, FMNH 83901 (Carrie Bow).

Coastline Marine: FMNH 83909 (Punta Gorda); FMNH 83900 (Middle Snake).

Offshore Banks: FMNH 83899 (Glovers Reef).

Gobiesox sp.

Pelican Cays: USNM 360530 (Co-Cat, 2000).

Tomicodon sp. nov. — broadhead clingfish (This species is being described by J.

Williams and J. Tyler.)

Barrier Reef: FMNH 93758 (Carrie Bow).

Tomicodon sp. nov. — coral clingfish (This species is being described by J. Williams and J. Tyler.)

Barrier Reef: USNM 358693 (Carrie Bow).

Tomicodon sp. nov. — reticulate clingfish (Figure 14) (This species is being described by J. Williams and J. Tyler.)

Mid-Shelf: FMNH 93759 (Twin); USNM 276185 (Twin).

Pelican Cays: USNM 364369 (Co-Cat, 2001).

Coastline Marine: FMNH 93754 (Punta Gorda).

Tomicodon rupestris (Poey, 1860) — barred clingfish

Barrier Reef: FMNH 94187 (Ambergris).

Offshore Banks: FMNH 93755 (Glovers Reef).

Callionymidae

Paradiplogrammus bairdi (Jordan, 1888) — lancer dragonet

Barrier Reef: USNM 276224 (Carrie Bow).

Eleotridae

Dormitator maculatus (Bloch, 1792) — fat sleeper

Coastline Marine: FMNH 95585 (Belize City).

Eleotris amblyopsis (Cope, 1871) — weakeye sleeper

Barrier Reef: FMNH 105599 (St. George's).

Coastline Marine: FMNH 107512 (Belize City); FMNH 107513 (Southern Lagoon).

Eleotris perniger (Cope, 1871) — spinycheek sleeper (formerly known as *E. pisonis*)

Barrier Reef: FMNH 103792 (St. George's).

Erotelis smaragdus (Valenciennes, 1837) — emerald sleeper

Barrier Reef: USNM 276354, FMNH 95587 (Carrie Bow).

Mid-Shelf: FMNH 96464 (Twin).

Coastline Marine: FMNH 95588 (Belize City); FMNH 95590 (Punta Gorda).

Offshore Banks: FMNH 98046 (Turneffe).

Gobiidae

Barbulifer ceuthoecus (Jordan and Gilbert, 1884) — bearded goby

Barrier Reef: FMNH 100642 (Carrie Bow); USNM 365018 (sand spit 3.1 mi. south of Carrie Bow).

Mid-Shelf: USNM 360564 (Spruce, 2000); USNM 365014 (sand spit between Spruce and Wee Wee, 2001); USNM 365016 (Channel, 2001).

Pelican Cays: USNM 347313 (Cat, 1997); USNM 346468 (Manatee, 1997); USNM 360563 (Cat, 2000); USNM 360526 (Co-Cat, 2000); USNM 360563 (Cat, 2000); USNM 347347 (Manatee, 1997); USNM 365015 (Fisherman's, 2001); USNM 365017 (Cat, 2001).

Coastline Marine: FMNH 87907 (Punta Gorda).
 Offshore Banks: FMNH 94279 (Turneffe).

Bathygobius curacao (Metzelaar, 1919) — notchtongue goby
 Barrier Reef: USNM 351295 (Carrie Bow).
 Mid-Shelf: USNM 365012 (sand spit between Spruce and Wee Wee, 2001).
 Pelican Cays: USNM 347467 (Manatee, 1997).

Bathygobius mystacium Ginsburg, 1947 — island frillfin
 Barrier Reef: USNM 349049 (Carrie Bow).

Bathygobius soporator (Valenciennes, 1837) — frillfin goby
 Barrier Reef: AMNH 84327 (Ambergris).
 Pelican Cays: USNM 360525 (Co-Cat, 2000).
 Coastline Marine: FMNH 103790 (Temash River).
 Offshore Banks: FMNH 86604 (Glovers Reef).

Chriolepis imswe (Greenfield, 1981) — whiteband goby (formerly *Varicus imswe*)
 Barrier Reef: USNM 328243, FMNH 83894 (Carrie Bow).
 Offshore Banks: FMNH 100499 (Glovers Reef).

Coryphopterus alloides Böhlke and Robins, 1960 — barfin goby
 Barrier Reef: USNM 267843 (Carrie Bow); FMNH 99578 (Curlew).
 Offshore Banks: FMNH 99577 (Glovers Reef); FMNH 99575 (Turneffe).

Coryphopterus dicrus Böhlke and Robins, 1960 — colon goby
 Barrier Reef: USNM 276124, FMNH 99598 (Carrie Bow); FMNH 99604
 (Ambergris); AMNH 225079 (Carrie Bow).
 Mid-Shelf: USNM 360643 (SE Lagoon, 2000).
 Coastline Marine: FMNH 99600 (Punta Gorda).
 Offshore Banks: FMNH 99609 (Glovers Reef); FMNH 99585 (Turneffe).

Coryphopterus eidolon Böhlke and Robins, 1960 — pallid goby
 Barrier Reef: USNM 267838, FMNH 99695 (Carrie Bow); FMNH 99707
 (Ambergris); FMNH 99706 (English).
 Mid-Shelf: SR CLS (Lagoon, 2000); SR J/S (Elbow, 2001); SR J/S (Channel,
 2001); SR J/S (Quamino, 2001).
 Pelican Cays: USNM 347398 (Cat, 1997); USNM 347402 (Cat, 1997); USNM
 347380 (Manatee, 1997); USNM 360539 (Cat, 2000); USNM 347467
 (Cat, 1997); USNM 360538 (Cat, 2000); USNM 360540 (Little Cat,
 2000); USNM 360541 (Little Cat, 2000); USNM 365004 (Cat, 2001);
 USNM 365005 (Manatee, 2001); USNM 365006 (Avicennia, 2001);
 USNM 365010 (Fisherman's, 2001); SR J/S (Little Cat, 2000); SR CLS

(Cat, 2000,2001); SR J/S (Manatee, 2001); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 103724, 70952 (Glovers Reef); FMNH 99696 (Turneffe); FMNH 99686 (Lighthouse).

Coryphopterus glaucofraenum Gill, 1863 — bridled goby

Barrier Reef: FMNH 108249 (Carrie Bow); SR J/S (Carrie Bow, 2000); FMNH 108251 (Sergeant's); AMNH 225073 (Carrie Bow); AMNH 83091 (Ambergris).

Mid-Shelf: USNM 360548 (Douglas, 2000); SR J/S (Channel, 2001); USNM 365007 (North Elbow); USNM 360550 (SE Lagoon, 2000); SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001); FMNH 108254 (Twin); FMNH 100571 (Blue Ground Range).

Pelican Cays: USNM 347399 (Cat, 1997); USNM 347405 (Cat, 1997); USNM 347405 (Cat, 1997); USNM 347345 (Manatee, 1997); USNM 360547 (Cat, 2000); USNM 360549 (Little Cat, 2000); USNM 365008 (Cat, 2001); USNM 365009 (Manatee, 2001); SR J/S (Cat, 2000); SR J/S (Little Cat, 2000); SR J/S (Avivennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Coastline Marine: FMNH 99574 (Punta Gorda); FMNH 103791 (Frenchman's).

Offshore Banks: FMNH 86608, 77672 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 108256 (Turneffe).

Coryphopterus hyalinus Böhlke and Robins, 1962 — glass goby

Barrier Reef: USNM 267835 (Carrie Bow); FMNH 107594 (Carrie Bow); FMNH 105602 (Ambergris); FMNH 105597 (English).

Offshore Banks: FMNH 107574 (Glovers Reef); FMNH 105604 (Turneffe); FMNH 107590 (Lighthouse).

Coryphopterus lipernes Böhlke and Robins, 1962 — peppermint goby

Barrier Reef: USNM 267833, FMNH 107605 (Carrie Bow); FMNH 105636 (Ambergris).

Offshore Banks: FMNH 107606, 107619 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 105631 (Turneffe).

Coryphopterus personatus (Jordan and Thompson, 1905) — masked goby (Figure 15)

There is a question as to whether this species is distinct from *C. hyalinus* and in our sight records we list all as *C. personatus*.

Barrier Reef: USNM 267841, FMNH 107685 (Carrie Bow); FMNH 107654 (Ambergris); SR J/S (Carrie Bow, 2000, 2001); FMNH 107624 (English); FMNH 107651 (Hol Chan); AMNH 225083 (Carrie Bow).

Mid-Shelf: FMNH 107644 (Twin); SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: USNM 347312 (Cat, 1997); USNM 360542 (Cat, 2000); USNM 365002 (Cat, 2001); USNM 347381 (Manatee, 1997); USNM 365003 (Manatee, 2001); USNM 347466 (Little Cat, 2000); USNM 365001 (Fisherman's, 2001); SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR JCT et al. (Cat, 1995); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 107626 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 107658 (Turneffe); FMNH 107682 (Lighthouse).

Coryphopterus thrix Böhlke and Robins, 1960 — bartail goby

Barrier Reef: FMNH 103707 (Carrie Bow); FMNH 83989 (Ambergris).

Offshore Banks: FMNH 103708, 103706 (Glovers Reef).

Coryphopterus tortugae (Jordan, 1904) — sand goby

The status of this species is unclear and we did not distinguish it from *C. glaucofrenum* in our sight records.

Barrier Reef: FMNH 99708 (Carrie Bow); FMNH 99561 (Ambergris); FMNH 99675 (Hol Chan); FMNH 99538 (Gallows Point).

Coastline Marine: FMNH 99572 (Middle Snake).

Offshore Banks: FMNH 99551 (Glovers Reef); FMNH 99564 (Turneffe); FMNH 99569 (Lighthouse).

Elacatinus atronasus Böhlke and Robins, 1968 — blacknose goby

Barrier Reef: USNM 274932 (Carrie Bow).

Elacatinus evelynae Böhlke and Robins, 1968 — sharknose goby

Barrier Reef: USNM 276146 (Carrie Bow); SR J/S (Carrie Bow, 2001).

Mid-Shelf: SR RSJ (Lagoon, 2000).

Pelican Cays: USNM 347299 (Cat, 1997).

Elacatinus horsti (Metzelaar, 1922) — yellowline goby

Barrier Reef: USNM 329554 (Carrie Bow).

Pelican Cays: USNM 360645 (Little Cat, 2000).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Elacatinus louisae Böhlke and Robins, 1968 — spotlight goby

Offshore Banks: FMNH 105686 (Glovers Reef).

Elacatinus oceanops Jordan, 1904 — neon goby (Figure 16)

Barrier Reef: USNM 274918, FMNH 100555 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 100576 (Ambergris); FMNH 100581 (Hol Chan); AMNH 225069 (Carrie Bow).
 Mid-Shelf: USNM 360648 (Douglas, 2000); USNM 365030 (North Elbow, 2001); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); USNM 360649 (SE Lagoon, 2000); SR J/S (Douglas, 2000); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).
 Pelican Cays: USNM 347400 (Cat, 1997); USNM 347407 (Cat, 1997); USNM 360470 (Little Cat, 2000); USNM 365028 (Cat, 2001); USNM 365029 (Manatee, 2001); SR J/S (Cat, 2000); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).
 Coastline Marine: FMNH 100546 (Punta Gorda).
 Offshore Banks: FMNH 100562 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 100512 (Turneffe); FMNH 100528 (Lighthouse).

Elacatinus prochilos Böhlke and Robins, 1968 — whiteline goby

Barrier Reef: FMNH 107714 (Carrie Bow).
 Offshore Banks: FMNH 107712 (Glovers Reef); FMNH 107713 (Turneffe).

Elacatinus xanthiprora Böhlke and Robins, 1968 — yellowprow goby (Figure 17)

Barrier Reef: USNM 347301, FMNH 105685 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).
 Mid-Shelf: SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Tarpum, 2001).
 Pelican Cays: USNM 347401 (Cat, 1997); USNM 360560 (Cat, 2000); USNM 360561 (Little Cat, 2000); USNM 360562 (Little Cat, 2000); USNM 365031 (Manatee, 2001); SR J/S (Cat, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Co-Cat, 2001).

Evorthodus lyricus (Girard, 1858) — lyre goby

Coastline Marine: FMNH 77680 (Belize City).

Gnatholepis thompsoni Jordan, 1902 — goldspot goby

Barrier Reef: USNM 276130 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 225080 (Carrie Bow).

Pelican Cays: USNM 347379 (Manatee, 1997); USNM 360608 (Little Cat, 2000); SR JCT et al. (Cat, 1995).

Offshore Banks: FMNH 70956 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988); FMNH 94881 (Turneffe).

Gobiosoma yucatanum (Dawson, 1971) — Yucatan goby

Coastline Marine: FMNH 104727 (Belize City); FMNH 104728 (Southern Lagoon).

Gobionellus saepepallens (Gilbert and Randall, 1968) — dash goby

Barrier Reef: USNM 353875 (Carrie Bow).

Offshore Banks: FMNH 86618 (Glovers Reef).

Gobulus myersi Ginsburg, 1939 — paleback goby

Pelican Cays: USNM 347348 (Manatee, 1997).

Lophogobius cyprinoides (Pallas, 1770) — crested goby

Barrier Reef: FMNH 103793 (Sr. George's).

Mid-Shelf: FMNH 96463 (Twin).

Offshore Banks: FMNH 98041 (Glovers Reef); FMNH 86661 (Turneffe).

Lythrypnus crocodilus (Beebe and Tee-Van, 1928) — mahogany goby

Barrier Reef: USNM 274936 (Carrie Bow); FMNH 96607 (Carrie Bow);

FMNH 96612 (Ambergris); FMNH 96611 (Hol Chan).

Offshore Banks: FMNH 96609 (Glovers Reef).

Lythrypnus elasson Böhlke and Robins, 1960 — dwarf goby

Barrier Reef: FMNH 83971 (Carrie Bow); FMNH 83967 (Goff's); FMNH 83968 (English); FMNH 83987 (Ambergris).

Offshore Banks: FMNH 83950 (Glovers Reef); FMNH 83966 (Turneffe); FMNH 96492 (Lighthouse).

Lythrypnus heterochroma Ginsburg, 1939 — diphasic goby

Barrier Reef: USNM 274913 (Carrie Bow); FMNH 83988 (Ambergris).

Offshore Banks: FMNH 83953 (Glovers Reef); FMNH 84000 (Turneffe).

Lythrypnus minimus Garzon and Acero P., 1988 — pygmy goby.

Pelican Cays: USNM 347382 (Manatee, 1997); USNM 365032 (Cat, 2001).

Lythrypnus nesiotes Böhlke and Robins, 1960 — island goby

Barrier Reef: USNM 274904 (Carrie Bow); FMNH 96596 (Ambergris).

Mid-Shelf: USNM 360558 (SE Lagoon, 2000).

Pelican Cays: USNM 360559 (Little Cat, 2000).

Offshore Banks: FMNH 96591 (Glovers Reef); FMNH 96599 (Turneffe).

Lythrypnus okapia Robins and Böhlke, 1964 — okapi goby

Barrier Reef: FMNH 99654 (Ambergris).

Offshore Banks: FMNH 99653 (Glovers Reef).

Lythrypnus spilus Böhlke and Robins, 1960 — bluegold goby

Barrier Reef: USNM 267845, FMNH 83970 (Carrie Bow).

Pelican Cays: USNM 347408 (Cat, 1997); USNM 365033 (Cat, 2001).

Coastline Marine: FMNH 96421 (Punta Gorda).

Offshore Banks: FMNH 83951 (Glovers Reef); FMNH 83999 (Turneffe); FMNH 96494 (Lighthouse).

Lythrypnus sp.

Mid-Shelf: USNM 360473 (Douglas, 2000); USNM 360475 (SE Lagoon, 2000).

Pelican Cays: USNM 360471 (Cat, 2000); USNM 360474 (Little Cat, 2000).

Offshore Banks: FMNH (Glovers Reef).

Microgobius microlepis Longley and Hildebrand, 1940 — banner goby

Pelican Cays: USNM 347307 (Cat, 1997).

Offshore Banks: FMNH 107720 (Glovers reef).

Nes longus (Nichols, 1914) — orangespotted goby

Mid-Shelf: USNM 350189, AMNH 225005 (Twin Cays shot hole).

Offshore Banks: FMNH 77688 (Glovers Reef).

Oxyurichthys stigmalophius (Meade and Böhlke, 1958) — spotfin goby

Offshore Banks: FMNH 86619 (Glovers Reef).

Priolepis hipoliti (Metzelaar, 1922) — rusty goby

Barrier Reef: USNM 267829 (Carrie Bow); FMNH 103700 (Ambergris); AMNH 225070 (Carrie Bow).

Offshore Banks: FMNH 70947 (Glovers Reef).

Psilotris amblyrhynchus Smith and Baldwin, 1999 — bluntnose goby

Barrier Reef: USNM 347250 (Carrie Bow).

Psilotris batrachodes Böhlke, 1963 — toadfish goby

Barrier Reef: USNM 274946 (Carrie Bow); FMNH 101789 (Carrie Bow); FMNH 101791 (Hol Chan); FMNH 101788 (Ambergris).

Offshore Banks: FMNH 101793 (Glovers Reef); UF 209460 (Lighthouse Reef).

Psilotris celsus Böhlke, 1963 — highspine goby

Pelican Cays: USNM 360607 (Little Cat, 2000).

Pycnomma roosevelti Ginsburg, 1939 — presidents goby

Barrier Reef: USNM 346493 (Carrie Bow).

Risor ruber (Rosén, 1911) — tusked goby

Barrier Reef: USNM 267830 (Carrie Bow); SR JCT (Carrie Bow, 2000).

Mid-Shelf: USNM 360556 (SE Lagoon, 2000).

Pelican Cays: USNM 344844 (Cat, 1997); USNM 360554 (Cat, 2000); USNM 360555, (Little Cat, 2000); USNM 365019 (Cat, 2001); USNM 365020 (Ridge, 2001).

Offshore Banks: FMNH 82592 (Glovers Reef); FMNH 107721 (Turneffe).

The following four species, elsewhere assigned to *Gobiosoma*, *Garmannia*, or *Elacatinus*, are tentatively placed in the genus *Tigrigobius* by Van Tassell, 1998.

Tigrigobius dilepis Robins and Böhlke, 1964 — orangeside goby (formerly *Gobiosoma dilepis*)

Mid-Shelf: USNM 365184 (Quamino, 2001).

Pelican Cays: USNM 347300 (Cat, 1997); USNM 365027 (North Elbow, 2001); SR J/S (Avicennia, 2001).

Offshore Banks: FMNH 86620 (Glovers Reef).

Tigrigobius gemmatum (Ginsburg, 1939) — frecklefin goby (formerly *Garmannia gemmatum*)

Barrier Reef: USNM 321082 (Carrie Bow).

Tigribobius pallens (Ginsburg, 1939) — wall goby (formerly *Gobiosoma pallens*)

Barrier Reef: USNM 336874 (Carrie Bow).

Offshore Banks: FMNH 104418 (Glovers Reef).

Tigrigobius saucrum (Robins, 1960) — leopard goby (formerly *Gobiosoma saucra*)

Humann (1994: 243) presents an excellent photograph under the name *Gobiosoma dilepsis* [sic] and states it is uncommon in the Bahamas and Caribbean. Böhlke and Smith-Vaniz (1993), in their additions to the b Fishes of the Bahamas, list no *G. dilepsis* so we assume that this is a misspelling of *dilepis*. Humann's photograph, however, is not *dilepis* but appears to be *Gobiosoma saucrum*.

Mid-Shelf: USNM 360551 (Douglas, 2000); USNM 365021 (North Elbow, 2001); USNM 360552 (SE Lagoon, 2000); USNM 365025 (Quamino, 2001); USNM 365026 (Tarpum, 2001).

Pelican Cays: USNM 347469 (Cat, 1997); USNM 360553 (Little Cat, 2000); USNM 365022 (Cat, 2001); USNM 365023 (Manatee, 2001); SR RSJ (Avicennia, 2001).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Varicus fisheri (Herre, 1942) — translucent goby (formerly *Chriolepis fisheri*)
Offshore Banks: FMNH 71115 (Glovers Reef).

Vomerogobius flavus Gilbert, 1971 — lemon goby
Offshore Banks: FMNH 100488 (Glovers Reef).

Microdesmidae

Cerdale floridana Longley, 1934 — pugjaw wormfish
Barrier Reef: USNM 276202 (Carrie Bow); FMNH 101098 (Goff's); FMNH 101097 (South Water).
Pelican Cays: USNM 347349 (Manatee, 1997); USNM 365185 (Avicennia, 2001).
Coastline Marine: FMNH 101099 (Punta Gorda).

Microdesmus bahianus Dawson, 1973 — reef wormfish
Barrier Reef: USNM 350592 (Carrie Bow).

Microdesmus carri Gilbert, 1966 — brown wormfish
Barrier Reef: USNM 350900 (Carrie Bow).

Microdesmus longipinnis (Weymouth, 1910) — pink wormfish
Barrier Reef: USNM 350894 (Carrie Bow).

Ptereleotris helena (Randall, 1968) — hovering goby
Barrier Reef: SR J/S (Carrie Bow, 2000).
Mid-Shelf: SR CLS (Twin Cays shot hole, 1997).

Ephippidae

Chaetodipterus faber (Broussonet, 1782) — Atlantic spadefish
Mid-Shelf: SR J/S (Tarpum, 2001).
Pelican Cays: USNM 360523 (Co-Cat, 2000); SR J/S (Cat, 2000); SR JCT et al. (Cat, 1995); SR J/S (Little Cat, 2000); SR J/S (Manatee, 2001).
Coastline Marine: AMNH 83653 (Bahia de Amatique).

Acanthuridae

Acanthurus bahianus Castelnau, 1855 — ocean surgeonfish
Barrier Reef: USNM 276244 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 86512 (Gallows Point Reef); AMNH 93321 (Carrie Bow).
Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).
Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39798 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Acanthurus chirurgus (Bloch, 1787) — doctorfish

Barrier Reef: USNM 327618 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); AMNH 83088 (Ambergris); AMNH 224967 (Carrie Bow).

Mid-Shelf: USNM 360604 (Spruce, 2000); SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000, 2001); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 86518 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Acanthurus coeruleus Bloch and Schneider, 1801 — blue tang

Barrier Reef: USNM 276153 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 86520 (Gallows Point Reef); AMNH 93325 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001).

Pelican Cays: SR J/S (Cat, 2000, 2001); SR J/S (Manatee, 2000); SR J/S (Little Cat, 2000); SR J/S (Avicennia, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39797 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Sphyraenidae

Sphyraena barracuda (Walbaum, 1792) — great barracuda

Barrier Reef: USNM 353139 (Carrie Bow); FMNH 77873 (St. Georges); SR J/S (Carrie Bow, 2000, 2001).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Quamino, 2001).

Pelican Cays: USNM 347357 (Manatee 1997); SR J/S (Cat, 2000); SR J/S (Manatee, 2000); SR J/S (Little Cat, 2000); SR JCT et al. (Cat, 1995); SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 77669 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Scombridae

Scomberomorus cavalla (Cuvier, 1829) — king mackerel

Barrier Reef: RD (Carrie Bow, 2001).

Scomberomorus regalis (Bloch, 1793) — cero

Barrier Reef: RD (Carrie Bow, 2001).

Mid-Shelf: SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000); SR J/S (Quamino, 2001); SR J/S (Tarpum, 2001).

Pelican Cays: SR J/S (Manatee, 2000, 2001); SR J/S (Cat, 2001); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR JCT et al. (Cat, 1995).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Thunnus alalunga (Bonnaterre, 1788) — albacore

Offshore Banks: FMNH 39863 (Glovers Reef).

Thunnus atlanticus (Lesson, 1831) — blackfin tuna

A larva of this species was collected at Carrie Bow Cay and identified by W. Richards. A photograph of the specimen has been posted on the Smithsonian Website (www.nmnh.si.edu/vert/fish.html).

Achiridae

Achirus declivis Chabanaud, 1940 — plainfin sole

Coastline Marine: FMNH 89532 (Belize City).

Achirus lineatus (Linnaeus, 1758) — lined sole

Barrier Reef: USNM 353970 (Carrie Bow).

Mid-Shelf: FMNH 89534 (Drowned).

Coastline Marine: FMNH 89535 (Belize City).

Bothidae

Bothus lunatus (Linnaeus, 1758) — peacock flounder

Barrier Reef: USNM 349048 (Carrie Bow); SR J/S (Carrie Bow, 2000).

Offshore Banks: FMNH 39762 (Glovers Reef).

Bothus maculiferus (Poey, 1860) — maculated flounder

Offshore Banks: FMNH 104643 (Glovers Reef).

Bothus ocellatus (Agassiz, 1831) — eyed flounder

Barrier Reef: USNM 353145 (Carrie Bow).

Coastline Marine: FMNH 89651 (Belize City).

Offshore Banks: FMNH 77533 (Glovers Reef).

Paralichthyidae

Citharichthys macrops Dressel 1885 — spotted whiff

Coastline Marine: FMNH 77534 (Belize City); FMNH 103799 (Pelican Beach, Dangriga).

Citharichthys spilopterus Günther, 1862 — bay whiff

Coastline Marine: FMNH 103798 (Belize City).

Syacium sp., larva

Barrier Reef: USNM 363537 (Carrie Bow).

Cynoglossidae

Syphurus arawak Robins and Randall, 1965 — Caribbean tonguefish

Barrier Reef: USNM 267784 (Carrie Bow).

Offshore Banks: FMNH 104681 (Glovers Reef); FMNH 97497 (Lighthouse).

Syphurus ommaspilus Böhlke, 1961 — ocellated tonguefish

Offshore Banks: FMNH 94820 (Glovers Reef).

Syphurus plagiusa (Linnaeus, 1766) — blackcheek tonguefish

Coastline Marine: FMNH 97494 (Belize City); FMNH 97490 (Pelican Beach, Dangriga).

Syphurus rhytisma Böhlke, 1961 — patchtail tonguefish

Offshore Banks: FMNH 94821 (Glovers Reef).

Syphurus tessellatus (Quoy and Gaimard, 1824) — tessellated tonguefish

Barrier Reef: USNM 356243 (Carrie Bow).

Balistidae

Balistes capriscus Gmelin, 1789 — gray triggerfish

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Coastline Marine: AMNH 83651 (Bahia de Amatique).

Balistes vetula Linnaeus, 1758 — queen triggerfish

Barrier Reef: USNM 327619 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001).

Pelican Cays: SR MT (Cat, 1997).

Offshore Banks: FMNH 39732 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Melichthys niger (Bloch, 1786) — black durgon

Barrier Reef: SR J/S (Carrie Bow, 2000).

Offshore Banks: SR CLS and JCT (Glovers Reef, 1988).

Monacanthidae

Aluterus schoepfi (Walbaum, 1792) — orange filefish

Barrier Reef: USNM 353144 (Carrie Bow).

Coastline Marine: FMNH 86523 (Belize City).

Aluterus scriptus (Osbeck, 1765) — scrawled filefish

Barrier Reef: USNM 349042 (Carrie Bow).

Cantherhines pullus (Ranzani, 1842) — orangespotted filefish

Barrier Reef: USNM 349050 (Carrie Bow); SR RSJ (Carrie Bow, 2000);

AMNH 224966 (Carrie Bow).

Offshore Banks: FMNH 86527 (Glovers Reef).

Monacanthus ciliatus (Mitchill, 1818) — fringed filefish

Barrier Reef: USNM 327995 (Carrie Bow).

Pelican Cays: USNM 347359 (Manatee, 1997); USNM 360567 (Cat, 2000);

USNM 364871 (Cat, 2001).

Coastline Marine: FMNH 86528 (Belize City).

Offshore Banks: FMNH 77522 (Glovers Reef).

Monacanthus tuckeri Bean, 1906 — slender filefish

Barrier Reef: USNM 327620 (Carrie Bow); SR JCT (Carrie Bow, 2000).

Offshore Banks: FMNH 77793 (Glovers Reef).

Stephanolepis setifer (Bennet, 1831) — pygmy filefish

Coastline Marine: FMNH 86534 (Belize City).

Offshore Banks: FMNH 86533 (Glovers Reef).

Ostraciidae

Acanthostracion polygonius Poey, 1876 — honeycomb cowfish

Offshore Banks: FMNH 86537 (Glovers Reef).

Acanthostracion quadricornis (Linnaeus, 1758) — scrawled cowfish

Mid-Shelf: SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Lagoon, 2000).

Pelican Cays: SR J/S (Cat, 2000); SR J/S (Kitten, 2001); SR J/S (Ridge, 2001); SR J/S (Co-Cat, 2000).

Coastline Marine: FMNH 86536 (Belize City).

Lactophrys bicaudalis (Linnaeus, 1758) — spotted trunkfish

Barrier Reef: AMNH 224985 (Carrie Bow).

Pelican Cays: SR J/S (Co-Cat, 2001).

Offshore Banks: FMNH 39723 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Lactophrys trigonus (Linnaeus 1758) — trunkfish

Offshore Banks: FMNH 86538 (Glovers Reef).

Coastline Marine: AMNH 83655 (Bahia de Amatique).

Lactophrys triqueter (Linnaeus, 1758) — smooth trunkfish

Barrier Reef: USNM 349065 (Carrie Bow).

Mid-Shelf: SR J/S (Elbow, 2001).

Offshore Banks: FMNH 86541 (Glovers Reef).

Tetraodontidae

Canthigaster rostrata (Bloch, 1786) — sharpnose puffer

Barrier Reef: USNM 267792, FMNH 94567 (Carrie Bow); SR J/S (Carrie Bow, 2000, 2001); FMNH 93811 (Sergeant's); FMNH 93814 (English); FMNH 70924 (Gallows Point); AMNH 225001 (Carrie Bow).

Mid-Shelf: SR J/S (Douglas, 2000); SR J/S (Elbow, 2001); SR J/S (Channel, 2001); SR J/S (Quamino, 2001).

Pelican Cays: SR J/S (Kitten, 2001).

Offshore Banks: FMNH 93801 (Glovers Reef); FMNH 93813 (Turneffe); FMNH 77765 (Lighthouse); SR CLS and JCT (Glovers Reef, 1988).

Sphoeroides greeleyi Gilbert, 1900 — lappetskin puffer

Coastline Marine: AMNH 83658 (Bahia de Amatique).

Sphoeroides nephelus (Goode and Bean, 1882) — southern puffer

Offshore Banks: FMNH 86544 (Glovers Reef).

Sphoeroides spengleri (Bloch, 1785) — bandtail puffer

Barrier Reef: USNM 327622 (Carrie Bow); SR RSJ (Carrie Bow, 2000); AMNH 224993 (Carrie Bow).

Mid-Shelf: SR J/S (Elbow, 2001).

Pelican Cays: SR RSJ (Cat, 2000).

Coastline Marine: FMNH 86546 (Belize City); FMNH 93785 (Punta Gorda).

Offshore Banks: FMNH 93783 (Glovers Reef); SR CLS and JCT (Glovers Reef, 1988).

Sphoeroides testudineus (Linnaeus, 1758) — checkered puffer

Mid-Shelf: AMNH 225061 (Twin).

Coastline Marine: FMNH 77776 (Belize City); FMNH 93794 (Punta Gorda); FMNH 77778 (South Lagoon); AMNH 83635 (Bahia de Amatique).

Diodontidae

Chilomycterus antennatus (Cuvier, 1816) — bridled burrfish

Barrier Reef: USNM 349052 (Carrie Bow).

Pelican Cays: USNM 347358 (Manatee, 1997).

Chilomycterus antillarum Jordan and Rutter, 1897 — web burrfish

Coastline Marine: FMNH 86551 (Belize City).

Chilomycterus schoepfii (Walbaum, 1792) — striped burrfish
 Coastline Marine: FMNH 86550 (Belize City).

Diodon holocanthus Linnaeus, 1758 — balloonfish
 Offshore Banks: FMNH 86554 (Glovers Reef).

Diodon hystrix Linnaeus, 1758 — porcupinefish
 Barrier Reef: SR J/S (Carrie Bow, 2001).
 Coastline Marine: AMNH 83636 (Bahia de Amatique).

DISCUSSION

Because the Pelican Cays are mangrove islands with bases of live coral and are associated with deep lagoons, some with depths in excess of 15 meters (Ukish, 2000), they support a highly diverse biota (Macintyre and Rützler, 2000). The objectives of this study have been to determine if there are any differences between the ichthyofauna of the Rhomboidal Cays and the other regions, and if there are any special characteristics of the Core Pelican Cays fish fauna as compared to that of the Peripheral Rhomboidal Cays.

Regional Comparisons

We begin our assessment of the uniqueness of the Rhomboidal Cays ichthyofauna by comparing the numbers of species known from the Rhomboidal Cays with the numbers recorded from adjacent regions. For this comparison we recognize the following major regions of the Belize Barrier Reef Complex: Coastline Marine; Mid-Shelf, exclusive of the Core Pelican Cays but including the Peripheral Rhomboidal Cays; the Core Pelican Cays; the Outer Barrier Reef; and the Offshore Banks. At the latitude of the Pelican Cays, the Coastline Marine, Mid-Shelf, and Outer Barrier Reef areas are clearly distinct from one another but as the shelf narrows northward these regions fuse and some species that otherwise occur only along the coast are found in collections from the Mid-Shelf islands. Thus, the limits of these regions are somewhat subjective but sufficiently distinct to provide a basis for further analysis.

Our list of fish species from the Coastline Marine, Mid-Shelf, Core Pelican Cays, Outer Barrier Reef, and Offshore Banks of Belize now includes 497 species. For comparison, the number of species reported from Bermuda is 433 (Smith-Vaniz et al., 1999), from the four western Caribbean oceanic atolls is 273 (Mejia et al., 1998), and from Navassa Island is 237 (Collette et al., in press).

The numbers of species from each of the regions of the Belize shelf are summarized in Table 1.

Not unexpectedly, substantially more species occur in the Outer Barrier Reef and Offshore Banks where there are deep-water and open-ocean habitats as well as shallow

reef, sand bottom, and mangrove habitats. These two areas also have reefs that are exposed to vigorous wave action.

Together the Outer Barrier Reef (339; unique 60 or 17.6 %) and Offshore Banks (293; unique 38 or 13.0%) have a total of 399 species (many shared between the two regions), of which 196 (49.1%) occur only in one or both of these two areas. To some extent the large number of species recorded from the Outer Barrier Reef probably reflects intensive collecting in the vicinity of the Smithsonian Institution's research station at Carrie Bow Cay, whereas the large number of species from the Offshore Banks reflects intensive collecting by the staff of the Field Museum of Natural History.

Table 1. Numbers of species recorded from each of the major regions of the Belize Barrier Reef Complex, and numbers of species recorded only from those regions.

Region	Total Species	Unique Species	Percent Unique Species
Coastline Marine	150	58	38.7
Mid-Shelf, including the Peripheral Rhomboidal Cays	164	4	2.4
Peripheral Rhomboidal Cays	123	0	0
Core Pelican Cays	168	13	7.7
Outer Barrier Reef	339	60	17.6
Offshore Banks	293	38	13.0

The Coastline Marine environment with 150 recorded species contains the largest proportion (38.7 %) of species not recorded from the other regions. This includes species that live in areas of open sand bottom, reduced salinity, and higher turbidity.

The Mid-Shelf region lacks the deep-water and open-ocean habitats of the Outer Barrier Reef and Offshore Banks, and it also lacks the open sand bottom, low salinity, and turbid water habitats of the Coastline Marine region. The Mid-Shelf's unique habitats are quiet water coral reefs, mangroves, seagrass flats, and silty lagoons. Its known fauna comprises 164 species, of which four (2.4%) are reported only from the Mid-Shelf. One hundred and six species are recorded from the Mid-Shelf region exclusive of the Rhomboidal Cays. Our records from mud-based cays are scant, with 28 species from Twin Cays, 11 species from the Blue Ground Range, and 14 species from the non-coral area of Spruce Cay.

These low numbers probably reflect, in part, a lack of collecting effort but they undoubtedly also indicate an actual lack of species richness. In contrast, Douglas Cay, with a fringing coral reef, has 66 recorded species.

The Rhomboidal Cays

For comparative purposes, we grouped the northern islands of the Rhomboidal Cays into the Core Pelican Cays and Peripheral Rhomboidal Cays (Fig.1). The Core Pelican Cays are: Northeast Cay, Bird Cays, Ridge Cay, Fisherman's Cay, Co-Cat Cay, Manatee Cay, Avicennia Cay, Kitten Cay, Cat Cay, and Little Cat Cay. Northeast Cay and the Bird Cays were not sampled because they are inhabited, and our sample from Fisherman's Cay is too small to be considered representative.

The Peripheral Rhomboidal Cays are: the Elbow Cays, Channel Cay, Tarpum Cay, Quamino Cay, and the Lagoon Cays. Douglas Cay is technically outside of the Rhomboidal Cays but it is close enough to be included in the comparisons.

The total numbers of species recorded from each locality within the Rhomboidal Cays are shown in Tables 2 and 3. These numbers reflect collecting effort as well as an estimate of size of the resident fauna. For example, Cat Cay and Manatee Cay were sampled repeatedly over several years and the number of species recorded at those two cays was significantly higher than at other cays in the Pelicans: 112 and 78 respectively vs. the average of 50.4 species from localities sampled only two to four times. This is especially obvious in the number and percentage of species recorded from only those localities. Manatee Cay had 16 species unknown from other Core Pelicans Cays and 13 unknown from the Peripheral Rhomboidal Cays. Cat Cay with 112 species had 33 species unknown from other Core Pelican Cays and 20 species unknown from the Peripheral Rhomboidal Cays. Other cays sampled had fewer than 10 unique species except for Co-Cat with 14. Co-Cat has the only extensive sandy beach that we could locate.

Table 2. Numbers of species recorded from each locality in the Core Pelican Cays. In the number and type of samples column, the number of rotenone samples and sight records are given in parentheses. The first number is the number of rotenone samples and the second is the number of visual censuses. The third column is the number of species recorded from the Core Pelican Cays only at that cay. The fourth column is the number of species recorded from all of the Rhomboidal Cays only at that cay.

	Number and Type of Samples	Total Number of Species	Unique in Core Pelican Cays	Unique in Rhomboidal Cays
Ridge	2 (1/1)	37	3	2
Co-Cat	3 (3/0)	72	14	9
Manatee	9 (4/5)	78	16	13
Avicennia	2 (1/1)	46	2	2
Kitten	2 (1/1)	45	5	2
Cat	18 (10/8)	112	33	20
Little Cat	4 (2/2)	52	3	3
Mean		63.1		

One hundred and ninety-three species of fishes have been reported from the Rhomboidal Cays, 168 from the Core Pelican Cays (99 species recorded from both the Core Pelican Cays and the Peripheral Rhomboidal Cays plus 69 species that were not found in the Peripheral Rhomboidal Cays), and 123 in the Peripheral Rhomboidal Cays (species found in both and 24 that were not found in the Core Pelican Cays).

Table 3. Numbers of species recorded from the Peripheral Rhomboidal Cays. Columns as in Table 2 except that column three is the number of species recorded from the Peripheral Rhomboidal Cays only at that cay.

	Number of Samples	Total Species	Unique in Peripheral Rhomboidal Cays	Unique in Rhomboidal Cays
Douglas	4 (3/1)	66	8	1
Elbow	5 (2/3)	73	10	0
Channel	3(2/1)	43	4	0
Tarpum	2 (1/)	54	6	0
Lagoon	3 (1/1 + dip net)	62	9	4
Quamino	3 (2/1)	51	7	4
Mean		58.2		

Interrelationships of the Core Pelican Cays and Peripheral Rhomboidal Cays

We attempted to examine the interrelationships of the Core Pelican Cays and the Peripheral Rhomboidal Cays using the program PAUP (Phylogenetic Analysis Using Parsimony by David L. Swofford, 1998). This program is designed for examining large sets of taxonomic characters to analyze taxonomic similarities. In this study, we used the presence or absence of species as "characters" and individual localities as "taxa." Our hypothesis was that if the Core Pelican Cays had characteristic special faunas they would fall out as a group, relative to the Peripheral Rhomboidal Cays. Although limitations of the program precluded using the entire faunal list, runs with a large subsample yielded no clear-cut grouping of the Core Pelican Cays in any of the resulting trees and we conclude that our data do not suggest that the Core Pelican Cays are distinct from the Peripheral Rhomboidal Cays. Hence, what are commonly called the Pelican Cays are biogeographically simply the northernmost of the Rhomboidal Cays.

Special Features of the Rhomboidal Cays

The Rhomboidal Cays do, however, have some special faunal characteristics. First of all, there are some species that are either confined to the Rhomboidal Cays or appear to reach their maximum abundance there. Second, there are species that are

conspicuously absent from the Rhomboidal Cays. Third, there are species whose microhabitats in the Rhomboidal Cays differ from their microhabitats in other major regions.

Eleven species, *Aetobatus narinari*, *Myrophis anterodorsalis*, *Porichthys pauciradiatus*, *Epinephelus morio*, *Lonchopisthus micrognathus*, *Caranx crysos*, *Lutjanus cyanopterus*, *Equetus lanceolatus*, *Gobulus myersi*, *Lythrypnus minimus*, and *Psilotris celsus*, were seen or collected in the Core Pelican Cays but not in the other parts of the Belize Barrier Reef Complex. However, all of these have wide distributions in the Caribbean and we can attach no special significance to their apparent absence in the surrounding regions, other than sampling error.

Two species, however, appear to characterize the Rhomboidal Cays in that they are abundant there and absent or rare elsewhere. The Mayan hamlet (*Hypoplectrus* sp.) is common and abundant at Manatee, Cat, and Little Cat Cays in the Core Pelican Cays. We have not collected or observed it outside of the Rhomboidal Cays, but Philip Lobel (pers. comm.) has taken it at Wee Wee Cay. The schooling wrasse (*Halichoeres* sp.) has been reported from the Core Pelican Cays and from Channel, Tarpum, Lagoon, and Quamino Cays. It appears to be one of the most abundant species in the Rhomboidal Cays.

Species Notably Absent from the Rhomboidal Cays

One hundred sixteen species occur in both the Offshore Banks and the Barrier Reef collections but are absent from the Core Pelican Cays and the Peripheral Rhomboidal Cays. Perhaps the most conspicuous by its absence is the bluehead wrasse (*Thalassoma bifasciatum*), which is extremely common on the Barrier Reef and Outer Banks, but does not occur in the Coastal Marine, Rhomboidal Cays, or in Mid-Shelf samples. This species is especially common in flourishing coral-reef areas and its absence from grass and mangrove habitats is not unexpected, but its absence from the Core Pelican Cays quiet water coral reefs is noteworthy. Other species conspicuous by their absence are: *Myripristis jacobus*, *Scorpaena plumieri*, *Epinephelus guttatus*, *Serranus baldwini*, *Heteropriacanthus cruentatus*, *Apogon townsendi*, *Malacanthus plumieri*, *Gerres cinereus*, *Mulloidichthys martinicus*, *Holacanthus tricolor*, *Microspathodon chrysurus*, *Bodianus rufus*, *Acanthemblemaria paula*, *Bothus lunatus*, *Cantherhines pullus*, and *Monacanthus tuckeri*.

Species with Unique Microhabitats in the Rhomboidal Cays

Of special interest is the habitat of the roughhead blenny (*Acanthemblemaria aspera*, Figure 12). At Carrie Bow Cay and most other Caribbean localities, this small species is confined to depths of 15 to 50 feet, especially in the groove-and-spur formations (Clarke, 1989, 1994). In the Core Pelican Cays it lives at depths of less than one foot. *Acanthemblemaria aspera* was the only species of *Acanthemblemaria* found at Cat Cay. At Manatee Cay it lives with two other much less common species, the false

papillose blenny (*Acanthemblemaria greenfieldi*) and the spinyhead blenny (*A. spinosa*). The latter two species occur in shallow water at Carrie Bow Cay, where they are well separated from the deeper water habitat of *A. aspera*. Possibly the subdued water movement in the Rhomboidal Cays is important to these distribution patterns, but there may be other factors as well.

CONCLUSIONS

The Rhomboidal Cays have a rich ichthyofauna of 193 known species. We have not found any reliable ichthyofaunal differences between the Core Pelican Cays and the Peripheral Rhomboidal Cays, but the Rhomboidal Cays have many more species of fishes than the Mid-Shelf mangrove cays with mud bases such as Twin Cays. The Mayan hamlet (*Hypoplectrus* sp.) and the schooling wrasse (*Halichoeres* sp.) appear to be almost restricted to the Rhomboidal Cays and certainly reach their maximum abundance there. One hundred sixteen species that occur in both the Offshore Banks and the Barrier Reef have not been reported from the Rhomboidal Cays. A particularly striking example is the bluehead wrasse (*Thalasoma bifasciatum*), which is conspicuously absent in spite of the presence of flourishing coral reefs along most of the Rhomboidal Cays.

Finally, there are differences in microhabitat utilization by hole dwelling blennies of the genus *Acanthemblemaria*.

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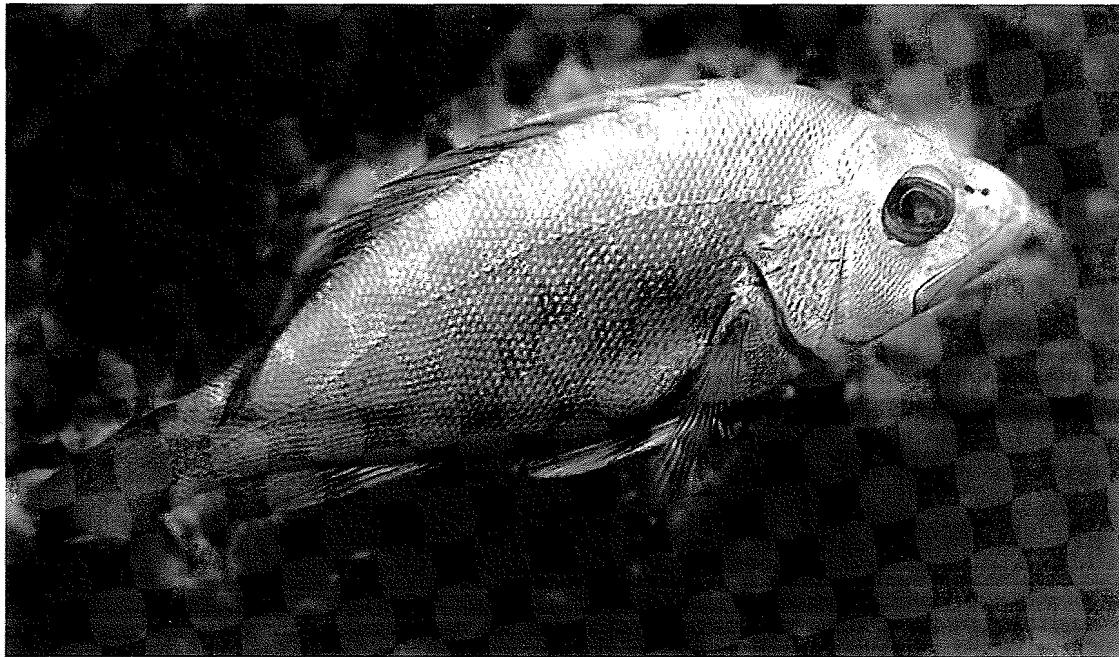


Figure 2. Mayan hamlet (*Hypoplectrus* sp. nov.). This distinctive species is presently known only from the Pelican Cays, with one record from Wee Wee Cay.

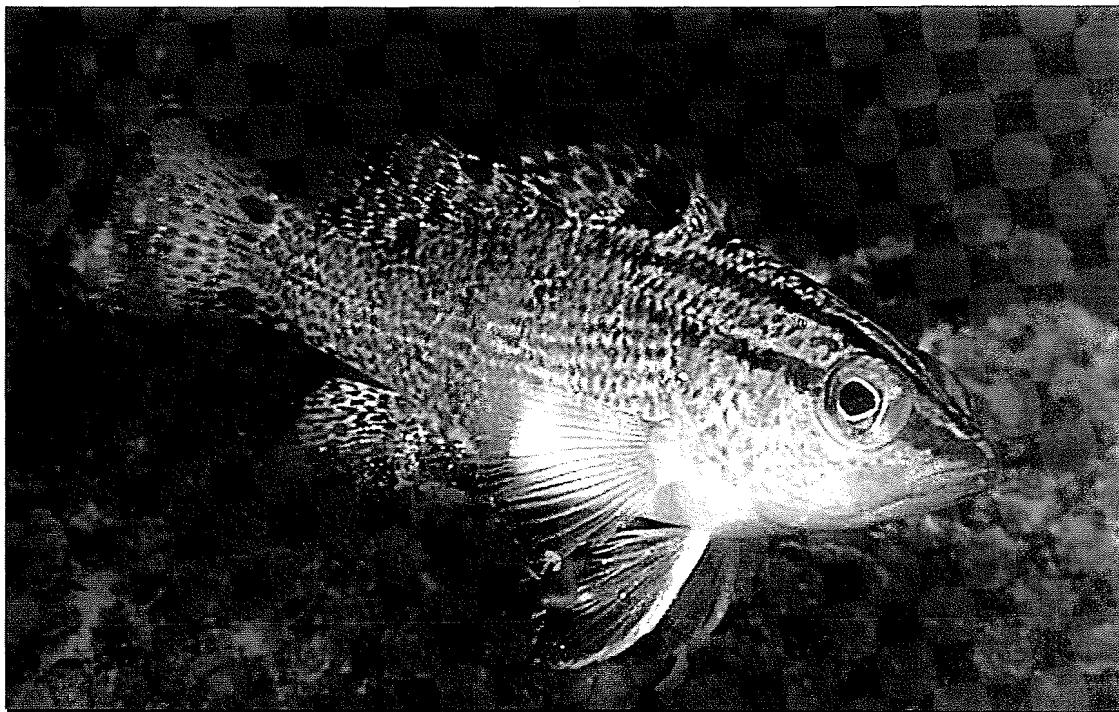


Figure 3. Two-spot bass (*Serranus flaviventris*). This secretive species is common in the Rhomboidal Cays.

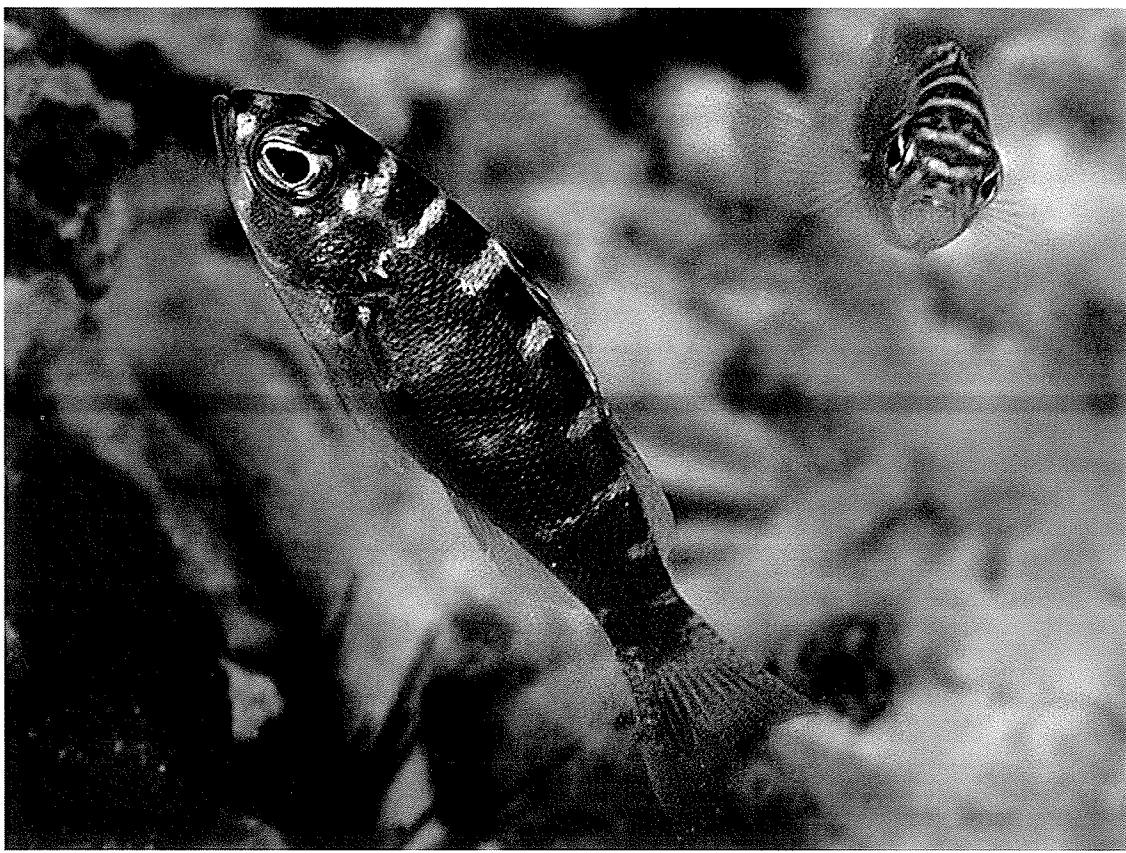


Figure 4. Chalk bass (*Serranus tortugarum*). Usually this species is found on the outer slope of reefs facing open water at depths of more than 15 meters. Its presence in the confined waters of the Pelican Cays is of interest.

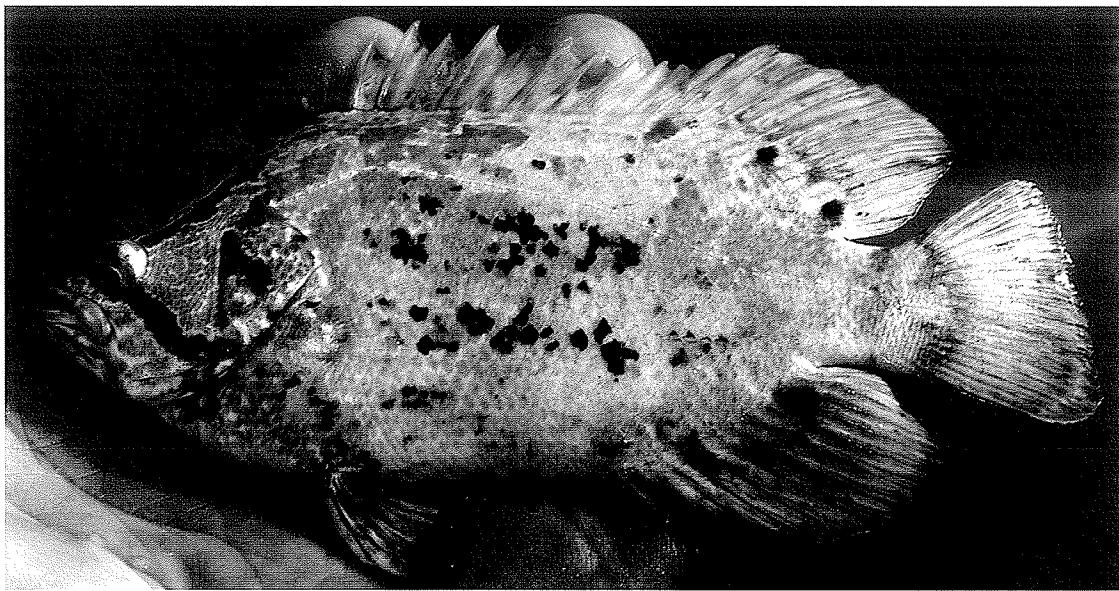


Figure 5. Tripletail (*Lobotes surinamensis*). This juvenile drifted onto the beach at Carrie Bow Cay on 6 February 2001, and has not been recorded from the Rhomboidal Cays.

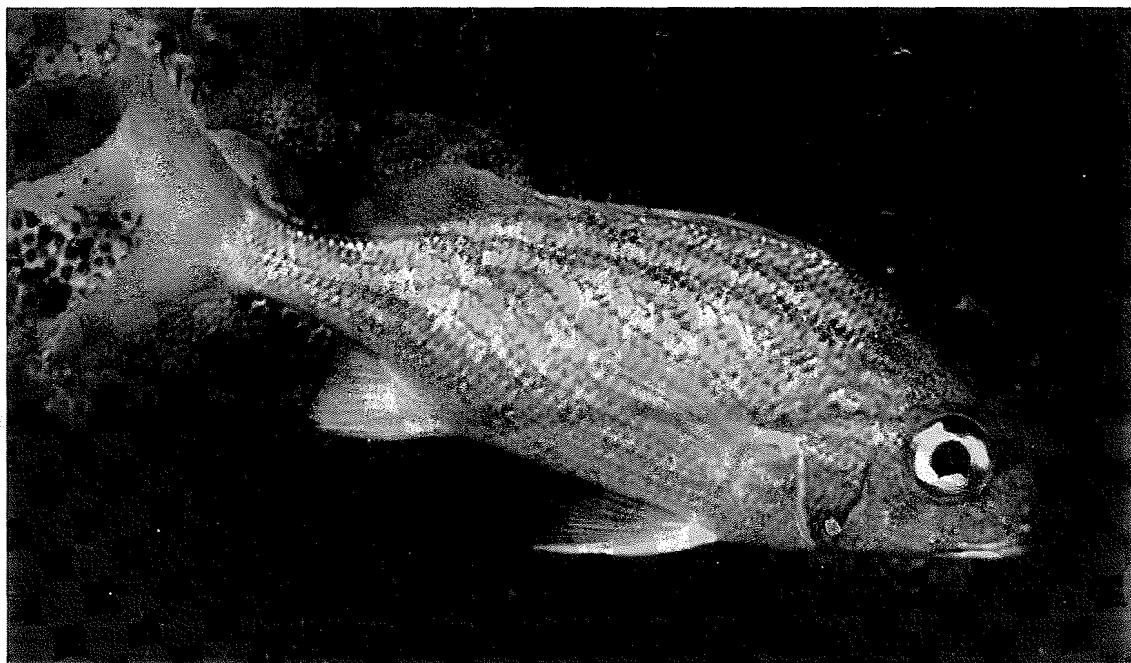


Figure 6. French grunt (*Haemulon flavolineatum*). As it is elsewhere throughout its range, the French grunt is abundant along the top of the reef and among mangrove roots in the Rhomboidal Cays.



Figure 7. Yellowcheek wrasse (*Halichoeres cyancephalus*). This species is found in the groove and spur zone off Carrie Bow Cay, and has not been recorded from the Rhomboidal Cays.

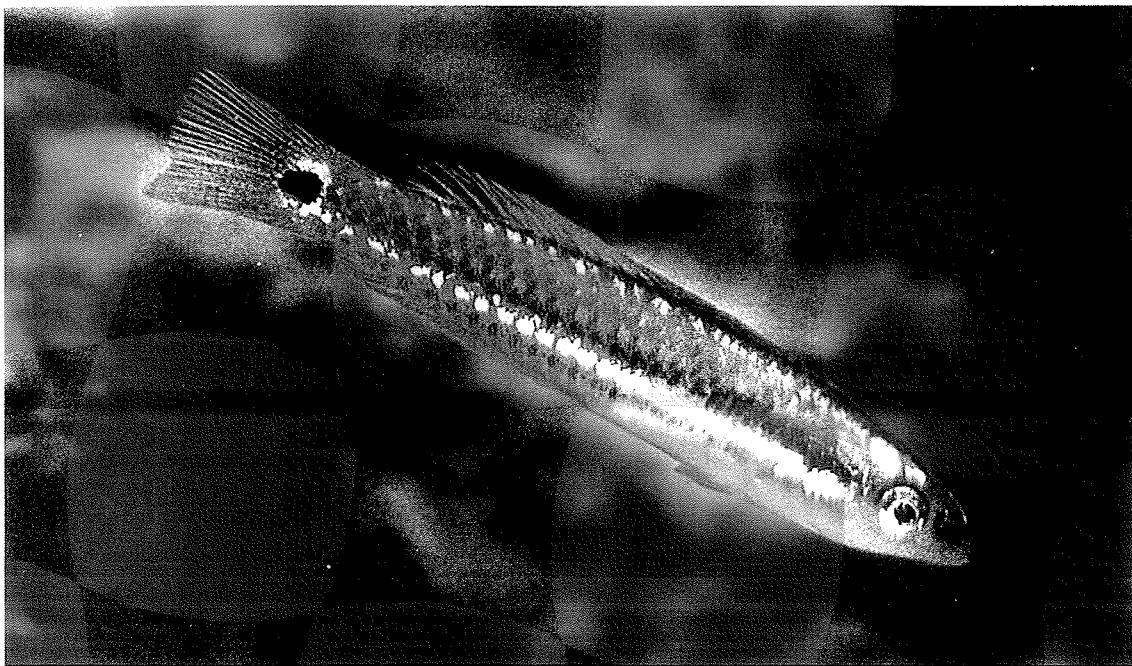


Figure 8. Schooling wrasse (*Halichoeres* sp. nov.). This is a very common wrasse that is known only from the Rhomboidal cays. Unlike most species of the genus, it occurs in large schools.

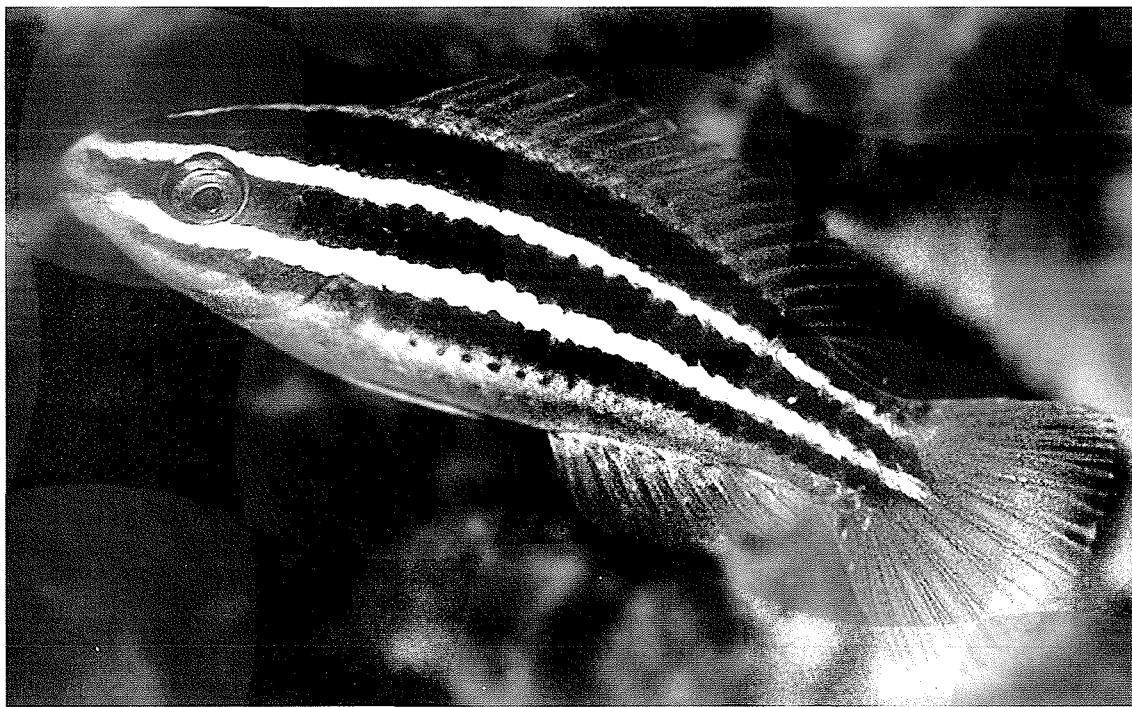


Figure 9. Striped parrotfish (*Scarus iserti*). This parrotfish is almost ubiquitous in the Pelican Cays. Although this juvenile has a complete white stripe across the snout, there are no dark dorsal and ventral margins on the base of the caudal fin as there would be in juveniles of the closely related princess parrotfish.

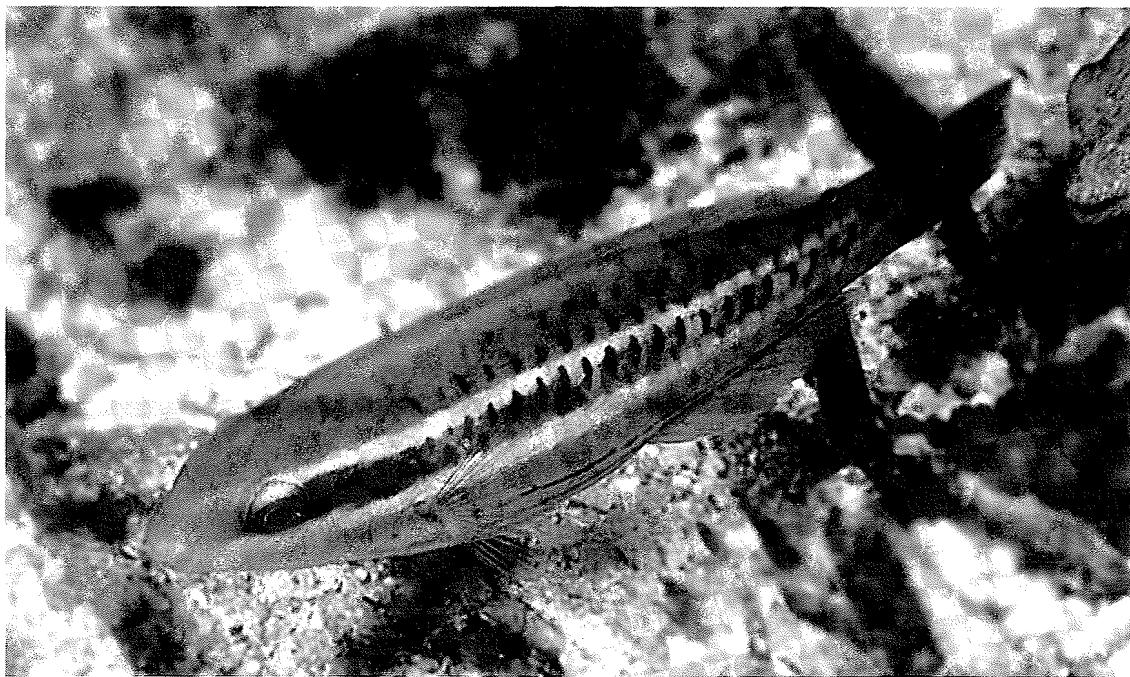


Figure 10. Striped parrotfish (*Scarus iserti*) from the Pelican Cays. Female.

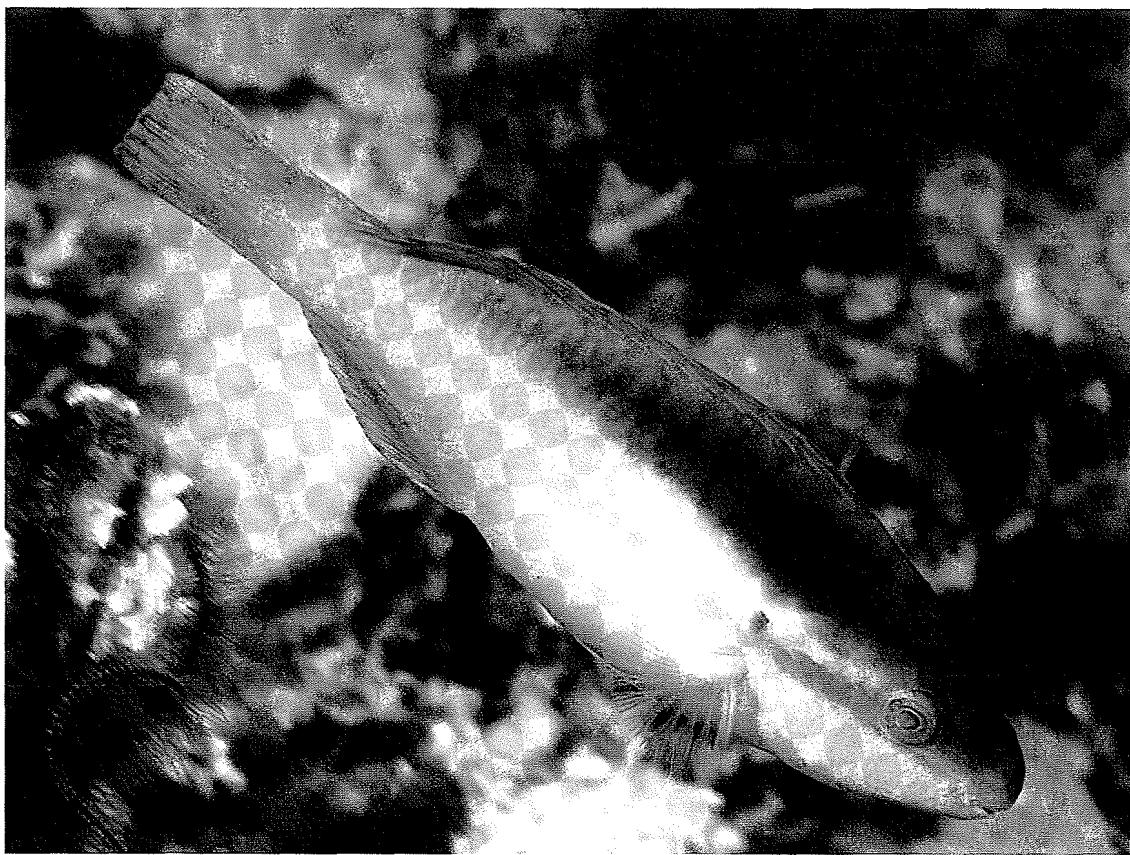


Figure 11. Striped parrotfish (*Scarus iserti*) from the Pelican Cays. "Super-male."

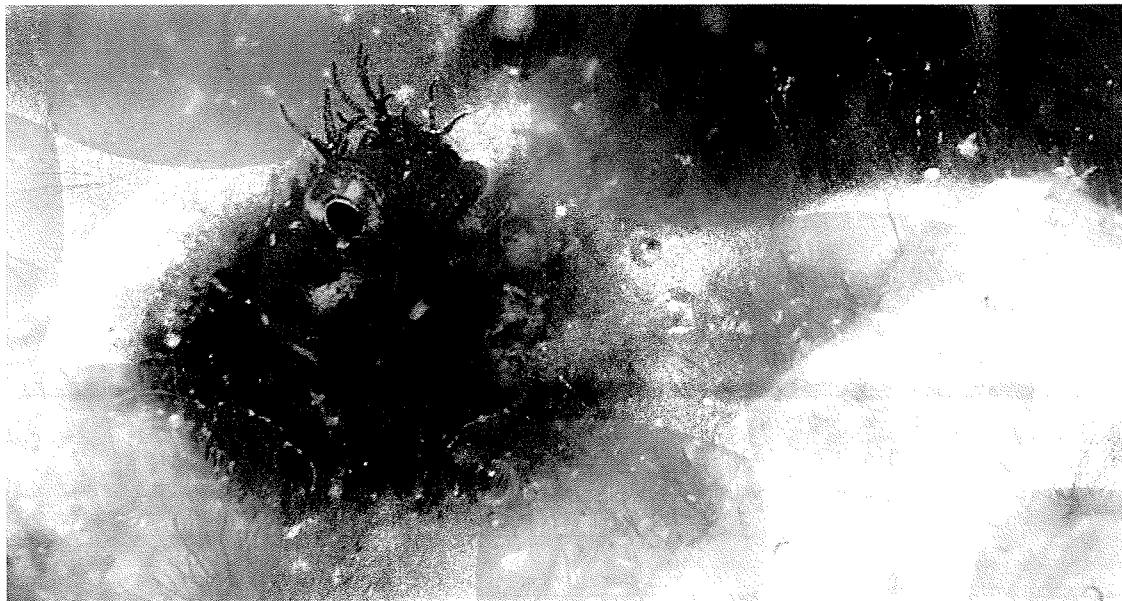


Figure 12. Roughhead blenny (*Acanthemblemaria aspera*). In the Pelican Cays this species is found in much shallower water than in areas near Carrie Bow Cay and most other Caribbean localities.

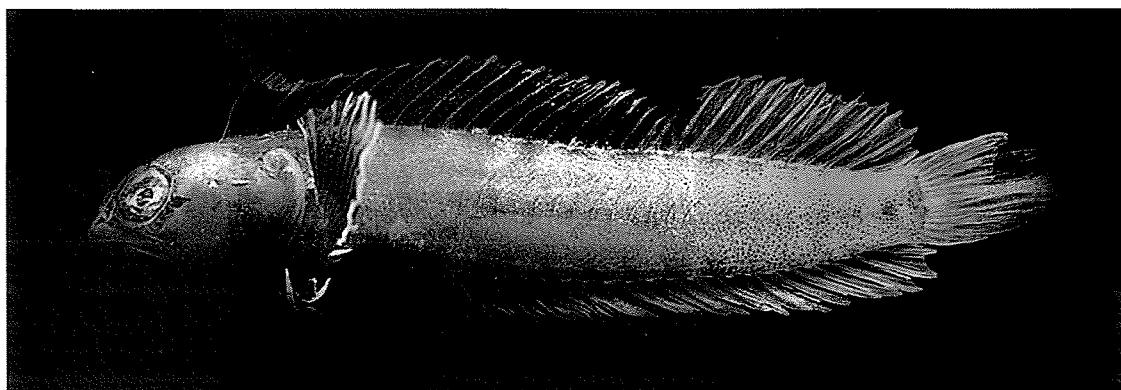


Figure 13. Redflag blenny (*Emblemariopsis* sp. nov.). To date this distinctive species is known only from the Rhomboidal Cays, Wee Wee Cay, and the Blue Ground Range.



Figure 14. Reticulate clingfish (*Tomicodon* sp. nov.). This is an uncommon species that is widespread on the Belize shelf but in the Pelican Cays it is known only from a small sand and rubble area along the northeast shore of Co-Cat Cay.

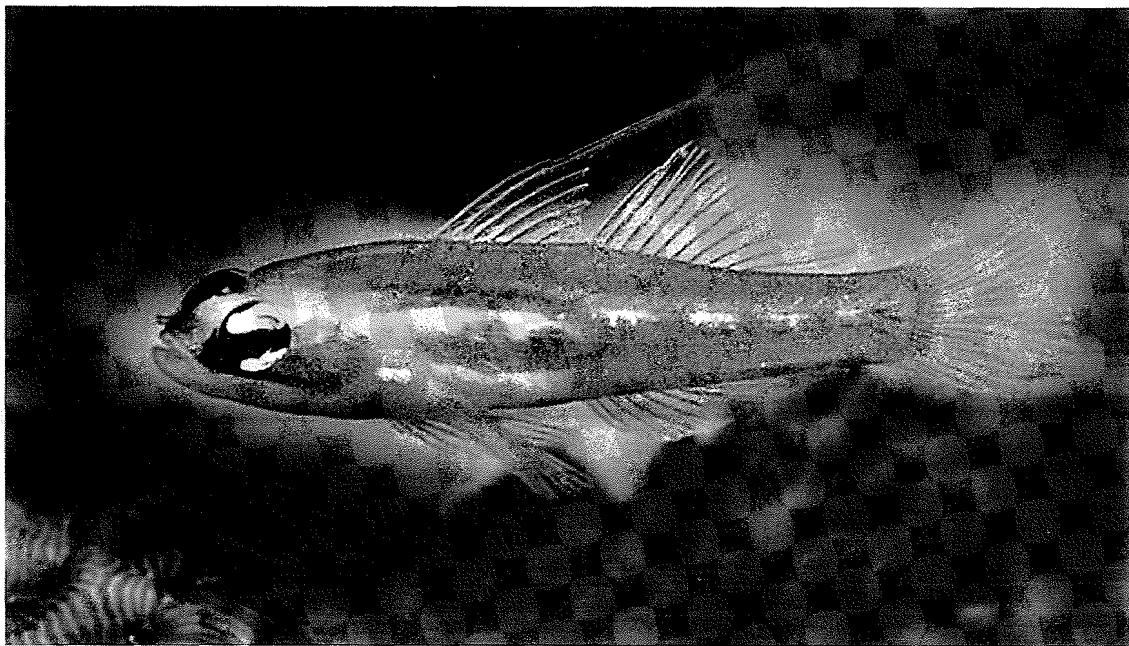


Figure 15. Masked goby (*Coryphopterus personatus*). This species can only be separated from the glass goby (*Coryphopterus hyalinus*) on the basis of minute features. We did not distinguish them in our visual surveys in the Pelican Cays.



Figure 16. Neon goby (*Elacatinus oceanops*). A common goby in the Pelican Cays that lives on the surface of living corals.

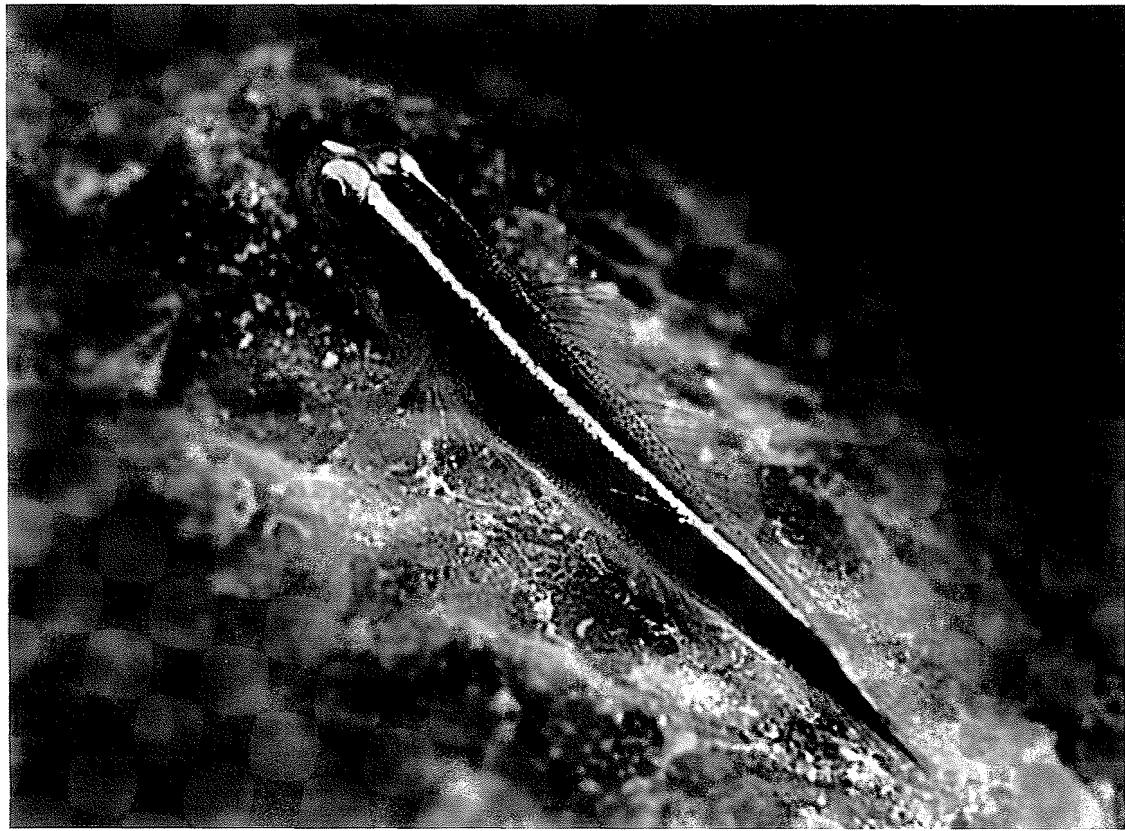


Figure 17. Yellowprow goby (*Elacatinus xanthiprora*). A common species of coral-dwelling goby in the Pelican Cays.