

Table S51. Average net primary production values reported from mangrove forests of south Florida and eastern Mexico. The values were obtained by several different methods of measurement and reported in different units, but for the table all values have been standardized as discussed in the text. (South Florida data from Odum, McIvor, and Smith 1982. Mexican data from Barriero-Gilemes and Balderas-Cortes 1991; Rico-Gray and Lot-Helgueras 1983.)

Forest type	g C/m ² /yr	g dry wt/m ² /yr	lb/A/yr
South Florida			
Red mangroves	1,934.5	6,248	55,732
Black mangroves	1,533.0	4,952	45,172
Mixed forests	3,029.5	9,785	87,282
Eastern Mexico			
Red mangroves	153.6	496	4,424
Black mangroves	257.6	832	7,421

Table S52. Estimates of litter fall (as dry organic matter) in several types of mangrove forests of south Florida. Values given for red and black mangrove under “variety of types” include those for riverine, overwash, fringe, and “mature” forests. (Recalculated from data in Odum, McIvor, and Smith 1982.)

Forest type	Daily litter fall (g/m ² /day)	Annual litter fall	
		g/m ² /yr	lb/A/yr
Red mangrove			
-variety of types	2.8	1,022	9,116
-scrub forest	0.4	146	1,302
Black mangrove			
-variety of types	1.3	475	4,237
Mixed forests	2.3	840	7,493

Table S53. Brief sketches of important families of perciform fishes found in neritic or epipelagic waters of the Gulf of Mexico, giving information on recognition characters, habitats, and habits and listing important genera.

Centropomidae – snooks. The snooks have elongate bodies with two well-separated dorsal fins and a pointed snout. The lower jaw projects well beyond the upper jaw. These fishes are most common off south Florida, where they frequent grass flats and often enter brackish water and freshwater. They are prized game fishes. *Centropomus*.

Serranidae – sea basses. The sea basses have a single slightly notched dorsal fin and large mouth. The opercle (gill cover) has three flat spines, and the upper edge of the opercle is free from the body. Most species live around rocks and reefs, but several occur on muddy or sandy bottoms of the open shelf. All are carnivorous, and some are important food or game fishes. *Centropristes*, *Diplectrum*, *Epinephelus*, *Mycteroperca*, *Serranus*.

Priacanthidae – bigeyes. These fishes are recognized by their deep bodies, single dorsal fins, and very large eyes. The mouth is large, oblique, and protractile (i.e., it can be extended forward beyond the head). Bigeyes are found around reefs and other structures of the middle and outer shelf. *Priacanthus*, *Pseudopriacanthus*.

Apogonidae – cardinalfishes. These small-bodied fishes have two dorsal fins, large eyes, and large oblique mouths. Many are red with black bars or spots on the sides, but some are silvery or of dark coloration. They inhabit reefs of the middle and outer shelf and are active at night. *Apogon*, *Phaeoptyx*, *Synagrops*.

Echeneidae – remoras. The remoras have slender bodies, flattened heads, and protruding lower jaws. On top of the head there is a laminated adhesive sucking disk. By means of the disk they attach themselves to sharks, large rays, sea turtles, marine mammals, and even the hulls of ships. They consume scraps of food left by the feeding of their hosts. *Echeneis*, *Remora*.

Carangidae – jacks. Within this large and diverse group of fishes body forms vary greatly from long and streamlined to short and compressed (flattened from side to side). All have large forked caudal fins, and in the fast-swimming pelagic species hard scutes (modified scales) line the caudal peduncle. All are predatory on squids, fishes, and other marine animals. Many of the jacks and pompanos are considered game species, and some, such as the pompanos, are of commercial importance. *Caranx*, *Hemicaranx*, *Selene*, *Seriola*, *Trachinotus*.

Coryphaenidae – dolphinfishes. These elongate fishes have very long dorsal fins, originating over the head and extending the length of the body, and long forked caudal fins. The snout is blunt, and a bony crest is present on the forehead of the male. Dolphins are fast-swimming epipelagic predators prized as game and food fishes. *Coryphaena*.

Lutjanidae – snappers. Snappers possess bass-like bodies with a large head and a large terminal mouth. The long continuous dorsal fin has both spines and soft rays. These fishes are most common around offshore reefs and other structures, but some, particularly the young, occur on open soft bottoms. All are carnivorous. Several are considered sport fishes, and the red snapper is an important commercial and food species. *Lutjanus*, *Ocyurus*, *Pristipomoides*, *Rhomboplites*.

Gerreidae – mojarras. These small silvery fishes are completely covered with scales. The mouth comes to a point at the front of the head, and the jaws are protractile. The dorsal fin is notched, and the caudal fin is deeply forked. Mojarras are common in estuaries and on nearshore muddy and sandy bottoms. They feed on crustaceans and other small invertebrates. *Diapterus*, *Eucinostomus*, *Gerres*.

Haemulidae – grunts. The grunts have large heads and continuous dorsal fins. They are related to the snappers but have canine teeth or teeth on the roof of the mouth. They inhabit offshore reefs as well as inshore seagrass beds and sandy or muddy bottoms. They make a grunting noise by rubbing their pharyngeal teeth together. All are carnivorous. *Anisotremus*, *Haemulon*, *Orthopristis*.

Sparidae – porgies. These fishes possess large heads with steep frontal profiles. The small mouth is situated at the front of the body. The well-developed teeth include incisors and canines in the front of the jaw and molars on the sides. A single dorsal and long pectoral fins are present. Porgies occur on a variety of substrate types in estuaries and shelf water, and they are particularly common around seagrass beds. Some species consume algae and other vegetation, and some take barnacles and other encrusting animals, but most consume a variety of small invertebrates. *Archosargus*, *Calamus*, *Diplodus*, *Lagodon*, *Stenotomus*.

Sciaenidae – drums. These often elongate fishes have two dorsal fins separated by a distinct notch, and the lateral line extends to the posterior edge of the caudal fin. Teeth are present in the jaws but absent from the roof of the mouth, and short barbels may be present on the chin. A booming or grinding sound is produced by vibrating the swim bladder. Some drums are bottom feeders, but others prey on shrimps, crabs, and fishes in the water column. Among the sciaenids are such forms as croakers, seatrouts, and red drums (red fishes). Some are important sport and commercial species. They are found in estuaries and in most habitats of the continental shelf. *Cynoscion*, *Menticirrhus*, *Micropogonias*, *Pogonias*, *Sciaenops*.

Mullidae – goatfishes. The goatfishes have two widely spaced dorsal fins and two long fleshy barbels trailing from the lower jaw. They are often bright red or yellow and may occur around rocks and reefs or on the open continental shelf. They consume bottom invertebrates. *Mulloidichthys*, *Mullus*, *Upeneus*.

Chaetodontidae – butterflyfishes. These small fishes have thin disk-shaped bodies, pointed snouts, and small mouths with protractile jaws. The dorsal fin is long and continuous. Most species are yellow. Many have a black vertical stripe running through the eye, and there may be one or more large black spots on the body or dorsal fin. Butterflyfishes are common around shallow-water coral reefs, where they feed on small invertebrates. *Chaetodon*.

Pomacanthidae – angelfishes. These are similar in shape to the butterflyfishes, but they have a blunt snout and a spine at the angle of the opercle. Posterior rays of the dorsal and anal fins are long and filamentous. These highly colored fishes are active during the daytime. They are prominent around shallow-water coral reefs, where they feed on small invertebrates including ectoparasites of other fishes. *Holacanthus*, *Pomacanthus*.

Pomacentridae – damselfishes. These small round-bodied fishes, flattened from side to side, have protractile jaws and only a single nostril on each side (rather than two, as in most other fishes). Many are very colorful, and they are found around shallow-water reefs, where they consume algae and small invertebrates. *Abudefduf*, *Chromis*, *Pomacentrus*.

Mugilidae – mullets. In this group of elongate fishes the anterior part of the body is nearly cylindrical, the snout is blunt, and the mouth is small and wide. A fatty (adipose) eyelid is well developed. The two dorsal fins are well separated, and there is no lateral line. Mullets are common coastal fishes, present in estuaries and on the nearshore shelf, where they feed on algae and sediments. Some species spend a portion of their lives in freshwater. *Mugil*.

Sphyraenidae – barracudas. Barracudas are elongate fishes with long jaws full of sharp teeth. The two dorsal fins are well separated, and the anal fin is a mirror image of the second dorsal. Pelvic fins are inserted in front of the small pectoral fins. Some of the larger barracudas are pelagic in the open ocean, while others inhabit vegetation beds near shore. All are voracious predators that feed primarily on other fishes. Although the flesh is good to eat, it may carry ciguatera toxin (derived up the food chain, ultimately from toxic dinoflagellates). *Sphyraena*.

Labridae – wrasses. The body of the wrasse may be deep and compressed or long and thin. The mouth is terminal, the jaws are protractile, and the lips are conspicuously thick. There is a long continuous dorsal fin. Most species are highly colored, and the sexes may be shaded differently. They are found around shallow and deeper water reefs. *Bodianus*, *Decodon*, *Halichoeres*, *Thalassoma*.

Scaridae – parrotfishes. The parrotfishes are heavy-bodied fishes with a single long dorsal fin. The mouth is terminal, and the front teeth of both jaws are fused to form beak-like plates. Many are quite colorful. All feed on vegetation and/or small invertebrates in shallow seagrass meadows or around shallow-water reefs. They are noted for chewing off stony coral, swallowing the polyps and algae, and expelling the remaining sand and gravel-sized fragments of calcium carbonate. As a result of this habit, on reefs they are major agents in the accumulation of carbonate sand and pavement between coral heads. *Scarus*, *Sparisoma*.

Clinidae – blennies. These are small elongate fishes with long dorsal and anal fins. Fleshy hairlike protuberances (cirri) are present at several locations around the head (on the nostrils, above the eyes, and on the rear of the head). Pelvic fins are inserted forward of the pectoral fins. These small colorful fishes live in cracks and crevices of nearshore reefs, where they feed on tiny invertebrates. *Emblemaria*, *Starksia*.

Blenniidae – combtooth blennies. These small fishes are similar to the true blennies (above), but their long dorsal fins are notched, and they have long anal fins. Featherlike cirri may be present

above the eyes and elsewhere on the head. The snout is somewhat blunt, and the jaws contain a single row of incisor-like teeth. These generally drab-colored fishes live on the bottom, especially in seagrass beds and around rocky areas. *Blennius*, *Hypseurochilus*, *Hypsoblennius*.

Gobiidae – gobies. The gobies are small elongate fishes in which the dorsal fin is either notched or divided into two separate fins. The pelvic fins are located side by side on the bottom of the body and are sometimes fused to form a suction disk. They live in a variety of estuarine and marine habitats and are often common around coral reefs. Some species bear camouflage markings, but others are highly colored and conspicuous. They feed on small invertebrates. *Bollmannia*, *Gobiodes*, *Gobionellus*, *Gobiosoma*.

Scombridae – mackerels, tunas, and their relatives. The mackerels, tunas, and their relatives are all streamlined, fast-swimming fishes with two dorsal fins and a series of small finlets above and below the caudal peduncle in front of the sickle-shaped caudal fin. Three pairs of keels are present on the sides of the caudal peduncle, and the pectoral fins are inserted high on the sides of the body. These are important commercial and game fishes and are prized for their food qualities. All are pelagic open-ocean species, but several, including the mackerels and bonitos, are common over the continental shelf, especially during the warmer months. They feed primarily on squids and other fishes. *Euthynnus*, *Scomber*, *Scomberomorus*, *Thunnus*.

Xiphiidae – swordfish. The swordfish has a tuna-like body with a long, flattened, swordlike snout. There are two dorsal fins, the first much larger than the second. Adults lack scales and pelvic fins. The one species occurs worldwide from tropical to cold-temperate waters. It may reach a weight of over half a ton. This pelagic oceanic fish is often found over the outer shelf or continental slope, and in the Gulf it is most common around the Mississippi River Delta. *Xiphias*.

Istiophoridae – billfishes. The marlins and sailfishes have elongate, streamlined bodies with a long pointed bill in front. Unlike the swordfishes, which are toothless, the billfishes have teeth, body scales, and pelvic fins. These are fast-swimming oceanic fishes, particularly common over the outer shelf and upper slope, but some such as the sailfish are found across the shelf. These are large fishes, and weights of over a ton have been recorded for some marlins, but most are only half that weight or less. These fishes are top predatory species that consume other fishes, and all are prized game species. *Istiophorus*, *Makaira*, *Tetrapturus*.

Table S54. Comparison of the fish faunas of Galveston Bay, Texas (GB), Tampa Bay, Florida (TB), and Laguna de Términos, Mexico (TL). Only species recorded from within the bays or connecting passes are included, and all taxonomic names are updated. Fishes that are primarily freshwater species are marked with an asterisk. (Data from the following sources: Galveston Bay – J. Parker 1965; Tampa Bay – V. Springer 1961, and V. Springer and Woodburn 1960; Terminos Lagoon – Castro-Aguirre 1978, Toral-Almazán and Reséndez-Medina 1974, Yáñez-Arancibia, Linares, and Day 1980.)

Scientific and common names	Where collected		
	GB	TB	TL
Rhincodontidae – carpet sharks			
<i>Ginglymostoma cirratum</i> – nurse shark		X	
Odontaspidae – sand tigers			
<i>Odontaspis taurus</i> – sand tiger		X	
Carcharhinidae – requiem sharks			
<i>Carcharhinus falciformis</i> – silky shark		X	
<i>Carcharhinus leucas</i> – bull shark	X	X	X
<i>Carcharhinus limbatus</i> – blacktip shark	X	X	X
<i>Carcharhinus porosus</i> – smalltail shark			X
<i>Rhizoprionodon terraenovae</i> – Atlantic sharpnose shark	X		
Sphyrnidae – hammerhead sharks			
<i>Sphyrna lewini</i> – scalloped hammerhead	X		
<i>Sphyrna tiburo</i> – bonnethead	X	X	X
Pristidae – sawfishes			
<i>Pristis pectinata</i> – smalltooth sawfish	X	X	X
<i>Pristis pristis</i> – largetooth sawfish			X
Torpedinidae – electric rays			
<i>Narcine brasiliensis</i> – lesser electric ray			X
Rhinobatidae – guitarfishes			
			X

Rhinobatos lentiginosus – Atlantic guitarfish

Rajidae – skates

Raja texana – roundel skate X

Dasyatidae – stingrays

Dasyatis americana – southern stingray X X

Dasyatis sabina – Atlantic stingray X X X

Dasyatis say – bluntnose stingray X

Gymnura micrura – smooth butterfly ray X X

Himantura schmardae – round stingray X

Urolophidae – round stingrays

Urolophus jamaicensis – yellow stingray X

Myliobatidae – eagle rays

Aetobatus narinari – spotted eagle ray X

Rhinoptera bonasus – cownose ray X X

Mobulidae – mantas

Manta birostris – manta X

Polyodontidae – paddlefishes

Polyodon spathula – paddlefish* X

Lepisosteidae – gars

Lepisosteus oculatus – spotted gar* X

Lepisosteus osseus – longnose gar* X X

Lepisosteus platostomus – shortnose gar* X

Lepisosteus spatula – alligator gar* X

Elopidae – tarpons

Elops saurus – ladyfish X X X

Megalops atlanticus – tarpon X X X

Albulidae – bonefishes

Albula vulpes – bonefish X X

Anguillidae – freshwater eels

Anguilla rostrata – American eel X X

Muraenidae – morays		X
<i>Gymnothorax moringa</i> – spotted moray		X
Ophichthidae – snake eels		
<i>Bascanichthys bascanium</i> – sooty eel		X
<i>Echiophis intertinctus</i> – spotted spoon-nose eel		X
<i>Echiophis punctifer</i> – snapper eel	X	
<i>Myrophis punctatus</i> – speckled worm eel	X	X
<i>Ophichthus gomesi</i> – shrimp eel	X	
Clupeidae – herrings		
<i>Alosa chrysochloris</i> – skipjack herring*	X	
<i>Brevoortia gunteri</i> – finescale menhaden	X	X
<i>Brevoortia patronus</i> – gulf menhaden	X	X
<i>Brevoortia smithi</i> – yellowfin menhaden		X
<i>Dorosoma cepedianum</i> – gizzard shad*	X	X
<i>Dorosoma petenense</i> – threadfin shad*	X	
<i>Harengula clupeola</i> – false pilchard		X
<i>Harengula humeralis</i> – redear sardine		X
<i>Harengula jaguana</i> – scaled sardine	X	X
<i>Opisthonema oglinum</i> – Atlantic thread herring	X	X
<i>Sardinella aurita</i> – Spanish sardine	X	X
Engraulidae – anchovies		
<i>Anchoa cubana</i> – Cuban anchovy		X
<i>Anchoa hepsetus</i> – striped anchovy	X	X
<i>Anchoa lamprotaenia</i> – bigeye anchovy		X
<i>Anchoa mitchilli</i> – bay anchovy	X	X
<i>Cetengraulis edentulus</i> – Atlantic anchoveta		X
Cyprinidae – carps and minnows		
<i>Campostoma anomalum</i> – central stoneroller*	X	
<i>Cyprinus carpio</i> – common carp*	X	
Catostomidae – suckers		

<i>Carpoides carpio</i> – river carpsucker*	X
<i>Ictiobus bubalus</i> – smallmouth buffalo*	X
Ictaluridae – bullhead catfishes	
<i>Ameiurus melas</i> – black bullhead*	X
<i>Ameiurus natalis</i> – yellow bullhead*	X
<i>Ameiurus nebulosus</i> – brown bullhead*	X
<i>Ictalurus furcatus</i> – blue catfish*	X
<i>Ictalurus meridionalis</i> – *	X
<i>Ictalurus punctatus</i> – channel catfish*	X
Ariidae – sea catfishes	
<i>Arius felis</i> – hardhead catfish	X X X
<i>Bagre marinus</i> – gafftopsail catfish	X X X
<i>Cathorops melanopus</i> – madamango sea catfish	X
Synodontidae – lizardfishes	
<i>Synodus foetens</i> – inshore lizardfish	X X X
Aphredoderidae – pirate perches	
<i>Aphredoderus sayanus</i> – pirate perch*	X
Gadidae – cods	
<i>Urophycis floridana</i> – southern hake	X X
Ophidiidae – cusk-eels	
<i>Ophidion holbrookii</i> – bank cusk-eel	X
<i>Ophidion marginatum</i> – striped cusk-eel	X
<i>Ophidion welshi</i> – crested cusk-eel	X
Batrachoididae – toadfishes	
<i>Batrachoides surinamensis</i> – pacuma toadfish	X
<i>Opsanus beta</i> – gulf toadfish	X X X
<i>Porichthys plectrodon</i> – Atlantic midshipman	X X
Antennariidae – frogfishes	
<i>Histrio histrio</i> – sargassumfish	X
Gobiesocidae – clingfishes	

<i>Gobiesox strumosus</i> – skilletfish	X	X	X
Exocoetidae – flying fishes			
<i>Cheilopogon melanurus</i> – Atlantic flying fish		X	
<i>Chriodorus atherinoides</i> – hardhead halfbeak			X
<i>Hemiramphus brasiliensis</i> – ballyhoo			X
<i>Hirundichthys rondeleti</i> – blackwing flying fish	X		
<i>Hyporhamphus unifasciatus</i> – silverstripe halfbeak	X	X	X
Belonidae – needlefishes			
<i>Strongylura marina</i> – Atlantic needlefish	X		X
<i>Strongylura notata</i> – redfin needlefish		X	
<i>Strongylura timucu</i> – timucu	X		X
<i>Tylosurus acus</i> – agujon			X
<i>Tylosurus crocodilus</i> – houndfish	X		X
Cyprinodontidae – killifishes			
<i>Adinia xenica</i> – diamond killifish	X	X	
<i>Cyprinodon variegatus</i> – sheepshead minnow	X	X	X
<i>Floridichthys carpio</i> – goldspotted killifish		X	
<i>Fundulus chrysotus</i> – golden topminnow*	X		
<i>Fundulus confluentus</i> – marsh killifish		X	
<i>Fundulus grandis</i> – gulf killifish*	X	X	
<i>Fundulus jenkinsi</i> – saltmarsh topminnow	X		
<i>Fundulus pulvereus</i> – bayou killifish	X		
<i>Fundulus similis</i> – longnose killifish	X	X	
<i>Lucania parva</i> – rainwater killifish	X	X	
Poeciliidae – live-bearers			
<i>Gambusia affinis</i> – western mosquitofish*	X	X	
<i>Poecilia latipinna</i> – sailfin molly*	X	X	
Atherinidae – silversides			
<i>Atherinomorus stipes</i> – hardhead silverside			X
<i>Membras martinica</i> – rough silverside	X		

<i>Menidia beryllina</i> – inland silverside*	X	X	X
Syngnathidae – pipefishes			
<i>Anarchopterurus criniger</i> – fringed pipefish		X	
<i>Hippocampus erectus</i> – lined seahorse	X	X	X
<i>Hippocampus zosterae</i> – dwarf seahorse	X	X	
<i>Microphis brachyurus</i> – opossum pipefish			X
<i>Syngnathus floridae</i> – dusky pipefish	X	X	X
<i>Syngnathus louisianae</i> – chain pipefish	X	X	X
<i>Syngnathus pelagicus</i> – sargassum pipefish			X
<i>Syngnathus scovelli</i> – gulf pipefish	X	X	X
Dactylopteridae – flying gurnards			
<i>Dactylopterus volitans</i> – flying gurnard			X
Scorpaenidae – scorpionfishes			
<i>Scorpaena brasiliensis</i> – barbfish		X	
<i>Scorpaena calcarata</i> – smoothhead scorpionfish	X		
<i>Scorpaena grandicornis</i> – plumed scorpionfish			X
<i>Scorpaena plumieri</i> – spotted scorpionfish			X
Triglidae – sea robins			
<i>Prionotus carolinus</i> – northern sea robin			X
<i>Prionotus scitulus</i> – leopard sea robin	X	X	
<i>Prionotus tribulus</i> – bighead sea robin	X	X	
Centropomidae – snooks			
<i>Centropomus parallelus</i> – fat snook			X
<i>Centropomus undecimalis</i> – common snook	X	X	
Percichthyidae – temperate basses			
<i>Morone chrysops</i> – white bass*	X		
<i>Morone mississippiensis</i> – yellow bass*	X		
Serranidae – sea basses			
<i>Centropristes philadelphica</i> – rock sea bass	X		
<i>Centropristes striata</i> – black sea bass		X	

<i>Diplectrum formosum</i> – sand perch		X	
<i>Diplectrum radiale</i> – aquavina			X
<i>Epinephelus guttatus</i> – red hind			X
<i>Epinephelus itajara</i> – jewfish	X	X	X
<i>Epinephelus morio</i> – red grouper			X
<i>Epinephelus nigritus</i> – Warsaw grouper	X		
<i>Rypticus saponaceus</i> – greater soapfish			X
<i>Serranus subligarius</i> – belted sandfish		X	
Centrarchidae – sunfishes			
<i>Lepomis gulosus</i> – warmouth*	X		
<i>Lepomis macrochirus</i> – bluegill*	X	X	
<i>Lepomis microlophus</i> – redear sunfish*	X		
<i>Micropterus salmoides</i> – largemouth bass*			X
<i>Pomoxis annularis</i> – white crappie*	X		
<i>Pomoxis nigromaculatus</i> – black crappie*	X		
Percidae – perches			
<i>Etheostoma lepidum</i> – greenthroat darter*		X	
Apogonidae – cardinalfishes			
<i>Astrapogon alutus</i> – bronze cardinalfish			X
Pomatomidae – bluefishes			
<i>Pomatomus saltatrix</i> – bluefish	X	X	
Rachycentridae – cobias			
<i>Rachycentron canadum</i> – cobia		X	
Echeneidae – remoras			
<i>Echeneis naucrates</i> – sharksucker	X	X	X
<i>Remora remora</i> – remora		X	
Carangidae – jacks			
<i>Caranx cryos</i> – blue runner	X	X	
<i>Caranx hippos</i> – crevalle jack	X	X	X
<i>Caranx latus</i> – horse-eye jack	X	X	X

<i>Caranx ruber</i> – bar jack			X
<i>Chloroscombrus chrysurus</i> – Atlantic bumper	X	X	X
<i>Hemicaranx amblyrhynchus</i> – bluntnose jack	X		
<i>Oligoplites saurus</i> – leatherjack	X	X	X
<i>Selene setapinnis</i> – Atlantic moonfish	X	X	
<i>Selene vomer</i> – lookdown	X	X	X
<i>Seriola rivoliana</i> – almaco jack	X		
<i>Seriola zonata</i> – banded rudderfish			X
<i>Trachinotus carolinus</i> – Florida pompano	X		
<i>Trachinotus falcatus</i> – permit			X
Coryphaenidae – dolphinfishes			
<i>Coryphaena hippurus</i> – dolphinfish		X	
Lutjanidae – snappers			
<i>Lutjanus analis</i> – mutton snapper			X
<i>Lutjanus apodus</i> – schoolmaster	X		X
<i>Lutjanus cyanopterus</i> – cubera snapper			X
<i>Lutjanus griseus</i> – gray snapper	X	X	X
<i>Lutjanus synagris</i> – lane snapper	X	X	X
Lobotidae – tripletails			
<i>Lobotes surinamensis</i> – tripletail	X	X	X
Gerreidae – mojarras			
<i>Diapterus plumieri</i> – striped mojarra	X		X
<i>Diapterus rhombeus</i> – catipa mojarra			X
<i>Eucinostomus argenteus</i> – spotfin mojarra	X		X
<i>Eucinostomus gula</i> – silver jenny	X	X	X
<i>Eucinostomus havana</i> – bigeye mojarra			X
<i>Eucinostomus lefroyi</i> – mottled mojarra			X
<i>Eucinostomus melanopterus</i> – flagfin mojarra			X
<i>Gerres cinereus</i> – yellowfin mojarra			X
Haemulidae – grunts			

<i>Anisotremus splenatus</i>		X
<i>Anisotremus virginicus</i> – porkfish		X
<i>Haemulon aurolineatum</i> – tomate	X	X
<i>Haemulon bonariense</i> – black grunt		X
<i>Haemulon flavolineatum</i> – French grunt	X	
<i>Haemulon plumieri</i> – white grunt	X	X
<i>Orthopristis chrysoptera</i> – pigfish	X	X
<i>Orthopristis poeyi</i> – Cuban grunt		X
Sparidae – porgies		
<i>Archosargus probatocephalus</i> – sheepshead	X	X
<i>Archosargus rhomboidalis</i> – sea bream		X
<i>Calamus arctifrons</i> – grass porgy		X
<i>Calamus calamus</i> – saucereye porgy		X
<i>Calamus penna</i> – sheepshead porgy		X
<i>Diplodus argenteus</i> – silver porgy		X
<i>Diplodus holbrooki</i> – spotted pinfish		X
<i>Lagodon rhomboides</i> – pinfish	X	X
Sciaenidae – drums		
<i>Aplodinotus grunniens</i> – freshwater drum*	X	
<i>Bairdiella chrysoura</i> – silver perch	X	X
<i>Bairdiella ronchus</i> – ground croaker		X
<i>Bairdiella sanctaeluciae</i> – striped croaker		X
<i>Cynoscion arenarius</i> – sand seatrout	X	X
<i>Cynoscion jamaicensis</i> – Jamaican weakfish		X
<i>Cynoscion nebulosus</i> – spotted seatrout	X	X
<i>Cynoscion nothus</i> – silver seatrout	X	X
<i>Equetus acuminatus</i> – high-hat		X
<i>Larimus fasciatus</i> – banded drum	X	
<i>Leiostomus xanthurus</i> – spot	X	X
<i>Menticirrhus americanus</i> – southern kingfish	X	X

<i>Menticirrhus littoralis</i> – gulf kingfish	X		
<i>Menticirrhus saxatilis</i> – northern kingfish		X	X
<i>Micropogonias furnieri</i> – whitemouth croaker			X
<i>Micropogonias undulatus</i> – Atlantic croaker	X	X	
<i>Odontoscion dentex</i> – reef croaker			X
<i>Pogonias cromis</i> – black drum	X	X	
<i>Sciaenops ocellatus</i> – red drum	X	X	
<i>Stellifer lanceolatus</i> – star drum	X		X
<i>Umbrina coroides</i> – sand drum			X
Kyphosidae – sea chubs			
<i>Kyphosus sectatrix</i> – Bermuda chub		X	
Ephippidae – spadefishes			
<i>Chaetodipterus faber</i> – Atlantic spadefish	X	X	X
Chaetodontidae – butterflyfishes			
<i>Chaetodon ocellatus</i> – spotted butterflyfish			X
Pomacanthidae – angelfishes			
<i>Pomacanthus arcuatus</i> – gray angelfish			X
Cichlidae – cichlids			
<i>Cichlasoma aureum</i> *			X
<i>Cichlasoma fenestratum</i> *			X
<i>Cichlasoma friedrichsthalii</i> *			X
<i>Cichlasoma guija</i> *			X
<i>Cichlasoma heterospilus</i> *			X
<i>Cichlasoma pearsei</i> *			X
<i>Cichlasoma sexfasciatum</i> *			X
<i>Cichlasoma urophthalmum</i> *			X
<i>Petenia splendida</i> *			X
Mugilidae – mullets			
<i>Mugil cephalus</i> – striped mullet	X	X	X
<i>Mugil curema</i> – white mullet	X	X	X

<i>Mugil gyrans</i> – fantail mullet	X	X
Sphyraenidae – barracudas		
<i>Sphyraena barracuda</i> – great barracuda	X	X
Polynemidae – threadfins		
<i>Polydactylus octonemus</i> – Atlantic threadfin	X	X
Labridae – wrasses		
<i>Halichoeres bivittatus</i> – slippery dick	X	
<i>Novaculichthys martinicensis</i> – rosy razorfish		X
Scaridae – parrotfishes		
<i>Nicholsina usta</i> – emerald parrotfish	X	X
<i>Scarus</i> sp.		X
Uranoscopidae – stargazers		
<i>Astroscopus y-graecum</i> – southern stargazer	X	X
Clinidae – clinids		
<i>Labrisomus nuchipinnis</i> – hairy blenny	X	
Blenniidae – combtooth blennies		
<i>Chasmodes bosquianus</i> – striped blenny	X	
<i>Chasmodes saburrae</i> – Florida blenny		X
<i>Hypsoblennius hentz</i> – feather blenny	X	X
<i>Hypsoblennius ionthas</i> – freckled blenny	X	
<i>Parablennius marmoreus</i> – seaweed blenny		X
Eleotridae – sleepers		
<i>Dormitator maculatus</i> – fat sleeper*	X	X
<i>Gobiomorus dormitor</i> – bigmouth sleeper*		X
Gobiidae – gobies		
<i>Awaous tajasica</i> – river goby		X
<i>Bathygobius soporator</i> – frilled goby		X
<i>Evorthodus lyricus</i> – lyre goby	X	
<i>Gobiodoides broussoneti</i> – violet goby		X
<i>Gobionellus boleosoma</i> – darter goby		X

<i>Gobionellus oceanicus</i> – highfin goby	X	X	X
<i>Gobionellus shufeldti</i> – freshwater goby	X		
<i>Gobiosoma bosc</i> – naked goby	X	X	X
<i>Gobiosoma longipala</i> – twoscale goby		X	
<i>Gobiosoma robustum</i> – code goby	X	X	
<i>Microgobius gulosus</i> – clown goby	X	X	
<i>Microgobius thalassinus</i> – green goby	X	X	
Trichiuridae – snake mackerels			
<i>Trichiurus lepturus</i> – Atlantic cutlassfish	X	X	X
Scombridae – mackerels			
<i>Scomberomorus cavalla</i> – king mackerel		X	
<i>Scomberomorus maculatus</i> – Spanish mackerel	X	X	X
Stromateidae – butterfishes			
<i>Peprilus alepidotus</i> – harvestfish	X		
<i>Peprilus burti</i> – gulf butterfish		X	
Bothidae – lefteye flounders			
<i>Ancylopsetta quadrocellata</i> – ocellated flounder	X	X	X
<i>Citharichthys spilopterus</i> – bay whiff	X		X
<i>Etropus crossotus</i> – fringed flounder	X		X
<i>Paralichthys albigutta</i> – gulf flounder	X	X	
<i>Paralichthys lethostigma</i> – southern flounder	X		
<i>Paralichthys squamilentus</i> – broad flounder	X		
Soleidae – soles			
<i>Achirus lineatus</i> – lined sole	X	X	X
<i>Gymnachirus melas</i> – naked sole		X	X
<i>Sympodus plagiusa</i> – blackcheek tonguefish	X	X	X
<i>Trinectes maculatus</i> – hogchoker	X	X	X
Balistidae – leatherjackets			
<i>Aluterus schoepfii</i> – orange filefish	X	X	
<i>Balistes capriscus</i> – gray triggerfish			X

<i>Monacanthus ciliatus</i> – fringed filefish	X	X
<i>Monacanthus hispidus</i> – planehead filefish	X	X
Ostraciidae – boxfishes		
<i>Acanthostracion quadricornis</i> – scrawled cowfish	X	X
<i>Lactophrys bicaudalis</i> – spotted trunkfish		X
Tetraodontidae – puffers		
<i>Chilomycterus antennatus</i> – bridled burrfish		X
<i>Diodon hystrix</i> – porcupinefish	X	X
<i>Chilomycterus schoepfi</i> – striped burrfish	X	X
<i>Lagocephalus laevigatus</i> – smooth puffer	X	X
<i>Sphoeroides dorsalis</i> – marbled puffer		X
<i>Sphoeroides nephelus</i> – southern puffer	X	X
<i>Sphoeroides spengleri</i> – bandtail puffer		X
<i>Sphoeroides testudineus</i> – checkered puffer	X	X

Table S55. Comparison of continental shelf fish faunas of the northwestern (NW), northeastern (NE), eastern (E), and southwestern (SW) sectors of the Gulf of Mexico based on trawling results. (Data from the following sources: northwestern Gulf – Darnell, Defenbaugh, and Moore 1983; northeastern Gulf and eastern Gulf – Darnell and Kleypas 1987; southwestern Gulf – Yáñez-Arancibia and Sánchez-Gil 1986).

Scientific and common names	Where collected			
	NW	NE	E	SW
Carcharhinidae – requiem sharks				
<i>Carcharhinus acronotus</i> – blacknose shark		X	X	
<i>Carcharhinus limbatus</i> – blacktip shark		X	X	
<i>Carcharhinus remotus</i>				X
<i>Mustelus canis</i> – smooth dogfish	X	X	X	
<i>Rhizoprionodon terraenovae</i> – Atlantic sharpnose shark	X	X		
Sphyrnidae – hammerhead sharks				
<i>Sphyrna tiburo</i> – bonnethead	X	X	X	X
Squatinaidae – angel sharks				
<i>Squatina dumeril</i> – Atlantic angel shark	X		X	X
Torpedinidae – electric rays				
<i>Narcine brasiliensis</i> – lesser electric ray	X	X	X	X
Rhinobatidae – guitarfishes				
<i>Rhinobatos lentiginosus</i> – Atlantic guitarfish	X	X	X	X
Rajidae – skates				
<i>Raja eglanteria</i> – clearnose skate		X	X	X
<i>Raja garmani</i> – rosette skate				X
<i>Raja olseni</i> – spreadfin skate	X			X
<i>Raja teevani</i>				X
<i>Raja texana</i> – roundel skate	X	X	X	X
Dasyatidae – stingrays				
<i>Dasyatis americana</i> – southern stingray		X	X	X
<i>Dasyatis centroura</i> – roughtail stingray	X			
<i>Dasyatis sabina</i> – Atlantic stingray	X	X	X	X
<i>Dasyatis say</i> – bluntnose stingray	X	X	X	
<i>Gymnura micrura</i> – smooth butterfly ray	X		X	

Urolophidae – round stingrays						
<i>Urolophus jamaicensis</i> – yellow stingray						X
Myliobatidae – eagle rays						
<i>Aetobatus narinari</i> – spotted eagle ray					X	X
<i>Rhinoptera bonasus</i> – cownose ray		X	X	X	X	
Mobulidae – mantas						
<i>Manta birostris</i> – manta					X	
Anguillidae – freshwater eels						
<i>Anguilla rostrata</i> – American eel					X	
Moringuidae – spaghetti eels						
<i>Neoconger mucronatus</i> – ridged eel					X	
Muraenidae – morays						
<i>Gymnothorax moringa</i> – spotted moray						X
<i>Gymnothorax nigromarginatus</i> – black edge moray		X	X	X		
<i>Gymnothorax saxicola</i> – honeycomb moray					X	
Ophichthidae – snake eels						
<i>Bascanichthys scuticaris</i> – whip eel					X	
<i>Echiophis intortus</i> – spotted spoon-nose eel					X	
<i>Echiophis punctifer</i> – snapper eel	X					X
<i>Myrichthys ocellatus</i> – goldspotted eel		X	X			
<i>Myrophis punctatus</i> – speckled worm eel	X		X			
<i>Ophichthus gomesi</i> – shrimp eel		X	X	X		
<i>Ophichthus puncticeps</i> – palespotted eel					X	
Nettastomatidae – duckbill eels						
<i>Cynoponticus savanna</i> – sapphire eel						X
<i>Hoplunnis diomedianus</i> – blacktail pike-conger					X	X
<i>Hoplunnis macrurus</i> – freckled pike-conger	X	X	X			
<i>Hoplunnis tenuis</i> – spotted pike-conger	X	X	X			
<i>Xenomystax bidentatus</i>						X
Congridae – conger eels						
<i>Ariosoma balearicum</i> – bandtooth conger		X	X	X		
<i>Hildebrandia flava</i> – yellow conger		X	X	X		
<i>Paraconger caudilimbatus</i> – margintail conger		X	X			
<i>Uroconger syringinus</i> – threadtail conger				X		
Clupeidae – herrings						
<i>Alosa alabamae</i> – Alabama shad					X	

<i>Alosa chrysochloris</i> – skipjack herring	X			
<i>Brevoortia gunteri</i> – finescale menhaden	X			X
<i>Brevoortia patronus</i> – gulf menhaden	X	X	X	
<i>Etrumeus teres</i> – round herring	X	X	X	
<i>Harengula jaguana</i> – scaled sardine	X	X	X	X
<i>Jenkinsia lamprotaenia</i> – dwarf herring				X
<i>Opisthonema oglinum</i> – Atlantic thread herring	X	X	X	X
<i>Sardinella aurita</i> – Spanish sardine	X	X	X	
 Engraulidae – anchovies				
<i>Anchoa hepsetus</i> – striped anchovy	X	X	X	X
<i>Anchoa lamprotaenia</i> – bigeye anchovy	X			X
<i>Anchoa lyolepis</i> – dusky anchovy				X
<i>Anchoa mitchilli</i> – bay anchovy	X	X	X	
<i>Cetengraulis edentulus</i> – Atlantic anchoveta				X
 Ariidae – sea catfishes				
<i>Arius felis</i> – hardhead catfish	X	X	X	X
<i>Bagre marinus</i> – gafftopsail catfish	X	X	X	X
 Argentinidae – argentines				
<i>Argentina striata</i> – striated argentine				X
<i>Glossanodon pygmaeus</i> – pygmy argentine				X
 Synodontidae – lizardfishes				
<i>Saurida brasiliensis</i> – largescale lizardfish	X	X	X	X
<i>Saurida normani</i> – shortjaw lizardfish		X	X	
<i>Synodus foetens</i> – inshore lizardfish	X	X	X	X
<i>Synodus intermedius</i> – sand diver	X	X	X	X
<i>Synodus poeyi</i> – offshore lizardfish	X	X	X	X
<i>Synodus synodus</i> – red lizardfish		X	X	
<i>Trachinocephalus myops</i> – snakefish	X	X	X	X
 Myctophidae – lanternfishes				
<i>Diaphus dumerilii</i>				X
 Bregmacerotidae – codlets				
<i>Bregmaceros atlanticus</i> – antenna codlet		X	X	X
 Gadidae – cods				
<i>Physiculus fulvus</i> – metallic codling		X	X	
<i>Physiculus kaupi</i> – morid cod				X
<i>Steindachneria argentea</i> – luminous hake	X	X		X
<i>Urophycis cirrata</i> – gulf hake	X	X	X	X
<i>Urophycis earlli</i> – Carolina hake				X
<i>Urophycis floridana</i> – southern hake	X	X	X	

<i>Urophycis regia</i> – spotted hake	X	X	X
Macrouridae – grenadiers			
<i>Nezumia bairdi</i> – marlin spike		X	
Ophidiidae – cusk-eels			
<i>Brotula barbata</i> – bearded brotula	X	X	X
<i>Lepophidium brevibarbe</i> – blackedge cusk-eel	X	X	X
<i>Lepophidium jeannae</i> – mottled cusk-eel		X	X
<i>Lepophidium marmoratum</i>			X
<i>Lepophidium profundorum</i> – fawn cusk-eel		X	X
<i>Neobythites gilli</i> – twospot brotula		X	X
<i>Ophidion beani</i> – longnose cusk-eel			X
<i>Ophidion grayi</i> – blotched cusk-eel		X	X
<i>Ophidion holbrooki</i> – bank cusk-eel	X	X	X
<i>Ophidion marginatum</i> – striped cusk-eel			X
<i>Ophidion welshi</i> – crested cusk-eel	X	X	X
<i>Otopholidium dormitator</i> – sleeper cusk-eel			X
<i>Otopholidium omostignum</i> – polka-dot cusk-eel		X	X
Aphyonidae – aphyonids			
<i>Aphyonus gelatinosus</i>			X
Carapidae – pearlfishes			
<i>Carapus bermudensis</i> – pearlfish			X
Bythitidae – viviparous brotulas			
<i>Ogilbia cayorum</i> – key brotula			X
Batrachoididae – toadfishes			
<i>Opsanus beta</i> – gulf toadfish			X
<i>Opsanus pardus</i> – leopard toadfish			X
<i>Opsanus tau</i> – oyster toadfish			X
<i>Porichthys plectrodon</i> – Atlantic midshipman	X	X	X
Lophiidae – goosefishes			
<i>Lophius americanus</i> – goosefish		X	X
Antennariidae – frogfishes			
<i>Antennarius ocellatus</i> – ocellated frogfish			X
<i>Antennarius radiosus</i> – singlespot frogfish	X	X	X
<i>Antennarius striatus</i> – striated frogfish			X
<i>Histrio histrio</i> – sargassumfish	X		
Ogcocephalidae – batfishes			
<i>Dibranchus atlanticus</i> – Atlantic batfish		X	

<i>Halieutichthys aculeatus</i> – pancake batfish	X	X	X	X
<i>Ogcocephalus corniger</i> – longnose batfish			X	
<i>Ogcocephalus nasutus</i> – shortnose batfish			X	
<i>Ogcocephalus radiatus</i> – polka-dot batfish			X	
<i>Zalieutes mcgintyi</i> – tricorn batfish		X	X	
 Gobiesocidae – clingfishes				
<i>Gobiesox strumosus</i> – skilletfish			X	
 Exocoetidae – flying fishes				
<i>Euleptorhamphus velox</i> – flying halfbeak			X	
<i>Hemiramphus brasiliensis</i> – ballyhoo		X		
 Belonidae – needlefishes				
<i>Tylosurus acus</i> – agujon				X
 Atherinidae – silversides				
<i>Hypoatherina harringtonensis</i> – reef silverside			X	
<i>Membras martinica</i> – rough silverside			X	
 Trachichthyidae – roughies				
<i>Gephyroberyx darwini</i> – big roughy				X
 Holocentridae – squirrelfishes				
<i>Holocentrus adscensionis</i> – squirrelfish				X
<i>Holocentrus bullisi</i> – deepwater squirrelfish		X		
<i>Holocentrus coruscus</i> – reef squirrelfish			X	
<i>Holocentrus marianus</i> – longjaw squirrelfish			X	
<i>Ostichthys trachypoma</i> – bigeye squirrelfish		X		
 Polymixiidae – beardedfishes				
<i>Polymixia lowei</i> – beardedfish				X
 Caproidae – boarfishes				
<i>Antigonia capros</i> – deepbody boarfish		X		X
 Fistulariidae – cornetfishes				
<i>Fistularia petimba</i> – red cornetfish				X
 Centriscidae – snipefishes				
<i>Macroramphosus scolopax</i> – longspine snipefish				X
 Syngnathidae – pipefishes				
<i>Anarchopteruss criniger</i> – fringed pipefish			X	
<i>Cosmocampus albirostris</i> – whitenoose pipefish			X	
<i>Cosmocampus elucens</i> – shortfin pipefish			X	

<i>Hippocampus erectus</i> – lined seahorse	X	X	X
<i>Hippocampus reidi</i> – longsnout seahorse		X	
<i>Hippocampus zosterae</i> – dwarf seahorse	X	X	
<i>Syngnathus floridae</i> – dusky pipefish		X	
<i>Syngnathus louisianae</i> – chain pipefish		X	
<i>Syngnathus scovelli</i> – gulf pipefish		X	
<i>Syngnathus springeri</i> – bull pipefish		X	

Dactylopteridae – flying gurnards

<i>Dactylopterus volitans</i> – flying gurnard	X
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Scorpaenidae – scorpionfishes

<i>Neomerinthe hemingwayi</i> – spinycheek scorpionfish	X	X	X
<i>Pontinus castor</i> – longsnout scorpionfish		X	
<i>Pontinus longispinis</i> – longspine scorpionfish	X	X	X
<i>Pontinus rathbuni</i> – highfin scorpionfish		X	
<i>Scorpaena agassizi</i> – longfin scorpionfish		X	X
<i>Scorpaena brasiliensis</i> – barbfish	X	X	X
<i>Scorpaena calcarata</i> – smoothhead scorpionfish	X	X	X
<i>Scorpaena dispar</i> – hunchback scorpionfish		X	X
<i>Scorpaena inermis</i> – mushroom scorpionfish		X	
<i>Scorpaena plumieri</i> – spotted scorpionfish			X

Triglidae – sea robins

<i>Bellator brachycheir</i> – shortfin sea robin		X	
<i>Bellator egretta</i> – streamer sea robin		X	X
<i>Bellator militaris</i> – horned sea robin	X	X	X
<i>Peristedion gracile</i> – slender sea robin		X	X
<i>Peristedion miniatum</i> – armored sea robin	X		
<i>Prionotus alatus</i> – spiny sea robin	X	X	X
<i>Prionotus carolinus</i> – northern sea robin			X
<i>Prionotus evolans</i> – striped sea robin			X
<i>Prionotus griescens</i>			X
<i>Prionotus longispinosus</i> – bigeye sea robin	X	X	X
<i>Prionotus martis</i> – barred sea robin	X	X	X
<i>Prionotus ophryas</i> – bandtail sea robin	X	X	X
<i>Prionotus paralatus</i> – Mexican sea robin	X	X	X
<i>Prionotus punctatus</i> – bluewing sea robin			X
<i>Prionotus roseus</i> – bluespotted sea robin	X	X	X
<i>Prionotus rubio</i> – blackwing sea robin	X	X	X
<i>Prionotus scitulus</i> – leopard sea robin	X	X	X
<i>Prionotus stearnsi</i> – shortwing sea robin	X	X	X
<i>Prionotus tribulus</i> – bighead sea robin	X	X	X

Centropomidae – snooks

<i>Centropomus undecimalis</i> – common snook	X
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Percichthyidae – temperate basses				
<i>Synagrops bellus</i> – blackmouth bass			X	X
<i>Synagrops spinosus</i> – keelcheek bass		X		X
 Serranidae – sea basses				
<i>Bathyanthias mexicanus</i> – yellowtail bass	X		X	
<i>Centropristes ocyurus</i> – bank sea bass	X	X	X	X
<i>Centropristes philadelphica</i> – rock sea bass	X	X	X	
<i>Centropristes striata</i> – black sea bass	X		X	
<i>Diplectrum bivittatum</i> – dwarf sand perch	X	X	X	
<i>Diplectrum formosum</i> – sand perch	X	X	X	X
<i>Diplectrum radiale</i> – pond perch				X
<i>Epinephelus flavolimbatus</i> – yellowedge grouper	X	X	X	
<i>Epinephelus guttatus</i> – red hind				X
<i>Epinephelus itajara</i> – jewfish			X	
<i>Epinephelus morio</i> – red grouper			X	X
<i>Epinephelus nigritus</i> – warsaw grouper				X
<i>Epinephelus niveatus</i> – snowy grouper	X		X	
<i>Hemanthias leptus</i> – longtail bass	X		X	
<i>Hemanthias vittatus</i> – red barbier			X	
<i>Holanthias martinicensis</i> – roughtongue bass			X	
<i>Hoplolepterus unicolor</i> – butter hamlet			X	
<i>Mycteroperca bonaci</i> – black grouper				X
<i>Mycteroperca microlepis</i> – gag			X	
<i>Mycteroperca phenax</i> – scamp			X	
<i>Rypticus bistrispinus</i> – freckled soapfish	X	X		
<i>Rypticus maculatus</i> – whitespotted soapfish			X	
<i>Rypticus saponaceus</i> – greater soapfish			X	X
<i>Schultzia beta</i> – school bass				X
<i>Serranilulus pumilio</i> – pygmy sea bass		X	X	
<i>Serranus atrobranchus</i> – blackear sea bass	X	X	X	X
<i>Serranus notospilus</i> – saddle bass		X	X	
<i>Serranus phoebe</i> – tattler			X	X
<i>Serranus subligarius</i> – belted sandfish			X	X
 Priacanthidae – bigeyes				
<i>Priacanthus arenatus</i> – bigeye	X	X	X	X
<i>Pristigenys alta</i> – short bigeye		X	X	X
 Apogonidae – cardinalfishes				
<i>Apogon aurolineatus</i> – bridle cardinalfish			X	
<i>Apogon maculatus</i> – flamefish			X	X
<i>Apogon pseudomaculatus</i> – twospot cardinalfish	X	X	X	
<i>Apogon quadrisquamatus</i> – sawcheek cardinalfish			X	
<i>Astrapogon alutus</i> – bronze cardinalfish			X	

<i>Astrapogon stellatus</i> – conchfish	X
<i>Phaeoptyx conklini</i> – freckled cardinalfish	X
<i>Phaeoptyx xenus</i> – sponge cardinalfish	X
Malacanthidae – tilefishes	
<i>Caulolatilus intermedius</i> – anchor tilefish	X X X
<i>Caulolatilus microps</i> – blueline tilefish	X X
<i>Lopholatilus chamaeleonticeps</i> – tilefish	X
Pomatomidae – bluefishes	
<i>Pomatomus saltatrix</i> – bluefish	X X X
Rachycentridae – cobias	
<i>Rachycentron canadum</i> – cobia	X X
Echeneidae – remoras	
<i>Echeneis naucrates</i> – sharksucker	X X X
<i>Echeneis neucratoides</i> – whitefin sharksucker	X
<i>Remora remora</i> – remora	X
Carangidae – jacks	
<i>Caranx bartholomaei</i> – yellow jack	X
<i>Caranx cryos</i> – blue runner	X X X
<i>Caranx hippos</i> – crevalle jack	X X X
<i>Caranx latus</i> – horse-eye jack	X
<i>Caranx ruber</i> – bar jack	X
<i>Chloroscombrus chrysurus</i> – Atlantic bumper	X X X X
<i>Decapterus punctatus</i> – round scad	X X X X
<i>Decapterus tabl</i> – redtail scad	X
<i>Hemicaranx amblyrhinchus</i> – bluntnose jack	X X
<i>Oligoplites saurus</i> – leatherjack	X X X
<i>Selar crumenophthalmus</i> – bigeye scad	X X X
<i>Selene setapinnis</i> – Atlantic moonfish	X X X X
<i>Selene spixii</i>	X
<i>Selene vomer</i> – lookdown	X X X X
<i>Seriola dumerili</i> – greater amberjack	X X
<i>Seriola zonata</i> – banded rudderfish	X
<i>Trachinotus carolinus</i> – Florida pompano	X X X
<i>Trachinotus falcatus</i> – permit	X
<i>Trachurus lathami</i> – rough scad	X X X
Coryphaenidae dolphinfishes	
<i>Coryphaena hippurus</i> – dolphinfish	X
Lutjanidae – snappers	
<i>Lutjanus analis</i> – mutton snapper	X

<i>Lutjanus campechanus</i> – red snapper	X	X	X	X
<i>Lutjanus cyanopterus</i> – cubera snapper				X
<i>Lutjanus griseus</i> – gray snapper				X
<i>Lutjanus synagris</i> – lane snapper	X	X	X	X
<i>Ocyurus chrysurus</i> – yellowtail snapper	X			X
<i>Pristipomoides aquilonaris</i> – wenchman	X	X	X	
<i>Pristipomoides macrophthalmus</i> – cardinal snapper				X
<i>Rhomboplites aurorubens</i> – vermillion snapper	X	X	X	X

Gerreidae – mojarras

<i>Diapterus auratus</i> – Irish pompano				X
<i>Diapterus rhombus</i> – catipa mojarra				X
<i>Eucinostomus argenteus</i> – spotfin mojarra	X	X	X	X
<i>Eucinostomus gula</i> – silver jenny	X	X	X	X
<i>Eucinostomus melanopterus</i> – flagfin mojarra				X

Haemulidae – grunts

<i>Anisotremus surinamensis</i> – black margate	X			
<i>Anisotremus virginicus</i> – porkfish		X	X	
<i>Conodon nobilis</i> – barred grunt	X			X
<i>Haemulon aurolineatum</i> – tomtate	X	X	X	
<i>Haemulon boschmae</i> – bronzestripe grunt				X
<i>Haemulon macrostomum</i> – Spanish grunt		X		
<i>Haemulon plumieri</i> – white grunt		X	X	
<i>Haemulon steindachneri</i> – chere-chere grunt				X
<i>Haemulon striatum</i> – striped grunt		X	X	
<i>Orthopristis chrysoptera</i> – pigfish	X	X	X	X
<i>Pomadasys crocro</i> – burro grunt				X

Sparidae – porgies

<i>Archosargus probatocephalus</i> – sheepshead	X	X	X	X
<i>Archosargus rhomboidalis</i> – sea bream				X
<i>Calamus arctifrons</i> – grass porgy		X		
<i>Calamus bajonado</i> – jolthead porgy		X	X	
<i>Calamus leucosteus</i> – whitebone porgy	X	X	X	
<i>Calamus nodosus</i> – knobbed porgy		X	X	
<i>Calamus penna</i> – sheepshead porgy				X
<i>Calamus proridens</i> – littlehead porgy		X		
<i>Diplodus holbrooki</i> – spotted pinfish			X	
<i>Lagodon rhomboides</i> – pinfish	X	X	X	X
<i>Pagrus pagrus</i> – red porgy		X	X	
<i>Stenotomus caprinus</i> – longspine porgy	X	X	X	X
<i>Stenotomus chrysops</i> – scup				X

Sciaenidae – drums

<i>Bairdiella batabana</i> – blue croaker	X
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<i>Bairdiella chrysoura</i> – silver perch	X	X	X
<i>Bairdiella ronchus</i> – ground croaker			X
<i>Bairdiella sanctaeluciae</i> – striped croaker			X
<i>Cynoscion arenarius</i> – sand seatrout	X	X	X
<i>Cynoscion nebulosus</i> – spotted seatrout			X
<i>Cynoscion nothus</i> – silver seatrout	X	X	X
<i>Equetus acuminatus</i> – high-hat	X	X	X
<i>Equetus lanceolatus</i> – jackknife-fish		X	X
<i>Equetus umbrosus</i> – cubbyu		X	X
<i>Larimus fasciatus</i> – banded drum	X	X	X
<i>Leiostomus xanthurus</i> – spot	X	X	X
<i>Menticirrhus americanus</i> – southern kingfish	X	X	X
<i>Menticirrhus littoralis</i> – gulf kingfish	X		X
<i>Menticirrhus saxatilis</i> – northern kingfish			X
<i>Micropogonias undulatus</i> – Atlantic croaker	X	X	X
<i>Odontoscion dentex</i> – reef croaker			X
<i>Pogonias cromis</i> – black drum		X	
<i>Sciaenops ocellatus</i> – red drum		X	X
<i>Stellifer colonensis</i>			X
<i>Stellifer lanceolatus</i> – star drum	X	X	X
<i>Umbrina coroides</i> – sand drum	X		X

Mullidae – goatfishes

<i>Mulloidichthys martinicus</i> – yellow goatfish	X		X
<i>Mullus auratus</i> – red goatfish	X	X	X
<i>Pseudupeneus maculatus</i> – spotted goatfish			X
<i>Upeneus parvus</i> – dwarf goatfish	X	X	X

Ephippidae – spadefishes

<i>Chaetodipterus faber</i> – spadefish	X	X	X
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Chaetodontidae – butterflyfishes

<i>Chaetodon aya</i> – bank butterflyfish	X	X	X
<i>Chaetodon capistratus</i> – foureye butterflyfish			X
<i>Chaetodon ocellatus</i> – spotfin butterflyfish			X
<i>Chaetodon sedentarius</i> – reef butterflyfish			X
<i>Chaetodon striatus</i> – banded butterflyfish			X

Pomacanthidae – angelfishes

<i>Holacanthus bermudensis</i> – blue angelfish	X	X
<i>Holacanthus ciliaris</i> – queen angelfish		X
<i>Pomacanthus arcuatus</i> – gray angelfish		X

Pomacentridae – damselfishes

<i>Chromis encrysurus</i> – yellowtail reef fish	X	X
<i>Chromis scotti</i> – purple reef fish		X

<i>Microspathodon chrysurus</i> – yellowtail damselfish	X
<i>Pomacentrus leucostictus</i> – beaugregory	X
<i>Pomacentrus partitus</i> – bicolor damselfish	X
Mugilidae – mullets	
<i>Mugil cephalus</i> – striped mullet	X X
<i>Mugil curema</i> – white mullet	
<i>Mugil gyrans</i> – fantail mullet	X
Sphyraenidae – barracudas	
<i>Sphyraena barracuda</i> – great barracuda	X X
<i>Sphyraena borealis</i> – northern sennet	
<i>Sphyraena guachancho</i> – guaguanche	X X X X
Polynemidae – threadfins	
<i>Polydactylus octonemus</i> – Atlantic threadfin	X X X X
Labridae – wrasses	
<i>Decodon puellaris</i> – red hogfish	X X X
<i>Halichoeres caudalis</i> – painted wrasse	X X
<i>Halichoeres garnoti</i> – yellowhead wrasse	
<i>Halichoeres pictus</i> – rainbow wrasse	X
<i>Hemipteronotus novacula</i> – pearly razorfish	X X X X
<i>Lachnolaimus maximus</i> – hogfish	X X
Scaridae – parrotfishes	
<i>Cryptotomus roseus</i> – bluelip parrotfish	X
<i>Nicholsina usta</i> – emerald parrotfish	X X
<i>Scarus vetula</i> – queen parrotfish	X
<i>Sparisoma radians</i> – bucktooth parrotfish	X
Oapistognathidae – jawfishes	
<i>Lonchopisthus micrognathus</i> – swordtail jawfish	X X
<i>Opistognathus lonchurus</i> – moustache jawfish	X
Uranoscopidae – stargazers	
<i>Astroscopus y-graecum</i> – southern stargazer	X X X
<i>Kathetostoma albogutta</i> – lancer stargazer	X X X X
Percophidae – flatheads	
<i>Bembrops anatirostris</i> – duckbill flathead	X X
<i>Bembrops gobiooides</i> – goby flathead	X
Dactyloscopidae – sand stargazers	
<i>Dactyloscopus tridigitatus</i> – sand stargazer	X
<i>Gillellus semicinctus</i> – halfbanded stargazer	X

Clinidae – clinids				
<i>Emblemaria atlantica</i> – banner blenny			X	
<i>Emblemaria piratula</i> – pirate blenny			X	
<i>Paraclinus fasciatus</i> – banded blenny			X	
<i>Paraclinus marmoratus</i> – marbled blenny			X	
<i>Starksia ocellata</i> – checkered blenny			X	
Blenniidae – combtooth blennies				
<i>Chasmodes saburrae</i> – Florida blenny			X	
<i>Hypseurochilus geminatus</i> – crested blenny			X	
<i>Hypsoblennius hentz</i> – feather blenny			X	
<i>Parablennius marmoreus</i> – seaweed blenny			X	
Callionymidae – dragonets				
<i>Callionymus himantophorus</i>				X
<i>Diplogrammus pauciradiatus</i> – spotted dragonet			X	
<i>Foetorepus agassizi</i> – spotfin dragonet	X	X		
<i>Paradiplogrammus bairdi</i> – lancer dragonet			X	
Eleotridae – sleepers				
<i>Erotelis smaragdus</i> – emerald sleeper			X	
Gobiidae – gobies				
<i>Bollmannia boqueronensis</i> – white-eye goby				X
<i>Bollmannia communis</i> – ragged goby	X	X	X	
<i>Coryphopterus punctipectophorus</i> – spotted goby	X		X	
<i>Evermannichthys spongicola</i> – sponge goby			X	
<i>Gobiosoma grosvenori</i> – rockcut goby			X	
<i>Gobiosoma horsti</i> – yellowline goby			X	
<i>Gobiosoma longipala</i> – twoscale goby			X	
<i>Gobiosoma macrodon</i> – tiger goby			X	
<i>Gobiosoma robustum</i> – code goby			X	
<i>Lythrypnus nesiotes</i> – island goby			X	
<i>Microgobius gulosus</i> – clown goby			X	
<i>Risor ruber</i> – tusked goby			X	
Acanthuridae – surgeonfishes				
<i>Acanthurus bahianus</i> – ocean surgeon		X		X
Trichiuridae – snake mackerels				
<i>Epinnula orientalis</i> – sackfish				X
<i>Trichiurus lepturus</i> – Atlantic cutlassfish	X	X		X
Scombridae – mackerels				
<i>Scomber japonicus</i> – chub mackerel		X	X	X

<i>Scomberomorus cavalla</i> – king mackerel	X	X	
<i>Scomberomorus maculatus</i> – Spanish mackerel	X	X	X

Stromateidae – butterfishes

<i>Ariomma bondi</i> – silver-rag			X
<i>Hyperoglyphe perciformis</i> – barrelfish		X	
<i>Peprilus alepidotus</i> – harvestfish	X	X	X
<i>Peprilus burti</i> – gulf butterfish	X	X	X

Bothidae – lefteye flounders

<i>Ancylopsetta dilecta</i> – three-eye flounder	X	X	X
<i>Ancylopsetta quadrocellata</i> – ocellated founder	X	X	X
<i>Bothus lunatus</i> – peacock flounder			X
<i>Bothus ocellatus</i> – eyed flounder		X	X
<i>Bothus robinsi</i> – twospot flounder		X	X
<i>Citharichthys cornutus</i> – horned whiff	X	X	X
<i>Citharichthys gymnorhinus</i> – anglefin whiff		X	X
<i>Citharichthys macrops</i> – spotted whiff	X	X	X
<i>Citharichthys spilopterus</i> – bay whiff	X	X	X
<i>Cyclopsetta chittendeni</i> – Mexican flounder	X	X	X
<i>Cyclopsetta fimbriata</i> – spotfin flounder		X	X
<i>Engyophrys senta</i> – spiny flounder	X	X	X
<i>Etropus crossotus</i> – fringed flounder	X	X	X
<i>Etropus microstomus</i> – small-mouth flounder		X	X
<i>Etropus rimosus</i> – gray flounder	X	X	X
<i>Gastropsetta frontalis</i> – shrimp flounder		X	X
<i>Monolene sessilicauda</i> – deepwater flounder		X	X
<i>Paralichthys alboguttatus</i> – gulf flounder	X		X
<i>Paralichthys lethostigma</i> – southern founder	X	X	X
<i>Paralichthys squamilentus</i> – broad flounder	X	X	X
<i>Syacium gunteri</i> – shoal flounder	X	X	X
<i>Syacium micrurum</i> – channel flounder	X	X	X
<i>Syacium papillosum</i> – dusky flounder	X	X	X
<i>Trichopsetta ventralis</i> – sash flounder	X	X	X

Pleuronectidae – righteye flounders

<i>Poecilopsetta beanii</i> – deepwater dab			X
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Soleidae – soles

<i>Achirus lineatus</i> – lined sole	X	X	X
<i>Gymnachirus melas</i> – naked sole		X	X
<i>Gymnachirus nudus</i> – flabby sole			X
<i>Gymnachirus texae</i> – fringed sole	X	X	X
<i>Symphurus civitatus</i> – offshore tonguefish	X		X
<i>Symphurus diomedianus</i> – spotfin tonguefish	X	X	X
<i>Symphurus minor</i> – large scale tonguefish		X	X

<i>Sympodus ommaspilus</i> – ocellated tonguefish	X
<i>Sympodus parvus</i> – pygmy tonguefish	X X
<i>Sympodus pelicanus</i> – longtail tonguefish	X
<i>Sympodus plagiusa</i> – blackcheek tonguefish	X X X X
<i>Sympodus urospilus</i> – spottail tonguefish	X
<i>Trinectes maculatus</i> – hogchoker	X X X X

Triacanthodidae – spikefishes

<i>Parahollardia lineata</i> – jambeau	X X
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Balistidae – leatherjackets

<i>Aluterus heudelotii</i> – dotterel filefish	X X
<i>Aluterus monoceros</i> – unicorn filefish	X
<i>Aluterus schoepfii</i> – orange filefish	X X X X
<i>Aluterus scriptus</i> – scrawled filefish	X X X X
<i>Balistes capriscus</i> – gray triggerfish	X X X X
<i>Cantherhines macrocerus</i> – whitespotted filefish	X
<i>Monacanthus ciliatus</i> – fringed filefish	X X X
<i>Monacanthus hispidus</i> – planehead filefish	X X X X
<i>Monacanthus setifer</i> – pygmy filefish	X X
<i>Monacanthus tuckeri</i> – slender filefish	X
<i>Xanthichthys ringens</i> – sargassum filefish	X

Ostraciidae – boxfishes

<i>Acanthostracion quadricornis</i> – scrawled cowfish	X X X X
<i>Lactophrys trigonus</i> – trunkfish	X

Tetraodontidae – puffers

<i>Canthigaster rostrata</i> – sharpnose puffer	X X
<i>Chilomycterus schoepfii</i> – striped burrfish	X X X X
<i>Diodon holocanthus</i> – balloonfish	X
<i>Diodon hystrix</i> – porcupinefish	X
<i>Lagocephalus laevigatus</i> – smooth puffer	X X X X
<i>Sphoeroides dorsalis</i> – marbled puffer	X X X X
<i>Sphoeroides greeleyi</i> – Caribbean puffer	X
<i>Sphoeroides nephelus</i> – southern puffer	X X X
<i>Sphoeroides pachygaster</i> – blunthead puffer	X X
<i>Sphoeroides parvus</i> – least puffer	X X
<i>Sphoeroides spengleri</i> – bandtail puffer	X X X X

Table S56. Comparison of the primary reef fish faunas of the East and West Flower Garden Banks (FGB), Mississippi-Alabama banks (MAB), and eastern Gulf reefs (EGR). (Data from the following sources: Flower Garden Banks – Dennis and Bright 1988; Mississippi-Alabama banks – Gittings, Bright, and Schroeder 1991; eastern Gulf reefs – T. S. Hopkins, Schroeder, et al. 1981; G. Smith 1976.)

Scientific and common names	Where collected		
	FGB	MAB	EGR
Muraenidae – morays			
<i>Gymnothorax moringa</i> – spotted moray	X	X	X
<i>Muraena retifera</i> – reticulate moray		X	X
Ophichthidae – snake eels			
<i>Myrichthys breviceps</i> – sharptail eel		X	
Batrachoididae – toadfishes			
<i>Opsanus pardus</i> – leopard toadfish			X
Antennariidae – frogfishes			
<i>Antennarius ocellatus</i> – ocellated frogfish		X	X
Gobiesocidae – clingfishes			
<i>Gobiesox strumosus</i> – skilletfish			X
Holocentridae – squirrelfishes			
<i>Holocentrus adscensionis</i> – squirrelfish	X	X	X
<i>Holocentrus bullisi</i> – deepwater squirrelfish		X	X
<i>Holocentrus Marianus</i> – longjaw squirrelfish	X		
<i>Holocentrus poco</i> – saddle squirrelfish	X		
<i>Holocentrus rufus</i> – longspine squirrelfish	X		X
<i>Holocentrus vexillarius</i> – dusky squirrelfish	X		
<i>Myripristis jacobus</i> – blackbar soldierfish	X		X
<i>Plectrypops retrospinis</i> – cardinal soldierfish	X		
Aulostomidae – trumpetfishes			

<i>Aulostomus maculatus</i> – trumpetfish		X	X
Scorpaenidae – scorpionfishes			
<i>Scorpaena plumieri</i> – spotted scorpionfish			X
Serranidae – sea basses			
<i>Centropristes striata</i> – black sea bass			X
<i>Epinephelus adscensionis</i> – rock hind	X		X
<i>Epinephelus cruentatus</i> – graysby	X		X
<i>Epinephelus drummondhayi</i> – speckled hind			X
<i>Epinephelus fulvus</i> – coney	X		X
<i>Epinephelus guttatus</i> – red hind	X		X
<i>Epinephelus inermis</i> – marbled grouper	X		
<i>Epinephelus itajara</i> – jewfish			X
<i>Epinephelus morio</i> – red grouper			X
<i>Epinephelus nigritus</i> – warsaw grouper		X	
<i>Gonioplectrus hispanus</i> – Spanish flag	X		
<i>Hemanthias aurorubens</i> – streamer bass			X
<i>Holanthias martinicensis</i> – roughtongue bass	X	X	
<i>Hypoplectrus unicolor</i> – butter hamlet			X
<i>Liopropoma eukrines</i> – wrasse bass	X	X	X
<i>Mycteroperca bonaci</i> – black grouper	X		X
<i>Mycteroperca interstitalis</i> – yellowmouth grouper	X		X
<i>Mycteroperca microlepis</i> – gag		X	X
<i>Mycteroperca phenax</i> – scamp	X	X	X
<i>Mycteroperca tigris</i> – tiger grouper	X		
<i>Mycteroperca venenosa</i> – yellowfin grouper	X		X
<i>Paranthias furcifer</i> – creole bass	X	X	X
<i>Rypticus maculatus</i> – whitespotted soapfish	X		X
<i>Serranus annularis</i> – orangeback bass	X		
<i>Serranus phoebe</i> – tattler	X	X	
<i>Serranus subligarius</i> – belted sandfish			X

Priacanthidae – bigeyes

<i>Priacanthus arenatus</i> – bigeye	X	X	X
<i>Priacanthus cruentatus</i> – glasseye snapper		X	
<i>Pristigenys alta</i> – short bigeye		X	X

Apogonidae – cardinalfishes

<i>Apogon aurolineatus</i> – bridled cardinalfish	X		X
<i>Apogon binotatus</i> – barred cardinalfish			X
<i>Apogon maculatus</i> – flamefish	X	X	X
<i>Apogon pillionatus</i> – broadsaddle cardinalfish		X	
<i>Apogon pseudomaculatus</i> – twospot cardinalfish	X	X	X
<i>Astrapogon alutus</i> – bronze cardinalfish			X
<i>Phaeoptyx pigmentaria</i> – dusky cardinalfish			X
<i>Phaeoptyx xenus</i> – sponge cardinalfish			X

Malacanthidae – tilefishes

<i>Malacanthus plumieri</i> – sand tilefish	X		X
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Carangidae – jacks

<i>Caranx ruber</i> – bar jack	X		X
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Lutjanidae – snappers

<i>Lutjanus campechanus</i> – red snapper	X	X	X
<i>Lutjanus cyanopterus</i> – cubera snapper		X	X
<i>Lutjanus jocu</i> – dog snapper	X		
<i>Ocyurus chrysurus</i> – yellowtail snapper	X		X
<i>Rhomboplites aurorubens</i> – vermillion snapper	X	X	X

Haemulidae – grunts

<i>Haemulon aurolineatum</i> – tomtate	X		X
<i>Haemulon melanurum</i> – cottonwick	X		
<i>Haemulon plumieri</i> – white grunt			X
<i>Haemulon striatum</i> – striped grunt	X		

Sparidae – porgies

<i>Calamus bajonado</i> – jolthead porgy	X		X
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<i>Calamus nodosus</i> – knobbed porgy	X	X
Sciaenidae – drums		
<i>Equetus lanceolatus</i> – jackknife fish	X	X
<i>Equetus punctatus</i> – spotted drum	X	
<i>Equetus umbrosus</i> – cubbyu		X
<i>Odontoscion dentex</i> – reef croaker		X
Mullidae – goatfishes		
<i>Mulloidichthys martinicus</i> – yellow goatfish	X	
<i>Pseudupeneus maculatus</i> – spotted goatfish	X	X
Chaetodontidae – butterflyfishes		
<i>Chaetodon aculeatus</i> – longsnout butterflyfish	X	
<i>Chaetodon aya</i> – bank butterflyfish	X	X
<i>Chaetodon capistratus</i> – foureye butterflyfish		X
<i>Chaetodon ocellatus</i> – spotted butterflyfish	X	X
<i>Chaetodon sedentarius</i> – reef butterflyfish	X	X
<i>Chaetodon striatus</i> – banded butterflyfish	X	X
Pomacanthidae – angelfishes		
<i>Centropyge argi</i> – cherubfish	X	X
<i>Holacanthus bermudensis</i> – blue angelfish	X	X
<i>Holacanthus ciliaris</i> – queen angelfish	X	X
<i>Holacanthus tricolor</i> – rock beauty	X	X
<i>Pomacanthus arcuatus</i> – gray angelfish	X	X
<i>Pomacanthus paru</i> – French angelfish	X	X
Pomacentridae – damselfishes		
<i>Abudefduf saxatilis</i> – sergeant major	X	X
<i>Chromis cyanea</i> – blue chromis	X	X
<i>Chromis encrysurus</i> – yellowtail reef fish	X	X
<i>Chromis insolata</i> – sunshinefish	X	
<i>Chromis multilineata</i> – brown chromis	X	X
<i>Chromis scotti</i> – purple reef fish	X	X

<i>Microspathodon chrysurus</i> – yellowtail damselfish	X		
<i>Pomacentrus partitus</i> – bicolor damselfish	X		X
<i>Pomacentrus planifrons</i> – threespot damselfish	X	X	X
<i>Pomacentrus variabilis</i> – cocoa damselfish	X		X
Cirrhitidae – hawkfishes			
<i>Amblycirrhos pinos</i> – redspotted hawkfish	X		
Sphyraenidae – barracudas			
<i>Sphyraena barracuda</i> – great barracuda	X		X
Labridae – wrasses			
<i>Bodianus pulchellus</i> – spotfin hogfish	X	X	X
<i>Bodianus rufus</i> – Spanish hogfish	X		
<i>Clepticus parrae</i> – creole wrasse	X		
<i>Halichoeres bathyphilus</i> – greenhead wrasse			X
<i>Halichoeres bivittatus</i> – slippery dick	X	X	X
<i>Halichoeres caudalis</i> – painted wrasse			X
<i>Halichoeres cyancephalus</i> – yellowcheek wrasse			X
<i>Halichoeres garnoti</i> – yellowhead wrasse	X		X
<i>Halichoeres maculipinna</i> – clown wrasse	X		
<i>Halichoeres pictus</i> – rainbow wrasse			X
<i>Halichoeres radiatus</i> – pudding wife	X		
<i>Lachnolaimus maximus</i> – hogfish			X
<i>Thalassoma bifasciatum</i> – bluehead	X		X
Scaridae – parrotfishes			
<i>Scarus croicensis</i> – striped parrotfish			X
<i>Scarus taeniopterus</i> – princess parrotfish	X		
<i>Scarus vetula</i> – queen parrotfish	X		
<i>Sparisoma atomarium</i> – greenblotch parrotfish	X		
<i>Spalisoma aurofrenatum</i> – redband parrotfish	X		X
<i>Spalisoma radians</i> – bucktooth parrotfish			X
<i>Spalisoma viride</i> – stoplight parrotfish	X		

Opistognathidae – jawfishes

Opistognathus aurifrons – yellowhead jawfish X X

Clinidae – clinids

Emblemaria pandionis – sailfin blenny X

Labrisomus haitiensis – longfin blenny X

Blenniidae – combtooth blennies

Ophioblennius atlanticus – redlip blenny X

Parablennius marmoreus – seaweed blenny X

Gobiidae – gobies

Gobiosoma horsti – yellowline goby X

Gobiosoma oceanops – neon goby X X

Microgobius carri – Seminole goby X

Acanthuridae – surgeonfishes

Acanthurus bahianus – ocean surgeon X X

Acanthurus chirurgus – doctorfish X X

Acanthurus coeruleus – blue tang X X

Balistidae – leatherjackets

Aluterus scriptus – scrawled filefish X X

Balistes capriscus – gray triggerfish X X X X

Balistes vetula – queen triggerfish X X

Cantherhines macrocerus – whitespotted filefish X

Cantherhines pullus – orangespotted filefish X

Melichthys niger – black Surgeon X

Xanthichthys ringens – sargassum filefish X

Ostraciidae – boxfishes

Acanthostracion polygonius – honeycomb cowfish X

Lactophrys triqueter – smooth trunkfish X

Tetraodontidae – puffers

Canthigaster rostrata – sharpnose puffer X X X

Diodon holocanthus – balloonfish X

Table S57. Representative fishes of the open water column and their habitats. Coastal species (C) occur from the shoreline to midshelf (ca. 100 m). Oceanic species (O) are found over the outer shelf and/or in epipelagic waters of the deep Gulf.

Scientific and common names	<u>Habitat</u>	
	C	O
Rhincodontidae – carpet sharks <i>Rhincodon typus</i> – whale shark	X	X
Odontaspidae – sand tigers <i>Odontaspis taurus</i> – sand tiger	X	
Alopiidae – thresher sharks <i>Alopias superciliosus</i> – bigeye thresher <i>Alopias vulpinus</i> – thresher shark	X	X
Cetorhinidae – basking sharks <i>Cetorhinus maximus</i> – basking shark	X	X
Lamnidae – mackerel sharks <i>Carcharodon carcharias</i> – white shark <i>Isurus oxyrinchus</i> – shortfin mako <i>Isurus paucus</i> – longfin mako	X	X
Scyliorhinidae – cat sharks <i>Scyliorhinus retifer</i> – chain dogfish		X
Carcharhinidae – requiem sharks <i>Carcharhinus acronotus</i> – blacknose shark <i>Carcharhinus brevipinna</i> – spinner shark <i>Carcharhinus falciformis</i> – silky shark <i>Carcharhinus isodon</i> – finetooth shark <i>Carcharhinus leucas</i> – bull shark <i>Carcharhinus limbatus</i> – blacktip shark <i>Carcharhinus longimanus</i> – ocean whitetip shark <i>Carcharhinus obscurus</i> – dusky shark <i>Carcharhinus perezi</i> – reef shark <i>Carcharhinus plumbeus</i> – sandbar shark <i>Carcharhinus porosus</i> – smalltail shark <i>Galeocerdo cuvier</i> – tiger shark <i>Mustelis canis</i> – smooth dogfish <i>Mustelis norrisi</i> – Florida smoothhound	X	X

<i>Negaprion brevirostris</i> – lemon shark	X
<i>Prionace glauca</i> – blue shark	X
<i>Rhizoprionodon terraenovae</i> – Atlantic sharpnose shark	X
Sphyrnidae – hammerhead sharks	
<i>Sphyra lewini</i> – scalloped hammerhead	X
<i>Sphyra mokarran</i> – great hammerhead	X
<i>Sphyra tiburo</i> – bonnethead	X
Squalidae – dogfish sharks	
<i>Centrophorus uyato</i> – little gulper shark	X
<i>Squalus cubensis</i> – Cuban dogfish	X
Dasyatidae – stingrays	
<i>Pteroplatytrygon violacea</i> – pelagic stingray	X
Myliobatidae – eagle rays	
<i>Aetobatis narinari</i> – spotted eagle ray	X
<i>Myliobatis freminvillei</i> – bullnose ray	X
<i>Rhinoptera bonasus</i> – cownose ray	X
Mobulidae – manta rays	
<i>Manta birostris</i> – manta	X
<i>Mobula hypostoma</i> – devil ray	X
Elopidae – tarpons	
<i>Elops saurus</i> – ladyfish	X
<i>Megalops atlanticus</i> – tarpon	X
Clupeidae – herrings	
<i>Alosa alabamae</i> – Alabama shad	X
<i>Alosa chrysochloris</i> – skipjack herring	X
<i>Brevoortia gunteri</i> – finescale menhaden	X
<i>Brevoortia patronus</i> – gulf menhaden	X
<i>Brevoortia smithi</i> – yellowfin menhaden	X
<i>Etrumeus teres</i> – round herring	X
<i>Harengula clupeola</i> – false pilchard	X
<i>Harengula jaguana</i> – scaled sardine	X
<i>Jenkinsia lamprotaenia</i> – dwarf herring	X
<i>Jenkinsia majua</i> – little-eye herring	X
<i>Jenkinsia stolifera</i> – shortband herring	X
<i>Opisthonema oglinum</i> – Atlantic thread herring	X
<i>Sardinella aurita</i> – Spanish sardine	X
Engraulidae – anchovies	
<i>Anchoa cubana</i> – Cuban anchovy	X

<i>Anchoa hepsetus</i> – striped anchovy	X
<i>Anchoa lamprotaenia</i> – bigeye anchovy	X
<i>Anchoa lyolepis</i> – dusky anchovy	X
<i>Anchoa mitchilli</i> – bay anchovy	X
<i>Anchoa perfasciata</i> – flat anchovy	X
<i>Cetengraulis edentulus</i> – Atlantic anchoveta	X
<i>Engraulis eurystole</i> – silver anchovy	X

Bregmacerotidae – codlets

<i>Bregmaceros atlanticus</i> – antenna codlet	X	X
<i>Bregmaceros cantori</i> – striped codlet		X
<i>Bregmaceros houdei</i> – stellate codlet		X
<i>Bregmaceros mcclellandi</i> – spotted codlet		X

Exocoetidae – flying fishes

<i>Cheilopogon comatus</i> – clearwing flying fish	X	X
<i>Cheilopogon cyanopterus</i> – margined flying fish		X
<i>Cheilopogon exsiliens</i> – bandwing flying fish		X
<i>Cheilopogon furcatus</i> – spotfin flying fish		X
<i>Cheilopogon melanurus</i> – Atlantic flying fish	X	X
<i>Chriodorus atherinoides</i> – hardhead halfbeak		X
<i>Euleptorhamphus velox</i> – flying halfbeak		X
<i>Exocoetus obtusirostris</i> – oceanic two-wing flying fish		X
<i>Exocoetus volitans</i> – tropical two-wing flying fish		X
<i>Fodiator acutus</i> – sharpchin flying fish		X
<i>Hemiramphus balao</i> – balao	X	X
<i>Hemiramphus brasiliensis</i> – ballyhoo	X	X
<i>Hirundichthys affinis</i> – fourwing flying fish		X
<i>Hirundichthys rondeleti</i> – blackwing flying fish	X	X
<i>Hyporhamphus meeki</i> – American halfbeak		X
<i>Hyporhamphus unifasciatus</i> – silverstripe halfbeak	X	
<i>Oxyporhamphus micropterus</i> – smallwing flying fish		X
<i>Parexocoetus brachypterus</i> – sailfin flying fish		X
<i>Prognichthys gibbifrons</i> – bluntnose flying fish	X	

Belonidae – needlefishes

<i>Abelennes hians</i> – flat needlefish	X
<i>Platybelone argalus</i> – keeltail needlefish	X
<i>Strongylura marina</i> – Atlantic needlefish	X
<i>Strongylura notata</i> – redfin needlefish	X
<i>Strongylura timucu</i> – timucu	X
<i>Tylosurus acus</i> – agujon	X
<i>Tylosurus crocodilus</i> – houndfish	X

Atherinidae – silversides

<i>Atherinomorus stipes</i> – hardhead silverside	X
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<i>Hypoatherina harringtonensis</i> – reef silverside	X	
<i>Membras martinica</i> – rough silverside	X	
<i>Menidia peninsulae</i> – tidewater silverside	X	
Pomatomidae – bluefishes		
<i>Pomatomus saltatrix</i> – bluefish	X	
Rachycentridae – cobias		
<i>Rachycentron canadum</i> – cobia	X	
Echeneidae – remoras		
<i>Echeneis naucrates</i> – sharksucker	X	X
<i>Echeneis neucratoides</i> – whitefin sharksucker	X	X
<i>Remora remora</i> – remora	X	X
Carangidae – jacks		
<i>Alectis ciliaris</i> – African pompano	X	X
<i>Caranx bartholomaei</i> – yellow jack	X	X
<i>Caranx cryos</i> – blue runner	X	X
<i>Caranx hippos</i> – crevalle jack	X	X
<i>Caranx latus</i> – horse-eye jack	X	X
<i>Caranx lugubris</i> – black jack	X	
<i>Caranx ruber</i> – bar jack		X
<i>Chloroscombrus chrysurus</i> – Atlantic bumper	X	
<i>Decapterus punctatus</i> – round scad	X	X
<i>Elagatis bipinnulata</i> – rainbow runner		X
<i>Hemicaranx amblyrhynchus</i> – bluntnose jack	X	
<i>Naucrates ductor</i> – pilotfish	X	X
<i>Oligoplites saurus</i> – leatherjack	X	
<i>Selar crumenophthalmus</i> – bigeye scad	X	X
<i>Selene setapinnis</i> – Atlantic moonfish	X	
<i>Selene vomer</i> – lookdown	X	
<i>Seriola dumerili</i> – greater amberjack		X
<i>Seriola rivoliana</i> – almaco jack		X
<i>Seriola zonata</i> – banded rudderfish		X
<i>Trachinotus carolinus</i> – Florida pompano	X	X
<i>Trachinotus falcatus</i> – permit	X	X
<i>Trachurus lathami</i> – rough scad	X	
Coryphaenidae – dolphinfishes		
<i>Coryphaena equiselis</i> – pompano dolphin	X	X
<i>Coryphaena hippurus</i> – dolphinfish	X	X
Mugilidae – mullets		
<i>Mugil cephalus</i> – striped mullet	X	
<i>Mugil curema</i> – white mullet	X	

<i>Mugil gyrans</i> – fantail mullet	X
Sphyraenidae – barracudas	
<i>Sphyraena barracuda</i> – great barracuda	X X
Scombridae – mackerels	
<i>Acanthocybium solandri</i> – wahoo	X X
<i>Auxis thazard</i> – frigate mackerel	X X
<i>Euthynnus alletteratus</i> – little tunny	X X
<i>Euthynnus pelamis</i> – skipjack tuna	X X
<i>Sarda sarda</i> – Atlantic bonito	X X
<i>Scomber japonicus</i> – chub mackerel	X X
<i>Scomberomorus cavalla</i> – king mackerel	X X
<i>Scomberomorus maculatus</i> – Spanish mackerel	X X
<i>Scomberomorus regalis</i> – cero	X X
<i>Thunnus albacares</i> – yellowfin tuna	X
<i>Thunnus atlanticus</i> – blackfin tuna	X
<i>Thunnus thynnus</i> – bluefin tuna	X
Xiphiidae – swordfishes	
<i>Xiphias gladius</i> – swordfish	X
Istiophoridae – billfishes	
<i>Istiophorus platypterus</i> – sailfish	X X
<i>Makaira nigricans</i> – blue marlin	X X
<i>Tetrapturus albidus</i> – white marlin	X X
<i>Tetrapturus pfluegeri</i> – longbill spearfish	X X
Stromateidae – butterfishes	
<i>Ariomma bondi</i> – silver-rag driftfish	X
<i>Ariomma melanum</i> – brown driftfish	X
<i>Ariomma regulus</i> – spotted driftfish	X
<i>Centrolophus niger</i> – black ruff	X
<i>Cubiceps paradoxus</i> – longfin cigarfish	X
<i>Hyperoglyphe bythites</i> – black driftfish	X
<i>Nomeus gronovii</i> – man-of-war fish	X X
<i>Peprilus alepidotus</i> – harvestfish	X
<i>Peprilus burti</i> – gulf butterfish	X
<i>Psenes cyanophrys</i> – freckled driftfish	X
<i>Psenes pellucidus</i> – bluefin driftfish	X
Molidae – molas	
<i>Mola lanceolata</i> – sharptail mola	X
<i>Mola mola</i> – ocean sunfish	X