The fishes listed here have been recorded within the coastal area of Bermuda, Bahamas, and Caribbean Sea. They were not given a full account with an illustration because of their rarity, limited range, or deep-water habitat or due to lack of specimen photographs or video.

#### White Shark - Carcharodon carcharias (Linnaeus, 1758)

FEATURES: Pale to dark gray, blue gray, or blackish dorsally. White ventrally. Snout blunt, pointed. First dorsal-fin origin located behind pectoral-fin base. Prominent caudal keels. Large-bodied. To 19 ft. HABITAT: Circumglobal in tropical to temperate seas; less common in tropical waters. Newfoundland to Gulf of Mexico, Bermuda, and Puerto Rico to Anguilla. Pelagic from nearshore waters to open ocean.

### Porbeagle - Lamna nasus (Bonnaterre, 1788)

FEATURES: Bluish gray dorsally. White ventrally. Lower posterior portion of dorsal fin white. Snout pointed. Prominent caudal keels. Stout, round-bodied. To 8 ft. HABITAT: Primarily in North Atlantic. Also in southern oceans. Newfoundland to NE Gulf of Mexico—usually to NC. Occasionally Bermuda. Pelagic.

### Colombian Electric Ray - Diplobatis colombiensis Fechhelm & McEachran, 1984

FEATURES: Golden tan with brown, round, eye-size spots symmetrically arranged on dorsal surface. Creamy to white ventrally. Disk slightly oval. Snout moderately convex. A large pair of electric kidney-shaped organs visible from above. Dorsal fins equal in size. Caudal fin triangular. To 7 in. HABITAT: Colombia. Demersal over soft bottoms of inner continental shelves from about 100 to 350 ft.

## Ocellated Skate - Rostroraja ackleyi (Garman, 1881)

FEATURES: Yellowish brown dorsally with scattered dark and pale spots, and two ocellated spots on middle sides of disk. Moderately small thorns on snout and around eyes. A row of thorns extends from behind eyes to tip of tail. Tail with rows of thorns and lateral folds. To 1.3 ft. HABITAT: NE Gulf of Mexico and off NE Yucatán Peninsula. Demersal over soft bottoms from about 105 to 1,260 ft.

## Spiny Butterfly Ray - Gymnura altavela (Linnaeus, 1758)

FEATURES: Shades of brown with small, pale spots and ocelli scattered on dorsal surface. Darker spots form irregular blotches. Ventral area creamy white. Small "tentacles" at inner margins of spiracles. Pectoral-fin tips rounded and trailing. Tail has one or more barbs. Width to 6.8 ft. HABITAT: MA to FL, and Gulf of Mexico to southern Bay of Campeche. At or near bottom from shoreline to about 180 ft.

# Mobula species A

FEATURES: Uniformly blackish dorsally, or with pale grayish, curved blotches behind spiracles. Uniformly white ventrally, or with patches of black to gray behind last gill openings and/or at pectoral-fin margins. Head very broad with mouth at front. Pectoral fins wide, arched, and pointed. A separate pair of cephalic fins extends in front of eyes and mouth. Width to 16 ft. HABITAT: NC to S FL, Gulf of Mexico, Bahamas, and Caribbean Sea. Pelagic and near surface from near shore to open ocean.

# Appendix

#### Northern Ladyfish - Elops saurus Linnaeus, 1766

FEATURES: Greenish gray to bluish dorsally. Silvery below. Snout short, pointed. Mouth and eyes large. Body elongate. Dorsal-fin origin over pelvic-fin origin. Caudal fin deeply forked. To 3 ft. HABITAT: MA (rare) to FL, Gulf of Mexico, Bermuda, Bahamas, Caribbean Sea to Brazil. Inshore, in bays and lagoons and around mangroves. Also offshore.

### Ridged Eel - Neoconger mucronatus Girard, 1858

FEATURES: Shades of brown and sometimes with dark reticulations. Pores on lower jaw sometimes ringed by areas of white. Head conical; upper jaw projects beyond lower jaw. Eyes small; teeth in rows. Dorsal-fin origin slightly anterior to anus. Dorsal and anal fins confluent with well-developed caudal fin. To 1 ft. HABITAT: Gulf of Mexico and Caribbean Sea to central Brazil. Burrows in soft, muddy bottoms to about 870 ft.

## Catesby's False Moray - Catesbya pseudomuraena Böhlke & Smith, 1968

FEATURES: Shades of brown. Margins of dorsal and anal fins paler than body. Snout conical; head elongate and slender. Mouth large, extends well past eyes. Teeth needle-like. Gill opening small and round. Pectoral fins small. Dorsal-fin origin just behind pectoral fins. Dorsal and anal fins confluent with tail. To 5.5 in. HABITAT: Bahamas. Demersal over reefs from about 26 to 50 ft.

#### Catherine's False Moray - Robinsia catherinae Böhlke & Smith, 1967

FEATURES: Brown dorsally and to midline; white below and just before tail. Snout conical; head elongate and slender. Mouth large, extends just past eyes. Teeth conical to compressed. Gill openings small and oval. Pectoral fins absent. Dorsal-fin origin just behind gill openings. Dorsal and anal fins confluent with tail. To 8 in. HABITAT: Bahamas, Haiti, Dominican Republic, Yucatán Peninsula, and Nicaragua to Colombia. Demersal over reefs from about 170 to 1,000 ft.

# Longtrunk Conger - Ariosoma anale (Poey, 1860)

FEATURES: Shades of gray. Dorsal, anal, and pectoral fins black. Snout rounded. Eyes large. Flanges on upper and lower jaws. Upper edge of gill opening at center of pectoral-fin base. Pectoral fins well developed and moderately long. Dorsal and caudal fins continuous with blunt and stiff tail fin. Tail tip blunt and stiff. To 14 in. ECOLOGY: FL, FL Keys, Bahamas, and Honduras to Venezuela. Coastal, marine, and inshore.

### Cuban Longfin Herring - Neoopisthopterus cubanus Hildebrand, 1948

FEATURES: Translucent with a silvery midlateral stripe. Row of tiny dark dots along anal-fin base. Probably silvery on cheeks and abdomen. Dorsal surface may be brownish green. Jaws moderately large—upper jaw with two toothed bones. Pectoral fins small, low on body. Dorsal-fin origin behind anal-fin origin. Anal fin long based with 39–43 rays. Abdomen with a row of scutes. To 4.3 in. HABITAT: Northwest coast of Cuba. Occur in shallow, coastal marine waters.

#### Little-eye Herring - Jenkinsia majua Whitehead, 1963

FEATURES: Translucent with a narrow, silvery midlateral stripe. Some silvery on top and sides of head. Small black flecks dorsally. Blackish bar at caudal-fin base. Black spots along anal-fin base. Mouth small. Eyes comparatively small. Dorsal fin above pelvic fins. Anal fin small. Body elongate. To 3 in. HABITAT: FL Keys, Bahamas, and scattered in Caribbean Sea. Occur in shallow inshore waters to about 16 ft.

### Shortstriped Round Herring - Jenkinsia parvula Cervigón & Velasquez, 1978

FEATURES: Translucent with a very narrow silvery stripe from opercle to behind dorsal fin where it becomes about as wide as irises. Mouth small. To 7 in. HABITAT: Colombia. Demersal over soft bottoms of inner continental shelves from about 100 to 350 ft. IUCN: Vulnerable.

### Higuchi's Sea Catfish - Cathorops higuchii Marceniuk & Betancur-R., 2008

FEATURES: Color in life unknown. Preserved specimens brownish dorsally, paler below, and with pale barbels and fins. Head flattened with a median groove on top. Head shield short with a few granules. Two pairs of short barbels on chin. Barbels on upper jaw reach past pectoral-fin spine base. Anal fin with 18–20 rays. To 13.7 in. HABITAT: Honduras to Panama. Occur in shallow-water estuaries, coastal areas, and lower reaches of rivers.

## Wayuu Sea Catfish - Cathorops wayuu Betancur-R., Acero P. & Marceniuk 2012

FEATURES: Gray dorsally; silvery white below. Fins dusky, often tinged with red. Anal fin paler than other fins. Head flattened with a median groove on top. Head shield granular with two forward-facing projections over eyes. Two pairs of barbels in chin. Barbels on upper jaw extend to or past pectoral-fin spine base. Anal fin with 19–20 rays. HABITAT: Eastern Colombia to Gulf of Paria, Venezuela. Demersal in shallow, coastal, brackish, and marine waters.

## Largespot Lizardfish - Synodus macrostigmus Frable, Luther & Baldwin, 2013

FEATURES: Grayish dorsally with yellow brown stripes along scale rows. Sides with about eight diamond-shaped blotches that have smaller spots on interspaces. Ventral area silvery with golden stripes along scale rows. Black blotch above upper opercular corner. Pelvic and anal fins yellowish. Snout comparatively short. To 10 in. HABITAT: NC to FL, Yucatán Peninsula, scattered in Caribbean Sea. Demersal over sandy and muddy bottoms from about 95 to 636 ft.

## Bicolor Toadfish - Opsanus dichrostomus Collette, 2001

FEATURES: Tannish dorsally and on sides with irregular mottling and indistinct bars and rosettes. Bars radiate from eyes. Pectoral fins blotched and banded. Dorsal and anal fins with about 10 oblique bands. Caudal fin banded. Head with fleshy cirri. Lower jaw with numerous barbels. Upper opercle with two stout spines. First dorsal fin with three spines. To 6 in. HABITAT: Southern Gulf of Mexico to Belize, and SW Cuba. Demersal over shallow soft bottoms with seagrasses. Also on shallow reefs.

## Cozumel Toadfish - Sanopus johnsoni Collette & Starck, 1974

FEATURES: Shades of brown with irregular, dense, darker, and paler mottling. Dorsal and anal fins irregularly banded. Head with numerous cirri and barbels. Wellspaced, long, multi-fringed, and branched barbels present around mouth and chin. Upper opercular corner with two stout spines, lower corner with one spine. First dorsal fin with three spines. Two lateral lines, both with papillae. To 12 in. HABITAT: Known from Palancar Reef, Cozumel, Mexico. May occur elsewhere. Demersal in caves of shallow-water coral reefs.

### Marked Batfish - Ogcocephalus notatus (Cuvier & Valenciennes, 1837)

FEATURES: Described as gray brown with paler tips on bucklers dorsally, and with one to seven clusters of dark and pale-edged spots along disk edge. Some with dark rings on dorsal surface and on sides of tail. Pectoral fins with dark margins and pale ray tips. Rostrum blunt. Pectoral-fin rays padded. Ventral surface covered with bony and pointed scales. To 6.7 in. HABITAT: Colombia to Brazil. Demersal over soft bottoms from about 50 to 564 ft. Also in estuaries.

## Oceanic Bluntnose Flyingfish - Prognichthys glaphyrae Parin, 1999

FEATURES: Iridescent dark blue dorsally; silvery white below. Dorsal and caudal fins grayish. Pectoral fins translucent with a gray to greenish area at center. Pelvic fins grayish to greenish at center. Dorsal fin low with 11–13 rays. Anal fin low with 9–11 rays. Pelvic fins long and broad. To 10 in. HABITAT: In offshore and oceanic waters of the Atlantic from FL to southern Brazil. Pelagic and at surface.

### Western Bluntnose Flyingfish - Prognichthys occidentalis Parin, 1999

FEATURES: Iridescent blue dorsally; silvery white below. Dorsal and caudal fins grayish. Pectoral fins brown with pale tips and lower parts. Dorsal fin low with 10–13 rays. Anal fin low with 8–10 rays. Pelvic fins long and broad. To 10 in. HABITAT: Temperate to tropical waters of the western Atlantic from off NJ to Argentina including Gulf of Mexico and Caribbean Sea. Pelagic and at surface of offshore and oceanic waters.

## Bermuda Halfbeak - Hemiramphus bermudensis Collette, 1962

FEATURES: Greenish dorsally; silvery white on sides and below. Narrow silver stripe on sides. Tip of lower beak red. Upper caudal-fin lobe reddish orange to orange yellow. Pectoral-fin tips not reaching nasal pits when folded forward. Gill rakers number 37–45 on first arch. To 17 in. HABITAT: Bermuda. Occur at surface of shallow inshore waters.

# False Silverstripe Halfbeak - Hyporhamphus meeki Banford & Collette, 1993

FEATURES: Translucent green dorsally; silvery white below. Narrow silver stripe on sides. Three thin black lines on back from head to dorsal fin. Fleshy tip of lower jaw red. Caudalfin margin blackish. Gill rakers number 31–40 on first arch. To 8.6 in. HABITAT: MA to FL, and Gulf of Mexico to Yucatán Peninsula. Occur inshore and at surface over sandy bottoms of bays, estuaries, and harbors.

## Largescale Four-eyes - Anableps anableps (Linnaeus, 1758)

FEATURES: Shades of gray dorsally; silvery white below. Sides with up to eight gray stripes; upper and lower stripes may create an inverted C shape at peduncle. Snout short; mouth protrusible; head flattened. Eyes elevated with horizontally divided pupils. Lateral line with fewer than 64 scales. Anal fin modified in males, used for internal fertilization. To 11 in. HABITAT: Trinidad and the Orinoco Delta to the Amazon Delta. Primarily in shallow fresh water; sometimes around saltwater mangroves at river mouths.

#### Parazen - Parazen pacificus Kamohara, 1935

FEATURES: Iridescent violet pink to reddish dorsally; silvery on sides and below. Spiny dorsal fin short-based with a black tip and white inner membranes. Other fins transparent. Mouth large and oblique. Eyes large, set back on head. Lateral line divided, forms an elongate oval-shape that joins anteriorly and posteriorly. To 12 in. HABITAT: FL Keys, Bahamas, Yucatán Peninsula, and Caribbean Sea. Found over soft bottoms from about 475 to 1,800 ft.

## Worm Pipefish - Penetopteryx nanus (Rosén, 1911)

FEATURES: Head and body covered in very narrow, close-set, and alternating reddish brown and whitish bars. Bars on head wider than those on body. Snout very short, thick, and upturned. Pectoral, dorsal, anal, and pelvic fins absent. To 1.25 in. HABITAT: Bahamas, Belize, and off Nicaragua. Demersal over shallow-water, dead coral bottoms.

# Yucatan Pipefish - Syngnathus makaxi Herald & Dawson, 1972

FEATURES: Described as tan and mottled with upper or entire body with 12–13 pale and dark bars. Sides of head mottled or plain. Snout blotched or barred ventrally. Snout moderately long. Trunk rings number 14–15. To 2.75 in. HABITAT: Yucatán Peninsula from Celestron to Quintana Roo. Demersal over shallow-water seagrass and algal beds.

# Bull Pipefish - Syngnathus springeri Herald, 1942

FEATURES: Tannish with about 12 brownish saddles or bars that are wider than or equal to pale interspaces. Snout with a dark strip on both sides. Lower sides with a series of diffuse dark blotches. Snout long and slender. Trunk rings number 22–24. To 15 in. HABITAT: NC to northern Gulf of Mexico, and Bahamas. Occur over sandy and shelly bottoms from estuaries, to marine waters, and in *Sargassum* weed, from surface to about 420 ft.

## Helena Scorpionfish - Pontinus helena Eschmeyer, 1965

FEATURES: Reddish dorsally; yellowish below. Head and body with a few, small dark specks. Ridge under eyes with three to four spines. Bone above and before mouth with two downward-facing spines. Preopercle with a long, pointed spine. Spiny dorsal fin tall, third spine tallest. Pectoral fins with inner ray longest. To 10 in. HABITAT: Venezuela to Suriname. Demersal over rocky and shelly bottoms from about 250 to 1,440 ft.

# Appendix

### Smoothhead Scorpionfish - Scorpaena calcarata Goode & Bean, 1882

FEATURES: Shades of red to purplish red dorsally; creamy to yellowish below. Pectoral fin red with small whitish spots on rays. Dorsal, caudal, and anal fins irregularly banded. Small cirrus over each eye. Ridge under eyes with three spines. Pit behind eyes absent. Preopercle with at least four spines, uppermost largest. To 6.3 in. HABITAT: NC to FL; Gulf of Mexico and Caribbean Sea to Brazil. Demersal over muddy bottoms from near shore to about 700 ft.

### Dwarf Scorpionfish - Scorpaena elachys Eschmeyer, 1965

FEATURES: Described as red with a network of pale and dark lines under dorsal fin. Dusky between and under eyes. Gill chamber blackish. Pectoral fins yellow on inner surface. Anal fin red anteriorly and posteriorly, speckled at center. Snout very short. Bony ridge under eyes smooth with one spine at preopercular margin. Shallow pit behind eyes. Body deep. To 2.5 in. HABITAT: FL Keys, and scattered in Gulf of Mexico and Caribbean Sea. Demersal over rocky and shelly bottoms from about 120 to 330 ft.

#### Caribbean Searobin - Bellator ribeiroi Miller, 1965

FEATURES: Described as reddish brown on upper third of head and body with four or five dark spots on sides. Spiny dorsal fin brownish with a dark spot between fourth and fifth spines. Second dorsal fin with three yellow stripes. Caudal fin with four yellow stripes on upper lobe, red on lower lobe. Snout with spiny projections. Large spines on preopercle, opercle, and above pectoral-fin base. First dorsal-fin spine long and filamentous in males. To 6.3 in. HABITAT: Honduras to Brazil. Demersal over sandy and muddy bottoms from about 130 to 230 ft.

### Barred Searobin - Prionotus martis Ginsburg, 1950

FEATURES: Described as grayish brown and often with three or four oblique, dark saddles. Spiny dorsal fin with dark spots on first and third membranes. Pectoral fins mottled. Upper caudal-fin lobe spotted. Preopercular spine reaches past opercular margin. Pectoral fin reach past anal-fin origin. To 7 in. HABITAT: Gulf of Mexico from FL to Yucatán Peninsula. Demersal over sandy mud bottoms from about 36 to 360 ft.

## Dusky Basslet - Lipogramma anabantoides Böhlke, 1960

FEATURES: Head bright rosy red; body brownish orange. Dorsal, caudal, and anal fins with black outer margins and yellow inner margins. Small black spot on anterior dorsal fin; large black ocellated spot on posterior dorsal fin. Pelvic fins blackish with small yellow spots, long and trailing. To 1 in. HABITAT: FL Keys, northern Gulf of Mexico, Bahamas, and northern Caribbean Sea. Occur over live bottoms and deep reefs from about 36 to 290 ft.

## Rosy Basslet - Lipogramma rosea Gilbert, 1979

FEATURES: Described as rosy on head and body with a yellow line from tip of snout to dorsal-fin origin. Also described as yellow on head and body. Dorsal and anal fins red with pale spots. Caudal fin yellow with dark spots that form a central bar. Pelvic fins long and pointed. To 5 in. HABITAT: Bahamas, Puerto Rico, and around Providencia, Nicaragua. Occur over coral reefs from about 16 to 295 ft.

### Largescale Jawfish - Opistognathus megalepis Smith-Vaniz, 1972

FEATURES: Described as yellow on head, body, and fins with a pale greenish brown tinge. Anterior dorsal fin brown; rear margin brown. Posterior portions of caudal and anal fins brown. Snout very blunt and steep. Head large and bulbous. Eyes large. Maxilla long with a straight rear margin. Caudal fin short and rounded. To 2.2 in. HABITAT: Bahamas, off NE Yucatán Peninsula, and around Islas los Testigos, Venezuela. Demersal over soft and rubble bottoms of outer slopes from about 260 to 1,000 ft.

### Bermuda Tilefish - Caulolatilus bermudensis Dooley, 1981

FEATURES: Head and body bluish gray with about 20 narrow and wavy yellowish bars on sides. Irises white with a dark vertical bar. Dorsal fin bluish gray with yellow posteriorly. Anal fin translucent yellow with a white margin. Caudal fin mostly yellow. To 16 in. HABITAT: Bermuda. Demersal over rubble bottoms from about 885 to 1,350 ft.

## Reticulated Tilefish - Caulolatilus guppyi Beebe & Tee-Van, 1937

FEATURES: Silvery gray with numerous wavy brown reticulations on sides. Dark bar below eyes. Black ridge on nape. Small dark spot present above pectoral-fin base. Dorsal fin dark along base with a pale inner band. Anal fin pearly white. To 14 in. HABITAT: Eastern Colombia to Suriname. Demersal over semi-hard, shell, and sand bottoms from about 135 to 560 ft.

#### Anchor Tilefish - Caulolatilus intermedius Howell Rivero, 1936

FEATURES: Pale violet brown dorsally. White below. Black bar runs from jaws, around eyes, and up to black predorsal ridge. Black spot above pectoral-fin base. Dorsal fin with a series of dark blotches that form an irregular band. To 12 in. HABITAT: Gulf of Mexico from NW FL to Yucatán. Also NW Cuba. Demersal over muddy bottoms at edges of continental shelves from about 148 to 950 ft.

# Blueline Tilefish - Caulolatilus microps Goode & Bean, 1878

FEATURES: Dark brownish gray to gray dorsally; buff white below. Dusky yellow streak from tip of snout to eyes, underlined by a bright blue streak. Irises golden. Predorsal ridge black. Dorsal fin with yellowish margin. Anal fin with dusky inner margin. Caudal fin rays yellowish at base. To 12 in. HABITAT: VA to FL and Gulf of Mexico to Bay of Campeche. Demersal over mud and rubble bottoms from about 100 to 775 ft.

### Fanfish - Pteraclis carolinus Valenciennes, 1833

FEATURES: Head and body bronze gray with a silvery sheen. Fins blackish with a bluish sheen. Head rounded in profile, extends over front of jaws. Body tapers to peduncle. Scales rhomboid-shaped. Dorsal and anal fins greatly expanded and sail-like, depress into a scaled sheath. To 17 in. HABITAT: Bermuda to Brazil. Occur in pelagic, offshore waters in both sides of the Atlantic. Found from surface to about 1,300 ft.

# Appendix

### Black Pomfret - Taractes rubescens (Jordan & Evermann, 1887)

FEATURES: Head, body, and fins blackish with a silvery luster. Middle caudal-fin and lower pectoral-fin margins translucent. Lower jaw protrudes. Dorsal- and anal-fin lobes scaled, stiff, long, and pointed. Caudal fin crescent-shaped. Body deep, somewhat compressed. Scales rhomboid-shaped with posterior scales keeled. To 2.6 ft. HABITAT: Scattered circumglobally. In western Atlantic from northern and central Gulf of Mexico and southern Lesser Antilles. Oceanic and pelagic from near surface to about 2,000 ft. Usually in midwater.

### Campeche Porgy - Calamus campechanus Randall & Caldwell, 1966

FEATURES: Silvery with seven dark bars on sides. Snout with numerous narrow, wavy, and horizontal blue and yellow lines. Head profile uniformly convex and rounded, with snout at a 60° to 68° angle with midline. Body profile oval and deep. To 8.3 in. HABITAT: Campeche Bank, Mexico. Also reported from Nicaragua. Occur near bottom over sand from about 33 to 60 ft.

# Spotfin Porgy - Calamus cervigoni Randall & Caldwell, 1966

FEATURES: Silvery with a yellowish brown sheen dorsally. A dark bar present under eyes and several faint bars present on nape. A black blotch present on dorsal fin between the tenth spine and second ray. May also display oblique bars and irregular spots on sides. Snout steep. Head profile angled over eyes. Body deep, rounded in profile. To 7.8 in. HABITAT: Colombia to Venezuela. Bottom-dwelling over muddy bottoms from about 33 to 295 ft.

### Atlantic Threadfin - Polydactylus octonemus (Girard, 1858)

FEATURES: Pale silvery olive or silvery yellow to dusky silver dorsally; whitish below. Dorsal, caudal, and anal fins with blackish margins. Pectoral fins black. Lower eight (sometimes nine) pectoral-fin rays separate, long, and filamentous. To 9 in. HABITAT: NY to FL, and Gulf of Mexico to Campeche Bank. Occur over sandy mud bottoms of bays, estuaries, and river mouths and along beaches from near shore to about 216 ft.

# Redeye Parrotfish - Sparisoma axillare (Steindachner, 1878)

FEATURES: Initial phase shades of mottled pale gray to pinkish gray with large and small patches of yellow on sides. Terminal phase dusky reddish orange dorsally and on sides; pale under head and on abdomen; dorsal, anal, and pectoral fins yellowish; black spot at pectoral-fin base; upper and lower caudal-fin lobes blackish. To 17 in. HABITAT: Primarily along the coast of Brazil. Also recorded from Isla Margarita, Venezuela, and Trinidad and Tobago. Occur over rocks and reefs to about 177 ft.

# Yellow Triplefin - Enneanectes flavus Victor, 2019

FEATURES: Translucent with four oblique blackish bars on sides that become darker and closer together posteriorly; interspaces with a wash of yellow. Dark bars extend onto anal fin. Caudal peduncle with a large black blotch followed by a red blotch on caudal-fin base. Snout very steep and short. First dorsal fin short, not usually reaching second dorsal fin when depressed. To 1 in. HABITAT: Aruba to Saint Vincent. Demersal in crevices and under ledges of shallow-water rocky and coral reefs.

#### Squaretail Triplefin - Enneanectes quadra Victor, 2017

FEATURES: Translucent with oblique brownish bands on body. Red bar below eyes. Head with red spots. Large and nearly square black blotch on caudal peduncle. Caudal fin unmarked. Anal fin with six to eight dark bars. Single cirrus over eyes longer than wide. To 1.5 in. HABITAT: Bahamas and Puerto Rico to Virgin Islands, and Belize to Honduras. Demersal over coral and rocky ledges in sheltered shallow-water habitats.

#### Windward Triplefin - Enneanectes wilki Victor, 2013

FEATURES: Translucent with five oblique reddish black bars on sides that may be faint to dark anteriorly. Large black blotch on caudal peduncle. Some yellow on interspaces between last bar and black blotch. Anal fin with four to six dark blotches. Caudal fin red at base and with two or more reddish bars. Snout very short and steep. Single cirrus over eyes short and blunt. First dorsal fin short. To 0.8 in. HABITAT: Lesser Antilles. Demersal over corals from near surface to about 36 ft.

#### Ragged Goby - Bollmannia communis Ginsburg, 1942

FEATURES: Yellowish brown with about five vague blotches on sides. Irises dark. First dorsal fin with a large black blotch. Yellow orange ocellated spots on dorsal fins and upper caudal fin. Second dorsal fin with 12–14 rays. Anal fin with 13 rays. To 4 in. HABITAT: Gulf of Mexico from FL to Bay of Campeche. Demersal over muddy bottoms from about 30 to 280 ft.

#### Shelf Goby - Bollmannia eigenmanni (Garman, 1986)

FEATURES: Translucent with about five yellowish blotches along sides and back. Upper jaws dark. Irises golden. Spiny dorsal fin yellowish with a black blotch between fourth and sixth spines. Dark spot on caudal-fin base. Second dorsal fin with 11 rays. Anal fin with 10–12 rays. To 4 in. HABITAT: NE Gulf of Mexico and from Colombia to Venezuela. Demersal over muddy bottoms from about 120 to 660 ft.

### Citrine Goby - Bollmannia litura Ginsburg, 1935

FEATURES: Translucent yellowish with about five faint brownish blotches on sides. Sides of head with irregular reddish orange blotches and bands. Small blackish blotch on spiny dorsal-fin base. Dorsal and caudal fins with orange red ocellated spots. Pelvic and anal fins dark. Soft dorsal fin with 11–12 rays. Anal fin with 11–12 rays. To 2.7 in. HABITAT: Hispaniola and southern Caribbean Sea to Brazil. Demersal over soft bottoms from about 100 to 230 ft.

### Blunt-snout Goby - Carrigobius amblyrhynchus Smith & Baldwin, 1999

FEATURES: Described as yellowish brown with about seven irregular dusky blotches on sides. Diffuse dark spot below eyes. Oblique dark bar from just behind opercle to pectoral-fin base. About 16 diffuse dark saddles along back. Caudal fin with three oblique bars. Snout very short and blunt. Soft dorsal fin with 10–11 rays. Anal fin with 8–11 rays. Pelvic fins separate. HABITAT: Known only from off the coast of Belize. Demersal over sandy patches of turtle-grass beds and on spur-and-groove areas of reefs.

# **Appendix**

### Roosevelt's Goby - Chriolepis roosevelti (Ginsburg, 1939)

FEATURES: Described as tannish with dark speckles and about seven broken brownish bars on sides that extend onto dorsal fins. Dark bar on caudal-fin base. Cheeks with a reddish wash. Dorsal fins banded. Caudal fin yellowish with a dark margin. Second dorsal fin with nine rays. Anal fin with eight rays. To 1 in. HABITAT: Scattered in the Caribbean Sea. Demersal over sandy, rocky, and broken coral bottoms from shore to about 65 ft.

### Yellow-spotted Sand Goby - Coryphopterus curasub Baldwin & Robertson, 2015

FEATURES: Translucent with four rows of pale orange spots on sides. Spots surrounded with blackish flecks. Pale orange and blue stripes below and behind eyes. Dorsal fins with three yellow orange stripes. Two yellow orange spots at pectoral-fin base. Soft dorsal fin with 10 rays. Anal fin with nine rays. Pelvic fins fused into a disk. To 1.6 in. HABITAT: Known only from Curação. Demersal over sandy patches between areas of coral from about 230 to 320 ft.

## Mexican Goby - Ctenogobius claytoni (Meek, 1902)

FEATURES: Generally pale with a bar from lower eye to upper jaw. Nape with four narrow dark bars. Upper sides with five irregular, narrow bars. Male caudal fin dusky on lower portion with a pale inner stripe; dark pelvic fins; elongate third dorsal-fin spine. Female pelvic fins striped. To 3 in. HABITAT: Southwest Gulf of Mexico from TX border to N Yucatán Peninsula. Demersal over sandy and gravely bottoms from freshwater streams to estuaries.

### Jarocho Goby - Elacatinus jarocho Taylor & Akins, 2007

FEATURES: Translucent pale blue with a broad blue stripe above a black stripe that runs from head to peduncle. Snout with an oval yellow spot. Tops of eyes yellow followed by a short yellow stripe. Caudal-fin base with a yellow bar above a large black blotch. To 1.4 in. HABITAT: Scattered in SW Gulf of Mexico. Occur in water column in aggregations of 16–20 over high-profile coral reefs and overhangs to about 80 ft.

## Slaty Goby - Elacatinus tenox (Böhlke & Robins, 1968)

FEATURES: Uniformly bluish gray to purplish gray on body and fins. Snout with a narrow yellowish bar. Tops of eyes with some yellow followed by a moderately long and narrow yellow stripe that extends to over pectoral fins. Soft dorsal fin with 11 rays. Anal fin with nine rays. To 1 in. HABITAT: Eastern Caribbean Sea. Also off Panama. Demersal inside tube sponges from about 50 to 230 ft.

## Tenant Goby - Evermannichthys convictor Metzelaar, 1919

FEATURES: Described as tannish to reddish with numerous small, dark spots and dots on head and body. Spots more dense on top of head. Dorsal and anal fins colorless with speckles along margins. Snout very short and blunt. Body elongate. Soft dorsal fin with 11–12 rays. Anal fin with 9–10 rays. To 0.7 in. HABITAT: Green Cay, Bahamas, and Jamaica. Demersal inside sponges from about 40 to 210 ft.

#### Naked Goby - Gobiosoma bosc (Lacepede, 1800)

FEATURES: Shades of tan to gray with 9–11 broad, dark bars on body that extend onto lower dorsal fins. Width between bars vary. Head mottled. May also be overall very dark. Head depressed and somewhat laterally expanded. Body entirely scaleless. To 3 in. HABITAT: MA to FL, and in Gulf of Mexico from FL to Campeche. Demersal over oyster beds, grass beds, and rocky bottoms and in marsh pools and around sea squirts to about 30 ft.

### Bermuda Goby - Lythrypnus mowbrayi (Bean, 1906)

FEATURES: Described as pale with wide dark bars that lack pale central bars. Cheeks with two to four narrow bars that become spots radiating from eyes. Pectoral-fin base with a very large dark spot. Scales with dark margins. Soft dorsal fin with eight to nine rays. Anal fin with seven to nine rays. To 1 in. HABITAT: Bermuda. Demersal at bases of patch reefs and coral-encrusted boulders with undercuts to about 180 ft.

# Ember Goby - Palatogobius incendius Tornabene et al., 2017

FEATURES: Translucent with a pinkish red on sides of head and abdomen. Spinal column yellow with a black stripe above and reddish stripe below. Dorsal fins translucent with red on tips of spines and rays. Caudal fin with a yellow to red central stripe. Eyes large. Caudal fin with a pointed central tip. To 1 in. HABITAT: Windward Islands, Curaçao, and Bonaire, and off N Honduras. Near bottoms and in water column from about 290 to 670 ft. Form large schools.

### Mauve Goby - Palatogobius paradoxus (Lacepede, 1800)

FEATURES: Translucent peach with a solid to broken iridescent bluish green stripe on sides. Irises golden at center, iridescent blue above and below. Dorsal and anal fins with yellowish rays and blue margins. Caudal fin edged with blue. Caudal fin deeply forked. To 1.4 in. HABITAT: Dominican Republic to US Virgin Islands, Panama, and off Venezuela. Demersal over sand and coral rubble from about 65 to 435 ft. Usually below 200 ft.

## Peppered Goby - Pariah scotius Böhlke, 1969

FEATURES: Described as overall dark with dense, small dark spots. Fins pale with tiny speckles. Snout short and blunt. Mouth large and oblique. Head long. A few rough scales present on caudal peduncle. Soft dorsal fin with 10–11 rays. Anal fin with seven to eight rays. HABITAT: Bahamas and Jamaica to Haiti. Demersal inside sponges from about 36 to 100 ft.

# Longtail Goby - Parrella macropteryx Ginsburg, 1939

FEATURES: Tannish with about five diffuse internal spots, dark flecks along midline, and dark cross-hatching dorsally. Dark spot on upper caudal-fin base. Fins dark. Snout short and rounded. Mouth large and oblique. Soft dorsal fin with 9–12 rays. Anal fin with 12 rays. To 2.4 in. HABITAT: West Cuba, Puerto Rico, and Panama to Colombia. Demersal over muddy and sandy bottoms and around detritus and small rocks from about 60 to 150 ft.

# Appendix

#### Boehlke's Goby - Psilotris boehlkei Greenfield, 1993

FEATURES: Translucent cream with diffuse dark bars on spinal column. A brownish wedge-shaped mark under eyes. A narrow dark stripe behind eyes. Caudal fin with a dark margin. Anal fin with a dark inner band. Soft dorsal fin with 9–10 rays. Anal fin with nine rays. To 1.3 in. HABITAT: Northern Lesser Antilles. Demersal over bottoms with rocks, sponges, and coral and on seagrass beds. From shore to about 65 ft.

#### Thin-barred Goby - Psilotris laurae Van Tassell & Tornabene, 2016

FEATURES: Semi-translucent whitish with six narrow brownish yellow bars on sides that extend onto fins. Narrow brownish yellow bands radiate from eyes. Soft dorsal and caudal fins banded. Pectoral fins yellowish above, white below. Soft dorsal fin with nine rays. Anal fin with eight rays. To 1.4 in. HABITAT: Known only from Curaçao and Bonaire. Demersal over rubble bottoms from about 375 to 820 ft.

## Panamanian Goby - Tigrigobius panamensis Victor, 2010

FEATURES: Head pale tan with a broad reddish to brownish stripe from mouth, through eyes, to above pectoral fin where it merges with a blackish blotch. Body dark green with 16–23 narrow pale green bars circling body. Soft dorsal fin with 10 rays. Anal fin with nine rays. To 1 in. HABITAT: Known only from Panama. Demersal over shallow-water coral reefs among sea urchin spines.

#### Puffed Cheek Goby - Varicus bucca Robins & Boehlke, 1961

FEATURES: Described as pale on head with scattered melanophores on cheeks. Body dusky above, pale below with melanophores on scale margins. Dorsal fins with two or three spots on spines and rays. Soft dorsal fin with nine rays. Anal fin with seven to eight rays. To 1.7 in. HABITAT: Bahamas and northern and southern Caribbean Sea. Demersal over coral sand from about 45 to 900 ft.

### Blue Dartfish - Ptereleotris calliura (Jordan & Gilbert, 1882)

FEATURES: Pearly bluish gray to pearly lavender. Blue line from snout to dorsal-fin origin and behind eyes to opercle. Outer dorsal-fin margin black, inner margin blue or red. Upper caudal-fin margin may be blackish, blue, or red. Caudal fin long and pointed. To 5 in. HABITAT: NC to FL, and Gulf of Mexico to Yucatán Peninsula. Also SE Cuba. Occur over shelly rubble and sand around coral reefs to about 270 ft.

## Bluestripe Dartfish - Ptereleotris randalli Gasparini, Rocha & Floeter, 2001

FEATURES: Pearly lavender with a bright blue line from snout to dorsal-fin origin and from behind eyes to opercular margin. Dorsal, caudal, and anal fins with narrow bright blue outer margins and reddish inner margins. Caudal fin bluntly rounded. To 5 in. HABITAT: Southeastern Caribbean Sea to Brazil. Occur over sandy bottoms near reefs from about 26 to 213 ft.

## Driftfish - Cubiceps gracilis (Lowe, 1843)

FEATURES: Body and fins brown to bluish blackish. Head and tip of snout scaled. Eyes very large. Pectoral fins long, wing-like; base at about 45° angle. Pelvic-fin origin behind pectoral-fin base. Second dorsal fin with 21–24 rays. To 2.5 ft. HABITAT: Temperate to subtropical western Atlantic including Bermuda and NE Antilles. Also northern Gulf of Mexico. Pelagic and oceanic from surface to about 330 ft.

#### Banded Driftfish - Psenes arafurensis Günther 1889

FEATURES: Adults described as blackish. Smaller specimens described as mottled or banded with dark pelvic fins. Dorsal profile of head moderately elevated. Snout is short. Upper jaw extends to middle of eyes. First dorsal fin with 10–11 spines. Second dorsal fin with one to two spines and 19–21 rays. Body deep. Caudal peduncle slender. Caudal fin forked. To 9.8 in. HABITAT: Nova Scotia to northern South America. Also northern Gulf of Mexico. Pelagic and oceanic. Associated with jellyfishes.

### Fringed Sole - Gymnachirus texae (Gunter, 1936)

FEATURES: Eyed side brown to pale tan with 25–49 widely spaced brown to blackish bars. Caudal fin with three to six whole or broken bars. Blind side pale creamy white. Juveniles may be dark with no bars. Dermal folds and fimbriae on blind side of head. Dermal cirri present on upper eyed-side interspaces. Pectoral fin on eyed side rudimentary, occasionally hidden. Body scaleless. HABITAT: Gulf of Mexico from NW FL to Campeche Bank. Bottom-dwelling over muddy bottoms from about 56 to 610 ft.

# Hogchoker - Trinectes maculatus (Bloch & Schneider, 1801)

FEATURES: Color, pattern vary. Shades of brown with darker, wavy spots, blotches, and lines. Usually with seven to eight widely spaced dark bars that extend into fins. Blind side white to pale tan, occasionally blotched or spotted. Fimbriae present around mouth on eyed side and scattered on blind side of head and on eyed side. Pectoral fins absent. HAB-ITAT: Gulf of Maine to FL; Gulf of Mexico to Panama. In turbid inshore waters. Found in rivers, estuaries, and high-salinity coastal waters to about 195 ft.

## Plaincheek Pufferfish - Sphoeroides georgemilleri Shipp, 1972

FEATURES: Described as pale gray to pale brown with a few scattered, darker, and vague blotches dorsally. Pale below. Cheeks unmarked. Snout blunt. Body robust. Prickles present in a narrow strip from snout to above pectoral-fin tips, and prickles from chin to just before anus. Prickles absent from sides of head and sides of body. Skin flaps absent. To 4.7 in. HABITAT: Gulf of Darien to Barranquilla, Colombia. Found near bottom of soft bottoms from near shore to about 500 ft.

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