

## Anchoa hepsetus – ANCHOVIES

**Description:** snout length somewhat less than eye diameter; silver stripe on body narrow - width less than eye diameter or snout length throughout; back greenish; some yellowish about the head; melanophores outline all dorsal scales, especially those behind the dorsal fin; dorsal fin begins above a point well in front of anal fin, and ends above front rays of anal fin; 14 to 17 dorsal fin rays (usually 16), 15 to 18 pectoral fin rays (usually 16 to 17), and 20 to 24 anal fin rays (usually 21 to 23)

Size to 15 cm (6 in.)

## Anchoa mitchilli – ANCHOVIES

**Description:** body relatively deep; head short; snout very short, only slightly overhanging mouth; silvery stripe narrow, often faint or absent toward front; stripe fades after death; body grayish, with few melanophores above; dorsal fin far back - the only U.S. species in which that fin begins above or only very slightly in front of anal fin; 11 to 14 (usually 12 to 13) pectoral fin rays; 23 to 31 (usually 24 to 29) anal fin rays

Size: to 10 centimeters (4 inches)

Where found: in shallow bays and estuaries, but found in water up to 120 feet; common in brackish waters

### Pomatomus saltatrix – BLUEFISHES

**Description:** color blue or greenish blue on back, sides silvery; mouth large; teeth prominent, sharp, and compressed; dorsal and anal fins nearly the same size; scales small; lateral line almost straight

Similar fish: blue runner, C. crysos

Where found: young usually inshore spring and summer, moving offshore to join adults fall and winter; strong migration of northeast Atlantic stock to Florida east coast in winter

**Size:** most west coast catches under 3 pounds, much larger on east coast

**Remarks:** travels in large schools, following schools of baitfish; cannibalistic; all members of a given school about the same size; spawning occurs offshore in spring and summer

### Sphyraena barracuda – BARRACUDAS

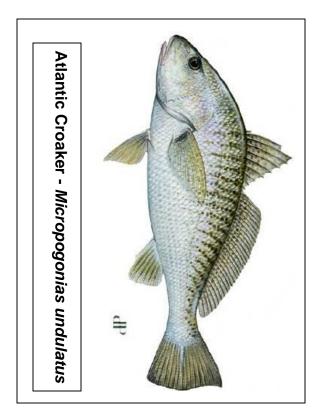
**Description:** gray, with greenish cast above, whitish below; many irregular small black blotches on lower side; 18 to 22 diagonal dark bars on upper side (not always evident); caudal fin dark with white tips; 75 to 87 lateral line scales; no fleshy tip on jaw

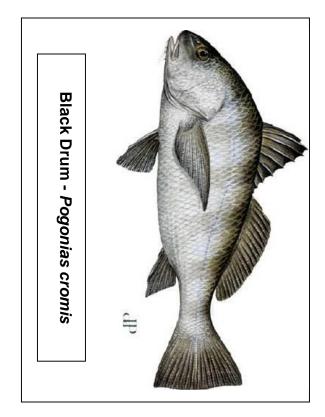
**Young:** dark stripe on side; stripe breaks into dark squarish blotches as fish grows

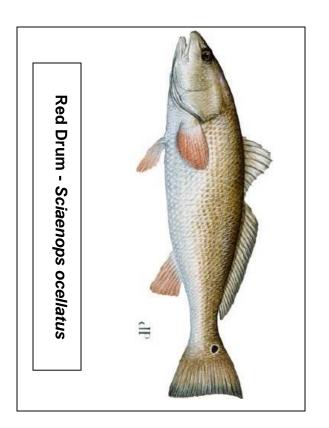
**Size:** to 6 ft and 106 lbs; reports of larger fish unverified

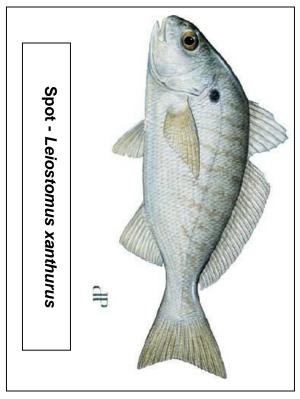
Where found: young live in inshore seagrass beds; adults range from inshore channels to open ocean

**Remarks:** flesh of smaller fish apparently not poisonous, but larger fish sometimes very toxic due to ciguatera; no safe, reliable way of recognizing toxic fish









## Pogonias cromis – DRUMS

**Description:** high arched back; 10 to 14 pairs of chin barbels; gray or black colored body in adults; young have 4 to 6 vertical bars; has cobblestone-like teeth capable of crushing oysters; scales large

**Similar fish:** red drum; the vertical bars on juvenile black drum are somewhat similar to those on sheepshead; and spadefish

Where found: inshore fish common to bays and lagoons; bottom dweller often found around oyster beds; also offshore

Size: common to 30 pounds

**Remarks:** largest member of the drum family; spawns nearshore in winter and early spring; feeds on oysters, mussels, crabs, shrimp, and occasionally fish; longevity to 35 or more years

## Micropogonias undulates – DRUMS

**Description:** inferior mouth; 3 to 5 pairs of small barbels on chin; silver-gray or bronze body with dark oblique wavy bars or lines; iridescent especially on head; preopercle strongly serrated

**Similar fish:** spot, *Leiostomus xanthurus* (no chin barbels with a dark blotch on shoulder)

Size: usually less than 2 pounds

Where found: generally found north of Tampa Bay on the west coast, and north of Cape Canaveral on the east coast; young fish found in estuaries; older fish (2 to 3 years) inhabit deep offshore waters during the winter months and move into bays and estuaries during the spring, summer, and fall

**Remarks:** during spawning becomes bronze or yellow in color; spawning apparently occurs offshore in fall; longevity 2 to 4 years

# Leiostomus xanthurus – DRUMS

**Description:** the only drum in our region with a distinctly forked caudal fin; bluish to brownish above; brassy on side; silvery to white below; distinct brownish spot on shoulder; 12 to 15 narrow, diagonal dark lines on upper body

Size: to 36 centimeter (14 inches)

Remarks: a popular pan fish

## Sciaenops ocellatus – DRUMS

Other local names: redfish

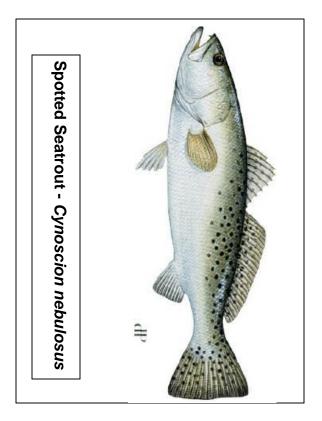
**Description:** chin without barbels; copper-bronze body, lighter shade in clear waters; one to many spots at base of tail (rarely no spots); mouth horizontal and opening downward; scales large

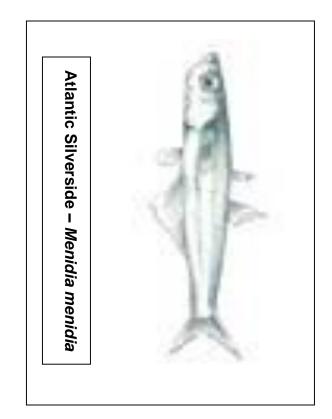
Similar fish: black drum, Pogonias cromis

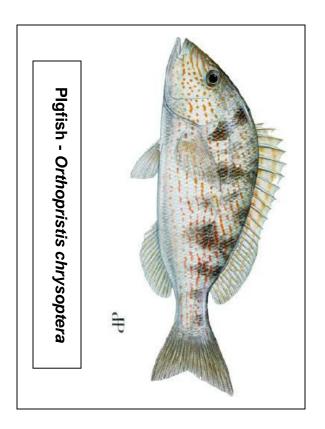
Where found: juveniles are inshore fish, migrating out of the estuaries at about 30" (4 years) to join the spawning population offshore

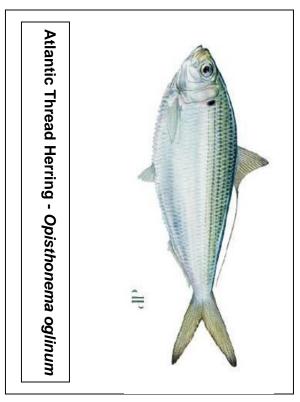
Size: common to 20 pounds

**Remarks:** spawning occurs from August to November in nearshore waters; feeds on crustaceans, fish, and mollusks; longevity to 20 years or more









# Descriptions

### Menidia menidia – SILVERSIDES

**Description:** Body firm and opaque, two dorsal fins, snout pointed, mouth small and oblique, silvery white ventrally, with bright silver mid lateral stripe, between 43 and 55 lateral scales, 23-25 anal fin rays.

Where found: Tidal creeks and grass flats in summer, deeper waters in winter. Spawns in intertidal or shallow estuarine waters.

Size: maximum 5 inches

## Cynoscion nebulosus – DRUMS

**Description:** dark gray or green above, with skyblue tinges shading to silvery and white below; numerous distinct round black spots on back, extending to the dorsal fins and tail; no barbels; no scales on the soft dorsal fin; one or two prominent canine teeth usually present at tip of upper jaw

Where found: inshore and/or nearshore over grass, sand, and sandy mud bottoms; move into slow-moving or still, deep waters in cold weather

Size: common to 4 pounds on west coast, larger on east coast

**Remarks:** matures during first or second year and spawns inshore from March through November, often in association with seagrass beds; lives mainly in estuaries and moves only short distances

### **Opisthonema oglinum – HERRINGS**

Other local names: gizzard shad

**Description:** back dark blue/gray, sides silvery, belly white; small head

Where found: in salt water from Cape Cod to Brazil, including Gulf of Mexico

Size: up to 16"

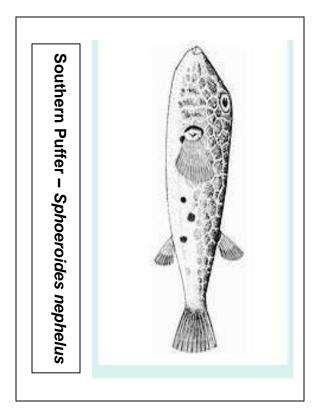
**Remarks:** has scales on ridge of back before dorsal fin

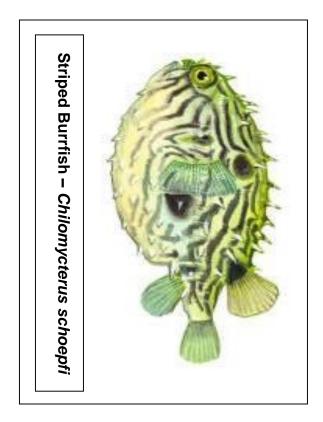
### Orthopristis chrysoptera – GRUNTS

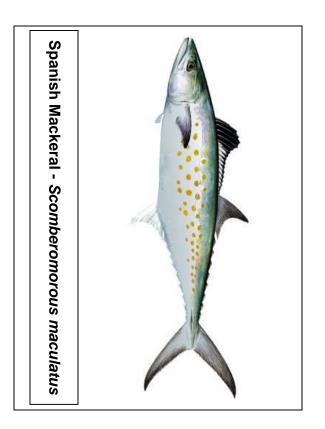
**Description:** gray, often with a bluish cast; many bronze to yellowish spots, dashes, and other small markings; mouth small, ending below front nostril

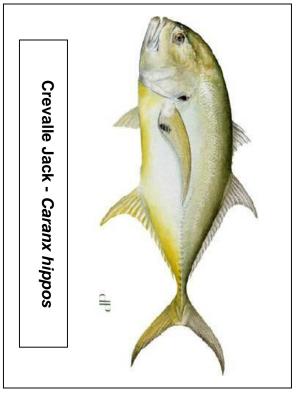
Size: to 38 centimeters (15 inches)

Where found: bay and banks; not on reefs in water less than 60 feet









## Chilomycterus schoepfi – PUFFERS

**Description:** Oval, broad, slightly depressed; covered with stout, 3-rooted, immovable spines. Back green to olive green or brownish; upper sides with irregular, oblique, narrow to wide, black or brown lines; lower sides whitish; belly whitish or golden yellow; dark blotches with light halos at dorsal and anal fin bases and above and behind pectoral fin base. 1 tooth in each jaw, fused to form parrot-like beak. Pectoral and caudal fins well developed; dorsal and anal fins short-based.

Where found: shallow sea-grass beds in summer; to depths of 225 feet (69 m) in winter.

Size: to 10 inches

## Sphoeroides nephelus – PUFFERS

**Description:** Brown body, paler below, adorned with a variety of darker and lighter spots and blotches and often pale tan rings and semicircles. Larger dark splotches along the lower sides are variable and dark slashes may occur on the lower cheek. Dark interorbital (between the eyes) bar and a distinctive dark spot at the axil of the pectoral fins. Mature, ripe males may be covered with small, bright red or orange spots.

**Similar fish:** Northern puffer, *S. maculatus*; these congeners are similar in appearance, although southern puffers lack the dark spots and diffuse gray bars characteristic of the northern puffer

Where found: benthic inhabitant of bays, estuaries, and protected waters to a depth of 11 m, and is frequently encountered in and around seagrass beds

Size: commonly reach a length of 20 cm

## Caranx hippos – JACKS

**Description:** color bluish-green to greenish-gold back and silvery or yellowish belly; soft dorsal and anal fins almost identical in size; prominent black spot on operculum (gill cover); black spot at the base of each pectoral fin; no scales on throat

Similar fish: other Caranx

Where found: common to both INSHORE waters and the open sea

Size: usually 3 to 5 pounds

**Remarks:** tolerates a wide range of salinities; schools corner a pod of baitfish at the surface and feed with commotion that can be seen for great distances; feeds mainly on small fish; peak spawning occurs offshore from March through September

## Scomberomorous maculates -MACKERELS

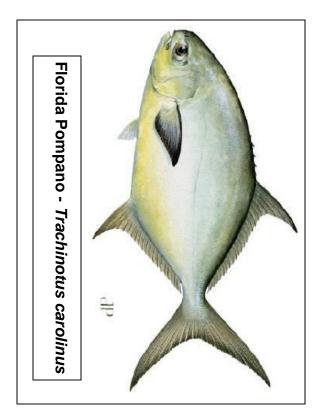
**Description:** color of back green, shading to silver on sides, golden yellow irregular spots above and below lateral line; front of dorsal fin black; lateral line curves gently to base of tail

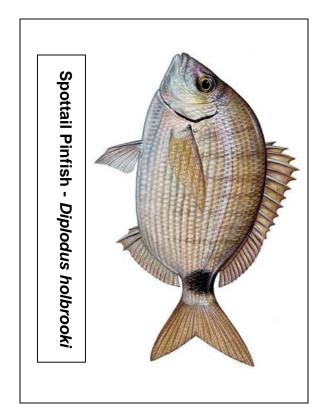
Similar Fish: cero, *S. regalis*; king mackerel, *S. cavalla* 

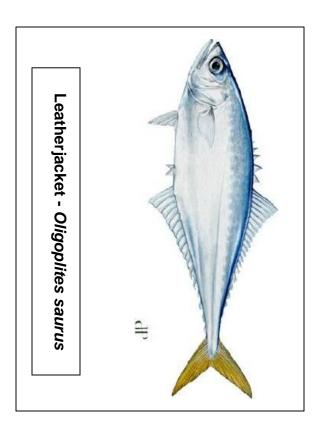
Where found: inshore, nearshore and offshore, especially over grass beds and reefs; absent from north Florida waters in winter

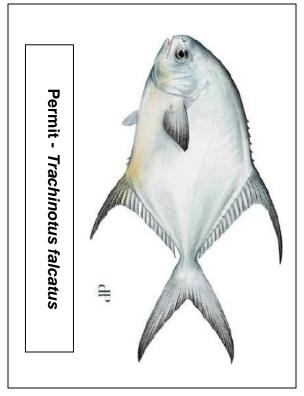
**Size:** average catch less than 2 pounds (20 inches)

**Remarks:** schooling fish that migrates northward in spring, returning to southerly waters when water temperature drops below 70 degrees F; spawns offshore, spring through summer; feeds on small fish and squid









## Diplodus holbrooki - PORGIES

**Description:** dark saddle on caudal peduncle sometimes forms a complete ring around peduncle in adults; eight faint bars on body, alternately long and short; more prominent in young; edge of opercular membrane blackish; pelvic and anal fins dusky brown, dorsal fin less dark

Size: to 46 centimeters (18 inches)

Where found: inshore seagrass beds, offshore rochs and reefs

## Trachinotus carolinus – JACKS

**Description:** greenish gray on back, shading to silvery sides; fish in dark waters showing yellow on throat, pelvic, and anal fins; deep flattened body with small mouth; no scutes; 22 to 27 soft dorsal rays; 20 to 23 soft anal rays; origin of anal fin slightly behind origin of second dorsal

**Similar fish:** permit; the permit is deeper bodied; dorsal body profile not strongly angled at insertion of second dorsal fin; pompano rarely grow larger than 6 pounds; permit common to 40 pounds

Where found: inshore and nearshore waters, especially along sandy beaches, along oyster bars, and over grassbeds, often in turbid water; may be found in water as deep as 130 feet

Size: usually less than 3 pounds

**Remarks:** spawns offshore between March and September

## Trachinotus falcatus – JACKS

**Description:** color gray, dark or iridescent blue above, shading to silvery sides, in dark water showing golden tints around breast; small permit have teeth on tongue (none on pompano); no scutes; dorsal fin insertion directly above that of the anal fin; 17 to 21 soft dorsal rays; 16 to 19 soft anal rays

**Similar fish:** Florida pompano, *T. carolinus*; the permit is deeper bodied; dorsal body profile forms angle at insertion of second dorsal fin; pompano rarely grow larger than 6 pounds; permit common to 40 pounds

Where found: offshore on wrecks and debris, inshore on grass flats, sand flats, and in channels; most abundant in south Florida, with smaller specimens from every coastal county

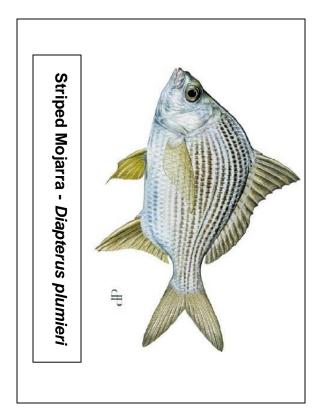
Size: common to 25 pounds

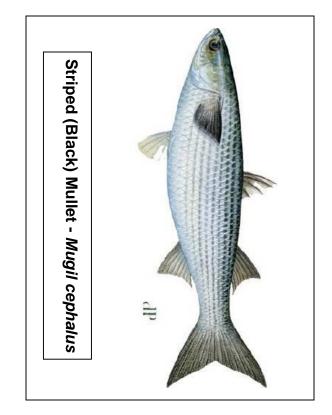
## Oligoplites saurus – JACKS

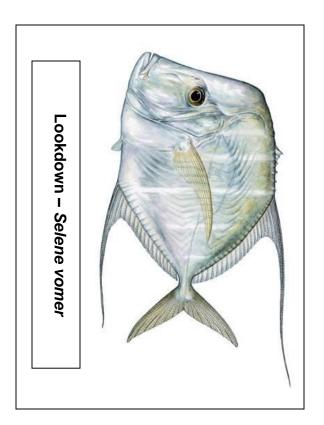
**Description:** body silvery, bluish above; fins yellow; rear parts of dorsal and anal fins consist of a series of finlets; spinous dorsal fin has 5 welldeveloped, unconnected spines; lateral line nearly straight; scales tiny, embedded; skin appears smooth

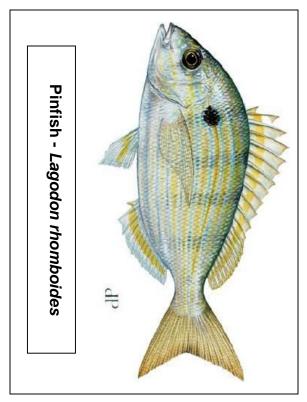
Size: to 30 centimeters (1 foot)

Where found: enters bays and estuaries, often in turbid water









## Mugil cephalus – MULLETS

**Description:** color bluish-gray or green above, shading to silver on sides, with indistinct horizontal black barrings, white below; fins lightly scaled at base, unscaled above; blunt nose and small mouth; second dorsal fin originiates behind that of the anal

**Similar fish:** white mullet, *M. curema*; fantail mullet *M. gyrans* (both white and fantail mullet have black blotch at base of pectoral fin, which is lacking in the black mullet)

### Where found: inshore

**Size:** roe mullet common to 3 pounds, but in aquariums known to reach 12 pounds or more

**Remarks:** adults migrate offshore in large schools to spawn; juveniles migrate inshore at about 1 inch in size, moving far up tidal creeks; frequent leapers

## Diapterus plumier – MOJARRAS

**Description:** body dark olive above; tan to silvery on side, often with a metallic sheen; conspicuous blackish stripe along center of each scale row, except toward belly; all fins except pectoral fins dusky in large adults; and anal fins sometimes dark orange; pelvic spine and first 2 anal spines pale; dorsal and anal spines long and stout; 3 anal spines

Size: to 30 centimeters (1 foot)

Where found: brackish and coastal fresh waters (in limestone regions), grassy areas

## Lagodon rhomboids – PORGIES

**Description:** small mouth with incisor-like teeth; distinctive black spot behind the gill cover; body bluish-silver with blue and orange-yellow horizontal stripes, yellow fins

Where found: seagrass beds, bridges, piers, marker pilings, and around natural and artificial reefs; spawn offshore

Size: usually less than 8 inches

Remarks: popular live bait, notorious bait stealers

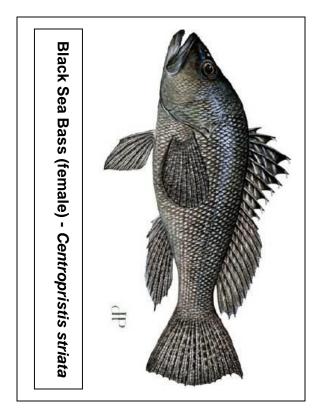
## Selene vomer - JACKS

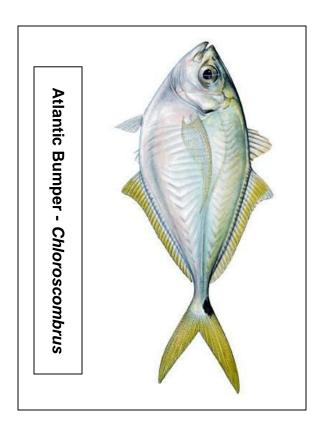
**Description:** silvery, iridescent, sometimes with brassy highlights; body extremely compressed and deep, platelike; front of head very steep; lobes at front of soft dorsal and anal fins very long; pelvic fins small; lateral line arched toward front

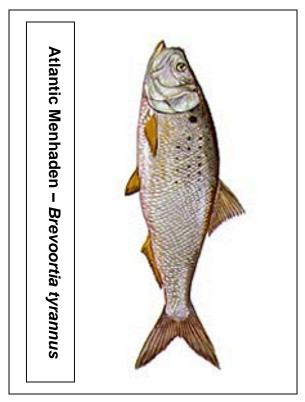
**Young:** spines at front of dorsal fin and rays in pelvic fin streamerlike

Size: to 30 centimeters (1 foot)









## Centropristis striata – GROUPERS

**Description:** basic color dark brown or black; dorsal fin has rows and stripes of white on black; large males have iridescent blue and ebony markings, and fatty hump in front of dorsal fin; females may have indistinct vertical barrings; topmost ray of caudal fin much elongated in adults; caudal may be tri-lobed; sharp spine near posterior margin of gill cover

Similar fish: bank sea bass, *C. ocyurus*; other *Centropristis* 

Where found: structure-loving fish, associated with reefs and rubble offshore; smaller specimens often found in INSHORE finger channels

Size: common to 1.5 pounds (13 inches)

## Archosargus probatocephalus – PORGIES

**Description:** basic silvery color, with 5 or 6 distinct vertical black bars on sides, not always the same; prominent teeth including incisors, molars, and rounded grinders; no barbels on lower jaw; strong and sharp spines on dorsal, anal fins

**Similar fish:** black drum; Atlantic spadefish, (black drum have barbels on lower jaw, sheepshead do not; vertical barring on sides of black drum and spadefish disappear as fish mature; spadefish have small, brush-like teeth)

Where found: inshore around oyster bars, seawalls and in tidal creeks; moves nearshore in late winter and early spring for spawning, gathering over rocks, artificial reefs, and around navigation markers

**Size:** inshore, 1 to 2 lbs; offshore, common to 8 lbs

## Brevoortia tyrannus - HERRINGS

**Description:** Oval, deep, compressed. Blue or green, sometimes bluish brown above; sides and belly silvery; distinct humeral spot often followed by several rows of smaller spots; fins yellowish. Head very large; mouth oblique; maxilla reaches posterior edge of eye. Pectoral fin slightly falcate, insertion near ventral profile of body; dorsal fin origin slightly behind pelvic fin insertion. Exposed edges of scales almost vertical, fringed.

Where found: at or near surface over continental shelf, near large estuaries.

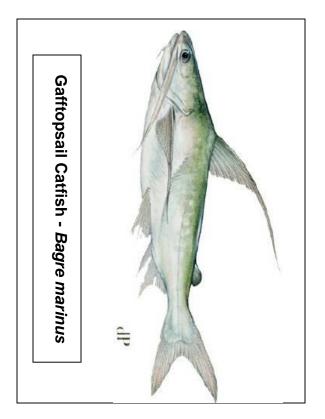
Size: to 18 inches

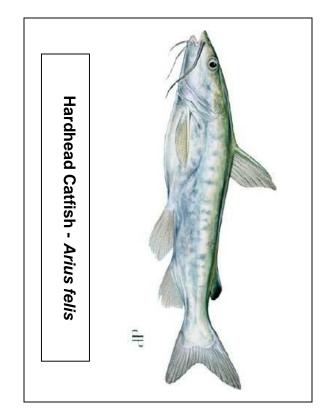
## Chloroscombrus chrysurus - JACKS

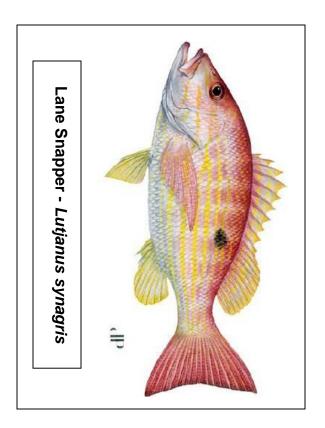
**Description:** silvery to golden below; yellowish anal and caudal fins; conspicuous black saddle on caudal peduncle and small black area at edge of opercle; lower profile more arched than upper profile; lateral line strongly arched toward front

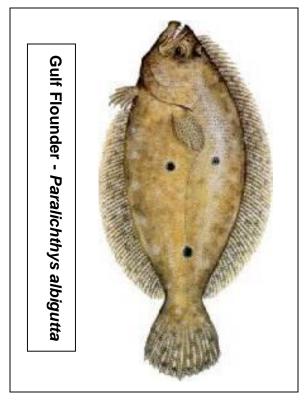
Size: to 30 centimeters (1 foot)

Where found: one of the most abundant inshore fishes in tropical America; commonly enters bays and estuaries









# Arius felis – CATFISHES

**Description:** brownish to gray-green; white to yellowish below; fin spines with no fleshy filaments; barbel at corner of mouth not very flattened and shorter than head; four barbels on chin

**Size:** to 60 centimeters (2 feet) and 5.5 kilograms (12 pounds) but usually much smaller

Where found: same as for gafftopsail catfish, usually much more common

**Remarks:** commonly caught from catwalks, bridges, and piers, particularly in passes and inland waterways; edible, but generally not eaten

# Bagre marinus – CATFISHES

**Description:** bluish above; silvery below; dorsal and pectoral fins with long, fleshy filaments on spines; barbel at corner of mouth flattened, bandlike, and very elongate, sometimes reaching anal fin; only 2 barbels on chin

**Size:** to 60 centimeters (2 feet) and 2.5 kilograms (5 to 6 pounds)

Where found: continental waters; enters brackish waters; usually less common than the hardhead catfish

**Remarks:** commonly caught by anglers along bridges, piers, and catwalks; a good food fish, but not much used

# Paralichthys albigutta - FLATFISH

**Description:** body color brown, its shade depending on color of bottom, with numerous spots and blotches; 3 prominent eye-like spots forming a triangle; one spot on lateral line, one above, one below; numerous white spots scattered over body and fins (albigutta, whitespotted); strong canine-like teeth; caudal fin in shape of wedge, its tip in the middle

**Similar Fish:** southern flounder, *P. lethostigma* (no eye-like spots; color pattern is key to distinguishing the two species)

Where found: inshore on sandy or mud bottoms, often ranging into tidal creeks; occasionally caught on nearshore rocky reefs

**Size:** common to 2 pounds, generally smaller than southern flounder

**Remarks:** hatches into usual fish form, but right eye migrates over to left side early in life; a bottom dweller; thought to spawn offshore

## Lutjanus synagris - SNAPPERS

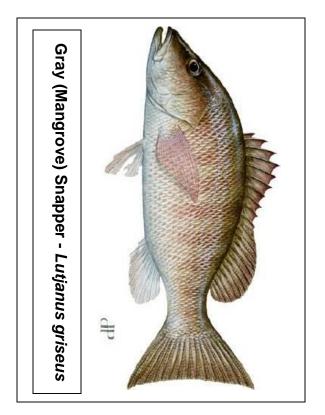
**Description:** color silvery-pink to reddish with short, irregular pink and yellow lines on its sides; diffuse black spot, about as large as the eye; the dorsal fin centered above the lateral line; outer margin of caudal fin blackish

**Similar fish:** mutton snapper, *L. analis* (anal fin rounded in lane snapper, pointed in mutton)

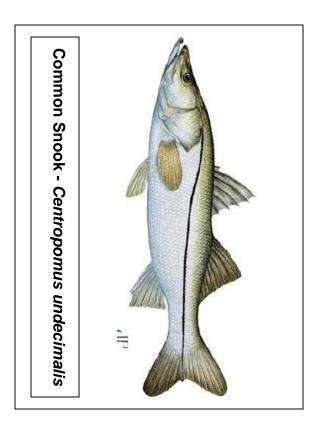
Where found: juveniles inshore over grass beds or shallow reefs; adults offshore; most common in south Florida.

Size: usually less than 1 pound

**Remarks:** spawns March to September, sexually mature at 6 inches; feeds on the bottom, taking crustaceans, mollusks, and fish









## Stephanolepis hispidus - FILEFISH

**Description:** Very deep, greatly compressed. Coloration varies with background: gray, tan, or brown, sometimes greenish, with irregular dark blotches or spots; caudal fin dusky yellow, other fins yellow. 6 outer teeth in each jaw; gill slits almost vertical; pelvic bone has prominent external spine, disappearing in large individuals. First dorsal fin spine strong; second dorsal fin with 29-35 rays, second ray forming long filament in adult males; 30-35 anal fin rays; caudal fin roughly rounded. Modified, bristle-like scales on sides of caudal peduncle. Surface of body velvet-like.

Where found: Over sand or mud around vegetation from near shore to open seas; usually in shallow waters, occasionally to depths of 265 feet

Size: to 9 inches

## Lutjanus griseus – SNAPPERS

**Description:** color dark brown or gray with reddish or orane spots in rows along the sides; dark horizontal band from snout through eye (young only); two conspicuous canine teeth at front of upper jaw; dorsal fins have dark or reddish borders; no spot on side underneath dorsal fin

Similar fish: cubera snapper, L. cyanopterus

Where found: juveniles inshore in tidal creeks, mangroves, and grass beds; adults generally nearshore or offshore on coral or rocky reefs

Size: offshore catches common to 10 pounds

**Remarks:** spawns June through August; feeds on crustaceans and small fish

## Anguilla rostrata – EELS

**Description:** Elongate, snake-like, circular in cross section anteriorly, compressed posteriorly. Coloration variable, depending on habitat and age: usually dark brown or greenish above, fading to yellowish white on belly. Head large, about oneeighth of length; mouth terminal, nearly horizontal; lower jaw projects slightly. Pectoral fin well developed; dorsal fin origin far behind pectoral fin; anal fin origin behind dorsal fin origin; dorsal and anal fins continuous with caudal fin. Scales small, elliptical, deeply embedded in skin.

Where found: Brackish or fresh waters; migrates to sea to spawn.

Size: to 4 feet 11 inches

### Centropomus undecimalis – SNOOKS

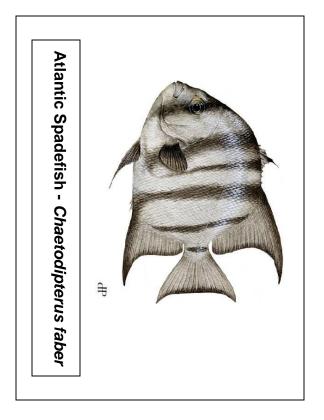
**Description:** distinct black lateral line; high,divided dorsal fin; sloping forehead; large mouth, protruding lower jaw; grows much larger than other snooks; pelvic fin yellow

Similar fish: other Centropomus

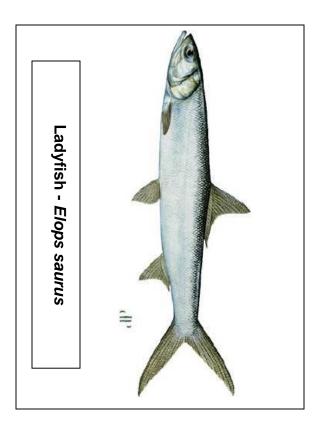
Where found: from central Florida south, usually INSHORE in coastal and brackish waters, along mangrove shorelines, seawalls, and bridges; also on reefs and pilings

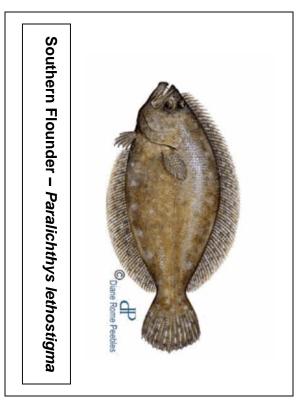
Size: most catches 5 to 8 pounds

**Remarks:** spawns primarily in summer; cannot tolerate winter temperatures below 60 degrees Fahrenheit; can tolerate wholly fresh or saltwater; schools along shore and in passes during spawning season; feeds on fish and larger crustaceans









## Trichiurus lepturus - CUTLASSFISH

**Description:** Very elongate, ribbon-like, highly compressed; tail tapering to point. Silver, with light blue iridescence; dorsal fin yellowish gray. Mouth large, terminal; lower jaw projects beyond upper; teeth large, fang-like. No pelvic fins; dorsal fin long, with 135 rays, begins at nape, continues to near tip of tail; anal fin reduced to long series of very short, separate, inconspicuous spines; no finlets; no caudal fin. Unscaled. Lateral line near ventral profile.

Where found: Estuaries over mud or over continental shelf to depths of 1,150 feet

Size: to 5 feet

**Remarks:** The occurrence in shallow water of both Atlantic and Pacific Cutlassfishes is unusual, since other family members are confined to deep water.

## Chaetodipterus faber – SPADEFISHES

**Description:** silvery, with 4 to 6 black vertical bands on each side which sometimes become obscure in larger fish; deep, flattened body; separated first and second dorsal fins; concave caudal fin; anterior rays of second dorsal fin and anal fin elongated

**Similar fish:** no close resemblance, but frequently and mistakenly called angelfish

Where found: inshore and nearshore, around natural and artificial reefs, and especially near navigation markers in 15 to 20 feet of water

**Size:** most catches less than 2 pounds, known to reach 15 pounds

**Remarks:** spawns in spring and summer; travels in large schools; small juveniles almost totally black, known to drift on their sides and mimic floating debris

# Paralichthys lethostigma - FLATFISH

**Description:** Flat, oval, with long, wedge-shaped tail fin. Head small, pointed; lower jaw protrudes; eyes on left side of head. Dorsal color matches background: olive or sandy with diffuse, dark brown blotches and spots (but no ocelli, or eyespots); white below. Dorsal and anal fin bases long, continuous; 80-95 dorsal fin rays and 63-74 anal rays. Usually 9-10 gill rakers on lower limb of outer arch and 56-64 scales in straight part of lateral line.

Where found: Inshore shallows and nearby fresh waters over muddy bottoms, often in just a few inches of water.

Size: to 33 inches

**Remarks:** Larval form of this and other flatfishes swims upright and has each eye on opposite side of head. By adulthood the right eye has migrated to the left side of the head.

## Elops saurus – TARPONS

**Description:** terminal mouth; slender body; small scales; last dorsal ray not elonged; head small and pointer

Similar fish: juvenile tarpon, Megalops atlanticus

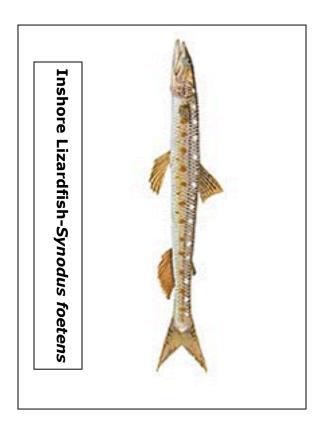
Where found: inshore fish, in bays and estuaries; occasionally enters freshwater, occurring in tidal pools and canals; often forms large schools and harasses bait at the surface

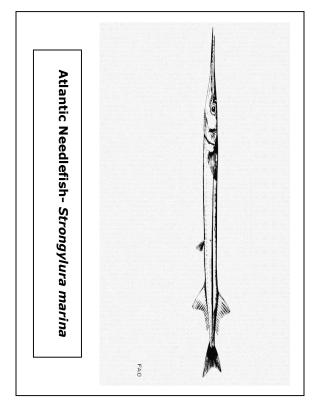
Size: 2 to 3 pounds

**Remarks:** known to spawn offshore; ribbon-like larvae very similar to *Albua* and *Megalops*, peaking in fall; adults feed predominantly on fish and crustaceans; leaps when hooked









## **Opsanus tao - TOADFISH**

**Description:** Robust, compressed. Olive brown above; belly paler, with pale bars or irregular blotches; paired fins pale; median fins dusky; complete pale bars across pectoral and caudal fins. Head large, depressed; mouth very large, wide; fleshy flaps on upper and lower lips; teeth strong, blunt. Pectoral fin broad at base, fan-like, with 19-20 rays, insertion posterior to pelvic fin; usually 25-26 dorsal fin rays; anal fin spineless, similar to dorsal fin but shorter; caudal fin rounded. Body unscaled.

Where found: Shallow waters with vegetation or among debris and man-made objects over sand or mud.

Size: to 15 inches

**Remarks:** Toadfishes have powerful jaws and should be handled with caution.

# Cyprinodon variegatus – SHEEPSHEAD MINNOW

**Description:** Silver, tubby bodies, one dorsal and one anal fin and no lateral line.

**Young**: Reaches sexual maturity at three months old. The eggs are adhesive and stick to plants, the bay bottom and to each other.

Where found: Can be found in both freshwater and saltwater environments. They prefer quiet, shallow waters and have been found in saltwater bays and estuaries, as well as coastal inland areas such as creeks, canals and ditches.

Size: 1.8 inches at maturity

**Remarks:** Can live in water so shallow that it may be the only species there. They can also survive in water that has been deprived of oxygen by gulping air at the water's surface.

## Strongylura marina – NEEDLEFISH

**Description:** Slender fish, they have a single dorsal fin, placed far back on the body, almost opposite to the teeth. The upper jaw only reaches full length in adulthood, so that the one juveniles have a half-beak appearance, with elongate lower jaw, but a notch smaller upper one. During this stage of their life cycle, they eat plankton, switching to fish one the beak fully develops.

Where found: Near the surface of the water, tropical waters.

Size: Range from 3 to 95 cm.

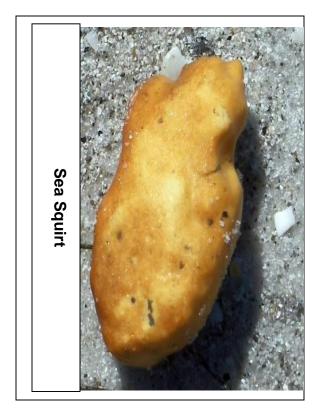
**Remarks:** can be harmful to humans because they propel themselves out of the water and with their elongated jaw they could penetrate skin inflicting deep puncture wounds. There are two known deaths from the needle fish.

# Synodus foetens - LIZARDFISH

**Description:** Elongate, cylindrical. Brownish or olive, with greenish cast above; about 8 diamondshaped marks on upper sides; whitish or yellowish below; light wavy lines on head; pectoral fin dusky, yellowish, or light green; dark spot on adipose fin. Head depressed; snout pointed; eye large, above midpoint of maxilla. Pelvic fin with inner rays much longer than outer rays; anal fin with 10-14 (usually 11-13) rays, base same length or longer than dorsal fin base. 4-6 rows of scales between lateral line and dorsal fin base. Lateral line complete, with 56-65 (usually 60-62) scales.

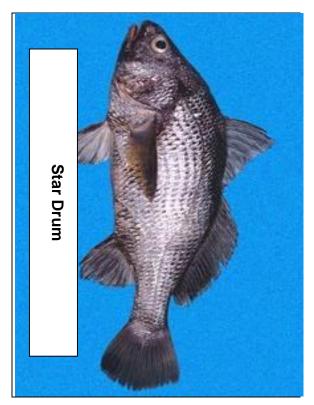
Where found: On bottom to depths of about 90' (27 m); usually near shore.

Size: to 18 inches









## Gobie strumosus- GOBIES

**Description:** Brownish to olive brown with mottled, net-like pattern dorsally. About six faint lines radiate from each eye. Always with dark band at caudal-fin base. Upper lip broad. Head broadly rounded and wider than body. Dorsal fin with 10-13 (usually 12) rays. Pelvic fins form large sucking disks.

Where found: NJ to FL, Gulf of Mexico, and possibly Bermuda

Size: Up to 3 inches

**Remarks:** Occur in rocky tide pools and over grassy areas in shallow waters.

## Ascidian – TUNICATES

**Description:** Primarily sessile, potato-shaped organisms. The body has an outer protective covering, the tunic, which contains a cellulose-like substance. Sea quirts have two large pores for feeding and gamete release.

**Where found:** Native to most of Europe, ranging from Norway to Portugal and the North American Atlantic.

Size: up to 3 inches in diameter

**Remarks:** Live by filtering tiny plankton (diatoms, protozoans, copepods, and larvae of various invertebrates). Found in mostly shallow water, usually attached to rocks, and artificial structures.

### Stellifer lanceolatus - DRUMS

**Description:** Silvery grayish to silvery olive dorsally. Fins dusky to pale. Spiny dorsal fin with dark margin. Snout bluntly rounded. Mouth moderately large, oblique. Doral fin notched.

Where found: Virginia to Florida, in Gulf of Mexico from Florida to Texas. Found in coastal waters over hard sandy mud bottoms from shore to about 65ft. Also in estuaries.

Size: Up to 8 inches

**Remarks:** Feed on small crustaceans. Common trawl bycatch. Other name American star drum.

### Labrisomus nuchipinnis- BLENNIES

**Description:** Diagonal transverse row of cirri on a fleshy base on upper posterior part of each side of head; with four irregular dark brown bars; pale edged black spot on opercula; often a dark spot at front of dorsal fin.

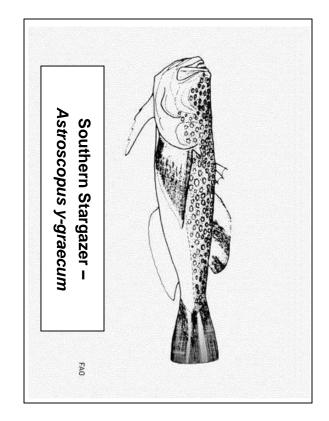
**Young:** Larvae are pelagic which eventually settle down at the bottle as juveniles.

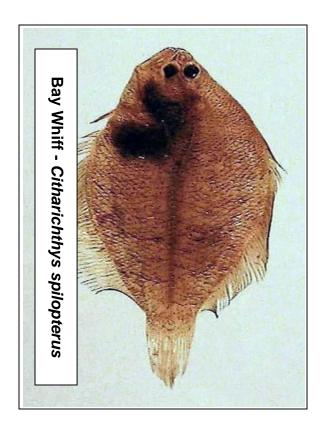
Where found: Bottom dwelling species which occur in rocky and rubble shores with algal mats, reefs, and seagrass beds. Generally at depths of a few cm. Usually seen resting in holes or crevices.

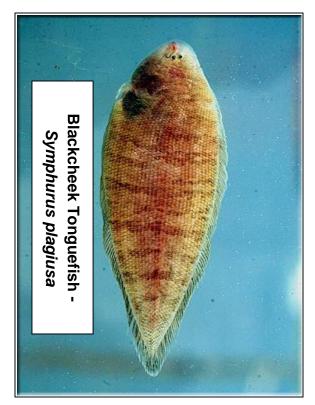
Size: 23cm max

**Remarks:** Adult males have red on lower part of head, chest and abdomen.









### Astroscopus y-graecum- STARGAZERS

**Description:** Brownish dorsally to about midline, whitish below. Dark portion does not form distinct stripe at caudal peduncle, small, dark-ridged white spots cover dorsal portion of body from lower jaw to caudal peduncle. Spots relatively uniform in size. First dorsal fin blackish, soft dorsal fin with one to three dark bands, pectoral fins dark, pale at the margins. Mouth broad, nearly vertical, head flattened dorsally. Eyes small, on top of the head. Body robust with small venomous spines above each pectoral fin.

**Where found:** North Carolina to Florida, Gulf of Mexico to Brazil.

Size: Up to 17.5 inches

**Remarks:** Found coastally over soft bottoms from near shore to about 230ft. They lie buried in the bottom sediment with only the top of the head exposed, they use electric organs to stun prey and feed on fishes.

## Prionotus tribulus- SEAROBINS

**Description:** Grayish brown dorsally with darker, oblique bars and pale flecks. Pale ventrally, first dorsal fin with dark blotches between fourth and fifth spines. Pectoral fin dark with irregular crossbars, caudal fin with single broad, dark bar.

**Where found:** New York to Florida, Gulf of Mexico to bay of Campeche.

Size: Up to 14 inches

**Remarks:** From shore to about 600ft, juveniles occur in estuaries. Feed on crustaceans, fishes, and worms. Spawn from fall to spring.

## Symphurus plagiusa- FLATFISHES

**Description:** Eyed side dark brown to dull tan, or whitish with a variable number of dark bars on head and body; bars may be absent. Dark blotch at upper opercle; may be absent in smaller specimens. Fins blotched; other described lacking spots or blotches on fins. Opercular cavity and throat region dark, visible from above. Body cavity un- pigmented. Blind-side uniformly white in adults. Snout short, rounded. Lower eye smaller than upper eye. Dorsal fin with 81-91 rays. Caudal fin usually with 10 rays.

Where found: New York to Florida Keys, Gulf of Mexico. Also Cuba and Bahamas.

Size: up to 9 inches

**Remarks:** Most common from Chesapeake Bay to Florida. Occur from shallow estuaries and tidal creeks to over the continental shelf from shore to about 98ft.

### Citharichthys spilopterus - FLATFISHES

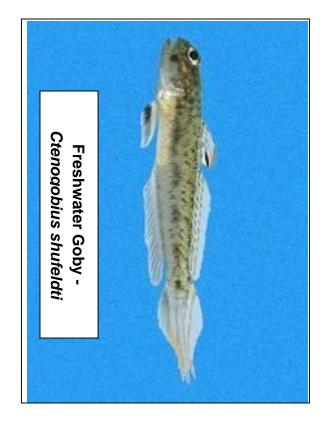
**Description:** Eyed side pale to dark brown, with or without numerous spots and blotches on body and fins. Dark spots on caudal peduncle, may display obscure, dark chevron-shaped mark on posterior body. Blind side is white, upper jaw extends nearly to posterior portion of lower eye. Eyes separated by a low, narrow, concave ridge. Pelvic fins bases are short.

Where found: New Jersey to Florida, Gulf of Mexico to Brazil.

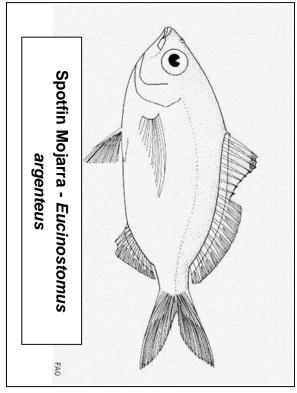
Size: Up to 8 inches

**Remarks:** Occur on muddy bottoms in estuaries and lagoons to continental shelves from shore to about 250 feet. Demersal









## Ctenogobius shufeldti - GOBIES

**Description:** Tannish yellow to light brown, dark band from corner of mouth to upper opercle. Head and upper sides with dark flecks, four squarish blotches along midline and a dark spot at caudal-fin base. Dorsal and caudal fins banded.

Where found: North Carolina to south Florida, Gulf of Mexico.

Size: Up to 4.3 inches

**Remarks:** Occur in low salinity bays, estuaries, and freshwater.

## Trinectes maculatus - FLATFISHES

**Description:** Color and pattern variable shades of brown with darker, wavy spots, blotches, and lines. Usually with seven to eight widely separated dark bars. Bars and lines extend into fins. Blind side white to pale tan, occasionally blotched or spotted. Fimbriae present around the mouth on eyed side and are broadly distributed on blind side of head. Pectoral fins are absent, cirri are scattered on body, but do not form tufts.

**Where found:** Gulf of Maine to Florida, Gulf of Mexico to Panama.

Size: Up to 8 inches

**Remarks:** Found in turbid inshore waters. Found in rivers, estuaries, and high-salinity coastal waters to about 195 feet.

### Eucinostomus argenteus- MOJARRA

**Description:** Silvery, smaller specimens with dark, oblique bars and spots that fade with age. Spiny dorsal fin with dusky margin, tips of caudal fin may be dusky. Anal fin low, fairly straight-edged. Scale less area between eyes surrounded by scales, with a moderately slender body.

Where found: North Carolina to Florida, Gulf of Mexico, Bahamas, Antilles, northern South America to Brazil.

Size: Up to 7.8 inches

**Remarks:** Over sandy and shelly bottoms of continental shelves, occasionally in inlets and estuaries. They feed on benthic invertebrates.

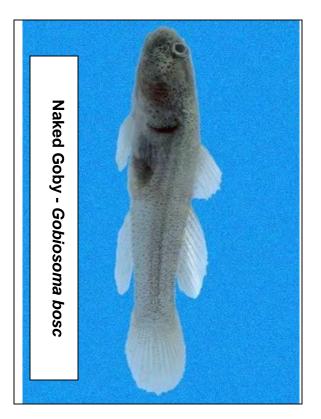
### **Bathygobius soporator - GOBIES**

**Description:** Varying shades of brown; may be very dark. Head blotched. Five dark saddles along back; saddles below first dorsal fin broadest. Dark blotches on side. Tongue slightly notched at tip. Pectoral fins with 18-21 rays, upper 4-5 filamentous, free of membrane at tips. Scales in horizontal series on sides number 27-41.

Where found: North Carolina to Florida, Gulf of Mexico, Bahamas, Antilles to southeastern Brazil.

Size:up to 3.5 inches

**Remarks:** Found in a variety of shallow water habitats from muddy river bottoms to estuaries and rocky tide pools.









# Descriptions

### Aplidium stellatum- TUNICATES

**Description:** Colonial tunicate that forms tough, globular colonies that measure an inch or more in height and are rubbery or cartilaginous to the touch.

**Where found:** Maine south through Florida and the Gulf of Mexico.

Size: grows in colonies up to 12 inches

**Remarks:** subtidal, found from the low tideline to depths of approximately 30 feet. Can grow on hard substrates such as mangrove roots, rock jetties, pilings and floating docks

### Gobiosoma bosc - GOBIES

**Description:** Shades of tan to gray with 9-11, broad, dark bars on body. Bars extend into dorsal fins, head mottled, depressed, and somewhat laterally expanded. Body entirely scaleless.

Where found: Maine to North Florida, Gulf of Mexico from SW Florida to Campeche. Occur in estuaries and over protected coastal, vegetated, and rubble bottoms and oyster beds.

Size: Up to 3 inches

**Remarks:** Occur in estuaries and over protected coastal, vegetated, rubble bottoms, and oyster beds.

### Fundulus grandis- KILLIFISH

**Description:** Females: olivaceous above, silvery below with pearly flecks and 12-15 narrow bars on sides. Males: olivaceous to brownish above, with numerous pearly flecks on side; bars faint to absent; abdomen may be golden. Both with convex snout profile, ten pores on lower jaw. Caudal-fin margin almost straight.

Where found: NE Florida and Gulf of Mexico to Veracruz. In coastal bays, marshes, pools, ditches, and nearby fresh water.

Size: Up to 7 inches

**Remarks:** Feed on invertebrates and small fishes, used as bait.

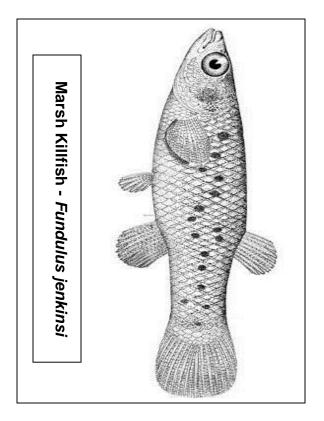
#### Molgula manhattensis - TUNICATES

**Description:** Solitary tunicate, cylindrical to irregular, grape-like shape, somewhat transparent, gray to greenish, and covered with fibrils that may or may not be attached with silt and other organic debris or other small organisms. At the free end of the tunicate, there are two siphons that are used for feeding and gamete dispersal.

**Where found:** Native to most of Europe, ranging from Norway to Portugal and the North American Atlantic.

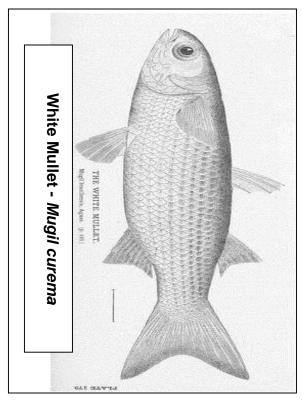
Size: Up to one inch in diameter

**Remarks:** Can be found from intertidal to 300 feet deep prefers protected marine waters and estuaries and is very tolerant of pollution.









## Fundulus heteroclitus - KILLIFISH

**Description:** Females: olivaceous above with pale abdomen; may have dusky bars; fins unmarked. Males: olivaceous above, pale below with yellow tinge; sides spotted, with up to 15 pale bars; fins spotted, with yellowish margins; dark spot usually present on dorsal fin. Both with convex snout profile and eight pores on lower jaw. Caudal-fin margin broadly rounded.

Where found: Labrador to NE Florida, in coastal bays, marshes, and channels and over segrass flats.

Size: Up to 4.7 inches

**Remarks:** Feed on invertebrates, plants, and fishes.

# Fundulus jenkinsi - KILLIFISH

**Description:** Males and females similar in shape and color. Olivaceous dorsally, pale below. Others described as yellowish. Dark spots on sides arranged in two irregular rows. Scales with dark specks along edge. Dark blotch on upper opercle. Fins unmarked, anal-fin origin slightly anterior to dorsal-fin origin. Body comparatively shallow.

**Where found:** In Gulf of Mexico from west coast of Florida to Texas.

Size: Up to 2.5 inches

**Remarks:** Occur near bottom in low-salinity brackish streams and bays.

# Mugil curema- MULLET

**Description:** Bluish green to olive dorsally. Sides and abdomen silvery to whitish. Yellowish to orange blotch at upper edge of opercle. Pectoral fins with dark spot at base. Caudal fin with yellowish base and blackish margin. Second dorsal and anal fins almost entirely scaled.

Where found: Maine to Florida, Gulf of Mexico and Caribbean Sea to Brazil. Also Bermuda, in tropical warm temperate, coastal, and brackish waters.

Size: Up to 3 feet

**Remarks:** White mullet are schooling, feed on plankton and detritus.

### Sphoeroides testudineus- PUFFERS

**Description:** Dorsal area with a network of dark blotches and bands. Large, darker spots overlay blotches and bands. Interspaces tannish to grayish, bands loosely arranged into a bull's-eye pattern on mid back. Lower side spotted, abdomen pale, caudal fin may be barred. Snout moderately blunt, prickles present from snout to dorsal fin and ventrally to anus.

Where found: Rhode Island to the Florida Keys, Compeche Bank, Bahamas, Carribbean sea to Brazil. Rare to absent in northern Gulf of Mexico.

Size: Up to 12 inches

**Remarks:** Shallow water over seagrass beds, around mangroves, and in estuaries.









### Cosmocampus elucens- PIPEFISH

**Description:** Variable, blackish, purplish, brownish, to pinkish. Two bands radiate from eyes. Evenly spaced pale bars over length of body. May or may not have dermal flaps on head and body. Dorsal fin short-based with 21 to 25 rays. Trunk with 16-18 rings.

Where found: NJ to Florida, eastern Gulf of Mexico, and Caribbean Sea.

Size: Up to 6 inches

Remarks: Closely related to the seahorse

## Fundulus majalis- KILLIFISH

**Description:** Females: olivaceous above, silvery below; dark stripes, bars on caudal peduncle; fins may have yellow cast. Males: olivaceous dorsally, silvery to bronze below; 10-15 dark bars on sides; may have dark spot on dorsal fin; anal fin longer then female anal fin. Both with long snout, straight to slightly concave head profile.

Where found: NH to SE Florida. In Gulf of Mexico from west coast of Florida to Tampico, Mexico. Occur in inlets, bays, estuaries, and marshes and along beaches.

Size: Up to 7 inches

**Remarks:** Striped killifish prefer higher salinities. Gulf populations of females tend to have more bars then stripes but fewer bars than males do.

### Poecilia latipinna- MOLLIES

**Description:** Olivaceous to brownish dorsally. Pale below, scales form diamond shaped pattern. Spots on scales form stripes along sides. Females: dorsal fin low, banded; peduncle moderately deep. Males: dorsal fin tall, sail-like, and banded with a yellow to orange margin; peduncle deep.

Where found: North Carolina to Florida Keys, in Gulf of Mexico from SW Florida to Yucatán. In Weedy, quiet, fresh, brackish, and marine waters. Prefer clear waters.

Size: Up to 5 inches

**Remarks:** Feed on algae, detritus, insects, and crustaceans. Tolerant of polluted waters. Southern populations are larger and more colorful than northern populations. Color variants are popular in the aquarium trade.

## Gambusia holbrooki- MOSQUITOFISH

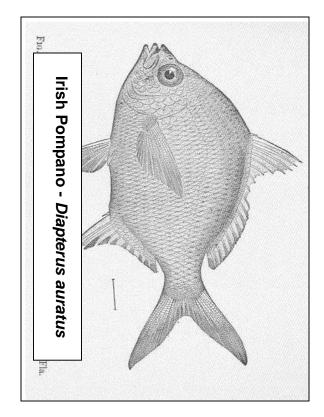
**Description:** Shades of olive, tan, brown, or silver dorsally. Pale below, may have a bar below eyes. Scale margins dusky, forming a diamond-shaped pattern. Dorsal fin with two to three rows of dark spots. Females: distinct gravid spot on abdomen; body deep; larger than males. Males: anal fin elongate at tip; body slender.

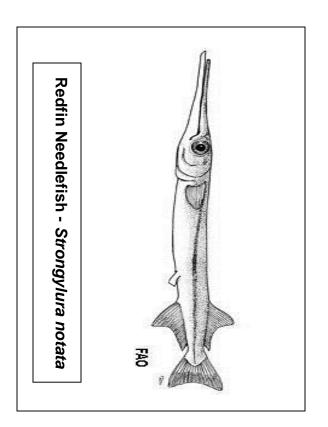
Where found: NJ to S Florida and in Gulf of Mexico to Mobile Bay, AL. Occur in quiet brackish and freshwater.

Size: Up to 1.5 inches

**Remarks:** have hybridized with east and west species making them difficult to distinguish.









## Diapterus auratus- POMPANO

**Description:** Silvery, somewhat darker dorsally. Smaller specimens with three dark bars on sides. Spiny dorsal fin with dusky margin. Anal and pelvic fins yellowish. Lower preopercular margin serrated. Anal fin lobed, with strong second spine. Body rhomboid in shape, deep, and compressed.

**Where found:** East Florida, West Gulf of Mexico, Greater Antilles, northern South America to Brazil.

Size: Up to 13.4 inches

**Remarks:** Occur in shallow coastal waters, including estuaries, seagrass beds, mangroves, lagoons, and bays. Commonly enter freshwater.

## Hippocampus erectus- SEAHORSES

**Description:** Color and pattern highly variable, pale and dark dots on neck and along back. Pale and dark lines on head and body, snout shorter than distance from eye to opercular margin. Body may be covered in fleshy filaments.

**Where found:** Nova Scotia to Florida, Caribbean Sea to Venezuela, Gulf of Mexico and Bermuda.

Size: Up to 6.8 inches

**Remarks:** In vegetated waters about 240ft, males brood up to 400 eggs.

### Eucinostomus gula- SILVER JENNY

**Description:** Silvery, somewhat darker dorsally, smaller specimens with about seven oblique bars and blotches on upper side that fade with age. Spiny dorsal fin with dusky margin. Scaleless area between eyes surrounded by scales. Body moderately deep.

Where found: North Carolina to Florida, Gulf of Mexico, Bahamas, and Caribbean Sea to Argentina.

Size: Up to 7 inches

**Remarks:** Primarily over shallow seagrass beds, but also over open sandy bottoms. Rarely in fresh water. They feed on benthic invertebrates.

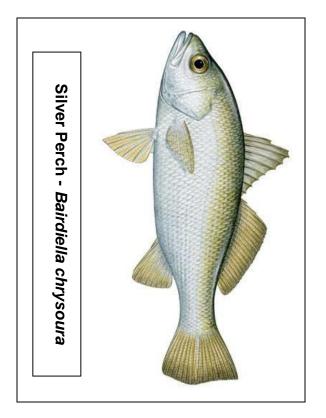
### Strongylura notata- NEEDLEFISH

**Description:** Bluish green dorsally, silvery below. Black bar on prepercular margin. Dorsal, caudal, and anal fins with areas of red to orange.

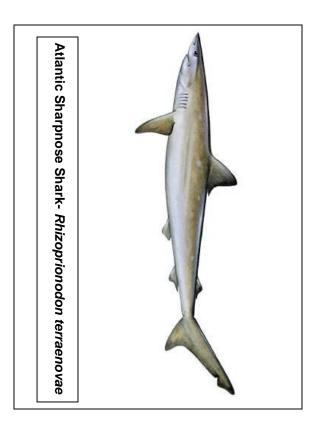
Where found: Florida, Bahamas, Antilles, and coast of Central America

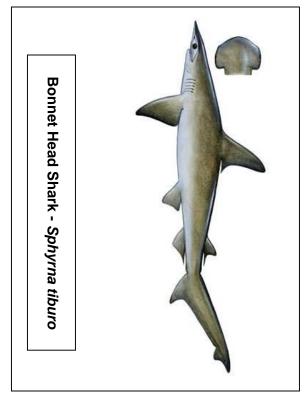
Size: Up to 2 feet

**Remarks:** Found inshore and in bays and estuaries, they feed on fishes and shrimp.









## Dasyatis Americana – RAYS

**Description:** color brownish dorsally and whitish ventrally; disc broad angular (rhomboid) with pointed corners; snout moderate, not protrusive; spine near base of long whip-like tail; well-developed ventral fin fold on tail, dark brown to black in color; dorsal fin fold on tail absent

**Habitat:** inhabits coastal waters including ocean beaches, bays, estuaries, and river mouths. Generally found near shore on grass and sand/mud flats but does venture into deeper coastal waters up to ~200 feet

**Size:** wingspan of 4-5 feet and weight up to around 200 pounds

**Human Factors:** observed singly, in pairs, and in aggregations. Non-aggressive species of little danger to humans with the exception of their defensive venomous barb located near base of tail; avoid handling or exercise extreme caution

## Bairdiella chrysoura – DRUMS

**Description**: color silvery with yellowish fins; no spots; no chin barbels; no prominent canine teeth at tip of upper jaw; preopercle finely serrated; 5 to 6 chin pores; mouth terminal

**Similar fish**: sand seatrout, *Cynoscion arenarius* (the seatrouts usually have 1 or 2 prominent canine teeth at tip of upper jaw and do not have chin pores)

Where found: inshore in seagrass beds, tidal creeks and rivers, and marshes

Size: small, not exceeding 9 inches

**Remarks**: spawning takes place in shallow, saling portions of bays and other inshore areas, peaking between May and September; matures by second or third year (about 6 inches); adults eat crustaceans and small fishes; may live to 6 years

## Sphyrna tiburo – SHARKS

**Description:** broadly widened head in the shape of a shovel; only slight indentation of anal fin; front of head not notched at midline; gray or grayishbrown in color

**Habitat:** inshore species found in bays and estuaries

**Reproduction:** gives birth to live young; litters contain 4–16 pups; size at birth about 12 inches

**Size/Age:** smallest member of the hammerhead family, maximum length about 3.5 feet; matures at approximately 2 years of age (about 30 inches) and is estimated to live 7+ years

**Human factors:** edible, but marketed mostly as crab bait, good sport fish (use light tackle with live shrimp or cut-bait), harmless to humans, often displayed in aquaria

## Rhizoprionodon terraenovae – SHARKS

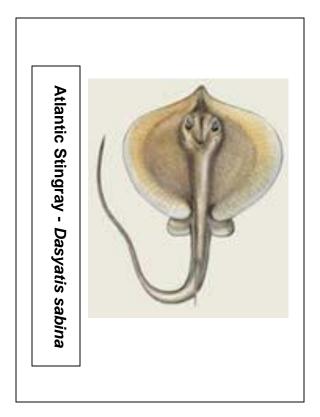
**Description:** long and flattened snout; white trailing edge of pectoral; black-edged dorsal and caudal fins, especially when young; may have small whitish spots on sides; furrows in lips at the corners of the mouth; outer margin of teeth notched; second dorsal fin originates over middle of anal fin; brown to olive-gray in color with white underside; slender body

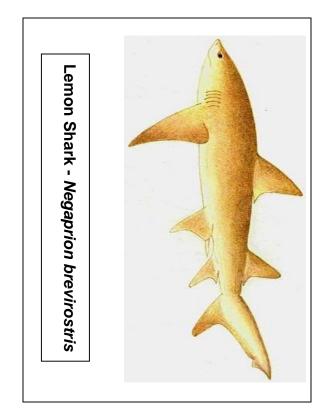
Similar Fish: other carcharhinids

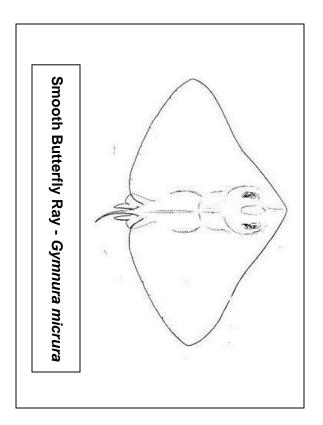
Where found: inshore species, even found in surf; also common in bays and estuaries; adults occur offshore

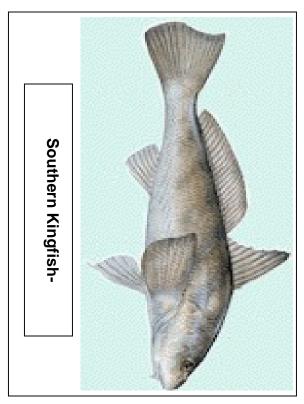
Size: small species, 2 to 4 feet

**Remarks:** mature adults between 2 and 2.75 feet long; 4-7 newborns range from 9 to 14 inches in length; adults feed on small fish and crustaceans









## Negaprion brevirostris – SHARKS

Habitat: An abundant, inshore tropical shark that inhabits both estuarine and nearshore waters of the Gulf and Atlantic coasts of Florida. Commonly enters estuarine waters and often ventures into freshwater areas, but does not penetrate as far up rivers as the Bull shark. Migrates southward and into deeper waters in the winter months.

**Size/Age**: Maximum size about 10.5 feet. Matures at approximately 11-12 years of age (about 8 feet) and is estimated to live 27+ years.

#### Human factors

Constitutes only a small portion of the commercial shark fishery. Does well in captivity, with young individuals being favorite subjects for physiological and behavioral studies. Has been involved in only a few attacks on humans.

## Dasyatis Sabina – RAYS

**Description:** Color brownish to yellowish brown dorsally and whitish ventrally. Disc corners rounded. Disc width nearly equal to disc length. Snout pointed and projecting. Spine near base of long whip like tail. Low dorsal and ventral fin folds on tail which are brown/dusky in color.

**Habitat:** Benthic species. Inhabits coastal waters, including estuaries, lagoons and sometimes rivers.

#### Size/Age

Wingspan of up to 2 feet.

#### **Human Factors**

Non-aggressive species of little danger to humans with the exception of their defensive venomous barb located near the base of the tail. Avoid handling or exercise extreme caution. Do the "Stingray shuffle".

### Menticirrhus americanus-Southern Kingfish.

**Description:** Grayish brown with silvery sides, 7-8 diagonal dusky bands or blotches on each side but these marks are hard to see and never form v-shaped marks on the sides

Habitat: Shallow coastal waters, common around beaches

**Feeding:** Bottom feeders that eat shrimp, clams, worms and young fish.

Size: Up to fifteen inches

Remarks:

### Gymnura micrura – RAYS

**Description**: Disc broad, much wider than long ('butterfly shaped'). Coloration brownish, gray or green with many small dark spots/blotches dorsally and white ventrally. Snout protruding. Tail short with low dorsal and ventral fin folds and three to four dark crossbars. No venomous spine on tail.

**Habitat:** Prefers coastal waters and usually found on soft mud or sandy substrates. May enter estuaries or bays.

**Feeding:** Benthic feeder. Feeds on bottom-living invertebrates and fishes.

**Reproduction**: Aplacental viviparity. Three to four pups per litter.

Size/Age: Wingspan up to 4.5 feet.

Human Factors: Non-aggressive species of no danger to humans.