

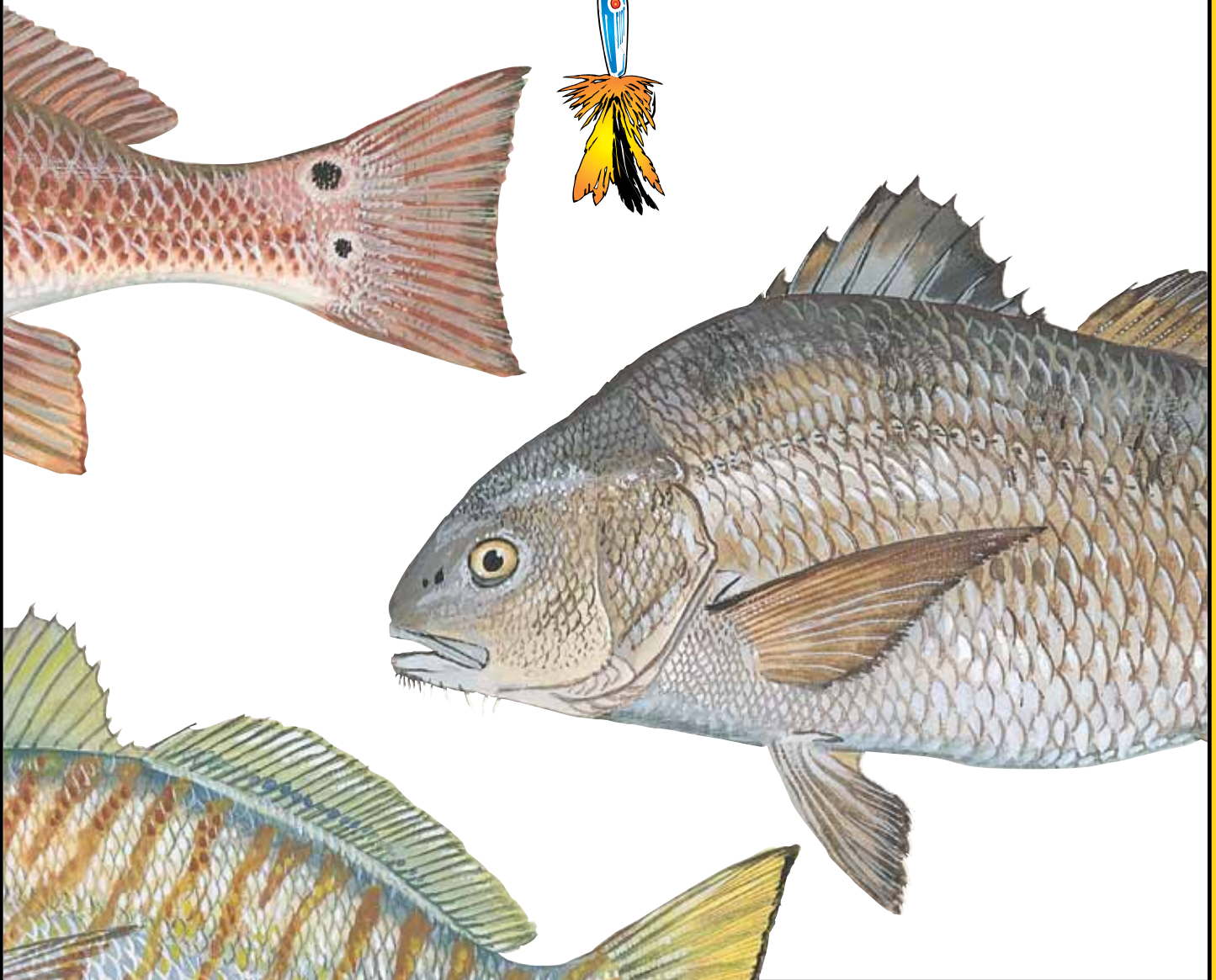
# FISH IDENTIFICATION GUIDE

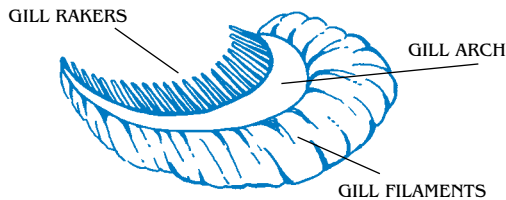
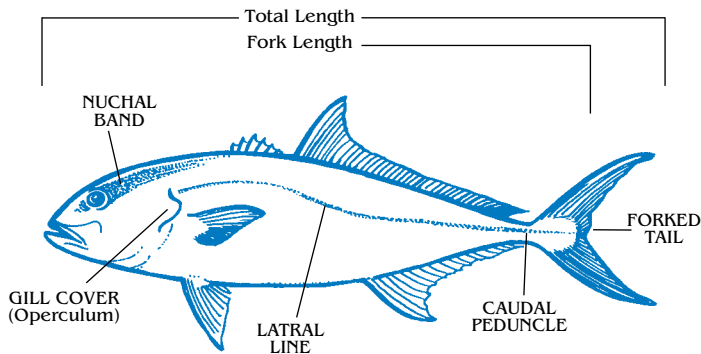


The identification of different species of fish has become an important concern for recreational fishermen. The proliferation of regulations relating to minimum sizes and possession limits compels fishermen to make the proper identification of every fish caught.

Most species of fish are distinctive in appearance and relatively easy to identify. However, closely related species, such as members of the same "family" of fish, can present problems. For these species it is important to look for certain distinctive characteristics to make a positive identification.

The ensuing fish identification guide depicts more than 50 species of fish commonly encountered in Virginia waters. In addition to color illustrations of each species, the description of each species lists the distinctive characteristics which enable a positive identification.





## DEFINITIONS

**Anal Fin** – The fin on the bottom of fish located between the anal vent (hole) and the tail.

**Barbels** – Slender strands extending from the chins of some fish (often appearing similar to whiskers) which perform a sensory function.

**Caudal Fin** – The tail fin of fish.

**Caudal Peduncle** – The narrow portion of a fish's body immediately in front of the tail.

**Demersal Fish** – Fish that live on the bottom.

**Dorsal Fin** – The fin running down the back of fish. The dorsal fin is often divided into two distinct portions: the first or spinous dorsal fin, which is closest to the head of the fish and often contains hard spines; and the second dorsal fin.

**Finlets** – The series of small fins situated behind the dorsal and anal fins on some species of fish.

**Forked Tail** – A caudal fin marked by the extension of the top and bottom portions of the fin substantially further from the caudal peduncle area than the center portion of the fin.

**Fork Length** – The measurement of a fish's length from the tip of the nose to the inside of the fork in the tail.

**Fusiform** – Fish shape marked by being tapered at both ends, such as the members of the tuna family.

**Gill Arch** – The white bony structure supporting the gills of fish.

**Gill Cover** – The exterior gill cover, also known as the operculum.

**Gillrakers** – The white bony projections coming from the gill arch.

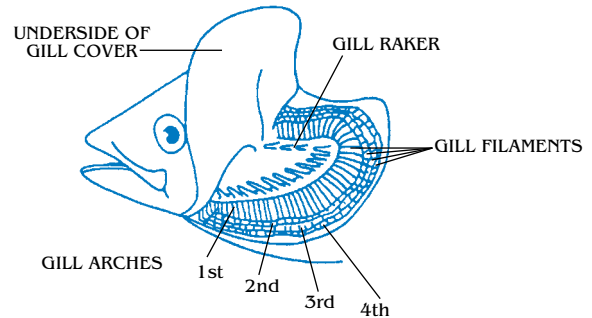
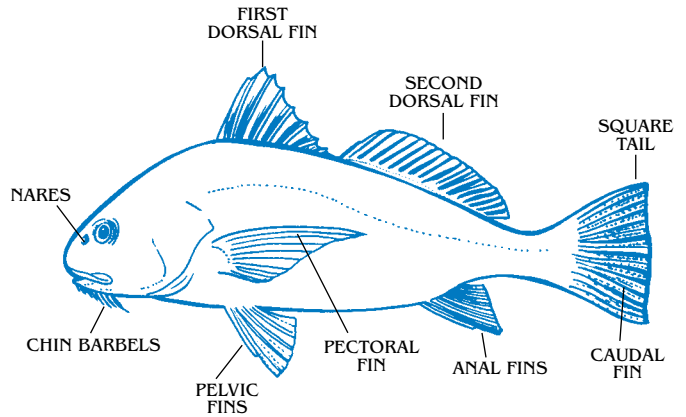
**Incisor Teeth** – Front teeth sharpened to form a cutting edge.

**Keel** – A ridge or projection, often present on caudal peduncle.

**Lateral Line** – The sensory organ with the appearance of a line which runs lengthwise down each side of a fish.

**Lunate** – curved or shaped like a crescent.

**Molars** – Rear teeth flattened for use in grinding or crushing.



**Nuchal Band** – A dark band extending from behind or near the eye of a fish across the back of the neck toward the first dorsal fin.

**Ocellated Spot** – A dark spot encircled by a band of another, lighter color; a spot with the appearance of being surrounded by a halo.

**Operculum** – The exterior gill cover.

**Otoliths** – The bony structures, generally spherical in shape, found in the inner ear of fish; also called ear stones.

**Pectoral Fins** – The fins appearing on each side of the fish immediately behind the gill opening.

**Pelagic Fish** – Fish that live or are associated with open ocean waters.

**Pelvic Fins** – Pair of fins located on the underside of fish below and slightly rearward of pectoral fins.

**Peritoneum** – The lining of the stomach cavity.

**Pharyngeal Teeth** – The set of grinding or mashing teeth or plates found in the throat of some fish, such as red drum.

**Scute** – A hard plate, often sharp, found in the caudal peduncle area on some fish.

**Spiracle** – An air or breathing hole.

**Square Tail** – A caudal fin generally equal in length from top to bottom.

**Striated** – Marked or appearing to be marked with grooves, furrows or ridges.

**Swim Bladder** – A sac or pouch of tissue which is used by fish to maintain a neutral or certain level of buoyancy.

**Total Length** – The measurement of a fish's length from the tip of the nose to the tip of the tail.

**Underslung Jaw** – A mouth located on the under side of the head, slightly rearward of nose, which opens downward; also known as an inferior jaw.



## RED DRUM

(Channel Bass, Redfish, Puppy Drum, Spottail Bass) *Sciaenops ocellatus*

**Description:** copper to bronze colored back, fading to a white belly; may be more silvery in appearance in clear or ocean waters; one to several ocellated spots occur at the base of the tail; caudal fin is slightly lunate and pectoral fin is rounded; large scales and underslung jaw.

**Similar Fish:** closely related and similar in appearance to Black Drum; distinguishable by lack of chin barbels (which are present on black drum),



rounded shape of pectoral fin, ocellated spot or spots at base of tail, slightly lunate caudal fin, and generally more streamlined body shape.

**Size:** up to 100 pounds; average size is 10 – 50 pounds; small fish, called puppy drum, are found in river estuaries, bays, and coastal waters and range from 8 – 20 inches in length.

## BLACK DRUM

*Pogonias cromis*

**Description:** bronze, copper or grayish back, fading to a light colored belly; occasionally has a more silvery appearance; color fades after death to a grayish or grayish-green hue; high arched back gives most fish a “humpback” shape; 10 to 14 pairs of barbels are prominent under chin; caudal fin is square and pectoral fin comes to a pronounced point; juvenile fish (generally under 15 pounds) display 4 to 6 dark vertical bars, which fade in adults.

**Similar Fish:** closely related and similar in appearance to Red Drum; distinguishable by absence of ocellated spot or spots at the base of the tail (which are present on red drum), the pres-



ence of chin barbels, pointed pectoral fin, square caudal fin and “humpback” body shape. Juveniles are similar in appearance to sheepshead, which have 5 to 6 vertical bars on their sides; however, sheepshead lack chin barbels, have a significantly forked tail, a fully connected first and second dorsal fin (in black drum the first dorsal fin is distinct from second dorsal fin), and prominent teeth, which are absent in black drum.

**Size:** up to 120 pounds; average size is 20 – 70 pounds; occasionally, juvenile fish in the 6 – 16 inch range are common in Chesapeake Bay and estuarine waters.

## ATLANTIC CROAKER

(Croaker, Hardhead) *Micropogonias undulatus*

**Description:** silvery color overall with a white belly; often has a faint bronze or golden cast, with yellowish fins; back often has small brassy spots, that align into wavy lines down the fish’s sides; underslung jaw features 3 to 5 pairs of barbels under the chin; caudal fin is convex in shape; gill cover is hard and sharp.



**Similar Fish:** Spot

**Size:** up to 8 pounds; average size is 8–14 inches ( $\frac{1}{2}$  pound – 2 pounds)

## SPOT

(Norfolk Spot, Yellowbelly)  
*Leiostomus xanthurus*

**Description:** silvery color overall with a white belly; a prominent black spot is present behind the gill cover and above the base of the pectoral fin; several wavy lines, brassy in color, extend down the back; caudal fin is slightly concave; larger individuals in the late summer often exhibit a distinct yellow coloration on their bellies.



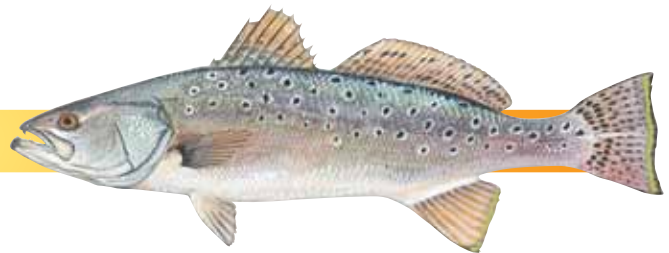
**Similar Fish:** Atlantic Croaker

**Size:** up to 2½ pounds; average size is 5 – 10 inches (under a pound).

## SPOTTED SEATROUT

(Speckled Trout, Spotted Trout, Speckle)  
*Cynoscion nebulosus*

**Description:** grayish silver back (often with a bluish, iridescent tint) fading to silver sides with a white belly; distinct round black dots are present on back and sides, and they extend onto second part of the dorsal fin and the caudal fin; body is long and slender; upper jaw possesses two large canine teeth.



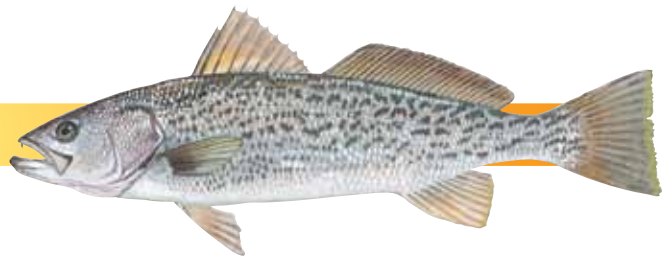
**Similar Fish:** closely related and similar in appearance to the Weakfish or Gray Trout; distinguishable by the black dots which extend onto second dorsal fin and caudal fin (gray trout lack any black markings on these fins).

**Size:** up to 17 pounds; average size is 1½ – 4 pounds.

## WEAKFISH

(Gray Trout, Yellowfin Trout, Squeteague, Tiderunner) *Cynoscion regalis*

**Description:** silvery body and sides with some olive shading along the top of the back; numerous dark blotches appear on the back and the sides, some of which may appear to align and form wavy lines; fins are a uniform dusky color, some of which may have a yellowish margin; body is long and slender; upper jaw possesses two large canine teeth.



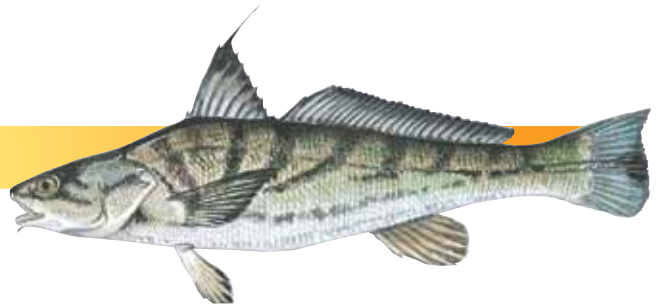
**Similar Fish:** closely related and similar in appearance to the Spotted Seatrout; distinguishable by the dorsal and caudal fins which are a uniform dusky coloration without any markings (spotted seatrout have black dots on these fins).

**Size:** up to 20 pounds; average size ranges from ½ – 8 pounds.

## NORTHERN KINGFISH

(Roundhead, Sea Mullet, Whiting, King Whiting, Virginia Mullet) *Menticirrhus saxatilis*

**Description:** long, slender body is dark in coloration; the top of the back tends to be dark fading to grayish sides; 5 or 6 dark bars occur on the back of this fish; fins are dusky, often with a blackish tinge or tip and the first dorsal fin possesses a long, soft spine; underslung mouth features a single barbel under the chin.



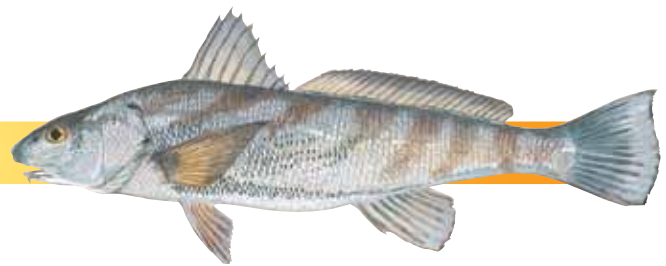
**Similar Fish:** closely related and similar in appearance to the Southern Kingfish; distinguishable by the darker coloration and long spine on first dorsal fin.

**Size:** up to 3 pounds; average size ranges from 1/2 – 1 pound.

## SOUTHERN KINGFISH

(Roundhead, Sea Mullet, Whiting, King Whiting, Virginia Mullet) *Menticirrhus americanus*

**Description:** long, slender body is grayish-silver on the sides; 6 to 8 very faint dusky bars may be present along the back and sides; fins are dusky in color; underslung mouth features a single barbel under the chin.



**Similar Fish:** closely related and similar in appearance to Northern Kingfish; distinguishable by lighter coloration and absence of long spine on first dorsal fin.

**Size:** up to 3 pounds; average size ranges from 1/2 – 1 pound.

## SILVER PERCH

(Perch, Sand Perch) *Bairdiella chrysoura*

**Description:** small member of the drum family with bright silvery coloration fading to a white belly; fish from estuarine waters that are not clear may have a slightly darkish coloration along the top of the back; easily distinguishable from other members of the drum family by lack of chin barbels and mouth that is not underslung.



**Similar Species:** White Perch; distinguishable by lighter, silvery coloration and lack of spines in dorsal fin (white perch have sharp spines in first dorsal fin).

**Size:** under 1 pound; average size ranges from 4 – 7 inches.

## STRIPED BASS

(Rockfish, Striper) *Morone saxatilis*

**Description:** overall coloration is silvery with a white belly; back tends to be a dark, olive or dusky brownish color; 7 or 8 pronounced black stripes run horizontally down the back and sides of the fish; the spines in the first dorsal fin are stiff and the gill cover is hard and sharp.



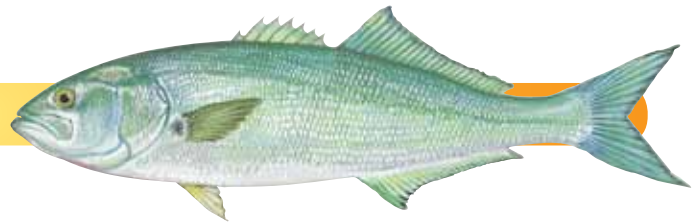
**Size:** up to 125 pounds; average size ranges from 4 – 15 pounds.

## BLUEFISH

(Blue, Chopper, Snapper, Tailor Blue) *Pomatomus saltatrix*

**Description:** long body is bluish green in coloration, fading to a light colored belly; tail is sharply forked and the mouth features razor sharp teeth.

**Similar Fish:** Pollock and several species of jacks are somewhat similar in appearance to bluefish, but all lack the formidable set of teeth prominent in bluefish.



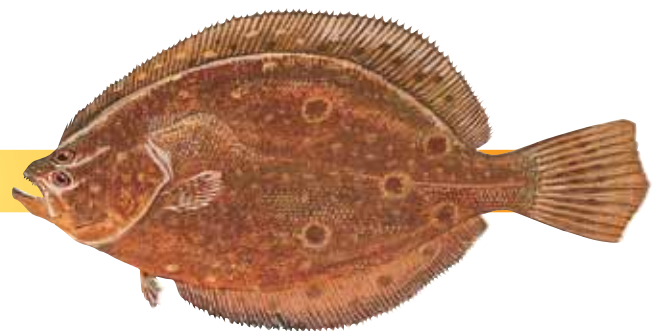
**Size:** up to 31<sup>3</sup>/<sub>4</sub> pounds; average size is 1 – 15 pounds.

## SUMMER FLOUNDER

(Flounder, Fluke) *Paralichthys dentatus*

**Description:** rounded, flat body is brown on one side (the left side) and white on the other side; both eyes appear on the brown (left) side of the fish; caudal fin is convex and the mouth features sharp, cone-like teeth; summer flounder feature five ocellated spots on their brown side, three tending to form a triangle just above the base of the tail.

**Similar Fish:** closely related and similar in appearance to the Southern Flounder; distinguishable by the presence of ocellated spots on the back of the summer flounder (southern flounder may have



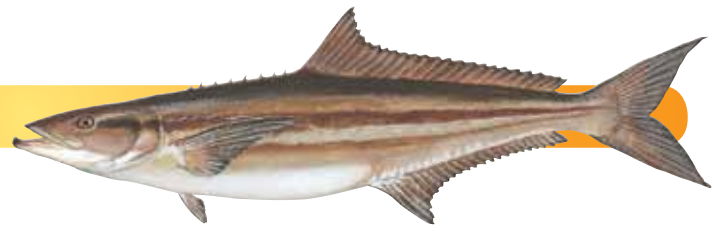
blotches and/or spots but lack the conspicuous ocellated spots found on summer flounder); Gulf Flounder, which are not common north of Cape Hatteras, are similar in appearance, but feature only three ocellated spots – one above the lateral line, one below it and one touching it, and these spots may become indistinct in larger fish.

**Size:** up to 20 pounds; average size is 1/2 – 5 pounds.

## COBIA

(Bonito, Ling, Crabeater,  
*Rachycentron canadum*)

**Description:** large, long fish which is dark, chocolate brown on the back and sides fading to a white belly; juveniles often display a brown back with a white horizontal stripe, a very dark stripe and a second white stripe down the sides; the tail is deeply forked and the first dorsal fin is absent (replaced by 7 to 9 short spines) but they feature a pronounced second dorsal fin; the lower jaw protrudes past the upper jaw.



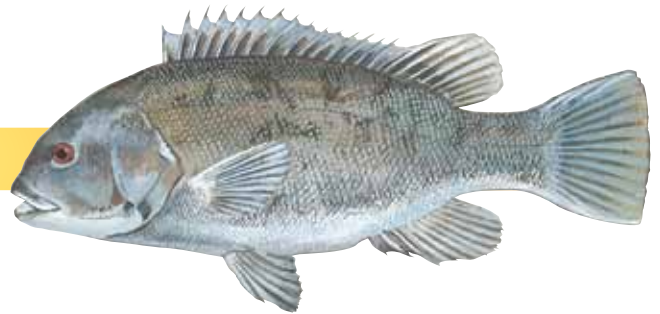
**Similar Fish:** None, although cobia often swim at the surface with second dorsal fin sticking out of the water, causing many people to mistake them for sharks. Juvenile cobia are similar in appearance to remoras, but lack the large suction pad on the top of the head of remoras.

**Size:** up to 135 pounds; average size ranges from 10 – 50 pounds.

## TAUTOG

(Blackfish, Chub, 'Tog, White Chin,  
*Tautoga onitis*)

**Description:** a thick-bodied fish characterized by thick lips, blunt snout, and large, irregular teeth (incisors in front, molars in the rear); coloration is varied from a chocolate brown, to gray or a blackish olive on the back and sides with a white belly; some fish have irregular blotches on the side, but this mottling pattern, often associated with spawning activity, is not present in all individuals; males have a more blunt head, a more pronounced white chin, and a distinct white spot on their side.



**Similar Fish:** closely related to and similar in appearance to the Cunner; distinguishable by lack of scales on the gill cover (cunner have scales on their gill covers) and by size (cunner rarely achieve weights of 1 pound).

**Size:** up to 25 pounds; average size ranges from 1 – 6 pounds.

## BLACK SEA BASS

(Sea Bass, Black Will) *Centropristis striata*

**Description:** coloration is black to a very dark brown on the back and sides; the belly and fins also tend to be dark in color; females have a uniformly curved slope from the top of the back to the head, while large males have a pronounced hump forward of the dorsal fin; individual fish may exhibit a pronounced iridescent aquamarine to bluish coloration with some highlights of red in the area forward and below the dorsal fin, behind the



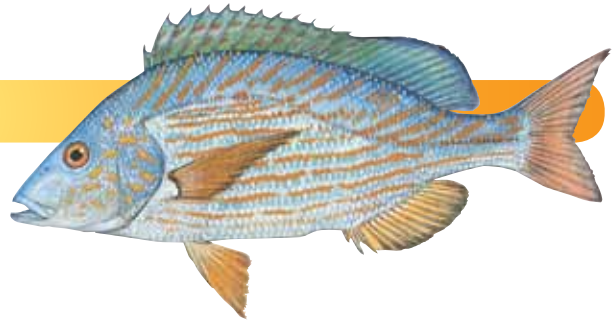
head and especially on males on and around the hump, which may be associated with spawning activity; a long filament extends from the upper part of the caudal fin.

**Size:** up to 10 pounds; average size ranges from 1/2 – 3 pounds.

## PIGFISH

(Hogfish) *Orthopristis chryoptera*

**Description:** coloration is grayish along the back fading to silver along the sides and a silvery white belly; brassy to bronze mottled marks are scattered over much of the body; fins tend to be a dull golden color; the first dorsal fin has distinct spines; the name derives from the grunting noise these fish make when removed from the water.



**Similar Fish:** Pinfish.

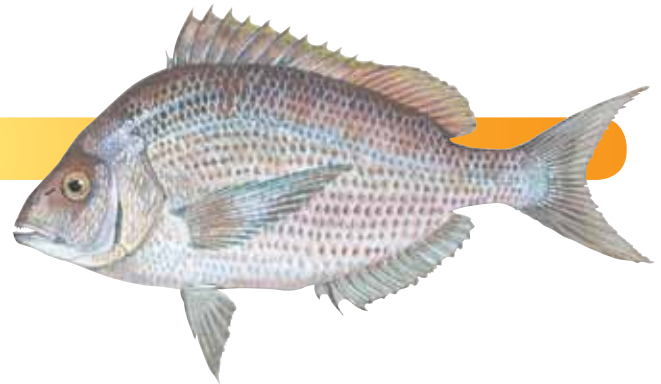
**Size:** up to 2 pounds; average size is  $\frac{1}{2}$  – 1 pound.

## SCUP

(Porgy, Silver Porgy) *Stenotomus chrysops*

**Description:** a deep bodied fish that is grayish to grayish brown along the back and sides, fading to a light gray belly; dorsal fin has pronounced spines and the mouth has distinct incisor and molar teeth; pectoral fin is pointed and relatively long for the size of the fish.

**Similar Fish:** Longspine Porgy and several porgies prevalent on reefs in the southern Atlantic.



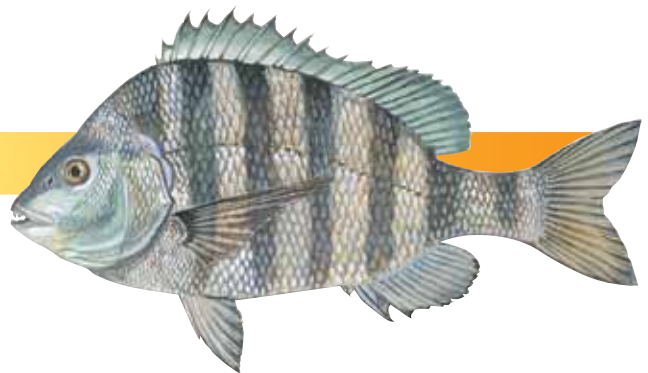
**Size:** up to 4 pounds; average size ranges from 1 –  $1\frac{1}{2}$  pounds.

## SHEEPSHEAD

(Convict Fish) *Archosargus probatocephalus*

**Description:** a deep bodied fish that is grayish in color along the back and sides with a belly that is only slightly lighter in color; 5 to 6 black (or very dark brown) bars run down the sides; mouth is filled with formidable incisor and molar teeth; pectoral fin is long and pointed.

**Similar Fish:** Similar in body shape and size to several porgies; most similar in appearance to small black drum, but easily distinguishable by single dorsal fin structure (black drum have separate first and second dorsal fins), mouth with incisor



and molar teeth (black drum lack substantial teeth in their mouth, having crushing plates, called pharyngeal teeth, deep in their throat) and absence of chin barbels (black drum have pronounced chin barbels).

**Size:** up to 20 pounds; average size ranges from 2 – 8 pounds.



## SPADEFISH

### *Chaetodipterus faber*

**Description:** deep bodied fish with pointed second dorsal and anal fins, which give the fish an almost triangular shape; coloration is silvery gray with 4 to 6 prominent black bars running down the sides; juveniles are very dark in color; the mouth is noticeably small relative to the overall size of the fish and lacks teeth.

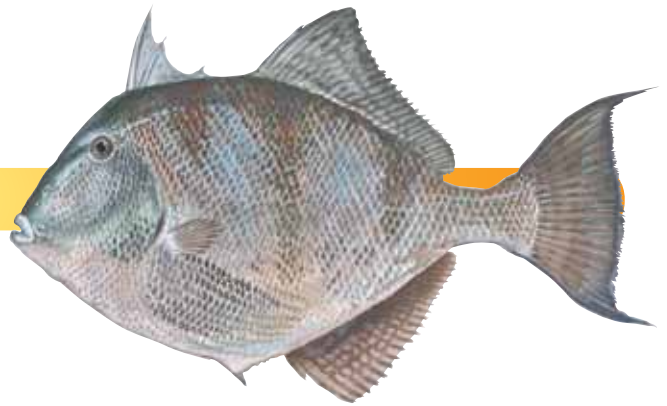


**Size:** up to 15 pounds; average size ranges from 1 – 6 pounds.

## GRAY TRIGGERFISH

### (Triggerfish) *Balistes capriscus*

**Description:** deep bodied fish with a large first spine in the first dorsal fin; grayish overall in color, some individuals may show some darker mottling; mouth features pronounced lips and large teeth; body is covered with tough skin.

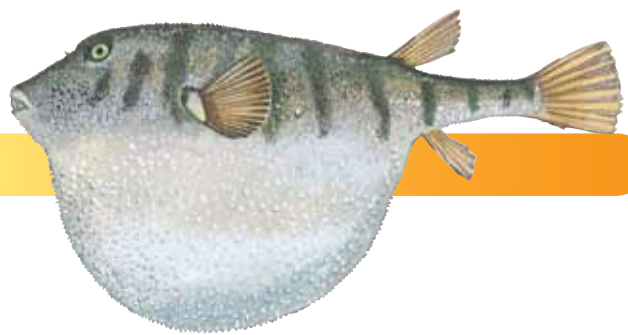


**Size:** up to 12 pounds; average size 1 – 5 pounds.

## NORTHERN PUFFER

### (Blow Toad, Blowfish, Swell Toad) *Sphoeroides maculatus*

**Description:** blunt, "boxlike" body shape, which can rapidly be altered by swelling of the belly with air or water into a spherical shape; mouth features large, "rabbitlike" incisor teeth; coloration is light brownish on the back and sides with a white belly; several dark vertical bars run down the sides; fins have a yellowish or yellowish orange tinge; skin is tough and coarse, similar to sandpaper.



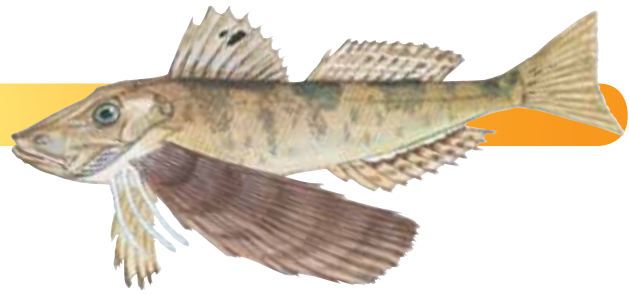
**Similar Fish:** Southern Puffer (rare north of Florida); Smooth Puffer, which has a very smooth skin and attains a larger size; Burrfish, which have pronounced spines protruding from the skin.

**Size:** up to 2 pounds; average size is under a pound.

## NORTHERN SEA ROBIN

(Sea Robin) *Prionotus carolinus*

**Description:** long, tapered body follows a broad head featuring a tough, bony covering with numerous spines; large, rounded pectoral fins can spread out to form “wings”; at the base of each pectoral fin are 3 to 4 feelers, which are sensory organs the fish use to “walk” along the bottom and feel for various forage items; color is brownish with hints of orange along the back, fading to a grayish



brown along the sides, and a white belly; fins have a brownish orange or brownish yellow hue.

**Size:** up to 4 pounds; average size is less than 1 pound.

## OYSTER TOADFISH

(Toadfish, Mud Toad, Oyster Toad)  
*Opsanus tau*

**Description:** the oyster toadfish will not win any beauty contests; this species features a broad, flat head with a large mouth and plenty of small teeth; the body is tapered and the skin is slimy and lacks scales; bony protrusions and spines are present at



the rear of the head; coloration is yellowish brown with some hints of orange.

**Size:** up to 6 pounds; average size ranges from ½ – 2 pounds.

## LIZARDFISH

*Synodus foetens*

**Description:** a long, slender fish with a body that is almost cylindrical in shape; the head is pointed and the mouth is large and full of sharp teeth; the skin looks similar to the skin on a reptile, but scales are present; coloration is brown to grayish brown, with a white belly.



**Size:** small, less than a pound.

## HOUNDFISH



### *Tylosurus crocodilus*

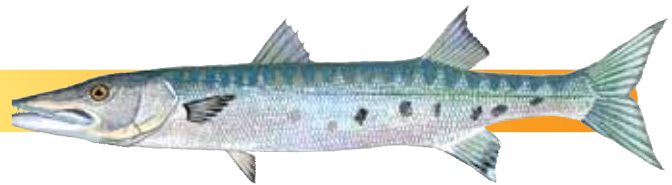
**Description:** a very long, slender fish with a cylindrical shaped body and a bony head with long, bony jaws armed with sharp teeth; the dorsal fin is located well toward the rear of the body; coloration is greenish to bluish green along the back fading to silvery or silvery green sides and belly.

**Similar Fish:** closely related and similar in appearance to Atlantic Needlefish; distinguishable

by much larger average size of houndfish (Atlantic needlefish rarely exceed 1 pound in local waters), the presence of a silvery horizontal stripe on Atlantic needlefish (absent on houndfish), and the presence of a caudal peduncle with a keel on the houndfish (no keel on caudal peduncle of Atlantic needlefish).

**Size:** up to 10 pounds; average size 3 - 6 pounds.

## GREAT BARRACUDA



### (Barracuda) *Sphyraena barracuda*

**Description:** a long, slender fish with a pointed snout and a large mouth full of sharp teeth; coloration is silver with a green or grayish green back; several black or dark spots may occur on the sides toward the tail of the fish.

**Similar Fish:** Sennet, which are small relatives of the barracuda.

**Size:** up to 60 pounds; average size ranges from 7 - 20 pounds.

## TARPON

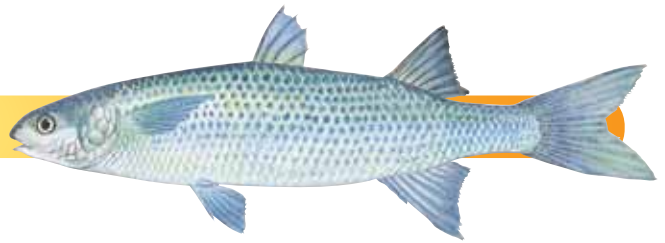


### (Silver King) *Megalops atlanticus*

**Description:** a long fish featuring a single dorsal fin with a long trailing filament, a large mouth with a protruding lower jaw, large scales, and deeply forked tail; occasionally, they are said to look like an overgrown herring; coloration is silver, although the back may be greenish gray or bluish gray.

**Size:** up to 230 pounds; average size is 35 - 90 pounds.

## STRIPED MULLET



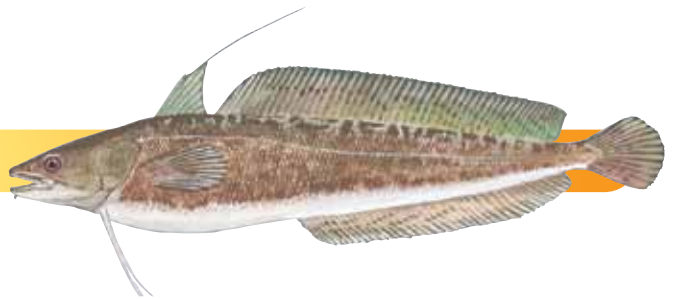
(Mullet, Jumping Mullet) *Mugil cephalus*

**Description:** long, cylindrically shaped fish featuring a small mouth and two distinct dorsal fins; body covered with relatively large scales and hard spines are present in first dorsal fin; coloration is greenish, bluish green or bluish gray along the back fading to silvery sides and a silvery white belly; may have faint, dark stripes down the back.

**Similar Fish:** closely related and similar in appearance to White Mullet; difficult to distinguish between the two species, but striped mullet has 8 rays or soft spines in the anal fin (white mullet have 9 rays).

**Size:** up to 6 pounds; average size is under 2 pounds.

## RED HAKE

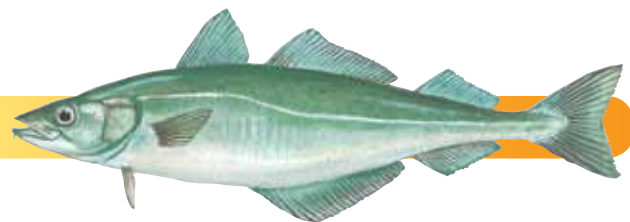


(Ling Cod) *Urophycis chuss*

**Description:** long, tapered body shape featuring a short first dorsal fin with an elongated filament and a long second dorsal fin; a single chin barbel is present; caudal fin is rounded; coloration is brownish to grayish brown, with some hints of red, along the back and upper sides fading to a yellowish, off-white belly.

**Size:** up to 9 pounds; average size is under 2 pounds.

## POLLOCK



*Pollachius virens*

**Description:** long, tapered body features a head with a pointed snout, a plump midsection on most fish and a tapered rear; three distinct dorsal fins, a chin barbel and a forked caudal fin highlight the fin structure; coloration is bluish green to olive green along the back fading to a gray or greenish silver along the sides and a silvery belly.

**Similar Fish:** similar in color and shape to a bluefish; distinguishable by absence of teeth (bluefish are armed with sharp teeth), presence of three distinct dorsal fins (bluefish has two dorsal fins) and

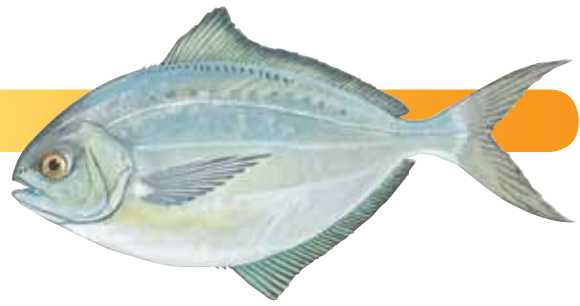
presence of a chin barbel (none on bluefish). Also, closely related to and similar in body shape and fin structure to Atlantic cod, but distinguishable by much more prominent chin barbel on cod and coloration (cod have many color phases and tend to exhibit much more color including brown and reddish or dark spots along the back and sides).

**Size:** up to 35 pounds, average size is 1 – 6 pounds.

## BUTTERFISH

### *Peprilus tricanthus*

**Description:** round or oval shaped body featuring a head with a blunt snout and a small mouth; fin structure is highlighted by a deeply forked caudal fin, no first dorsal fin, which is replaced with 3 or 4 spines, and a long second dorsal fin; coloration pale blue to bluish green along the back fading to a silvery belly.



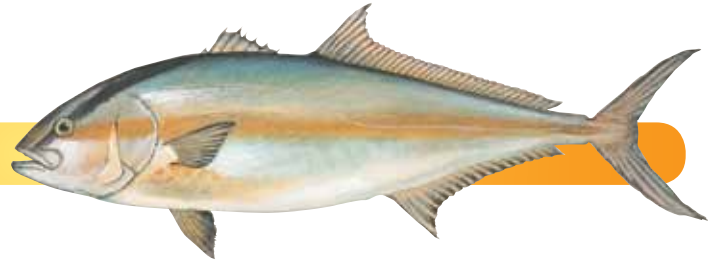
**Size:** up to 1 pound; average size is smaller.

## GREATER AMBERJACK

### (Amberjack) *Seriola dumerili*

**Description:** large, streamlined fish with a deeply forked, crescent shaped tail, caudal peduncle features a keel without scutes (which are hard, bony projections), a short, rounded pectoral fin and a dark nuchal band (stripe) running from the first dorsal fin through the eye; coloration is olive to dark amber on the back, fading to silvery sides and a white belly, although the overall color has a light yellow or amber tinge.

**Similar Fish:** Almaco Jack, Banded Rudderfish, Lesser Amberjack. Differentiation of these species is tricky. Banded rudderfish are a very small jack with six prominent dark bars, running down their sides (juvenile amberjack have similar bars, but the bars fade and disappear in larger amberjack).



Amberjack have 7 spines in their first dorsal fin, 30 – 34 dorsal rays in their second dorsal fin and 11 – 19 gillrakers; banded rudderfish have 8 dorsal spines in their first dorsal fin, 34 – 39 dorsal rays in their second dorsal fin, and 12 – 16 gillrakers. Almaco jacks have 7 dorsal spines in their first dorsal fin, 28 – 31 dorsal rays in their second dorsal fin, and 21 – 26 gillrakers. Lesser amberjack have 8 dorsal spines in their first dorsal fin, 29 – 32 dorsal rays in their second dorsal fin, and 21 – 24 gillrakers.

**Size:** up to 130 pounds; average size ranges from 30 – 60 pounds.

## BANDED RUDDERFISH

### *Seriola zonata*

**Description:** small jack similar in body shape to the amberjack (streamlined with a deeply forked, crescent shaped tail, caudal peduncle has a keel without scutes, a short, rounded pectoral fin and a dark nuchal band); coloration is olive to dark amber on the back fading to silvery sides, although the fish has an overall light yellow or amber tinge; 6 prominent dark (often dark olive color) bars run down the sides of this fish.



**Similar Fish:** Greater Amberjack, Almaco Jack, Pilotfish; To differentiate among species, see Great Amberjack.

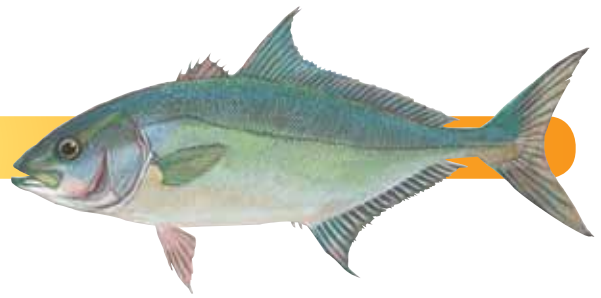
**Size:** up to 10 pounds; average size ranges from ½ – 2 pounds.

## ALMACO JACK

### *Seriola rivoliana*

**Description:** streamlined fish with a deeply forked, crescent shaped tail, a caudal peduncle with a keel but no scutes, a short rounded pectoral fin, and a dark nuchal band; coloration is olive to bluish green to dark amber on the back, fading on the sides with a light colored belly; overall coloration has a light bluish green or olivaceous tinge.

**Similar Fish:** Amberjack and Banded Rudderfish; overall body shape is shorter and wider, and sec-



ond dorsal and anal fins tend to be higher in relation to body width than in other species; also, caudal fin, while distinctively forked, is less crescent shaped than other species; to differentiate among species, see Greater Amberjack.

**Size:** up to 55 pounds; average size ranges from 8 – 25 pounds.

## CREVALLE JACK

### (Hardtail) *Caranx hippos*

**Description:** streamlined shape with a tapered body, although the head is relatively blunt (high forehead); deeply forked, crescent shaped tail, pointed, sickle shaped pectoral fin, and caudal peduncle keel with scutes (scutes are hard and very sharp, often inflicting severe cuts on anglers handling the fish by the tail); coloration is greenish gold along the back fading to a silver or yellowish silver sides and a yellow belly; a black spot is pre-



sent on the gill cover and another black spot is present at the base of the pectoral fin.

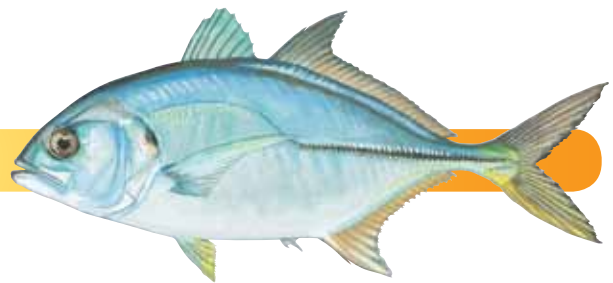
**Similar Fish:** Blue Runner, Bar Jack, Horse Eye Jack

**Size:** up to 55 pounds; average size ranges from 3 – 20 pounds.

## BLUE RUNNER

### *Caranx crysos*

**Description:** streamlined shape, similar in most respects to crevalle jack, but lacking the blunt head; deeply forked, crescent shaped tail, pointed, sickle shaped pectoral fin and caudal peduncle keel with scutes are present; coloration is bluish green along the back, silvery sides with a silvery belly with shades or hints of yellow; a dark spot is present on gill cover and tips of caudal fin feature dark spots, but lacks the dark spot at the base of pectoral fin which is present on crevalle jacks.



**Similar Fish:** Crevalle Jack, Bar Jack, Horse Eye Jack

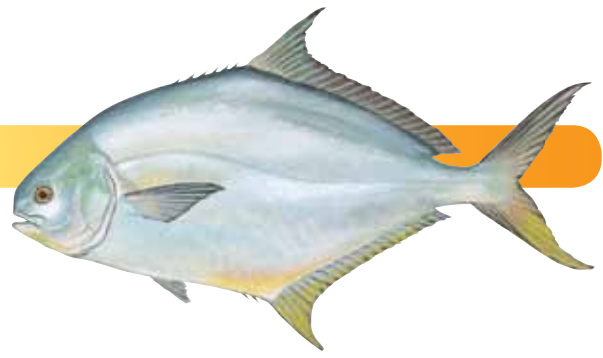
**Size:** up to 5 pounds; average size is approximately 1 pound.

## POMPANO

(Florida Pompano) *Trachinotus carolinus*

**Description:** rounded, flattened body with a small, underslung mouth; deeply forked tail and a small pectoral fin; coloration is greenish gray with some yellowish hints along the back fading to silver sides and a silvery yellow belly.

**Size:** up to 7 pounds; average size ranges from 1/2 – 2 pounds.



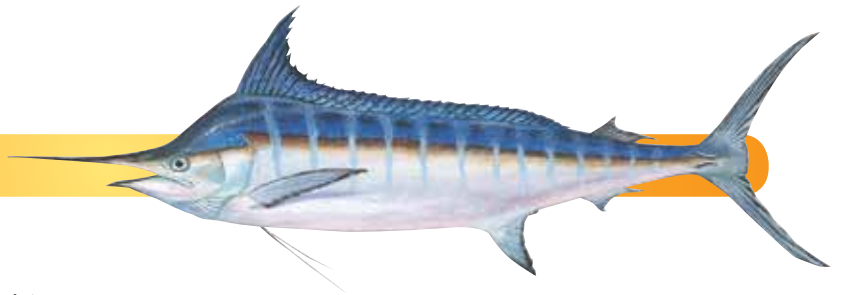
## BLUE MARLIN

*Makaira nigricans*

**Description:** the largest Atlantic billfish, with an elongated body colored dark blue or cobalt blue on top fading to a silvery white belly; may have some golden hues when the fish is alive, especially where the bluish back fades to silvery, and several pale vertical bars may be present down the sides; first part of dorsal fin and the anal fin are pointed.

**Similar Fish:** closely related and similar in appearance to White Marlin; distinguishable by pointed dorsal and anal fins (white marlin have rounded dorsal and anal fins) and size (white marlin in excess of 150 pounds are extremely rare)

**Size:** up to 1500 pounds; average size ranges from 200 – 500 pounds.



## WHITE MARLIN

*Tetrapturus albidus*

**Description:** elongated body colored dark blue or cobalt blue on top fading to silvery white belly; first part of dorsal fin is rounded and features small black or dark spots; anal fin is rounded.

**Similar Fish:** closely related and similar in appearance to Blue Marlin; distinguishable by rounded

first part of dorsal fin (which also features spots) and rounded anal fin (dorsal and anal fins of blue marlin are pointed).

**Size:** up to 180 pounds; average size ranges from 40 – 70 pounds.



## SAILFISH

### *Istiophorus platypterus*

**Description:** elongated body features a greatly enlarged dorsal fin, like a sail, from which the fish derives its name; coloration is dark blue or cobalt blue on top fading to silvery white belly; the large dorsal fin features numerous small, dark spots.



**Similar Fish:** White Marlin, Blue Marlin, Longbill Spearfish.

**Size:** up to 125 pounds; average size ranges from 30 – 60 pounds.

## Longbill Spearfish

### *Tetrapturus pfluegeri*

**Description:** a relatively small fish, whose elongated body features an elongated dorsal fin; coloration is dark blue or cobalt blue on top fading to silvery white belly.



**Size:** up to 75 pounds; average size ranges from 20 – 35 pounds.

## DOLPHIN

### (Dolphinfish, Mahi-Mahi) *Coryphaena hippurus*

**Description:** colorful fish tending to show a bluish green or turquoise top, fading to greenish sides fading to a yellowish belly; small bluish green dots can be found over entire body; body is elongated and tapers sharply from the head to the tail; males feature a very blunt forehead, while females exhibit a rounded forehead; caudal fin is deeply forked.



**Similar Fish:** Pompano Dolphin.

**Size:** up to 85 pounds, average size ranges from 2 – 15 pounds.



## WAHOO

### *Acanthocybium solanderi*

**Description:** a long, slender fish with a pointed snout and mouthful of sharp teeth; gills lack the white "teeth" or protrusions called gillrakers; coloration is dark blue or cobalt blue on top, fading to pale blue sides and a silvery blue belly; dark, vertical bands are present along the sides, similar to the stripes on a tiger.



**Similar Fish:** King Mackerel; distinguishable by the lack of gillrakers, a first dorsal fin which is longer and much fuller, and a caudal fin which is decidedly more upright (much less pronounced fork).

**Size:** up to 150 pounds; average size ranges from 20 – 35 pounds.

## KING MACKEREL

### (Kingfish, King) *Scomberomorus cavalla*

**Description:** a long, slender fish with a deeply forked tail, caudal peduncle keel and a mouthful of sharp teeth; coloration is bluish green, bluish gray, or dark gray on the top fading to silvery sides and belly; fins are a uniform, dusky color.

**Similar Fish:** closely related and similar in appearance to Spanish Mackerel, particularly in juvenile king mackerel which have bronze spots on their sides which fade in adult fish; distinguishable from Spanish mackerel by 1) dusky coloration of first dorsal fin (Spanish mackerel have a jet black forward



ward portion of first dorsal fin; 2) lateral line which makes a pronounced dip at the start of the second dorsal fin (Spanish mackerel have a lateral line that dips gradually and relatively evenly from the head to the tail); 3) 6 – 10 gillrakers on each gill arch (Spanish mackerel have 11 – 16 gillrakers on each gill arch); 4) spots on juvenile king mackerel are a dull bronze color (on Spanish mackerel the spots are a bright golden color).

**Size:** up to 90 pounds; average size is 7 – 25 pounds.

## SPANISH MACKEREL

### *Scomberomorus maculatus*

**Description:** a slender fish with a deeply forked tail, caudal peduncle keel, and a mouthful of sharp teeth; coloration is green or greenish blue on top fading to silver sides and belly; a large number of irregular bright golden spots adorn the sides; front portion of first dorsal fin is jet black in color.

**Similar Fish:** closely related and similar in appearance to Cero Mackerel and King Mackerel; distinguishable from cero mackerel by the alignment and shape of golden spots on the sides (Spanish mackerel have irregular spots round in shape; cero



mackerel have spots which are long and thin (elongated), close together and are aligned so if they were connected they would form lines running down the sides; also cero mackerel have a single golden line running down each side); cero mackerel are extremely rare north of southern Florida; see king mackerel to differentiate between king and Spanish mackerel.

**Size:** up to 13 pounds; average size ranges from 1 – 3 pounds.

## ATLANTIC MACKEREL



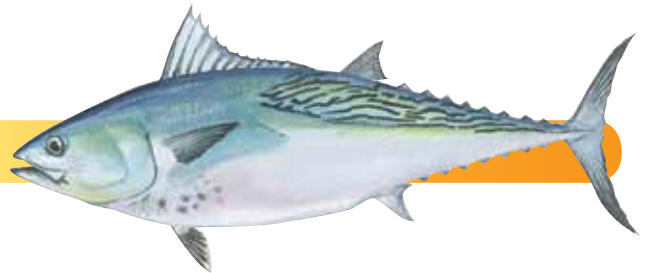
(Boston Mackerel) *Scomber scombrus*

**Description:** small fish favoring cold water; coloration is dark green along the back fading to a silvery belly; dark wavy lines run from the top to midway down the sides; does not have a swim bladder.

**Similar Fish:** Chub Mackerel; distinguishable by absence of spots below lateral line (chub mackerel have spots) and absence of swim bladder (chub mackerel have a swim bladder).

**Size:** up to 5 pounds; average size is 1 – 2 pounds.

## LITTLE TUNNY



(False Albacore) *Euthynnus alletteratus*

**Description:** streamlined body shape tapering from head to tail; small finlets are present between dorsal and anal fins and the upright tail (caudal fin); coloration is dark greenish or dark greenish blue along the top and upper sides fading to silvery below; wavy stripes are present on the rear portion of the back (above the lateral line) and several dark spots appear below the base of the pectoral fin; caudal peduncle keel is present.

**Similar Fish:** Atlantic Bonito and Skipjack Tuna; distinguishable by location and placement of stripes on body.

**Size:** up to 35 pounds; average size ranges from 10 – 15 pounds.

## ATLANTIC BONITO



(Bonito, Bonito Mackerel) *Sarda sarda*

**Description:** streamlined body shape tapering from head to tail; small finlets are present between dorsal and anal fins and the caudal fin; coloration is dark blue on top and upper sides fading to a silvery belly; several straight stripes run along the back tilted upward as they run from behind the head to the top of the back; caudal peduncle keel is present.

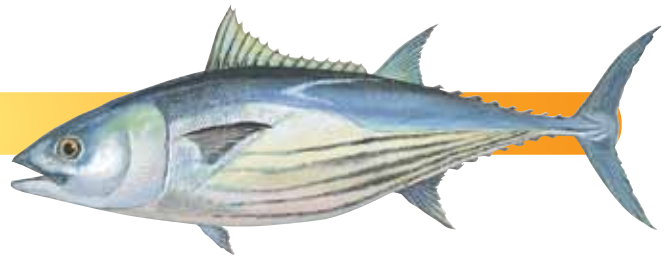
**Similar Fish:** Little Tunny and Skipjack Tuna; distinguishable by location and placement of stripes on body. Atlantic bonito have noticeable teeth, which are not as conspicuous in little tunny and skipjack tuna.

**Size:** up to 20 pounds; average size ranges from 4 – 8 pounds.

## SKIPJACK TUNA

(Oceanic Bonito, Skippy) *Euthynnus pelamis*

**Description:** streamlined body shape tapering from head to tail; small finlets are present between dorsal and anal fins and the caudal fin; coloration is dark blue to bluish black on the top fading to silvery on the belly; 4 to 6 horizontal stripes run along the lower sides and belly; caudal peduncle keel is present.



**Similar Fish:** Little Tunny and Atlantic Bonito; distinguishable by location and placement of stripes on body.

**Size:** up to 40 pounds; average size ranges from 5 – 15 pounds.

## BLUEFIN TUNA

(Horse Mackerel) *Thunnus thynnus*

**Description:** streamlined body tapering from head to tail; small finlets, usually tinged yellow, are present between dorsal and anal fins and the caudal fin; pectoral fin is short; coloration is dark blue to nearly black on top, fading along the sides with a white belly; often several series of small, very light-colored spots are present on the belly.

**Similar Fish:** closely related and similar in appearance to Yellowfin Tuna and Bigeye Tuna; distinguishable from both species by 1) short pectoral



fin, which does not extend rearward on its body to the start of the second dorsal fin (pectoral fin extends at least this far on both yellowfin and bigeye tuna), and 2) the gillrakers on first gill arch (bluefin tuna have 34 – 43 gillrakers on arch, while yellowfins have 27 – 33 gillrakers and big-eyes have 25 – 29 gillrakers).

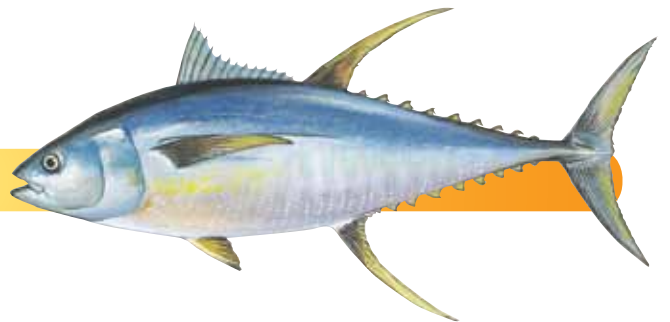
**Size:** up to 1400 pounds; average size ranges from 30 - 150 pounds.

## YELLOWFIN TUNA

(Allison Tuna) *Thunnus albacares*

**Description:** streamlined body tapering from head to tail; finlets, colored yellow, are present between dorsal and anal fins and the caudal fin; second dorsal and anal fin tend to be elongated (particularly on larger fish) and are colored yellow; pectoral fin is long, extending past the start of the second dorsal fin; coloration is dark blue on the top, fading along the sides with golden or yellow highlights to a light colored belly.

**Similar Fish:** closely related and similar in appearance to Bluefin Tuna and Bigeye Tuna; distinguishable from both species by 1) length of pectoral fin, which extends rearward past start of second dorsal fin (pectoral fin on bluefin tuna does not extend to start of second dorsal fin, while on bigeye tuna it extends just to the start of second dorsal



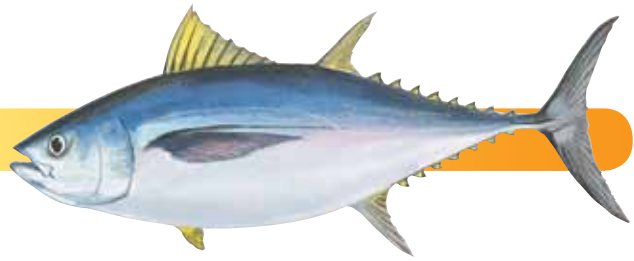
fin); and, 2) its liver, which has a smooth surface on all sides and is not symmetrical in shape (both bluefin and bigeye tuna have livers which are striated on one side, which is caused by blood vessels just under the surface of the liver, and are symmetrically shaped); distinguishable from bluefin tuna by number of gillrakers on first gill arch (yellowfin tuna have 27 – 33 gillrakers on gill arch, while bluefin tuna have 34 – 43 gillrakers); often, the very similar appearance of bigeye and yellowfin tuna necessitates examination of the liver for a positive identification.

**Size:** up to 385 pounds; average size ranges from 30 - 80 pounds.

## BIGEYE TUNA

### *Thunnus obesus*

**Description:** streamlined body tapers from head to tail; finlets, which are yellow tinged by black, are present between dorsal and anal fins and the caudal fin; dorsal and anal fins tend to be yellow in color; pectoral fin is long, extending rearward just to the start of the second dorsal fin; coloration is dark blue on top fading along the sides to a white belly; first gill arch has 25 – 29 gillrakers; eye is larger relative to the size of the head than for either bluefin or yellowfin tuna.



**Similar Fish:** closely related and similar in appearance to Bluefin Tuna and Yellowfin Tuna; see descriptions of Bluefin Tuna and Yellowfin Tuna for distinguishing characteristics.

**Size:** up to 375 pounds; average size ranges from 100 – 250 pounds.

## ALBACORE

### *Thunnus alalunga*

**Description:** streamlined body tapers from head to tail; finlets, dusky in coloration, are present between dorsal and anal fins and the caudal fin; pectoral fin is extremely long, extending past the start of the anal fin; coloration is dark blue on top fading to a silvery white sides and belly; first dorsal fin is yellow.



**Similar Fish:** similar to other tunas, but easily distinguishable by extremely long pectoral fins.

**Size:** up to 90 pounds; average size 25 – 45 pounds.

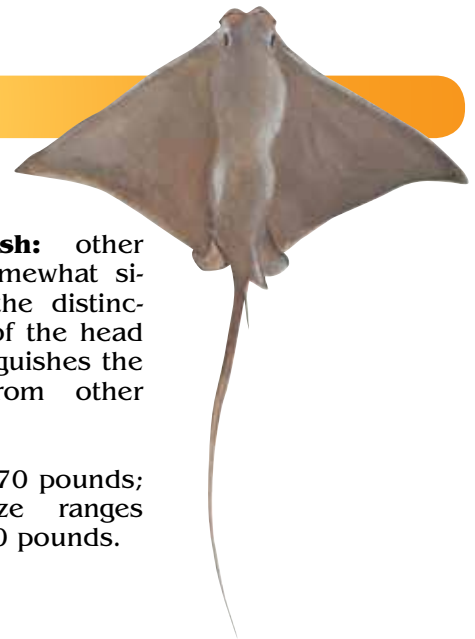
## COWNOSE RAY

### (Bat Ray, Bullfish) *Rhinoptera bonasus*

**Description:** broad, flat body is formed by wing-like pectoral fins; long, whiplike tail features a barbed spine at the base of the tail; front of the head has an indentation in the middle giving it a similar appearance to a cow's nose, which gives rise to its name; coloration is brown or brownish with a mustard yellow tint on the back with a white or off-white belly.

**Similar Fish:** other rays are somewhat similar but the distinctive shape of the head easily distinguishes the cownose from other rays.

**Size:** up to 70 pounds; average size ranges from 20 – 40 pounds.



## SOUTHERN STINGRAY

(Stingray) *Dasyatis americana*

**Description:** broad, diamond-shaped body is formed by winglike pectoral fins and a pointed head; long, whiplike tail features a barbed spine near the base of the tail; coloration is brown to grayish brown on the back with a white or off-white belly.

**Similar Fish:** closely related and very similar in appearance to the Atlantic stingray; distinguishable by pointed sides or wings (Atlantic stingray has rounded sides or wings) and placement of

barbed spine (more forward on southern stingray, closer to the end of the tail on the Atlantic stingray).

**Size:** up to 175 pounds; average size ranges from 30 – 75 pounds.



## SMOOTH BUTTERFLY RAY

*Gymnura micrura*

**Description:** broad, diamond-shaped body, which is much wider than it is long, is formed by winglike pectoral fins and a pointed head; short tail has no spine; coloration is mustard yellow to brownish on the back with an off-white belly.

**Similar Fish:** closely related and similar in appearance to the spiny butterfly ray; distinguishable by

lack of barbed spine on tail (spiny butterfly ray has a barbed spine).

**Size:** up to 150 pounds; average size ranges from 25 – 70 pounds.



## CLEARNOSE SKATE

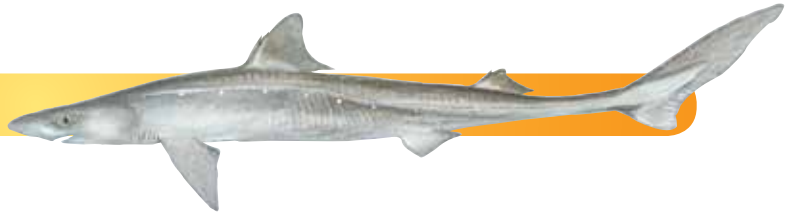
(Skate) *Raja eglanteria*

**Description:** broad diamond-shaped body with a pronounced pointed snout which is almost translucent; long tail features numerous spines (none barbed) running along the back and down the tail; coloration is brown or grayish brown along the back with numerous darker spots and some light spots; belly is white.

**Size:** up to 10 pounds; average size ranges from 2 – 5 pounds.



## SPINY DOGFISH



### *Squalus acanthias*

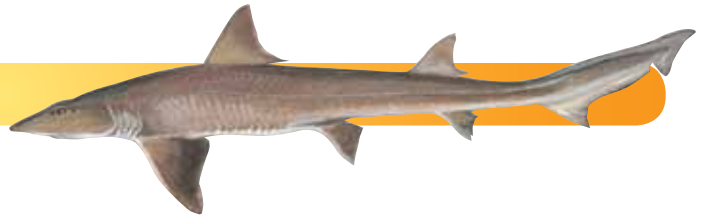
**Description:** long, slender body with two dorsal fins of nearly equal size; pelvic fin on the underside of the fish is positioned between the two dorsal fins and anal fin is absent; jaw is filled with small teeth with points bent toward rear of the mouth, positioned closely together to form a continuous cutting edge; a spiracle (airhole) is positioned behind the relatively large eye; coloration is gray along the back fading to pale gray with a white belly; young spiny dogfish have numerous white spots along the back.

**Similar Fish:** closely related and similar in appearance to the smooth dogfish; distinguishable by lack of anal fin (smooth dogfish has an anal fin) and the presence of spines at the start of each dorsal fin

(smooth dogfish lack spines). Also, spiny dogfish may appear similar to Atlantic sharpnose sharks, which have small white spots along the back. However, the two species are easily distinguishable by size of dorsal fins (spiny dogfish have fins nearly equal in size, while the sharpnose shark has a first dorsal fin substantially larger than the second); presence of an anal fin on sharpnose shark (none on spiny dogfish); presence of spines at start of dorsal fins on spiny dogfish (none on sharpnose shark), and presence of distinct individual teeth in sharpnose shark.

**Size:** up to 30 pounds, average size 5 – 15 pounds.

## SMOOTH DOGFISH



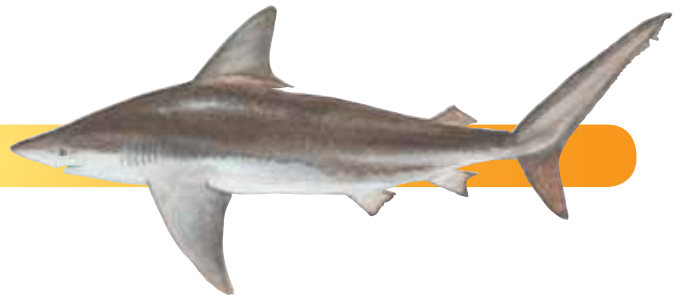
### *Mustelus canis*

**Description:** long slender body with two dorsal fins of nearly equal size; pelvic fin on underside of fish is positioned between two dorsal fins, while anal fin is rear of the second dorsal fin; jaw features flat, pavement-like teeth and a spiracle (airhole) is located behind the relatively small eye; coloration is gray to brownish along the back fading to a pale gray along the sides with a white belly.

**Similar Fish:** closely related and similar in appearance to the spiny dogfish; distinguishable by presence of anal fin (absent in spiny dogfish) and absence of spines at the start of dorsal fins (present in spiny dogfish).

**Size:** up to 40 pounds; average size 4 – 15 pounds.

## SANDBAR SHARK



### (Brown Shark, Sand Shark) *Carcharhinus milberti*

**Description:** long slender body with large first dorsal fin and small second dorsal fin; distinctive ridge exists along top of back between the first and second dorsal fins; height of first dorsal fin exceeds 10% of shark's total length and first dorsal fin extends farther forward on the body than on similar sharks; coloration is gray to grayish brown along the back and sides fading to a lighter colored abdomen.

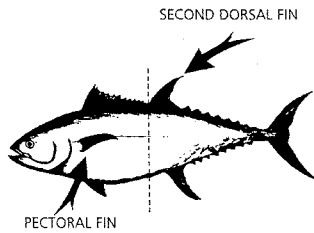
**Similar Sharks:** Dusky shark; distinguishable by larger size of first dorsal fin (dusky's first dorsal fin height is smaller than 10% of its total body length) and location of first dorsal fin (dusky shark's first dorsal fin starts at or rearward of the connection of the pectoral fins to the body).

**Size:** up to 350 pounds; average size is 10 – 50 pounds.

**Note:** Chesapeake Bay is the largest nursery area in the world for sandbar sharks, and small specimens (10-25 pounds) are extremely abundant during the summer months. People often refer to the sand shark, which is not a true species of shark but is a generic reference to any small toothy shark, and most likely they are referring to the sandbar shark in local waters. Identification of the shark species is extremely difficult, often relying on comparisons of fin lengths or placement. A good guide for shark identification is **Angler's Guide to Sharks of the Northeastern United States**, by John G. Casey. This was a publication of the Department of the Interior, Bureau of Sport Fisheries and Wildlife, Circular Number 179.

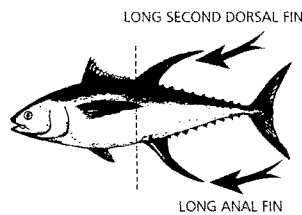
# TUNA IDENTIFICATION CHART

## LENGTH OF PECTORAL FIN



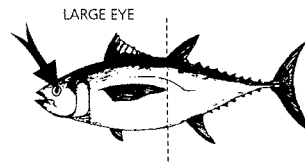
### BLUEFIN TUNA

Bluefin tuna have a short pectoral fin, which does not reach the first part of the second dorsal fin.



### YELLOWFIN TUNA

Yellowfin tuna have a pectoral fin which reaches past the first part of the second dorsal fin. Also, yellowfin tuna weighing more than 70 pounds may have long second dorsal and anal fins.

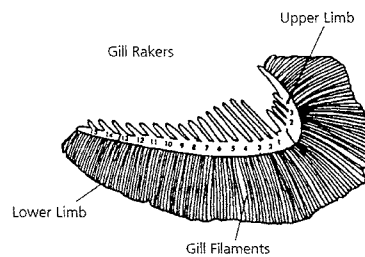
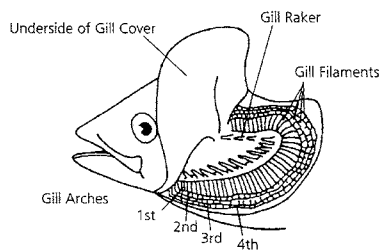


### BIGEYE TUNA

Bigeye tuna have a pectoral fin longer than the bluefin tuna but shorter than the yellowfin tuna. Its length generally just reaches the start of the second dorsal fin. Eye is distinctively large.

**Note:** Pectoral Fin length may not be sufficient to distinguish the yellowfin tuna from the bigeye tuna.

## NUMBER OF GILL RAKERS



Gill rakers are the white, bony bumps on the gill arch of a fish. Fish have four gill arches on each side of their head. Each tuna species has a distinct number of gill rakers on each arch, so counting the number of gill rakers can assist in identifying different tunas. In the picture above the gill rakers are numbered; the total of the gill rakers on both the upper and lower limb of the gill arch is the number used to assist in identifying the species of tuna.

### Bluefin Tuna

34-43 gill rakers on each gill arch

### Yellowfin Tuna

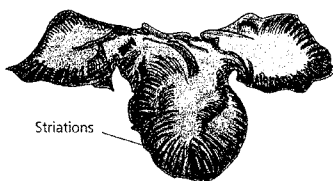
27-33 gill rakers on each gill arch

### Bigeye Tuna

25-29 gill rakers on each gill arch

**Note:** There is some overlap on the gill raker count of yellowfin and bigeye tuna; however, the bluefin tuna has a distinctive number of gill rakers making its identification easy.

## SHAPE AND TEXTURE OF THE LIVER



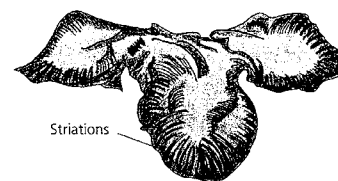
### BLUEFIN TUNA

The liver of a bluefin tuna is symmetrical in shape, with the middle portion tending to be longer than the two side portions. Blood vessels occur close to the surface of the bottom side of the liver, giving it a streaked or striated look and texture.



### YELLOWFIN TUNA

The liver of the yellowfin tuna is not symmetrical in shape, with the middle and one side long and the other side short. There are no blood vessels near the surface of either side of the liver, giving the liver a very smooth appearance.



### BIGEYE TUNA

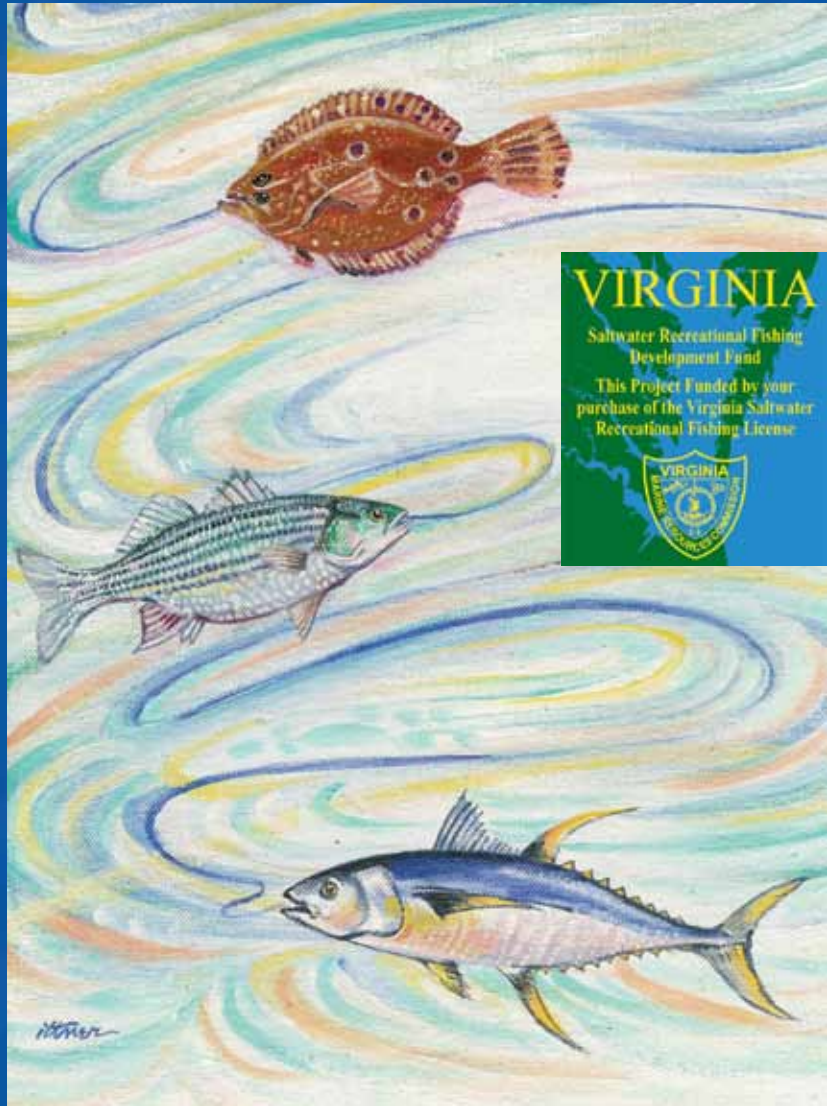
The liver of a bigeye tuna is symmetrical in shape, with the middle portion tending to be longer than the two side portions. Blood vessels occur close to the surface of the bottom side of the liver, giving it a streaked or striated look and texture.











Saltwater Recreational Fishing Development Fund  
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