

**Winter Flounder (Blackback, Mud Dab,
Black Flounder)**

Family: Pleuronectidae

Pseudopleuronectes americanus

Description

Size: Averages 12-15" in length, can grow up to 25"; average weight 3/4-2 lbs., can weigh up to 8 lbs.

Characteristics: Oval; thick body; slightly concave head outline; small mouth with thick, fleshy lips; eyes and viscera on the right side; blunt nose; eyes set far apart with scales between them; incisor-like teeth in the lower jaw; upper jaw may have no teeth; smooth scales cover the blind side; the dorsal fin, with spines of equal length, extends backward from the eye; the anal fin spines are longer at the middle; a gap separates the ventral fins from the anal; broad caudal fins.

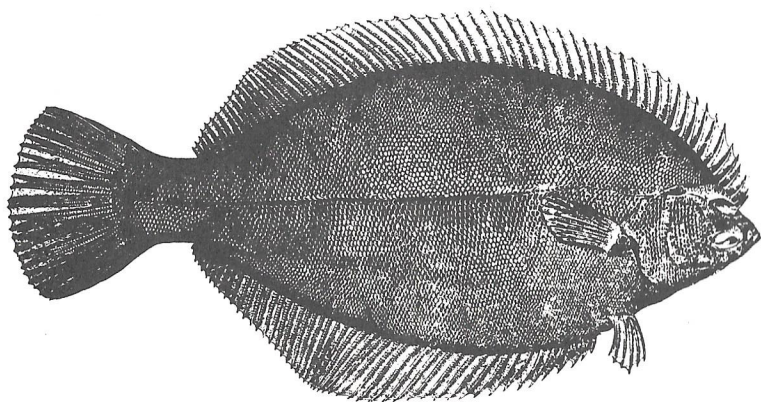
Color: Usually muddy, reddish-brown, olive green, black or dark gray on the dorsal side, with dark spots; white blind side with a translucent edge tinged with blue; yellow or white caudal peduncle; the long fins are tinged with pink, red or yellow on the eyed side, white on the blind side.

Habitat

Prefers salt and brackish water; occasionally found in fresh water; found on mud, sand, shell or gravel bottoms and among eelgrass; year-round residents of Sandy Hook.

Edibility

Excellent



Winter Flounder

Sheepshead Minnow

Family: Poeciliidae

Cyprinodon variegatus

Description

Size: Average between 4/5 - 3" in length.

Characteristics: Deep-bodied, flat-sided; small flat-topped head; mouth with wedge-shaped teeth; high arched back; thick caudal peduncle; males have higher ventral, dorsal and anal fins than females.

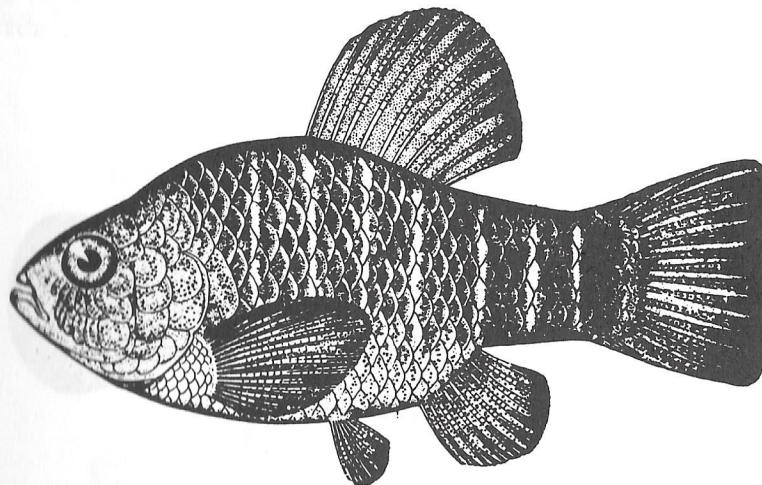
Color: Males are olive on the dorsal side; with a pale or yellowish-white belly and two black cross stripes; during the spring breeding season, males are steel blue on their dorsal side, deep orange on their ventral side; young minnows have black stripes, which fade on male adults; females have a black spot on the rear corner of their dorsal fin.

Habitat

Found in shallow waters, heads of bays and salt marshes; may be found in the brackish waters of estuaries; a year-round resident of Sandy Hook waters.

Edibility

Good, not considered a food source.



Sheepshead Minnow

Mummichog (Killifish, Mud Minnow, Killi, Common Killifish, Pike Minnow)

Family: Poeciliidae
Fundulus heteroclitus

Description

Size: Average between 3½ - 4" in length.

Characteristics: Stout body; round back and belly; blunt snout; small mouth; top of the head is flat between the eyes; large, rounded scales cover the head and body; deep caudal peduncle; rounded caudal fin; the dorsal and anal fins of the male are larger, more muscular and shaped differently than the females.

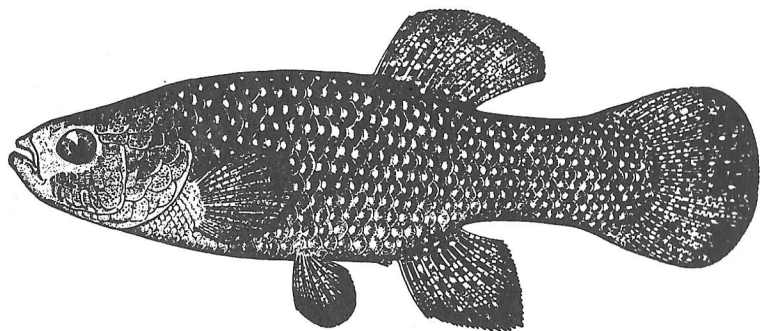
Color: Males are dark green or steel blue on the dorsal side, with white and yellow spots and silvery spotted lines; their ventral side is white, pale yellow or orange; during spring spawning, the male turns almost black, with a steel blue belly; females are olive to green, darker on their dorsal side, with faint crossbars of a darker color; can change their color depending on the amount of light penetrating the water.

Habitat

Found in brackish estuarine waters and among beds of eelgrass and marsh grass (*Spartina alterniflora*); lives at Sandy Hook year round.

Edibility

Good, not used as a food source; excellent baitfish; used by sport fishermen to catch larger pelagic species and blue-claw crabs.



Mummichog

Striped Mummichog (Striped Killi, Killifish)

Family: Poeciliidae
Fundulus majalis

Description

Size: Can grow up to 7" in length

Characteristics: More slender; its snout more pointed; its body tapered at both ends; its caudal peduncle not as stout as the common mummichog.

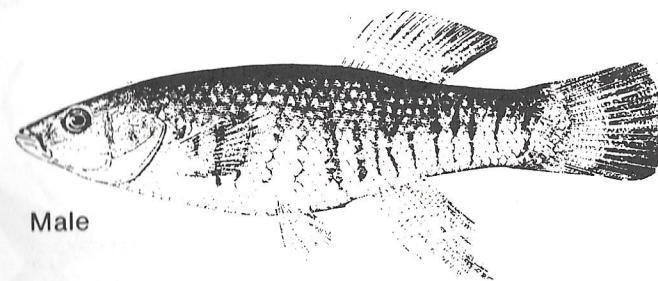
Color: The male is dark olive green on top, with silvery sides; a greenish-yellow belly and a black spot on the rear part of the dorsal fin; his pectoral and caudal fins are pale yellow; his body is striped and when breeding, the lower sides and belly change to orange or gold and the fins to bright yellow; the female is olive green on the dorsal side, white on the ventral side, with two or three long black stripes on each side; the top stripe runs from the pectoral to the ventral fin, then from the ventral to beyond the anal fin; her caudal peduncle has a few stripes.

Habitat

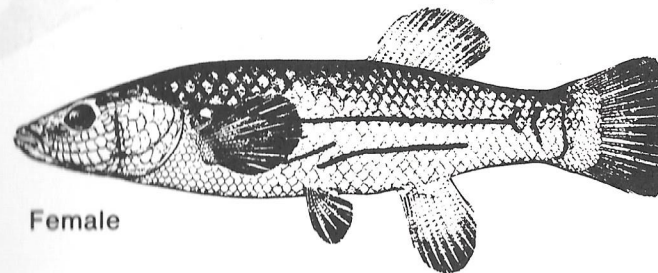
Prefers salt water; can be found along open beaches and in salt marshes; can jump back into the water if stranded on shore; found along Sandy Hook from spring until fall.

Edibility

Not considered a major food source; used by sport fishermen as baitfish to catch larger pelagic species.



Male



Female

Striped Mummichog

**Bluefish (Snapper (juveniles), Taylors (1-2 lbs.),
Blues or Choppers (adults))**

Family: Pomatomidae

Pomatomus saltatrix

Description

Size: Snappers, 14" average in length; larger fish up to 3½' long; snappers average less than 1/3 lb.; Taylors average between 1-3 lbs.; blues up to 35 lbs.

Characteristics: Semi-stout body; flat-sided, blunt-edged belly, deep head; semi-pointed nose; large mouth with a projecting lower jaw; stout, conical, canine-like teeth in both jaws; scales cover the head, second dorsal and anal fins; the first spiny, rounded dorsal fin is in a depressible groove; the second dorsal is twice as high as the first and tapers backward; broad, deeply forked caudal fin; anal fin is similar to the second dorsal, but not as concave, and is preceded by two short detached spines hidden in the skin.

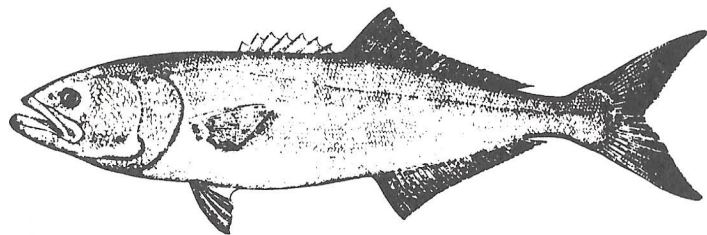
Color: Sea-green on the dorsal side; silver on the ventral side; the second dorsal, caudal and pectoral fins are tinted sea-green with black blotches at the base of the pectoral fin.

Habitat

Bluefish less than 4 lbs. are common out to the edge of the continental shelf; snappers swim into harbors and estuaries along the coast; larger blues live further off the continental shelf; blues move to warmer waters in the winter; inhabits Sandy Hook from late spring until mid-fall; fast swimmers, voracious eaters, feeding frenzies occur when there is easily obtainable food available.

Edibility

Good.



Bluefish

Little Skate (Common Skate, Summer Skate)

Family: Rajidae

Raja erinacea

Description

Size: Averages 16-20" length; weighs between ¾ - 2 lbs.

Characteristics: Blunt nose; rounded snout; wavy mouth with approximately 50 rows of teeth; outer and rear angles are rounded; no distinct tailfin; two small dorsal fins at the rear of the tail; tail is covered with two to four rows of bumps; females have thorns scattered over the head, snout, shoulders and sides of the tail; juveniles have no thorns down the middle of the back, propels itself through the water by undulating its flexible pectoral fins and steers with its tail; comparatively smaller than any of its relatives.

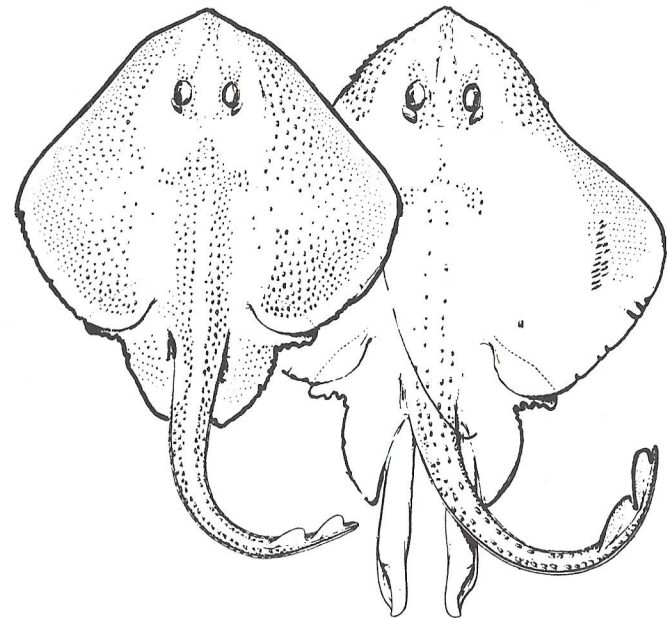
Color: Grayish to dark brown on the dorsal side; white or gray on the ventral side; covered with dark spots; the edges of the pectoral fins are light brown.

Habitat

Abundant on sandy bottoms, in mud or on ledges; found in the ocean near Sandy Hook from late spring until early fall.

Edibility

Poor



Little Skate

Northern Kingfish (King Whiting, Minkfish, Roundhead, Sea Mullet)

Family: Sciaenidae

Menticirrhus saxatilis

Description

Size: Averages 10-14" in length, can grow up to 17"; averages 1/3 - 2/3 lbs. in weight, can weigh up to 3/4 lbs.

Characteristics: Slender; most of its weight distributed around the anterior region; blunt nose; snout overhangs the mouth protecting the lower jaw; barbel below the fleshy lips; has no air bladder so it doesn't croak; first spiny dorsal fin is high and pointed; the second is soft-rayed, tapered slightly and preceded by one stout spine; the third dorsal is long and filamentous; the caudal fin is concave on top, rounded on the bottom; a long spine beginning under the second dorsal fin precedes the anal fin; long, pointed pectorals.

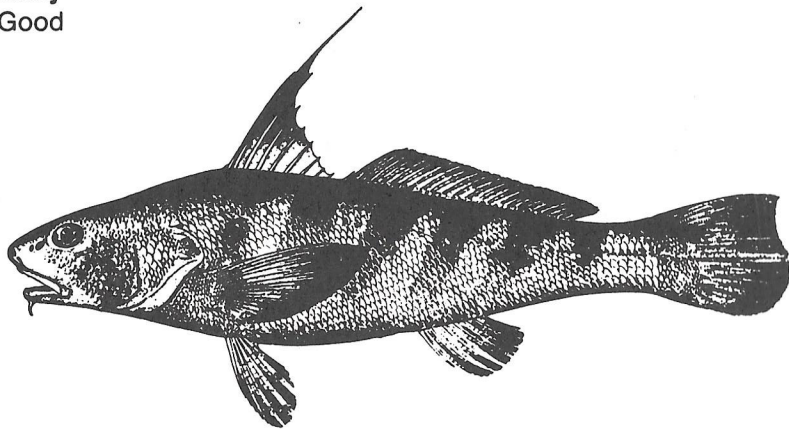
Color: Dusky gray to black on the dorsal side, with silver and metallic reflections; milky or yellow-white ventral side; irregularly striped sides with the strips forming a V-shaped blotch below the dorsal fin; pale belly with a long dark streak on either side; dusky or black fins; all fins except the second dorsal and caudal fin have dirty white tips.

Habitat

Prefers sand, shell or gravel bottoms near inlets, sand bars or along channel edges; found near Sandy Hook from early summer until early fall.

Edibility

Good



Northern Kingfish

Atlantic Croaker (Croaker)

Family: Sciaenidae

Micropogon undulatus

Description

Size: Averages 2/5 - 14" in length; average weight 1/4 - 1 1/2 lbs., can weigh up to 5 lbs.

Characteristics: Long head; conical snout; slightly arched back; short barbels below the mouth on each side of the chin; caudal fin is doubly concave with pointed corners; called "croakers" because of the croaking sound they make, caused by contractions of abdominal muscles against gas filled air bladders.

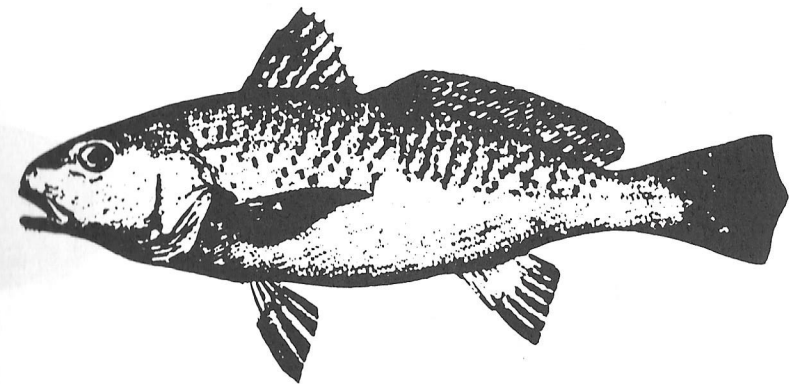
Color: Green or grayish-silver on the dorsal side with a silver ventral portion, giving it an iridescent tint; the back, sides and dorsal fins have numerous brassy or brownish wavy, spotted bars.

Habitat

Lives on mud, sand or coral bottoms; found around rock jetties or wrecks in salt or brackish water; some can tolerate nearly fresh water environments; inhabits Sandy Hook waters from late spring until early fall.

Edibility

Fair.



Atlantic Croaker

Black Drum (Puppy Drum, Drum)

Family: Sciaenidae

Pogonias cromis

Description

Size: Can grow up to 4' in length; average weight 3/4 - 2 lbs., can weigh up to 146 lbs.

Characteristics: Short, deep body; high arched back; flat belly; horizontal, low-set mouth; small, pointed jaw teeth; flat, pavement-like throat teeth used to crush shellfish; small eyes; barbels on the chin; large scales; first spiny dorsal fin is rounded and triangular, the second is soft-rayed, oblong, smaller and separate from the first; square-tipped caudal fin; two spines, one short, one long, precede the anal fin; sharply pointed pectoral fins; rounded ventrals; named because of the drumming sound they make to signal their mates at spawning time.

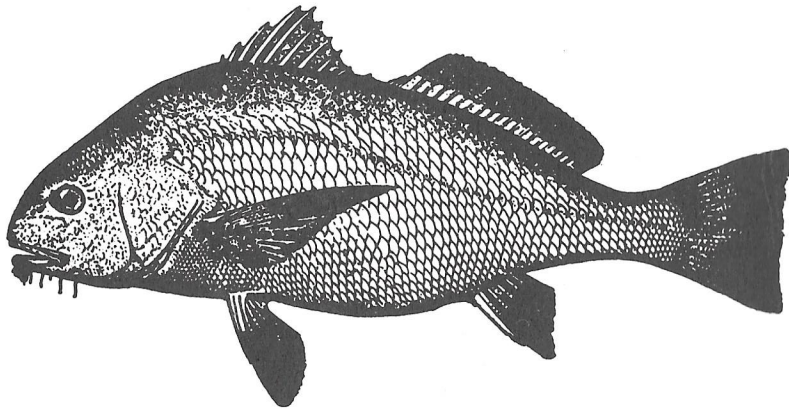
Color: Silver with a brassy lustre and black fins; can be gray or red when caught, but turns dark gray after death.

Habitat

Found on any type of bottom; prefers sandy areas with mussel, clam or oyster beds; also found around breakwaters, jetties, pilings, bridges and piers; found near Sandy Hook during the summer months.

Edibility

Fair



Black Drum

Atlantic Bonito (Common Bonito, Skipjack, Bonito)

Family: Scombridae

Sarda sarda

Description

Size: Can grow up to 3' in length; average weight 2-4 lbs., can weigh up to 15 lbs.

Characteristics: Stout-bodied; pointed snout, large mouth gapes back past the eyes; scales cover the body; first spiny dorsal fin is tall and triangular; the second dorsal and anal fins are both concave followed by several finlets; broad, forked caudal fin.

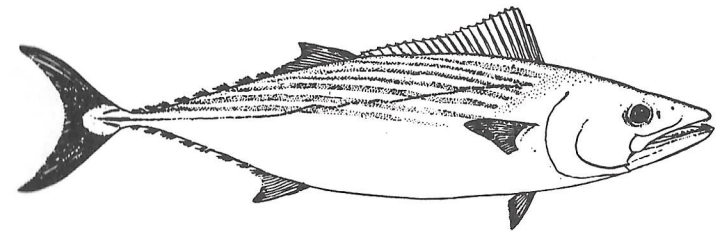
Color: Steely blue on the dorsal side with silver sides and abdomen; upper sides are striped with dark, narrow bluish lines.

Habitat

Found in the open sea travelling in schools; found near Sandy Hook from August through October when water temperatures are warmest.

Edibility

Fair



Atlantic Bonito

Chub Mackerel (Hardhead)

Family: Scombridae

Scomber colias

Description

Size: Averages 8 - 14" in length; 1/3 - 2/3 lbs. in weight.

Characteristics: Chub mackerels differ from Atlantic mackerels in the following ways:

- 1) Chubs have a well-developed swim bladder, mackerels do not;
- 2) The chub's dorsal fins are closer together with fewer spines;
- 3) The chub's eyes are larger.

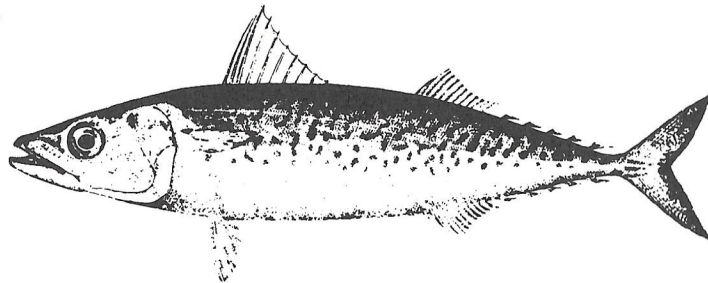
Color: Silver below the middle; its lower sides are mottled with small, dusky blotches; otherwise it resembles the Atlantic mackerel.

Habitat

Prefers warmer water; but can be found in inshore and offshore areas; inhabits the waters of Sandy Hook for a brief period in the spring and fall.

Edibility

Good.



Chub Mackerel

Atlantic Mackerel (Common Mackerel, Boston Mackerel)

Family: Scombridae

Scomber scombrus

Description

Size: Averages 14 - 18" in length, can grow up to 22"; averages 3/4 - 1 1/4 lbs. in weight, can weigh up to 4 1/2 lbs.

Characteristics: Long head; pointed nose; large mouth; sharp, slender teeth; its large eyes are filled with a fatty, clear tissue that covers the pupil except for a perpendicular slit over the pupil; the body is tapered at both ends and covered with velvety-soft scales; two dorsal fins, one spiny and triangular, one soft, separated from the first and followed by several small finlets; the anal fin is similar in shape and size to the second dorsal; broad, deeply-forked caudal fin.

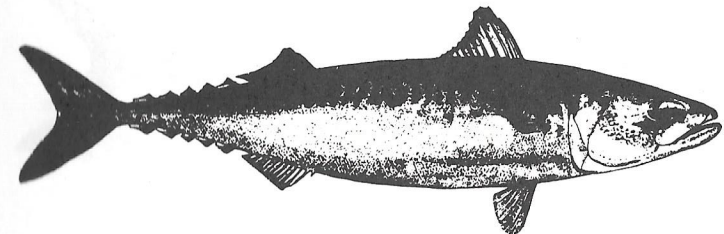
Color: Dark silver-gray to greenish-blue and blue-black on its head; dark, wavy transverse stripes run down its sides; silver jaws and gill covers; lower sides are white with a silver, copper or brassy iridescence; silvery-white belly; a narrow streak runs the length of the body from the pectoral to caudal fin; the pectorals are black at the base; gray or dusky dorsal and caudal fins.

Habitat

Swift-moving fish, inhabits inshore and offshore areas; to stay alive they must swim constantly to bring sufficient water (and oxygen) through their gill filaments; inhabits the waters of Sandy Hook for a brief run in the spring and fall.

Edibility

Fair.



Atlantic Mackerel

Cero Mackerel (Cero)

Family: **Scombridae**
Scomberomorus regalis

Description

Size: Can grow up to 12" in length; 2-4 lbs. in weight.

Characteristics: Slender body; long head; pointed nose; sharp, pointed, triangular teeth; forked caudal peduncle; the first spiny dorsal fin is long and triangular, the second is concave; the anal fin resembles the second dorsal and both are followed by several finlets; the pectoral fins are covered with scales.

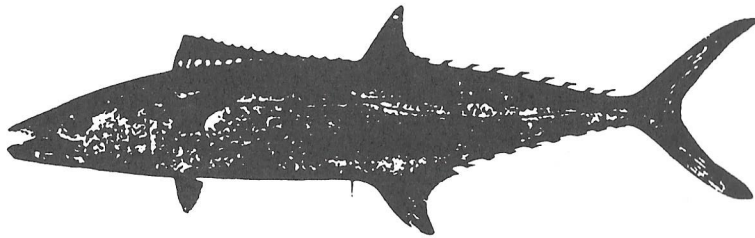
Color: Dark blue or blue-green on the dorsal side; silver on the ventral side; the upper half of the first dorsal fin is deep blue; the second dorsal and pectoral fins are pale yellow with dusky edges; white anal and ventral fins; a narrow brown stripe runs from the pectoral to the base of the caudal fin, sloping downward.

Habitat

Found along ocean beaches; near Sandy Hook for a brief run in the spring and fall.

Edibility

Good.



Cero Mackerel

Black Sea Bass (Sea Bass)

Family: **Serranidae**
Centropristis striatus

Description

Size: Can grow up to 2' in length; averages 1/4 - 3/4 lbs. in weight, can weigh up to 8 lbs.

Characteristics: Stout-bodied; high back; smooth, flat-topped head; pointed snout; large mouth; eyes set high on its head; one sharp, flat spine behind each smooth gill cover; large scales; broad, stout caudal peduncle; the spiny and soft-rayed dorsal fins are equal in length and attached to form one continuous fin; three short, sharp spikes precede the rounded, long and narrow anal fin; the broadly rounded pectoral fins reach almost to the anal fin; the caudal fin is rounded, with an extended well-developed ray; the ventral fins begin in front of the pectorals.

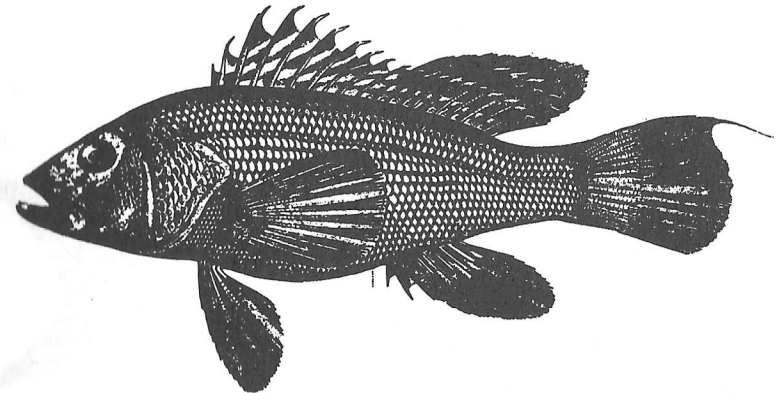
Color: Usually gray to brown or blue-black; somewhat mottled; pale belly and sides; spotted dorsal fins; the other fins are mottled and dusky; the outside edge of the scales are dark, giving the appearance of stripes.

Habitat

Found on or near rock, coral or shell bottoms around wrecks, pilings, rock jetties or breakwaters; strictly a bottom fish, it seldom ventures into rivers or streams; found near Sandy Hook from mid-spring until late fall.

Edibility

Excellent.



Black Sea Bass

Scup (Porgy, Maiden, Fairmaid, Ironsides)

Family: Sparidae

Stenotomus chrysops

Description

Size: Can grow up to 18" in length; averages 1/4-3/4 lbs. in weight, can weigh up to 5 lbs.

Characteristics: Thin; twice as long as it is wide; small, slightly concave head; thick, firmly attached scales; rounded gill covers; the first short spine of the long dorsal fin is followed by a taller, spiny portion, a soft-rayed portion, and ends with rounded corners; it fits in a groove down the middle of its back; the anal fin has three spines, the first shorter than the other two, followed by several soft rays; the anal fin fits in a groove much like the dorsal; pointed ventral fins; caudal fin is deeply concave with sharp corners.

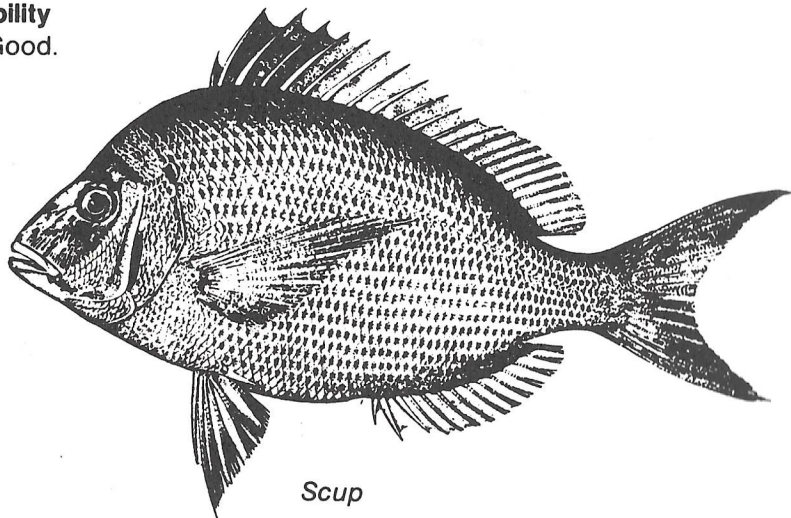
Color: Dull silver iridescence; darker dorsally with inconspicuous stripes on its sides and back; speckled with light blue streaks on the base of the dorsal fin; its head is silvery with dusky blotches; its dorsal, caudal and anal fins are dusky, speckled with blue; white, blue and slightly dusky ventral fins; tinted brown pectorals; white belly.

Habitat

Found on sand, gravel or rock bottoms near shoals, shellfish beds, pilings and wrecks; warm weather brings them inshore to shallow water along the beaches, they retreat to deeper water in the winter; found near rocky structures of Sandy Hook from late spring until mid-fall.

Edibility

Good.



Scup

Spiny Dogfish (Dogfish, Piked Dogfish, Grayfish)

Family: Squalidae

Squalus acanthias

Description

Size: 8½ - 13" long when born, adult males average 2-3' in length, adult females average 2½ - 3½' in length; average weight 7-10 lbs., can weigh up to 15-20 lbs.

Characteristics: Slender, little shark; flattened head; snout tapers to a blunt tip; sharply pointed teeth are bent toward the outer corners of the mouth so they form a nearly continuous cutting edge along each jaw; the larger dorsal is between the pectorals and pelvics; the second dorsal is behind the pelvics; sharp dorsal spines lie across the front margins of the two dorsal fins; it has no anal fin, unlike all other smooth-finned sharks.

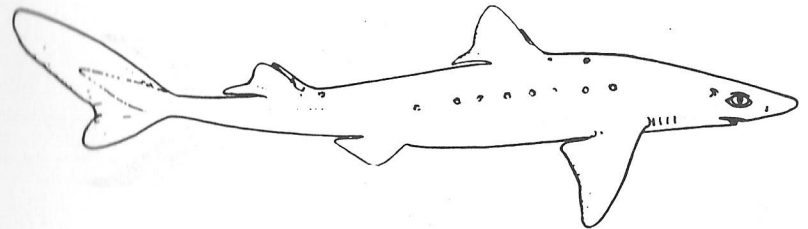
Color: Slate colored, may be tinged with brown; a row of small white spots around the dorsal fins which may fade in older fish; pure white to pale gray belly.

Habitat

Found around Sandy Hook during the colder months of the year.

Edibility

Fair.



Spiny Dogfish

Butterfish (Sheepshead, Dollarfish, Harvestfish, Shiner)

Family: Stromateidae

Peprilus triacanthus

Description

Size: Averages 8" in length, can grow up to 11"; average weight 1/4-3/4 lb., can weigh up to 1 1/2 lb.

Characteristics: Flat and broad, similar to flounder; short head; blunt nose; small mouth; weak teeth; very small scales; a row of conspicuous mucus pores below the forward half of the dorsal fin; short, slender caudal penducle; one long soft-rayed dorsal, preceded by a forward pointing spine; the anal fin is almost as long as the dorsal and follows three short, inconspicuous spines; long, pointed pectorals; deeply forked tail fin; no ventral fins.

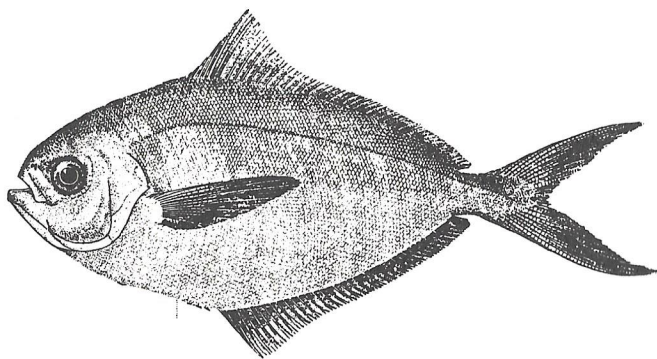
Color: Blue-gray on the dorsal side; sides marked by irregular dark spots which fade after death; silver belly.

Habitat

Found inshore in schools which frequent sheltered bays and estuaries; prefers sandy bottoms, but will remain near to the coast; can be found near salt marsh borders and open bay areas of Sandy Hook Bay from late spring until early fall and in nearby ocean waters May through December.

Edibility

Excellent; they have a buttery flavor.



Butterfish

Northern Seahorse (Common American Seahorse, Seahorse)

Family: Syngnathidae

Hippocampus hudsonius

Description

Size: Average 3-6" in length.

Characteristics: The head resembles that of a horse; a star-shaped crown sits on top of its head; tubular snout; a small slanted mouth at the tip; sharp spines above and behind each eye, over the gill cover and on each side of the throat; bony plates cover the neck, body and tail; four blunt spines interlock each body ring; below the anal fin the body tapers into a long tail that curls inward; the male carries the brood pouch; no ventral and caudal fins; the anal and dorsal fins move constantly to stabilize and propel this animal.

Color: Light brown or dusky to ashen gray or yellow; mottled with lighter, darker or silver dots.

Habitat

Found among eelgrass and seaweed where they cling with their monkey-like tails; inhabits the waters of Sandy Hook from late spring until early fall.

Edibility

Poor.



Northern Seahorse

Northern Pipefish (Pipefish, Common Pipefish, Banded Pipefish)

Family: Syngnathidae

Syngnathus fuscus

Description

Size: Averages between 4-8" in length.

Characteristics: Slender, little fish; tubelike, blunt-ended snout; small toothless mouth; small gill openings; boney plates connected in rings cover the body; the male has a wider abdomen where two side flaps meet to form the brood pouch; can independently roll their eyes; the middle ray of the rounded caudal fin is the longest on its body; small anal fin behind the vent; no ventral fins; pipefish propel themselves by using their dorsal fin or strokes of their tail.

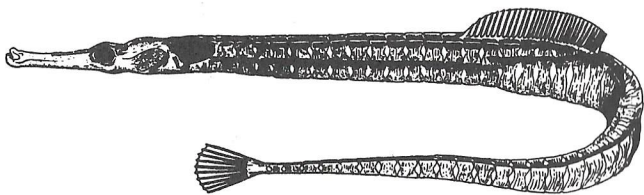
Color: Greenish, striped and mottled with darker color; silver gill covers; spotted lower sides; brown stripes separate the sides from the abdomen; the snout is colorless, becoming pale to golden yellow back toward the vent; fleshy brood pouch; pale dorsal and pectoral fins; brown tail; can change color to match their surroundings.

Habitat

Found amid eelgrass, seaweed, in areas bordered by salt marshes, open shores and brackish waters; will occasionally stray out to sea on the surface; a year-round resident of Sandy Hook.

Edibility

Poor.



Northern Pipefish

Northern Puffer (Blowfish, Swellfish, Balloonfish, Globefish)

Family: Tetraodontiae

Sphoeroides maculatus

Description

Size: Averages 10-14" in length; average weight 1/3 - 2/3 lbs., up to 2½ lbs.

Characteristics: Slender when not inflated; small mouth at the tip of its rounded snout; oval eyes set high on its head; the upper and lower jaws form cutting edges; instead of scales, puffers have small, stiff prickles, some of which are sharp and pointed; the soft, angular dorsal fin is short (lengthwise), tall, and lies near the slightly-rounded caudal fin; the anal is similar to the dorsal fin; the fan shaped pectorals are behind the gill openings; no ventral fins; females are usually larger than males; puffers can inflate themselves with air or water to ward off predators — when this happens their belly skin becomes tightly stretched, the fish becomes globular and floats to the surface, belly up, until the danger is gone.

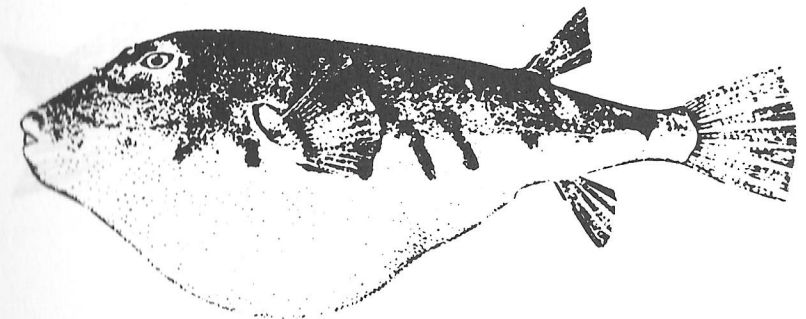
Color: Dark olive-green or dusky; greenish-yellow to orange sides striped with blotches; white belly.

Habitat

Inshore fish that prefer brackish estuarine waters, can be found a few feet above mud, sand, shell or gravel bottoms; found near Sandy Hook from mid-summer until early fall.

Edibility

Excellent.



Northern Puffer

**Northern Sea Robin (Green Eye, Sea Robin,
Common Sea Robin)**

Family: Triglidae

Prionotus carolinus

Description

Size: Can grow up to 1' in length.

Characteristics: Large head encased in rough, bony plate; one sharp spine on each cheek; flat, depressed snout; concave upper jaw (one of its distinguishing characteristics); two short spines over each eye that point backward; a spine on either side of the neck and one on each shoulder; the soft-rayed dorsal fin is longer than the spiny dorsal, and they are not connected; slightly concave caudal fin; the fan-like pectoral fins overlap the long anal fin and have three feelers used to grope the bottom.

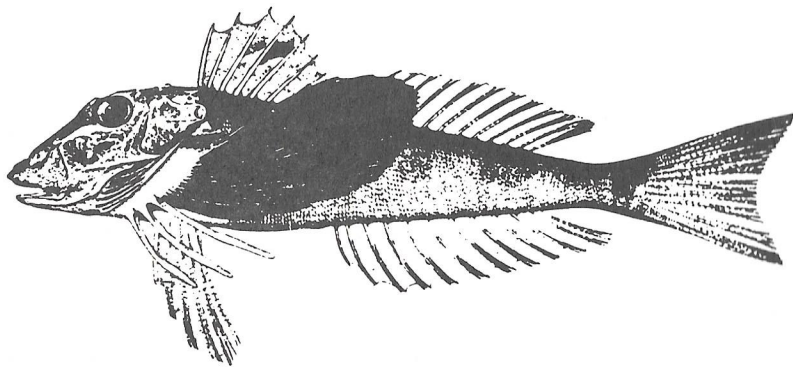
Color: Grayish or reddish-brown on the dorsal side, with dark blotches on its back; dirty white or pale yellow ventral side; the dorsal fins are gray with pale spots and stripes and a black spot between the fourth and fifth spines; gray or brownish caudal fin; brown anal fin; yellow to brown ventrals; yellow or orange pectorals, with two broad dusky stripes.

Habitat

Keeps close to the bottom, especially smooth, hard grounds, and if disturbed, will bury itself in the sand; found in the shallow areas of Sandy Hook Bay and ocean from early spring until fall.

Edibility

Fair; tail sections and roe can be eaten.



Northern Sea Robin

Striped Sea Robin (Sea Robin)

Family: Triglidae

Prionotus evolans

Description

Size: Can grow up to 18" in length.

Characteristics: The differences between the striped and northern sea robin are:

- 1) The striped sea robin's mouth is wider and gapes back to its eye.
- 2) Its head is flatter.
- 3) Its pectoral fins are longer.
- 4) Its feelers are more slender and tapered.
- 5) Its caudal fin is square-ended.

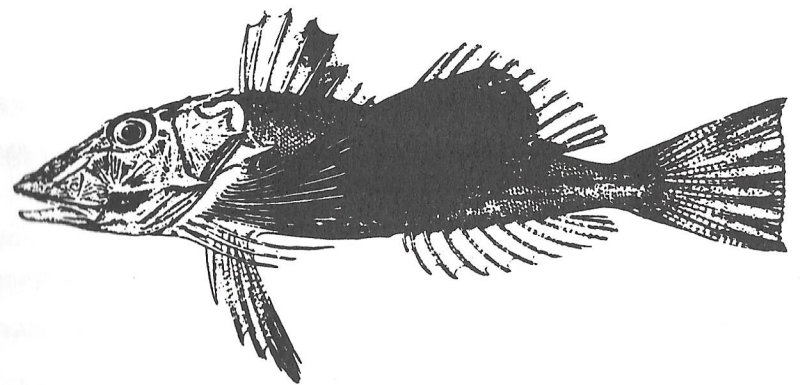
Color: Sides are red or olive-brown, with long stripes of bronze-brown or dusky brown; its pectorals are orange to brown with pale edges and dusky centers; no stripes; pale brown or orange pectoral filaments marked with narrow brown bars.

Habitat

Keeps close to the bottom in salt water; inhabits shallow bay and ocean waters around Sandy Hook from spring until early fall.

Edibility

Poor



Striped Sea Robin