

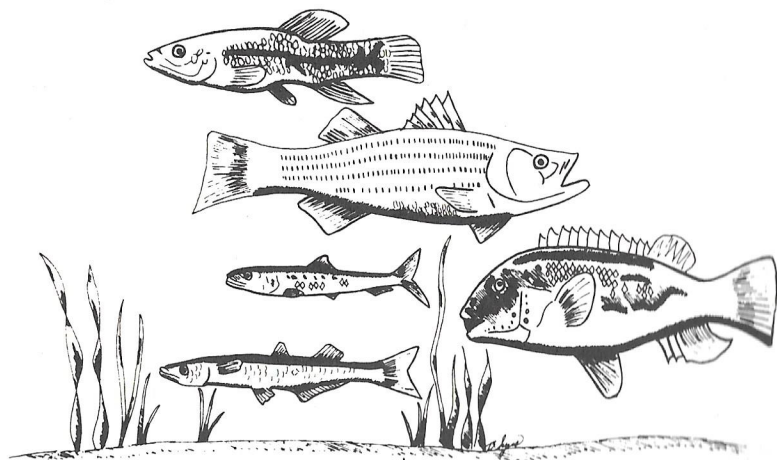
or bottom fishing from boats. Party boat fleets sail daily from Highlands, Atlantic Highlands, Belmar, Point Pleasant, Barnegat Bay and Cape May.

SEPTEMBER offers an excellent chance to catch all the migratory species available from June to October. This month is thought by many fishermen to be the best time to surf fish for large bluefish and trophy-sized striped bass. The best time to fish for stripers is during the late night and early morning hours if you don't mind losing a little sleep to try for these highly sought after fish. Blue crab fishing usually increases in the Shrewsbury and Navesink Rivers during autumn, and catches of a bushel or more are not uncommon in these estuaries.

OCTOBER brings a rapid change to the coastal zone. Finfish school up and begin their migratory journey to more moderate climates and in their place come the first of the winter species such as ling and whiting. This is about the last chance to catch fluke and weakfish before the cold weather sets in, although the bluefish are still active and stripers continue to visit the swash zones along the beach. Black sea bass, porgy, and tautog can still be found near rocky structures, and blue crabs continue to be plentiful in the estuaries.

NOVEMBER continues to offer considerable action for large stripers and bluefish in New Jersey, and an occasional weakfish, black sea bass, porgy, blackfish, or fluke may still be caught. Silver and red hake are the mainstay of party boat fleet catches this month and into winter season. Winter flounder migrate inshore to the bay and estuarine waters to begin their dormant period, occasionally coming out of the mud on sunny days to feed.

DECEMBER is always a cold and uninviting month for fishing. Silver and red hake may be hooked from a party boat, and on calm, sunny days some of the bigger flounder can be caught in the bay and rivers in water depths of ten to twelve feet. Blue crab fishing ends now because the crabs burrow into the mud to hibernate. Striped bass and bluefish migrate south, returning to Sandy Hook in the spring.

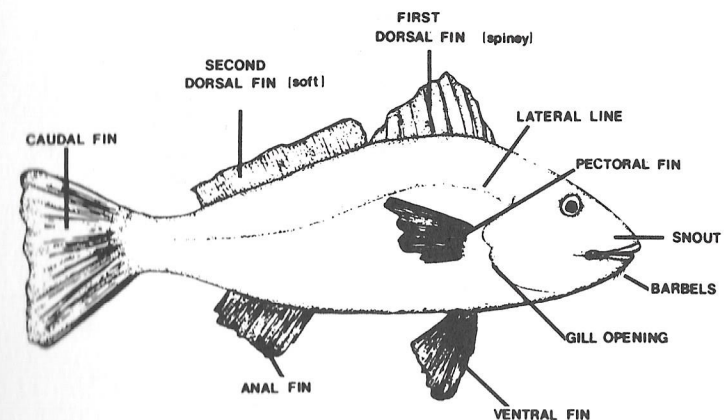


TUNICATES AND FISH

Phylum: CHORDATA

There are over 44,000 species of fish, amphibians, reptiles, birds and mammals in the phylum chordata. All have bilateral symmetry, some segmentation and an internal skeleton. Chordates have three unique features:

1. All possess a notochord, a flexible, rod-like structure, at some stage of their development. It is located on the dorsal side of the digestive tract and gives the body internal support. In most chordates it is replaced by a backbone before maturity.
2. All possess pairs of gill pouches inside the throat region, matched by paired grooves on the outside. In aquatic chordates, the gill pouches and exterior grooves form the gill slits. Water enters through the mouth, passes over the gills, which extract dissolved oxygen from the water so that the chordate can breathe, and exits through the gill slits. In land chordates, the gill pouches are greatly modified during the later stages of development.
3. All have a hollow nerve cord that develops on the dorsal side of the body above the notochord. At the head region, this cord enlarges to form the brain.



Tunicates are a group of chordates which lack a true backbone. They are classified in the subphylum *Urochordata* and possess the three distinct chordate features only during their larval stages.

Sea Grapes

Family: Molgulidae

Molgula manhattensis

Description

Size: to 1 3/8"

Characteristics: Grape shaped with two short tubular siphons. Usually observed by accumulated debris and encrusting organisms.

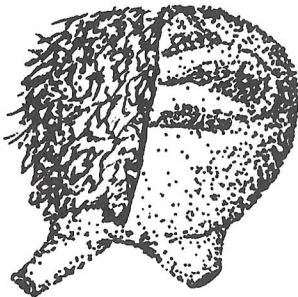
Color: Milky gray to flesh color.

Habitat

Any firm substrate. High pollution tolerance.

Edibility

Not edible.



Sea Grapes

Golden Star Tunicate

Family: Styelidae

Botryllus schlosser

Description

Size: Individuals are only 1/16" but colonies may reach 4"

Characteristics: The colonies are soft, smooth encrustations.

Individuals cluster to create the "star" effect.

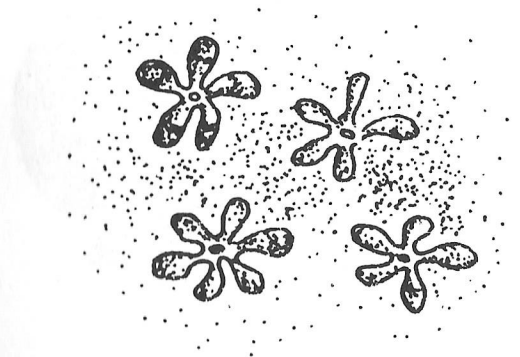
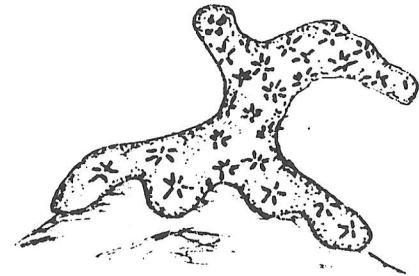
Color: Highly variable olive and black to bluish and yellow.

Habitat

Brackish water on any firm substrate.

Edibility

Not edible.



Golden Star Tunicate

Hogchoker

Family: Achiridae

Trinectes maculatus

Description

Size: Averages 4-6" long, up to 8"

Characteristics: Rounded body; no definite snout; mouth on its right side; the gape of the mouth is shorter and more crooked on the blind left side; no pectoral fins on either side; no prominent eye sockets; rough scales; slimy, mucus-covered; spawns in late spring and summer; hogchoker is the only American sole; so named because when fed to hogs, they would "choke" on the rough scales.

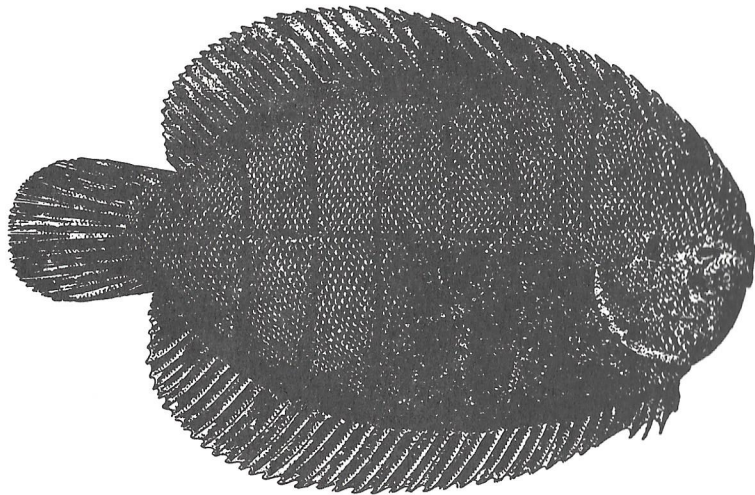
Color: On the eyed side, olive to dark brown with dark lines across the body; the blind side is dirty white, sometimes with dark, round spots.

Habitat

Inhabits regions off the Atlantic and Gulf coasts of North America; found near Sandy Hook from spring to early fall; most common in bays and nearby estuarine systems.

Edibility

Good.



Hogchoker

Sand Eel (Sand Launce, Lant)

Family: Ammodytidae

Ammodytes americanus

Description

Size: Averages 4-6" in length

Characteristics: A slender fish with a long head; the sharply pointed snout allows them to burrow into the sand several inches; the lower jaw extends beyond the upper jaw; wide gill openings; one long, soft-rayed dorsal fin extends from the pointed pectorals to the base of the caudal fin; the anal fin is half as long as the dorsal fin; no ventral fins; forked tail; the small scales lie in a cross pattern; there is a low ridge of skin on either side of the belly.

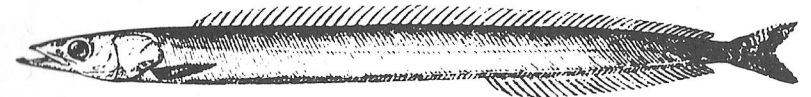
Color: Olive, brown or bluish-green on its back with silvery sides and a dull white belly; some have a steel blue iridescent strip down each side; color may vary depending on its surroundings.

Habitat

Found along sandy foreshores and on the shoals of offshore fishing banks; usually congregate in dense schools; inhabits the waters around Sandy Hook from early spring through late fall.

Edibility

Good; seldom used as a food source; an excellent bait.



Sand Eel

American Eel (Silver Eel, Freshwater Eel, Common Eel, Elver [young eel])

Family: Anguillidae

Anguilla rostrata

Description

Size: Averages 4-5" long, up to 16½ lbs. in weight; mature males average 11-12", females up to 18"; average weight is 1/2-2 lbs.

Characteristics: Small round eyes; pointed snout; the lower jaw may project beyond the upper; gill slits on each side of the neck near the fan-like pectoral fins; the dorsal fin extends from the pectorals to the tail; short anal fin.

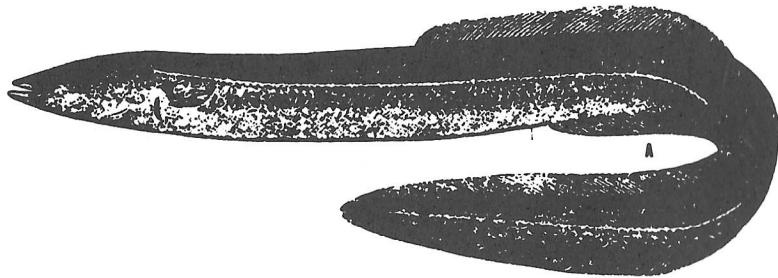
Color: Its back is dark or olive brown; sides may be tinged with yellow; yellow-white belly; color may vary depending on the background.

Habitat

Young eels can be found in estuaries, where some remain while others migrate up rivers and streams; after living in fresh or brackish water for as long as 20 years, they return to the deep ocean to spawn; during cold months, they embed themselves in the mud; found around Sandy Hook year round.

Edibility

Good.



American Eel

Atlantic Silverside (Shiner, Sperling, Green Smelt)

Family: Atherinidae

Menidia menidia

Description

Size: Averages 4-4½" in length

Characteristics: Slender fish, rounded belly; short head; large eyes; oblique mouth; moderately-forked tail; soft, spiny dorsal fin; small pointed teeth line the upper and lower jaws.

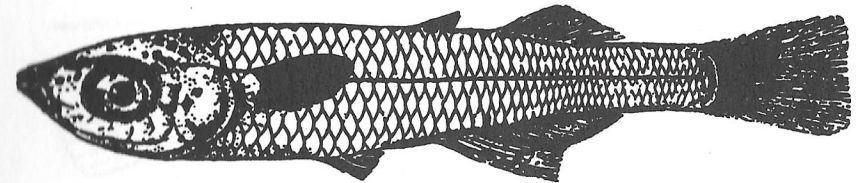
Color: Its back is translucent green; the nose, chin and top of the head are dusky gray; the upper sides are speckled dark brown; a black and silver streak runs down each side; its belly is white.

Habitat

Found near sandy or gravelly shores; at high tide they can be found among cord grass; inhabit areas near Sandy Hook year round.

Edibility

Fair; seldom used as a food source; an excellent bait fish.



Atlantic Silverside

Toadfish (Oyster Cracker; Sally Growler)

Family: **Batrachoididae**

Opsanus tau

Description

Size: Averages 12" in length, weighs up to 18 oz.

Characteristics: Tapered body; large, flat head; round nose; wide mouth; plump belly; scallop-shaped pectoral fins are covered with a thick, fleshy skin; ventral fins are under the throat; fleshy flaps of skin cover the tip of the lower jaw, the cheeks and the area over each eye; dorsal fin has a small spiny part and a longer, soft-rayed part; rounded caudal fin; skin is shiny and without scales; large, blunt teeth; two short spines on each gill cover.

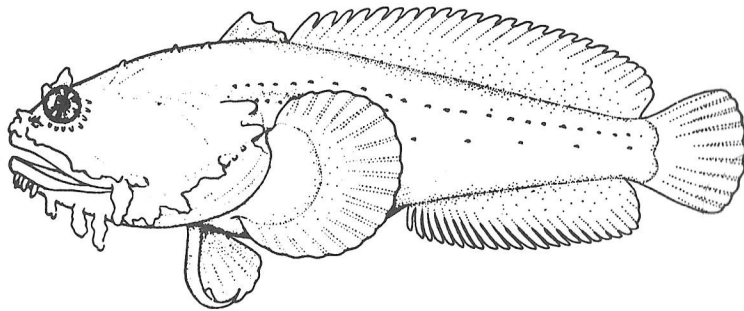
Color: Dark olive green to brown or yellow; irregular spots may cover the whole fish or just the head and fins; can change color to match their surroundings.

Habitat

Inhabit shoal waters; prefer sandy or muddy bottoms; known to hide among eelgrass or under stones; where they hollow out dens to wait for prey; inhabit the waters of Sandy Hook year round.

Edibility

Poor.



Toadfish

Silver Gar (Saltwater Gar, Sea Pike, Garfish)

Family: **Belonidae**

Tylosurus marinus

Description

Size: Averages 1' in length, can grow up to 3'

Characteristics: Slender body with a long bill; the head of an adult accounts for approximately one-third of the total length; the lower jaw (from the eye forward) is twice as long as the rest of the head; the body and sides of the head are covered with scales; dorsal fin contains 13-17 rays; anal fin 17-21 rays; the posterior part of the dorsal and anal fin can be pressed against the gar's back and nearly concealed in a groove, the forward part stays erect; the anal fin is just behind the dorsal fin; forked caudal fin.

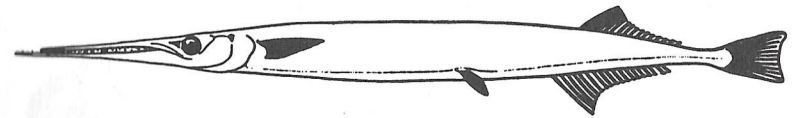
Color: Green on the dorsal side; white underneath; silver on the sides, with a silvery blue stripe running to the tail.

Habitat

Can be seen on or near the surface of the bay in Sandy Hook; found near Sandy Hook from June until early fall.

Edibility

Poor.



Silver Gar

Windowpane (Sundial, Sun Dab, Sand Flounder)

Family: Bothidae

Scophthalmus aquosus

Description

Size: Averages 10-12" in length, up to 18"; average weight 1/4 - 1/2 lb., can weigh up to 2 lbs.

Characteristics: Left-handed flounder; large mouth; small teeth; smooth scales; its thin, rounded body is translucent when held against the light; the two ventral fins are the same width at the base and at the tip; the upper left fin is longer than the fin on the right side of the throat; the fringe-like dorsal fin tapers towards the tail; the anal fin tapers towards the head; the pectoral fin on the eyed side is longer and more pointed than its mate on the blind side; rounded caudal fin.

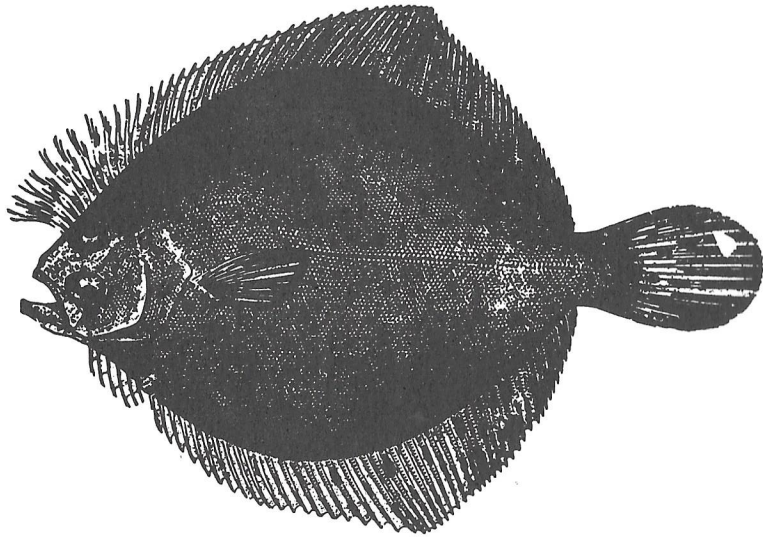
Color: Pale, translucent green, red, or light brown on the eyed side, with small, mottled, brown spots; numerous white spots around the dorsal, anal and caudal fins; the fins are more darkly mottled than the body; the blind side is white, with occasional dark blotches.

Habitat

Found in salt or brackish water; prefers sand, mud, or clay bottoms; found near Sandy Hook year round.

Edibility

Good



Windowpane

Summer Flounder (Northern Fluke, Fluke, Doormat)

Family: Bothidae

Paralichthys dentatus

Description

Size: Averages 14-16" in length, up to 3' long; averages 3/4-2 lbs. in weight, may weigh up to 15 lbs.

Characteristics: Left-handed flounder (eyes on the left-hand side); wide body, large head; pointed snout; mouth has a single set of pointed teeth in the upper and lower jaws; scales cover the body; small ventral and pectoral fins; the anal fin is between the ventral fins; the dorsal fin starts opposite the eye; the caudal fin is rounded in juveniles, double concave in adults.

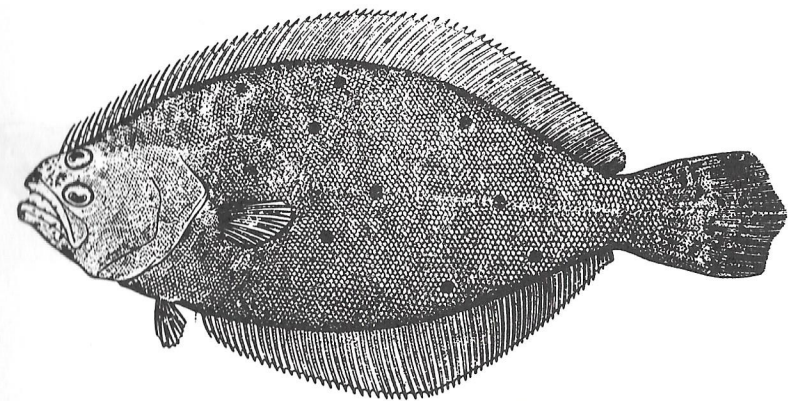
Color: White on the underbelly; brown or gray on the back; may be variegated or marked with dark eyespots; can change color to match their surroundings.

Habitat

Found in brackish or fresh water; prefers muddy sand, mussel beds and clay bottoms; found in the bay and ocean waters surrounding Sandy Hook from late spring until late fall.

Edibility

Excellent.



Summer Flounder

Smooth Dogfish (Sand Shark, Dogfish)

Family: *Carcharhinidae*

Mustelus canis

Description

Size: Averages 2-3' in length, up to 5'; averages 1-4 lbs., may weigh up to 20 lbs.

Characteristics: Slender and flat on the belly side; small mouth; low, flat, pavement-like teeth; tapered, blunt snout; small eyes; rough skin with large, sharply-pointed denticles; two spineless triangular dorsal fins, one larger than the other; small anal and ventral fins; the pectoral fins have slightly concave margins; the lower lobe of the shallow caudal fin is not well defined.

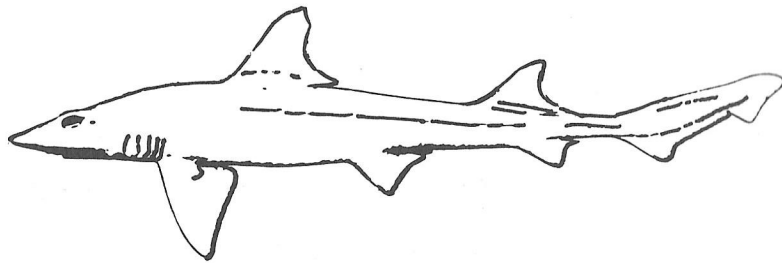
Color: The dorsal side is grayish olive, slated gray or brown; the ventral side is yellow or grayish white; can change from a translucent pearly color to a dark gray depending on their surroundings.

Habitat

An inshore fish and a body swimmer; can enter shoal harbors, bays, estuaries and fresh water; can be found close to the surf zone of Sandy Hook from spring until fall.

Edibility

Fair; surf fishermen find them a nuisance, but some use them as bait or food.



Smooth Dogfish

Hickory Shad (Fall Herring, Shad Herring, Freshwater Taylor)

Family: *Clupeidae*

Alosa mediocris

Description

Size: Averages 15-18" in length; average weight 1½ - 2½ lbs.

Characteristics: The deep belly has a saw tooth edge; head tapers to the snout; lower jaw extends beyond the upper when the mouth is closed; no teeth on the roof of the mouth; small ventral and dorsal fins; larger anal fin; forked caudal fin.

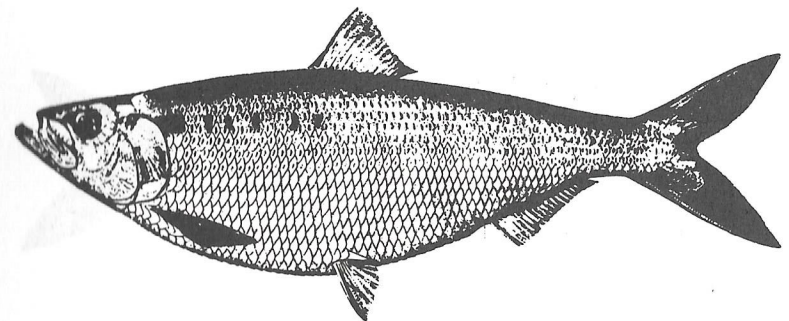
Color: Grayish-green on top; silvery sides; iridescent belly; spotted shoulders; on the upper sides faint dark spots form dark, longitudinal lines at the base of the scales; dusky dorsal, caudal and pectoral fins; translucent ventrals.

Habitat

A salt water, brackish, and fresh water fish similar to the herring and alewife; found during their spring run in the upper reaches of the estuarine system near Sandy Hook.

Edibility

Poor; roe is excellent.



Hickory Shad

**Alewife (Sawbelly, Branch Herring,
Big-Eyed Herring, Grayback)**

Family: Clupeidae

Alosa pseudoharengus

Description

Size: Average 10-11" in length, weighs 8-9 ozs.

Characteristics: Broad head area; sharp serrations or cuts on the middle of its belly; small mouth; lower jaw extends beyond the upper when closed; upper jaw has no teeth.

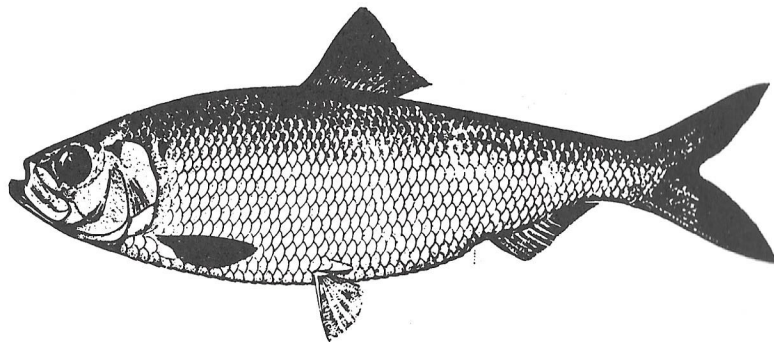
Color: Grayish-green on its dorsal side; silvery on its sides and belly; sides are iridescent green and violet and may be striped; usually a dusky spot behind the gill cover; can change color depending on its surroundings.

Habitat

Found in fresh and brackish water; migrate into salt water; anadromous, they return to the estuaries to spawn in fresh water; spend much of the year (primarily winter) in the ocean; inhabits the waters of Sandy Hook from early spring until early fall.

Edibility

Poor; roe is excellent.



Alewife

American Shad (Shad)

Family: Clupeidae

Alosa sapidissima

Description

Size: Can grow up to 2½' in length; 2-4½ lbs. in weight

Characteristics: Deep body; sharp, saw-edged belly similar to the alewife or hickory shad; upper jaw extends below the eye when the mouth is closed; the top of the lower jaw is slightly concave; adults have no teeth, some juveniles do; scales cover the body; soft-rayed dorsal and anal fins; deeply forked caudal fin; a member of the herring family.

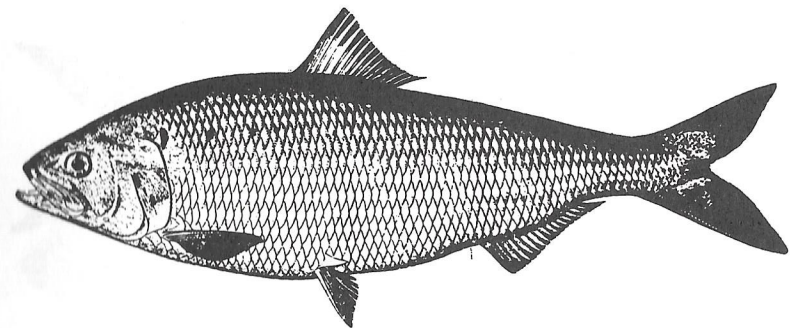
Color: Dark blue or green on the dorsal side; white and silver on the lower sides and belly; a dusky spot followed by one or two rows of spots behind the gill cover.

Habitat

Lives in salt water, though they sometimes appear in brackish estuaries; enter fresh water to spawn; inhabits the waters near Sandy Hook during their brief spring run.

Edibility

Excellent.



American Shad

Menhaden (Moss Bunker, Fatback, Pogy, Bunker)

Family: Clupeidae
Brevoortia tyrannus

Description

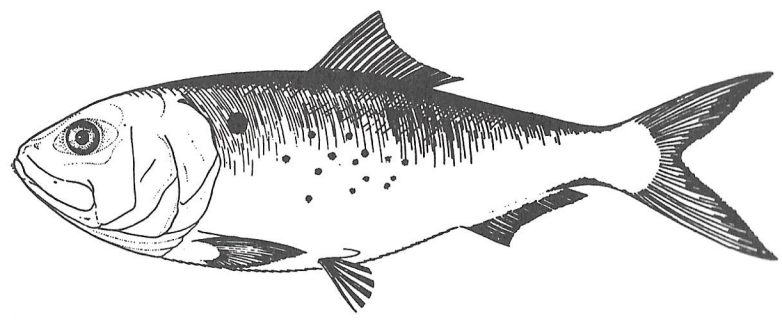
Size: 12-15" average in length; 2/3-1 lb. in weight.
Characteristics: Long, flat, wide body; sharp-edged belly; head has no scales; vertical body scales edged with long, comb-like teeth; the lower jaw projects beyond the upper; no teeth; small ventral fins; dorsal and anal fins are larger than the ventrals; deeply forked tails.
Color: Dark blue, green, blue-gray or blue brown on the dorsal side; silvery sides, belly and fins with a yellow, brassy luster; a dusky spot behind each gill opening, followed by irregular rows of dark spots.

Habitat

Travel in large schools and swim closely side by side, tier above tier; chiefly a salt water fish; found near Sandy Hook from late spring until early fall.

Edibility

Poor; used by sports fishermen as chum for bluefish and as live bait by striped bass fishermen; used for the manufacture of oil, fertilizer and fish meal.



Menhaden

Grubby (Little Sculpin)

Family: Cottidae
Myoxocephalus aeneus

Description

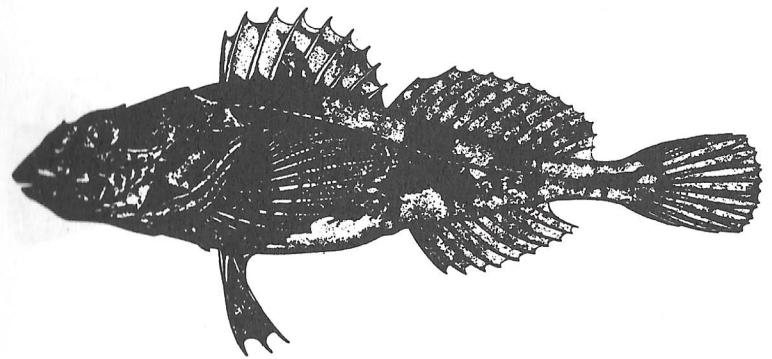
Size: Can grow up to 8" in length
Characteristics: Small, stout fish; head spines; a ridge with two spines over each eye; a pair of spines between its nostrils; six short spines on each side of the face between the snout and gill openings; two spiny dorsal fins; ventral fin has one spine and three rays; rounded caudal fin.
Color: Light to dark or greenish-gray on the dorsal side; darker shadings or irregular bars on its sides and fins; sides of the head are mottled; pale gray or white belly; a pale band runs along the lower sides; can change color depending on the surroundings.

Habitat

Found among the eelgrass in estuaries and in shoal waters; inhabits the waters surrounding Sandy Hook from late spring until early fall.

Edibility

Poor.



Grubby

Longhorn Sculpin (Gray Sculpin, Hacklehead)

Family: Cottidae

Myoxocephalus octodecemspinosus

Description

Size: Average 10-14" in length; up to 1 lb. in weight.

Characteristics: Long, tapered body; flat head; wide mouth; large eyes set high on its head; smooth, lateral, cartilaginous plates; long cheek spine reaches back to the gill cover edge; sharp head spines, the longer ones are marked on top; two thorns on each shoulder; a deep notch connects two dorsal fins, one tall and spiny, the other shorter and soft-rayed; anal fin is as long as the shorter dorsal fin; small, rounded caudal fin.

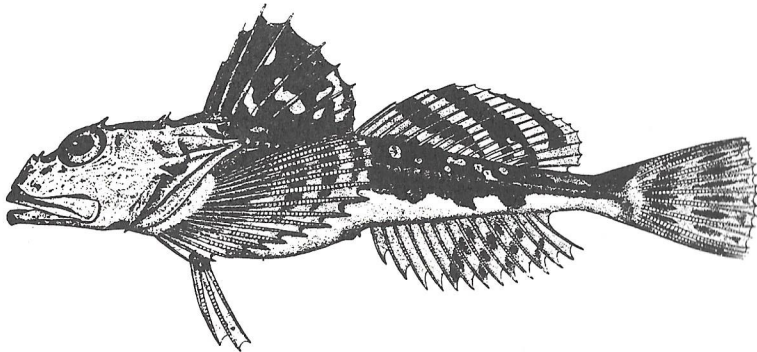
Color: The dorsal and lateral surfaces may be dark olive, pale greenish-yellow, greenish-brown or pale gray; may have four irregular, dark crossbars or blotches that vary depending on the surroundings; spiny dorsal fin is pale gray, mottled or spotted; soft-ray dorsal is pale olive with three dark, irregular crossbands; caudal fin is pale gray; pectoral fins are yellow with four to six dark, narrow crossbands; anal fin is pale yellow with dark mottlings; belly is pure white.

Habitat

Found in estuaries, salt water bays and river mouths; never in fresh water; inhabits areas around Sandy Hook from late spring until early fall.

Edibility

Poor



Longhorn Sculpin

Anchovy (Bay Anchovy, Whitebait)

Family: Engraulidae

Anchoa mitchilli

Description

Size: Can grow up to 3½" in length

Characteristics: Easily confused with young herring, smelt or Atlantic silversides; a wide mouth and larger eyes than herring; large, thin scales are easily detached; two dorsal fins (silversides only have one) are behind the ventrals; anal fin is longer than that of a smelt or silverside; no adipose fin behind the dorsal fin (as smelts have); deeply forked caudal fin.

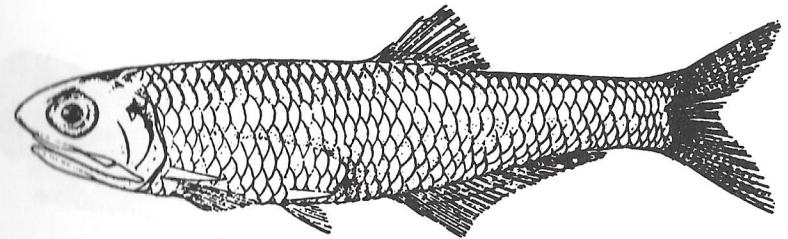
Color: Whitish-silver; an ill-defined silvery band runs from the gill opening to the caudal fin; many dark spots on the body and fins.

Habitat

Found in the bay and ocean waters of Sandy Hook from late spring until early fall.

Edibility

Good.



Anchovy

Atlantic Tomcod (Frostfish, Tomcod)

Family: Gadidae

Microgadus tomcod

Description

Size: Averages 9-12" in length; can grow up to 15"; average weight 1/4-3/4 lbs., can weigh up to 1 1/2 lbs.

Characteristics: A slender, smaller version of a codfish; the upper jaw projects beyond the lower; a barbel on the chin; the narrow ventral fins taper to a long filament resembling a feeler; rounded caudal fin; fan-like pectoral fins; three soft-rayed, separate dorsal fins; two separate anal fins, similar to the second and third dorsals.

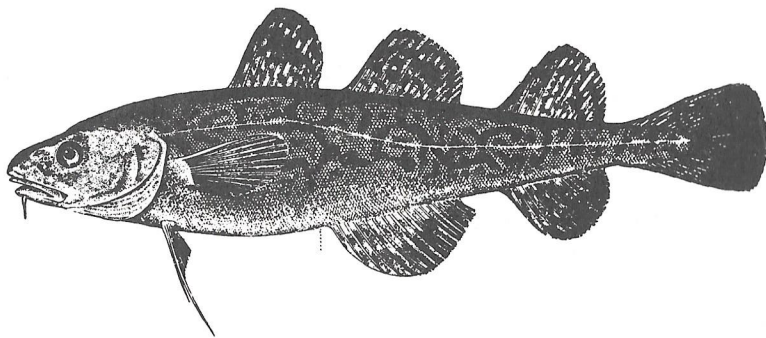
Color: Olive or brown-green with a yellow tinge on top; pale mottled sides; pale yellow lower sides; gray or yellow-white ventral surface; darkly-colored dorsal and caudal fins; the mottled anal fins are pale at the base, olive on the margins.

Habitat

Found in estuaries, rivers and along coastal areas; prefers sand, mud, gravel or rocky bottoms; inhabits the cold waters of Sandy Hook from late fall until early spring.

Edibility

Fair.



Atlantic Tomcod

Red Hake (Ling, Squirrel Hake)

Family: Gadidae

Urophycis chuss

Description

Size: Averages 1-2' in length; Averages 1/2-2 lbs. in weight, can weigh up to 7 lbs.

Characteristics: Slender, soft-bodied; may be confused with the white hake; the red hake has a larger number of scales arranged in crossrows than the white hake; the upper jaw reaches only to the pupil, not to the rear of the eyes as on the white hake; large eyes; small chin barbel; blunt-edged nose; the long, narrow ventral fins have feeler-like rays and overlap the vent in front of the pectorals; the first triangular, spiny dorsal fin has a filamentous ray longer than the rest; the soft-rayed dorsal fin has rounded corners and runs to the tail fin; the anal fin is shorter than the second dorsal fin.

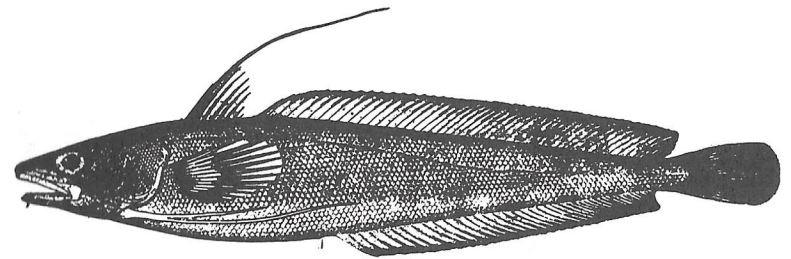
Color: Sides, back and the dorsal, caudal and anal fins are red, brown, olive-brown, black or mottled; yellow lower sides; belly and lower head are white, gray or yellow; pale pink or yellow ventral fins.

Habitat

Lives on clay, mud or sandy bottoms; congregate on rock, hard bottoms and around wrecks from spring to fall, but are found at all depths during warmer months; leave their cover to feed at night; found near Sandy Hook year round.

Edibility

Good.



Red Hake

Spotted Hake

Family: Gadidae

Urophycis regius

Description

Size: Averages 12-16" in length; up to 1½ lbs. in weight.

Characteristics: Distinguishable from other member of the hake family because:

- 1) Its first dorsal fin has 8 or 9 rays, none of which are prolonged;
- 2) Its second dorsal fin has a smaller number of rays;
- 3) It has only 90-95 rows of scales on its side from the gill openings to the caudal fin instead of 105-110 rows (squirrel hake) or 140 rows (white hake).

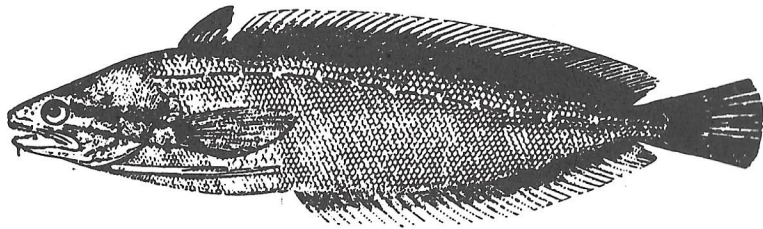
Color: Dull brown; darker brown lateral line is marked with white spots; the first dorsal fin is black with a whitish margin; whitish ventral fins; the anal and other dorsal fins are the same color as its back (usually brown).

Habitat

Found around the waters of Sandy Hook from late spring until early fall.

Edibility

Fair



Spotted Hake

Four-Spined Stickleback (Bloody Stickleback)

Family: Gasterosteidae

Apeltes quadracus

Description

Size: Averages 1½-2½" in length

Characteristics: Broad middle, tapered ends; pointed nose; no scales; a long ridge on each side of its abdomen; 2-4 dorsal spines on alternated spines down the back; the fin membrane attaches another spine to the dorsal fin; the anal fin has curved, saw-edged spines, followed by two slender, rounded rays; the caudal fin is longer and more narrow than those in other sticklebacks.

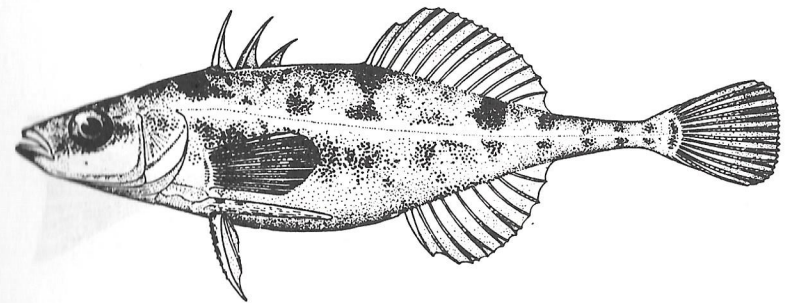
Color: Brownish-olive or greenish-brown with dark mottlings; silvery-white belly; red ventral fin membrane, males are usually darker than females.

Habitat

Primarily a salt and brackish water dweller; stays near the coast, although it can run into fresh water; inhabits the waters of Sandy Hook from late spring until early fall.

Edibility

Poor.



Four-Spined Stickleback

**Three-Spined Stickleback
(Stickleback, Thornfish, Thornback)**

Family: Gasterosteidae

Gasterosteus aculeatus

Description

Size: Averages 2-3" in length, can grow up to 4"

Characteristics: Pointed snout; small, slanted mouth; large round eyes; characterized by its dorsal spines (usually 3, occasionally 4, rarely 5) attached by a small, triangular membrane; the first two spines are usually larger than the third; the small anal spine hangs free; bony plates on each side; a single ventral plate behind the ventral fins; squared tail fin; slender, keeled caudal peduncle; very aggressive resulting with them using their spines as weapons on larger fish.

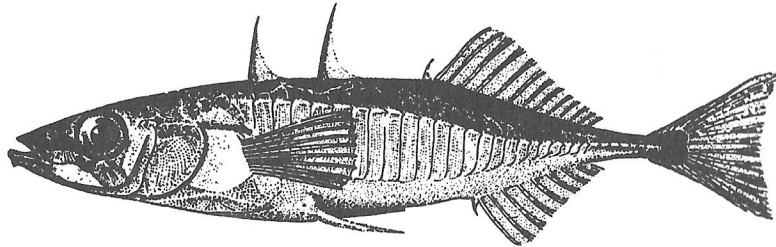
Color: Extremely variable; usually deep gray, olive, greenish-brown or blue on the dorsal side; sides are pale with silvery reflections; silvery ventral surface; red fin membranes.

Habitat

A shore fish preferring estuaries; also enjoys salt water; hides in clumps of floating eelgrass or rockweed and lives in the surface waters except in rough weather; inhabits the waters around Sandy Hook from late spring until early fall.

Edibility

Poor.



Three-spined Stickleback

Tautog (Blackfish, Black Porgy)

Family: Labridae

Tautoga onitis

Description

Size: Averages 10-18" in length, can grow up to 3'; averages 1-4 lbs. in weight.

Characteristics: Heavy stout fish; high arched head; blunt nose; thick lips; scaleless, velvety cheeks in front of the gill openings; stout, conical jaw with two or three larger front teeth; flat, rounded crushing teeth in the rear of the mouth; slightly rounded, wide caudal fin; the long dorsal fin is sharp and spiny up front, soft-rayed and fan-like at the rear; large, rounded pectoral fins; one sharp spine on each of the ventral fins; three short spines precede the anal fin.

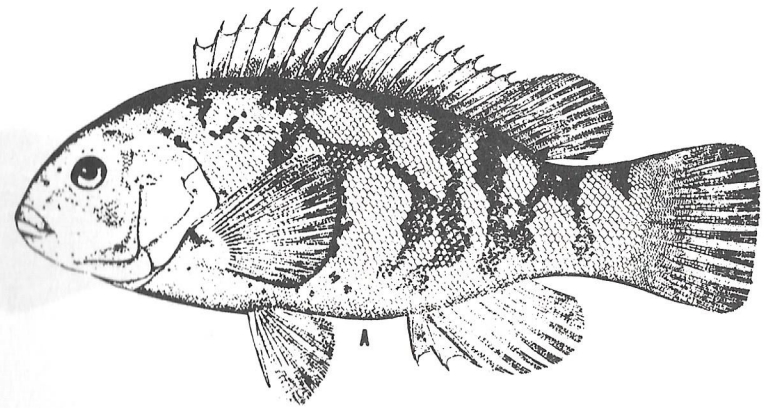
Color: Brown-gray, dark gray, dusky green or dull black, with mottled or darkly blotched sides; pale brown to white ventral surface; can change color depending on their surroundings.

Habitat

Year-round residents of Sandy Hook; lives in salt water, occasionally enters brackish water; prefers rocky, gravel or sand bottoms around shellfish beds, wrecks, jetties, breakwaters, stone pilings and bridges; found near rocky structures of Sandy Hook from mid-spring until mid-fall.

Edibility

Good.



Tautog

Cunner (Bergall)

Family: Labridae

Tautoglabrus adspersus

Description

Size: Averages 6-10" in length; averages less than 1/2 lb. in weight.

Characteristics: Moderately deep body; flat-topped head; small mouth at the tip of the snout; pointed nose and thin lips distinguish the cunner from the tautog; large scales cover the body and gill covers; wide caudal fin is slightly convex with rounded corners.

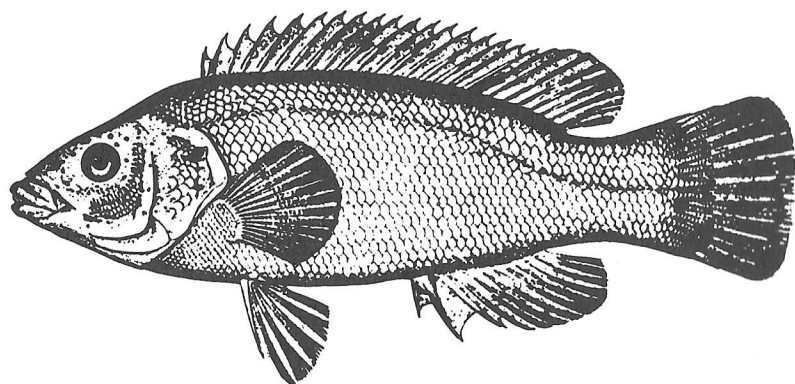
Color: Reddish-brown mottled with blue, brown or red; solid brown, red or olive green mixed with blue, brown or rust; the lips and mouth lining are bright yellow; bluish-white belly; can change color depending on their surroundings.

Habitat

Found among eelgrass and wharf pilings; prefers salt water to brackish water; inhabits the waters near Sandy Hook from late spring until early fall.

Edibility

Poor



Cunner

Silver Hake (Whiting, New England Hake)

Family: Merlucciidae

Merluccius bilinearis

Description

Size: Average 14" in length, can grow up to 2½'; average 1/2-1½ lbs. in weight, can weigh up to 5½ lbs.

Characteristics: Slender, rounded in front of the vent, flattened sideways behind the vent; flat-topped head; large eyes; wide mouth with two or more rows of sharp teeth; the lower jaw projects beyond the upper jaw; two soft-rayed dorsal fins, the first is triangular, the second longer and taller than the first; the anal fin is under the second dorsal fin and is similar in size and shape; caudal fin is square when spread, slightly concave when folded; the narrow, slightly rounded pectoral fins reach to the second dorsal fin; the fin-like ventrals are shorter than the pectorals.

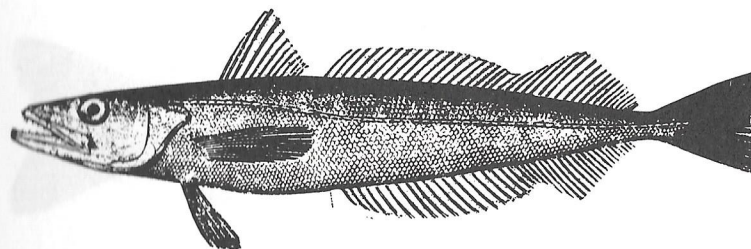
Color: Dark gray and brownish-red on the dorsal side with iridescent silver and gold reflections; silver lower sides and belly; whiting are brightly iridescent when caught, but fade soon after death.

Habitat

Remain on or close to the bottom during the day and move towards the surface or into shallow water at night; strong, swift swimmers and extremely voracious; found near Sandy Hook from late fall until mid-spring.

Edibility

Excellent.



Silver Hake

White Perch (Sea Perch, Gray Perch)

Family: Moronidae

Morone americana

Description

Size: Averages 8-10" in length, can grow up to 15"; averages 1/3 to 1 lb. in weight, can weigh up to 5½ lbs.

Characteristics: Deep-bodied; flattened sideways; small mouth; concave head; projecting lower jaw; fewer rows of scales than striped bass; the first dorsal fin is spiny and round; the second dorsal, separated from the first by a deep notch, is shorter, soft-rayed and angular; one stout spine on the forward margin of the ventrals; wide, slightly forked tail fin.

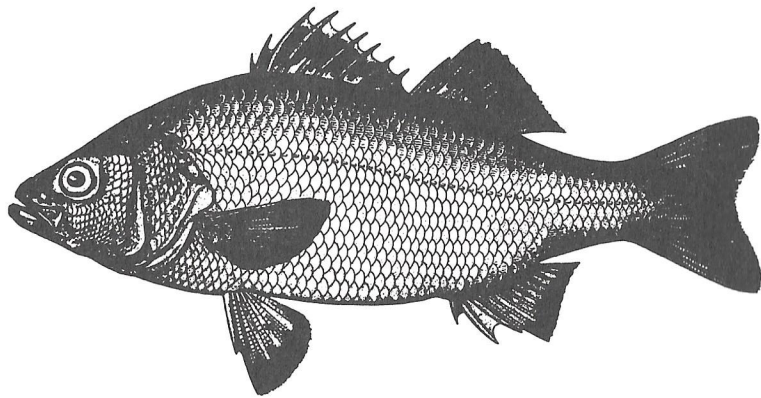
Color: The dorsal surface is olive, gray-green or dark silver-gray; the sides are olive, silver-green or silver-white; the head has a blue luster; the ventral and anal fins are rose-colored at their base; the other fins are dusky.

Habitat

Found in brackish water, in estuaries and river mouths; usually found in shallow water (up to 35' deep) in small schools; can be found near Sandy Hook from mid-spring until late summer, but usually found well upriver.

Edibility

Good.



White Perch

Striped Bass (Rockfish, Striper, Linesider)

Family: Moronidae

Morone saxatilis

Description

Size: Can grow up to 5' in length; average weight 1-5 lbs., some have weighed up to 70 lbs.; fish measuring less than 31" (this size subject to change) from tip of mouth to tip of tail fin are not considered of legal size when caught in New Jersey waters.

Characteristics: Deep, stout body; highly arched back; long head; pointed nose; two spines on each gill cover margin; mouth gapes back to its small eye; the lower jaw projects upward; two well-developed dorsal fins are spiny, soft-rayed and equal in length; slightly forked caudal fin; three spines precede the anal fin; the pectoral and ventral fins are spread apart.

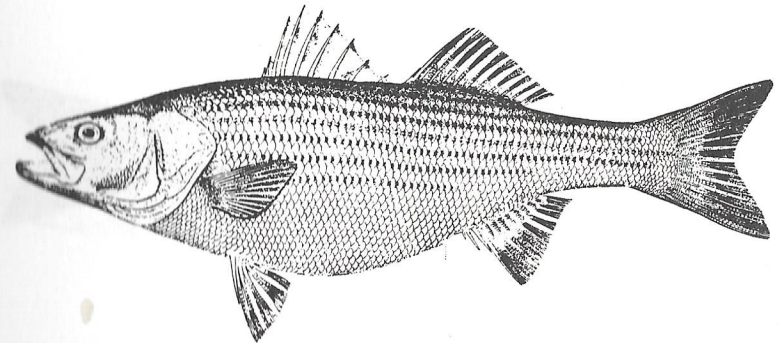
Color: Dark olive green to blue on its dorsal side; silver belly with brassy reflections; pale sides are striped above the pectoral fins, the uppermost stripe the most distinct; dusky dorsal, caudal and anal fins.

Habitat

Found schooling in rivers, bays, estuaries and the ocean on any type of bottom; frequently inhabits breaker zones along the coastline and in winter may stray further offshore or migrate southward to warmer waters; found near Sandy Hook from March until late fall.

Edibility

Excellent



Striped Bass

Mullet (Common Mullet)

Family Mugilidae

Mugil cephalus

Description

Size: Can grow up to 2½' in length; average weight 1/2-1 lb.

Characteristics: Stout body; short head; blunt nose; oblique mouth; small eyes; large, rounded scales cover the body and head; smooth, bare fins; two dorsal fins, one spiny, one soft; deeply forked tail.

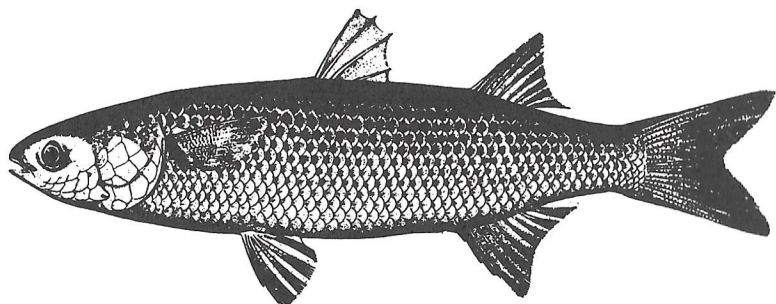
Color: Bluish-gray or green on the dorsal side; silvery lower sides; the scales on its sides have dark centers; slightly dusky fins; juveniles are bright silver.

Habitat

Fast swimmers, good jumpers; usually prefers ocean and bay areas along the shore; found near Sandy Hook from late spring until early fall.

Edibility

Good; sport fishermen use this fish whole to catch larger species or cut it up for chum.



Mullet

Weakfish (Sea Trout, Weakies, Tiderunners, Gray Trout)

Family: Otolithidae

Cynoscion regalis

Description

Size: Averages 12-22" in length, can grow up to 3'; average weight 2-7 lbs., can weigh up to 30 lbs.

Characteristics: Slim, flattened lengthwise, large head and mouth; pointed snout, two canine-like teeth in the upper jaw; the lower jaw projects beyond the upper; the first spiny dorsal fin is triangular; the second is soft-rayed, rectangular and twice as long as the first; the anal fin has two slender spines followed by several soft rays; the pointed ventrals resemble the pectorals in size; broad, slightly concave caudal fins; derives its name from its weakly constructed mouth that is often pulled apart by angler's efforts to land this fish.

Color: Dark olive green on the dorsal side; back and sides tinted with purple, green, blue, gold or copper and marked with lines of black, green and bronze spots; chalky white or silver underbelly; dorsal and caudal fins are dusky or olive tinged with yellow; yellow ventral and anal fins; the pectorals are olive on the outside, yellow on the inside.

Habitat

Prefers salt and brackish water on any type of bottom; favors sandy areas; found near Sandy Hook from July until October.

Edibility

Good.

