

Species Profile:

By Peter J. Himchak, Acting Chief, Bureau of Marine Fisheries
Jeff Brust, Research Scientist

Tautog

Common Name: Tautog. Also known as blackfish, white chin, chinner, chub, black porgy, slippery bass and tog.

Scientific Name: *Tautoga onitis*

Characteristics: Coloration varies by habitat and sex, but tautog are generally drab-colored, with light and dark irregularly-blotched sides with a slightly lighter belly. Large males have a characteristically white chin. During the spawning season, males are commonly grayish, often with a white midline saddle mark. Juveniles and female tautog show a mottled, brown-toned appearance. Besides these color variations, a mature tautog's gender can often be determined from external characteristics. Males have a pronounced lower jaw and more steeply-sloping forehead. The female's mouth position is more midline, and her body is an ovoid shape. Other distinguishing characteristics include large fleshy lips and large canine teeth that often protrude from the mouth. Like other members of the wrasse family, tautog possess a second set of jaws, called pharyngeal (far-IN-gee-all) jaws, located at the opening to the throat.

Range: Tautog are distributed along the northeast Atlantic coast of North American from the outer coast of Nova Scotia to Georgia. Greatest abundances are found from Cape Cod to Chesapeake Bay. North of Cape Cod, tautog are usually found close to shore (within four miles) in water less than 60 feet deep. South of Cape Cod, these fish can be found up to 40 miles offshore and at depths up to 120 feet.

Habitat: Throughout their lives, tautog are structure-dependant fish. Juvenile tautog occur in bays, in submerged aquatic vegetation beds and around pilings or other hard structures. Adults inhabit rough bottom which includes rock outcroppings, shipwrecks and reefs, in nearshore ocean waters. North of Long Island, New York, rocks and boulders can be found in abundance along the coastline as a result of glacial deposition, providing habitat for larger tautog. South of Long Island there are few natural rocky habitats in coastal waters, so tautog commonly inhabit shellfish beds, coastal jetties, pilings, shipwrecks, and reefs. Significant outcroppings along the New Jersey coast do occur along the mouth of Delaware Bay and

the area north of Manasquan Inlet. Reef locations occur along the entire New Jersey coastline.

Food and Feeding: Juvenile tautog feed primarily on small, bottom and water-column invertebrates. Their diet changes as juveniles mature and increase in size. Adults feed primarily on the blue mussel and other shellfish. Adult tautog grasp mussels using their large canine teeth, tearing mussels from their attachment surface by shaking them loose. Small mussels are swallowed whole, while large, hard-shelled ones are crushed by the pharyngeal teeth prior to swallowing. Adult tautog also consume barnacles, crabs, hermit crabs, sand dollars, scallops and other invertebrates.

Size: The tautog is a slow-growing, long-lived species with reports of individuals over 30 years of age. Larval growth rates are estimated at 0.01 to 0.03 inches per day. Young-of-the-year juveniles grow during the summer at a rate of 0.02 inches per day. Juvenile growth rates have been observed to be higher in vegetated than non-vegetated habitats. Average length after the first summer of growth is 2.9 inches; 6.1 inches after the second summer. Adult growth is relatively slow and varies with the season.

Adult male tautog grow faster in length than adult females. A reasonably accurate guide to tautog length at age is provided by the table at right.

Migration: Tautog are not highly migratory along the Atlantic coast but rather demonstrate an

Length	Age (years)
3.0	1
5.5	2
9.0	3
10.5	4
12.5	5
14.0	6
15.5	7
17.0	8
18.0	9
19.0	10
21.0	15
22.0	20



inshore-offshore migration pattern throughout the year. Adult tautog migrate inshore in the spring as water warms to around 48°F to spawn in the late spring through early summer. The fall offshore migration is triggered when water temperatures drop below 52°F in late fall. Most adult tautog form schools and migrate offshore to deep water locations (80-150 feet) with a rugged bottom, where they become inactive throughout the winter.

Spawning: Tautog normally reach sexual maturity at three to four years of age (7-12 inches). Spawning usually occurs within estuaries or in nearshore marine waters. Tagging studies show that adults return to the same spawning locations over a period of several years. Discrete spawning groups may exist in Narragansett Bay as evidence by tagging studies and fishing observations. Optimum size for female egg production has been estimated at 16 inches. Tautog between 8 and 27 inches long were observed to contain 5,000 to 637,000 mature eggs. Eggs are buoyant without oil globules, 0.9 -1.0 mm in diameter. Spawning occurs in heterosexual pairs or in groups of a single female with several males.

Recreational and Commercial Importance: The primary tautog fishing grounds extend from the beach out to about the 12-fathom contour. Recreational fishing modes include bottom fishing, particularly the directed trips of party and charter boats, jetty fishing and spearfishing.

The ideal boat rod for tautog is 7 feet long with a sturdy butt section and slow tapered tip. Live green crabs or fiddlers are the best bait to use. Conventional reels are preferable over spinning tackle for bottom fishing and a fishing rod with muscle will help keep those hooked tautog from getting back into reef structure where the line may get hung up or cut on sharp edges of blue mussels or barnacles.

The mean weight of tautog harvested in New Jersey's recreational fishery ranges from 1.8 – 2.3 pounds. The New Jersey State Record tautog is 25 pounds and is recognized by the IGFA as the current world record.

The overwhelming majority of tautog harvested in New Jersey is from the recreational fishery, which averaged approximately 1.3 million pounds per year from 1981 to 1995. Because of fishery regulations, landings varied from 40,000 pounds to 1.8 million pounds per year during the 1996 to 2002 period. New regulations implemented in 2003 have stabilized landings at a much lower level, averaging about 167,000 pounds per year from 2003-2005.

From 1981 to 1995, the commercial tautog fishery in New Jersey averaged about 110,000 pounds per year. With the implementation of a fishery management plan in 1996, harvest has decreased substantially. Over the last five years (2002-2006), the commercial fishery has averaged approximately 55,000 pounds per year.

