



FLOUNDER FACTS

By
Jerald Horst
(Revised July 2003)

Although 18 species of the lefteye flounder family are found in the northern Gulf of Mexico, flounder in Louisiana almost invariably means the southern flounder. Its Latin name, *Paralichthys lethostigma*, literally means “parallel fish that forgot its spots.”

In Louisiana, southern flounders can be found from 100 miles up the Mississippi River in pure fresh water, out to full-strength seawater off the coast, although most studies show that they are most common at moderate salinities.

Most research indicates that male flounders stay in offshore waters year-round. Male flounders are small, seldom growing larger than 10 to 12 inches, but the females grow larger and move longer distances. Females may reach 23 inches long, and spend most of the year in inshore waters, only migrating offshore during October to December to spawn. Excellent catches of flounder can be made during this period.

Female southern flounders spawn several times during their short annual spawning period, producing about 100,000 eggs each spawn. Spawning seems to be triggered by water temperatures of about 56 degrees F and usually occurs between 5 and 9 a.m.

After hatching, larval southern flounders grow most rapidly in highly saline waters. Young flounders begin to appear in Louisiana inshore estuaries between January and April, and range 1/4 inch to 2 inches in length. Like other fish, flounders hatch with one eye on each side of the head. Movement of the right eye to the left side of the head begins when the fish is 1/3 to 1/2 inch long and is complete when the fish is 3/4 inch to 1 inch long. At this same time, the left side develops its dark color and the right side turns white.

After hatching, southern flounder larvae eat microscopic floating animals (plankton). As juvenile fish, they eat small bottom animals. At about 6 inches long, they adopt their adult diet of fish and shrimp. One study in Lake Pontchartrain showed that 89 percent of their diet was fish, with 41 percent being anchovies (sardines). In Barataria Bay, another study showed that 94 percent of their diet consisted of mullets and anchovies.

In Texas, researchers have noted that the southern flounder is the dominant predator of shrimp in the spring, and that most of its diet is anchovies, mullets, shrimp, menhaden (pogies) and croakers. In Mississippi, southern flounders' stomachs most frequently contained fish, with one-third having shrimp in them. Interestingly, as flounders get larger they don't eat larger fish, they just eat more small ones.

Female southern flounders grow more rapidly than males. A research project in Louisiana did not find a male southern flounder over 13.5 inches long. Another study in Georgia showed no males more than 16 inches long, and research in Texas showed no males over 12.8 inches long. Female flounders grow quickly their first two years; then their growth slows. Approximate average lengths at each age for females are: Age 1, 10 inches; Age 2, 16.7 inches; Age 3, 18.8 inches; Age 4, 19.6 inches; Age 5, 20 inches; Age 6, 20.4 inches; and Age 7, 20.5 inches. Few females live beyond seven years old and almost no males live past three years old.

Flounders are considered "ambush predators." Instead of actively pursuing their prey, they lie in wait in areas that are likely to concentrate or disorient small fish or shrimp. From their position on the bottom, flounders pounce on these animals as they move by.

Because of their feeding habits, large numbers of flounders will concentrate in good ambush areas. Especially productive are current-swept points and channels that serve as choke points for tidal currents.

Southern flounders take live bait, jigs, or even spoons that are fished near the bottom. Because their mouth opens side-to-side, rather than vertically, small hooks will produce more hook-ups than large hooks.

Flounders may also be gigged with a one-pronged spear in shallow waters at night by fishermen using lanterns for illumination. Firm sandy bottoms are preferred for easy wading. Gigging is most successfully conducted on a rising tide and in clear water. The largest flounders are almost invariably gigged in October and November near Louisiana's barrier islands, as the larger females appear in these waters during their spawning migration to offshore waters.

Currently, the daily recreational limit on southern flounders is 10 per day. The possession limit (on land) is 10 southern flounders per day per licensed person for each consecutive day spent on the water. There is no minimum size limit on southern flounders in Louisiana.