## Summer Flounder

## A PROFILE

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Common Names: summer flounder, fluke

Scientific Name: Paralichthys dentatus

Range: Nova Scotia south to eastern Florida, but most common in the Mid-Atlantic region.

Size: Males can grow to over 2 feet, with larger females reaching lengths up to 3 feet.

**Biological Characteristics:** Like all flounder, adult summer flounder are flat-bodied. They are white below and range from shades of brown to grey drab above, with a scattering of distinct, dark identifying spots. Summer flounder have the ability to change their coloring in order to blend with their environment. Summer flounder are considered "left-eyed;" when viewed from above, both eyes are typically on the left side of the body, although rarely a right-eyed variation may occur.

Habitat: Hard, sandy bottoms and salt marsh creeks or seagrass beds with muddy or silty substrate.

Food and Feeding: Larval summer flounder feed primarily on zooplankton, juveniles mainly on crustaceans and adults are opportunistic predators. Their ability to camouflage themselves with the substrate where they spend most of their lives makes them highly efficient ambush predators. Numerous, well-developed teeth allow adult summer flounder to feed on a range of prey, including crustaceans, small fish, squid and sea worms. Summer flounder most actively feed during daylight hours.

Spawning: Summer flounder typically begin spawning around age two to three, with males averaging 10 inches and females averaging 12.5 inches in length. Spawning occurs in the fall and winter (peaking in October and November) when summer flounder migrate from coastal to offshore waters to depths between 120 and 600 feet. Spawning is directly linked to sexual maturity, with older, larger fish migrating first. Since flounder spawn several times per season, a large female may release up to 4 million eggs in a single year. Larval flounder, or fry, begin life in the water column and migrate inshore to shallow coastal nurseries. Here they settle into the sediment and develop their adult form, with the body flattening and the right eye migrating over the top of the head to the left side.

**Migration:** Their migration patterns are strongly tied to water temperature, with adults spending the warm summer months on the sea floor in shallow coastal waters before migrating to the outer edge of the continental shelf as fall temperatures drop. **Commercial/Recreational Importance:** Summer flounder are considered one of the most important and sought-after fish in New Jersey, primarily for their great tasting meat. Restaurants, bait and tackle shops, charter and head boats plus beach townships all benefit economically from the influx of both local and visiting anglers that target summer flounder along the New Jersey coastline each summer. The New Jersey commercial summer flounder fishery accounts for a large portion of the summer flounder sold in restaurants and super markets. However, the recreational fishery is equally important in New Jersey. Recreational anglers support the local businesses, enjoy the activity of fishing for summer flounder and can then take part in a fresh, home-cooked meal.

**Fishing Methods:** Summer flounder can be caught using a variety of methods, one of which is by using a bucktail teaser rig. The bucktail acts as the weight on the bottom of a leader, and a second hook is placed 12–24 inches above on a dropper loop. Both hooks can be tipped with an artificially scented soft plastic lure that summer flounder can't resist. Using light tackle such as 5- to 7-foot medium-action rods and 10 lb. mono/20 lb. braided line is necessary to feel the sensitive bite of a summer flounder.

Applying a small, but rapid vertical jigging action to the rod will present the bucktail and lure like an

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injured baitfish, often resulting in a strike from a summer flounder. Since these fish are visual predators, the presented bait should be moving constantly to attract their attention. This usually requires shore-based anglers to continually cast and retrieve; boat anglers drift rather than anchor in one spot.

Summer flounder do not produce drag-ripping fights such as bluefish and striped bass, but can still be sporty on light tackle, especially from boats where their flat profile creates a lot of water resistance. Making up for their lack of fighting skills, summer flounder can often be caught in large quantities in one fishing trip.

If a summer flounder is caught along a certain stretch of beach or near a certain underwater feature, continue fishing that same area and you will often catch more fish. When fishing from shore, it is important to work the bucktail right up to the beach. Summer flounder often settle close against the beach lip, feeding on baitfish and crabs washed seaward off the beach face. Typically, most summer flounder caught from the surf are hooked less than 20 yards from shore.

Sources:

Atlantic States Marine Fisheries Commission (2014) NOAA Fish Watch (2014) K. Hill. Smithsonian Marine Station at Fort Pierce (2014)

K. Hill, Smithsonian Marine Station at Fort Pierce (2014) New Jersey Division of Fish and Wildlife, Bureau of Marine Fisheries

> Surf Fishing at Long Beach Island — Shane Evert and his dad Steve share in the delight of catching this summer flounder.