Blueline Tilefish:

A PROFILE



Common Name: Blueline tilefish, gray tilefish

Scientific Name: Caulolatilus microps

Background

Blueline tilefish are frequently caught as bycatch by long-liners and charter/party boats fishing for golden tilefish. Tilefish are relied upon on to "save a trip," meaning that the catch of a tilefish by anglers fishing for species like tuna can still make the trip worthwhile, even if the original target species is not biting.

Management

Tilefish are non-migratory, making them highly susceptible to the pressures of overfishing. Previously, blueline tilefish had no regular federal regulations for fish caught north of Virginia, because the fishery is data-deficient in the mid-Atlantic region. For this reason, along with the increasing number of catches, an interim fishery management plan went into effect in June 2016 to limit the number of tilefish caught and to prevent overfishing while data is gathered and the stock is further assessed. New Jersey Division of Fish and Wildlife cooperated with the Mid-Atlantic Fishery Management Council to collect gonads (reproductive organs) and otoliths (bone-like structures within the head used to age fish) in hopes of gaining a better understanding of the population, age and reproduction rates of blueline tilefish off New Jersey's coast.

Biological Characteristics

Blueline tilefish are dull-olive gray, gradually turning white moving toward their underside. They lack a fleshy structure behind their head which visually separates them from the popular golden tilefish. Blueline tilefish have a long snout, a narrow gold stripe underlined in fluorescent blue from the snout to the tip of the eye and a strong, flat spine on their gill cover. These fish also have an elongated, continuous dorsal and anal fin that is roughly half the length of the body. Males tend to be larger than females, can grow up to 32 inches long and live for up to 15 years.

Range

Western mid-Atlantic Ocean south to Florida; northern and eastern Gulf of Mexico.

Habitat

Bluelines live in deep water around the continental shelf and upper slope. Their preferred water temperature range is 59°-73°F, with a depth range from 240-780 feet in a mud and rubble substrate, allowing them to construct and inhabit burrows that are shared with other fish. In New Jersey, blueline tilefish are most commonly found near golden tilefish, and in shallower waters, near black sea bass.

Food and Feeding

Being a bottom dwelling fish, blueline tilefish are opportunistic feeders that prey mainly on benthic invertebrates associated with the seafloor substrate that they inhabit. These invertebrates include portunid crabs, mollusks, polychaete worms and brittle stars, although bluelines occasionally feed on smaller fish.

Spawning

Blueline tilefish typically begin to spawn at 4–5 years old when they reach 17–18 inches in length for females and 23.5 inches for males. Spawning occurs April–October. During this time, females can release upwards of



Mark Milici retains the N.J. State Record blueline (gray) tilefish from 2015 at 23 pounds, 4 ounces.

four million free-floating eggs into the water column. It is speculated that blueline tilefish are hermaphroditic—able to reverse gender.

Migration

Bluelines are not known to migrate, however, they will move if the constant deep-water temperature they prefer drops to below their minimum survival threshold.

How to Catch

Because blueline tilefish live at depths of up to 780 feet, a reel packed with lots of line (multifilament preferred) is essential, along with a rod stout enough to handle a one-pound weight. A multi-hook rig is the most common set-up with a maximum of five hooks per rod. This allows the angler—when fishing in 700 feet of water—to keep fishing if a bite is missed rather than serving as an attempt to hook multiple fish per drop. A variety of baits are used—from crabs to clams to cut fish—but the bait must be fresh to stay on the hook and entice the bite. While many avid fisherman use tricks such as glow beads or lights, the key to catching tilefish is location, location, location.

References:

The IUCN Red List of Threatened Species: Caulolatilus microps www.iucnredlist.org/details/190191/0

South Atlantic Fisheries Management Council: Blueline Tilefish https://safmc.net/regulations/regulations-by-species/blueline-tilefish/

Reproductive Biology of The Blueline Tilefish, Caulolatilus Microps, off North Carolina and South Carolina

 $https://archive.org/stream/cbarchive_54318_reproductive biology of the blue li 1971/reproductive biology of the blue li 1971\#page/n15/mode/2 up$

 $\label{thm:continuous} Tile fish, Lopholatilus chamaeleonticeps, Life History and Habitat Characteristics (NOAA)$

www.nefsc.noaa.gov/nefsc/publications/tm/tm152/tm152.pdf

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