



Trinectes maculatus fasciatus
hogchoker

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Type Locality

India [?] (Bloch and Schneider 1801 *in* Eschmeyer 1990).

Etymology/Derivation of Scientific Name

Trinectes: three swimmer; *maculatus*: spotted, in reference to the color pattern of the eyed side (Ross 2001)

Synonymy

Pleuronectes maculatus Bloch and Schneider 1801:157 *in* Eschmeyer 1990.

Achirus fasciatus Evermann 1899:310.

Trinectes maculatus Cook 1959:37.

Achirus mollis Wailes 1854:333.

Characters

Maximum size: 212 mm SL (Merriman 1939).

Coloration: The color of the eyed side is highly variable, ranging from light and dark brown to olive green. The background is a lighter shade; it may have a uniform pattern or many small, dark elongate blotches that provide a mottled appearance. Additionally, there are always six to eight dark bands running across the body, these are lighter in small specimens. The blind side is usually immaculate and may have light pigmentation. All fins are pigmented with a mottled pattern that matches the body margins (Ross 2001).

Teeth count:

Counts: 66-75 lateral line scales (Hubbs et al 1991). There are 65-77 SC, 48-57 dorsal rays, 38-42 anal ray pelvic rays, and 4 (3-4) left pelvic rays (Ross 2001).

Body shape: Small, oblong flatfish with small eyes (Ross 2001).

Mouth position: Vertical mouth (Ross 2001).

External morphology: Right pectoral fin absent (Hubbs et al 1991). The dorsal and anal fins are elongated, the dorsal fin originating on the head and extending to the caudal peduncle. The pectoral fins are absent (small ones may have a few rudimentary rays). The pelvic fins are symmetrical. The body is covered with small, ctenoid scales and the lateral line is complete. Scales on the blind side of the head have cirri (Ross 2001).

Distribution (Native and Introduced)

U.S. distribution: Coastal species known from Massachusetts south along the Atlantic coast, and throughout the Gulf of Mexico to Venezuela (Hubbs et al 1991).

Texas distribution: May be found inhabiting most of the bays and estuaries in the state; also found in the lower reaches of coastal streams (Hubbs et al 1991).

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Generally inhabit nonvegetated, sanded areas, but also occur over silt or mud bottoms (Reid and Castagna 1955). Occur in fresh water and estuaries, with movement between the two habitats related to both seasonal and age changes. In coastal areas of Mississippi, hogchoker habitats are generally those of moderate salinity (2-7 m), low water clarity, moderate oxygen levels, and mud-sand substrata (Peterson 1996).

Mesohabitat:

Biology

Spawning season: From June through August (Pearson 1941; Dovel et al. 1969; Koski 1978; Smith 1986).

Spawning location: In estuaries in the evening, from approximately 6:00 to 8:00 p.m. (Hildebrand and Cab

Reproductive strategy:

Fecundity: Has been estimated at 10,000 to 34,000 eggs (Hildebrand and Schroeder 1928; Castagna 1955).

Age at maturation: Varies from two (Koski 1978) to three (Wockley 1968) or four years (Mansueti and Pa

1956).

Migration: After hatching, the larvae move away from the higher salinity (15-18 ppt) spawning grounds in salinity areas of estuary or freshwater streams. The following spring they move back downstream into low areas. This downstream distance is extended progressively each year until maturity, when they return to the spawning grounds. The upstream migration occurs each fall for the overwintering period (Dovel et al. 1969; Peterson 1996).

Longevity: Estimated anywhere from 6-12 years along Atlantic Coast (Mansueti and Pauly 1956; Wockly Dovel et al. 1969; Koski 1978).

Food habits: Generalized predators on small benthic invertebrates. Their diet generally consists of midges, ostracods, amphipods, aquatic insects, annelids, crustaceans, polychaetes and foraminiferans. Vascular plants and bottom materials are also occasionally ingested, but probably as an artifact of their benthic feeding (Hill and Schroeder 1928; Reid 1954; Castagna 1955; Darnell 1958; Wockley 1968; Carr and Adams 1973; Smith 1984). Small hogchokers (less than 60 mm SL) feed primarily on amphipods, whereas larger fish feed more on polychaetes and clam siphons (Smith et al. 1984).

Growth: Average SL for Mississippi hogchokers are: 21 mm, 42 mm, 60 mm, 74 mm, and 91 mm at ages 1, 2, 3, 4, and 5 respectively (Peterson-Curtis 1996).

Phylogeny and morphologically similar fishes

In estuaries, it is most similar to the lined sole (*Achirus lineatus*), from which it differs in lacking pectoral fins and having a more oblong (versus rounded) dorsal profile (Ross 2001).

Host Records

Commercial or Environmental Importance

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[Home](#)