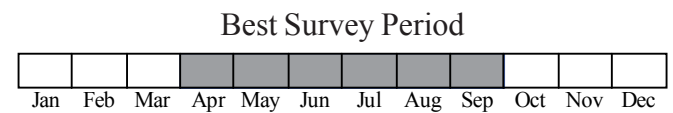
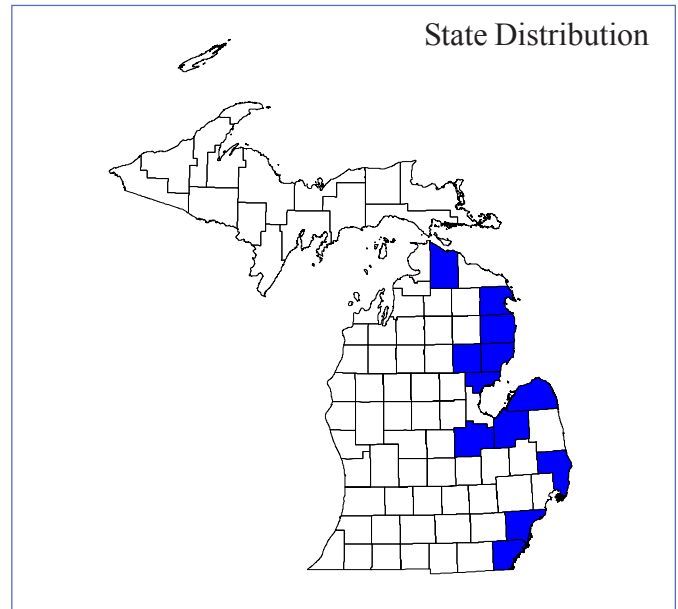


Image courtesy of New York Sportfishing and Aquatic Resources Education Program (SAREP)



Status: State Endangered

Global and State Rank: G4/S1S2

Family: Percidae (Perch)

Total Range: The channel darter occurs primarily in the Ohio River basin, extending into the lower Great Lakes basin and upper St. Lawrence drainages. The channel darter also occurs in southeastern Kansas, southwestern Missouri, eastern Oklahoma, Arkansas and northern Louisiana. While the range of the channel darter is large, this species often occurs in isolated populations.

State Distribution: The range of the channel darter in Michigan includes near shore areas of Lake Huron and Lake Erie on the eastern coast of Michigan. Historic occurred in the AuSable River, Iosco Co.; Pine River, Alcona Co.; Rifle River, Arenac and Ogemaw Co.; Saginaw Bay region; and Thunder Bay, Alpena County. Since 1994, the channel darter has only been observed in the Au Sable, Pine and St. Clair Rivers in Michigan.

Recognition: Darters are small, laterally compressed fish with two dorsal fins. The channel darter is distinguished from other darters by enlarged scales between the base of the pelvic fins. Channel darters also have two anal spines, unlike many other Michigan darter species which have a single spine. The channel darter has an elongate, slender body, with light olive to sand

coloration and 10 to 15 small blotches along the midline on each side (Pflieger 1975). The channel darter is usually less than 55 mm (standard length), although individuals have been observed to 64 mm. Breeding males are generally darker and may develop a green sheen (Kuehne and Barbour 1983).

Best Survey Time: April through September.

Habitat: The channel darter inhabits rivers and large creeks in areas of moderate current over sand and gravel. The channel darter has also been reported in the nearshore waveswept areas of Lake Huron and Lake Erie in coarse-sand, fine-gravel beach and sandbar habitats (Trautman 1981).

Biology: Channel darter spawning has been studied in the the Cheboygan River, Cheboygan County (Winn 1953, 1958a, 1958b). Channel darters spawned between July 9 and 23, when water temperatures ranged from 69 to 72 F. Flowing water is essential to channel darter spawning. Males defend a 1 meter territory centered by a large rock, behind which they maintain a small nest station. When a female approaches, the male guides her to the area of small gravel behind the rock. The female buries herself partially in the gravel, and with the male perched on top of her, deposits her eggs. They are immediately fertilized by the male, and then both parents depart the nest. Females deposit 4-10 eggs at each nest, and over a season, may deposit as many as 415 eggs total (Winn 1953). Eggs are slightly adhesive and require no parental care.



Channel darters are benthic, or bottom, feeders. Their diet consists of small invertebrates, such as mayfly and midge larvae, as well as small crustaceans. The channel darter also feeds on algae and organic debris (Turner 1921).

While the channel darter typically occurs in deeper (3 m) water, it is known to move into shallow water (<1 m) at night (Trautman 1981). It generally overwinters in deep backwater pool areas filled with organic debris (Branson 1967).

Conservation/Management: The range of the channel darter in Michigan has been drastically reduced in the past century. Prior to 1957, the darter was reported in 11 counties along Lake Huron, Lake St. Clair and the St. Clair River, and Lake Erie. In surveys conducted in 1986 and 1994, channel darters were only found in the Pine and the Au Sable Rivers. Additional surveys confirmed the presence of channel darters in the St. Clair River in 1994 and 1995.

Much of the decline in channel darter numbers can be linked to diminishing suitable habitat. Habitat in the Cass and Huron Rivers has become polluted and apparently no longer supports channel darter populations. In more pristine rivers, such as the Pine and Au Sable Rivers, suitable habitat and viable channel darter populations persist.

Research Needs: Additional surveys are needed to determine the distribution and numbers of remaining channel darters. Monitoring of known populations is needed to determine the status of these populations. Studies should focus on spawning, developmental processes and behavior. Such information will enable resource managers to initiate effective protection and recovery efforts, to insure the long-term viability of this species in Michigan and throughout its range.

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