OCHLOCKONEE MOCCASINSHELL
Medionidus simpsonianus

Order: Unionoida
Family: Unionidae
FNAI Ranks: G1/S1
U.S. Status: Endangered
FL Status: Endangered

Description: A small bivalve mollusk reaching a length of 2.2 in. (55 mm). Valves (shell) light brown to yellowish green with wide, dark green rays; mostly smooth though sculptured posteriorly, slightly elongate elliptical in shape and mildly blunt posteriorly, somewhat inflated (deep), with relatively thin valves with broadly curved ventral margins. A moderately angular posterior ridge runs from umbo (raised area on valve near hinge) to end of shell and is covered in its entire length, and often behind, by well-developed, irregular, concentric ridges. Internally, two low teeth below umbo of left valve, and one tooth in right valve; nacre (inner lining of valves) bluish white.

Similar Species: Its small size, prominent green rays, and characteristic sculpturing distinguish this species from other mussels in the Ochlockonee River system. Other moccasinshells (*Medionidus spp*.) from other Florida river systems have fine or no dark green rays on the shell. Because many mussels are similar externally, identity should always be confirmed by an expert.

Habitat: Large creeks to medium-sized rivers with moderate current and substrates of sand with some gravel.

Seasonal Occurrence: Present year-round.

Florida Distribution: The species is restricted to one reach of the Ochlockonee River in Leon and Gadsden counties (USFWS, 2003).

Range-wide Distribution: Restricted to Ochlockonee River system of Florida and Georgia.

Conservation Status: Very rare and in severe decline; may not be reproducing. Habitat subject to multiple threats, including many forms of degradation as well as introduced Asian clam (*Corbicula fluminea*).

Protection and Management: The major focuses in managing for viable populations of freshwater mussels are maintenance of high quality waters and benthic habitats, as well as ample stream and river flows (damming is strongly discouraged). Valuable tools include establishment of buffers and streamside management zones for all agricultural, silvicultural, mining, and developmental activities; and elimination or reduction of invasive species (especially other bivalves) if possible. Monitoring programs should focus on water and benthic habitat quality, as well as population sizes and population statuses of both mussels and their host fishes at all occupied sites. Additionally, it is important to promote responsible watershed land use practices by implementing aquatic habitat education programs for land use planners and resource managers, and to conduct periodic reevaluations of the effectiveness of habitat protection measures and watershed land use practices.

References: Deyrup and Franz (eds.) 1994, Georgia DNR 1999, U.S. Fish and Wildlife Service 1998b.

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