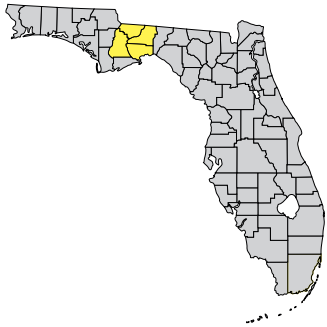
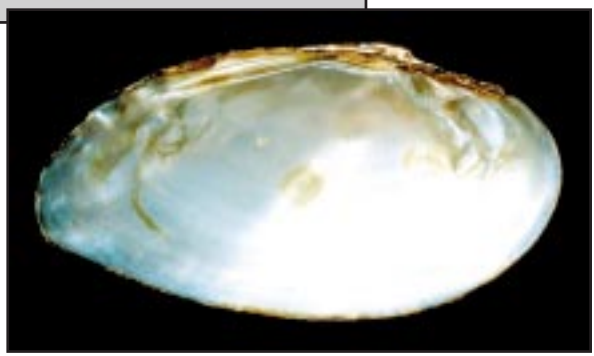
# OCHLOCKONEE MOCCASINSHELL

## *Medionidus simpsonianus*



**Order:** Unionoidea
**Family:** Unionidae
**FNAI Ranks:** G1/S1
**U.S. Status:** Endangered
**FL Status:** None







**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.

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**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:** Ochlockonee River system, including Little River.

**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:** Protect inhabited streams and rivers from pollution, siltation, impoundment, and other disturbance; this must extend upstream into Georgia. Limit withdrawal of surface and subterranean waters as necessary to maintain normal stream flows, especially during drought. Protect forests along floodplain and at least 150 ft. (ca. 50 m) of adjoining upland from timber harvest, livestock, and development. Situate roads at least 0.25 mi. (0.4 km) from heads of all tributaries, and even more on steep slopes. Use silt fencing and vegetation to control runoff and siltation at all stream crossings, especially during construction and maintenance activities. Prohibit dredging and damming of streams and rivers. Avoid introduction of non-native invertebrates, especially zebra mussel (*Dreissena polymorpha*); monitor and attempt to control Asian clam. Use and maintain sewer systems rather than septic tanks and stream-dumping for management of wastes. Ban use of agricultural pesticides on porous soils near streams. Identify and maintain fish populations (probably darters) that serve as mussel larval hosts.

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