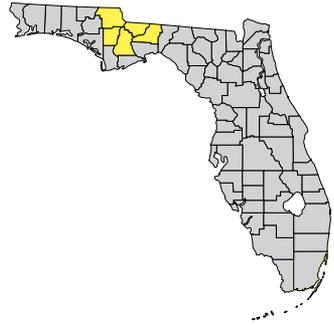


SHINY-RAYED POCKETBOOK

Lampsilis subangulata

(formerly *Villosa subangulata*)

Order: Unionoidea
Family: Unionidae
FNAI Ranks: G2/S1S2
U.S. Status: Endangered
FL Status: None



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Description: A medium-sized bivalve mollusk reaching a length of 3.3 in. (85 mm). Valves (shell) a shiny light yellowish brown with medium-wide emerald green rays (darker brown with rays obscured in some older individuals) over entire surface; smooth, roughly elliptical, and solid but fairly thin. Umbos (raised areas on valves near hinge) broad and somewhat inflated (deep or broad); posterior ridge extending from umbo to posterior margin rounded, not angular. Internally, two large, erect teeth below umbo of left valve, and one large and one flatter tooth in right valve; nacre (inner lining of valves) white, sometimes with salmon tint in cavity of umbo.

SHINY-RAYED POCKETBOOK

Lampsilis subangulata

Similar Species: The yellow shell with fairly wide, bright green rays is unique among Florida mussels. Gulf moccasinshell (*Medionidus penicillatus*; see species account), which rarely exceeds 2 in. (51 mm), is yellowish to greenish brown and has fine but typically broken green rays. Because many mussels are similar externally, identity should always be confirmed by an expert.

Habitat: Medium-sized creeks and rivers with slow to moderate current and clean or silty sand substrates.

Seasonal Occurrence: Present year-round.

Florida Distribution: Principally Chipola and Ochlockonee rivers, with one historic site in tributary of upper Apalachicola River; not confirmed in Liberty County.

Range-wide Distribution: Apalachicola (including Chipola, Flint, and Chattahoochee rivers) and Ochlockonee river systems of Florida, Alabama, and Georgia.

Conservation Status: Declining; public lands protect part of Chipola and Ochlockonee river floodplains, but rivers still face multiple threats, including introduced Asian clam (*Corbicula fluminea*).

Protection and Management: Protect inhabited streams and rivers from pollution, siltation, impoundment, and other disturbance; this must include Georgia and Alabama headwaters. 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. 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 waste water. Ban use of agricultural pesticides on porous soils near streams. Maintain fish populations (largemouth and spotted bass) that serve as mussel larval hosts.

Selected References: Brim Box and Williams 2000, Deyrup and Franz (eds.) 1994, Georgia DNR 1999, U.S. Fish and Wildlife Service 1998b.