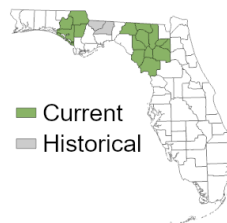


OVAL PIGTOE

Pleurobema pyriforme

Order: Unionoida
Family: Unionidae
FNAI Ranks: G2/S1
U.S. Status: Endangered
FL Status: Endangered



Description: A small bivalve mollusk reaching a length of 2.4 in. (60 mm). Valves (shell) a plain but shiny yellowish to chestnut in color (with faint green rays in some small specimens), oval and compressed (relatively flattened) to somewhat inflated (deep), with a smooth surface marked by distinct concentric growth lines; prominent ridge from umbo (raised area on valves near hinge) to posterior end, which tapers slightly to a blunt point. Umbos extend slightly above hinge line. Internally, two fairly large teeth below umbo of each valve; nacre (inner lining of valves) salmon to bluish white and iridescent posteriorly.

Similar Species: The combination of shell characters given above distinguish this species from other Florida mussels. Gulf moccasinshell (*Medionidus penicillatus*; see species account) is equally small and can be brownish but tends to have greenish radiating lines on the valves. Because many mussels are similar externally, identity should always be confirmed by an expert.

Habitat: *P. pyriforme* inhabits rivers and creeks with moderate to slow current and substrates of sand, sandy mud, and gravel (Williams et al. 2014).

Seasonal Occurrence: Present year-round.

Florida Distribution: Within Florida, *Pleurobema pyriforme* occurs, or occurred, in Econfina Creek and the upper Chipola, upper Ochlockonee, and Suwannee river systems; it is not known from the Apalachicola River mainstem or non-Chipola tributaries although probably occurred there before channel entrenchment began following completion of Jim Woodruff Lock and Dam in 1957 (Williams et al. 2014). The Chipola River population extends into Alabama (Garner et al. 2009). Failure to find the species in the Ochlockonee basin during extensive 2006-2017 surveys suggests that the population there may be extirpated (Pursifull et al. 2021), and the Suwannee/Santa Fe basin population seems very sparse (USFWS 2020). A convex polygon encompassing all Florida sites, current and historic, measures ca. 22,000 km².

Range-wide Distribution: Beyond Florida, extends northward into Georgia in Ochlockonee, Flint, and Chattahoochee river systems.

Conservation Status: In severe decline. Although portions of floodplains of inhabited river systems are in public ownership, habitats still face multiple forms of degradation as well as introduced Asian clam (*Corbicula fluminea*).

Protection and Management: Additional protection via acquisition or easement is needed for those portions of Econfina Creek and the Apalachicola/Chipola, Ochlockonee, Suwannee river floodplains and adjacent uplands that remain private, including along headwaters in Alabama and Georgia. Managing for viable populations of freshwater mussels requires focusing on the maintenance of high-quality waters and benthic habitats, as well as ample stream and river flows (damming, dredging, and excessive water consumption are strongly discouraged); this requires multi-state cooperation. Valuable tools include proper wastewater management; the 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, and population sizes and statuses of both mussels and their host fishes (potentially including eastern mosquitofish and sailfin shiner: Williams et al. 2014) 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. Finally, for relatively small Gulf Coast drainages such as Econfina Creek and the Ochlockonee River, it is imperative to do everything possible to limit global warming and consequent sea level rise to limit saltwater intrusion and inundation of lower reaches.

References: Brim Box and Williams 2000; Deyrup and Franz (eds.) 1994; Georgia DNR 1999; U.S. Fish and Wildlife Service 1998, 2003, 2007, 2020.



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