PURPLE BANKCLIMBER

Elliptoideus sloatianus

Order: Unionoida Family: Unionidae FNAI Ranks: G2/S1S2

U.S. Status: Threatened
FL Status: Threatened



Description: A very large bivalve mollusk reaching a length of 8 in. (203 mm). Valves (shell) brownish black to black, heavy and strongly sculptured, nearly rhomboidal in shape, moderately inflated (deep). A well-developed posterior ridge extends from umbos (raised areas on valves near hinge) to posterior ventral edge of shell; along and near this are several irregular ridges. Umbos low, barely extending above hinge. Internally, two teeth below umbo of left valve, and one in right valve; nacre (inner lining of valves) whitish near center to deep purple toward margin, very iridescent posteriorly.

Similar Species: With one exception (washboard, *Megalonaias nervosa*), no other Florida freshwater mollusk attains this size. Shallow umbo pocket and purple edges of nacre distinguish it from *M. nervosa* and *Amblema neislerii* (see species account). Similar to genus *Elliptio*, but differs from it reproductively. Bankclimber (*Plectomerus dombeyanus*), has very similar shell but inhabits Escambia River. Because many mussels are similar externally, identity should always be confirmed by an expert.

Habitat: Small to large rivers with slow to moderate current, and substrate of sand, sometimes mixed with mud or gravel.

Seasonal Occurrence: Present year-round.

Florida Distribution: This mussel is known only from the Apalachicola and Ochlockonee river systems in Florida. Heard (1979) reported one shell from the Escambia River, near Century, Florida, but this record may have been based on the conchologically similar *Plectomerus dombeyanus* (Deyrup and Franz, 1994). The species is known from fossil records from two additional Florida drainages (Bogan and Portell, 1995; J. D. Williams, pers. obs.). It appears to be very rare in or

extirpated from the Chipola River, the last record being from 1988 (Brim Box and Williams, 2000).

Range-wide Distribution: Extends into Georgia in Flint River; formerly occurred in lower Chattahoochee River along Alabama-Georgia border.

Conservation Status: Declining, with little reproduction. Although much of floodplains of inhabited rivers is public land, rivers still face multiple threats of habitat 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: Brim Box and Williams 2000, Deyrup and Franz (eds.) 1994, Georgia DNR 1999, U.S. Fish and Wildlife Service 1998b.



© Richard T. Bryant



© Richard T. Bryant