CHIPOLA SLABSHELL
Elliptio chipolaensis

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

Description: A medium-sized bivalve mollusk reaching a length of 3.3 in. (85 mm). Valves (shell) chestnut colored, usually with one to four dark, concentric bands and dark umbos (raised areas on valves near hinge); smooth, oval to nearly elliptical, somewhat inflated (deep) though with slightly concave posterior slope; umbos prominent, extending well above hinge line. Posterior ridge extending from umbo to posterior end starts out rounded but flattens to form two angles along shell margin. Internally, cavity of umbo relatively deep; nacre (inner lining of valves) salmon-colored, more intense near hinge, somewhat iridescent.

Similar Species: Pattern of light and dark bands on valves in combination with salmon nacre distinguish this species from most other Florida mussels. The dark bands and slightly concave posterior slope help to distinguish from other species of *Elliptio*, including *E. complanata* and *E. icterina*, both of which are brownish and inhabit Chipola and Apalachicola rivers. Because many mussels are similar externally, identity should always be confirmed by an expert.

Habitat: Main channel of river and lower reaches of larger tributaries.

Seasonal Occurrence: Present year-round.

Florida Distribution: This species was once thought to be endemic to the Chipola River system (van der Schalie, 1940) until Brim Box and Williams (2000) located a single museum specimen from a Chattahoochee River tributary (Howards Mill Creek) in southeastern Alabama and southwestern Georgia; however, that population is believed to have been extirpated. The historic range is centered throughout much of the Chipola River mainstem and several of its headwater tributaries at 17 historic sites, though more recently found to extend into Alabama (Garner et al. 2009). Populations in Dead Lake and Cowarts and Spring creeks (Chipola River) may also be extirpated (USFWS, 2003; Mirarchi et al., 2004), leaving only about 100 km of occupied habitat

left in the Chipola River drainage in Florida.

Range-wide Distribution: Only non-Florida record is one site in Chattahoochee River, southeastern Alabama, but that population appears to be extirpated.

Conservation Status: Portions of Chipola River floodplain are publicly owned, but river still faces multiple threats from habitat degradation and 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.

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