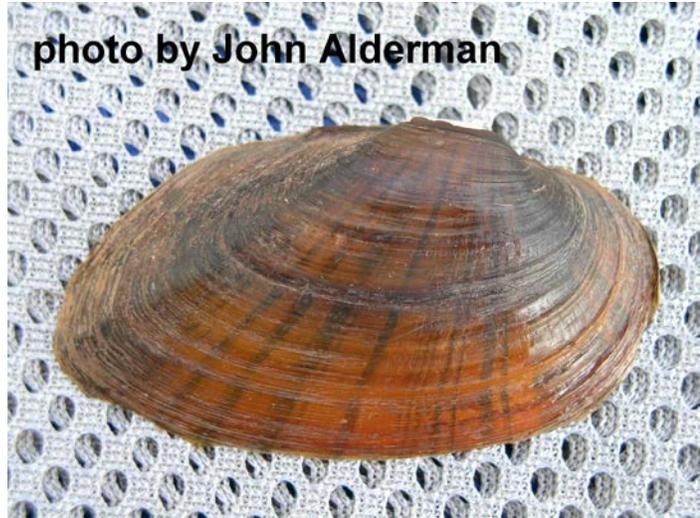


Carolina Elephantear

Elliptio congaraea

Contributor (2005): Jennifer Price
(SCDNR)

Reviewed and Edited (2012): William
Poly (SCDNR)



DESCRIPTION

Taxonomy and Basic Description

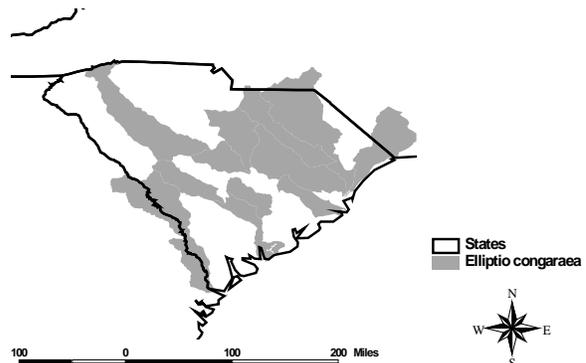
The shell of the Carolina Elephantear is rhomboid, with the posterior end obliquely truncated above and biangulate below. The surface has irregular growth lines, usually wrinkled on the posterior slope. The outer surface of the shell is greenish-yellow or tawny and is usually rayed. The inner surface of the shell is purplish (Bogan and Alderman 2004, 2008). The common name, Carolina Slabshell, also has been used in the past for this species (NatureServe 2011).

Status

The global ranking of this species is vulnerable (G3), with a state ranking of vulnerable (S3) in North Carolina, Georgia, and South Carolina (NatureServe 2011) and is currently a species of special concern in the latter.

POPULATION SIZE AND DISTRIBUTION

This species is found in many river basins in South Carolina. The Pee Dee, Waccamaw, and Savannah Rivers contain particularly healthy populations. Other sites are very sparsely populated by the species. Globally, it ranges from the Ogeechee Basin in Georgia to the Chowan River Basin in Virginia (Bogan and Alderman 2004, 2008).



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The Carolina Elephantear species is found in a variety of habitats, including rivers and small streams. This species prefers sandy substrates (Taxonomic Expertise Committee 2004).

CHALLENGES

Observations suggest that this species is sensitive to channel modification, pollution, sedimentation, and low oxygen conditions, but we do not know how the relative sensitivity of this species to these challenges compares to other species.

CONSERVATION ACCOMPLISHMENTS

There are no significant conservation accomplishments specifically for the Carolina Elephantear at this time.

CONSERVATION RECOMMENDATIONS

- Continue to conduct surveys and monitor Carolina Elephantear population density.
- Explore the need to list the Carolina Elephantear in South Carolina, based on survey results.
- Conduct genetic analyses to determine the relationship between the Carolina Elephantear and other species in the genus *Elliptio*.
- Protect critical habitats for the Carolina Elephantear from future development and further habitat degradation by following Best Management Practices and protecting and purchasing riparian areas.
- Promote land stewardship practices through educational programs both within critical habitats with healthy populations and in other areas that contain available habitat for the Carolina Elephantear.
- Encourage responsible land use planning.
- Consider this species' needs when participating in the environmental permit review process.
- Educate off-road motor vehicle operators of the negative effects of crossing streams at multiple locations and using stream bottoms as trails.
- Conduct further research to determine the degree of sensitivity of the Carolina Elephantear to various point and non-point sources of pollution and land use impacts.

MEASUREMENTS OF SUCCESS

Persistence of existing populations and an increase in numbers at sites where the Carolina Elephantear is currently rare will indicate success.

LITERATURE CITED

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