

Pod Lance

Elliptio folliculata

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photo by John Alderman



DESCRIPTION

Taxonomy and Basic Description

The pod lance's shell is narrow and uninflated, resembling a straight-edged razor. The dorsal and ventral margins are parallel to one another. The outer surface of the shell is rough and dark brown to black; the inner surface varies from bluish to pink (Bogan and Alderman 2004).

There is some confusion regarding the taxonomic identity of specimens previously identified as the pod lance, which is suspected by some to be synonymous with *Elliptio producta* (NatureServe 2005).

Status

NatureServe identifies the pod lance as having a global ranking of vulnerable to imperiled (G2/G3). Currently, this species is not ranked in South Carolina.

POPULATION DISTRIBUTION AND SIZE

The pod lance ranges from the Ogeechee River in Georgia to the Waccamaw and Cape Fear basins in North Carolina. The pod lance has been reported in all the major river basins in South Carolina (Bogan and Alderman 2004). Concerns regarding the correct identification of some specimens make creation of a detailed range map difficult.

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The pod lance has been found on sandy or clay substrates in water generally greater than one meter (3.3 feet) in depth. It has been found in both rapidly flowing rivers as well as slow flowing areas (Bogan and Alderman 2004).

CHALLENGES

All of the general challenges to mussels are likely to apply to this species, although we do not know how specific actions affect this species. 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 (Taxonomic Expertise Committee 2004).

CONSERVATION ACCOMPLISHMENTS

There are no significant conservation accomplishments for the pod lance at this time.

CONSERVATION RECOMMENDATIONS

- Conduct genetic analyses across the range of the pod lance to determine its relationship with other lanceolate *Elliptio* species.
- Conduct surveys to determine the current range and status of the pod lance.
- Explore the need to list the pod lance within South Carolina, based on survey results.
- Protect critical habitats for the pod lance 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 other areas that contain available habitat for the pod lance.
- Encourage responsible land use planning.
- Consider species needs when participating in the environmental permit review process.
- Educate off-road motor vehicle operators of the negative affects of crossing streams at multiple locations and using stream bottoms as trails.
- Conduct further research to determine the degree of sensitivity of the pod lance to various point and non-point source pollution sources and land use impacts.

MEASURES OF SUCCESS

Resolving taxonomic questions regarding the relationship between the pod lance and other lanceolate elliptios will be a measure of success. Determining the extent of its distribution will be another. Once the South Carolina distribution of the pod lance is determined, persistence of identified populations will be considered indicative of success.