

USACE Natural Resource Management Freshwater Mussels



Littlewing Pearlymussel

Littlewing Pearlymussel (*Pegias fabula*): Rarely exceeding 1.5 inches in length and 0.5 inches in width, this is a small mussel. The outer shell ranges from light green to dark yellow-brown with dark rays of variable width. The outer shell is often eroded giving it a chalky or ashy white appearance. (USFWS)

Status: Endangered, listed 1993

Nature Serve: Critically Imperiled



Genus: *Pegias* is a monotypic genus that is part of the freshwater mussel family, *Unionidae*. (Integrated Taxonomic Information System)

Range: Historically widespread but uncommon. Known from 27 stream reaches in the Tennessee and Cumberland River systems in Alabama, North Carolina, Tennessee, Kentucky, and Virginia. (USFWS)

Photo Left to Right: Littlewing Pearlymussel in Substrate (Kentucky DFWR), Littlewing Pearlymussel (U.S. Fish and Wildlife Service), & An Eroded Littlewing Pearlymussel (U.S. Fish and Wildlife Service)

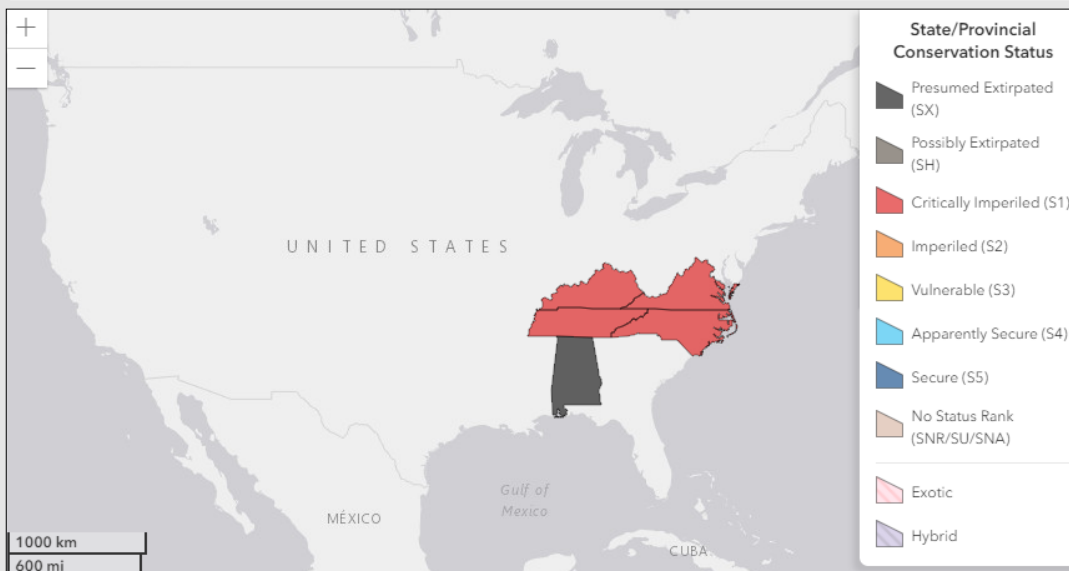


Photo: NatureServe map of species' status by state.

Management and Protection:

- Inhabits small to medium, cool-water streams in the Cumberland and Tennessee River basins. Occupied streams have moderate to high gradients and low turbidity.
- This mussel is often found buried beneath boulders, in riffles lying on the substratum, or in the transition zone between riffles and pools on top of or buried in the substratum. (USFWS)
- The primary threats to the littlewing pearlymussel are habitat loss and degraded water quality due to impoundments, pollution, acid mine drainage, and/or siltation.
 - Remnant populations are small and isolate, increasing susceptibility to catastrophic events and restricting the natural interchange of genetic material among populations. (USFWS)



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USACE ROLE: According to the Engineering Research and Development Center's Threatened and Endangered Species Team Cost Estimates, the USACE has expended over \$31,898 on efforts related to the littlewing pearlymussel since 2005. These funds have been expended by multiple business lines including Environmental Stewardship, Hydropower, Regulatory, and more. Expense types included Inventory, Survey and Monitoring, Site Visits and Inspections, and Coordination and Determination.



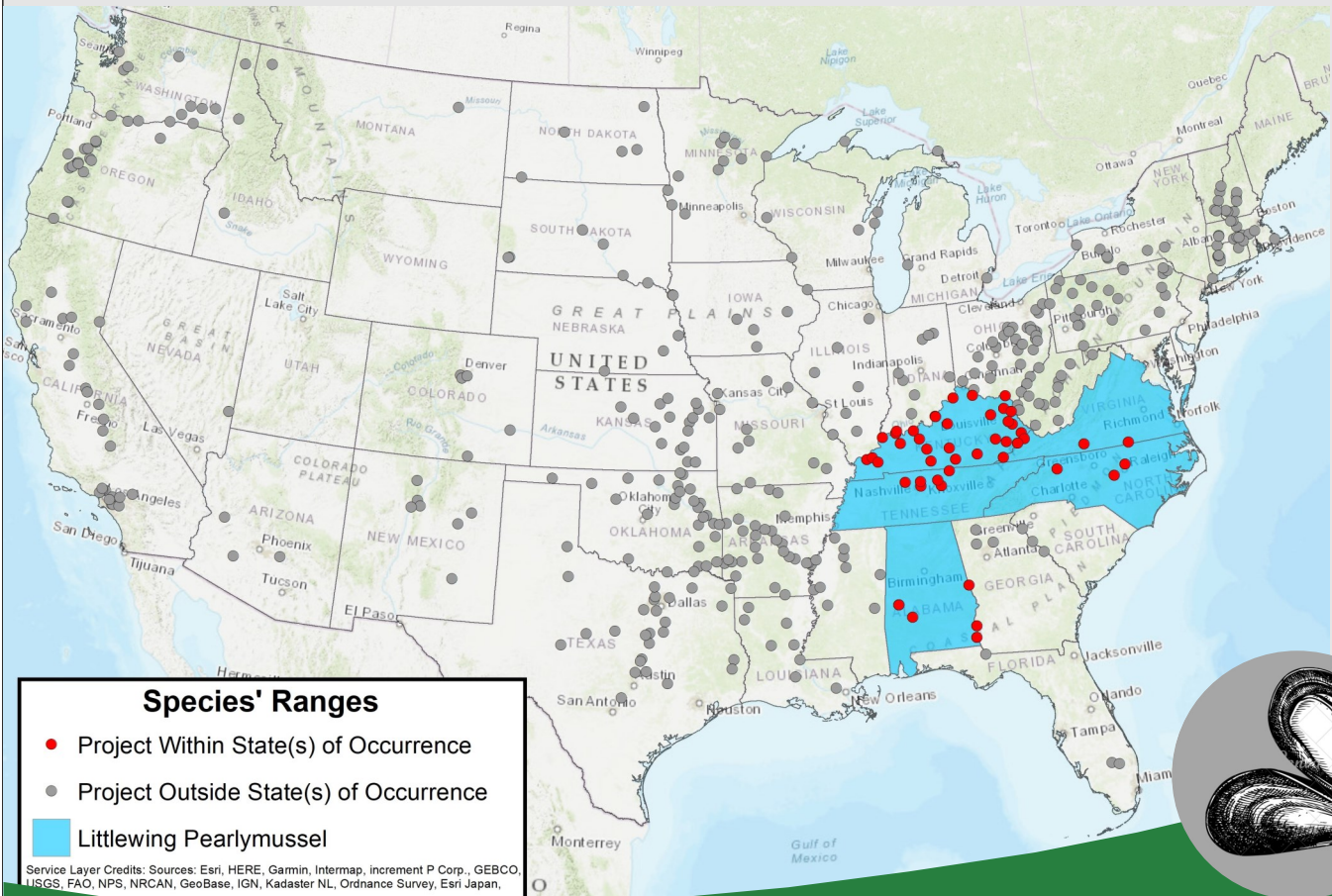
Littlewing Pearlymussel = \$31,898 (2005)

In the 2020 NRM Assessment a single project within the Great Lakes and Ohio River Division listed the species. The Wolf Creek Dam and Lake Cumberland Project of the Nashville District noted that the littlewing pearlymussel is known to have rare occurrences at the project. Across the littlewing pearlymussel's range the USACE works diligently to ensure that current and proposed work does not negatively impact the mussel or other federally listed species.



Photo: An aerial image of Lake Cumberland, Nashville District.

This fact sheet has been prepared as an unofficial publication of the U.S. Army Corps of Engineers (USACE). This online publication is produced to provide its readers information about best management practices related to special status species. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof.



Source: Map provided by Ashleigh Boss, ORISE Fellowship, Institute for Water Resources

