

USACE Natural Resource Management Freshwater Mussels



Ring Pink

Ring Pink (*Obovaria retusa*): This medium sized mussel grows to be between 2-3 inches in length. The shell is round and moderately inflated. This outer shell is yellow-green to brown in color and does not have rays. Individuals often darken with age. The inner shell ranges from a light pink to a dark purple and has a white border.

Status: Endangered, listed 1989

NatureServe: Critically Imperiled



Genus: *Obovaria* was first described by Rafinesque in 1819. It is part of the *Unionidae* family and currently has seven recognized species. (Integrated Taxonomic Information System)

Range: This mussel once ranged throughout the Ohio, Tennessee, and Cumberland River systems. The species is likely extirpated from IL and IN. The viability of remaining populations is unclear. (NatureServe)

Photos Left to Right:
Ring Pink Shell (USFWS), Internal Shell (Karen Little/Illinois State Museum), & Ring Pink Shell (USFWS)



Photo: NatureServe map of species' status by state.

Management and Protection: According to USFWS's 2019 Five-Year Review of the ring pink mussel:

- The ring pink is still extremely rare. Few live individuals have been found in recent years. Only four live individuals have been recorded from the Green River since 1998.
- The most significant threats that had been identified in the 1991 recovery plan continue to impact the ring pink mussel today. Additionally, the low population size is a threat to the species' continued viability.
- Water and habitat quality have improved in some occupied or historically occupied waterways. There has not, however, been a subsequent increase in species' populations in the Green River or any streams where the ring pink historically occurred.



USACE ROLE: According to the Engineering Research and Development Center's Threatened and Endangered Species Team Cost Estimates, the USACE has expended over \$339,000 on efforts related to the ring pink mussel. These funds have been expended by multiple business lines including Environmental Stewardship, Flood Risk Management, Hydro-power, Navigation, Recreation, Regulatory, and Water Supply. Expense types include Coordination and Determination, Site Visits and Inspections, and Inventory, Survey, and Monitoring.



Ring Pink = \$339,498 (2006)

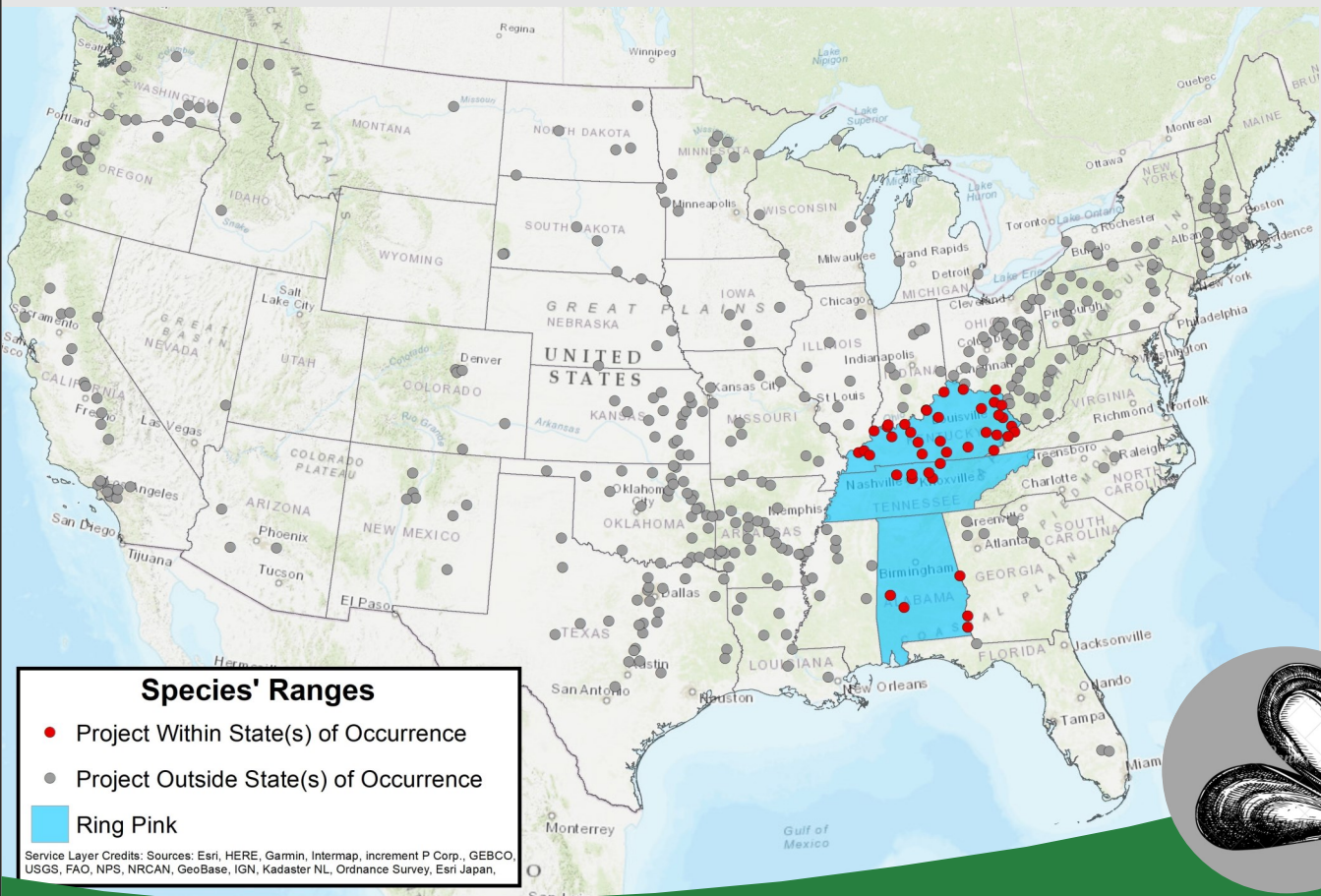
The Green River contained the last known reproducing population of the ring pink mussel. In the late 1900's the USACE partnered with The Nature Conservancy (TNC), the National Park Service (NPS) and others to protect and restore this river. Green River Lake was the first Corps' project to receive approval for permanent operation for ecological benefits downstream of a Corps reservoir as part of the Sustainable Rivers Project, a joint effort between the Corps and TNC.

Beginning in 1999, TNC and Corps staff worked together to develop reservoir management alternatives that were ecologically sustainable while maintaining authorized project purposes. Benefits of this management includes improved conditions for reproduction of aquatic species, especially endangered mussels and improved water quality of releases primarily during fall drawdown.



Photo: An aerial view of Green River Lake, Campbellsville, Kentucky.

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

