

# USACE Natural Resource Management Freshwater Mussels



## Purple Bankclimber

**Purple Bankclimber (*Elliptoideus sloatianus*):** This is a large freshwater mussel that grows to a length of 4-5.5 inches. The shell shape is nearly rhomboidal. The outer shell is grey to black in color while the inner shell is white with a purple edge. The left valve has two teeth while the right valve has only one.

**Status:** Threatened, listed 1993

**Nature Serve:** Imperiled



**Genus:** *Elliptoideus* was once a monotypic subgenus under *Elliptio*. Currently, *Elliptoideus* is recognized as having generic status. The use of all four gills for brooding is a significant trait which separates this genus from *Elliptio*. (NatureServe)

**Range:** Historically, the purple bankclimber occupied waters in Alabama, Florida, and Georgia. (USFWS)

Photo Left to Right:  
Purple Bankclimber  
Field Specimen  
(USFWS), Museum  
Specimen (USFWS),  
Captive Propagation  
Purple Bankclimber  
(USFWS)



Photo: NatureServe map of species' status by state.

### Management and Protection:

- Found in the Ochlockonee and Apalachicola rivers of Florida and the Flint River in Georgia. Inhabits medium to large river channels in substrates of sand or sand mixed with mud or fine gravel, often near limestone outcrops. (USFWS)
- Occupied waterways have experienced exceptional drought periods which have resulted in mortality since the purple bankclimber was federally listed as Threatened. Additional threats to this species include sediment and chemical loads from runoff. (USFWS)
  - According to the USFWS's 2020 Five Year Review, this species and its habitat continue to be impacted by excessive sediment, channel instability, reduced water quality, developmental activities, water withdrawal, impoundments, and invasive species.



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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 \$800,000 on efforts related to the Purple Bankclimber since 2005. These funds have been expended by multiple business lines including Environmental Stewardship, Regulatory, Water Supply, and more. Expense types included Inventory, Survey and Monitoring, Site Visits and Inspections, and Coordination and Determination.



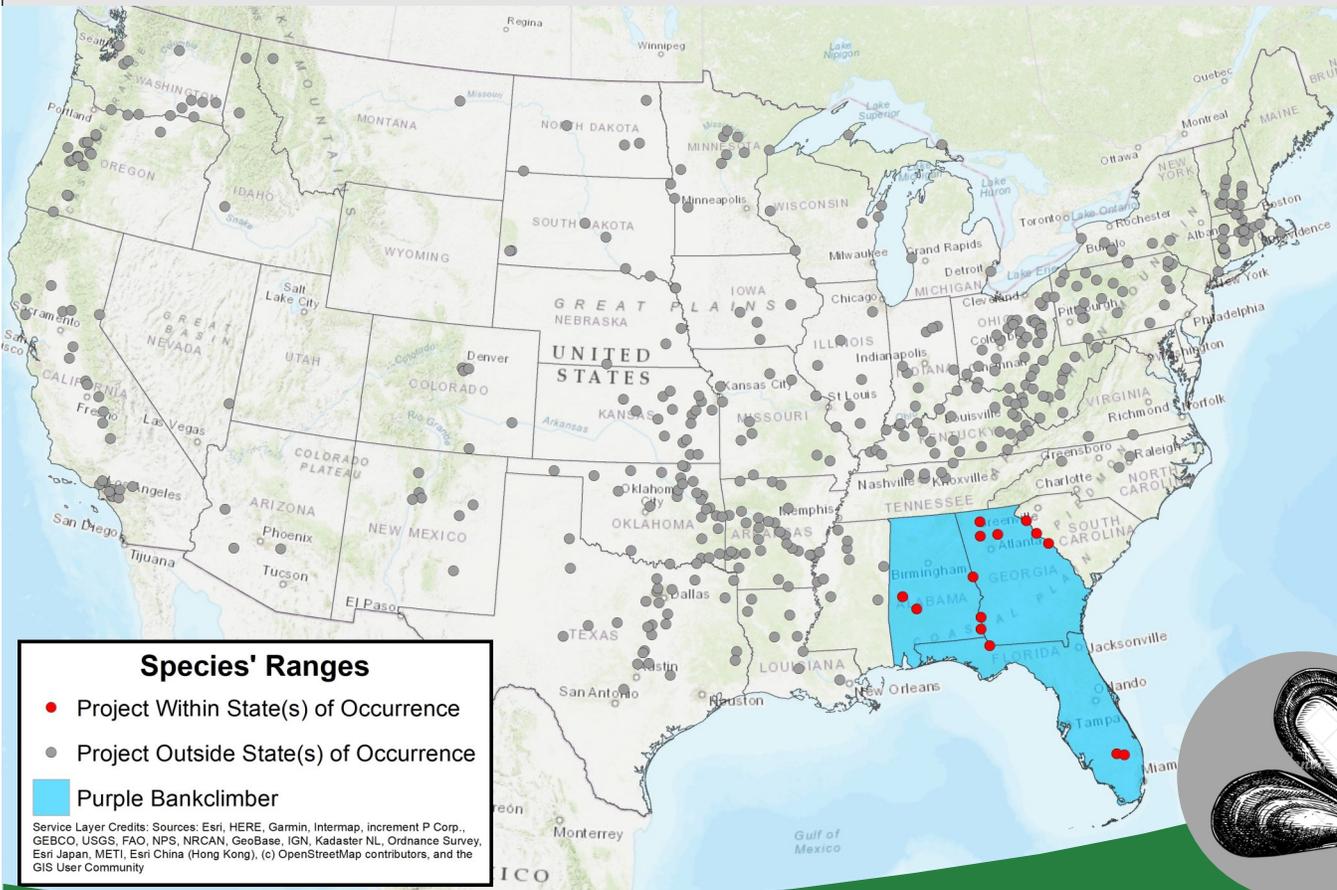
**Purple Bankclimber = \$801,389 (2005)**

This species has a limited range which falls within the South Atlantic Division. In the 2020 NRM Assessment, the purple bankclimber was listed by two projects within the Mobile District. Both projects are located along the Apalachicola-Chattahoochee-Flint River System. The Jim Woodruff Lock and Dam and Lake Seminole project was noted to have occasional occurrences of the species while the Walter F. George Lock & Dam project was noted to have rare occurrences of the purple bankclimber.



Photo: Walter F. George Lock & Dam which is noted to have rare occurrences of the species.

*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.*



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



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