

Spectacle Case ***Cumberlandia monodonta***

Habitat Preference: Large Rivers with swiftly flowing water, among boulders in patches of sand, cobble, or gravel in areas where current is reduced.



Threats:

- Pesticide use
- Dredging is particularly detrimental in that it kills mussels currently using the area while creating an inhospitable environment that limits recolonization.
- Water pollution
 - Industrial discharge
 - Residential discharge
 - Siltation
 - Herbicide runoff
 - Fertilizer runoff
- Alterations to the natural flow of rivers due to the construction of dams.
- Channelization
- Invasion by non-native species, especially zebra mussels.

Habitat Improvement Guidelines:

- Implement proper upland management such as contour farming and other soil erosion control methods.
 - Buffer water bodies to filter silt and nutrients out of runoff.
 - Establish large shade trees such as oaks and cottonwoods along stream corridors.
 - Minimize pesticide use.
 - Limit grazing, cows and pigs can destabilize banks and directly crush mussels.
- Install riffles or other fish habitat components.
- Cease channelization.
- Limit new construction of dam structures and remove existing dam structures when feasible.
- Create fish passageways over existing dams.
- Limit dredging to previously disturbed areas or to areas of unsuitable habitat.