Tubercled-Blossom Pearly Mussel (*Epioblasma torulosa torulosa*)

Common Name
Tubercled-Blossom Pearly Mussel

Scientific Name
Epioblasma torulosa torulosa

Status
This mussel has been listed by the U.S. Fish and Wildlife Service as Endangered. This mussel was once quite abundant throughout all the major rivers of the eastern U.S. and southern Ontario. It was particularly numerous in the Ohio River Valley. Increased turbidity and siltation caused by deforestation, and the spread of intensive agriculture were major factors in the decline of this species. The last individual collected was a freshly dead one found below Kanawha Falls, West Virginia in 1969. There have been no specimens recovered since. The species may well be extinct.

Habitat
This mussel is found in large rivers, in shallow sand and gravel shoals with rapid currents.

Behavior
Reproduction requires a stable, undisturbed habitat and a sufficient population of host fish to complete the mussel's larval development. When the male discharges sperm into the current, females downstream siphon in the sperm in order to fertilize their eggs, which they store in their gill pouches until the larvae hatch. The females then expel the larvae. Those larvae that manage to attach themselves to the gills of a host fish grow into juveniles with shells of their own. At that point they detach from the host fish and settle into the streambed, ready for a long (possibly up to 50 years) life as an adult mussel.

Deforestation and intensive agriculture from the time of early settlement were dominant factors in the demise of many species of mussels. Other factors that are attributed to the decline of this mussel include the building of dams and reservoirs and pollution from agricultural and industrial runoff.

Feeding Habits
Adults are suspension-feeders, siphoning in water and feeding on the suspended algae, bacteria, detritus, microscopic animals, and dissolved organic material. Adult mussels spend their entire lives partially or completely buried within the substrate. The shell of a young spectaclecase mussel is smooth and solidly light yellow, tan, or brown, becoming rough and dark brown to black as the mussel ages.

U.S. Fish & Wildlife Service
1 Federal Drive
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http://www.fws.gov/midwest/endangered
January 2011