



U.S. Fish & Wildlife Service

Threatened and Endangered Species

Curtis' Pearlymussel

(Epioblasma florentina curtisi)



The Curtis' pearlymussel is found in Arkansas and Missouri.

The Curtis' pearlymussel is a federally *endangered species*. Endangered species are animals and plants that are in danger of becoming extinct. *Threatened species* are plants and animals that are likely to become endangered in the foreseeable future. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's Endangered Species Program.

Curtis' pearlymussels prefer riffles within transitional zones of clean, freshwater streams and rivers, between the swift-flowing headwaters and more leisurely, meandering currents farther downstream. It buries itself in sand or gravel in shallow water less than 30 inches deep.



Reproduction requires a stable, undisturbed habitat and a sufficient population of fish hosts 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 which 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.

This mussel has suffered from habitat alteration due to gravel dredging and impoundments. Dams and reservoirs have flooded much of the Curtis' habitat, reducing its gravel and sand habitat, its food supply and probably affecting the distribution of the fish hosts necessary for reproduction. Impoundments are fatal to most riverine mussels; one researcher counted 45 mussel species in a river before the construction. Four months after the dam was completed, there were none.

The Curtis' pearlymussel has also been exported to the shelling industry for use as buttons and pins. Other threats include pollution from agricultural and industrial runoff. These chemicals and toxic metals become concentrated in the body tissues filter-feeding mussels, eventually poisoning them to death.

Habitat

Behavior

Why It's Endangered

U.S. Fish & Wildlife Service
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<http://midwest.fws.gov/endangered>