



The range of the clubshell has been reduced by 95 percent. Today it is found only in portions of 13 streams.



Clubshell (*Pleurobema clava*)

The clubshell mussel 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.

Habitat

This mussel prefers clean, loose sand and gravel in medium to small rivers and streams. The clubshell will bury itself in the bottom substrate to depths of up to four inches.

Behavior

Reproduction requires a stable, undisturbed habitat and a sufficient population of fish hosts to complete the mussel's larval development. When male mussels discharge sperm into the river current, downstream females siphon in the sperm to fertilize their eggs. The fertilized eggs are stored in the female's gill pouches until the larvae hatch. The females then expel the larvae. Larvae which manage to attach themselves, by means of tiny clasping valves, 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.

Why It's Threatened

The clubshell was once found from Michigan to Alabama, and from Illinois to West Virginia. Extirpated from Alabama and Tennessee, it occurs today in portions of only 13 streams. Reasons for its decline in the upper Ohio and Wabasha watersheds are mainly due to pollution from agricultural run-off and industrial wastes, and extensive impoundments for navigation.

An added threat now is the zebra mussel, a fast spreading exotic species that was accidentally introduced in ballast water from the Caspian Sea. These tiny mussels reproduce in enormous numbers which then cover and suffocate native mussels.