U.S. Fish & Wildlife Service

Threatened and Endangered Species

River dredging for irrigation and flood control threatens to destroy the only known population of this mussel.

Fat Pocketbook

(*Potamilus capax)*

The Fat Pocketbook 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 sand, mud, and fine gravel bottoms of large rivers. It buries itself in these substrates in water ranging in depth from a few inches to eight feet, with only the edge of its shell and its feeding siphons exposed.

Behavior

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 that manage to find a host fish to clamp onto by means of tiny clasping valves, 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 Endangered

Today, the fat pocketbook is found only in the lower Wabash and Ohio rivers, and in the lower Cumberland river. Impoundments and dredging for navigation, irrigation and flood control have altered or destroyed much of this mussel's habitat, silting up its gravel and sand habitat and probably affecting the distribution of its fish hosts.

Other threats today include pollution from agricultural and industrial runoff. These chemicals and toxic metals become concentrated in the body tissues of such filter-feeding mussels as the fat pocketbook pearly mussel, eventually poisoning it to death.

U.S. Fish & Wildlife Service
Endangered Species Division
1 Federal Drive
Fort Snelling, Minnesota 55111-4056
http://midwest.fws.gov/endangered
1997