

Why are Mussels in danger?

Mussels are one of the most endangered groups of animals. Protecting mussel habitat protects mussel populations. Populations can decline from changes in water conditions and water quality. These changes are brought about by dredging, which uproots mussels and destroys their habitat. Dams reduce water flow, which reduces available food nutrients. In addition, siltation changes water quality. Soil eroded off the land settles out of the water and smothers the mussels. Pollution from industrial, agricultural, mining, oil and gas well-drilling, chemicals, and other sources enter the water and poison mussels.

Changes in water quantity also cause mussel populations to decline. Droughts make shallow water more reachable by predators. Droughts can also raise water temperature. Flooding can also damage or destroy mussel habitat.

Removing water from rivers can destroy or damage mussel habitat. Water relocation, building bridges for roads, and **poaching** can also disturb mussel populations.

Mussel populations are affected by the loss of certain "host" fish, to which newborn mussels attach for growth.

Competition for food and space from **invasive species** like zebra mussels also affects native mussel populations.

Zebra Mussel Invasion

Zebra mussels have nearly eliminated native mussels in some locations. In 1988, the first zebra mussels were spotted in Lake St. Claire near Lake Erie. These invaders arrived as stowaways in the ballast water of a ship from Europe. They are now found in many waterways in the eastern half of the United States. They are much smaller (less than 2 inches) than native mussels, and they reproduce rapidly. They attach themselves to hard surfaces. In zebra mussel-infested waters, it is not unusual for native mussels to be completely covered by zebra mussels. Competition for food and oxygen weakens and eventually starves native mussels.



**Zebra
Mussels**

