



# ZEBRA & QUAGGA MUSSELS

*Dreissena polymorpha, D. bugensis*

## Identification/Origin

Zebra and quagga mussels are closely related small, triangular bivalve mollusks (<50mm or ~2 inches) named for the striped pattern of their shells. Color patterns can vary with some populations having only dark or light-colored shells and no stripes. They are native to eastern Europe and first invaded the Great Lakes in the late 1980's and have since spread across North America, primarily through hitchhiking on watercraft. They are typically found in dense aggregations attached to hard substrates by byssal threads extending from underneath the shells. Although similar the two species can be easily distinguished. When placed on a surface zebra mussels are stable on their flattened underside while quagga mussels, lacking a flat underside, will not sit flat.

## Montana Status

Not currently known to exist in Montana. Zebra mussels have been found in North and South Dakota as well as Colorado. Quagga mussels have been found in Idaho in the Snake River.

## Pathways



Movement of water



Recreational watercraft







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## Reporting

Report suspected aquatic invasive species to Montana Fish, Wildlife & Parks. Report potential violations relating to mandatory watercraft inspections to TIP- MONT (406) 847-6668.

## Impacts

Zebra and quagga mussels have caused a variety of substantial impacts. They damage water-based infrastructure, decrease property values, and impact recreational opportunities. As prolific filter feeders they drop the nutrient base out of waters and cause a cascade of environmental effects. They outcompete native filter feeders and can cause explosive plant growth as well as algae blooms.

## Regional Ramifications

Though not currently found in Montana, studies have shown that much of the waterbodies in Montana present suitable habitat and have invasion potential. Watercraft inspection and ensuring all watercraft are clean, drain, dry prior to launch is the best way to prevent mussel spread.

## More Information

On zebra and quagga mussels and other aquatic invasive species can be found at [fwp.mt.gov/ais](http://fwp.mt.gov/ais)

