

Invasive Mussels Found in Montana



What is the situation?

Larvae of invasive aquatic mussels were recently detected at Tiber Reservoir and suspect detections were found at Canyon Ferry Reservoir and the Milk and Missouri rivers. Sampling is continuing at the suspect locations, and the results will be used to formulate a larger response plan.

What are zebra and quagga mussels?

Zebra and quagga mussels are small ($\frac{1}{4}$ to $1\frac{1}{2}$ inch long) freshwater mollusks with yellow and brown striped shells. Both mussel species can attach to hard surfaces in the water of lakes and rivers, and quagga mussels also attach to soft surfaces. Females produce 100,000 to one million eggs per year which develop into microscopic larva called veligers. The veligers swim for up to one month then crawl to search for suitable substrates for growth. The mussels grow to their maximum adult size in the first year of life, and live for three to five years.



Dave Brenner, Michigan Sea Grant

Where are they found?

Zebra and quagga mussels are native to Eastern Europe and Western Russia and are considered invasive species in the U.S. They are widespread in the Great Lakes region, Mississippi watershed, eastern U.S., and have expanded to the Colorado River system. The larvae found in Tiber Reservoir are the first confirmed observations of these invasive mussels in Montana.

What are the impacts?

Zebra and quagga mussels can:

- Clog irrigation intakes, valves, pipes, screens, sprinklers, and other irrigation parts.
- Increase electro-corrosion of steel and cast iron pipe and fittings.
- Cause a loss of intake head and decrease flow rate through irrigation components.
- Attach to boat motors and boat hulls, reducing performance and efficiency.
- Reduce water pumping capabilities for power and water treatment plants.
- Reduce available food for native fish and other animals.
- Increase aquatic vegetation growth and decrease water quality.

What can we do?

- Clean, drain, and dry watercraft and irrigation equipment before use in other water bodies.
- Thoroughly wash and decontaminate equipment and boats.
- Report any suspect infestations at <https://nas.er.usgs.gov/SightingReport.aspx>

Resources

- <http://musselresponse.mt.gov/>
- <http://fwp.mt.gov/fishAndWildlife/species/ais>
- <http://dnrc.mt.gov/divisions/cardd/MISAC>

Please contact Monica Pokorny (monica.pokorny@mt.usda.gov), Plant Materials Specialist, at 406.587.6708 with questions.



Bob Nichols, USDA

What is NRCS doing about invasive mussels?

Addressing invasive species is a required aspect of the NRCS conservation planning process. Montana NRCS is a member of the Montana Invasive Species Advisory Council. We will be involved in developing and assisting in implementing measures to control the spread of invasive mussels, to the fullest extent of our authorities and resources. NRCS field staff may be asked to help the Montana Mussel Response Team with education and outreach activities to apprise private landowners of planned actions, engage their cooperation, and answer any questions.

The NRCS state office will be distributing additional information regarding how we can assist landowners with mussel infestations and do our part to help address this potentially serious issue.

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