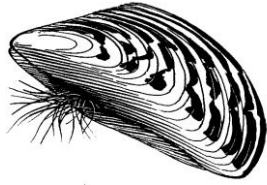


Zebra Mussels in Lake Minnetonka



(Dreissena polymorpha)

What are zebra mussels?

Zebra mussels are small freshwater mussels (clams) that are not native to Minnesota. They grow to about 1- 2 inches long and have yellow and brown striped shells. Unlike our native mussels, they attach themselves to any hard surface in the water.

Where did zebra mussels come from?

These mussels are originally from the Black and Caspian Sea areas in Russia. They have spread throughout much of Europe and Asia over the past 200 years. They were likely brought to North America in the ballast water in cargo freighters and were discovered in Lake Erie in 1988.

Zebra mussels moved through the Great Lakes and have moved into 18 Minnesota lakes and 8 rivers, including Lake Minnetonka. Zebra mussels are moved from one body of water to another by humans on boats, docks, and other equipment.

What problems do they cause?

Zebra mussels can kill native mussels by attaching themselves in enormous numbers and starving or smothering these natives. This can occur within a few years after zebra mussels invade a lake, as their populations can increase very quickly. Several Minnesota mussel species are listed as endangered or threatened. The zebra mussel may reduce or eliminate populations of threatened or endangered native mussels, some of which are among the 40 different species found in the St. Croix River.

A young (less than one year old) zebra mussel found attached to a rock in Lake Minnetonka.



Zebra mussels may also compete with young fish for small food particles (plant plankton). Zebra mussels are filter feeders, - they strain tiny food particles from the water. Tens or hundreds of thousands of these mussels may eat so much of this food that there may not be enough left for other aquatic animals.

Zebra mussels may also block underwater pipes, which can cause serious problems for utilities, industries or other water users. They attach to boat hulls and impede performance. They may block cooling water intakes on boat engines, possibly causing serious engine damage. Their shells, which are very sharp, can also wash up onto beaches in large numbers.

Does anything eat zebra mussels?

Diving ducks can eat many mussels. Fish such as sheepshead or carp and even crayfish may also feed on them. However, none of these predators will eliminate mussels from a lake or a river.

How do they spread?

Zebra mussels can attach to boats or aquatic vegetation and be carried upstream in a river or overland to a different lake. The microscopic larvae may be carried in bait buckets, live wells or other water.

What should you do to prevent their spread?

The most important thing to do is clean off your boat whenever you leave any access site.

Because zebra mussels can attach to aquatic vegetation, remove all aquatic plants from your boat, trailer and motor. Inspect your boat for visible attached mussels, particularly in the stern, trim tabs, and lower unit areas. Drain the water from bait buckets, live wells, and bilges. Another precaution is to wash your boat with hot (120°F or hotter) water or allow it to dry completely for 5 - 7 days.

Can zebra mussels be controlled or eliminated from a lake or river?

Currently there are no environmentally safe control methods to kill zebra mussels once they become established in a natural system. Because of this, the DNR does not try to eliminate zebra mussels if they become established in a lake or river. This is why it is important to prevent their spread, since once they arrive in a water body there is no way to eliminate them.

How can lake users adapt to a zebra mussel infestation?

Once a lake is infested, there are a number of things lake users can do to protect against harmful effects of zebra mussels:

When swimming or wading, wear protective footwear to minimize cutting your feet, as zebra mussel shells are sharp.

Remove irrigation intakes from the water when not in use.

If possible, keep boats and motors out of water when not in use to minimize encrusting by zebra mussels.

If it is not possible to store a boat out of water, contact a marina to inquire about protective paints and annual maintenance.

Run boats long enough to reach operating temperatures. The immature zebra mussels are very sensitive to heat, so a hot engine will kill them as they are flushed through the cooling system. Drain all water reservoirs after each use.

If you take your boat out of Lake Minnetonka to visit another lake or river, thoroughly clean your boat and trailer inside and out and let it dry for at least five days. Scrape off any encrustations, wash with high pressure, hot water, drain and dry all water reservoirs.

If you sell used docks, structures or water toys, be sure they are decontaminated and cleaned before they leave the area.

Consider participating in DNR's zebra mussel citizen monitoring program.

Does Minnesota have any laws regarding zebra mussels?

Yes. It is illegal to travel on a public road with zebra mussels attached to a boat or trailer, or to have live zebra mussels in your possession. It is also illegal to launch or place a watercraft or trailer into uninfested waters of the state with attached visible zebra mussels. It is also illegal to travel on a public road with aquatic vegetation on your boat or trailer, due in part to the fact that zebra mussels can attach to vegetation. You are also required to drain any water from your boat (live wells, bilges and bait buckets) when leaving zebra mussel infested waters.

How do I find out about zebra mussels in Lake Minnetonka?

For up to date information about the zebra mussel infestation in Lake Minnetonka, please visit

www.mndnr.gov/minnetonka_zebra_mussels

Where are zebra mussels found in Minnesota?

For a current listing of zebra mussel infested waters, please refer to Invasive Species Program website at:

<http://www.dnr.state.mn.us/invasives/aquaticanimals/zebramussel/index.html>

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