

DON'T MOVE A MUSSEL

WHAT MUSSELS?

Zebra Mussels. They originally came from lakes in Eurasia and are not native to North America. They live in freshwater lakes and rivers and are an Aquatic Invasive Species (AIS). Adult Zebra Mussels are known to encrust and corrode hard surfaces and cause serious harm to waters where they become established.

Fortunately, to the best of our knowledge, the waters in our area are still free from invasive mussels.



Photo Credit: Amy Benson USGS

HAVE... "theTALK"!

PREVENT THE SPREAD OF ZEBRA MUSSELS

It's not always easy to talk with neighbours, friends or family, but if you love our waters... it's OK to

HAVE... "theTALK"!

If you have a neighbour, perhaps a snowbird who takes their watercraft south with them for the winter, or a friend bringing their water toys out from the Lake Winnipeg or Red River area...

HAVE... "theTALK"!

Make sure they are aware of Zebra Mussels and the need to "CLEAN+DRAIN+DRY+DISPOSE, and if necessary, DECONTAMINATE as required by law" their watercraft, and other water-related equipment to protect our lakes. Talk with them about the importance of stopping at watercraft inspection stations. And to plan their travels when the stations are open.

Decontamination is necessary after watercraft or water-related equipment is removed from provincially-designated control zones. For a map of the control zones or Watercraft Inspection Stations, visit: Manitoba.ca/StopAIS

It wouldn't take long for Zebra Mussels to get established once they arrive. Each female can produce as many as 1 million eggs per year.

The mussels can be spread unknowingly by boaters, fishers, beach goers and other well-meaning nature lovers. In their early larval stages, they cannot be seen with the naked eye and can be innocently transported via damp/wet equipment or standing water in objects being moved from one body of water to another. At their juvenile stage, they can be the size of a grain of sand and begin attaching to hard surfaces. You may not be able to see them but they feel like sandpaper on a surface such as a boat hull. At their largest they are about the size of your thumbnail. They can be carried in on trailered boats and other watercraft, such as, jet-skis, kayaks, inflatables, etc. They can also be transported on damp or wet hip waders, fishing tackle, life jackets, water toys and other objects that have been in invaded waters.



Propeller after
3.5 months
in
Lake Erie

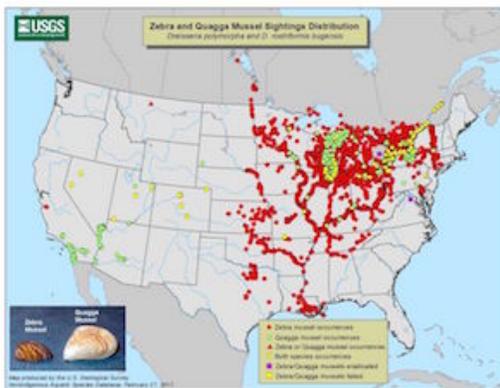
Source:
Manitoba
Sustainable
Development

Riding Mountain UNESCO World Biosphere Reserve



WHERE DID THEY COME FROM?

They were first introduced to Canada's Great Lakes region and the United States in the 1980s after ballast water was discharged by vessels traveling from Eurasia.



WHERE ARE THEY NOW?

Zebra Mussels have been in the Great Lakes in Ontario and Quebec since the late 80s and have been spreading ever since through the USA. In 2013, they were discovered in Lake Winnipeg and, in 2015, the Red River and Cedar Lake.

When they arrived in Central Manitoba, the Province expanded their Watercraft Inspection program. Watercraft being transported over land must stop at the inspection stations when they are open – it is the law.

Singush Lake in the Duck Mountains (68 km North West of Dauphin) is closed to day-use boaters until further notice. In 2016 a suspect Zebra Mussel was found.

Whirlpool Lake and campground, in Riding Mountain National Park, is closed to the public until further notice. In 2017, potential Zebra Mussel eDNA was identified in water samples.

Now that Zebra Mussels are only a 2-3 hour drive from our waters where we work, live and play, the importance of prevention is more critical than ever.

WHAT ARE THE IMPLICATIONS?

Studies have found that an invasion of Zebra Mussels can **negatively impact**:

- **Water intakes** for cottage owners and farmers' **irrigation systems**
- The **safety of drinking water** because of potential increased toxic algae levels
- Aquatic infrastructure (e.g. marinas, public and private **docks, boat-lifts**, buoys, etc)
- Motor boats by encrusting watercraft hulls, **propellers** and **cooling systems**, increasing drag and maintenance costs or causing catastrophic overheating and **engine failures**
- The natural ecology of the lake, by **removing nutrients** that are **important** to native **fish** species and enhancing the growth of aquatic plants which are a nuisance for boaters, fishers & swimmers
- **Real estate values**, especially waterfront properties, as the area becomes less attractive
- Our **beaches** with the presence of **razor-sharp shells** and **smelly** decaying mussels
- Our local tourist **economy**, due to **fewer visitors** because of **fouled beaches** and **poor fishing**
- Our local economies with the **loss of** business revenues, **jobs** and the potential loss of businesses that provide communities with important goods and services
- Local government **infrastructure**, such as, **drinking water intake**/distribution systems, storm drains and **sewage systems**, resulting in **increased** maintenance **costs** and **higher taxes**
- And **downstream waters**, as Zebra Mussel larva (veligers) move with the currents

SPREAD THE WORD, **NOT** THE MUSSELS

We cannot be certain that a waterbody is free of microscopic Zebra Mussel eggs and larva, so

“CLEAN+DRAIN+DRY+DISPOSE, and if necessary, DECONTAMINATE, as required by law”

This is the new water-user's etiquette that is essential if we are to protect the waters we love!

Visit the Riding Mountain Biosphere Reserve website for more information:

rmb.ca/SpreadTheWordNotTheMussels

Compiled with thanks to Okanagan Basin Water Board – Okanagan WaterWise's DontMoveAMussel.ca initiative

