



Citizens for Protecting Our Northern Waterways

Zebra Mussel Backgrounder

The Threat is Real!

The threat of Zebra Mussels entering our northern pristine waters is real and should be taken seriously. Originally from Europe they have been spreading rapidly since detected in the Great Lakes in the late 1980's.

In Manitoba, zebra mussels were first detected in the South Basin of Lake Winnipeg in 2013, by 2015 it was considered invaded. In 2015 they were found in the North Basin of Lake Winnipeg and larvae were found in Cedar lake downstream of The Pas near Easterville. By 2019 larvae were found in the Nelson River below the Limestone Generating Station and are now firmly established in many of the lakes with direct connected to the river.

Once established zebra mussels **cannot** be eradicated and the impacts are not good – not good for our economy and not good for the environment.

Let's start with the environment - Zebra mussels are filter feeders and a single adult mussel can filter up to 1 litre of water per day. Once zebra mussels get established in a lake, the water starts to clear. Although this may *sound* good, in reality it is not. When the water clears there is more light penetration resulting in increases in aquatic vegetation growth and can also result in algae blooms. Zebra mussels feed on microscopic plankton which are fundamental building blocks of the food chain resulting in an altered aquatic food web that can impact our native fish and clam species.

Now on to the economy - Adult zebra mussels attach themselves to hard surfaces and can accumulate to significant numbers resulting in impeding the water flow of intake pipes for municipal and home/cottage water supplies. Since the larvae stage of zebra mussels are microscopic, they can pass through intake screens and eventually accumulate within the water pipes themselves. For example, in 2018, Victoria Beach on Lake Winnipeg, was having difficulty watering their golf course because intake pipes drawing water from the lake were becoming clogged with zebra mussels. One can only imagine what the cost to the tax paying public can be to keep water intake pipes from becoming blocked!

From the side of social and recreational activities - Once established in a lake, zebra mussels can wash up on the shores and can accumulate on beaches with their sharp shells. For watercraft, they accumulate on the hull and engine increasing the drag. Plus - they accumulate on docks, piers, swimming platforms etc.

All of this seems pretty daunting but the spread **can be stopped**. The natural spread of zebra mussels follows the flow of water since the larvae are free floating. They are not capable of traveling upstream unless transported by a watercraft (boat, canoe, kayak, waterboard) or water related equipment (life jackets, rope, anchors).

The Province of Manitoba has developed a program that includes two key components we need to be aware of – **Legislation and Prevention**. Many people do not know **it's the Law** for all watercraft to be free of Zebra Mussels and other Aquatic Invasive Species. Failure to comply with the law can result in some pretty hefty fines, for example transporting a boat with the plug in is a \$237 fine.

Prevention is the key to stop the spread into upstream and isolated waterbodies. The following are three simple steps. Here's how it works:

Clean – remove evidence of zebra mussels, aquatic plants and mud before you leave the shore

Drain – all water from your watercraft and equipment before leaving the shore including live wells. Plugs must be removed when transporting your watercraft.

Dry – your equipment completely before placing it into another water body.

Additional steps are needed if your watercraft has been in the water where zebra mussels have been documented, or a waterway connected to a waterbody that has tested positive for having zebra mussels. or expected to spread. These are called **Control Zones**. In the northern Manitoba these waterbodies and waterways include Lake Winnipeg, Playgreen Lake, the Nelson River and Cedar Lake and incoming tributaries including the Saskatchewan River.

In this case:

Dispose – of all bait used while fishing in such waters before you leave the shore

Decontaminate – watercraft before placing into a waterbody where zebra mussels do not occur (e.g. Clearwater Lake, Rocky Lake).

Watercraft Inspection Stations - have been set up at strategic location to help prevent the spread west and north of Lake Winnipeg and the Saskatchewan River - waters known or considered at risk of having zebra mussels. The stations are located north of The Pas at the Clearwater Lake Junction on PTH 10 and north of Grand Rapids on PTH 6. All watercraft must report at this station when it is open. Failure to do so can result in a \$672 fine.

To date Watercraft Inspection Stations have not been set up north of Grand Rapids or north of the Clearwater Lake junction. As such it is very important to Clean, Drain and Dry.

We all have a role to play to **Stop the Spread**. To learn more please visit: www.Manitoba.ca/StopAIS.

Additional Information can be found on the **Citizens for Protecting Our Northern Waterways** website at: www.zebramusselprevention.com.

OR - SCAN CODE WITH CAMERA PHONE TO VIEW OUR WEBSITE



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