Aquatic Invasive Species/Zebra Mussel Prevention Program
Northwest Region Summary
2019

Following is a summary of the Aquatic Invasive Species (AIS)/Zebra Mussel prevention program for the Northwest Region of Manitoba provided by the MB Government.

Watercraft Inspection Station – Clearwater Lake turn off north of The Pas*

- The inspection station operated from May 9 through October 29
- Double shifting began June 20 and proceeded for the remainder of the season
    - meaning the station operated every day from June 20 - Oct 29 with double shifts on Sat, Sun, Monday
    - start/end times for the double shifts were sunrise and sunset
- Total Number of watercraft Inspected – **3160**
- Total number of decontaminations **187 (6%)**
- Number of Zebra Mussel Fouled boats **– 1**
    - Found May 23rd on the bilge, inboard/outboard gimbal and engine transom areas.
    - Mussels were old (the boat had been in winter storage for the previous 9 months).
    - Inspectors performed a full decontamination and successfully removed all of the attached mussels.
    - The boat was then allowed to proceed.
- Number of watercraft that did not report – **248 (7%)**
- Stopping compliance – **93%**
- Drain plug compliance - **94%** (percentage that had drain plug out when inspected)

***** watercraft include boats, canoes, kayaks, paddle boards.

Aquatic Invasive Species/Zebra Mussel Lake Waterbody Monitoring

Each year selected lakes are targeted for sampling to determine the presence of zebra mussels and other AIS. Sampling techniques include collecting water samples to test for the presence of veligers (larvae of zebra mussels) and Environmental DNA (eDNA) for the presence of zebra mussel DNA.

For some locations, artificial substrate samplers composed of PVC plastic are placed in the lake and later collected for analysis. In addition, for some lakes, a tactile (feeling) inspection on the surface of existing infrastructure submersed in the water such as dock floats is undertaken to determine if zebra mussels have become attached to these surfaces.

Waterbodies selected for monitoring are those identified to be more at risk, based on information from the watercraft inspection program, the likelihood of establishment based on environmental parameters and fisheries staff. For waterbodies identified as being of greater risk to the introduction of zebra mussels, efforts are made to sample at least twice during the open water season (e.g. Clearwater Lake). Other water bodies are sampled every 2-3 years. Where zebra mussels have been previously detected (e.g. Cedar Lake), more intensive sampling is undertaken.

Within the province, 108 waterbodies were sampled in 2019 - primarily for zebra mussels. In total approximately 679 water samples were analysed for zebra mussel veligers; approximately 288 water samples were analysed for Zebra Mussel eDNA; 61 substrate samplers were set and, where available, infrastructure was checked for adult Zebra Mussels. Water samples were also analysed for Spiny Water flea.

For the Northwest Region, in 2019, ten waterbodies were sampled during the open water season. The following table provides a summary of the results.

Water Bodies Sampled for Zebra Mussels and other AIS Manitoba Northwest Region - 2019					
Water body	**# of Water Samples**		**# of Substrate Samples**	**Tactile Infrastructure Inspection**	**Results**
	Veligers	**eDNA**			
Athapapuskow	9			*	negative
First Cranberry Lake [a]	3			*	negative
Rocky Lake	3			*	negative
Clearwater Lake	12		2		negative
Cormorant lake	3		1		negative
Moose Lake			2		negative
Footprint Lake	7				negative
Cedar Lake	30	12		*	negative
Summerberry River			2		negative
Saskatchewan River [b]	20		6		negative

[a] Caribou Lodge Boat Launch

[b] 4 locations

We are grateful for the information provided by Kayla Peterniak, Candace Parks and Laureen Janusz of the Aquatic Invasive Species Unit within the Wildlife and Fisheries Branch, Department of Agriculture and Resource Development (ARD).

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