

# Zebra Mussel and Aquatic Invasive Species (AIS) Public Survey – 2024

Citizens for Protecting Our Northern Waterways



October 2024



## Overview

To assist in determining the knowledge of the public in Northern Manitoba about zebra mussels and other Aquatic Invasive Species (AIS), a survey was prepared by Citizens for Protecting Our Northern Waterways (CPONW). This survey was offered to interested people who attended various public events attended by CPONW, including trade shows and markets.

The results will help identify the current knowledge of the public relative to zebra mussels/AIS and identify any gaps in knowledge. These results will assist CPONW improve its public outreach efforts to be more effective and fill any gaps. They will also be shared with the MB government AIS Unit to assist them in being more effective in delivering their AIS prevention program.

## The Survey

The survey consisted of nine (9) multiple choice questions designed to determine:

- the type of water-based activities that people are engaged in,
- their general knowledge of zebra mussels and other AIS,
- knowledge of prevention methods including Clean-Drain-Dry (CDD), and
- views about the most effective methods to further inform the public about zebra mussels and other AIS.

The survey is included in Appendix A.

The survey was offered to people to fill out when visiting the CPONW information booth set up at several local trade shows and public markets. People who agreed to fill out the survey had their name entered into a draw for an attractive wolf print. In addition, people were offered the opportunity to fill out the survey via the flinflononline website sponsored by CFAR radio. Names of participants were kept anonymous.

## Results

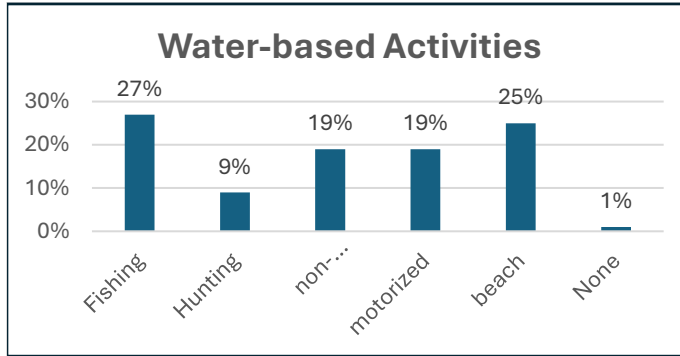
In total, 182 surveys were completed from six (6) different events including the Flin Flon Trade Show, The Snow Lake Trade Show, The Pas Trade Show, The Cranberry Portage Market (2 separate markets) and through the flinflononline website. Most participants attended both The Pas and Flin Flon tradeshow followed by Cranberry Portage, Snow Lake and then flinflononline (Table 1).

**Table 1.** Venues where surveys were undertaken, and number of surveys completed.

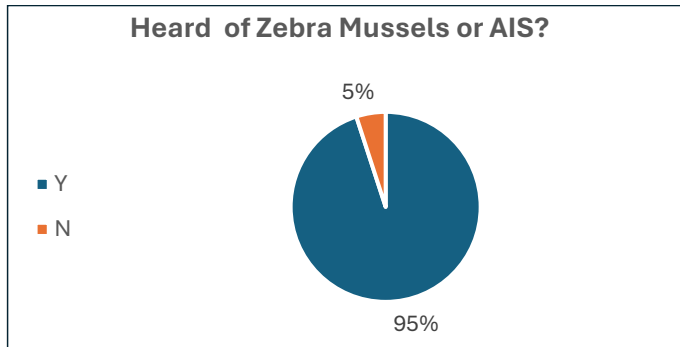
Flin Flon Trade Show	The Pas Trade Show	Snow Lake Trade Show	Cranberry Portage Market(s)	flinflononline
72 (40%)	75 (41%)	10 (5%)	20 (11%)	5 (3%)

Following is a summary of the answers provided by all survey participants for each of the questions. Results for individual events is provided in Appendix 2.

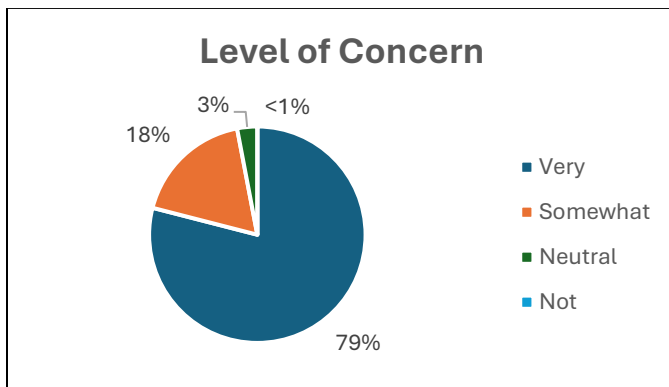
**Question 1.** What water activities do you participate in?



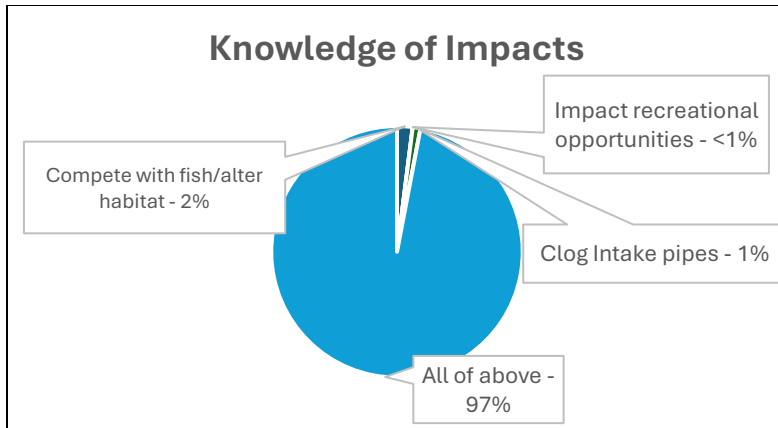
**Question 2.** Have you heard or read about zebra mussels and other aquatic invasive species (AIS)?



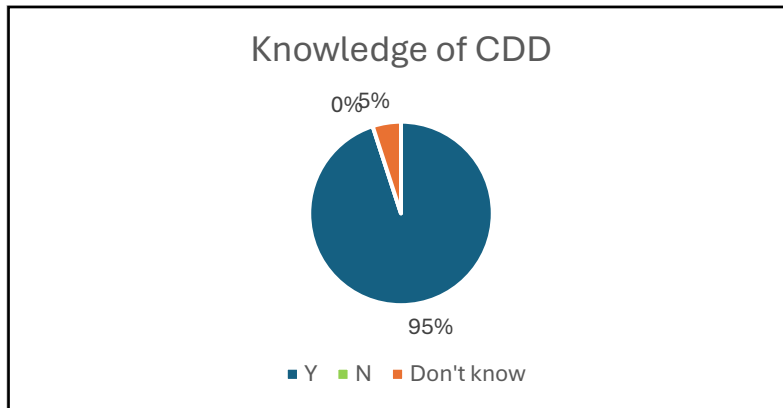
**Question 3.** Are you concerned about the impact that zebra mussels can have to our lakes?



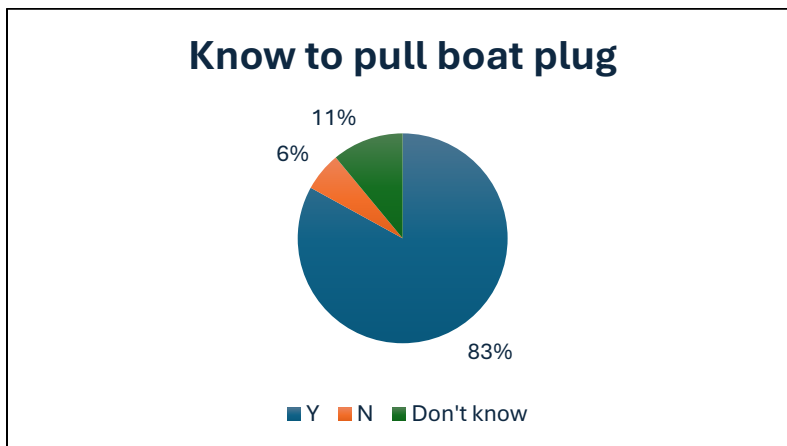
**Question 4.** Zebra mussels are highly destructive in our waterways because they can:



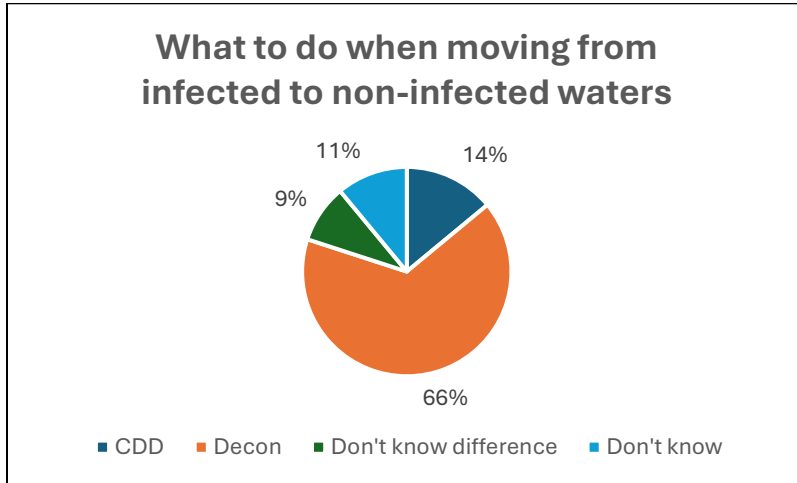
**Question 5.** “Clean, Drain and Dry” includes checking your boat to ensure there are no mussels, mud or plants on your boat and no water in the bilge, ballasts or engine before you leave the launch area after boating.



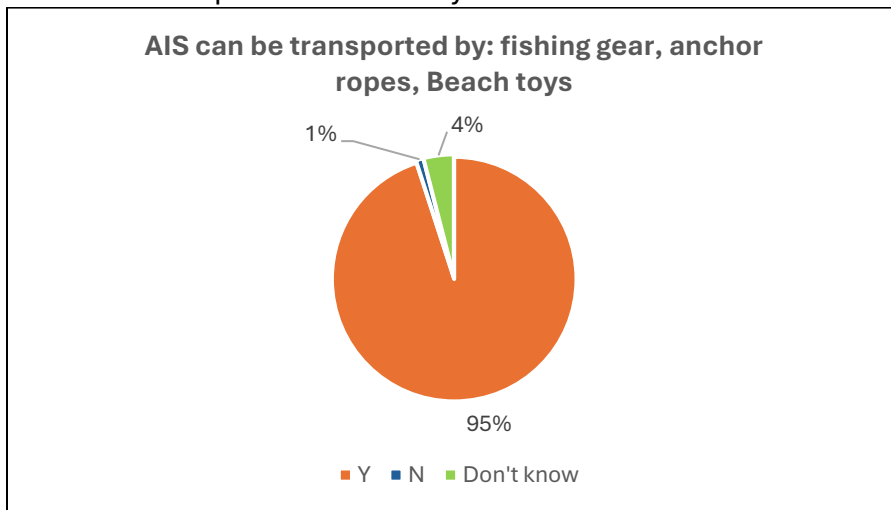
**Question 6.** If you have a boat and pull it out of the water at a boat launch, do you have to pull the boat plug prior to trailering it down the road?



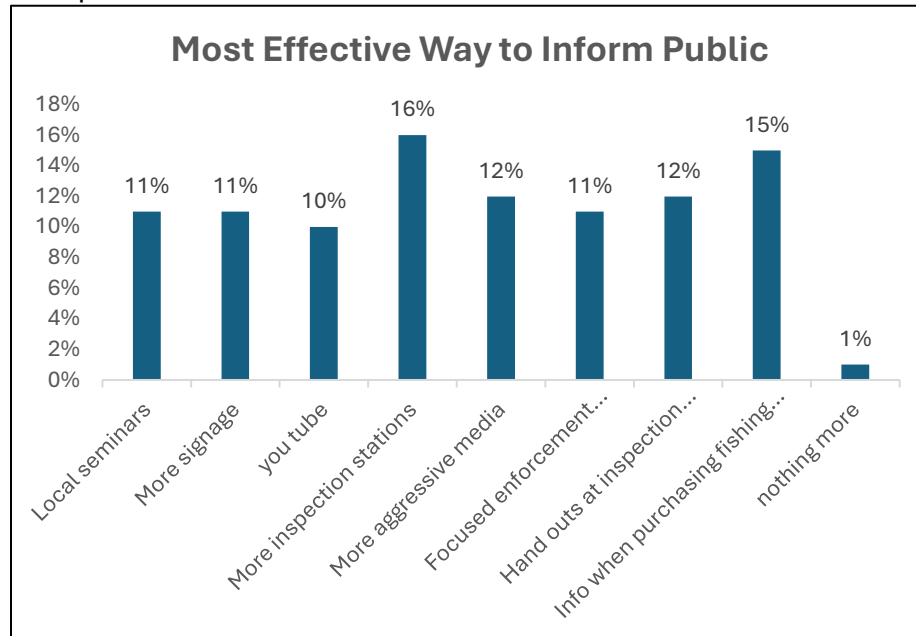
**Question 7.** On day one you used your watercraft in a waterbody known to have zebra mussels or other AIS. Prior to using it in a different waterbody the next day that is free of any AIS you need to:



**Question 8.** Aquatic Invasive Species can attach to and be transported on fishing gear, anchor ropes and beach toys.



**Question 9.** In your opinion, what would the most effective method be to further inform the public about AIS:



### Summary

- Although fishing was the most popular water-based activity (27%), going to the beach was the second, representing 25% suggesting more targeted outreach to beach goers is warranted. Use of motorized watercraft and non-motorized watercraft were similar at 19%.
- Most people (95%) are aware of zebra mussels and other AIS, and close to 80% are very concerned about the impact that they will have on our northern lakes.
- When asked about their knowledge of the impacts to our waterways, an overwhelming number of people (97%) identified multiple impacts based on the list provided.
- Specific to Question 5, when respondents were asked if CDD included the steps identified, 95% said yes which is very high.
- Specific to the requirement to pull the plug prior when transporting a watercraft, only 83% knew they needed to. The remaining people either didn't know, or answered it was not required.
- When asked what is required when moving a watercraft from an AIS invaded waterbody to one that is not invaded, the knowledge of what to do was low. Only 66% indicated that decontamination was required, 14% said only CDD, 11% didn't know and 9% didn't know the difference.
- The understanding that AIS can be transported by beach toys and fishing equipment and anchor ropes was high (95%) which is encouraging.

- When asked about what the most effective method to further inform the public about AIS, from nine (9) choices, responses were quite spread out. That said, the two most common methods selected were “more inspection stations” (16%) and providing “more information when purchasing a fishing license” (15%), followed by more aggressive media and providing handouts at the inspection stations (both at 12%).

## **Discussion**

It is important to note the survey was not designed to provide statistically valid results. Rather, the survey was prepared to provide an enhanced understanding of the current knowledge of the public on zebra mussels/AIS, and prevention methods to provide guidance on how to improve outreach efforts.

- Based on the survey results, it is encouraging that most respondents (95%) are aware of zebra mussels and other AIS and close to 80% are very concerned about the potential impact on our northern waterways.
- Although the indicated public knowledge of the impacts to our waterways (95%) is encouraging, when reviewing the answers, a considerable number of people selected multiple answers prior to answering “all of the above” (see question #4). This suggests that the potential answers provided may have led participants to the correct answer
- Questions 5 and 8 offered participants the option to simply answer “yes”, “no” or “don’t know” to a specific true statement, while others offered several answers to a statement potentially leading participants to the correct answer. As such, some of the results may indicate a higher level of knowledge than is the case which is important to recognize. Non-the-less, exposing survey participants to these questions and in this manner served as a means of educating participants on the impacts of zebra mussels and other AIS
- Specific to the CDD steps provided in question 5, based on our experience, if people were instead asked to document the steps of CDD, the level of knowledge would likely be considerably lower.
- Although 83% indicated knowledge about the requirement to pull the plug when transporting a watercraft, given the importance of this action more targeted outreach on the requirement to pull the plug is needed.
- Since 35% of respondents were not aware that decontamination is required when transporting a watercraft from an invaded waterbody to one that is not suggests specific messaging on this requirement is needed. This will be increasingly important going forward as the spread of AIS is anticipated.
- When participants were asked their opinion about the most effective method(s) to further inform the public about AIS, the majority selected “more inspection stations”. Although it is acknowledged having more inspection stations does not necessarily constitute a method of informing the public, the need for more inspection stations is a very common comment that CPONW hears from the public during our outreach events.

## Recommendations

Based on the results of the survey, in combination with our experience interacting with the public at various outreach events, following are recommendations:

1. Given the number of people who go to the beach, more information on the impacts of zebra mussel on the beach experience is warranted, including how to CDD and decontaminate beach toys and associated equipment.
2. Although participants indicated considerable knowledge of the impacts of zebra mussels and other AIS on our waterways, focused messaging related to these impacts need to continue.
3. Explicit messaging on what constitutes CDD and the requirement to “pull the plug” when transporting watercraft is needed.
4. Enhanced and more messaging on when decontamination is needed vs. just CDD is needed, including information that decontamination is required when a watercraft has been in a waterbody within a Control Zone.
5. Although good information on AIS is included in the Angler’s guide, we recommend additional information on AIS and prevention be provided directly to people who purchase an angling license on-line. This approach will capture about 73% of anglers (based on the 2022/2023 Annual Report by Natural Resources and Northern Development) but miss anglers who are seniors as they no longer need to hold an angling license. Consideration should be given to require all anglers to secure an angling license, even if they are free of charge. Similar information should also be provided to people who purchase a hunting license.
6. The use of more aggressive media to demonstrate the urgency of AIS prevention is needed. This should include high profile media coverage (T.V. and print) utilizing AIS and enforcement experts. Consideration should be given to engage social media influencers.
7. Information on AIS and prevention should be provided directly to people who stop at the government inspection stations.
8. The use of YouTube/on-line videos to inform the public was identified by 10% of survey participants. Short videos can be an effective communication tool, provided they can be easily accessed. We recommend videos specific to what constitutes CDD, when to decontaminate and how (both watercraft and beach toys) be promoted on various websites (CPONW and government agencies) and via popular social media feeds (e.g. Facebook, Tic Toc, Instagram). Engaging social media influencers would help strengthen these messages.
9. We understand there has been a more enforcement effort in 2024. We view enforcement as a critical component of the AIS prevention program and recommend an increased effort going forward.



10. We continue to be concerned about the absence of government inspection station presence in the north (specifically Grand Rapids and Wabowden) and survey respondents identified the need for more inspection stations. We recommend an increased effort be undertaken to fill these important gaps, including exploring alternate approaches to operating these stations such including exploring contract services.
11. We also recommend that Manitoba Parks should play a larger role in providing information and educating park visitors on AIS including providing information to campers, presentations at amphitheatre show and during Parks Day.

## **APPENDIX A**

### **Take this Survey about Zebra Mussels and Other Aquatic Invasive Species Enter a Draw to Win a Prize**

**1. What water activities do you participate in?**

- Fishing
- Hunting
- Kayaking/canoeing/paddle boarding
- Motorized boating
- Going to the beach
- None of the above

**2. Have you heard or read about zebra mussels and other aquatic invasive species (AIS)?**

- Yes
- No

**3. Are you concerned about the impact that zebra mussels can have to our lakes?**

- Very concerned
- Somewhat concerned
- Neutral
- Not concerned

**4. Zebra mussels are highly destructive in our waterways because they can:**

- compete with native fish and mussels and alter aquatic wildlife habitat
- impact recreational opportunities by encrusting docks and beaches
- clog water intake structures, impact municipal water supplies, agricultural irrigation, and hydro dam operations
- all the above
- none of the above

**5. “Clean, Drain and Dry” includes checking your boat to ensure there are no mussels, mud or plants on your boat and no water in the bilge, ballasts or engine before you leave the launch area after boating.**

- Yes
- No
- I do not know

**6. If you have a boat and pull it out of the water at a boat launch, do you have to pull the boat plug prior to trailering it down the road?**

- Yes
- No
- I do not know

**7. On day one you used your watercraft in a waterbody known to have zebra mussels or other AIS. Prior to using it in a different waterbody the next day that is free of any AIS you need to:**

- Only Clean Drain Dry your watercraft and gear.
- Decontaminate your watercraft and gear
- I do not know the difference between Clean Drain Dry and Decontaminate
- I do not know

**8. Aquatic Invasive Species can attach to and be transported on fishing gear, anchor ropes and beach toys.**

- Yes
- No
- I don't know

**9. In your opinion, what would the most effective method be to further inform the public about AIS:**

- Local in person seminars     More aggressive media
- More signage                       Focused enforcement campaigns
- Online/YouTube videos     Literature handed out at inspection stations
- More inspection stations     More information provided when purchasing angling licence
- Nothing more is required as enough information is provided already

**Thank You for participating in this survey. All names will remain anonymous.**

**APPENDIX B**

**Results of Individual Events**

<b>Questions</b>	<b>Cranberry Portage</b>	<b>Snow Lake</b>	<b>The Pas</b>	<b>CFAR Radio</b>	<b>Flin Flon</b>	<b>Total</b>
<b>Water-based Activities</b>	% respondents	% respondents	% respondents	% respondents	% respondents	% respondents
Fishing	22	33	29	29	27	27%
Hunting	5	8	8	14	11	9%
non-motorized	25	25	17	14	18	19%
motorized	20	13	17		21	19%
beach	27	21	28	43	23	25%
None			1		1	1%
<b>Heard of ZM's?</b>						
Y	100	90	99	80	92	95%
N		10	1	20	8	5%
<b>Level of Concern</b>						
Very	80	80	83	60	76	79%
Somewhat	20	20	17	40	15	18%
Neutral					7	3%
Not					2	<1%
<b>Knowledge of ZM impacts</b>						
Compete with fish/alter habitat			1	17	3	2%
Impact recreational opportunities			1			<1%
Clog intake pipes				17	1	1%
All above	100	100	98	66	96	97%
None of above						
<b>CDD knowledge</b>						
Y	100	100	93	80	95	95%
N						0%
Don't know			7	20	5	5%

<b>Know to pull boat plug</b>						
Y	80	100	78	60	87	83%
N	5		7		6	6%
Don't know	15		15	40	7	11%
<b>When moving from infected to non-infected waters</b>						
CDD	10	10	14		15	14%
Decontaminate	65	80	64	80	67	66%
Don't know difference	15	10	6		10	9%
Don't know	10		16	20	8	11%
<b>Transport of AIS via toys, fishing line beach toys</b>						
Y	100	100	96	60	94	95%
N			1		2	1%
Don't know			3	40	4	4%
<b>Most effective means of informing public</b>						
Local seminars	13	15	10	14	10.5	11%
More signage	7	8	13	11	11.5	11%
you tube	11	6	10	7	12.5	10%
More stations	11	21	18	14	14	16%
More aggressive media	13	10	13	14	11	12%
Focused enforcement campaigns	14	10	11	7	10.5	11%
Hand outs at inspection stations	13	17	11	14	12	12%
Info when purchasing fishing license	18	13	14	18	16	15%
nothing more	1		0		1	1%

