

Draft 2008 Summary Report of Watercraft Inspection Results at Lake Minnetonka

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Introduction:

The watercraft inspection program's goal is to reduce the spread of invasive species into and around the state. To accomplish this we complete at least 10,000 hours of watercraft inspections each year, work with citizen groups and educate the public at events such as the state fair.

In January of 2008 the MN DNR Invasive Species Unit created a grant program to allow citizen groups to increase the number of hours of inspection at their water accesses. This was done as a way to increase watercraft inspections in the state, work with citizen groups and satisfy requests from citizen groups for more hours of inspections at their accesses.

The Lake Minnetonka Conservation District received a prevention grant from the MN DNR in May of 2008 for 542 hours of inspection time during the 2008 watercraft inspection season with an equal amount of inspection time to be matched by the MN DNR. The LMCD also chose to cooperatively hire with the MN DNR for an additional 1,846 hours. The contract dates were May 23rd through September 1st of 2008. Ten watercraft inspectors were hired for the Lake Minnetonka crew to accomplish the 2,930 hours, which were focused on weekends at four primary and four secondary accesses, on watercraft entering Lake Minnetonka, and emphasized zebra mussel education.

The inspection process consists of a six-question survey that ensures that boaters are aware of the issues surrounding invasive species and incorporates the inspector walking the boater around the watercraft to show them where they should be looking for invasive species. Survey questions focus on boater knowledge and behavior with information given on the impacts of invasive species and what can be done to prevent their spread.

The data in this report will be based on all hours and inspections done at Lake Minnetonka in the 2008 season.

Inspection Results

Watercraft Inspectors worked 3,364 hours at nine Lake Minnetonka public water accesses. During this time 13,573 inspections were completed (table 1). Of the 3,364 hours, 2,092 were completed on Fridays, Saturdays, Sundays and Holidays between May 23rd and September 1st on the eight accesses identified by LMCD (table 2). The LMCD had requested that the watercraft inspectors work at the four primary accesses and two of the four secondary accesses each weekend, when only six of the eight accesses are counted during the peak times a total of 1,700 hours were accomplished within those parameters. During those 1,700 hours 9,583 of the 13,573 inspections were completed. Of the 13,573 inspections 11,265 or 83% of them were done on watercraft entering Lake Minnetonka (table 3).

Table 1. Lake Minnetonka summary of inspections in 2008.

Lake Name	Number of Boaters/Inspections	Enter/Exit/Unknown	Hours	Insp per Hour
Minnetonka	13,573	11,265/2,056/252	3,364	4.03

Table 2. Inspections and hours at Lake Minnetonka peak accesses during Fridays, Saturdays, Sundays and Holidays.

Access Name	Number of Boaters/Inspections	Hours	Inspections per Hour
HENDRICKSON/N ARM PWA	1,531	327.75	4.67
SPRING PK PWA	1,193	311.25	3.83
GRAYS BAY CITY PWA	3,597	385	9.34
MAXWELL BAY	2,664	331.75	8.03
HALSTEAD'S BAY	390	184.5	2.11
WAYZATA BAY	208	189.5	1.09
CARSON'S BAY	640	170	3.76
MOUND	508	198.75	2.56
Totals:	10,731	2,098	5.11

Table 3. Peak and Non Peak Entering Watercraft on Lake Minnetonka per Hour from 2001-2008.

Year	Entering Watercraft Inspected per Hour (both Peak and Non-Peak)	Hours of Inspection on Minnetonka (both Peak and Non-Peak)	Total Entering Watercraft Inspected (both Peak and Non-peak)
2001	2.04	1,003	1,342
2002	1.93	983	2,695
2003	1.97	1,871	4,920
2004	2.29	2,244	5,266
2005	3.56	2,412	7,693
2006	1.41	3,045	4,285
2007	4.67	2,105	9,835
2008	3.35	3,342	11,265

Out of the 13,573 watercraft inspected at Lake Minnetonka three were found to have ruffe, one round goby, twelve "other", and five hundred eighty-seven with attached vegetation. None of the watercraft were found to have zebra mussels. The watercraft identified as having round goby was entering the water and of those with ruffe one was exiting and two were entering. Of those identified as having an "other" invasive species (something other than ruffe, round goby,

vegetation, zebra mussel or spiny waterflea) ten were entering and two were exiting. The number exiting with vegetation attached was the highest, four hundred fifteen, and entering with vegetation was one hundred seventy-two.

The one hundred seventy-two boaters who came to the access with attached vegetation (1.5% of all entering watercraft) were inspected prior to entering the water and asked to remove any vegetation prior to putting their watercraft into Lake Minnetonka.

The following information has been provided as a summary of the inspections done at Lake Minnetonka in the 2008 season. Information we gather helps us understand risks involved, for example boaters coming from waters infested with zebra mussels are more likely to transport zebra mussels than those coming from non infested waterbodies.

The surveys done during the inspection process found that 258 boaters out of 13,573 (or 1.9%) inspections completed had come to Lake Minnetonka from a waterbody in Minnesota known to be infested with zebra mussels. The majority of the watercraft were coming from Mille Lacs Lake (table 4).

Table 4. Watercraft entering or exiting Lake Minnetonka that last used zebra mussel infested waters.

Enter/Exit	Last Waterbody	Number of Watercraft
Enter	Mille Lacs Lake	86
Enter	Mississippi River	59
Enter	Superior	6
Enter	St. Croix River	73
Enter	St. Louis River	2
Enter	Mississippi River	1
Enter	Ossawinnamakee Lake	1
Exit	St. Croix	7
Exit	Mississippi River	10
Exit	Mille Lacs Lake	13
Exit	Superior	1

The surveys found that about 1.4% of the boaters who were inspected entering Lake Minnetonka had come from another state. These boats likely represent another high-risk group (table 5).

Table 5. Watercraft from states other than MN who used Lake Minnetonka.

State	Number of Watercraft	ZM Present in that state
AZ	3	
CA	3	x
CO	1	x
FL	6	
GA	1	
IA	34	x

State	Number of Watercraft	ZM Present in that state
IL	32	x
IN	1	x
MI	1	x
MO	4	x
MT	1	
NC	3	
ND	4	
NE	5	x
NV	3	
OH	3	x
OR	1	
PA	2	x
SC	1	
SD	14	x
TX	2	
VA	1	x
WA	1	
WI	37	x

We use a decal with the current year on it to track if a boater has been inspected in the current year. Boaters who have been inspected in the current year are more likely to be educated about invasive species and how to prevent their spread. Below is the number of inspections broken down by whether they had a current year decal and would be a repeat, had a previous year's decal and had talked to us in past years, or had never spoken to us before (table 6).

Table 6. Decal summary at Lake Minnetonka, comparison from 2004 to 2008

Year	Inspections	Incoming	Outgoing	Curr Yr Dec	Prev. Yr decal	no decal
2008	13,573	11,265	2,056	7,163(53%)	3,434(25%)	2,348(17%)
2007	13,733	9,835	3,766	7,309(53%)	3,705(27%)	2,600 (19%)
2006	8,010	4,285	3,725	3,105(39%)	2,442(30%)	2,301 (29%)
2005	14,863	8,585	6,278	8,407(57%)	3,650(25%)	2,821(19%)
2004	12,079	5,266	6,813	5,881(49%)	3,721(31%)	2,942 (24%)

We have data for 13,573 boaters who were asked if they are familiar with invasive species, 299 or 2.2% of them were not familiar with invasive species. When asked if they were familiar with Eurasian water milfoil 324 out of 13,573 or 2.4% said they were not familiar. We also asked boaters if they were familiar with zebra mussels and the problems they cause and 556 out of 13,573 or 4.2% of boaters said they were not familiar with zebra mussels. When asked if they were familiar with the laws regarding the transport of invasive species 407 or 3% said they were

not familiar with these laws.

Discussion:

Overall the program was a success in 2008 with over 3,000 hours of inspection at Lake Minnetonka. In the 2009 season we will work towards ensuring that a higher percentage of these hours are done during peak times at the specified accesses. The number of inspections done on entering watercraft was very high at 83% and falls in line with the goals of the LMCD. The rate of awareness about invasive species at Lake Minnetonka accesses remains high.

In reviewing the inspections per hour done at the secondary accesses I would recommend that Wayzata Bay access be dropped from the rotation in the 2009 season, as the inspections per hour there were very low at 1.09 per hour. Conversely, Carson's Bay got almost as many inspections per hour as Spring Park and should be considered for additional hours in 2009.