

# **2010 Summary Report of Watercraft Inspection Results at Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes**

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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 Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes received a prevention grant from the MN DNR in April of 2010 for 833 hours of inspection time during the 2010 watercraft inspection season with an equal amount of inspection time to be matched by the MN DNR. The contract dates were May 13<sup>th</sup> through September 31<sup>st</sup> of 2010.

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 Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes in the 2010 season.

## **Inspection Results:**

Watercraft Inspectors worked 1,861.25 hours (1,538.5 hours of access time and 322.75 hours of drive time) at the Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes accesses. During this time 3,077 inspections were completed (table 1).

**Table 1. Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes summary of inspections in 2010.**

Access Name	Number of Boaters/Inspections	Enter/Exit/Unknown	Hours	Insp. per Hour
Bone Lake	20	8/12/0	42.75	0.46
Forest Lake-East	850	634/210/6	222.5	3.82
Forest Lake-Central	314	203/106/5	193.25	1.62
Forest Lake-West	638	404/234/0	181.5	3.51
Chisago/South Lindstrom	240	132/108/0	150.25	1.59
Comfort Lake	447	324/122/1	155.25	2.87
Green Lake	291	97/194/0	172.75	1.68
Kroon Lake	0	0	8.25	0
Little Green Lake	80	31/49/0	94.75	0.84
North Center Lake	137	72/65/0	128	1.07
Spider Lake	8	4/4/0	44.75	0.17
South Center Lake	52	28/15/9	144.5	0.35

Out of the three thousand and seventy-seven watercraft inspected at the lakes included in this contract three hundred and ninety-two watercraft were found to have attached vegetation. Of those watercraft seven were inspected prior to entering the water. Bone, South Center, and North Center Lakes each had one watercraft with attached vegetation that was inspected prior to entering. Two watercraft were inspected prior to entering at Forest Lake and two were inspected before entering Green Lakes. Five were inspected prior to entering Chisago/South Lindstrom Lake. The watercraft users were asked to remove the vegetation before launching. The other three hundred and eighty were inspected after exiting the waterbodies. Eighty-one were inspected at Chisago/South Lindstrom Lake and two were inspected at both Spider and South Center Lakes. Five watercraft were inspected at Forest Lake and eleven were inspected at Bone Lake. Forty-seven watercraft were inspected at Little Green Lake and fifty-eight were inspected at North Center Lake. The last one hundred and seventy-four exiting watercraft were inspected at Green Lake. All watercraft users are asked to inspect and clean their watercraft during the inspection process.

The following information has been provided as a summary of the inspections done at the lakes included in this contract in the 2010 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 130 boaters out of 3,077 inspections completed, or more than 4.2%, had come to the lakes included in this contract from a waterbody in Minnesota known to be infested with zebra mussels. The majority of the watercraft were coming from Mille Lacs Lake (table 2).

**Table 2. Watercraft entering or exiting Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes that last used zebra mussel infested waters.**

Waterbody	Last Waterbody	Enter/Exit	Number of Watercraft
Bone	Mille Lacs Lake	Exit	1
Chisago/South Lindstrom	Mille Lacs Lake	Enter	1
Chisago/South Lindstrom	Mille Lacs Lake	Exit	2
Chisago/South Lindstrom	St. Croix River	Enter	1
Chisago/South Lindstrom	St. Croix River	Exit	1
Comfort	Mille Lacs Lake	Enter	7
Comfort	Mille Lacs Lake	Enter	1
Comfort	Mille Lacs Lake	Exit	8
Comfort	Minnetonka	Enter	4
Comfort	Minnetonka	Exit	2
Comfort	Mississippi River	Exit	2
Forest	Gull	Enter	6
Forest	Mille Lacs Lake	Enter	28
Forest	Mille Lacs Lake	Exit	18
Forest	Minnetonka	Enter	10
Forest	Minnetonka	Exit	2
Forest	Mississippi river	Enter	1
Forest	St. Croix River	Exit	2
Forest	Superior	Enter	2
Forest	Superior	Unknown	2
Green	St. Croix River	Enter	1
Little Green	Mille Lacs Lake	Enter	3
Little Green	Mille Lacs Lake	Exit	4
Little Green	Mississippi River	Enter	2
Little Green	Mississippi River	Exit	5
Little Green	Prior lake	Enter	1
Little Green	St. Croix River	Exit	2
North Center	Mille Lacs Lake	Exit	2
North Center	St. Croix River	Exit	2
South Center	Mille Lacs Lake	Enter	1
South Center	Mille Lacs Lake	Exit	1
South Center	St. Croix River	Enter	3
South Center	St. Croix River	Exit	2

The surveys found that about 1.36% of the boaters who were inspected either entering or exiting the lakes included in this contract had come from another state. These boats likely represent another high-risk group (table 3).

**Table 3. Watercraft from states other than MN who used Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes.**

Waterbody	State	Enter/Exit	Number of Watercraft	ZM present in State
Chisago/South Lindstrom	FL	Enter	1	
Comfort	IA	Enter	2	X
Forest Lake	AK	Enter	2	
Forest Lake	IA	Exit	1	X
Forest Lake	MO	Enter	2	X
Forest Lake	SD	Enter	2	
Forest Lake	SD	Exit	2	
Forest Lake	WI	Enter	8	X
Forest Lake	WI	Exit	12	X
Green	WI	Exit	5	X
Little Green	WI	Enter	2	X
Little Green	WI	Exit	3	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 4).

**Table 4. Decal summary at Bone, Forest, Chisago/South Lindstrom, Comfort, Green, Kroon, Little, Little Green, North Center, Spider, and South Center Lakes, comparison from 2007 to 2010**

<u>Year</u>	<u>Inspections</u>	<u>Entering</u>	<u>Exiting</u>	<u>Curr Yr Dec</u>	<u>Prev. Yr decal</u>	<u>No decal</u>
<b>Bone</b>						
<b>2007</b>	5	3	2	1	0	4
<b>2008</b>	65	34	31	6	38	21
<b>2009</b>	0					
<b>2010</b>	20	8	12	7	3	10
<b>Forest Lake</b>						
<b>2007</b>	134	49	83	13	43	78
<b>2008</b>	240	95	144	29	85	126
<b>2009</b>	631	363	260	145	204	282
<b>2010</b>	1802	1241	550	369	721	711

**Chisago/South Lindstrom**

<b>2007</b>	120	11	109	22	34	64
<b>2008</b>	39	17	21	6	14	19
<b>2009</b>	542	231	297	100	195	247
<b>2010</b>	240	132	108	92	92	56

**Comfort**

<b>2010</b>	446	324	122	109	127	211
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**Green**

<b>2007</b>	223	89	133	29	78	116
<b>2008</b>	23	8	15	0	23	0
<b>2009</b>	239	85	154	32	94	113
<b>2010</b>	291	97	194	102	108	81

**Kroon**

<b>2010</b>	0
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**Little Green**

<b>2007</b>	71	35	36	8	21	42
<b>2008</b>	14	7	7	0	14	0
<b>2009</b>	168	92	76	22	68	78
<b>2010</b>	80	31	49	27	31	22

**North Center**

<b>2007</b>	38	9	29	4	12	22
<b>2008</b>	22	9	13	0	22	0
<b>2009</b>	146	96	50	8	68	70
<b>2010</b>	137	72	65	30	55	52

**Spider**

<b>2010</b>	8	4	4	0	0	8
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**South Center**

<b>2007</b>	29	15	14	3	13	13
<b>2008</b>	7	5	2	0	7	0
<b>2009</b>	140	86	54	6	47	87
<b>2010</b>	52	28	15	5	18	23

We have data for 3,077 boaters who were asked if they are familiar with invasive species, 56 (or 1.81%) of them were not familiar with invasive species. When asked if they were familiar with Eurasian water milfoil 57 out of 3,077 (or 1.85%) said they were not familiar. We also asked boaters if they were familiar with zebra mussels and the problems they cause and 57 out of 3,077 (or 1.85%) of boaters said they were not familiar with zebra mussels. These numbers illustrate that many of the boaters who are using the lakes included in this contract are aware of the problems associated with invasive species and the specific problems that are caused by Eurasian water milfoil and zebra mussels.

**Discussion:**

Our goal in the 2010 season was to accomplish 1,633 hours of inspection; we reached our goal by completing 1846.25 hours. Unfortunately we did not complete any hours at Little Lake. Out of the 3,077 inspections done at the lakes included in this contract 1,174 (or 38%) had not been inspected prior to 2010 and were an important audience for us to contact.

This was the first year that the watercraft inspection program visited Spider, Kroon, and Comfort lakes. Summer construction on Highway 61 near the Forest Lake-West access prevented people from using the access; inspectors said that they saw more boats using the east access.