

Zebra mussel and spiny water flea veliger

Again in this year, the City Crew used two fine-mesh nets to collect lake samples for zebra mussel veliger and spiny water fleas. In 2013, the samples were collected in five locations on Shell Lake on 6/25, 7/30, 8/22, and 9/11. Once the samples were collected, they were sent to DNR for analysis. Again in 2013, all samples were negative. (see attached report)

Pipeline Corridor Inspections

Refer to reports enclosed in this section.

Invasive species Inspection Program

- a. Clean Water Clean Boats: Again this year with the assistance of a DNR grant, the City hired four inspectors who inspected trailered watercraft entering Shell Lake. They staffed our main landing 14 hours per day, seven days throughout the summer. Also, a volunteer inspection program was established in 2012 which expanded our inspection period beyond Labor Day. A power point presentation is enclosed in this section which gives the details of 2013. The Round Lake access was also inspected in 2013 during high activity weekends. Participation was very low because receding water levels made it difficult to launch a boat.
- b. Monitoring of Vegetative Beds and Landings for Eurasian Milfoil: Kris Larsen, AIS Specialist WI DNR, performed these inspections on 6/26/ & 7/24. After that, DNR informed the City that they could no longer perform these inspections, but were willing to train someone to take over. Kris then trained volunteers Rob and Linda Anderson, lakeshore residents on south bay to complete the task. They inspected the vegetative beds on 8/19 and 9/22. No Eurasian water milfoil was found during these inspections.
- c. Adult Zebra Mussel Monitors: Dennis Anderson reported that no zebra mussels were found on his monitor in 2013.
- d. VHS Testing: The St. Croix Tribal Natural Resources Department completed this test in both 2010 and 2011 and found no apparent sign of the disease. They did not receive grant money to complete the testing in 2012 or 2013.

Invasive Species Education Program

- A newsletter entitled “Managing the Water’s Edge” (attached) was sent to 420 lakeshore owners on 6/14/13.
- The Shell Lake District Annual Meeting was held on June 29, 2013. The feature presentation: Snails, Plants and Water Quality-Lisa Burns, Conservation Coordinator, Land and Water Conservation Dept. & Kris Larsen, Invasive Species Specialist, WI DNR. Also, presentations and exhibits covered lakeshore buffers, invasive species, and storm water management projects completed by the City.
- The City continues to display and provide free brochures on lake management and protection.
- The Washburn County Register continues to print bi-weekly articles during the summer months which are written by our Clean Water Clean Boats Coordinator.

Purple Loosestrife

Refer to the attached report on our purple loosestrife inventory and actions taken in 2013.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Northern Region Headquarters
810 W. Maple Street
Spooner WI 54801

Scott Walker, Governor
Cathy Stepp, Secretary
John Gozdziński, Regional Director
Telephone 715-635-2101
FAX 715-635-4105
TTY Access via relay - 711



7 November 2013

Dave Vold, Lake Coordinator
501 1st Street
Shell Lake, WI 54871
715-468-7679

Subject: Results of Veliger Tows and Spiny Water Flea Tows

Dear Dave;

I am very pleased to say the results of the summer sampling of Shell Lake for zebra mussel veligers and spiny water fleas all are negative. The samples were taken on June 25, July 30, August 28, and September 11. These were sent to Madison for analysis. No invasive were present in the samples.

Sincerely,



Kris H. Larsen

Citizen Lake Monitoring and Invasive Species Specialist
Wisconsin Department of Natural Resources
810 West Maple Street
Spooner, WI 54801

(☎) phone: (715) 635-4072
(☎) fax: (715) 635-4013
(✉) e-mail: kris.larsen@wisconsin.gov

Wisconsin Department of Natural Resources

Surface Water Integrated Monitoring System (SWIMS)

Welcome Larsen, Kris H | Updates | Help | Log Off

- My Projects
- Find Data
- Submit Data
- Stations
- Forms
- Reports, Maps, and Documents
- Manage Data

SWIMS Home | Interactive Maps | [Search Monitoring Data](#)

Home -> View Fieldwork Event

Fieldwork Start 06/25/2013

Fieldwork End 06/25/2013

Show 10 entries

Search:

Field Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
		20000	SWIMS	FISHHOOK WATER FLEA	No		
		20001	SWIMS	SPINY WATER FLEA	No		
		30002	SWIMS	ZEBRA MUSSEL, VELIGER	No		
		40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
		40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
		40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
		40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
		40073	SWIMS	Date sample was analyzed	10/9/13		
		40073	SWIMS	Date sample was analyzed	10/9/13		
		40074	SWIMS	Name of plankton sample analyst	Caitlin Carlson		

Showing 1 to 10 of 11 entries

DNR AIS
Monitoring - Washburn
Project(s) County (Spiny Waterflea and Zebra Mussel Veliger Tows)

Data Collector(s) CAITLIN CARLSON

Fieldwork Event Status COMPLETE

Field Sample ID

Station Org. 21WIS

Station ID 10006702

Station Name Shell Lake

Station Type LAKE

Station WBIC 2496300

Station Waterbody Name Shell Lake

Field Description

Report To

Report to EPA? Y

No time given for collection of samples. Samples preserved in 70%

Comments Isopropyl Alcohol inseed of 95%

Ethanol. Samples not composited, 20mL out of each individual bottle was examined.

Lab Account Code

Show 10 entries

Search:

Lab Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Summary Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Habitat Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

- [Back to Browse](#) | [Vertical Measurements](#) | [Fieldwork Location](#) | [Results](#) | [Projects](#) | [Labslips](#) | [Reports/Graphs](#) | [Enable Edit](#) | [Download](#)

Currently, you are logged in.
For security purposes, you will be logged off automatically after 15 minutes of inactivity, or you can log out now.

Wisconsin Department of Natural Resources

Surface Water Integrated Monitoring System (SWIMS)

Welcome Larsen, Kris H | Updates | Help | Log Off

- My Projects
- Find Data
- Submit Data
- Stations
- Forms
- Reports, Maps, and Documents
- Manage Data

SWIMS Home | Interactive Maps | [Search Monitoring Data](#)

Home -> View Fieldwork Event

Fieldwork Start **07/30/2013**

Fieldwork End **07/30/2013**

Show 10 entries

Search:

Field Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
<input type="checkbox"/>	<input type="checkbox"/>	20000	SWIMS	FISHHOOK WATER FLEA	No		
<input type="checkbox"/>	<input type="checkbox"/>	20001	SWIMS	SPINY WATER FLEA	No		
<input type="checkbox"/>	<input type="checkbox"/>	30002	SWIMS	ZEBRA MUSSEL, VELIGER	No		
<input type="checkbox"/>	<input type="checkbox"/>	40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
<input type="checkbox"/>	<input type="checkbox"/>	40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
<input type="checkbox"/>	<input type="checkbox"/>	40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
<input type="checkbox"/>	<input type="checkbox"/>	40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
<input type="checkbox"/>	<input type="checkbox"/>	40073	SWIMS	Date sample was analyzed	10/9/13		
<input type="checkbox"/>	<input type="checkbox"/>	40073	SWIMS	Date sample was analyzed	10/9/13		
<input type="checkbox"/>	<input type="checkbox"/>	40074	SWIMS	Name of plankton sample analyst	Caitlin Carlson		

Showing 1 to 10 of 11 entries

DNR AIS
Monitoring - Washburn
Project(s) County (Spiny Waterflea and Zebra Mussel Veliger Tows)

Data Collectors CAITLIN CARLSON

Fieldwork Event Status COMPLETE

Field Sample ID

Station Org. 21WIS

Station ID 10006702

Station Name Shell Lake

Station Type LAKE

Station WBIC 2496300

Station Waterbody Name Shell Lake

Field Description

Report To

Report to EPA? Y

No time given for collection of samples. Samples preserved in 70%

Comments Isopropyl Alcohol inseed of 95% Ethanol. Samples not composited, 20mL out of each individual bottle was examined.

Lab Account Code

Show 10 entries

Search:

Lab Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Summary Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Habitat Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

- [Back to Browse](#) | [Vertical Measurements](#) | [Fieldwork Location](#) | [Results](#) | [Projects](#) | [Labslips](#) | [Reports/Graphs](#) | [Enable Edit](#) | [Download](#)

Currently, you are logged in.
For security purposes, you will be logged off automatically after 15 minutes of inactivity, or you can log out now.

Wisconsin Department of Natural Resources

Surface Water Integrated Monitoring System (SWIMS)

Welcome Larsen, Kris H | Updates | Help | Log Off

- My Projects
- Find Data
- Submit Data
- Stations
- Forms
- Reports, Maps, and Documents
- Manage Data

SWIMS Home | Interactive Maps | Search Monitoring Data

Home -> View Fieldwork Event

Fieldwork Start 08/28/2013
Fieldwork End 08/28/2013

Show 10 entries

Search:

Field Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
		20000	SWIMS	FISHHOOK WATER FLEA	No		
		20001	SWIMS	SPINY WATER FLEA	No		
		30002	SWIMS	ZEBRA MUSSEL, VELIGER	No		
		40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
		40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
		40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
		40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
		40073	SWIMS	Date sample was analyzed	10/9/13		
		40073	SWIMS	Date sample was analyzed	10/9/13		
		40074	SWIMS	Name of plankton sample analyst	Caitlin Carlson		

Showing 1 to 10 of 11 entries

First Previous 1 2 Next Last

DNR AIS
Monitoring - Washburn
Project(s) County (Spiny Waterflea and Zebra Mussel Veliger Tows)
Data Collectors CAITLIN CARLSON
Fieldwork Event Status COMPLETE
Field Sample ID
Station Org. 21WIS
Station ID 10006702
Station Name Shell Lake
Station Type LAKE
Station WBIC 2496300
Station Waterbody Name Shell Lake
Field Description
Report To
Report to EPA? Y

No time given for collection of samples. Samples preserved in 70% Isopropyl Alcohol instead of 95% Ethanol. Samples not composited, 20mL out of each individual bottle was examined.

Lab Account Code

Show 10 entries

Search:

Lab Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

First Previous Next Last

Show 10 entries

Search:

Summary Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

First Previous Next Last

Show 10 entries

Search:

Habitat Results

L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table							

Showing 0 to 0 of 0 entries

First Previous Next Last

Back to Browse | Vertical Measurements | Fieldwork Location | Results | Projects | Labslips | Reports/Graphs | Enable Edit | Download

Currently, you are logged in.
For security purposes, you will be logged off automatically after 15 minutes of inactivity, or you can log out now.

Wisconsin Department of Natural Resources

Surface Water Integrated Monitoring System (SWIMS)

Welcome Larsen, Kris H | Updates | Help | Log Off

[My Projects](#) | [Find Data](#) | [Submit Data](#) | [Stations](#) | [Forms](#) | [Reports, Maps, and Documents](#) | [Manage Data](#) | [SWIMS Home](#) | [Interactive Maps](#) | [Search Monitoring Data](#)

Home -> View Fieldwork Event

Fieldwork Start **09/11/2013**
 Fieldwork End **09/11/2013**
 DNR AIS
 Monitoring - Washburn
 Project(s) County (Spiny Waterflea and Zebra Mussel Veliger Tows)
 Data Collectors CAITLIN CARLSON
 Fieldwork Event Status COMPLETE
 Field Sample ID
 Station Org. 21WIS
 Station ID 10006702
 Station Name Shell Lake
 Station Type LAKE
 Station WBIC 2496300
 Station Waterbody Name Shell Lake
 Field Description
 Report To
 Report to EPA? Y
 No time given for collection of samples. Samples preserved in 70% Isopropyl Alcohol instead of 95% Ethanol. Samples not composited, 20mL out of each individual bottle was examined.
 Lab Account Code

Show 10 entries

Search:

Field Results		L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
<input type="checkbox"/>	<input type="checkbox"/>			20000	SWIMS	FISHHOOK WATER FLEA	No		
<input type="checkbox"/>	<input type="checkbox"/>			20001	SWIMS	SPINY WATER FLEA	No		
<input type="checkbox"/>	<input type="checkbox"/>			30002	SWIMS	ZEBRA MUSSEL, VELIGER	No		
<input type="checkbox"/>	<input type="checkbox"/>			40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
<input type="checkbox"/>	<input type="checkbox"/>			40071	SWIMS	Have you consolidated all of your samples into one composite bottle?	No		
<input type="checkbox"/>	<input type="checkbox"/>			40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
<input type="checkbox"/>	<input type="checkbox"/>			40072	SWIMS	Volume of sample that was analyzed (ml)	100	ML	
<input type="checkbox"/>	<input type="checkbox"/>			40073	SWIMS	Date sample was analyzed	10/9/13		
<input type="checkbox"/>	<input type="checkbox"/>			40073	SWIMS	Date sample was analyzed	10/9/13		
<input type="checkbox"/>	<input type="checkbox"/>			40074	SWIMS	Name of plankton sample analyst	Caitlin Carlson		

Showing 1 to 10 of 11 entries

Show 10 entries

Search:

Lab Results		L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table									

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Summary Results		L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table									

Showing 0 to 0 of 0 entries

Show 10 entries

Search:

Habitat Results		L	R	DNR Parameter	Type	Description	Result	Units	Present/Absent
No data available in table									

Showing 0 to 0 of 0 entries

[Back to Browse](#) | [Vertical Measurements](#) | [Fieldwork Location](#) | [Results](#) | [Projects](#) | [Labslips](#) | [Reports/Graphs](#) | [Enable Edit](#) | [Download](#)

Currently, you are logged in.
 For security purposes, you will be logged off automatically after 15 minutes of inactivity, or you can log out now.

**Pipeline Corridor Inspection
June 18, 2013**

Dave Vold inspected the pipeline corridor on June 18, 2013. He checked for invasive species and erosion problems. Everything looks good. The spring rains aided in the establishment of the vegetation. No erosion is evident. The City Crew mowed the corridor between New Knapp Road and Highway 63 on 6/18/13 mostly to control spotted knapweed.

**Pipeline Corridor Inspection
July 23, 2013**

Dave Vold inspected the corridor on July 23, 2013. No erosion problems were observed. Some spotted knapweed is coming on the corridor between County B & US 63 that will need mowing by the City Crew.

**Pipeline Corridor Inspection
August 23, 2013**

Dave Vold inspected the corridor on August 23, 2013. Spotted knapweed continues to be a problem in some areas. The City Crew generally spot mows these spots. Another extremely dry fall putting stress on the grass cover.

**Pipeline Corridor Inspection
September 24, 2013**

Dave Vold inspected the corridor on September 24, 2013. It's been an extremely dry summer, however, the vegetative cover held up well so erosion continues to be controlled. The City will have to continue to mow to control spotted knapweed.

Shell Lake's YR 2013

Annual Report

Aquatic Invasive Species

Inspection Program

1

Mission:

To educate the general public on how to prevent the spread of Aquatic Invasive Species, and keep invasive species from entering Shell Lake.

Vision:

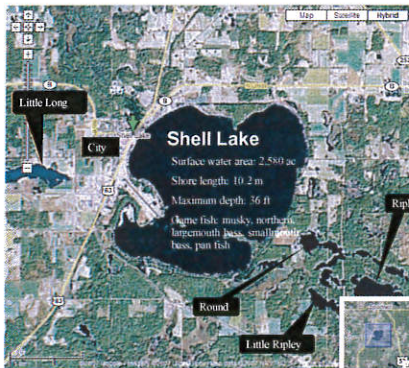
To be THE Clean Boats Clean Waters program that all other Clean Boats Clean Waters programs strive to achieve.



Inspection Program

- The Shell Lake City Council requires **trailed watercraft be launched and retrieved at the Class A access** (dock, ramp and other infrastructure) in Memorial Park.
- Inspectors, **trained under the WI Clean Boats - Clean Waters program**, inspect and monitor watercraft, lake access facilities for harmful Aquatic Invasive Species, are on duty 14 hours a day, 7 days a week, throughout the summer.
- In YRs 2007, 2008, 2009, 2010, 2011, and 2012 the inspectors collected data using a **hand-held computer for data collection and analysis.**

4



5

Committees Reporting to SL City Council / Lake District Board

- **Technical Oversight Committee:** DNR, St. Croix Band, Shell Lake Council, Contested case participants, USGS, Voigt Intertribal Task Force, Great Lakes Indian Fish and Wildlife Commission, Yellow River Property Owners, Yellow Lakes and River Association, and Technical Experts
- **Protection Advisory Committee:** Can include *anyone* with property or other interest in the District Up to 6 members - 3 year terms, meets - 4 times/year; Jim Glick, Chair; Andy Oman, V. Chair; Jane Lokken, Secretary; Tom Scott; Jeri Blitney; Jane Pederson; Dan Harrington
- **Staff Inspectors:** Coordinator: Jared McQuade; Inspectors: Mackenzie Curtis, Tanner Williams, Jonathan V.

6

Shell Lake Inspection Data (submitted to WiDNR)

	YR04		YR 06		YR08		YR09		YR10		YR11		YR12		YR13	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Clean Inspections	1437	88	3305	99	3180	99	2452	96	2977	96.7	2378	95.6	2911	96.5	2143	93.6
Boats requiring cleaning	190	12	41	1	34	1	101	4	101	3.28	83	3.4	107	3.5	71	3.2
Eurasian water Milfoil confirmed	9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Inspections	2957		3346		3214		2553		3078		2478		3018		2214	

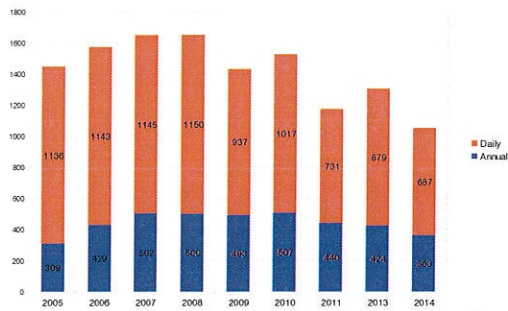
7

Inspections and Permits

	YR 06	YR 08	YR 09	YR 10	YR 11	YR 12	YR 13
Inspection logged:							
• Daily permits	989	969	990	1,063	765	832	N/A
• Annual permits	2,357	2,245	1,563	2,015	1,713	2,186	N/A
• Total Inspections	3,346	3,214	2,553	3,078	2,478	3,018	2,214
Permits Issued:							
• Daily	1,143	1,040	973	1,017	731	879	687
• Annual	429	507	493	507	440	424	363
	YR 06	YR 08	YR 09	YR 10	YR 11	YR 12	YR 13

Permit usage data not gathered in 2013

Number of Permits Sold



8

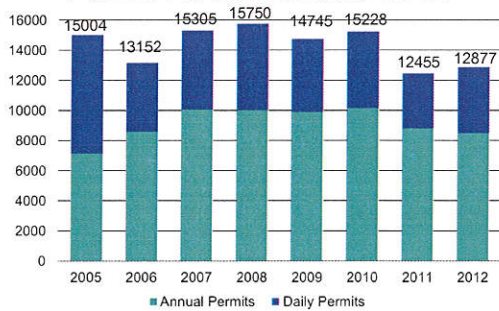
Lake Protection Fee Structure

	YR 2005	YR 2006	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011	YR 2012-13
All launches (note 2)								
- Daily	\$7	\$4	\$5	\$5	\$5	\$5	\$5	\$5
- Annual	\$30	\$20	\$20	\$20	\$20	\$20	\$20	\$20
SL property owners:								
- Daily	\$5							
	YR 2005	YR 2006	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011	YR 2012-13

Note 1: A citizens recommendation: Maintain current fee structure (YR 2007) in YR 2010. Establish a rapid reaction containment process and Note 2: In YR 2005, property owners had separate fee structure, shown under SL property owners.

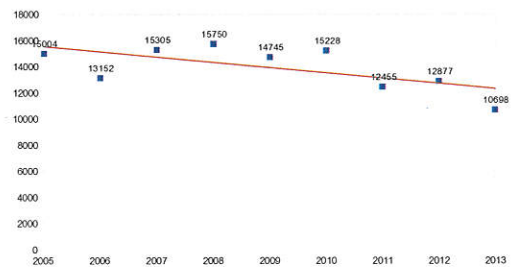
10

Permit Revenue 2005-2012



11

Permit Revenue 2005-2013



Red Line is linear trend line

11

2013 Revenue Breakdown

Revenue Source	# Sold	\$ in revenue
Annual passes sold at City Hall	23	\$460
Annual passes sold at Boat Landing	340	\$6,800
Daily/24hr passes sold at Boat Landing	673	\$3,365
Daily/24hr passes sold via after hours drop box at Boat Landing	14	\$70
Donation	N/A	\$3

Survey Questions 2013 Data

Question/Possible Answers	# of responses
<u>In the past 30 days how many times have you been contacted by an inspector?</u>	
0	336
1-2	746
3-4	563
5+	491
<u>Was the boat used in the past 5 days on a different body of water?</u>	
Yes	317
No	1903

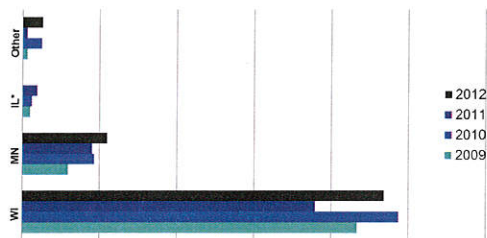
Survey Questions 2013 Data

Question/Possible Answers	# of responses
<u>In a typical month of boating how many water bodies do you visit?</u>	
1-2	1433
3-4	600
5+	145
<u>Aware of laws?</u>	
Yes	2121
No	71
Unsure	11

Survey Questions 2013 Data

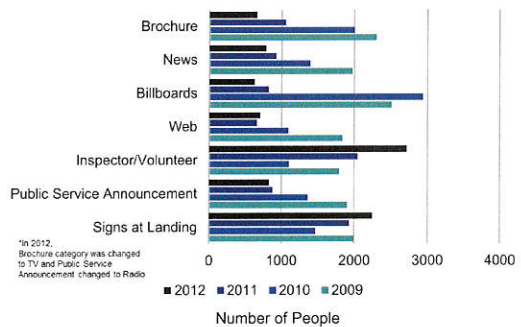
Questions	# of responses
<u>Steps you took when removing your boat from water</u>	
Inspect boat/trailer	2050
Remove attached plants	71
Nothing Attached	2094
Drain water from boat	1772
Drain water from livewell	1167
Dispose of unwanted bait	511
Does not fish	1260
Took no steps	62
I did not ask	6

Boat License of Incoming Boats 2009, 2010, 2011, 2012



*No record for IL in 2012 This question is now longer on the survey for 2013

Source of Invasive Species Information Among Boaters



*In 2012, Brochure category was changed to TV and Public Service Announcement changed to Radio

Number of People

This question is no longer asked after 2012

Type of Watercraft Launched

	YR 2005	YR 2006	YR 2007
Fishing	2,305	2,014	1,812
Pontoon	197	286	314
PWC	99	174	175
Sail	23	39	41
Ski/Pleasure	274	756	686
Kayak/Canoe	1	0	2
Unknown	64	77	99
	YR 2005	YR 2006	YR 2007

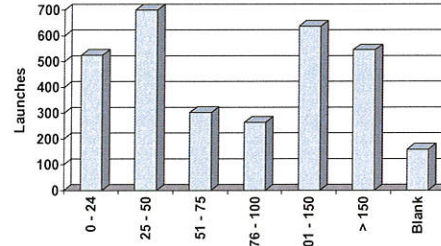
Pontoon and PWC are growing in popularity

This question is no longer asked after 2007

19

Horse Power Range

YR 2007

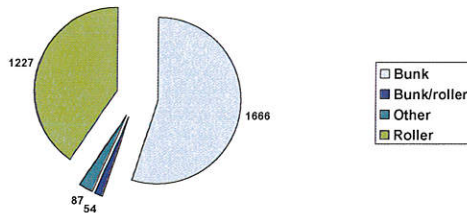


Horse Power Range

This question only asked in 2007

20

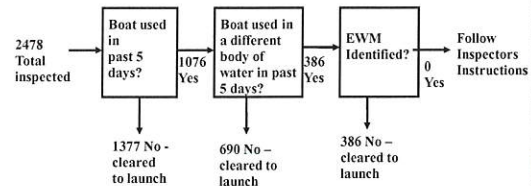
Type of Trailer (2007)



This question only asked in 2007

21

Responses to Key Questions that Identify Suspect Boats 2011



Budget and Actual For AIS Inspection Program

	YR 2006	YR 2008	YR 2009	YR 2010	YR 2011	YR 2012	YR 2013
	Actual	Actual	Actual	Actual	Actual	Actual	
Expense	27,400	18,330	20,600	20,900	22,800	24,000	23,000
- DNR Grant	12,950	12,500	15,400	15,600	17,100	14,000	14,000
- City	14,450	5,830	5,200	5,300	5,700	10,000	9,000

Notes:

1. City contribution is paid for mostly by launch fees and volunteer labor.
2. Budget includes launch inspections, aquatic plant survey, purple loosestrife inventory and control, and lake testing for zebra mussel veligers & spiny water fleas.
3. All dollars are used to implement a Rapid Response Plan as part of our lake protection campaign and maintain the launch site.

23

Observations

- The AIS program has been operational for 11 years and seems to gain greater public acceptance each year. Remarkably, there has been no Eurasian Water Milfoil detected on watercraft in the past 7 years.
- Due to ice being on the lake for an extended period of time overall numbers were lower than last year.
- The majority of major lakes in the area have adopted a program very similar to Shell Lake's.
- The project continues to provide very important public education about invasive species and steps to prevent the spread of invasives.
- Finding volunteers to assist with the program was extremely difficult.
- Many community members are extremely proud and thankful for the program.

24

Milestones

- **YR 2002**
 - Organized volunteers and began education program supporting Clean Boats/Clean Lakes program
- **YR 2003**
 - Created a part time position of inspector / supervisor at the launch area
 - Built the educational kiosk next to the launch ramp.
 - 1300 watercraft inspected
- **YR 2004**
 - AIS Control Grant #1 received from WIDNR (Feb – Dec)
 - Hired a part time supervisor / inspector (May - Sep)
 - Used volunteers for watercraft inspection (May – Sep)
 - 1636 watercraft inspected

25

Milestones

- **YR 2005**
 - AIS Control Grant #2 received from WIDNR (Feb – Dec)
 - Hired a part time supervisor / inspector (May - Sep)
 - Hired three part time inspectors (May – Sep)
 - Initiated launch fees gross revenue \$15,004; (\$5/7 daily, \$20/30 annual)
 - Received a grant to determine if a wash station would be feasible
 - 2963 watercraft inspected; 1445 permits issued
 - Six Eurasian Milfoil found; cleaned 136 suspect boats before launch
- **YR 2006**
 - AIS Control Grant #3 received from WIDNR (Feb – Dec)
 - Hired a part time supervisor / inspector (May - Sep)
 - Hired three part time inspectors (May – Sep)
 - Launch fees gross revenue \$13,150; (\$4 daily, \$20 annual)
 - Constructed an inspectors shelter
 - Received \$850 donation from PCOOL organization
 - 3348 watercraft inspected; 1572 permits issued
 - Zero Eurasian Milfoil found; cleaned 41 suspect boats before launch
 - First citation issued to individual who refused to pay the launch fee (fined about \$350)

26

Milestones

- **YR 2007**
 - Mayor sent a letter of appeal to property owners requesting they demonstrate their support of the Launch Permit requirements by buying an annual permit.
 - Received an AIS Grant in support of the inspection program
 - Award to study the feasibility of collecting inspectors data using a hand-held computer
 - Completed second year of Zero EWM detection
- **YR 2008**
 - Mayor sent letter to all property owners asking them to support the inspection program, eradicate purple loosestrife on their property and maintain a natural shore line.
 - Received an AIS Grant in support of the inspection program
 - Initiated training video for AIS Grant inspectors data using a hand-held computer
 - Completed third year of Zero EWM detection

27

Milestones

- **YR 2009**
 - Mayor sent letter to all property owners asking them to support the inspection program, eradicate purple loosestrife on their property and maintain a natural shore line.
 - Received AIS Grant for three years (2009-2011)
 - Completed fourth year of zero EWM detection
- **YR 2010**
 - Completed fifth year of zero EWM detection
 - Mayor sent letter to all property owners asking them to support the inspection program, eradicate purple loosestrife on their property and maintain a natural shore line.
 - Utilized second year of AIS grant (2009-2011)
- **YR 2011**
 - Completed sixth year of zero EWM detection
 - Mayor sent letter to all property owners asking them to support the inspection program, eradicate purple loosestrife on their property and maintain a natural shore line.
 - Utilized third year of AIS grant (2009-2011)
 - Approved for new three year grant (2012-2014)

28

Milestones

- **YR 2012**
 - Monthly monitoring in the summer months showed no indication of Eurasian Water-Milfoil, Zebra Mussel, or Spiny Water Fleas.
 - New signs were installed in the kiosk at the main landing.
 - New AIS signs were installed at the class B landing.
 - New iPod data collection system installed.
 - A volunteer inspection program was established to inspect boats after labor day.
 - All lakeshore property owners were sent a letter entitled "Keep Our Lake Clean."
 - Utilized first year of AIS Grant (2012-2014).

Milestones

- **YR 2013**
 - Monthly monitoring in the summer months showed no indication of Eurasian Water-Milfoil, Zebra Mussel, or Spiny Water Fleas.
 - Landing blitz towel giveaway program was implemented.
 - Landing was staffed until the first weekend in October.
 - Information box was installed outside at the landing providing information 24 hours a day.
 - Less than 4% of watercraft that came to the landing to required cleaning.
 - All lakeshore property owners were sent a letter entitled "Managing The Water's Edge."
 - Utilized Second year of AIS Grant (2012-2014).

In addition to the AIS Inspection Program, the City is

- **Zebra Mussel Veligers and spiny water fleas**
 - Monitoring the lake every month during the summer for zebra mussel veligers and spiny water fleas. A fine-mesh screen is pulled through the water in five locations and sent to DNR for analysis. Up to and including 2013, nothing has been detected.
- **Eurasian Water-Milfoil**
 - Nothing detected during monthly inspections by volunteers Rob and Linda.
- **Purple Loosestrife**
 - Inventorying Purple Loosestrife infestations within its corporate boundaries. When found on private property, the land owners were notified. When found on City property, the City crew eradicates it.

TO: Dave Vold
City of Shell Lake

FROM: Kris Larsen

DATE: 26 June 2013

RE: June surveillance for EWM

On June 26, Kris Larsen performed an inspection of the weed beds on Shell Lake. He boated across the beds looking for Eurasian Water Milfoil. He did not find any Eurasian Water Milfoil during the survey.

TO: Dave Vold
City of Shell Lake

FROM: Kris Larsen

DATE: 24 July 2013

RE: July surveillance for EWM

On July 24, Kris Larsen accompanied Rob and Linda Anderson on Shell lake for training on Eurasian Milfoil monitoring. They performed an inspection of the weed beds on Shell Lake. They boated across the beds looking for Eurasian Water Milfoil. They did not find any Eurasian Water Milfoil during the survey.

By completing this training, Rob and Linda Anderson will assume the monitoring duties of monthly EWM checks on Shell Lake.

August milfoil report

Linda Anderson <roblinander@gmail.com>
To: shelllakeadm@gmail.com

Mon, Sep 16, 2013 at 10:46 AM

Dave,

We completed the milfoil check for Shell Lake on August 19, 2013. We did not find any evidence of milfoil in the lake.

Rob and Linda Anderson

Sept. Milfoil report

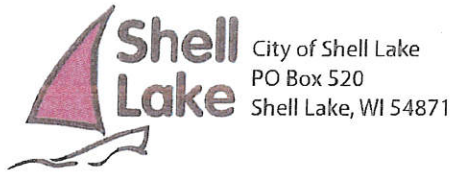
Linda Anderson <roblinander@gmail.com>
To: shelllakeadm@gmail.com

Mon, Sep 23, 2013 at 10:03 AM

Hi Dave,

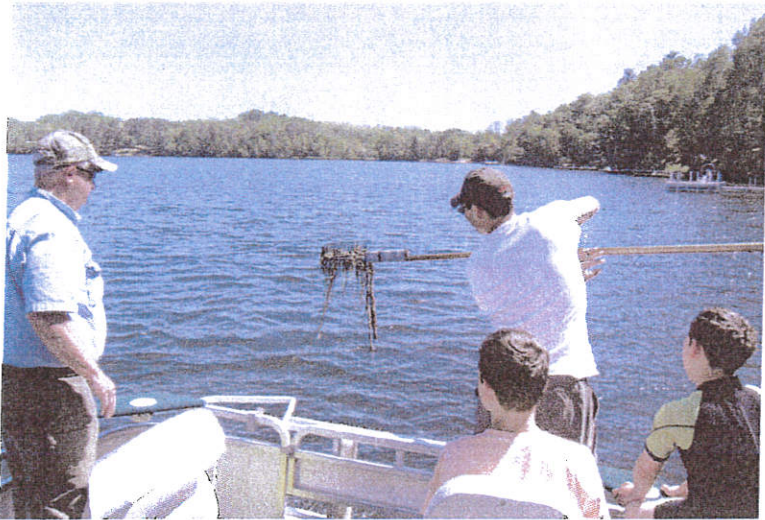
We completed the lake inspection for milfoil on Sept. 22, 2013. We found no evidence of milfoil.

Rob and Linda Anderson



A healthy restored lakeshore.

Shell Lake District Annual Meeting



June 29, 2013, 8:30 am - 10:30am

Shell Lake Community Center



8:30 am - Coffee, rolls, display exhibits, including aquatic invasive species, lakeshore restoration and frogs of Washburn County.

9:00am - Annual meeting (including election of 3 positions to the Lake Advisory Committee) followed by presentations.

Featured presentation: Snails, Plants and Water Quality- Lisa Burns, Conservation Coordinator, Land and Water Conservation Dpt & Kris Larsen, Invasive Species Specialist, Wisconsin Dpt of Natural Resources

Managing the Water's Edge

Call City Hall from 8:30am- Noon if you have any questions 715-468-7679

Since lakeshore is part of our City, we have a responsibility to help protect and restore water quality, improve wildlife and fish habitats and restore natural beauty to our lakes. Studies show that maintaining a healthy lakeshore will help us meet this responsibility. If every lakeshore owner leaves 70% or more of their property in its natural condition, the city can meet its healthy lake objective. This leaves 30% (approx. 30 feet wide) for a viewing corridor, swimming and dock.

Call the Washburn County Land & Water Conservation Dept. (715-468-4654) for assistance with native planting or shoreland restoration. For more information go to: www.dnr.state.mn.us.restoreyourshore/

Beach Maintenance

Recent lower water levels have left many of us with more exposed beach area. This added benefit comes with some responsibility and rules.

Removal of vegetation is limited to a single 30 foot wide path.

You can only remove vegetation in the path by hand-pulling, weed whacker or push mower. It is illegal to use rototillers, ATVs, tractors or similar motorized vehicles in these areas.

No herbicides of any kind can be used anywhere on the lake bed. For more information "Google" search - Wisconsin beach maintenance.



Purple Loosestrife Control

It is important that you control purple loosestrife on your property. Pull the loosestrife and dispose of it by placing it in your garbage.

If you have large areas of loosestrife, call the City Hall and they will arrange placement of purple loosestrife eating beetles on your property.

A free brochure with control tips and loosestrife identification is available at City Hall.

Shell Lake Aquatic Invasive Species Project - 2013
Purple Loosestrife Inventory sheet

Site Number	Date	Section	Location Town	Range	Water Body (if applicable)	Extent of Infestation # of plants	Lake, ditch, etc.
1	7/16/2013	Wetland	Industrial Blvd		Shell Lake	<0.1 acre Released beetles - 2 plants	Wetland
2	7/16/2013	Shell Lake Airport			Shell Lake	Released beetles - 6 plants	Lakeshore
3	7/16/2013	Access #14	South Bay		Shell Lake	Released beetles - 2 plants	Lakeshore
4	7/16/2013	Access #12	South Bay		Shell Lake	Released beetles-2 plants + roundup	Lakeshore
5	7/16/2013	Access #11	Pratt-Winton		Shell Lake	Released beetles - 2 plants	Lakeshore
6	7/16/2013	Access #10	North Landing		Shell Lake	Released beetles - 1 plant	Lakeshore
7	7/16/2013	Access #9	Donovan Cove		Shell Lake	Released beetles - 1 plant	Lakeshore
8	7/13/2013	Scout Island			Shell Lake	Treated by DNR	Lakeshore
9	8/8/2013	137 S Lake Dr			Shell Lake	10 plants - pulled by landowner	Lakeshore
10	8/7/2013	Diversion Ditch			Shell Lake	100 plants - Dave Mills pulled	Lakeshore

Actions taken:

Callista Holman, a Shell Lake High School Student, raised beetles for us this year. She potted 16 plants and added beetles which were purchased from DNR. On July 16, 2013 the beetles were released on the sites indicated on the inventory sheet above. A newsletter was sent to all lakeshore owners asking them to remove purple loosestrife on their property. If the City noticed purple loosestrife on private property, the owner received a letter or phone call. An article was placed in the Washburn County Register explaining how to identify purple loosestrife and methods of control. A purple loosestrife plant was displayed in City Hall with brochures available to the public. Continued an "adopt an access" program in which an individual or group can adopt an access and monitor for invasive species. The Lake District's Annual Meeting in 2013 featured presentations on invasive species by Lisa Burns, Conservation Coordinator, Washburn County Land and Water Conservation Dept. and Kris Larsen, Invasive Species Specialist, WI DNR.