



Washburn County WDNR Aquatic Invasive Species Project
Final Report AEPP-51417 July 2017- Dec 2019

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In July 2017, the Washburn County Land and Water Conservation Department (LWCD) began incurring expenses for 2 year AEPP grant from the Wisconsin Department of Natural Resources (WDNR) to implement a countywide AIS program, with an emphasis on zebra mussel response activities. Annual progress reports were submitted to the WI DNR and are available to view, by contacting the LWCD. The following final summary report discusses the scope activities completed from July 2017 through December 2019.

Clean Boats, Clean Waters

The Washburn County LWCD provided 9 Clean Boats Clean Waters trainings, including many one-on-one trainings, for numerous lake associations, totaling roughly 100 people. Many of them also trained their members and volunteers that couldn't make a training. Lake associations from surrounding counties also attended the workshops. Boy Scouts were also trained and were successful in helping Red Cedar, Long Lake and Minong Flowage lake associations. Template presentations were edited to include local AIS locations and concerns. County-wide watercraft efforts occurred with the help of a hired inspector. Data is entered into SWIMS and a graph is found on page 9.

Drain Campaign

The Washburn County LWCD organized and promoted the statewide "Drain Campaign" to local lake organizations, giving away 350 free ice packs to cooperating boaters on the following participating lakes:

2017- Lake information discussed in previous grant

2018- Big and Middle McKenzie, Long, Gilmore, Pokegema, Bass, Nancy, Kimball, Horseshoe, Shell, Red Cedar, Bear and Spooner.

2019- Long, Shell, Bear, Cable, Red Cedar, Sand, Kimball, Minong, Nancy, Gilmore, Big Bass, Horseshoe, Spooner, Mathews and McKenzie chain.

Landing Blitz

The Washburn County LWCD organized and promoted the statewide Fourth of July "Landing Blitz" by providing 930 towels to boaters and lake associations to the following participants:

2017- Shell, Long, Bear, Red Cedar, Spider, Big McKenzie, Long, Sand, Kimball, Minong, Nancy, Gilmore and Big Bass.

2018- Big and Middle McKenzie, Long, Gilmore, Pokegema, Bass, Nancy, Kimball, Horseshoe

2019- Spooner, Long, Bear, Shell, Spider, Birch, Cable, Red Cedar.

Purple Loosestrife Bio-Control

The Washburn County LWCD reared purple loosestrife beetles in 2017 and 2019. Due to time, weather and resource constraints, only one mass rearing cage were used instead of two. In the past, a majority of beetles were shipped from Madison to help the rearing process. These past couple of years, weather and overall timing of plants to be ready weren't as feasible as hoped, making the beetle population much less than in past years. Approximately 5,400 beetles were released. However, inventory of the largest infestation along the Yellow River, has shown very positive results in beetle control on the natural population. Release sites have been documented and data is in SWIMS. Landowners have reported less populations along their shoreline as well. Many partners have been involved in slowing its spread, including:

* DNR who help with the digging and organization of planting with students.

- * Spooner 8th graders who plant the rootstock in the mass rearing cages, as part of Earth Day.
- * Landowners who help dig the rootstock and release beetles on their property.
- * Birchwood Charter School who maintain two rearing stations.
- * Red Cedar Lakes Association who works with the Birchwood School to release beetles on the lake.
- * Washburn Co Lakes and Rivers Assn (WCLRA) who release beetles and do inventory on the whole stretch of the Yellow River starting up by the dam on Spooner Lake down to the County Line near Hwy 70. They do a great job of inventorying and mapping out the areas they work on.

Japanese Knotweed

The Washburn County LWCD has documented 39 stands of Japanese Knotweed. Approximately 18 stand have been treated with the help of the LWCD and landowners using a foliar spray of the herbicide Milestone. Herbicide treatment seems to be most effective, but more than one application is recommended to completely kill it. In 2019, seven new landowner parcels were documented during inventory and were sent a letter educating and encouraging they control the stand. Educational articles also went out to local newspapers and lake association newsletters. This sparked some landowners to reach out for additional assistance.

Yellow Flag Iris

The last few years has shown more interest from shoreline owners about this tough invasive, which triggered more outreach efforts. For the first time, the LWCD held an educational day on Leesome Lake to discuss its concerns, how to identify and how to control Yellow Flag Iris (YFI). It was astonishing to find out that previous plants that were dug out and left in a pile (under a tarp for a year) had produced new plants. Fortunately, it turned out to be a great learning opportunity for everyone at the workshop. Yellow Flag Iris has been found along sporadic spots along the Yellow River, however not inventoried quick enough for mapping purposes.

AIS Citizen Lake Monitoring Network

The Washburn County LWCD hosted three AIS Citizen Lake Monitoring Network workshops, including one-on-one trainings, with 50 participants. Workshop included a hands-on session to view specimens of AIS with a focus on native as well and invasive plants and animals. Template presentations were edited to include local AIS locations and concerns. 2017 had the most participants (25), likely credited to two factors; the concern/interest of the new finding of Zebra mussels in Big McKenzie Lake and simplified AIS CLMN monitoring kits. The new kits were very well received and people were motivated to get out and monitor.

Resort and Bait shop Outreach

To extend AIS outreach to fisherman, lake enthusiasts and the general public, cooperation between Washburn County LWCD, UW-Extension and WCLRA resulted in the creation of an AIS educational packet for local resort owners and bait shops.

Resort owners met with the partner's through-out the spring of 2019 and most of them (24) showed interest. The laminated document discusses some of the common species to be on the

look-out for in Washburn County, prevention steps and decontamination information. These packets are intended to be located in cabins for the public to view. A “Come Clean Leave Clean” poster was also created, for the cabin or fish cleaning station.

Eight local bait shops were contacted and given handouts containing AIS identification cards, WDNR minnow rules, brochures and a “Come Clean Leave Clean” poster.

Zebra Mussel Response

Since the initial discovery of zebra mussels in Big McKenzie Lake in 2016, response efforts have certainly changed. 2017 brought single discovery of zebra mussels to neighboring Middle McKenzie Lake and the population has grown since. After the initial discovery, Burnett County LWCD received a WDNR Early detection and response grant of which Washburn County jointly participates in. The funds from this rapid response grant are used to purchase decontamination stations, monitoring equipment, supplies, and outreach materials. The WDNR Recreational Warden was a key partner by providing a big flashing sign at the landing and busy intersections which alerted the public of the zebra mussels and reminder to take proper prevention steps.

Washburn County plays a lead role in the NW WI zebra mussel management team, by coordinating meetings, organizing monitoring plans and field days and sharing information with the general public. There are many partners involved on the team and the amount of field-work conducted would not have been possible without the strong cooperation between all involved, including: Burnett County, WDNR, St. Croix River Association, U.S. National Park Service, U.S. Fish and Wildlife Service and many local lake associations. The response to zebra mussels in the McKenzie Lakes was in many ways the first of its kind. The challenges that were encountered throughout the process were used to make monitoring more effective as the years progressed. This project also offered the rest of the state some insight as to what should be expected from a rapid response framework. The journey was shared at the 2018 Wisconsin Lakes Partnership Convention, several AIS Partnership meetings, Northwest Wisconsin Lakes Conference and through local media.

The methods for monitoring consisted of plate sampling, veliger tows, early detection surveys, and environmental DNA sampling. These efforts are shown by year for each lake that did monitoring on page 13. To date, no other lakes have tested positive for zebra mussels or veligers.

In 2018, Washburn and Burnett passed the first (in the state) decontamination ordinance, which states “if a decontamination station is present at a landing, the boater is required to use it prior to launching and leaving a boat landing”. This was initiated by local lake association members wanting additional prevention efforts to stop the spread of the zebra mussels and other AIS. The ordinance is an amendment to the current “no-transport ordinance”. Other counties have shown interest in the concept, and most recently, Barron County property committee passed something similar, but not a true ordinance.

Being the first in the state, there have been a lot of learning curves throughout the implementation of the ordinance. A frequently asked question (FAQ) sheet was developed to

help answer the numerous questions and concerns from the boaters and general public. Since it is a local (County) ordinance, The LWCD worked with the Sherriff's Department to find a proper way to handle potential violations. A violation report form was developed and distributed to lake associations with a decontamination station for inspectors to use. The form can be found on page 18.

Letters were sent to lake service providers as a reminder to take proper steps for AIS prevention and take extra pre-caution for zebra mussels when moving docks, trailers and boats from lake to lake (especially in the McKenzie Lakes area). As a result, some businesses bought a trailer specific to the McKenzie chain, and others purchased the decontamination materials on their own. A letter regarding fall equipment storage tips, was also mailed to those businesses. Numerous news articles were written and lake associations also spread the word with these resources.

Decontamination stations are placed at boat landings throughout Washburn and Burnett counties and lake associations/districts maintain and keep them functional. Volunteers worked with their township boards to receive permission to install them at the boat landing. Some of these stations were provided through a state AIS Grant, and others were purchased by lake associations. The stations consist of a 4'x8' (or smaller) informational sign, 500ppm bleach solution in a pressurized sprayer, safety goggles, and a long handled brush and hook to removed debris and weeds. Currently, there are 11 stations within Washburn County. A map of these locations can be found on page 17.

The County LWCD CBCW inspector used the bleach solution during each shift. His overall evaluation showed most boaters were fairly cooperative when he discussed the ordinance and reasoning for applying the solution. It is anticipated that continued education, training and the FAQ sheet will help boaters accept and understand the concept better. The FAQ sheet is found on pages 15-16.

A hot water pressure washer is shared by trained staff between Burnett and Washburn counties and it travels to various boat landings. A portion of the unit's time is at the McKenzie Lakes for zebra mussel containment. Staff also collaborated on CBCW inspection efforts on the McKenzie Chain and surrounding lakes. The Washburn County LWCD CBCW inspector found boaters preferred the pressure washer over the bleach solution, when given a choice. In 2019, Washburn County LWCD was selected by WDNR Warden unit to use their hot water pressure washer, but toward the end of the season parts broke and the unit only got used a of couple times. The breakdown turned out to be an effective learning experience for both entities and how to deal with potential future issues like this (MOU's, vehicle use, general equipment use, etc.).

Zebra mussel plate samplers were placed throughout the McKenzie Chain and are monitored by volunteers, which track the growth of the population yearly. Twenty four plates were deployed on Big McKenzie, nine on Middle McKenzie and five on Lower McKenzie. In

2019, Big McKenzie showed a huge increase in the numbers of ZM on the plates. According to the volunteer overseeing the monitoring, in 2018 there were 55 ZM/sq. ft. on the plates. This year there were so many, they were too abundant to count but estimate at least 1,000/sq. ft. Middle McKenzie showed a moderate increase from less than 1/sq. ft in 2018 to 45/sq.ft in 2019 and none reported on plates in Lower McKenzie Lake. Pictures of docks and lifts smothered in zebra mussels, is astonishing to see (page 20). A map of plate sampler locations and numbers found in 2019 in Big and Middle McKenzie are found on pages 21-22. Other interested lake association were contacted by the LWCD or reached out themselves to monitor their lake with the plates. The Chicog Township took the initiative themselves to educate, buy and distribute plate samplers to non-lake association members.

AIS Early Detection and zebra mussel veliger testing was done by The Washburn County LWCD with assistance of landowners, the WDNR, NPS, and Burnett County LWCD. Volunteers helped by providing boating resources and knowledge of the lake to complete the testing. Lakes were chosen based on the WDNR suitability model (optimum Calcium concentration), traffic and/or proximity to the McKenzie Chain. Lake associations that had early detection monitoring as part of their grant scope, were assisted in monitoring using the WDNR protocol. Samples were either sent to the State of WI Lab of Hygiene or the National Parks Service (RMB Environmental Lab, Inc.) for analyzation. All sampling data was entered into SWIMS and results are entered as soon as they are available. To date, no new lakes have tested positive for zebra mussel veligers.

Some lakes only collected ZM veliger tows (in red), the rest followed Early Detection protocol:
2017: Big McKenzie, Rocky Ridge, Spooner, Big Bass (Minong), Tozer, Trego Flowage
2018: Big McKenzie, Middle McKenzie, Bass (Casey Township), Tozer, Spooner
2019: Big McKenzie, Lower McKenzie, Bass (Casey Township), Spooner, Tozer, Nancy, Island, Slim

The protocol includes the collection of basic water quality data along with numerous early detection methods for aquatic invasive species:

- Thirty minute snorkel searches at all landings
- Ten minute snorkel searches at five pre-selected sites
- One dredge at deep hole for Spiny Water Flea (SWF)
- Three zebra mussel veliger tows
- Rake throws and D-nets while completing a shoreline meander

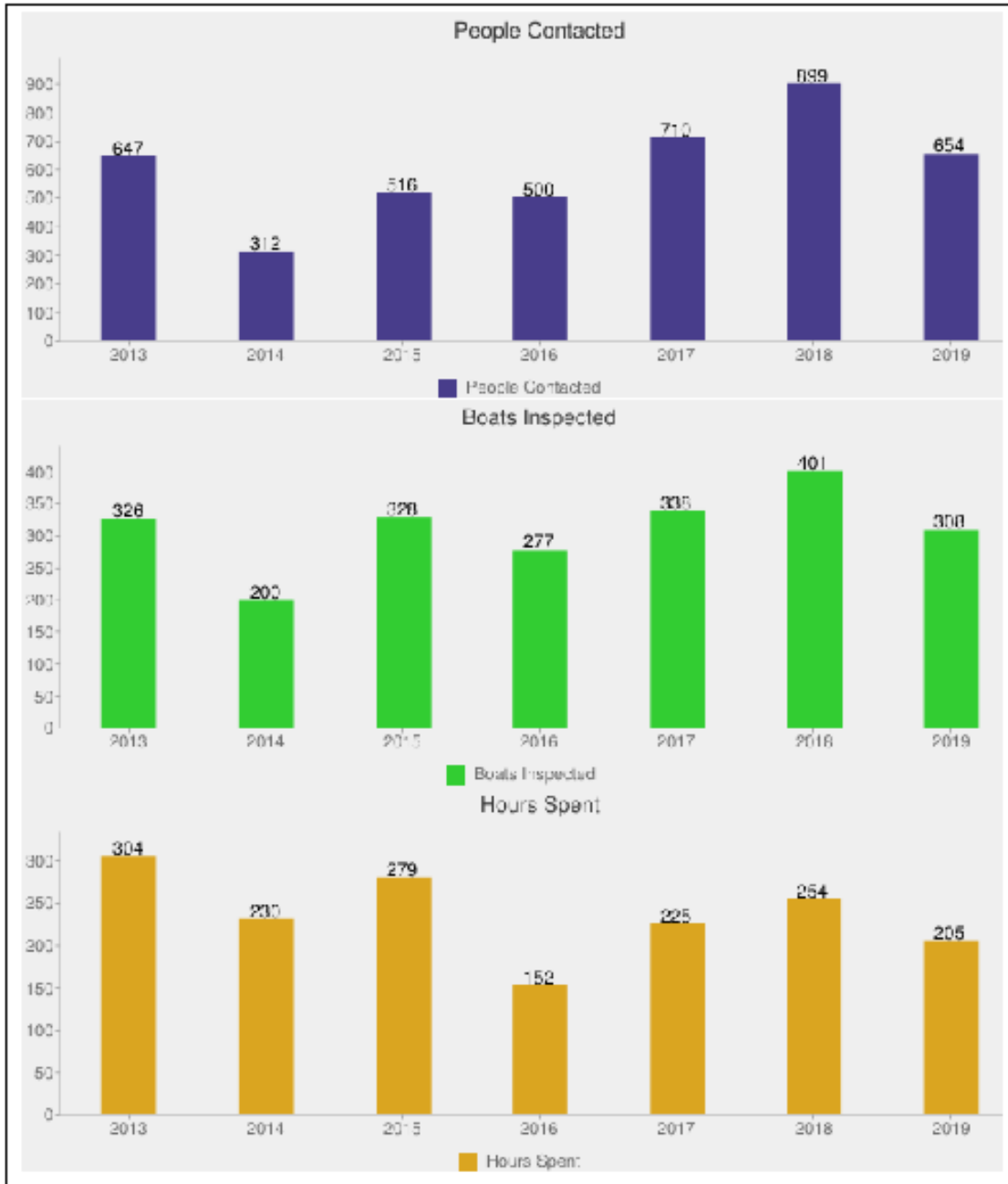
Environmental DNA (eDNA) is the detection of DNA shed from an organism. This method is primarily used to determine the presence or presence of AIS. It doesn't tell how much there is or if it's dead or alive. Ten total lakes were tested in Northwest WI in 2018 and 15 in 2019. Big McKenzie was the only one showing a positive hit.

Education and Outreach

The Washburn County LWCD delivered AIS education and outreach at numerous events and meetings for a variety of audiences including:

- ✓ Numerous Lake Association/District Meetings
- ✓ Statewide AIS Coordinator Meetings
- ✓ On-site visits, phone calls and emails with private landowners
- ✓ Master Gardeners and Twilight Tour
- ✓ Monthly Land Conservation Committee Meetings with Co. Board members
- ✓ Monthly Washburn Co Lakes and Rivers Assn Meetings
- ✓ Minong Town Lake Committee Meetings
- ✓ Northwest WI Lakes Conference
- ✓ Long Lake Chamber
- ✓ Learn about your Lakes Program
- ✓ Resort Owners
- ✓ Bait shop Dealers
- ✓ WI Land and Water Conservation Conference
- ✓ Northwest WI Lakes Conference
- ✓ Birchwood Charter School
- ✓ Spooner School-8th grade
- ✓ Shell Lake Hatchery Day-4th grade
- ✓ Northwood School and Canoes on Wheels (COWS) 6-8th grade
- ✓ Ernie Swift Camp-Minong
- ✓ Hunt Hill Audubon Sanctuary
- ✓ Township meetings
- ✓ City of Shell Lake
- ✓ Public Meetings with WI DNR
- ✓ St. Croix Red Cedar Cooperative Weed Mngt Area Meetings
- ✓ St. Croix Basin AIS team
- ✓ Local Newspapers
- ✓ Lake Association Newsletters
- ✓ The Source Magazine
- ✓ Washburn County LWCD website

Washburn County Land and Water Conservation CBCW Summary Data





Washburn County
Planning, Land & Resource Management Department

August 22, 2019

Douglas Rouzer
2012 20th CTH G.
Comstock, WI 54826

Dear Mr. Rouzer:

This letter is in regards to the existence of an exotic invasive species on your property called Japanese Knotweed. Our intent of this letter is to inform you of the existence, growth habits, the concerns with this species and why it is becoming a problem on many properties in the county. Attached is a very informational pamphlet specific to Japanese and Giant Knotweed. Please review this pamphlet.

This plant was originally introduced as an ornamental and planted in landscaping for many years. We are finding this plant to be escaping into lawn areas and establishing wild populations, resulting in detrimental impacts to our natural resources and property values. The WI DNR has adopted a new rule regulating these types of exotic invasive species. This new rule, Chapter NR 40, makes this plant illegal to transport, gift, trade or cultivate for sale. Unless it is a very new small growing stand, never attempt to dig this plant out and please be cautious when trimming back this plant. It can root from cut stems. If the cut stems are deposited elsewhere they may establish somewhere else on your property. These are the most concerning sites because wild sites expand very rapidly.

We recommend eradication of the stand on your property. Eradication is not easy and can take many years as this plant has an extensive root system that is very hard to kill. We can offer assistance in eradication by guiding you through the most effective treatment methods. We advise you to begin some control efforts as soon as possible.

If you have further questions or are interested in meeting regarding this matter, I would be happy to meet with you to discuss impacts of the plant and effective control measures.

Feel free to email me at lburns@co.washburn.wi.us or call the number below.

Thank you,

Lisa Burns- Conservation Coordinator
Washburn Co. Land & Water Conservation Department
715-468-4654

Encl.

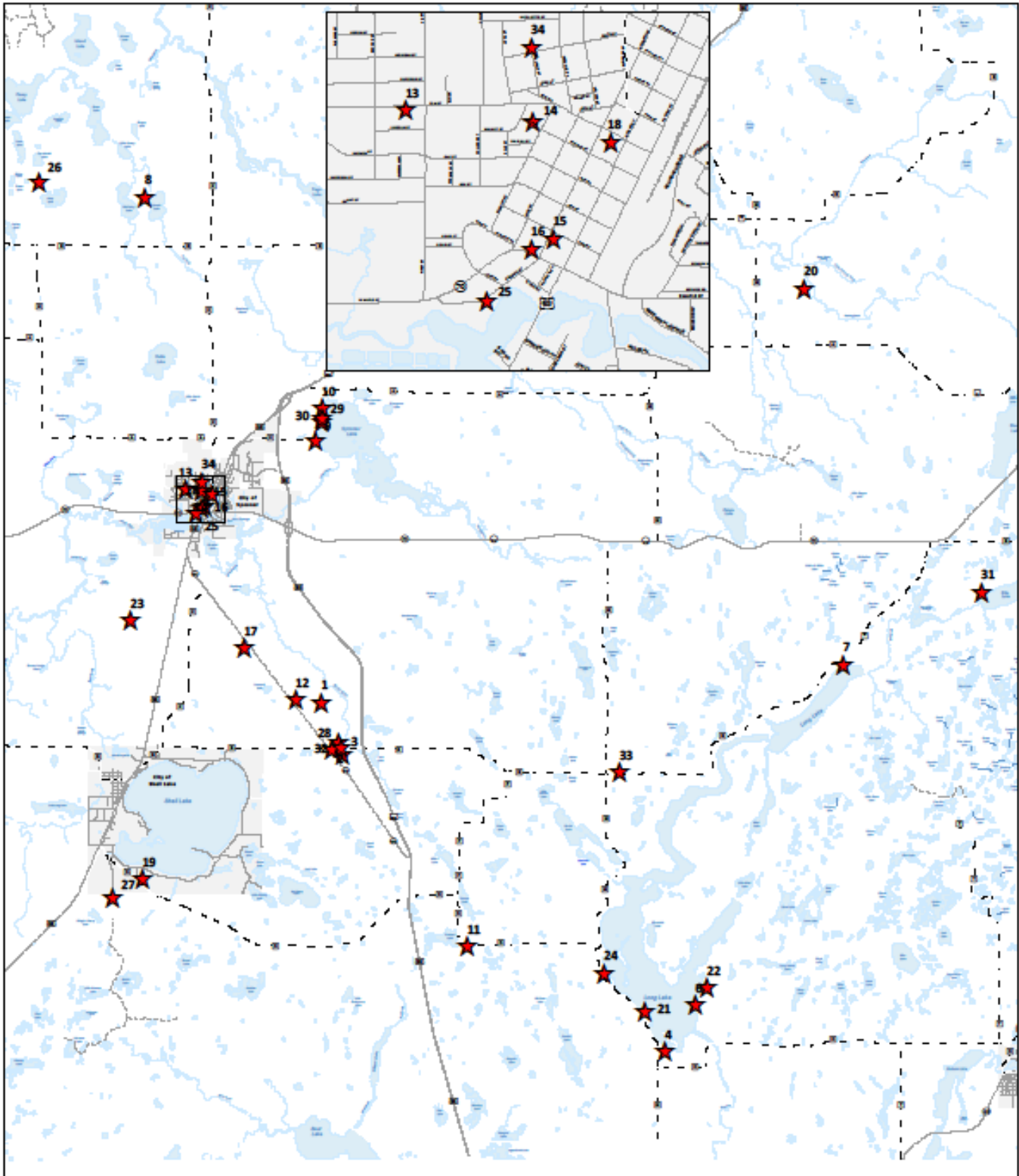


Japanese Knotweed
Washburn County, Wisconsin
December, 2019

★ Japanese Knotweed Site



WASHBURN COUNTY
LAND & WATER
CONSERVATION DEPT





Mark Your Calendar!

Invasive Yellow Flag Iris Education Event

The Washburn County Land Conservation Department is hosting a FREE public event to educate the public on Yellow Flag Iris identification and control methods. Yellow Flag Iris is starting to show up more and more along shorelines. The brilliant yellow-flowered plant can alter wildlife habitat and species diversity. All parts of this plant are poisonous, which results in lowered wildlife food sources in areas where it dominates. Blue Flag Iris is the native Iris landowners want to have along their shoreline.



WHAT TO EXPECT:

- * Education on the problems it creates
- * Identification and control
- * How shore land owners are dealing with it
- * Training will be held outdoors on Leesome Lake
- * Dress for rain or shine
- * Bring a kayak, canoe if you have one. Pontoon will be available

Date: June 18, 2019
Time: 1:30-3:30pm
Where: Leesome Lake
W3995 Leesome Lake Road, Sarona 54870

***Please Register with Lisa Burns**
715-468-4654
lburns@co.washburn.wi.us



Blue Flag Iris- want to see this on shorelines

Washburn County Zebra Mussel Monitoring Efforts

Decontamination Station Locations

Bass Lake (Casey) (1)
Bear Lake (1)
Big McKenzie Lake (1)
Cable Lake (1)
Long Lake (4)
Lower McKenzie Lake (1)
Mathews Lake (1)
Nancy Lake (1)
Potato Lake (1)
Spooner Lake (1)
Stone Lake (1)
Washburn County Total: 14

Zebra Mussel Plate Sampler Lakes

Bass Lake (Casey Township) (2018, 2019)
Bear Lake (2019)
Big McKenzie Lake (2017, 2018, 2019)
Chicog Lake (2017, 2018, 2019)
Gull Lake (2018, 2019)
Horseshoe Lake (2019)
Long Lake (2017, 2018, 2019)
Lower McKenzie Lake (2017, 2018, 2019)
Mathews Lake (2017, 2018, 2019)
McKinley Lake (2019)
McLain Lake (2017, 2018, 2019)
Middle McKenzie Lake (2017, 2018, 2019)
Minong Flowage (2019)
Nancy Lake (2018, 2019)
Pear Lake (2017, 2018, 2019)
Pokegema (2019)
Red Cedar Lake (2017, 2018, 2019)
Slim Lake (2019)
Spooner Lake (2018, 2019)
Trego Lake (2017, 2018, 2019)
Twin Lakes (2017, 2018, 2019)

Zebra Mussel Veliger Testing Lakes

Bass Lake (Casey Township) (2018, 2019)
Big McKenzie Lake (2017, 2018, 2019)
Birch Lake (2017)
Deep Lake (2017)
Island Lake (2019)
Long Lake (2019)
Lower McKenzie Lake (2019)
Middle McKenzie Lake (2018)
Nancy Lake (2019)
Pokegama Lake (2017)
Rocky Ridge Lake (2017)
Spooner Lake (2018, 2019)
Tozer Lake (2017, 2018, 2019)
Trego Lake (2017)

Environmental – DNA Testing (EDNA)

Bass Lake (Casey Township) (2018)
Big McKenzie Lake (2018, 2019)
Gull Lake (2018, 2019)
Long Lake (2018)
Lower McKenzie Lake (2018, 2019)
Middle McKenzie Lake (2018, 2019)
Tozer Lake (2018)
Trego Lake (2018)

Aquatic Invasive Species-Check your equipment before storage

With open water season winding down, recreational water equipment is being removed from the water for the year. It is crucial everyone continues to take the proper steps to make sure all equipment is cleaned properly to prevent the spread of aquatic invasive species.

Zebra mussels in particular, are extremely invasive organisms and are currently established in Big and Middle McKenzie Lakes. 2019 has shown more have inhabited the two lakes. Landowners have reported finding thousands of them covered on bottom of boats, motors and docks. Monitoring plates that citizens use on the McKenzie Chain of lakes, are reporting an increased population than years past. Zebra mussels reproduce quickly, remove important food sources for other water-living organisms and destroy motors and water intake pipes which can be very expensive to repair. Depending on conditions, they may survive out of water from several days to several weeks. To date, no other lakes in Washburn or Burnett Counties have found zebra mussels.

The following steps should be made when taking equipment out of the water for winter storage:

1. Inspect and remove all plants, mud or other debris found equipment that has been sitting in water: dock posts, wheels, boats, rafts, pontoons, kayaks, jet skis.
2. Drain all water if possible.
3. Spray all equipment (including live wells) with a pressure washer sprayer. This will help get unwanted invasive species that are hanging on tight or that you can't see.
4. Run water pumps and start motors out of water to flush out remaining water out of the cooling system.
5. Spray down your equipment with a bleach/water solution, including the inside of live wells. One tablespoon of bleach per gallon of water and let it air dry to help kill unseen hitchhikers.
6. Talk to your own service provider and neighbors about taking these steps.
7. If you find something suspicious, take a picture, bag it and contact Lisa Burns, Conservation Coordinator with Washburn County at 715-468-4654 or lburns@co.washburn.wi.us.

Decontamination Station Frequently Asked Questions

1. What is decontamination?

- a. It is the process of removing all aquatic plants and animals, including materials that may contain or transmit aquatic invasive species (AIS) beyond physical removal or other methods.

2. What is a decontamination station?

- a. The station may consist of high temperature water (140 degrees or more) applied with a pressure washer by trained personnel or a recommended chemical solution applied with a low pressure sprayer, or other techniques or devices.

3. Why have a decontamination station?

- a. Hand removal is effective at removing plants from watercraft equipment and removes small animals. Decontamination is another tool to help kill invasive species that are not visible or very difficult to see (zebra mussels and spiny water fleas).

4. Who owns a boat landing?

- a. Boat landings can be owned by various entities, including a private citizen, township, state or federal government. Permission to install a decontamination station must be approved by the landing owner.

5. Who maintains the decontamination station?

- a. Citizen members of a lake association or district change the solution to the recommended mix of 2 tablespoons bleach per gallon of water. They are trained to properly apply the solution to equipment.

6. What is the concentration of bleach?

- a. Standard bleach is 52,500 ppm chlorine, while the bleach concentration being used here is ~500 ppm. Reported in percentage, regular strength household bleach is 5.25% sodium hypochlorite while this solution is 0.05% sodium hypochlorite.

7. Where should the decontamination station be installed?

- a. It is recommended to be installed away from the launch area and where vehicles use an area for turn-around/back up. If there is a sloped launch, it is installed away from the slope, upward on land.

8. Are there runoff issues?

- a. A fine mist of the bleach/water solution is applied using a hand-pump sprayer. The solution covers the boat and trailer and is thoroughly applied around its perimeter. It evaporates quickly and no runoff into the lake occurs. There is no harm to the lake once the boat/trailer goes into the water.

9. Will it kill grass?

- a. The concentration of the bleach solution being used is low enough that it should not kill grass. A much stronger solution (1 cup bleach/gallon vs 2 tablespoons/gallon) is often used to clean vinyl siding on houses with no effect on nearby grass and landscaping.

10. I'm worried that this decontamination method will harm my boat/equipment.

- a. There are no known cases of damage from properly using any decontamination method. As stated in #9 an even higher solution is recommended to clean vinyl siding on a house. The WI DNR uses this solution on all of their boating equipment every day and tournament fishing boats have been sprayed down and have shown no harmful effects.

b. Ranger Boats: *“At any rate—household bleach at full concentration is not going to harm the gel coat when used during washing and rinsed off.”*

c. Tuffy Boats: *“The described bleach solution is 100% safe on all gelcoat applications.”*

11. I'm worried that the bleach/water solution in my live well will harm fish I keep in there.

- a. Between the low initial concentration of the applied solution, the off-gassing of the chlorine while sitting, and then the dilution of any residual chlorine, the likelihood that fish would be impacted by the bleach is very low.
- b. An alternative would be to use ice to keep fish fresh until you get home.

12. I don't think that this will make a difference.

- a. The vast majority of invasions are human mediated and theoretically preventable. Each prevention action we take, reduces the probability of a new invasion by a boat moving aquatic invasive species.
- b. Recreational boating is a way AIS move around and once they are here, we all share a responsibility to be doing everything we can to prevent their spread.

13. What are people doing about other pathways? That's a big reason AIS moves around.

- a. Ballast water – Recently approved regulations will facilitate the placement of ballast water treatment technology on ocean going shipping vessels.
- b. Ducks and turtles – If ducks and turtles were moving AIS, we'd expect a much more random distribution. More small ponds and lakes without access would contain AIS. As it stands, lakes that have boat ramps have AIS, indicating they are much more likely to be moved by people with boats than ducks and turtles.
- c. People letting pets go-The national Habitattitude campaign promotes responsible pet ownership and outlines alternatives to pet release. Wisconsin uses this program to develop pet rehoming networks so that people have alternatives to pet release.

As of February 2018, Washburn and Burnett Counties passed an ordinance that states “if a decontamination station is available at a boat landing, the boater is required to use it”.



For more information contact:

Burnett County AIS Coordinator, Tom Boisvert at 715-349-2109 Ext. 1382

Washburn County AIS Coordinator, Lisa Burns at 715-468-4654



Washburn County Ordinance Violation Report Form

(*Ordinance Reference: *Chapter 46, Article IV Section 46-49*)

This form shall be used by Clean Boats Clean Waters inspectors and volunteers to report boaters and recreational enthusiasts that refuse to use the decontamination station at a boat landing, if one is present. If you feel threatened call 911.

*Please provide the following information (Your information will stay confidential):

Inspector Name:

Address:

Phone Number:

Date & Time:

Boat Registration Number:

License Plate Number:

Lake Name and Location Description (if numerous landings):

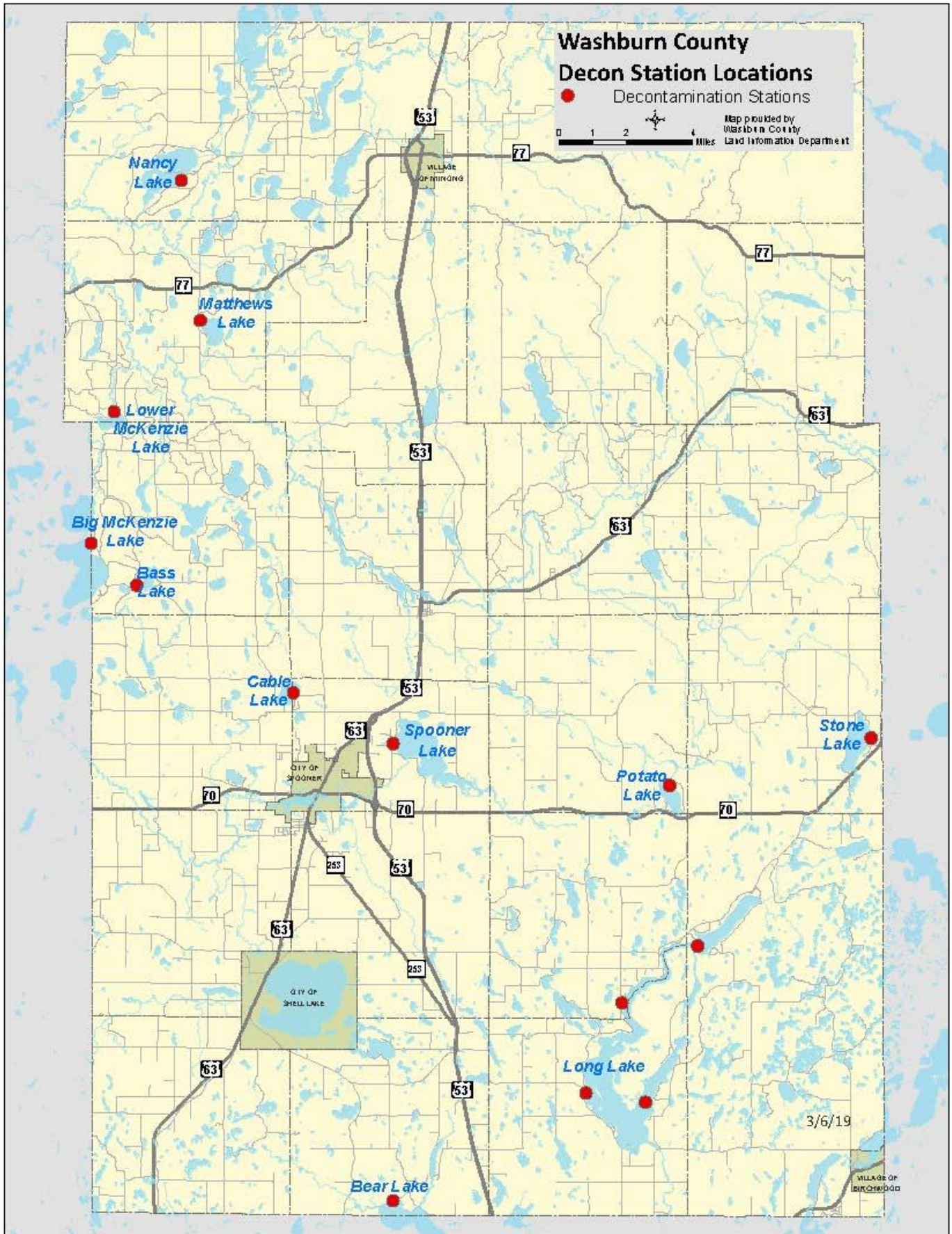
Testimony- Explain what was said to the boater and why he/she didn't comply. Please provide as much information as possible.

PLEASE MAIL THIS FORM TO:

Washburn County Sherriff Dept. c/o Recreation Officer

421 Hwy 63

Shell Lake, WI 54871

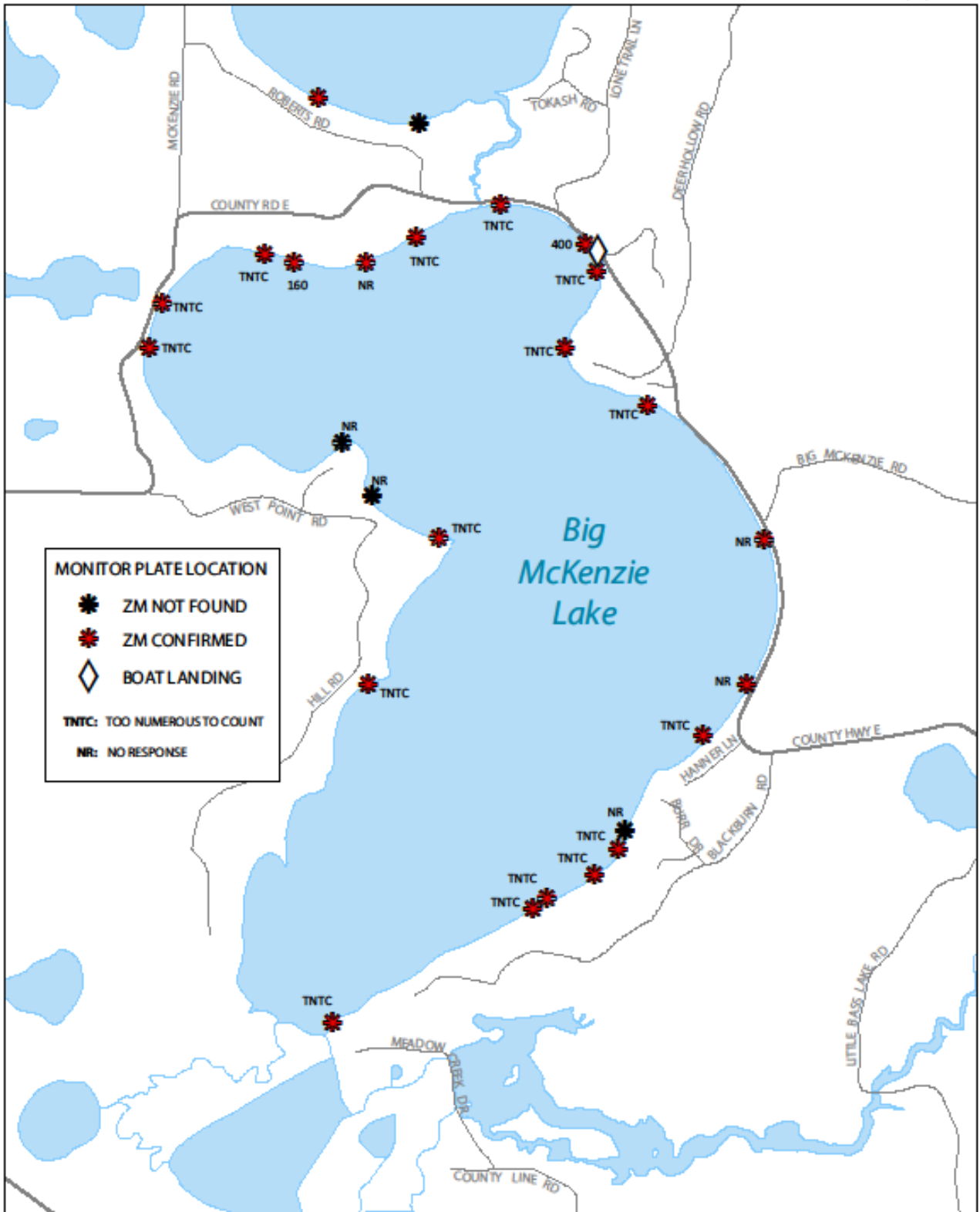


2019 Zebra Mussel Pictures



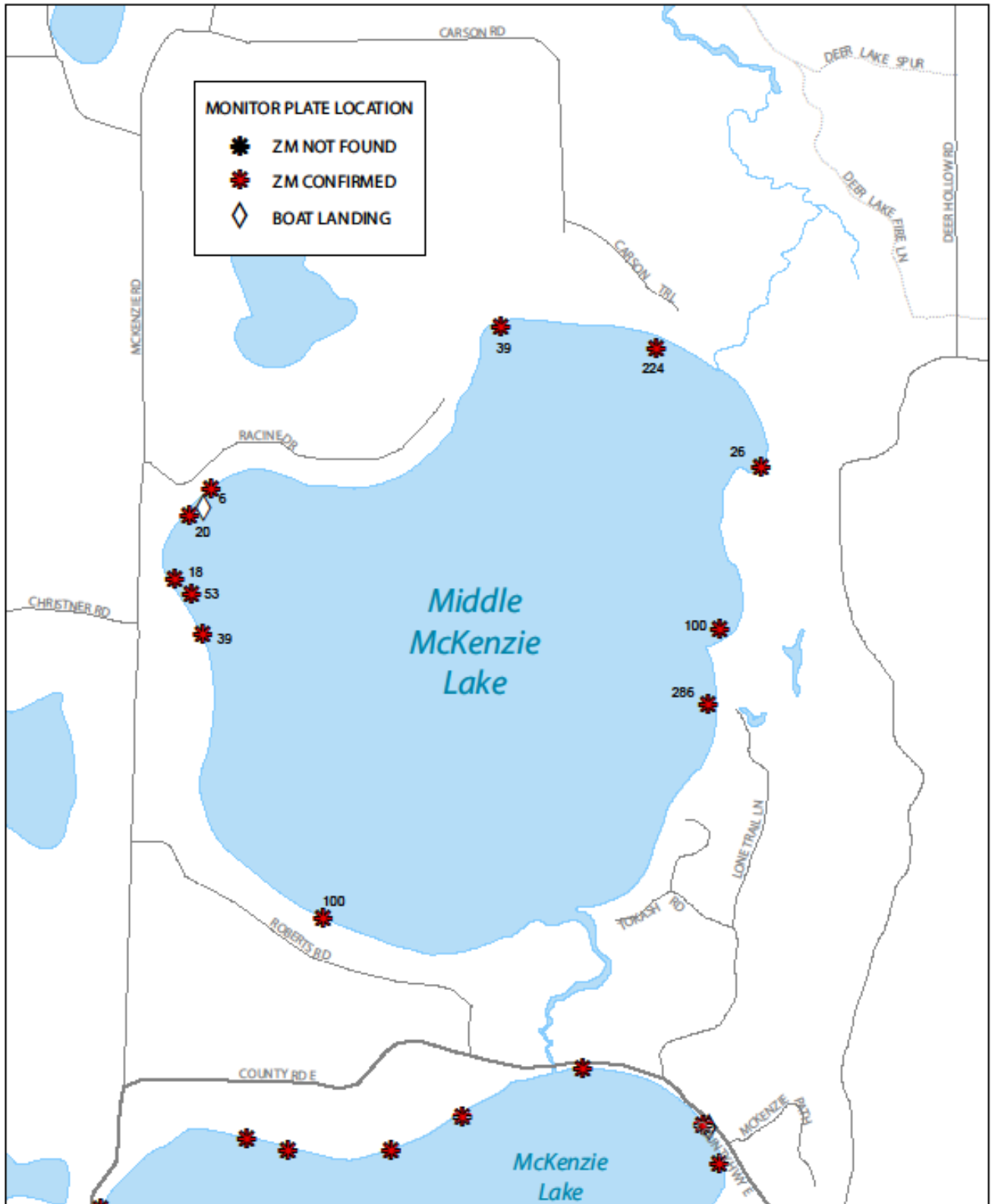
2019 Big McKenzie Lake
Total Zebra Mussel Plate Sampler Locations & Results

Date: 12/30/2019



2019 Middle McKenzie Lake
Total Zebra Mussel Monitor Sampler Locations & Results

Date: 12/30/2019



3/18/2019 9:00am-12:30pm

Agenda –Zebra Mussel Management Team

The Management Team will:

- a. Determine the extent of the infestation and pathways for potential spread.
- b. Determine the risk to the environment, human health, economy, etc.
- c. Identify constraints and limitations, including jurisdictional issues, legislative authority, funding, permitting, personnel training, access to private lands, gaps in knowledge, and ecological uncertainties.
- d. Determine if eradication/control is possible and select the appropriate method(s) to be employed.

Meeting Purpose: Discuss 2019 Monitoring, Prevention and Outreach Plans

* Updates

Rapid Response Grant
Big McKenzie ZM origin
2018 eDNA Sampling Results

* 2019 Monitoring Plan

e-DNA
Early Detection
ZM Sampler Plates
Veliger Testing
Others?
Field Day Lower McKenzie (Early July)

*BREAK

* CBCW

Grants Received
Inspections and Hot Water Power Washer
Workshop

*Decontamination Stations

Outreach
FAQ sheet

*Outreach

Bait Shop & Resort Assistance

07/10/2019 Agenda – McKenzie Lakes Area ZM Management Team

9:30am-3:00pm

Lower McKenzie Lake (meet at boat landing-Map attached)

***PLEASE BRING A LIFEJACKET**

The Management Team will:

- a. Determine the extent of the infestation and pathways for potential spread.
- b. Determine the risk to the environment, human health, economy, etc.
- c. Identify constraints and limitations, including jurisdictional issues, legislative authority, funding, permitting, personnel training, access to private lands, gaps in knowledge, and ecological uncertainties.
- d. Determine if eradication/control is possible and select the appropriate method(s) to be employed.

Meeting Purpose: Use DNR Early Detection monitoring techniques to sample for zebra mussels and other aquatic invasive species in Lower McKenzie Lake.

1. Meet at landing and discuss monitoring strategy and break into groups
2. Conduct monitoring
 - a. Veliger tows, E-DNA collection, snorkel, rake throws, check docks, etc.
 - b. Come back to landing and decontaminate all equipment
3. Lunch/Discussion at McKenzie Landing Restaurant
 - a. What was found?
 - b. Rapid Response Grant Update- Tm Boisvert-Burnett Co AIS Coordinator and Lisa Burns
 - c. Frequently Asked Question Document-Discussion
 - d. Updates-Roundtable
4. Future communication/meetings
 - a. Outreach efforts and future agenda items

AGENDA

Citizen Lake Monitoring Network – Aquatic Invasive Species Monitoring

May 18, 2019

9:00-11:30 am

Spoooner DNR

Lisa Burns-Washburn Co. Conservation Coordinator

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Welcome & Introduction

- What lake will you monitor?

Aquatic Invasive Species information

- Identification
- Look at plant and animal samples

Break: 10 Minutes

Citizen Monitoring

- Why monitor for aquatic invasive species?
- Setting up a monitoring team
- How and when to monitor
- Distribute kit and discuss forms

Closing

- Summarize workshop activities
- Answer any questions



FREE Clean Boats Clean Waters Workshop

When: April 20, 2019

Where: Spooner DNR (810 West Maple Street, Spooner 54801)

Time: 9:00am-11:30am

The Washburn County Land and Water Conservation Department is hosting a free Clean Boats Clean Waters (CBCW) workshop. Through this program, citizens are trained to be watercraft inspectors by educating boaters and anglers about aquatic invasive species (AIS) such as Eurasian water-milfoil and zebra mussels. Participants will receive hands-on training of invasive species identification and instructions on how to organize a volunteer inspection program. There will also be some discussion on the Washburn and Burnett County ordinance, regarding decontamination requirements at boat landings.

*To register, please contact Lisa Burns at 715-468-4654 or email lburns@co.washburn.wi.us.



Birchwood Students help control Invasive Plant

In late July, the Birchwood Blue Hills Charter School (BBHCS) collaborated with the Red Cedar Lake Association and the Washburn County Land and Water Department to raise purple loosestrife control beetles for release into a wetland area.

Purple Loosestrife is an aquatic invasive plant that appeared in the United States in the early 1800s from Eurasia. Purple loosestrife is a woody plant with a square stem and tall purple spike with tiny purple flowers. Introduced as a garden perennial plant, the aesthetically pleasing woody invasive has aggressive roots and strong tolerances to water quality and diverse environmental conditions. The plant chokes out native species by blocking off waterways and produces an astonishing one million seeds per year extending its reach every season. It can be found growing along shorelines or in ditches.

In late April, purple loosestrife rootstock was dug up. The Birchwood students planted the roots into large pots with soil. Twenty buckets were set into two large plastic swimming pools with water to grow. Fine mesh nets were placed over the plants to help them grow straight. In July, the beetles were placed inside each netted plant. The beetles mate, lay eggs, and hatch to create a new population. They devour the stem and leaves of the plant, effectively weakening the plant and eventually killing it. These beetles have been known to fly as far as a mile to find food. They will not cover your windows like the Asian lady beetle, and you likely won't even see them unless you're searching for them.

The newly hatched beetles were placed into individual nets and the pots containing new beetles were moved out to Red Cedar Lake only a few miles from where they were raised. Release points are determined from where past infestations were documented. Students, county staff, and members of Red Cedar Lake Nature Committee teamed up in canoes to release 1,000 beetle into an infested area of purple loosestrife. Since the project began in 2011, approximately 30,000 biocontrol beetles have been released in Red Cedar Lake and wetlands in the surrounding area.

It's an incredible experience to see an active group of students invested and working hard to protect the lake. It's heartening to see youth showing passion and interest in protecting our natural resources. A special thanks to advisor, Jenny Landes, for continued interest this project.

For more information on the program or other invasive species, please contact Lisa Burns at lburns@co.washburn.wi.us.

2019 Newspaper Article

Japanese Knotweed: Hopefully not on your property!

Summer is fading and water enthusiasts are slowing their trips to the lakes and rivers. Unfortunately, invasive species don't always slow their trek when the weather becomes cooler. One particular species, Japanese Knotweed, is one to be on the watch for during the next couple of weeks along shorelines, ditches and lawns.

Japanese Knotweed, native in eastern Asia, was once a common ornamental sought for its "green screen" and lilac-like flowers. Now it presents a tremendous threat to Wisconsin's waterways and is listed as one of the world's 100 worst invasive species.

Japanese Knotweed is recognizable by its hollow bamboo-like stem. This time of the year, Japanese Knotweed is fairly easy to identify. Besides the bamboo-like stem the leaves are alternate, egg shaped, dark green and 4-5" long. Numerous small white flowers will be branching off of the stem until late September. Winter is also a good time of the year to identify Japanese Knotweed, as the stems are rust-colored.

Being a very frost susceptible species, it causes this plant to die back leaving only reddish hollow bamboo like canes above the ground throughout the winter. Unfortunately, the cold winter weather does not kill the plant. With the arrival of spring, Japanese Knotweed begins to grow back from its enormous root system and takes full advantage of the new growing season. During peak growing season, it can grow 2-4 inches per day, reaching a maximum height of 10-20 feet in one growing season.

Its root system can grow 9 feet below ground and expand 60 feet wide. This leads to a decline in native plant growth, displacing wildlife habitat and food. Homeowners can experience problems, as the invasive root system and strong growth can push up through and damage concrete foundations, buildings, roadsides and retaining walls.

Control of Japanese Knotweed is very difficult once established. It is important to do something immediately if a small population is forming on your property. Even small patches of it rarely take less than a year to eradicate, even with multiple attempts. There are numerous control methods to implement on established sites, including manual/mechanical and herbicide application. Herbicide use over Wisconsin always requires a

permit from your regional WDNR Aquatic Plant Manager. Combining both methods allows more options and flexibility.

If you would like more information or would like to report existing infestations of Japanese Knotweed, please contact Lisa Burns at 715-468-4654 or email pictures to burns@co.washburn.wi.us for confirmation.

Controlling Purple Loosestrife

Purple Loosestrife is an invasive wetland plant that usually grows along a wet ditch or shoreline. Control of this invasive can be achieved by releasing beetles (*Galerucella spp.*) in an area where the plant is growing. These tiny beetles only eat purple loosestrife, and do not eat native plants. These versatile beetles can be used in various sites of large or small infestations.

WCLRA has worked with the Washburn County Land and Water Conservation Department for several years, releasing purple loosestrife beetles along the Yellow River. In August 2019, AIS Intern Hunter Denison and a WCLRA volunteer canoed and released beetles between the east Highway 70 bridge and Spooner. Hunter was encouraged to see a decline in the number of purple loosestrife plants since the summer of 2018. For more information about purple loosestrife or how to control it on your shoreline or river front, contact Lisa Burns 715-468-4654 or lburns@co.washburn.wi.us.



Photo by Paul Swawinski

WCLRA Bylaw Changes

At the Annual General Meeting, some changes were passed to help clarify language in the WCLRA bylaws. Two additional articles in the bylaws were modified to allow e-mail to notify members of the Annual General Meeting or a special meeting and allow directors to participate in Board meetings via telecommunications.

Check Your Equipment Before Storing

by Lisa Burns

With open water season winding down, recreational water equipment is being removed from the water for the year. It is crucial that everyone continue to take the proper steps to make sure all equipment is cleaned properly to prevent the spread of aquatic invasive species (AIS). Zebra mussels, in particular, are extremely invasive organisms and are currently established in Big and Middle McKenzie Lakes. 2019 has shown increased infestation in the two lakes.

Landowners have reported finding thousands of them covering bottoms of boats, motors and docks. Monitoring plates that citizens use on the McKenzie chain of lakes, are showing an increased population over past years. Zebra mussels reproduce quickly, remove important food sources for other water-living organisms and destroy motors and water intake pipes which can be very expensive to repair. Depending on conditions, they may survive out of water from several days to several weeks. To date, no other lakes in Washburn or Burnett Counties have found zebra mussels.

The following steps should be made when taking equipment out of the water for winter storage:

1. Inspect and remove all plants, mud or other debris found on equipment that has been sitting in water: dock posts, wheels, boats, rafts, pontoons, kayaks, jet skis.
2. Drain all water if possible.
3. Spray all equipment (including live wells) with a pressure washer sprayer. This will help get unwanted invasive species that are hanging on tight or that you can't see.
4. Run water pumps and start motors out of water to flush remaining water from the cooling system.
5. Spray down your equipment with a bleach/water solution, including the inside of live wells. Use one tablespoon of bleach per gallon of water and let it air dry to help kill unseen hitchhikers.
6. Talk to your own service provider and neighbors about taking these steps.
7. If you find something suspicious, take a picture, bag it and contact Lisa Burns, Conservation Coordinator with Washburn County at 715-468-4654 or lburns@co.washburn.wi.us.

Outreach: 4th grade Hatchery Day, Yellow Flag Iris Workshop, Master Gardner workshop, Lower McKenzie Lake Field Day, e-DNA testing Digging Purple Loosestrife rootstock and Purple Loosestrife Beetle release.



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