

# HORSEHEAD LAKE PROTECTION & REHABILITATION DISTRICT NO 1



September 1, 2023

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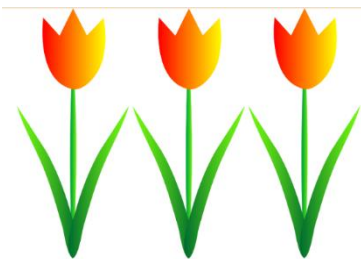
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[www.horseheadlake-wi.org](http://www.horseheadlake-wi.org)

## Annual Meeting of August 19, 2023

- Our annual meeting was attended by 28 people (21 voting members) at the Lake Tomahawk Pavilion. All motions passed unanimously.
- We again voted to stock blue gills and black crappies in the spring of 2024.
- In June 2024, Onterra will conduct an early season aquatic invasive plant water survey.
- The balance in the accounts at year end of August 31, 2023 is \$41,105.46.
- The next annual meeting is August 3rd, 2024. Please mark your calendar.
- Hans Delius performed an audit of the financial records, and everything looked to be in good order.

## Aerator Update

The district voted to go forward with securing a \$45,000 loan at 5.75% to finance the second aerator.

Financing will be provided by the Board of Commissioners. We have also secured a grant of \$29,780.

We are moving forward with hopes of getting the 2<sup>nd</sup> aerator operating for the coming winter. However, much is left to be done, including the electrical hookups and installation. The loan has to be secured before we can get aerator installed.

## Guest Speaker at Annual Meeting

Stephanie Boismenu from Oneida County gave a very informative presentation on invasive species. She had hosted the June paddle around the lake looking for invasive species. Per the information previously provided, the yellow iris you see around the lake are very invasive and choke out native plants and animal habitat. Enclosed is a map illustrating where Stephanie mapped out locations where the yellow iris was found and this map appears on our website. If you have yellow iris on your shoreline, at a minimum, please cut the yellow

flowers in the spring and early summer. This will help prevent further spread. Gloves should be worn when handling the plant as the sap can cause skin irritation in some people. Also, be aware that the yellow iris plant's roots and leaves are poisonous to animals.

Stephanie discussed many of the invasive species around the area and in other lakes. This was a good reminder to make sure your boat is free of plants and water from other lakes to prevent invasive species from spreading.

### Two Aerators Winter Open Water

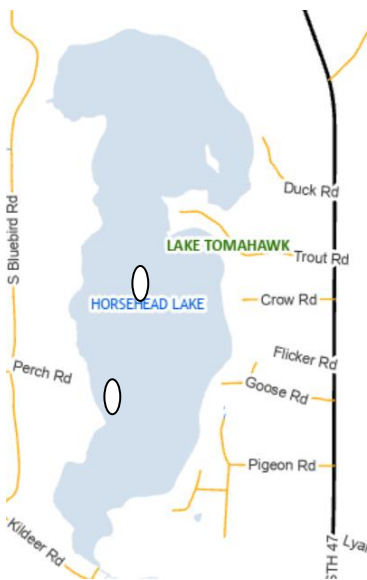


Please take note that we will likely have 2 aerators on the lake this winter, with 2 large spots of open water. This will affect snowmobiling on the lake.

Please be sure to stay away from these areas and warn any guests about the open water danger on the lake. Also note that several lake

residents operate aerators around their docks.

The below are approximate locations of the aerators open water:



### Catch and Release



Residents voted to recommend only catch and release for blue gills and black crappies through 2024, since we are continuing to stock fish.



### Boat Landing

Just a reminder, power loading boats causes the lake bottom to be pushed into a berm at the end of the landing. Please avoid power loading your boat. There is no solution for this as we have a shallow landing with a sandy bottom.

### Wake Boarding Boats

Wake Boarding Boats are becoming a concern for Wisconsin Lakes due to the damage it causes to the lake bottom. As shared at the Annual Meeting, both Oneida County and the Town of Lake Tomahawk are discussing limiting the boats on area lakes. Additionally, the Town of Lake Tomahawk has granted our district the authority to enact regulations, since we are a shallow lake. These boats have a place, but not on shallow lakes where irreparable harm can occur.

Wake Boarding Boats are powerful boats with ballast tanks that create larger than normal wake for water skiing, wake boarding and tubing. The problem is that these boats can easily

scour the bottom of a lake, especially a lake like ours that has a maximum depth of 11 feet and an average depth of 8 feet. These boats can also cause shoreline erosion, negatively affect shoreline habitat and species, and increase water turbidity. Research has shown where these boats have operated lake bottoms are now a wasteland, where previously aquatic vegetation and fish have thrived.

### **Commissioner Meetings**

The Commissioners will be meeting the following dates for the 2023-2024 year:

- November 18th, 2023
- April 6th, 2024
- July 6th, 2024
- August 3<sup>rd</sup>, 2024

Per statute, the commissioner meetings are a time for the commissioners to do work and vote on how to manage the district. Citizens have a right to attend and observe these board meetings, but citizens do not have a right to participate or vote at these meetings. However, we always allow time for citizen input on the agenda for anyone attending to

bring up concerns. You are also welcomed to bring concerns to any of the commissioners at any time.

### **Shoreline Living Booklet**

These were handed out at the annual meeting but a free copy of Shoreline Living can be viewed with the following web link:

[http://midwestglaciallakes.org/wp-content/uploads/2020/02/VBCD\\_2020\\_ShorelineLiving\\_WEB.pdf](http://midwestglaciallakes.org/wp-content/uploads/2020/02/VBCD_2020_ShorelineLiving_WEB.pdf)

You can also find it by searching Shoreline Living Booklet and clicking on the Midwest Glacial Lakes link.

The publication provides tips on keeping your shoreline natural and healthy which helps to reduce lake phosphorous levels that lead to weed growth.

### **New Commissioners**

In addition to Dusten Tornow being elected to the Board, Laurie Barrett resigned, due to health issues in her family. We thank Laurie for her service to the board and wish her the best. The

chairperson has authority to appoint a new commissioner to the board when a person resigns. Thanks to Kevin Collins for being willing to step into the Secretary role and complete Laurie's term which will expire in 2025.



### **Weed Harvesting**

Weed harvesting was not done this year. Per our management plan, the lake was assessed by Deb Bursik, Dennis Batchelet and Tom Niebler and all agreed the weeds were not in need of cutting this year. Please see the attached note about what we have learned about weed harvesting.

### **Safe and Courteous Boating**

Please be sure to practice safe and courteous boating and jet skiing on the lake. The DNR regulates boat safety and prohibits operating your vessel within 100 feet of a shoreline, dock, raft, pier or restricted area greater than slow or no wake speed. It is unlawful to chase, harass or disturb wildlife.

Personal watercraft (such as jet skis) cannot be operated at faster than "slow, no wake speed" within 100 feet of any other vessel on any waterbody, 200 feet of shore on any lake and 100 feet of a dock, pier, raft, or restricted area on any lake.

**Because it is less than 400 feet between the south end of the island and the shoreline, this is a no wake zone for jet skis.**

### EMAIL ADDRESSES

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If we have your Email address, we can send you bulletins. If you are receiving this newsletter via US Mail, it is because we do not have your email address. Our secretary indicates we are mailing over 60 newsletters out. Please send your email address to [horseheadlakePRD.sec@gmail.com](mailto:horseheadlakePRD.sec@gmail.com) as this saves the district postage and copy costs.



### From the Chair By Dusten Tornow

Thank you for the opportunity to serve as a board member, I'm looking forward to getting more involved in keeping our lake healthy and great!

A little about myself: my family has been on the lake since Fall of 2020. We purchased the A-Frame on the west side of the lake, just north of the campground. It was largely neglected and overgrown, so it's been a labor of love - but we're finally getting to the point where we're doing more relaxing than working. We live in Wausau and enjoy the close proximity to our cabin.

### Our Volunteers

#### Webmaster:

Dusten Tornow

#### Aerator:

Dave Averbek

#### Secchi testing/water

#### sampling:

Kevin Collins

#### Dissolved Oxygen Testing:

Paul Bursik

#### Audit Committee:

Charles Konsitzke

### Did You Know?

Freshwater is 2.5% of the earth's total water. Most of the earth's water is salt water, 97.5%. Available freshwater on lake surfaces is .01% as most of the freshwater is underground. We are fortunate to be surrounded by this precious resource.

Sincerely,  
Dusten Tornow  
David Averbek  
Kevin Collins  
Lenore Lopez  
Jim Winkleman

# Aquatic Invasive Species Fact Sheet

## Yellow Iris (*Iris pseudacorus*)

### DO NOT PLANT!

**Caution:** All parts of this plant are poisonous to humans and animals due to high levels of glycosides. Protect skin as resin in the leaves and rhizomes can cause skin irritation. Unpalatable to wildlife and livestock.

**Threat:** Yellow iris is an aggressive non-native aquatic plant that escapes from cultivation into native habitats. It invades shorelines to wetlands to drier upland sites. It displaces native plants, alters habitats and reduces food for waterfowl and fish. Dense infestations traps sediment, clogs culverts, and alters hydrology.

**Wisconsin Status:** Yellow iris is a Restricted species under the Wisconsin Invasive Species Rule. It is illegal to introduce, give away, buy, sell, barter, transport, or transfer. Any person who owns land where yellow iris is present is encouraged to control the plant or contain it to the already infested sites, to reduce its population, and to foster an increase in desired species. Plant natives as an alternative.

#### Identification:

**Spread:** Seeds, rhizomes, rhizome fragments, and human activity.

**Height:** Up to 6 feet tall.

**Flowers:** Blooms April-July. Pale to bright yellow, up to 4 inches across. Three short petals in the center.

The three outer, petal-like lobes of the blossom are sepals patterned with light brown to purple veins or flecks.

**Leaves:** Sword-like, flat, erect, and linear with a sharply raised midrib.

**Fruit & Seeds:** Seed capsules up to 4 inches long, angular, glossy green to brown as it ripens. Contains dozens of pale brown seeds arranged in 3 rows. Seeds have a hard outer casing and can float.

**Roots:** Thick rhizomes spread extensively and form thick mats and networks that crowd out native species. Rhizomes can float, survive prolonged dry conditions, and fragments can form new plants.



**Native to:** Europe, western Asia, and North Africa.

**Ecological Impacts:** Yellow iris is a fast-growing and fast-spreading non-native aquatic plant that forms dense stands of robust plants. It invades shorelines and shallow water areas of lakes, rivers, streams, wetlands, bogs, swamps, ponds, and forest, ditches, and flood plains.

The dense, almost impenetrable, monotypic stands crowd out native plants, reduce habitat for wildlife and fish, reduce bird nesting and rearing sites, compact soil, and alter hydrology by trapping sediment.

Yellow iris does not provide food for native animals and contains large amounts of glycosides that are toxic to wildlife and grazing animals.

**Spread:** Spreads quickly by seeds that float and by underground rhizomes that send out new shoots above the ground and roots below. Stands of yellow iris develop thick

mats of rhizomes that can connect several hundred plants. Fragments of rhizomes that break off can also form new plants. Seeds, stems and rhizomes escape into natural areas by wind, water movement, earthmoving equipment, transplanting and other human activities.

**Similar Species:** When not in flower, yellow iris may be confused with native species such as blue flag iris, cattails, or sweet flag.



Photo Credit: Stephanie Boismenu

**Control:** Caution should be used if pulling out this plant as it causes skin irritations. Control efforts are most likely to succeed when plants are small and manageable. Use an integrated approach of monitoring for seedlings and re-growth and control efforts.

**Mechanical:** Removing flowers and seed capsules can prevent the spread.

Mowed plants will regenerate from the rhizomes, so plants must be cut multiple times to exhaust their energy reserves.

Digging is effective for removing small plants and plant populations. Remove as much plant debris as possible, particularly rhizomes. Dispose of in landfill or by burning. Plant natives in its place.

Caution: The disturbance associated with digging can result in shoreline and sediment erosion.

**Chemical:** Permits may be needed. Always check DNR regulations for the most up-to-date information regarding permits for control methods.

**To report a yellow iris location and to learn more, visit [www.dnr.wi.gov/topic/Invasives/](http://www.dnr.wi.gov/topic/Invasives/)**

This Fact Sheet was developed by Stephanie Boismenu, Aquatic Invasive Species Coordinator, Oneida County Land & Water Conservation Department in partnership with the Three Lakes Waterfront Association. (S.B., R2023)

Photo credits: Stephanie Boismenu

Reference: Wisconsin Department of Natural Resources: *Yellow iris (Iris pseudacorus)*: <https://dnr.wi.gov/topic/Invasives/fact/>

YellowFlagIris.html


## 06-19-23 AIS Monitoring

On 6/19/23, The AIS Team from Oneida County Land & Water Conservation Department and 3 Volunteers from Horsehead Lake District monitored the entire littoral area of the lake for AIS through visual observations from their canoes and kayaks. The invasive yellow iris was observed throughout the lake with a total of 20 individual points and 2 highly dominate beds recorded.


**Actions:** The AIS Team clipped yellow iris flowers and hand removed several individual plants.


### Legend:

#### **Area-Based Mapping:**

 Highly Dominant  
(2 beds Recorded)

#### **Point-Based EWM Mapping:**

 Single or Few Plants  
(20 Points recorded)

 Boat landing

Prepared by  
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AIS Coordinator & Conservation  
Technician,  
Oneida County Land & Water  
715-369-7835





## Weed Harvesting

Horsehead Lake has a high population of aquatic plants. At times, the plant population can become so dense that it interferes with boat travel. Horsehead Lake District is able to hire a mechanical harvester to remove some of the weeds, if necessary.

The need for harvesting is defined by submergent plants in the area being within 1 – 2 feet of the surface. In the past, if the weeds are matted on the lake and boats were unable to navigate around the weeds, they needed to be harvested. The majority of the northern portion of the lake is a conservation area and therefore not eligible for weed harvesting. Onterra has identified 144 acres that we are allowed to cut (see map 9 of the Management Plan), however our permit only allows no more than 75 acres to be harvested in a single year. Our lake totals 380 acres and so harvesting is allowed in less than 20 % of the lake. Weed harvesting cuts paths in the weeds to make navigation possible. (See Management Plan p. 94.) Harvesting does not mean all the weeds are cut, but generally a circular path in the main part of the lake is cut.

Fortunately, in recent years (2018 to present), the weeds have not needed to be harvested. The sole reason to cut the weeds is to make navigation possible – if the weeds cannot be boated around. In general, there is nothing healthy for the lake in cutting the weeds, which is why the DNR limits their weed harvesting permits. As was explained in the DNR Zoom conference, the DNR is tasked with maintaining the natural resource versus allowing people to adequately use the resource. Anytime a management action is taken, the lake can be adversely impacted. (DNR Zoom 33:40.)

There are two major negative consequences that mechanical harvesting can cause.

1. Much research has shown that shallow lakes (like Horsehead Lake) typically exist in either a turbid state or a clear water state. Turbid state lakes are dominated by algae while clear water state lakes are dominated by aquatic plants. Fortunately, Horsehead is in a clear water state. Weed harvesting can cause a lake to flip from a clear water state to a turbid state, which means the algae takes over. During the DNR presentation our district did via Zoom, we were told about a lake that did flip. (See Management Plan pp. 20, 54, and 84 and DNR Zoom 37:15).
2. Eurasian Water Milfoil (EWM) and other invasive species can be spread or introduced into the lake. As Onterra has stated, EWM could still be lurking in our lake, but it hasn't taken off. In 2007, EWM was found by the boat landing and in 2013 there were 4 additional locations found during a whole lake survey that included areas near the original aerator and close to the private outlot (south of Trout Road). Onterra was concerned that the weed harvester could be spreading it around the lake. (Onterra memo of 6/24/2013.) Fortunately, EWM has not been located in the last several surveys, but as Onterra has pointed out, that doesn't mean it is completely eradicated. During the surveys, not every plant in the lake is looked at. The Point-to-Point Surveys look at plant life every 52 meters and plot out 500 points in the lake, in a grid fashion. It is possible the EWM is between the various points. Furthermore, anyone we hire to come in and perform weed harvesting has undoubtedly been removing weeds from other lakes filled with EWM. We rely upon the vendors cleaning and sterilization practices to make sure their equipment is free from EWM, but we have no way of knowing that a plant is not hiding in their machine that can spread EWM in our lake.

Additionally, there are a multitude of other adverse effects from weed harvesting. The harvester, much like a huge combine going through the lake, churns up the water and lake sediment, also removing fish, fish habitat, invertebrates and amphibians. (See Management Plan p. 54). Not all weeds cut are captured by the mechanical harvester, leaving them floating on the lake and washing ashore. Studies have found that smaller fish tend to get caught up in the aquatic vegetation that the conveyor brings up. (DNR Zoom 34:20). Aquatic insects are

also impacted by weed harvesting (DNR Zoom 35:05) which has trickle down effects on the fish population. Because weeds on Horsehead Lake have not needed to be harvested for a period of years, insect communities and fish communities are likely rebounding to natural levels. (DNR Zoom 35:45). Harvesting does cause the sediments to be resuspended causing increased turbidity and water column nutrient levels.

Previously it was thought that removing weeds from the lake can reduce the sediment on the bottom of the lake, thus reducing overall phosphorus, but research has shown this not to be true. We are not able to remove enough weeds to affect the sediment or phosphorous levels. Both Onterra and the DNR have agreed on this point. (Onterra presentation to the board in May 2023 and DNR Zoom meeting at 1:14:40).

\*The Management Plan refers to the Comprehensive Management Plan 2020 completed by Onterra. It can be found on our website at [www.horseheadlake-wi.org](http://www.horseheadlake-wi.org).

\*\* The DNR Zoom conference referenced was a meeting on March 8, 2022, with Ty Krajewski, Water Resource Management Specialist, with the DNR. He handles the weed harvesting permit for our lake. The presentation was recorded and is available by emailing the commissioners and asking for the link. Also see the May 2022 newsletter for a summary of this presentation. :

<https://us02web.zoom.us/rec/share/NTg86FjfgbyUrVrDwZKn9Xm9Jm4OZBsfwoNZgHVg2dSyLzvXNblEJgbgjbvYZox.3p6JVCWiaNTZzCX>