



Upper Hay Lake Association

P.O. Box 769
Pequot Lakes, Minnesota 56472

Winter Newsletter

January 2022

Page 1

GREETINGS FROM YOUR PRESIDENT

Welcome to the year 2022! It appears that winter has finally arrived with beautiful sunsets, snow-capped pines and frigid temperatures. We were spoiled with an unusually warm fall well into November. I bet there are many Upper Hay Lake residents and visitors anxious to go ice fishing.

Now – for my annual question. Did you remember to include Upper Hay Lake on your list of New Year's resolutions? The media constantly reminds us to focus on healthy living changes. We often forget to make resolutions focused on taking care of our environment and our properties. With a precious resource such as Upper Hay Lake, perhaps we can consider setting goals such as improving our water quality or taking better care of our shorelines in the year 2022?

In November, I attended a meeting with the Crow Wing Soil and Water Conservation District. I am impressed with the energy that Nicole Erickson pours into protecting our lakes and public landings. We are very fortunate to have a resource so readily available. There were several lake associations present that shared efforts in inspections at public accesses. In the year 2021, Crow Wing County had 55,3227 watercraft inspections and 21,589 watercraft inspection hours.

The Upper Hay Lake Association Board discussed the priority of reducing the amount of phosphorus in our lake. According to a 2021 report published in the Liquid Asset from WAPOA, Upper Hay Lake had a TSI value of 49, reaching a peak of 55. Higher numbers=poorer water quality. For every 1 point increase in TSI, there is a 10% increase of algae in the water. Remember that phosphorus is needed to produce algae. Water runoff carries gas, oil, antifreeze, organic matter, pesticides, herbicides and sediments carrying phosphorus. Your lawn's 1 pound

of phosphorus added to the lake, can result in the production of 500 pounds of algae in your lake. You can help by diverting lawn and driveway rain water from the lake. Also - buffer strips of vegetation slow water runoff and act as a filter for harmful substances.

Crow Wing County is hosting a 2022 AIS prevention plan presentation on January 21st, 2022, at 1:00 p.m. The meeting is open to the public to attend and learn more about Crow Wing County's prevention plan for 2022. You can attend virtually via Microsoft Teams or in person. Please call 218-824-1142 if you plan to attend. Topics to be highlighted include watercraft inspections, decontaminations education and awareness, milfoil treatments, and early AIS detection. The plan and press release are published on the website: www.crowwing.us/ais.

We look forward to seeing you on May 21, 2022 for our annual meeting. Shelley Larson, a shoreline restoration consultant with Hayland Woods, will be our speaker. Shelley and crew worked with Cindy Rieck this past summer on her shoreline. She has valuable information on ways to create buffer strips of vegetation to filter the phosphorus going into the lake.

Although the lake is solidly frozen, the days are beginning to get a little longer. This time of the year gives us time to ponder our New Year's resolutions. I know that I am committed to making improvements on our lake. How about you?

—Claire Steen

#####

CROW WING COUNTY SEEKS COMMENTS ON PROPOSED 2022 AQUATIC INVASIVE SPECIES

Prevention Plan

The Crow Wing County Land Services Department is requesting public comments on the proposed 2022 Aquatic Invasive Species (AIS) Prevention Plan. The 2022 AIS prevention plan can be viewed on the County website at www.crowwing.us/AIS Written comments on the plan will be accepted until Monday, January 31st, 2022 at 5:00pm and may be submitted to Crow Wing County at landservices@crowwing.us or mailed to 322 Laurel Street, Suite 15 Brainerd, MN 56401, Attention AIS Plan Comments.

The County Board will review the proposed 2022 AIS Prevention Plan at a regularly scheduled meeting in February 2022.

Crow Wing County is also hosting a 2022 AIS prevention plan presentation on January 21, 2022, at 1:00 p.m. The meeting is open to the public to attend and learn more about Crow Wing County's AIS prevention plan for 2022. Those interested may attend virtually via Microsoft TEAMS or in -person. If you plan to attend in person, please RSVP to Nicole Erickson at Nicole.Erickson@crowwing.us or 218-824-1142. Please visit the County's website at www.crowwing.us/ais for more information about how to join the online presentation.

Topics to be highlighted include watercraft inspections, decontaminations, education & awareness, milfoil treatments, and early AIS detection.

Crow Wing County has been allocated \$462,902 by the State legislature to assist in the prevention of the spread of AIS within County lakes and rivers in 2022. The AIS prevention plan proposes to accomplish this through several approaches, including:

Watercraft inspections: Crow Wing County optimized an online dashboard developed by MAISRC and the USDA Forest service called AIS Explorer. This online dashboard uses existing infestation information, water connectivity risk modeling, and over 1.6 million boater movement survey results to forecast the introduction risk of four priority AIS (zebra mussels, Eurasian watermilfoil, starry stonewort, and spiny waterflea) at individual

lakes throughout the County. Crow Wing County also used watercraft inspection per-hour data to determine

allocated hours at multiple landings throughout the County. In total, 15,984 watercraft inspection hours are proposed to be allocated on 44 landings in 2022.

Decontamination units: The County plans to operate the AIS decontamination station located at the Crosslake Joint Highway Maintenance Facility that will be open Thursday through Sunday, 9:00am to 6:00pm. The County also plans to operate a mobile decontamination station located at five public landings including Edward, Lower Hay, Lower Cullen, Pelican – Halverson Bay, and Upper South Long that will be open Friday through Sunday. Watercraft users are encouraged to call the Crow Wing County Decon Hotline at 218-824-1055 or text "CWCDECON" to 72345 for more details during the summer season.

Watercraft decontaminations consist of a very hot water rinse to kill Zebra Mussels and if needed a high pressure spray to remove AIS from boats, motors, trailers, and personal gear.

Treatment of Eurasian Water Milfoil: Crow Wing County has 10 lakes that are infested with milfoil that also have a public access. As in previous years, funds will be allocated for chemical or biological treatment of milfoil in these lakes.

Education & Awareness: New in 2022, funds will be granted for up to 25 lake associations that participate in the County's new Starry Search program. Lake associations will receive a \$200 incentive by sampling lakes for AIS with a public access. The \$200 incentive will go towards materials to build an AIS sampling rake, member's time, and monthly reports.

Lake associations will work directly with the County's Environmental Services Specialist to make sure they fulfill all the requirements of our Starry Search program. Our main goal for this program is to stay ahead of Starry Stonewort infestations within the County.

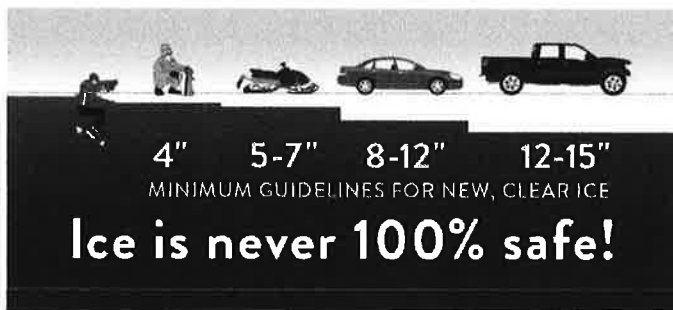
Early AIS Detection: The County plans to continue to work with area lake associations and an environmental lab to conduct Zebra Mussel veliger and Spiny waterflea testing in 2022.

In 2021, Crow Wing County allocated 17,040 watercraft inspection hours on 42 public access landings across the County. Lake Associations added an additional 5,000 hours of expanded coverage requests that the County scheduled beyond its County Board approved hours.

The Land Services Department is committed to providing excellent customer service while helping our residents make wise decisions that protect Crow Wing County's extraordinary natural resources. Citizens are encouraged to contact the Land Services Office at (218) 824-1010 or landservices@crowwing.us to discuss AIS or other land use related activities.

—Crow Wing County Land Services
#####

GENERAL ICE THICKNESS GUIDELINES



For new, clear ice only

UNDER 4" - STAY OFF

4" - Ice fishing or other activities on foot

5" - 7" - Snowmobile or ATV

8" - 12" - Car or small pickup

12" - 15" - Medium truck

[Download Ice Thickness Guidelines PDF »](#)

Double the thickness guidelines on white ice: White ice or "snow ice" is only about half as strong as new clear ice. Double the above thickness guidelines when traveling on white ice. Many factors other than thickness can cause ice to be unsafe. **Ice is never 100% safe.** The

DNR does not measure ice thickness on Minnesota lakes. Your safety is your responsibility. Check ice thickness at least every 150 feet.

Temperature, snow cover, currents, springs and rough fish all affect the relative safety of ice. Ice is seldom the same thickness over a single body of water; it can be two feet thick in one place and one inch thick a few yards away. Check the ice at least every 150 feet.

Ways to check ice thickness:



Ice chisel: An ice chisel is a metal rod with a sharp, flat blade welded onto one end. Drive the chisel into the ice, using a stabbing motion, to create a hole. Next, measure ice thickness with a tape measure.



Ice auger: There are 3 different kinds of augers: hand, electric and gas. Hand augers are low cost, lightweight and quiet. Electric augers

are also quiet, but use less manual labor than a hand auger. Gas augers drill through ice the fastest, but are heavier, noisier and generally more costly than hand or electric models. After drilling a hole with the ice auger, measure ice thickness with a tape measure.



Cordless drill: Using a cordless drill and a long, five-eighths inch wood auger bit, you can drill through eight inches of ice in less than 30 seconds. Most cordless drills that are at least 7.2 volts will work, but the type of bit is critical. You need a wood auger bit since they have a spiral called a "flute" around the shaft that metal drilling bits don't. The flutes pull the ice chips out of the hole and help keep it from getting stuck, much in the way a full-sized ice auger works. After drilling a hole, measure ice thickness with a measure tape. Dry the bit and give it a quick spray of silicone lubricant after each use to prevent rust.



Tape measure: Use a tape measure to find ice's true thickness. Put the tape measure into the hole and hook the bottom edge of ice before taking measurement. You can also use an ice fisherman's ice skimmer with inch markings on the handle in place of the tape measure. Don't judge ice thickness by how easily a chisel or drill breaks the surface. It happens so quickly that it's easy to overestimate the thickness.

Additional recommendations: Cars, pickups or SUVs should be parked at least 50 feet apart and moved every two hours to prevent sinking. Tip: Make a hole next to the car. If water starts to overflow the top of the hole - the ice is sinking and it's time to move the vehicle. For more information on ice safety or to request free publications, please contact the information center at: **Phone: (651) 296-6157 (metro area) or 1-888-646-6367 (toll free outside the metro area)** **Email: info.dnr@state.mn.us**
<https://www.dnr.state.mn.us/safety/ice/thickness.html>
#####

BLACK BEAR HIBERNATION

Submitted by Bruce Ohland

This article by Jacqueline Stuhmiller originally appeared in the Winter 2016-2017 issue of the quarterly print newsletter, *The Land Steward*. All through the spring and summer, black bears (*Ursus americanus*) have been eating everything they can find, up to 20,000 calories a day in the form of plants and grasses, berries, acorns, insects, honey, and even birdseed and garbage. When the weather grows cold and the food supply finally dries up, they will retreat to their winter dens. Males bed down around mid-December and emerge in mid-March; females, which give birth during the winter and stay with their cubs for two years, remain in their dens longer, from late November to mid-April. There is some debate about whether or not bears really hibernate; some scientists prefer to describe their winter sleep as “lethargy” or “torpor.” The bodies of so-called “true” or “deep” hibernators such as rodents or bats drop to near-ambient temperatures and their metabolic rates plummet to almost nothing within a few hours. Some species, such as the chipmunk, periodically wake up to eat and pass waste; others, like the bat, tough it out the whole winter without any sustenance at all. In comparison, the bear sleeps only lightly. Its body temperature drops slightly and its metabolism slows, but it will wake if it is disturbed or if the weather turns unusually warm. This light sleep is likely a survival mechanism, as bear dens can be in surprisingly exposed locations: scratched into hillsides, in rock crevices or hollow trees, under brush piles or downed trees, or even in open areas of the forest floor. Sleeping bears seem to be able to sense the presence of intruders, and they are able to wake up very quickly in order to defend themselves: midwinter explorers, take care. Unlike many “true” hibernators, the bear does not eat or drink anything for months on end, and it does not urinate or defecate. If we were to do this, even if we could survive without food, our muscles would atrophy and our bones would become porous and brittle (osteoporotic). Remarkably, although a bear may lose fifteen to thirty percent of its body mass over the course of a long winter, it may actually have more muscle mass at the end of the winter than it



did at the beginning, and its bones will retain all of their strength. The bear's body is able to use the nitrogen in urea, a byproduct of fat metabolism, to synthesize proteins that it then uses to maintain muscle and organ mass. In addition, it recycles its own water all winter, thereby avoiding dehydration and kidney failure. When a bear metabolizes fat during hibernation, its blood cholesterol levels double, but it does not seem to experience the ill effects that a human would suffer from sky-high blood cholesterol levels (atherosclerosis, gallstones). Perhaps the only downside to this perfectly self-contained system is the fact that the bear's intestines continue to produce feces all winter long and it must seek out plants with laxative effects in the spring. Bears mate during the summer, but the fertilized embryo does not implant in the female's uterus until after she has dened, and then only if she has sufficient fat stores. Six to eight weeks later, in midwinter, she gives birth to one to three cubs. No other northern animal gives birth at such a hostile time of year, and few mammalian species have young that are so tiny in comparison with the adults – from whence the old belief that bear cubs are born dead and must be licked into shape and life by their mothers. The mother dozes off and on for the rest of the winter as her cubs feed, grow fat, and wait for spring.

#

UPPER HAY LAKE ASSOCIATION

YEAR-END FINANCIAL SUMMARY FOR 2021 SUBMITTED BY: KEN MEYER

Association Checking Account Balance as of 1/01/2021	\$1,114.94
Association Savings Account Balance as of 1/01/2021	\$5,305.13
12 Mo. CD @ American National Bank Matures 7/08/2021	\$25,818.08
12 Mo. CD @ American National Bank Matures 10/27/2021	\$5,000.00
12 Mo. CD @ American National Bank Matures 10/27/2021	\$5,000.00
Total Assets as of 1/01/2021	\$42,238.15
Association Checking Account Balance as of 12/31/2021	\$1,291.49
Association Savings Account Balance as of 12/31/2021	\$5,305.66
12 Mo. CD @ American National Bank Matures 7/08/2022	\$26,090.24
12 Mo. CD @ American National Bank Matures 10/27/2022	\$5,052.50
12 Mo. CD @ American National Bank Matures 10/27/2022	<u>\$5,052.50</u>
Total Assets as of 12/31/2021	\$42,792.39
Income:	
Membership Dues	\$2,165.00
General Donations	\$1,197.00
Advanced Dues	\$75.00
Savings Interest	\$0.53
CD Interest	<u>\$377.16</u>
Subtotal	\$3,814.69
Expenses:	
Dues to Other Assoc. (Conserv. Minn., WAPOA, LARA, MN Lakes & Rivers, PR Watershed)	\$710.00
Printing & Postage	\$765.41
P.O. Box Rental	\$92.00
Insurance	\$424.00
Annual Meeting and Picnic Expenses	\$247.00
UHLA Lakeshore Restoration Grants	\$0.00
WAPOA; AIS Survey	\$0.00
Blakeman, Inc.	\$681.82
AIS Dishcloths	\$252.00
Miscellaneous	<u>\$88.22</u>
Subtotal	\$3,260.45
Total Assets as of 1/01/2021	\$42,238.15
Plus Income	\$3,814.69
Less Expenses	<u>(\$3,260.45)</u>
Year-to-Date Total	\$42,792.39

2022 Membership Application

Name (s): _____

Lake Address: _____

Summer Mailing Address (if different than lake address)	Winter Mailing Address (if different than summer address)

Lake Phone: _____ Cell Phone: _____ Other Phone: _____

E-mail address: _____

Would you like to receive Newsletters etc. by e-mail rather than US mail? Yes _____ No _____

I am particularly interested in seeing the Lake Association do the following:

I would like to participate in the following committees:

_____ AIS Monitoring	_____ Shoreline Restoration
_____ Public Access	_____ Fund Raising / Grant Writing
_____ Social Committee (Picnic / Breakfast)	_____ Other _____
_____ I would like my name placed on the ballot for a Board of Directors position.	

_____ Enclosed is my tax deductible membership dues of \$25.

_____ Enclosed is my additional tax deductible donation of \$_____ in support of UHLA's mission to promote environmental stewardship throughout the Upper Hay Lake area.

Make check payable to Upper Hay Lake Association and mail to:

Upper Hay Lake Association
P.O. Box 769
Pequot Lakes, MN 56472

Environmental Stewardship Today, for Tomorrow