

The Namakagon Lake
Association, Inc.

P.O. Box 536
Cable, WI 54821



Message from the President...

As I sit here and look at the few leaves falling, I reflect on the wonderful Summer we had and the good times we all experienced. At our annual meeting in August three new members were elected to the board. The new members are Bill Porter, Phil Rasmussen and Rick Yerhot. These new members replaced Clyde Wishart, Mike Cibulka and Mick Meinert. The board then elected a new slate of officers. I have been elected President; Jon Hoffert, Vice President, Bill Porter, Secretary and Rick Yerhot, Treasurer. Before I go on I must thank Clyde, Mike and Mick for their contributions. Under their leadership our membership has grown to over 320 members making our association one of, if not, the largest in the state of WI. These fellows have led our association to new heights in terms of making it an inclusive organization that closely adheres to our mission: to preserve and protect Lake Namakagon as an environmentally healthy watershed and by sponsoring educational programs. They also enhanced the educational programs with the Clean Boat Clean Water program, Fun on the Water for Youth Education, Day on the Lake w/DNR and Spring Lakeshore Clean Up. One of the most important programs is the start of the first phase of monitoring our boat landings for invasive species via the "Captain of the Landing"

program. In addition, we have received more State and DNR money from grants. To continue the progress we have made in the past few years we will need everyone's help. The most pressing issue facing our lake is the threat of invasive species. We now have Eurasian Water Milfoil in our county. The Pike Lake Chain in Iron River and some small lakes in the Barnes area have been infested. North of us at Lake Superior some landings are incubators for the milfoil. Cost to eradicate the problem is staggering. Each harvester cost is in excess of \$50,000.00. If it were to invade our lake it would be devastating to fishing, recreation and property values. In the coming years, we all need to take part in the effort to deter the introduction of Milfoil and other invasive species. We welcome input from all of our members, so please contact any of your board members with suggestions. We need help from every member to be successful. Please remember the ASSOCIATION belongs to all of us and it takes a great deal of effort to accomplish our goals. The board can only guide the association. We must all be involved.

Jim McMillan, President

ALERT: IT IS TIME TO PAY OUR ANNUAL DUES!!

To be eligible to vote, all members must be 18 years of age and a paid member 60 days prior to the Annual Meeting.

NAMAKAGON LAKE ASSOCIATION NEW MEMBER REQUEST FORM

MEMBERSHIP DUE ANNUALLY ON CALENDAR YEAR BASIS

- Individual Membership Per Person - \$10.00
- Wildlife Watcher - \$25.00
- Loon Lover - \$50.00
- Lake Steward - \$100.00
- Keeper of the Lake - \$200.00
- Other: _____

MAILING ADDRESS:
Namakagon Lake Association Inc.
PO Box 536
Cable, WI 54821

Name: _____

Address: _____

City/State/Zip: _____

Phone: () _____ E-mail address: _____

FROM YOUR NLA SECRETARY:

My name is Bill Porter and I am a newly elected member of the Namakagon Lake Association Board. I have assumed the responsibilities of secretary. I am the first to admit I have a lot to learn.

This November newsletter is the last of 2005. Our membership is set up on a calendar year basis: January 1 through December 31st. Please note the "New Member" / "Renewal Membership" form attached to this newsletter.

Also note the attached "Annual Meeting" minutes that describe some of the accomplishments during 2005 by the NLA. We are an active organization and hope to make a difference on our lake.

If you have agenda ideas, please e-mail or call one of the

board members. Your input is very important.

I will send the minutes of the NLA meetings that occur during the year if I have your current e-mail address. (I am getting mail delivery rejections on occasion because of an outdated address.) I will also send quarterly newsletters to paid members if I have your mailing address.

Within the past couple of weeks, I have merged a membership list and an e-mail list which hopefully will get communiqués to you in an accurate manner. I would ask you to e-mail me if you are receiving mail or e-mails that you would rather not receive and I will so note your wishes. If you are not receiving minutes of our meetings, please e-mail me your e-mail address. My e-mail address is wjip@cheqnet.net.

Bill Porter, Secretary

CHECK YOUR ENVELOPE ADDRESS LABEL

If the number following your name (in parentheses) is (2005) or a lower number, for example (2001), your Annual Membership Fee/Newsletter Renewal is due now. If the number following your name is (2006) or higher, you are paid up. Keep in touch and keep the Newsletters coming for the next calendar year. If you have not been getting the Newsletter four times a year, you can start right now by sending in your membership dues. (It is not necessary to pay for unpaid years to reinstate the Newsletter.)

PLEASE JOIN OR RENEW NOW!!!!

DNR SPONSORS TRAINING FOR LAKE NAMAKAGON VOLUNTEERS

With the help of a Wisconsin DNR grant, the Namakagon Lake Association initiated a Clean Boats/Clean Waters boat launch education and inspection program to help prevent the introduction of Aquatic Invasive Species into Lake Namakagon. Twenty five NLA volunteers attended DNR-sponsored training and monitored five of the busier Namakagon ramps throughout the summer. The volunteers made contact with 288 people accessing the lake via these ramps with positive results. Interestingly, one third of the boats observed were from out of state, ten percent of the boats launched had some type of aquatic vegetation hanging from them, and fourteen percent of those people contacted were not aware of the Wisconsin regulations regarding Aquatic Invasive Species. Looking ahead to 2006, there is a need for additional volunteers to help conduct our monitoring. Please contact one of your NLA Board members to participate. It is truly painless and for a cause dear to all of us! The photo below is of a boat driven directly from Lake Minnetonka to be launched in Lake Namakagon. Minnetonka is renowned for being severely infested with Eurasian Water Milfoil.

Jon Hoffert, Vice President



PREVENTION OR AFTER THE FACT?

While growing up near Excelsior, Minnesota, much of my misspent childhood involved riding my bike to Lake Minnetonka, kicking off my tennies and socks, rolling up my pant legs, and wading the shorelines fishing for the elusive largemouth bass. The decision to retire to the Lake Namakagon area was made easy because it is similar to Lake Minnetonka in many ways, but yet on a smaller scale. Despite the pressures of marriage, kids and work, I was still able to remain in touch with the lake. In addition to the shoulder to shoulder development of Minnetonka's shores, the greatest change to the lake recently has been the discovery of Eurasian Water Milfoil (EWM) in the late 80's and the ensuing efforts to cope with it. I recently googled "LMCD" (for Lake Minnetonka Conservation District) to catch up on activities in my old stomping grounds. Once at the LMCD web page, I clicked on "Reports" on the left panel and scrolled down to "2005 EWM Harvest Report". While reading the report, I learned that Minnetonka has 9 employees supervising and operating three full-time EWM harvesting machines and a high speed transport barge at 40 hours per week in June through August. At a cost of around \$100,000, they harvested 175 truckloads of EWM from 395 acres. They prioritized their harvesting efforts in areas that impeded public boat navigation over those with significant milfoil growth that were not aesthetically pleasing. Whew! What a tremendous amount of effort just to keep their lake navigable, let alone pleasing to the eye!

The Namakagon Lake Association hires an aquatic biologist annually to survey the vegetation in the lake and thus far no invasive species have been discovered. With EWM present in the Barnes area, the Delta area, the Hayward area, and Chequamegon Bay of Lake Superior, the threat is near and could be introduced into Namakagon with an activity as simple as a boat launch. The challenge is for all of the stakeholders in Lake Namakagon; the home owners, the fishermen, the boaters, the resort owners, the bar and restaurant owners, the tourist industry, the realtors serving the area, the local government, the local chamber of commerce, and anyone who enjoys the beauty of the lake to become familiar with Eurasian Water Milfoil and other Aquatic Invasive Species and learn how to best keep them from being introduced into Lake Namakagon.

What makes more sense . . . prevention or dealing with the issue after the fact?

Jon Hoffert, Vice President

PARTNERS IN PRESERVATION: SAVING THROUGH LAND TRUSTS

Have you ever thought about what will happen with your lake when you're gone or what will happen to that big hunk of shore that's been owned by some organization or individual for years? Wouldn't it be nice if that big parcel of land could be conserved-kept for its natural beauty, as a home for wildlife, or just a positive place for your lake? More and more landowners are turning to land trusts to answer these questions.

WHAT IS A LAND TRUST?

A land trust is a nonprofit, non-governmental conservation organization whose purpose is generally to work with landowners to protect or preserve land. The largest and probably most well known land trust in the country is The Nature Conservancy. Recently many smaller land trusts have formed in Wisconsin to meet increasing demands for conservation at the local level. Land trusts are one of the fastest growing conservation movements in the country today.

There are more than 50 land trusts in the Badger state. They range from small groups operated by volunteers to large land trusts with professional staff. Typically a land trust will choose to focus efforts on a specific geographic area or region. Gathering Waters Conservancy, an umbrella organization for Wisconsin land trust, maintains an online directory of the land trusts operating in Wisconsin and the areas they cover at <http://www.gatheringwaters.org>.

WHAT DOES A LAND TRUST DO?

A land trust works with individual landowners, communities, and lake and river associations interested in permanently protecting land. Depending on the situation, there are a variety of conservation options available. One of the most common options is a land protection agreement (or conservation easement), which is a legal agreement between the landowner and the land trust that permanently protects land by limiting specific things such as future uses, development, or subdivision of the property.

That's exactly what Willa Schmidt did when she decided to preserve her land. She worked with the Northwoods Land Trust (NWLT) to permanently conserve her 1,500 feet of natural shoreline and 12 acres of woodlands on Snipe Lake, west of Eagle River in Vilas County. "Willa Schmidt has left an incredible legacy for the future," said NWLT Executive Director Bryan Pierce. "By Voluntarily placing permanent restrictions on her property, she is ensuring that the conservation values of her property will be protected long into the future."

"The land remains private land and is not removed from the tax rolls," said Pierce. "The property can be sold or passed on to heirs, but the easement restrictions remain in place. The land trust holds these 'developments rights' in perpetuity, and takes on the job of annually monitoring the property and legally enforcing the easement in the future, if necessary, to ensure that the landowner's conservation interests are carried out in perpetuity."

Because each parcel of land and an owner's vision for that land are unique, each land protection agreement is unique-the result of conversations and negotiations between the landowner and land trust. With land protection agreements, the landowner maintains ownership, but the land trust takes on the responsibility for annually monitoring and enforcing the terms of the agreement forever-even when that property gets sold or passed on to other future owners. Because a land trust takes on those legal responsibilities in perpetuity, they will usually tend to focus on larger parcels having significant conservation value. Small parcels, or those with a small amount of lake or river frontage, may not always be the best 'fit' for land protection agreements. However, there are other important ways small landowners can contribute to lasting conservation options at a local level.

WORKING IN PARTNERSHIP

Willa Schmidt's property was one of the last remaining large parcels of undeveloped shoreline on Snipe Lake. Lake residents had long been interested in seeing that stretch of shoreline stay natural, but without the monetary resources to purchase the land outright, they knew there was a good chance it would get sold and divided up into small parcels. In this case, the Snipe Lake Association was able to work cooperatively with Ms. Schmidt and the land trust to permanently protect the property. "This is a great example of working cooperatively with the local lake association," said Pierce. "The Snipe Lake Association partnered with Schmidt and NWLT by contributing funds to help cover the costs of the easement and the endowment needed to annually monitor the easement and legally enforce it in the future if necessary."

On Cloverleaf Lakes in Shawano County, lake residents wanted to permanently protect a 25-acre island. They formed a non-profit citizens group, and are working in partnership with the town and the landowner (who donated part of the cost) to purchase the island. The lake association donated funds and is working hand-in-hand with the citizens group. With grants and donations they will be able to buy the island and maintain it in a natural state for the future generations to enjoy.

ARE THERE FINANCIAL BENEFITS?

In addition to land protection easements, there are a variety of other conservation options that landowners can use to protect land including land donations, bargain sales, registry programs, reserve life estates, and a bequest in wills. Depending on what option is used and the individual financial situation of the landowner, there can be significant income tax, estate tax, or even property tax advantages.

Look for more articles on preserving land through Lake Protection Grants, and with other government agencies and organizations in future issues of Lake Tides.

By Tiffany Lyden
US-Extension Lakes Program

For more information on land trusts and conservations options, visit
Gathering Waters Conservancy: <http://www.gatheringwaters.org>
Land Trust Alliance: <http://www.lta.org>

NAMAKAGON LAKE ASSOCIATION BOARD OF DIRECTORS

President:	Jim McMillan	(715) 794-2555
Vice President:	Jon Hoffert	(715) 794-2890
Secretary:	Bill Porter	(715) 794-2601
Treasurer:	Rick Yerhot	(507) 287-6900
Director:	Irene Ruth Sykes	(715) 794-2656
Director:	Jared Jackman	(715) 794-2434
Director:	Phil Rasmussen	(715) 794-2561

Email board members:
board@namakagonlakeassociation.org

Visit our website:
www.namakagonlakeassociation.org

MISSION STATEMENT

The Namakagon Lake Association, Inc. was formed in 1995 for the purpose of preserving and protecting Lake Namakagon and its environs. The Namakagon Lake Association, Inc. (NLA) is a not for profit organization that relies on the contributions and membership fees of land owners and other concerned citizens for its funding. It is our goal to preserve and protect Lake Namakagon as an environmentally healthy watershed, by sponsoring educational programs, adopting a proactive role in the formulation of water and shore land regulations, and responsible use of this unique and irreplaceable resource for all citizens.

GREETING CLEAN BOATS, CLEAN WATERS VOLUNTEERS!

This summer marks the third year of recruiting and training volunteers to educate boaters at the boat landings. At the close of summer, 20 workshops trained 293 new CBCW volunteers. We now have over 640 folks from 44 counties that attended a Clean Boats, Clean Waters workshop. Over half of the 2005 workshops occurred north of Hwy 29, a good indicator of the tremendous effort folks are making to help stop the spread of aquatic invasive species in northern Wisconsin. Lake residents, county board members, tribal community members, representatives from county parks and forest programs, boat marina operators and realtors have all attended a workshop to learn how aquatic invasive species threaten Wisconsin waters. At each workshop, we ask volunteers to collect data and record their information on the statewide database to help direct future educational efforts. If you haven't entered your data, please take time to visit this website and share your data with others.

<https://dnrs.wisconsin.gov/x10322/secure?submitData.asp>

SO, WHAT HAVE WE LEARNED AT THE BOAT LANDINGS?

As of October 25, volunteer watercraft inspectors logged 4,579 hours at the landings inspecting 9,055 boats and contacting 19,792 people – and that is just for 2005! Volunteer records indicated 84.4% of the boaters were from Wisconsin with 66% of them trying to catch a fish. Pleasure boating, waterskiing, and jet skiing ranked second in recreational choices. A closer look at horsepower usages on lakes revealed a surprising fact that 34% of the boats inspected operate with motors greater than 101 horsepower!

Additional data revealed 75% of the boaters understand the role they play in moving aquatic plants and animals from one water body to another. However, 16% of the boaters were not informed of Section 30.715, Stat. 2001 WI Act 16 (illegal to launch law) which prohibits launching a boat or trailer if aquatic plants or zebra mussels are attached. Upon close inspection, volunteers often uncovered hidden plants on the boat trailers and other recreational equipment. Information collected at the boat landing indicated 6% of all inspected boats had vegetation attached when approaching the landing, while 23% had vegetation attached as the boat pulled away from the landing. Twenty-three percent of all Wisconsin registered boats equates to over 143,000* boats pulling away from the landings carrying aquatic plants that could potentially infect another water body with Eurasian water-milfoil, zebra mussels or other aquatic invasive species! (*Data based on 624,121 Wisconsin registered boats as of August 1, 2005) Volunteers reporting this information are in support of amending the current law to include illegal to transport and the data collected at the boat landings certainly supports this change. If you too support this change, contact your legislative representative to encourage them to amend Wisconsin's current law to include both illegal to launch and transport.

Volunteers also submitted comments about their watercraft inspection experience and reported boaters were respectful and cooperative at the landings. Occasionally they met a challenging boater that did not want to take the time to remove aquatic plants before they launched their boat. After informing the boaters of the law, most remove the vegetation. One exception this year was reported by Pelican Lake, Oneida County. After a boater refused to remove aquatic plants from the trailer and subsequently launched their personal watercraft, the volunteer took a picture and recorded the violation using the Clean Boats, Clean Waters protocol. After notifying the local warden, a citation was issued based on the accurate information collected by the volunteer. Now that's a first in Wisconsin!

Partial letter from Laura Felda-Marquardt;
Clean Boats, Clean Waters Program Coordinator

SUMMARY OF 11-06-05 NLA MEETING MINUTES

(to be presented for approval at 01-14-06 Board meeting)

TREASURERS REPORT: \$18,290.90 as of 10-21-05

GRANT PROGRESS: CBCW Ramp Inspection hours being compiled. Jim Bartlett inspected pre-determined locations for Aquatic Invasive Species today.

FALL FEST: Discussed securing a higher traffic location. Emphasis should be on info Regarding AIS; NLA activities; etc.

NEWSLETTER: Newsletter will go out in November emphasizing new member & renewal memberships.

MARKETING: Newsletter application to join; Investigate "Discover Wisconsin" TV show Currently filming in the area to acknowledge our association.

MEETINGS AND SEMINARS: Bayfield County Lakes Forum and Northwood's Cooperative Weed Management attended by board representatives.

FISH CRIBS: A committee will be formed to investigate possibilities.

WEB SITE: Working on getting NLA site updated.

COMPUTER DISPOSAL: Discussion on NLA laptop and printer no longer used.

NLA LITERATURE: Investigate supplying NLA literature in the Cable Airport lounge

CLEAN BOATS/CLEAN WATERS (CBCW): Jon Hoffert shared a "vision" regarding prevention Of Aquatic Invasive Species being inadvertently introduced into Namakagon.

BUOY REMOVAL: No-wake buoys removed from lake on October 22nd.

SUMMARY OF 08-20-05 NLA ANNUAL MEETING MINUTES

(to be presented for approval at 2006 Annual Meeting)

Minutes of 2004 Annual Meeting approved

TREASURERS REPORT: \$20,810.18 as of 08-18-05

ELECTION OF OFFICERS: Brief bio given by nominees. Subsequent election: Bill Porter; Rick Yerhot & Phil Rasmussen.

PROGRAM: Becky Dinsmore, Forest Lodge Director gave presentation on history of Forest Lodge.

ANNUAL REPORT ON YEAR'S ACCOMPLISHMENTS:

- Lakeshore Clean up
- Clean Boats/Clean Waters program & ramp inspections
- Board & Member attendance at WAL conferences
- "Fun on the Water Youth Day and picnic
- Four Newsletters to members
- Water testing
- Invasive Species eradication (Purple Loosestrife)
- DNR Field Trip on the lake
- Increased inspections for AIS on lake
- Ads in Visitor magazine
- Cable Fall Festival Booth
- Trapping of beaver in Castle Creek
- Many of these activities were supported through grants

GUEST MEMBERSHIP: Added to by-laws.

MARKETING: NLA & Education Message Committee added

SEPTIC ISSUES: Septic committee added

WATER TESTING: Approval of \$985. Water testing monitor

MEMBERSHIP: 302 vs. 340 last year.

EXOTIC SPECIES LITERATURE: Suggest sent with confirmations from resorts & rentals

SHORELINE EROSION: Members permit denied by DNR

ADJOURNMENT

MIGHTY CLOSE TO HOME

In the Sawyer County Record dated: Sept 21, 2005, there appeared an article "Eurasian water milfoil discovered in Spider Creek". It seems that one plant of the invasive species was discovered in the creek adjacent to the Spider Chain of Lakes.

Eurasian Water Milfoil has the potential of doing great damage as it affects a lake's esthetics, fisheries, economy, recreational enjoyment and safety. Dense mats on the water surface can impede boat traffic and they pose a drowning danger to swimmers. Eradication and or control can be very expensive and property owners are often expected to defray part to most of the cost.

At this time of year boats, lifts, and docks are being removed providing an ideal opportunity for lakeshore owners to be on the lookout for this scourge.

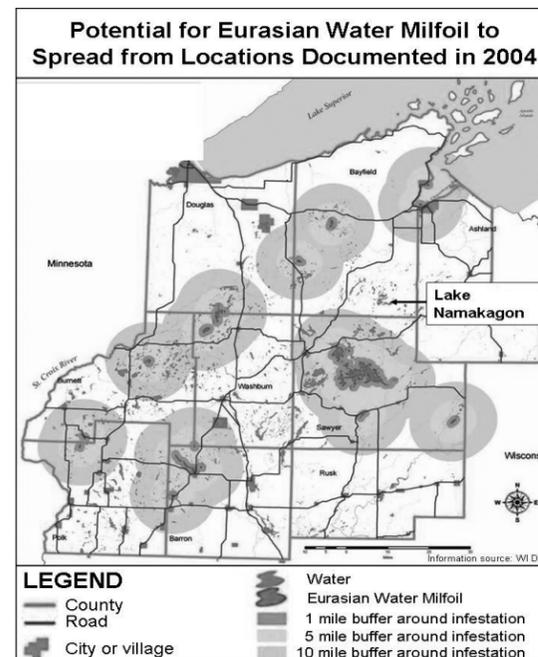
EWM usually grows in 15 feet of water or less, is limp out of water, and has 12 to 21 leaflet pairs.

If you are suspicious, obtain a specimen without dropping fragments back in the water. Seal the specimen in a zip lock bag with a little water and call a board member.

Info taken from SCR dated 9-21-05



Picture of Eurasian Water-Milfoil • CREDIT: Frank Koshere, DNR



CREDIT:
Wisconsin
DNR

"FUN ON THE WATER"

YOUTH SAFETY AND SKILLS DAY OVERVIEW

Our lake association's second annual "Youth Safety and Skills Day" was very successful as well as very educational. The event was held on a beautiful Sunday afternoon at our lake's National Forest Campground. Area youth and their families were invited through school notices, newspaper ads, and flyers at all area businesses. Lake association members and their families set up a variety of water skill activities that involved educational teaching techniques as well opportunities for our youth to win prizes. Some of these activities were spin casting, kayak racing, and diving for treasure.

Along with the excellent water sports were soccer, balloon toss, sand sculptures, frisbee golf, and fishing with magnets. A wonderful lunch was provided as well as a raffle drawing for all youth and their families. All participants received a free "loon" t-shirt and everyone won a prize. The highlight of the afternoon was a lake safety and rules presentation by Bayfield County Deputy Sheriff Larry Loch. All in attendance really enjoyed this educational presentation and many were very thankful for the updates and rules clarifications that Larry provided. This was truly an excellent and very educational afternoon allowing our Lake Namakagon community to get together informally and share ideas on how to safely involve our youth as we all work together to preserve and protect our lake!

This was truly an excellent event and the lake association wishes more members and their youth would participate. Once you attend "Fun on the Water" you will truly be back every year to enjoy the games, food, and hospitality of our wonderful association. See you next year! Thanks to all helped make this a very special, safe, and fun day!

Al Stawicki, Member

ANOTHER MEMORABLE TIME AT FALL FESTIVAL

Proudly, I must say our Namakagon Lake Association workers, though dampened by some rain, were not dampened in spirit, as they cheerfully remained to help at our booth, crowding under our canopy, and our show continued on in between the showers. These spirited helpers were Al Stawicki, Diane Zemke, Clyde and Joan Wishart, Bill and Janet Porter, Ralph and Janice Nystrom, and Bob and Diane Kirshner.

Again, the children enjoyed playing our games and winning prizes and parents and others picked up lake literature. There was lots of literature and we did want the owners of boats to pick up information on non-native, exotic species, such as Eurasian water milfoil and zebra mussels, that could be attached to boats and trailers coming from infected lakes. We certainly don't want these critters plaguing our Namakagon Lake. There was literature on how we are trying to inspect boats and trailers as owners come to our boat landings.

Another non-native, exotic species that could take over our native plants along lakes and roads, is the purple loosestrife. Our organization has excellent pictures and information on these troublesome species; and we encourage you to attend our meetings and obtain this literature.

Ruth Sykes, Director

ANNUAL BUOY REMOVAL

An annual event of every spring and fall is the placement and removal of buoys into Lake Namakagon. The Township places the "Rock" buoys and the NLA places the "No Wake" buoys. There are buoys placed at the ingress and egress of Jackson Lake, Garden Lake, Namakagon River and Sugar Bay.

This summer one of the buoys at the Jackson Lake cut was found missing. If anyone sees tampering of buoys, please contact the town board or a NLA board member. These buoys are expensive and critical and vandalizing will not be tolerated.

This fall, NLA members assisting in the removal of the buoys are: Mike Cibulka, Jon Hoffert, Bill Porter, Clyde Wishart and Rick Yerhot.



THE FACTS OF ICE

... Ice is a marvelous substance and has some properties that seem to fly in the face of physics.

For one thing, ice floats. If this were not true, life on earth as we know it would not exist. If water did not expand as it solidified, ponds, lakes, and oceans would freeze solid from the bottom up. Because ice floats, it insulates the liquid water below from the colder air, slowing the freezing process and allowing life to exist under the frozen surface.

Most substances contract and get denser as they cool until they solidify. Water expands as it freezes. Unlike most other materials, it is actually less dense as a solid than as a liquid. Water behaves like other liquids (expanding as it warms, contracting as it cools), until its temperature drops to 4 degrees C (39.2 degrees F), then water molecules no longer move vigorously enough to break their hydrogen bonds and they begin to freeze. As the temperature drops to 0 degrees C (32 degrees F), the water locks into a crystalline lattice, with each water molecule bonded to four partners. These hydrogen bonds force the molecules to keep their distance, enough to make the ice about 10% less dense than liquid water at 4 degrees C.

WHEN IS ICE SAFE?

There is no sure answer. Ice is tricky, and just because a lake or stream is frozen doesn't mean the ice is safe. To understand the factors involved in the strength of ice, it's necessary to understand how ice forms on lakes and streams and a few of its physical properties. The following are points to consider, largely based on research by the U.S. Army Cold Regions Research and Engineering Laboratory in New Hampshire.

- You can't tell the strength of ice just by its appearance, the daily temperature, thickness, or whether the ice is or isn't covered with snow. Strength of ice, in fact, is based upon all four factors plus the depth of water under the ice, the size of the water body, water chemistry, distribution of the ice, and local climatic factors.
- Generally speaking, new ice is much stronger than old ice. Direct freezing of lake or stream water will be stronger than ice formed by melting snow, refrozen ice, or ice made by water bubbling up through cracks and freezing on the surface. Several inches of new ice may be strong enough to support you, while a foot or more of old, "rotten" ice may not.
- Ice seldom freezes or thaws at a uniform rate. It can be a foot thick in one spot while, 10 feet away, only an inch thick.
- A layer of snow insulates ice, slowing down the ice forming process. In addition, the weight of snow can decrease the bearing capacity of the ice.
- Ice near shore is weaker. The buckling action of the lake or stream over the winter breaks and refreezes ice continually along the shore.
- If you hear ice "booming" or cracking on cold days or still evenings, it doesn't necessarily mean the ice is dangerous, merely that it's changing shape as the temperature changes.
- Ice formed over flowing water, near shore, around inflowing or outflowing streams, in places where the lake narrows, under bridges or on lakes containing large numbers of springs can be unsafe. River ice is generally about 15 percent weaker than ice on lakes. Straight, smooth flowing stretches are safer than river bends. River mouths are dangerous because the current undermines the ice and creates unsafe pockets. A potential danger spot on lakes is an open portion completely surrounded by ice. Winds will force exposed water beneath the ice and rot it from below.
- Other factors that weaken ice are water level fluctuations and the actions of birds and fish. An example, schools of carp create thin ice spots or even open water by congregating in one location while circulating the water with their fins.

ICE SAFETY TIPS

Once you understand the physical properties and problems with ice, you can understand why ice is so unpredictable and why the only absolute safety factor on ice is to stay off. In Wisconsin staying off the ice is hard to imagine. For those of us who venture onto the ice, whether on foot or in a vehicle, here are some tips to lessen your chance of a breakthrough:

- Ice fishing requires at least four inches of clear, solid ice; a snowmobile requires five inches. Automobiles and light trucks require at least eight inches to a foot of ice. (Remember, these are merely guidelines; the factors mentioned above must be considered!)
- Before you head onto ice, check with local experts, fire departments, wardens or local police for known thin ice areas or aeration operations which have created open water.
- Refrain from driving on the ice with your car or truck whenever possible. Traveling on ice in a vehicle, especially early or late in the season, is always risky.
- If you must drive a vehicle, be prepared to leave it in a hurry. Unbuckle your seat belt and have a simple plan of action in case you break through. Some safety experts recommend that the doors be left open and windows down for an easy exit.
- Parking a vehicle in one spot tends to weaken ice. Vehicles should be moved from time to time so the ice can resume its "normal" position and shape. A car parked on ice one foot thick will depress the ice an inch within a diameter of 200 feet. Cars parked close together may increase the load beyond the bending limit, causing the ice to break. Bending, however, gives added buoyancy since the ice becomes somewhat boat-shaped as it rests on the water underneath. But if the ice cracks, the added buoyancy is lost. A car surrounded by ice cracks has only the buoyancy of that single piece to support it. When driving across ice which has cracked and refrozen, cross the cracks at right angles and avoid parking near them.
- If you drive on ice, remember that it is only a film across a water surface. Weight moving across this film causes it to bend up and down in the form of long waves that roll out and away from a vehicle as it moves across the ice. U.S. Army researchers discovered that wave action might crack the ice if the vehicle is moving at a "critical speed." Speeds above or below this critical speed substantially reduce the danger of cracking. Higher speeds are usually not recommended for other reasons, except over very shallow water. So drive slowly. Don't follow close behind other cars; you may interrupt their wave action with your own, causing a break in what would otherwise be safe ice.
- Often cars will establish roads from shore to the current fishing "hotspot." After repeated use, these roads may cause the ice to weaken. Therefore, they may not be the safest routes.
- If you're on a snowmobile or driving a vehicle, be especially cautious at night or when it is snowing. The falling snow or darkness obscures thin ice or open holes.
- Carry a couple of large nails with caps on the sharp end and a length of light nylon rope in your pocket. The nails can help you pull yourself out of the water and onto the slippery ice. Use the line to rescue someone else. If you make your own ice picks remember to put a cap on the sharp end so they don't stab you if you fall down.

Credit: UWExtension Lake Tides Vol 25

WINTER FIRE PREVENTION

With the winter season fast approaching, now is the time to get your home ready for the winter heating season. If you heat with wood your chimney should be inspected and cleaned. Creosote builds up on the walls of the chimney over time and with a hot fire can cause that build up to burn causing a chimney fire. The fire can burn so hot that it can damage the lining of the chimney. Once the chimney has been cracked the fire inside the chimney can get to the wood structures of the house and start the house on fire. That is why a good cleaning and inspection before you start heating for the season is important.

Use only seasoned wood (wood that has had time to dry) in your fireplace or wood burner. Using green wood has more moisture in it, which can lead to more creosote build up inside your chimney. Use only hardwood, not pine, for burning because pine has pitch in it, which can build excessive creosote also.

If you do have a chimney fire, the first thing that you should do is to call 911 for the fire department. Then try to shut down the air supplies to the stove or fireplace by closing the damper or shutting fireplace doors.

You can purchase chimney fire extinguisher which look like a road flair and lights the same way. This would be a good item to have on hand at your home. You would light it and put it into the firebox. The chemicals from the smoke of the flare choke off the oxygen to the fire in the chimney and slow the fire down. Your local fire department probably has these for sale. They cost around \$12 each.

After a chimney fire, it is very important to have your chimney inspected by a professional to make sure there is no damage to the flue before you start another fire to avoid a possible house fire from a damaged chimney. If you look in the yellow pages of the phone book you will find numbers of people that inspect, clean and repair chimneys. Give them a call; they are trained and have the right equipment to do the job properly.

Smoke detectors are your family's first line of defense. There should be a working smoke detector on every level of your home and by your bedrooms. Batteries must be changed once a year. The smoke detector should be vacuumed twice a year and if your detector is over five years old should be replaced. Check your smoke detector once a month. If it doesn't work, check the battery; if it still doesn't work replace it. Smoke detectors are not expensive; you can replace your detector but you cannot replace a life. There should be an escape plan to evacuate your house in case of a fire that everyone knows about and should be practiced so that you know that everyone gets out of the house at the same time. Have a designated meeting spot outside of the home.

Just a reminder about the 911 service, when 911 is dialed you will hear nothing on the line for maybe up to 12 seconds, sometimes it is less some times it could be up to 15 seconds. That is because the call has to be routed through the phone lines to a central station that is miles away, it takes that amount of time for the signal to travel that distance to get to the 911 operator. So don't hang up and dial again, if you do that it will tie up another line going to the 911 center, a line that someone else might need. Just stay on the line till the dispatcher answers the call and give them all the information that they ask for before you hang up.

I hope these tips help you have a safe and warm winter. Happy holidays, Henry Rieckhoff, Chief, Town Of Namakagon Fire Department.

GOOD LAKE STEWARDSHIP BY A NLA MEMBER

Special recognition goes to NLA member Dianne Grage. In late September, when our AIS ramp inspection dwindles, Dianne sent out an e-mail to Clean Boats/Clean Waters inspection volunteers to alert them of two fishing tournaments taking place the next day.

One tournament was not too critical because it was a one day event on just Lake Namakagon.

The second tournament was a three day event covering 18 lakes. Some of those lakes contain Eurasian Water Milfoil. The tournaments, according to a representative, were not handing out "invasive species" information. They indicated they "could" do that in the future. The representative indicated the fishermen were "conscientious". There was mention of "not harassing the fishermen". Dianne explained that our monitors were trained to be polite and courteous and are trying to keep our pristine lake free of invasive.

Through Dianne's efforts, the next day, our busier ramps were manned and ready.

Thank you Dianne from all the NLA.