Lake Tides
The newsletter for people interested in Wisconsin lakes

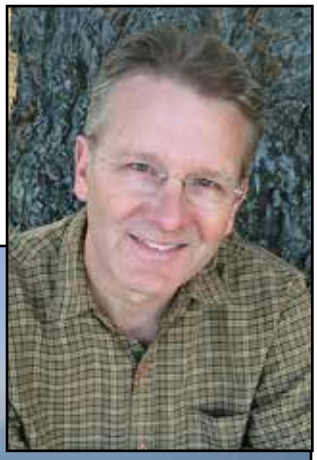
The Power of Giving

$10 Million Endowment Helps Northland College Ramp Up Freshwater Education, Research and Outreach

By Eric Olson, Director, UWEX Lakes

This past spring, Ashland's Northland College announced a major financial gift from the Mary Livingston Griggs and Mary Griggs Burke Foundation in St. Paul, Minnesota to create a new center focusing on freshwater science, management and communications. Mrs. Burke had long been a supporter of Northland College, serving on the advisory committee for the Sigurd Olson Environmental Institute in its early years. The $10 million endowment enables the college to bring in new faculty and expand their existing work on both inland lakes and Lake Superior. Peter Annin and Randy Lehr will codirect the Mary Griggs Burke Center for Freshwater Innovation starting this fall.

Annin may be familiar to *Lake Tides* readers as the keynote speaker from the 2007 Wisconsin Lakes Partnership Convention. He is the author of the book The Great Lakes Water Wars and has recently served as managing director of the Environmental Change Initiative at the University of Notre Dame. He also has strong family ties to lakes. His grandfather purchased a summer cabin on Black Oak Lake in Vilas



www.northland.edu

"I hope to play a key role at Northland in improving water literacy among the general public as well as policy makers."

~ Peter Annin

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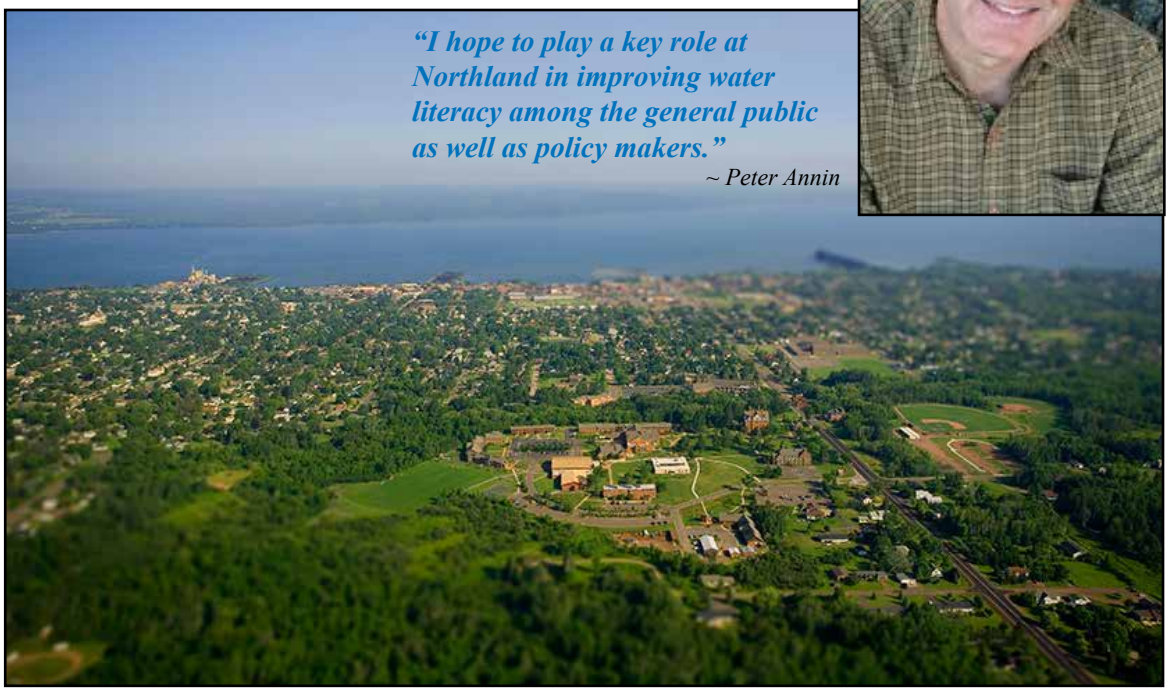

Northland College in Ashland, Wisconsin, abuts beautiful Lake Superior.

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Wisconsin Lakes Partnership

(The Power of Giving, continued from page 1)

County in the 1940s, a place where Peter spent a lot of time growing up and developing an appreciation for the environment.

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"Having the endowment allows us to be strategic and thoughtful about focusing our research and outreach to provide as broad a benefit as possible."

~ Randy Lehr

Randy Lehr has been serving as Bro Professor of Sustainable Regional Development at Northland College since 2010 and was involved in the planning for the Burke Center. "The connection with the Burke family began before I arrived at Northland. Our campus had periodic discussions about their Forest Lodge property near Cable and how that site could be tied to the student education and research at Northland." When Mary Griggs Burke passed away in 2012, the century-old Forest Lodge land and buildings were donated to the Forest Service, whose staff have been working with Northland to develop a plan for preserving and using the buildings and 980-acre site.

According to Lehr, caring for Forest Lodge is a major undertaking: "The renovation will be several years long, but we have already started using the lake and the facility in different capacities and expect to increase that use over time. We envision summer programs, student residencies and on-site research. It will evolve as the structures are improved and available for use."

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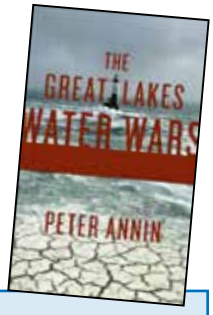
The Mary Griggs Burke family's former 1902 country retreat and summer home, named Forest Lodge.

The $10 million endowment will fund faculty, students and program expenses for the Center. "Having the endowment allows us to be strategic and thoughtful about focusing our research and outreach to provide as broad a benefit as possible," notes Lehr. Their efforts will be local, regional and beyond, as they will balance work on the region's inland lakes with expanded work on Lake Superior and other Great Lakes, along with global issues.

Already, Lehr and others have been working for the last three years on water quality and ecology issues at Lake Namakagon, where the Forest Lodge property is located. "It's a lake with a lot of variation in conditions, depending on what portion of the chain you are on," he notes. "It gives us some really unique management and science opportunities, and we have been working pretty consistently with the lake association and the DNR to develop a comprehensive lake management plan for the system." The staff at Northland also work with a handful of other lakes in the northwestern part of Wisconsin and plan to grow that involvement through the new Center.

Peter Annin's new position will focus on communications and outreach regarding freshwater issues. "I hope to play a key role at Northland in improving water literacy among the general public as well as policy makers," Annin states. "We want to help ensure that wise rules and regulations are implemented during this era of increasing water scarcity and tension." One of his tasks will be updating his book The Great Lakes Water Wars to reflect developments since 2009, including passage of the Great Lakes Compact and the City of Waukesha's recent request for the first diversion of Great Lakes water.



PLAN AHEAD

Northland College invites high school students to explore and experience the school's programs during summer 2016. Dive into geology, aquatic ecology, culture, astronomy, adventure and wildlife while you experience life on campus with other high school students. Develop field, leadership and teamwork skills while doing all the things that make summer count, like sea kayaking, paddle boarding, geocaching, climbing, swimming and hiking. Applications are accepted year-round; limited financial assistance is granted on a first-come, first-served basis. Email Northland at summer@northland.edu for more information.

Though he has strong ties to inland lakes and has lived in Madison for many years, Annin considers himself to be more of a Great Lakes person. “Lake Superior, in particular,” he points out. “So it is wonderful that this position at Northland College will put me in a place that connects two of the world’s major watersheds, the Mississippi Basin and the Great Lakes Basin. The position is very in tune with my own personal and professional goals: educating the next generation of environmental leaders, and getting students out in the field with researchers and resource managers. It’s a remarkable group of faculty members and we have an invigorated administration. It’s a really good time to be at Northland.”

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In addition to Lehr and Annin, the funding will support a staff of three within the Freshwater Center: Chris McNerny, Matt Hudson, and a new biologist position being hired this summer. Interest from the endowment will also provide income to 10 to 20 students employed in different capacities assisting with the Center’s work. According to Lehr, the student roles are important. “We bring students in as freshmen or pre-freshmen and try to get them engaged in research throughout their career. This endowment allows us to create these really unique learning experiences that are hard to match.” Elizabeth Alexson, for example, is a recent Northland graduate who is pursuing her MS in Water Resource Science at the University of Minnesota-Duluth studying diatoms and paleolimnology. Lehr believes that the endowment and the Center will expand opportunities for students like Alexson to gain hands-on science experience during their undergraduate studies at Northland.

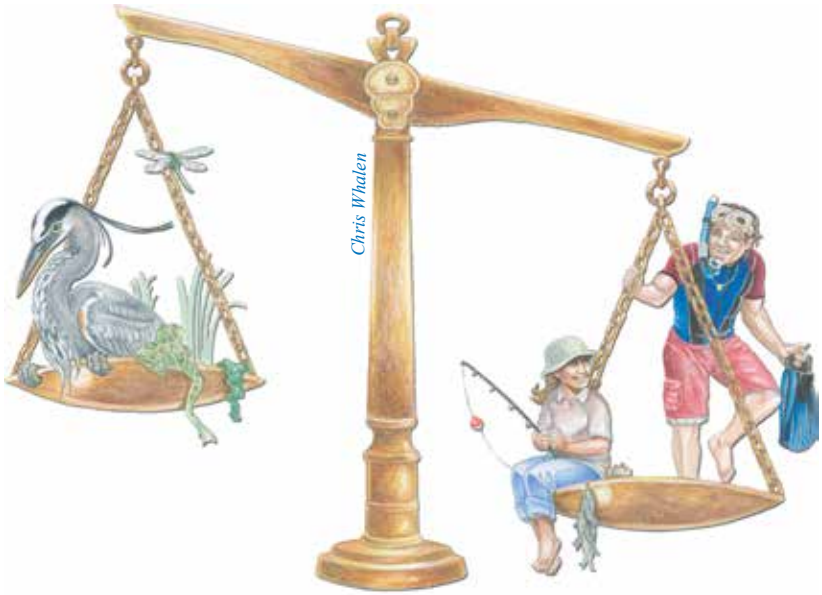
SAVE THE DATE - Friday, September 25, 2015

Celebrate the start of the Mary Griggs Burke Center for Freshwater Innovation and hear short presentations from the Center’s directors, Dr. Randy Lehr and Peter Annin, Friday September 25th from 5:00 p.m. to 6:30 p.m. on the campus mall at Northland College in Ashland. The program will be followed by a Harvest Trail Dinner on campus. For more information and to reserve tickets call (715) 682-1234.

Randy Lehr will discuss the influence of climate change on environmental management and community planning throughout the Lake Superior region. This presentation will summarize recent findings from research through the Chequamegon Bay and Apostle Islands ecosystem and discuss how regional communities might be impacted by, and adapt to, future climate conditions. Peter Annin will delve into the long history of political maneuvers and water diversion schemes that have proposed sending Great Lakes water everywhere from Akron to Arizona. He will analyze several noteworthy diversions that already exist, and shed light on potential water diversions of the future, including the water diversion application submitted by Waukesha, Wisconsin in 2010. A decision on the Waukesha water diversion application is expected later this year or early 2016.

Wisconsin Act 55

How will the two-year budget changes impact Wisconsin's lakes?



Chris Whalen

On July 12th, the Governor signed the 2015 Wisconsin Act 55, encompassing the state's two-year budget. In addition to determining funding for state agencies, the Act makes numerous changes to state statutes that affect shoreland property owners and other lake stakeholders. This short article provides a quick overview of the funding changes and other areas where the budget impacts lakes.

The UW cut translates to a $5.2 million reduction for UW-Extension, [and] will impact our ability to engage with counties and campus partners.

One major fiscal change is the elimination of state funding to a range of non-profit conservation organizations (NCOs) that assist the Department of Natural Resources in carrying out its mission, including Wisconsin Lakes, a statewide group that is part of the Wisconsin Lakes Partnership. The NCO funding cuts were initially proposed by the Governor, then largely restored by the Joint Finance Committee, and finally cut again through a Governor's veto. For Wisconsin Lakes, the cut eliminates roughly two-thirds of their operating budget which began immediately after Act 55 was signed. Other NCOs, including the River Alliance of Wisconsin, the Wisconsin Natural Resources Foundation, Gathering Waters and the Ice Age Trail Alliance are similarly cut, though state assistance often represents a smaller portion of their budgets. The NCO capacity grants helped foster state collaboration with hundreds of local groups like lake associations, land trusts, and community organizations that leveraged volunteers and donations to protect natural resources. The budget cuts will likely diminish the number and impact of such collaborations.

The budget also specifically eliminates numerous DNR scientist and educator positions, reduces (but does not eliminate) funding for the Stewardship Program, eliminates state funding and programming for environmental education in schools, cuts taxpayer support for state parks and trails, and reduces the University of Wisconsin budget by $250 million. Although over 80 DNR positions were eliminated during the biennium, no layoffs were necessary due to retirements, transfers and existing vacancies. The UW cut translates to a $5.2 million reduction for UW-Extension. UW-Extension Lakes is funded through segregated revenue sources (largely the motorboat fuel tax) and has not been directly impacted by the budget, but the cuts to the University and Extension will impact our ability to engage with counties and campus partners.

The budget did maintain programs in some areas that were slated for elimination. State funding for county land and water conservation work was reduced by $125,000, but not to the extent originally proposed by the Governor (-$800,000). The UW-Extension Regional Natural Resource Educators (formerly known as Basin Educators) also saw their segregated funding restored by Joint Finance, as did the newly initiated Farmer-led Watershed Council project in western Wisconsin. Uncertainty over the budget has already led many Extension educators to seek alternatives and presently all three Regional Natural Resource Educator positions in Southeast Wisconsin are vacant. The motorboat fuel tax component of the Water Resources Account, an important financial

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Zebra Mussel Control
Is Zequanox an Option?

By Scott Provost, Statewide Aquatic Plant Management Coordinator, Wisconsin DNR

Photo by Paul Skawinski

Zebra mussels have been present in North America since 1988 when they were first discovered in the Great Lakes. Since then, they have moved across North America from coast to coast with the greatest populations in the Great Lakes states. Zebra mussels can be very destructive to aquatic ecosystems by disrupting the base of the food web, and also to industry by clogging water intake pipes. Internationally, zebra mussels have been spreading for the last 150 years in Europe, where scientists and managers have been searching for some sort of control mechanism to no avail.

Photo by Government of Alberta, Flickr Creative Commons

Minnesota DNR and some Canadian provinces are using dogs to sniff out invasive mussels that can be hard to detect with the human eye.

Over the last few years research has been conducted on methods to kill zebra mussels. A product known as Zequanox, which is comprised of the dead cells of naturally occurring soil bacteria, has been approved by the EPA to curtail zebra mussel growth. To date, success is largely limited to closed water systems, such as intake pipes. In open-water applications (lakes and rivers), zebra mussel control was temporarily effective within contained areas on Christmas Lake in Minnesota, but re-population occurred later. Long-term control in open water has not yet been achieved.

Remember that reactive control measures are not needed if we are proactive in preventing the spread of these species.

In Wisconsin, Zequanox has been registered for use by the Department of Agriculture, Trade and Consumer Protection, but those interested in using it must first obtain a permit (NR 107) from the Department of Natural Resources. Permits will most likely not be issued until additional information about the product becomes available. Researchers are concerned with the effect Zequanox will have on non-target species, particularly our native mussels, as well as fingernail clams and some fish species. Although studies have been done on some of these species, additional testing is needed to evaluate long-term, sublethal and

(Continued on page 15)

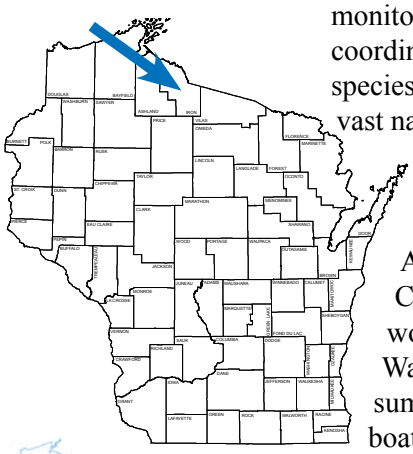
Meet Wisconsin's AIS Staff

Let's get to know….Zach Wilson!

To help our readers learn more about the people working on aquatic invasive species (AIS) issues across the state, we're bringing back a segment that focuses on an AIS staff member. These folks will tell us about what challenges their county is facing and why they're working to protect our lakes. Watch for these short articles in future Lake Tides.

Provided by Zach Wilson

Zach Wilson
Iron County Land and Water Conservation Specialist and AIS Coordinator



Since early childhood, Zach has spent much of his time in the woods and waters of Iron County. He grew up as a hunter, trapper, fisherman and wilderness adventurer, exploring the Northwoods with his small-town friends. In 2000, he graduated from Northland College in Ashland with a Bachelor of Science degree in Outdoor Education and Natural History. After traveling and working abroad on many different ecological projects, his love for the environment, education and Iron County eventually brought him home. Zach was the senior naturalist for the North Lakeland Discovery Center for 15 years, the Director for the Mercer Environmental Tourism Charter School for 3 years, and a private business owner of Northwoods Learning Adventures and Ecological Consulting. Zach serves as the coordinator for the Woods and Waters Project in which high school students from Iron County study the ecology of the American marten and common loon. He is a licensed bird bander, coordinates multiple citizen science monitoring projects, and has experience coordinating aquatic and terrestrial invasive species education programs. In addition to his vast naturalist background, he has also worked as a forest ecologist for the Board of Commissioners of Public Lands.

As the Iron County Land and Water Conservation Specialist, Zach has been working with the Clean Boats, Clean Waters (CBCW) program, training three summer staff that monitor and educate boaters about aquatic invasive species at the many boat landings around the famous Turtle Flambeau Flowage and Trude Lake (TFFTL). The Iron County Land and Water Conservation Department also helps coordinate Citizen Lake Monitoring Network volunteers, and conducts trainings for citizens interested in monitoring for aquatic invasive species. Other duties include managing Iron County's terrestrial invasive species and encouraging landowners to plant native species along their shoreline. Water runoff and erosion control continues to be a priority at the Iron County Land and Water Conservation Department, with several rain garden projects installed each year. This year, with help from a Natural Resource Foundation grant, Iron County is also monitoring the lakes within the TFFTL watershed, focusing on the Springstead area.

With its 495 lakes, 222 named streams totaling 1245 linear miles of shoreline (of which 84 streams are classified as trout streams), and surrounded by 87.4 % forested land, Iron County is among one of the most pristine areas in the state. "Only four of the 495 lakes have aquatic invasive species, and we want it to stay that way," says Wilson. "Education and prevention is the key and, with the help of our many dedicated volunteers, Iron County will continue its tradition of maintaining its healthy lakes."

What's new with invasive species in your county?

We continue to train volunteers and have hired three summer staff to conduct CBCW and AIS monitoring surveys at boat landings around the TFFTL. This year, with the help of our local schools, Mercer and Hurley K-12, we pulled over 800 lbs of garlic mustard from along the Montreal river and Fisher lake. Also, we cut, and will be soon treating, four large patches of Bohemian knotweed, one of which was creeping along a tributary to the Potato river.

In your opinion, what is currently the most prominent AIS issue in Iron County?

The biggest issue for Iron County is preventing the spread and movement of AIS. Currently, we only have four lakes with AIS infestations. However, we are a popular tourist destination and fear that out-of-town visitors will bring more AIS to Iron County lakes.

Why is AIS prevention important to you?

Because once a species becomes established, it is much harder to manage. In the end, prevention is much cheaper than treatment and management.

How do you think preventing the introduction and spread of AIS should be addressed?

We need to continue our education and boots-on-the-ground monitoring.

What is your favorite part of being an AIS Coordinator?

Working with the many volunteers and citizens concerned about the health of Iron County's lakes and rivers is one of the best parts of my job!

To find out who is working on AIS issues in your area, go to: http://dnr.wi.gov/lakes/invasives/topics.aspx.

2016 Surface Water Grants

The Wisconsin Department of Natural Resources' Surface Water Grants material has been updated for 2016. Go to DNR's Surface Water Grants website to download the new grant application and guidance document. If you plan to apply for a Lake/River/AIS Planning grant, a Clean Boats, Clean Waters grant and/or a Lake Classification and Ordinance grant for the December 10th deadline, now is the time to start working with your DNR regional lake/river/AIS biologist to develop the project.

dnr.wi.gov/aid/surfacewater.html

Find application materials under the How to Apply tab.

Surface Water Grant Timeline (for grants due December 10, 2015)

Now	Meet with your lake/river group to brainstorm potential grant project
September	Meet with your DNR regional lake/river/AIS biologist to discuss project idea
October (or before)	Identify project partners and meet with them to discuss partnership opportunities (in-kind donation of cash, volunteer time, etc.)
November (at the latest)	Complete draft grant application and submit to DNR regional lake/river/AIS biologist and/or environmental grant specialist for review
December 10	Email completed grant application and attachments to dnrsurfacewatergrants@wisconsin.gov

Starry Stonewort Update

By Paul Skawinski, CLMN Statewide Coordinator, UW-Extension Lakes with contributions from Tim Plude and Heidi Bunk, Water Resource Management Specialists, Wisconsin DNR

You can help prevent the spread of starry stonewort the same way you prevent the spread of other aquatic invasive species – be sure to follow the Clean Boats, Clean Waters prevention steps!

A species of invasive, aquatic algae known as starry stonewort (*Nitellopsis obtusa*) was discovered in September, 2014 in Little Muskego Lake, Waukesha County (as discussed in our last issue of *Lake Tides* - Volume 40, Issue 2). Intense monitoring efforts by the Wisconsin Department of Natural Resources (WDNR) and others have resulted in three additional populations of starry stonewort being identified. These occur in Long Lake, Racine County; Big Muskego Lake, Waukesha County; and Silver Lake, Washington County.

Photo by Amy Kowalski

Photo by Paul Skawinski

The unique star shape of the bulbils is useful when trying to identify this species.

Rapid Response

Little Muskego Lake has responded quickly to this new invader, receiving a rapid response grant from the WDNR. Residents of the lake have partnered with a local Boy Scouts Venture Crew to manually remove starry stonewort via SCUBA diving. In addition to this effort, the lake district has hired a consultant to perform a special type of manual removal called diver-assisted suction harvesting (DASH). With a DASH system, a diver can dislodge a target plant by hand and move it into a suction hose floating on the surface of the water. This allows the plant to be sucked out of the lake and moved to the shoreline or onto a special boat, minimizing fragmentation of the plant and time/effort of the diver. In the case of Little Muskego Lake, the material was pumped into large geotextile bags on shore, which contained the solids and allowed water to flow back out into the lake. This ensured that any bulbils or fragments of starry stonewort were contained and not allowed to return to the lake.

Photo by Paul Skawinski

It is illegal to transport any aquatic plants on a public roadway in Wisconsin.

Learning More

WDNR and UW-Extension Lakes held a series of public informational meetings on starry stonewort in Southeast Wisconsin this summer to brief the public on what we know (and don't yet know) about starry stonewort and its implications for Wisconsin lakes. We do know that starry stonewort does not produce viable "seed" in the United States, and therefore, it can only spread by fragments of the plant or its bulbils. You can help prevent the spread of starry stonewort the same way you prevent the spread of other aquatic invasive species – be sure to follow the Clean Boats, Clean Waters prevention steps (see page 9), and take time to familiarize yourself with how to identify starry stonewort. To learn more, please visit the Citizen Lake Monitoring Network website at www.uwsp.edu/cnr/uwexlakes/clmn, click on *Monitoring Types*, then click on the *Aquatic Invasive Species* button.

There's an App. for That!

FishBrain
http://fishbrain.com

FishBrain is the world's largest community-based fishing App. Join other anglers in your area and contribute to the world's smartest local fishing forecasts. FishBrain has also recently joined forces with the US Fish and Wildlife Service to enlist the help of over 750,000 App. users in logging sightings of endangered and threatened species.

Swim Guide
http://theswimguide.org

Experience the freedom of beach-hunting from your smartphone. Swim Guide connects you to beaches and swimming holes everywhere. Discover a variety of beaches, ranging from city parks to remote lakes ideal for camping, and identify at-a-glance which beaches are clean for swimming (green) and which have water quality problems (red). You can also use the App. to help protect your waterway by reporting pollution or environmental concerns.

Midwest Invasive Species Information Network
http://misin.msu.edu/tools/apps/

The Midwest Invasive Species Information Network (MISIN) smartphone App. provides a mobile solution for the capture of invasive species field observation data. You can play an important role in the early detection and rapid response to new invasive threats in your area by contributing invasive species observations to the MISIN database.

Reporting New Discoveries of Aquatic Invasive Species

Late summer is a perfect time for identifying aquatic invasive species (AIS) in your local lake or river. While you are out swimming, fishing and enjoying our lakes and waterways during this time of year, you can help track and slow the spread of AIS! Just follow these steps to report anything you haven't seen before:

1. Make sure the suspected invasive species has not been previously found in the waterbody. Type *AIS* in the search bar on the DNR website (dnr.wi.gov) to find an alphabetical list of waterbodies by county.
2. Take a digital photo (if possible) and make note of the species location and how large of a population is present. Collect five to ten specimens. If it is a plant, try to get the root system, all leaves, seed heads and flowers. Place in a zip bag with no water, place on ice, and transport to a refrigerator.
3. Fill out an Aquatic Invasive Species Incident Report form. A link to these forms can be found at http://dnr.wi.gov/topic/Invasives/report.html.
4. Contact your DNR Regional AIS Coordinator or email invasive.species@wisconsin.gov.

For more information search *Reporting Invasives* on dnr.wi.gov, or contact your local DNR office.

Check out these handy aquatic invasive species fact sheets to help with identification. Go to www.uwsp.edu/cnr/UWEXLakes/clmn and click *Resources*, then *AIS Fact Sheets*.

Fascinating Species

Sundew - the Carnivorous Beauty

By Paul Skawinski, CLMN Statewide Coordinator, UW-Extension Lakes

Photo by Paul Skawinski

Glistening droplets of gentle morning dew coat the hairs on tiny plants across a bog landscape, at least that's what these plants want you to think. Species of the genus Drosera*, known as the sundews, secrete a sticky, sweet-smelling substance across the surface of their leaves, tempting any unsuspecting insects that fly nearby. For most insects that touch these droplets, it's game over.*

When an insect lands on a sundew's sparkling leaves, it is instantly trapped. Struggling only makes the situation worse, as the insect's body contacts more droplets. Eventually, the insect gets covered in so much of the sticky substance that it drowns! The leaf of the sundew then rolls up around the insect, which can take close to an hour, and digests its catch.

If you come across this fascinating species and can take a picture, we'd love to see it! Post it to the Wisconsin Lakes Partnership Facebook page.

Life in a bog environment is tough for plants, particularly due to a lack of nutrients. Sundews typically grow directly on logs or clumps of *Sphagnum* moss, neither of which offer a source of minerals for the plants. A sundew can overcome this limitation by trapping insects and absorbing the minerals contained within their bodies. Mosquitoes, midges, flies and small beetles are all potential meals for a sundew.

Photo by Paul Skawinski

The legendary naturalist Charles Darwin spent a great deal of time studying sundews. One of his experiments involved dropping various substances onto sundew leaves to watch the plants' reactions. When Darwin dropped milk, meat or urine onto the leaves, they curled up. When he added paper or stone to the leaves, nothing happened. Darwin concluded that the sundews were able to sense the presence of nitrogen and avoided wasting energy to curl up around a non-living organism that would provide no nourishment for its efforts.

Wisconsin is blessed with four species of sundews, but all of them require careful attention to observe. A single sundew is typically only an inch or two in diameter. An ideal habitat may contain large clumps of sundews that are three to four inches across. If you're lucky enough to live near a *Sphagnum* bog or a fen, you probably have these fascinating plants right out your back door, waiting to be discovered.

(Wisconsin Act 55, continued from page 4)

resource for lake stakeholders, is slated to grow over the next two years. The state projects the post-recession trend of increased motorboat registrations in Wisconsin will continue. This account funds lake and river grants, as well as UW-Extension Lakes and numerous DNR lake management and biologist positions.

A significant non-budget item included in Act 55 impacts Wisconsin's shoreland zoning program. The changes seek to establish the state minimum standards for county ordinances as the uniform state *maximum* standards, largely eliminating the ability of counties to tailor shoreland codes to the different water resources found across Wisconsin. The changes also seek to allow greater latitude to owners of buildings that do not conform to current shoreland setbacks, when it comes to repairing and replacing such structures. Counties are now prohibited from requiring all shoreland property owners to restore shoreland buffers where they did not exist at the time the state's shoreland program was initiated. Adams and Dunn counties were slated to implement such a requirement in 2015. The Department of Natural Resources is currently evaluating the statutory changes that affect local governments in order to provide an interpretation that can be consistently implemented across the state.

If you have more questions about how Wisconsin Act 55 will impact your lake, please contact Wisconsin Lakes at 608-661-4313 or info@wisconsinlakes.org or UW-Extension Lakes at 715-346-2116 or uwexlakes@uwsp.edu

Q&A Lake Districts

We often get phone calls and emails from Lake Tides *readers with a variety of questions about lake districts. Do you have a question about lake districts that you would like to see answered in* Lake Tides*? Send it to uwexlakes@uwsp.edu so we can include it in a future issue.*

Q: Can a town, city or village appoint a lake district commissioner who is not an elected member of the municipal governing body?

A. Until recently, the answer to this question was "no", as the statute required local municipal appointees to be a member of the town, city, or village governing body. However, 2015 Wisconsin Act 25 made changes to chapter 33 of statutes that, as of July 1, require the governing body to appoint a resident of the lake district to serve on the commission. Specifically, Section 33.28 (2) (b) of the statutes was amended to read: "33.28 (2) (b) One ~~member of~~ resident of the district who is appointed by the governing body of the town, village, or city within which the largest portion by valuation of the district lies~~, appointed by the governing body and owning~~ and who owns property within the district if possible~~; and~~. The appointee may be a member of the governing body making the appointment." The final part of the amendment means that it is OK for a town board, village board or city council to appoint one of its own members to the district, but the first portion makes it clear that they would need to also be residents of the district. This may create issues for districts that have long enjoyed a favorable working relationship with their municipal appointee if that person happens to not be a district resident. However, many lake districts will likely welcome the addition of another district resident to the board of commissioners and the intent of this change is clearly to improve the functioning of boards across the state. If your district is concerned about this change and would like to advocate for a "middle ground" solution that would allow them to retain a good commission member from the municipal governing body, you are encouraged to contact Mike Engleson at Wisconsin Lakes: mengleson@wisconsinlakes.org or 608-661-4313.

For more information on lake districts, see *People of the Lakes: A Guide for Wisconsin Lake Organizations*, www.uwsp.edu/cnr/uwexlakes/districts.

2016 Lakes Convention

Celebrating Volunteers!

March 30-April 1, 2016 ~ Stevens Point, WI

www.uwsp.edu/cnr/uwexlakes

The Wisconsin Lakes Partnership will celebrate the 30th anniversary of the Citizen Lake Monitoring Network (CLMN) at the annual lakes convention on March 30-April 1, 2016.

Although some families have been observing lake changes for much longer than 30 years, the CLMN formally began in 1986. Today nearly 1,000 citizen volunteers statewide are collecting water quality data for more than 700 Wisconsin lakes. The goals of the CLMN are to collect high quality data, educate and empower citizens, and share and use this data and knowledge. This is one important step in providing data that is critical to sound policy and responsible management of our water resources.

Wisconsin relies on volunteers to be the eyes and ears in their lake communities. Volunteers play an important role in assessing lake water quality and watershed health by monitoring water clarity, water chemistry (such as dissolved oxygen or phosphorus), aquatic invasive species, native aquatic plant communities and many kinds of wildlife — from aquatic insects to birds. These observations are compiled in a statewide database that collectively helps to inform specialists who guide lake management decisions. If you're interested in doing your part to keep our lakes healthy, check out the Citizen Lake Monitoring Network (www.uwsp.edu/cnr/UWEXLakes/clmn).

Other volunteer programs include the Clean Boats Clean Waters program (www.uwsp.edu/cnr/UWEXLakes/cbcw), Wisconsin Lake Leaders Institute, and various other citizen monitoring programs at over 200 nature centers, conservation organizations and other groups.

The Department of Natural Resources, Wisconsin Lakes and University of Wisconsin-Extension provide volunteers with the necessary equipment and training. Volunteers provide their time, energy and a willingness to share information with their lake community and other lake users.

Please join us this next spring at the Wisconsin Lakes Partnership Convention to celebrate 30 Years of Citizen Lake Monitoring. To stay updated on this event click *Convention 2016* under *Events* on the UW-Extension Lakes website www.uwsp.edu/cnr/uwexlakes.

Call for Presenters

We encourage submission of presentations that address the broad theme of celebrating volunteers or any of the topics listed below:

- Ecology
- Aquatic Invasive Species
- Citizen Science
- Lake Research
- Streams, Rivers, Watersheds
- Lake Management

Deadline: October 2, 2015

Go to www.uwsp.edu/cnr/uwexlakes and click on *Convention 2016* under *Events* in the left navigation column.

Photo by Amy Kowalski

Another fun reason to attend the Lakes Convention in 2016 will be to see how much the native shoreland plants have grown since the Hands-on Shoreland Restoration workshop at last year's convention.

Aquatic Invasive Species

How Do They Get Here? Part Four

By Tim Campbell, AIS Communication Specialist, UWEX and Wisconsin Dept. of Natural Resources

Pet Release

On the surface, the pet release pathway looks a lot like the live specimen release pathway (discussed in the last issue of *Lake Tides*). People have plants and animals they can no longer care for, they release them into the environment, and then there can be problems. NR 40, Wisconsin's invasive species rule, plays the same regulatory role to minimize the spread of plants, animals and diseases. The difference lies in everything that happens before the release – what the consumer does before they purchase their new pet and options they have when considering release.

Before Purchasing a Pet

Before a purchase, retailers can play a big role in which pet a person finally decides to bring home. Sending a customer home with a pet that they will unlikely be able to care for may put the customer in the uncomfortable situation of considering release. Some stores are realizing this, and they are making sure their customers go home with a pet that matches their ability to care for it. A happy pet owner is one that keeps visiting their store.

Unfortunately, there are situations where people can no longer care for their pets – they lost their job, they are moving, or the pet was abandoned by a family member. Whatever the reason, finding a new home for a pet ensures that it doesn't end up in the environment as a potential invasive species. Sometimes a pet store will allow you to return a pet, and a local humane society can help to find a forever home for fluffy and cuddly pets. New homes can be more difficult to find for snakes, turtles and fish. Trading with a friend, seeking out a hobbyist club, or finding an exotic animal rescue are all good options.

In Wisconsin, we are lucky to have one exotic animal rescue out of Green Bay that has done a lot of work to create a viable alternative to pet release in northeast Wisconsin. Jamie Kozloski of Kingdom Animalia Exotic Animal Rescue has rescued and rehomed over 1,000 pets that people could no longer care for. She has partnered with the Wisconsin invasive species community multiple times to host pet surrender days and to help raise awareness at pet trade shows. Her efforts netted her a 2015 Wisconsin Invasive Species Council Invader Crusader Award (see page 14). More alternatives to pet release like Kingdom Animalia would greatly benefit our efforts to reduce the number of potentially invasive pets that are released.

Look for the final installment of *AIS - How Do They Get Here?* in the next issue of *Lake Tides*.

Finding a new home for a pet ensures that it doesn't end up in the environment as a potential invasive species.

DON'T LET IT LOOSE!
There are many alternatives to pet release. Whatever you do, just don't let it loose!

Provided by Tim Campbell

Jamie Kozloski of Kingdom Animalia Exotic Animal Rescue

Did you know woodpeckers have long, barbed tongues?

DYK

By Elizabeth Spry, UWSP student

As the name implies, woodpeckers are known for their ability to rapidly hammer wood – with at least 1,000 times the force of gravity – all without experiencing a headache! But something interesting hides beneath that beak of steel. After drilling a hole in a tree, a woodpecker needs something to get its meal out, and that is when a long tongue comes in handy. Woodpeckers have a long, thin tongue with a barbed tip, which is used to extend into a tree and essentially rake out the insect appetizers inside. A sticky coating around the tongue also helps the bird withdraw their food. A woodpecker's tongue can be several inches long, and a tongue that long needs to be stored somewhere for safekeeping. The cartilage and bone of the tongue, known as the hyoid apparatus, starts out as two bands, which merge together to form the bird's tongue. The split hyoid actually wraps all the way around the back of the skull, just under the skin, before coming together to form the tongue! Keep this quirky fact, just like the woodpecker's tongue, stored in the back of your mind next time you come across one of these interesting birds.

Photo by Larry Dau

2015 Invader Crusaders

Over 20 Invader Crusaders were nominated for this year's Invader Crusader awards – the most impressive turnout of quality crusading in recent years. Congratulations to this year's award recipients!

Professional Individuals – Christal Campbell, University of Wisconsin-Extension
Lee Shambeau, 4-Control
Kaycie Stushek, Golden Sands RC&D Council
Organization – Florence County Lakes and Rivers Association
Volunteer Individuals – Bill Jaeger, Jamie Kozloski, Paul Mozina, Sherry Speth
Volunteer Group – Friends of the MacKenzie Center
To read more about these award recipients, go to
http://invasivespecies.wi.gov/awareness-month/awards/

Provided by Wisconsin Invasive Species Council

2015 Invader Crusader Award winners and hosts. From left to right: Christal Campbell, Kaycie Stushek, DNR Deputy Secretary Kurt Thiede, Sherry Speth, Council member Jim Kerkman, Paul Mozina, Jamie Kozloski, Don Lucke, Deb Wearne-Neurohr, Steven Wearne, Mick Milnar, and Cary Anderson

(Zebra Mussel Control, continued from page 5)

chronic impacts on our native mussels and other species. Keep in mind that this product is not a silver bullet for zebra mussels and is NOT suitable for whole lake treatments. In fact, the label specifically states that Zequanox is not for whole lake treatments, and treatments must not exceed 50% of the total volume of water within a waterbody per treatment.

As we progress in finding effective control measures for zebra mussels, please keep in mind the best form of active control is prevention. Everyone needs to do their part to help eliminate the movement, and ultimately the introduction, of zebra mussels and other invasive species in our lakes and rivers. Remember that reactive control measures are not needed if we are proactive in preventing the spread of these species.

Be a part of the solution!

The Clean Boats, Clean Waters watercraft inspection program is an opportunity to take a front line defense against the spread of aquatic invasive species.

AIS Prevention Steps

INSPECT boats, trailers and equipment.
REMOVE all attached aquatic plants and animals.
DRAIN all water from boats, vehicles and equipment.
NEVER MOVE plants or live fish away from a waterbody.

CALENDAR

September 19, 2015 - Ocean Conservancy's International Coastal Cleanup
Take the *Pledge to Fight Trash* and join thousands across the nation as they volunteer their time to keep our coasts naturally beautiful.
For more information: www.oceanconservancy.org/keep-the-coast-clear/pledge.html

September 29-October1, 2015 – 11th Annual Great Lakes Restoration Conference, Chicago
Each year the Healing Our Waters – Great Lakes Coalition brings together a diverse group of more than 400 people from throughout the Great Lakes region to attend the Great Lakes Restoration Conference. The conference provides a 3-day forum for participants to learn about important Great Lakes restoration issues, network at the largest annual gathering of Great Lakes supporters and activists, and develop strategies to advance federal, regional and local restoration goals.
For more information: http://conference.healthylakes.org/

October 28-30, 2015 – 9th Biennial State of Lake Michigan/15th Annual Great Lakes Beach Association Joint Conference, Traverse City, Michigan
The Michigan Department of Environmental Quality is hosting this joint conference in which attendees will hear from top experts about the current status and science behind Lake Michigan and beach restoration and management.
For more information: www.michigan.gov (type "DEQ - 9th Biennial" in search bar)

November 16-19, 2015 – Annual AWRA Conference, Denver, Colorado
The American Water Resources Association will hold its Annual Conference on Water Resources in Denver this year. Register by the Super Saver Deadline on September 4th and save some cash!
For more information: www.awra.org

November 17-20, 2015 – 35th NALMS International Symposium, Saratoga Springs, New York
The North American Lake Management Society will hold their upcoming international symposium in historic Saratoga Springs, New York. The theme this year is *North American Lakes: Embracing Their History, Ensuring Their Future*.
For more information: www.nalms.org

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IN THIS ISSUE

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Reflections

The wealth of the nation is its air, water, soil, forests, minerals, rivers, lakes, oceans, scenic beauty, wildlife habitats and biodiversity… that's all there is. That's the whole economy. That's where all the economic activity and jobs come from. These biological systems are the sustaining wealth of the world.

~ Gaylord Nelson