



Native Plant

MYTHBUSTERS

The Value of Gardening with Native Plants

By Patrick Goggin, Lakes Specialist, UW-Extension Lakes

People around North America are planting more native gardens. Native grasses, sedges, rushes, wildflowers, ferns, shrubs and trees bolster habitat for wildlife, conserve water and beautify our home landscapes. These native gardens can provide a natural privacy fence, offer migratory birds food and shelter and support pollinators in dire need of nectar and host plants. Native gardens are even used beyond home landscapes, such as at hospitals and mental health clinics, to aid in faster healing from many different ailments. But even with all these benefits, replacing lawn areas with natives still has its barriers. Convincing homeowners to make the switch to native plants can be a tough sell, mainly because of the perception that lawns are elegant while natives are messy.

But one man, Doug Tallamy, is trying to change this perception by helping people understand the many values of gardening with native plants. As a professor of entomology and wildlife ecology at the University of Delaware, he is on a mission to change the definition of what our home landscapes can be nowadays.

Tallamy, a passionate voice in America's native plant movement, advocates minimizing lawn to make room for trees, shrubs, flowers and ground covers that are native to a particular region. He reasons that these home-grown plants are just as beautiful as the non-natives that dominate many of our nurseries and landscapes. Natives are also more lake friendly.

(Continued on page 2)

Photo by Patrick Goggin



Most common, non-native landscaping plants have a matching native alternative with similar leaves, flowers, size and shape.

This Northwoods native planting supports birds, butterflies, bats and moths, and displays colorful blooms throughout Wisconsin's changing seasons.

The Foley's enjoy their beautiful view of Beaver Dam Lake through a native garden planted as part of the Healthy Lakes initiative. The bird bath and stepping stones add a decorative touch.



However, not everybody is on board with this growing native gardening movement. Some hesitate to begin native planting projects based on what Tallamy says is the movement's biggest challenge: overcoming eight myths that discourage people from using native plants in their home landscapes.

designers call *cues to care*. Patio pavers or mulch can frame plant bed edges or create a flowing pathway, and whimsical sculptures can add visual interest. Wildlife feeders and houses invite furry and feathered neighbors, and natural seating areas or benches create a space to enjoy your garden.

Myth 1: Natives Are Messy

There are tricks to using native plants without sacrificing a tidy-looking garden. Cultivate dense layers and groupings of different species instead of single plants. This creates a clean look while maximizing the biodiversity that the landscape provides. Put a small patch of lawn only where you will walk, then plant everything else to create tidy outdoor rooms of natives. Ground covers can provide the floors, woody plants like medium-sized shrubs and small trees build the walls, and the arching limbs of trees and taller shrubs create the ceilings. Make it personal by including what landscape

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Myth 2: Density Is Ugly

Some feel that dense plantings cannot be attractive. This may be true of single-species hedges, but a rich mix of natives staggered along a property line can create vivid, living walls that look great and create natural fencing. Tallamy recommends a mix of plants such as dogwoods, hazelnuts, maples, birches, viburnums and oaks. Mix in some conifers too. You might also try vines like virgin's bower, rock clematis and American bittersweet. Ostrich, sensitive and cinnamon ferns can be great choices for wet areas. These combos yield year-round interest and provide food and shelter for native insects, birds and small mammals.

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This native backyard planting not only shields views from the neighbors, but also provides an area for little human explorers and a fantastic bird and butterfly habitat.

Photos by Paul Skawinski



Before



After

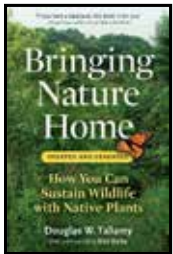
Myth 3: Natives Cannot Be Formal

“Formality is a function of the design, not the plant species,” says Tallamy. Several of our Wisconsin botanical gardens, nature centers and arboreta have formal native gardens exhibiting the rich color palette and diverse structural forms found in Midwestern native flora.

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Myth 4: Insects Destroy Natives

Tallamy’s studies, highlighted in his book Bringing Nature Home: How You Can Sustain Wildlife with Native Plants, show that native plants suffer no greater damage from plant-eating pests than do non-natives. They may, in fact, be healthier because they foster a more balanced ecosystem. Natives host many indigenous plant-eating insects such as caterpillars and grasshoppers, but these plant eaters in turn attract native predators such as birds, assassin bugs, praying mantises, beetles and parasitic wasps. These beneficial critters help keep the insects under control. In contrast, imported non-natives, such as honeysuckles and barberries, host non-native pests that have few predators.



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Myth 5: Natives Attract Vermin

Many people worry that natives attract unwelcome visitors such as rats and snakes. But all plants – native or not – will attract wildlife, including bees that may sting or birds that may splatter the car. To counter irrational fears of vermin, Tallamy notes that in 2012 only one person in the nation died from a snake bite, whereas 791 were killed by toasters and 33,000 by the common cold. Still, fear of snakes likely outweighs a fear of toasters, so this myth may die hard. Here in Wisconsin, the snakes in our native gardens are likely to be nonthreatening to humans, such as green, garter, milk and red-bellied snakes.

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Photo by Paul Skawinski

Myth 6: Non-natives Are Prettier

No one can categorically claim that native plants are more attractive than non-natives, but it’s hard to deny the beauty of the spires of purple blazing star, clusters of red cardinal flowers, masses of sky-blue lobelia, or patches of pink Joe Pye weed. Most common, non-native landscaping plants have a matching native alternative with similar leaves, flowers, size and shape. Beyond beauty, natives that bloom from April to October support pollinators, while native woody and herbaceous plants sequester carbon, provide shade and support a range of birds and other species.

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(Continued on page 4)



Convention Highlight

Pamela Toshner, Lake Biologist with the DNR, along with citizens involved in the Healthy Lakes Initiative, will be offering workshops on April 5, during the Wisconsin Lakes Partnership Convention. Read the details on page 11.

This rain garden has a rich mix of beautiful native flowers, and it keeps the yard from flooding when it rains!



Where do I buy native plants?

Search “native plant nurseries” on the dnr.wi.gov website to get a Wisconsin listing, or go directly to this link: <http://dnr.wi.gov/files/pdf/pubs/er/er0698.pdf>

Myth 7: Neighbors Scorn Natives

Neighbors scorn mess, regardless of the source. “The problem with the native plant movement is that people think they can stop mowing their lawns and just sprinkle seeds from prairie-in-a-can,” says Tallamy. “But we’re not suggesting you abandon landscaping. You do have to fit in with the cultural norms.” Well-tended native plantings can be tidy and beautiful enough to please the neighbors, not to mention the hummingbirds and butterflies.

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Myth 8: Natives Are Costly

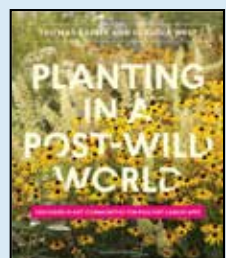
“Of all the myths, this is the least mythy,” says Tallamy. Mass-produced non-natives like impatiens are cheap, and that economy of scale does not yet exist for many natives, which are often sold by conservation groups to raise revenue. Still, an acorn from a native oak is free, and neighbors may be willing to share cuttings, seeds or divided roots of fast-spreading natives like bergamot, dwarf honeysuckle, snowberries, golden Alexanders, columbine, cup-plants or penstemons. Also, many Wisconsin nurseries now specialize in offering affordable Midwestern native species. 💧

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Native Plant Resources



If you would like to connect with others interested in the native plant movement or would just like to learn more about it, the *Wild Ones* website is a great place to start. www.wildones.org



If you would like to read more about the native plant movement, check out these books:

Planting in a Post-wild World: Designing Plant Communities for Resilient Landscapes by Thomas Rainer and Claudia West

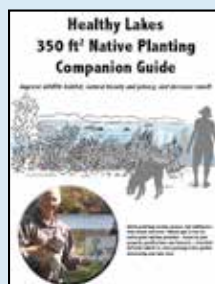


Garden Revolution: How Our Landscapes Can Be a Source of Environmental Change by Larry Weaner and Thomas Christopher



The Living Landscape: Designing for Beauty and Biodiversity in the Home Garden by Rick Darke and Doug Tallamy

If you are looking for assistance and ideas in planning and installing your own native plant project, check out these timely resources.



The recently updated Healthy Lakes 350 ft² Native Planting Companion Guide has six example planting plans: lakeshore edge, bird and butterfly, bare soil/erosion control, woodland, low growing and deer resistant. Check it out at the Healthy Lakes web site: <http://healthylakeswi.com>



Midwestern Native Shrubs and Trees: Gardening Alternatives to Nonnative Species is a new book being published in March 2017. This is a companion piece to the best-selling native plant guide The Midwestern Native Garden: Native Alternatives to Nonnative Flowers and Plants by Charlotte Adelman and Bernard Schwartz.



Ready to buy some native plants?

Search “native plant nurseries” on the dnr.wi.gov website to get a Wisconsin listing, or go directly to this link: <http://dnr.wi.gov/files/pdf/pubs/er/er0698.pdf>

Gardening for Your Own Good

By Eric Olson, Director and Lake Specialist, UW-Extension Lakes

With each lengthening day of late winter, our minds increasingly turn to thoughts of the spring season now on the horizon. Where will we go for fishing opener? How often will the grandkids come to the lake? When will the water be warm enough to swim in? For a subset of people, early spring also presents a deadline: for this spring's new seed orders to arrive on time. "I must get through these plant catalogues and choose my favorites!"

Imagining the beauty of my future garden makes procrastination all the more enjoyable. This reward to my own mental health – the pleasure of a theoretical garden – is amplified exponentially when my hands actually work the soil and my nostrils take in the sweet smell of compost. Science is now supporting what I and many of you take away from our time gardening through a burgeoning field of research known as horticultural therapy.

Horticultural therapy dates back to the 1800s, but it wasn't until the 1950s and 60s that formal academic programs emerged for the field. Today, the American Horticultural Therapy Association (AHTA) represents professionals who practice gardening as therapy and has been publishing a peer-reviewed journal on the topic since 1986. The Chicago Botanic Garden is one of seven teaching institutions in the U.S. accredited by the AHTA to provide students a certificate in horticultural therapy.

While a great deal of research and practice focuses on people with significant physical or mental challenges, many of the benefits of gardening can be realized by anyone willing to get their hands dirty and familiarize themselves with the landscape. Simply spending time outdoors in a focused activity like gardening can have a calming effect on our minds. Research is also showing that contact with soil bacteria can increase production of serotonin and decrease inflammation. Scholars in this field argue that humans evolved in close contact with soils and their microbes, and that our modern "anti-septic" environments could, ironically, be decreasing people's physical and mental health.

So the next time you are feeling anxious or blue, perhaps spend some time outdoors working the landscape a bit - divide out those lovely perennials, maybe get some shrubs planted down by the shore. You could be doing the land, the lake and yourself some good. 💧

Simply spending time outdoors in a focused activity like gardening can have a calming effect on our minds.



Convention Highlight

Barbara Kreski, Director of Horticultural Therapy Services at the Chicago Botanic Garden, will be teaching an introductory workshop on Therapeutic Horticulture on Wednesday April 5 as part of the Lakes Partnership Convention. Look for details on page 11.



Photo by Amy Kowalski



Lake Bottom Mysteries:

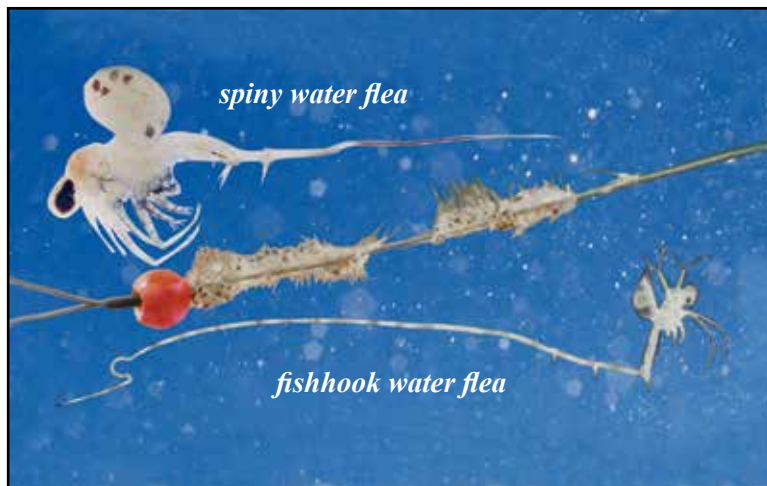
A Remarkable Reproduction Strategy

By Sandy Wickman, Regional CLMN Coordinator, UW-Extension Lakes

When asked to think about our favorite part of Wisconsin's lakes, many of us picture human activities (well, we are human after all), but there are many significant things happening below the surface that might be surprising. This winter's installment of Lake Bottom Mysteries uncovers some interesting facts about an extremely small creature, that has multiplied enough to have negative impacts in some of our largest waterbodies in the state.

Shown here are enlarged versions of the spiny water flea and the fishhook water flea, along with fishing line covered with a mass of spiny water fleas.

Photo provided by University of MN Sea Grant



At just $\frac{1}{4}$ to $\frac{1}{2}$ inch long, with 70% of that length covered by a barbed tail spine, the spiny water flea (SWF) is translucent with one large dark eye. Individually, it can easily go unnoticed, but when clustered together – which is often the case – they attach themselves to fishing line. When that happens, they get noticed.

History

Through genetic testing techniques, it appears that the spiny water flea, *Bythotrephes* spp., can be traced to native populations in St. Petersburg, Russia. Spiny water fleas were discovered in Lake Huron in 1984, likely transported in ballast water, and by 1987 had spread to all of the Great Lakes. They seem to prefer large, clear lakes and are confirmed in 23 lakes throughout Wisconsin. The fishhook water flea, *Cercopagis pengoi*, joined the SWF in the 1990s. Both spiny water flea and

fishhook water flea belong to an order of small crustaceans called Cladocera, the same as our native (and ecologically valuable) water fleas.

Making Babies

When water temperatures are just right (not too hot and not too cold) and food is abundant, adult female SWF produce eggs without mating. These unfertilized eggs are carried in their mother's brood pouch until they develop into female offspring that are identical to their mother. The female can produce ten young every two weeks or so. As a result, throughout much of the spring, summer and fall, the SWF population is composed mostly of females.

In response to an environmental cue, such as cold weather or food shortage, some of these eggs can hatch into males. The males mate with the females to produce resting eggs, which are later released and fall to the bottom of the lake. Resting eggs have a thick coating on them that allows them to withstand extreme conditions and lie dormant for long periods of time. These resting eggs are so durable, they will pass unscathed through a fish's digestive tract. The eggs "rest" until conditions are favorable and then hatch. The adults die following reproduction. These small non-native water fleas have high reproductive rates and can build a large population in a short time.

Supertime

The spiny water flea is a predator that feeds on smaller zooplankton (or small animal life). This zooplankton is also the preferred food of juvenile fish, so the larger the population of SWF, the more competitive it is for these young fish. The water fleas are small enough to eat, but young fish tend to avoid them because of the barbed tail. Only larger fish (usually more than two inches long) eat SWF.

Resting eggs have a thick coating on them that allows them to withstand extreme conditions and lie dormant for long periods of time.



Tiny Creature, Big Impact

Since water fleas feed primarily on zooplankton, there can be adverse impacts on fish populations and water quality. The appearance of spiny water flea in Lake Michigan coincided with a large drop in the abundance of the zooplankton, *Daphnia* (also a cladoceran).

In Lake Mendota, managers rely on the large algae-grazing zooplankter, *Daphnia pulicaria*, to maintain clear water. Since the spiny water flea invasion, Lake Mendota has seen a 95% reduction in *D. pulicaria* and, in turn, a one-meter decrease in water clarity readings. The Vander Zanden Lab at the Center for Limnology estimates that we would need to reduce phosphorus inputs by 80% to Lake Mendota to make up for this loss of clarity! The economic impact of this loss of clarity on Lake Mendota has an estimated value of 175 million dollars (read more about this research at www.jakevzlab.net/spiny-water-flea.html).

Do Your Part

Although SWF can multiply quickly and cause negative impacts in a lake where they already have an established population, it is up to us to keep them from spreading. SWF can be easily transferred to new areas by bilge water, bait buckets and livewells, so let's all follow the prevention steps, and help our fellow lake lover do the same. 💧

✓ **INSPECT**
✓ **REMOVE**
✓ **DRAIN**
✓ **NEVER MOVE**

This card is a product of the UW Environmental Resources Center



Check out the entertaining video at this website and learn how to stop the spread of spiny water flea and other invasive species.



*In Lake Mendota, managers rely on the large algae-grazing zooplankter, **Daphnia pulicaria**, to maintain clear water. Since the spiny water flea invasion, Lake Mendota has seen a 95% reduction in **D. pulicaria**.*

A New Resource for Citizen Lake Monitors!

If you are already part of the Citizen Lake Monitoring Network (CLMN), you probably haven't used your Secchi disc since last fall. Check out the new video on our website that will help refresh your memory on taking an accurate Secchi reading.

If you also monitor your lake for phosphorus levels, chlorophyll-a concentrations and temperature, we have a video for you too! Check out this little refresher after the winter months to make sure you collect and report accurate data.

Not a CLMN volunteer? These videos give you a good idea of what our dedicated lake monitoring volunteers do. Just go to our website, click on the CLMN logo, then click on the monitoring type you are interested in.

www.uwsp.edu/uwexlakes



New Effort Mobilizes Waterfowl Hunters in Preventing AIS

By Jennifer Siefert, AIS Outreach Specialist, UW-Extension

It was a grey, misty morning when Bradley Steckart arrived at Hunters Nest, a popular gun club on Big Muskego Lake. Eight o'clock on opening day of waterfowl hunting season, and the area was already teeming with hunters. The overall mood was as dreary as the day, for few hunters had bagged any birds.

This scene made for a wary first approach by Steckart and his teammates, a warden and a water guard from the Wisconsin Department of Natural Resources (DNR). They had come to talk with hunters about aquatic invasive species (AIS).

"As soon as we explained who we were and what we were doing, the hunters opened up and became engaged," says Steckart, who is the aquatic invasive species coordinator for Waukesha and Washington Counties.

Steckart was part of a pilot campaign to reach out to waterfowl hunters about the important role they play in preventing the spread of aquatic invasive species. Modeled after Clean Boats, Clean Waters, the campaign took place this past fall in five locations around the state, and the teams encountered an overall warm welcome among the hunters.

While a majority of waterfowl hunters are already aware of aquatic invasive species – many of them are also boaters and anglers – fewer made the connection that the *Inspect, Remove, Drain, Never Move* mantra applies to their hunting season, too.

In fact, a 2014 survey of waterfowl hunters conducted by UW-Extension and the DNR found 92 percent of the hunters surveyed were aware of aquatic invasive species. However, only 73 percent knew about NR 40, Wisconsin's law prohibiting the transport of aquatic plants and animals on our roadways. Even fewer (70 percent) realized their gear could be transporting AIS. While this survey reached hunters from only the central and northeastern parts of the state, it provided clues for where to start with outreach efforts.

Closing the awareness gap and increasing hunters' compliance with NR 40 is important because this group travels from one hunting area to another, which increases their risk of spreading invasive plants and animals. The same survey showed over half of the hunters had visited multiple waterbodies within five days.

Steckart and his teammates encountered a case in point. Many of the hunters they spoke with came off the lake with starry stonewort, a species of invasive algae already present in

While a majority of waterfowl hunters are already aware of aquatic invasive species fewer made the connection that the Inspect, Remove, Drain, Never Move mantra applies to their hunting season, too.

Photo provided by Bradley Steckart.



Duck decoys are one place where aquatic invasive species can stowaway on waterfowl hunting equipment.



the area, clinging to their decoys, motors and hunting equipment – a troubling discovery given that some of them were headed to other hunting spots, like Horicon Marsh.

“Seeing this prohibited species coming out of the lake was a huge realization of the importance of reaching out to hunters,” says Steckart.

Invasive species are a threat to waterfowl hunting because they can degrade waterfowl habitat and food sources. Some, particularly the faucet snail, carry parasites and diseases that can cause bird die-offs.

Waterfowl hunters use a plethora of equipment that invasive species could use to hitch a ride, including boots, blinds, decoys and even dogs. Helping them connect the prevention steps to this equipment was one motive of the campaign.

One barrier that several hunters expressed to the pilot teams was the amount of mud and debris they unintentionally haul out of the water, which creates a time-consuming mess. The campaign’s expansion in 2017 will include ways to help hunters overcome such behavioral barriers, like free boot brushes.

“Harvesting waterfowl is a sacred thing to do in Wisconsin. It’s important to touch on its heritage and how keeping hunting areas pristine will help continue the legacy,” says Steckart from his experience speaking with hunters.

Partners on the pilot campaign included the UW-Extension, Wisconsin DNR and Wisconsin Waterfowl Association. 🌊

Invasive species are a threat to waterfowl hunting because they can degrade waterfowl habitat and food sources.

Photo provided by Bradley Steckart.



Steckart helps a couple of hunters inspect their boat and equipment for invasive species on opening day at Big Muskego Lake.

WELCOME ABOARD!

Sharon Gayan was selected last October as the new Water Quality Bureau Director for the Wisconsin Department of Natural Resources. Sharon brings over 31 years of experience to this position, serving in a wide array of different water programs. Sharon began her career with the Department as a program planning analyst working on developing and implementing five non-point source and integrated resource management plans for the Milwaukee River Basin. She loves everything outdoors – especially recreational activities like kayaking, camping and hiking. Sharon lives in Mount Pleasant with her husband, Gary, daughter, Brita, and Isabel (the family dog) and enjoys traveling with her family.





Join us at the Lakes Partnership Convention April 5-7

*Holiday Inn
Convention Center
Stevens Point, WI*

By Eric Olson, Lake Specialist, UWEX Lakes

Agenda ...at a glance

Wednesday, April 5

Pre-convention Workshops/Sessions

8:00 am	Registration opens
9:00 am-Noon	Morning Workshops
Noon-1:30 pm	Lunch on your own (pre-register for on-site)
1:30-4:30 pm	Afternoon Workshops
4:45-5:45 pm	Special Technical Sessions
5:45-7:00 pm	Networking time - Dinner on your own
7:00-11:00 pm	Partnership Welcome Reception

Thursday, April 6

6:30-7:15 am	Sunrise Yoga
7:30 am	Registration opens
8:00 am	Exhibits open (until 6:00 pm)
8:00-8:50 am	Concurrent Sessions 1
9:00-10:45 am	Welcome and Keynote J. Nichols
11:00 am-Noon	Concurrent Sessions 2
12:15-1:30 pm	Lunch
1:45-2:25 pm	Concurrent Sessions 3
2:35-3:15 pm	Concurrent Sessions 4
3:30-5:00 pm	Poster Presentations
	Visit Exhibitors and Educational Displays
5:00-6:00 pm	Networking time/WAV Meeting
6:00-8:00 pm	Lake Stewardship Awards Banquet
8:00-11:00 pm	Lakes Partnership After Hours

Friday, April 7

6:30-7:15 am	Sunrise Yoga
7:30 am	Registration opens
8:00 am	Exhibits open
8:00-9:00 am	Concurrent Sessions 5
9:15-10:15 am	Concurrent Sessions 6
10:45-11:35 am	Concurrent Sessions 7
11:45 am-1:15 pm	Lunch/Keynote Andrew Fusek Peters
1:30-2:30 pm	Concurrent Sessions 8
3:00-4:00 pm	Concurrent Sessions 9
1:30-4:30 pm	Afternoon Workshops

In spring 2010, my friend and office neighbor, Bob Korth, invited me to speak to Crew 8 of the Wisconsin Lake Leaders Institute on the topic of ethics as it relates to lakes. I knew right away that I wanted to convey the spirit of Aldo Leopold's conservation ethic, which entails recognizing nature as a community member to be loved and treated with the same respect that we wish to be afforded. Leopold wrote, "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in." So I figured I would share with the Lake Leaders the story of how I, at a young age, fell in love with the upper Midwest landscape - the hills, lakes, moraines and streams of my Minnesota youth. When I explained that I had fallen hard for a landscape, one of them quipped, "Hope you made the first move!" We had a good laugh, but looking back I realize that, like all true love stories, there is no protagonist, no sincere wooing required, simply an acceptance that two were meant to be as one.

Seven years later, my loving relationship with lakes and water has only become more steadfast and I am grateful for each day that I get to share and broadcast my feelings while working as a lakes specialist for UW-Extension. I look forward each year to our great gathering in Stevens Point when I can celebrate and commiserate (because all loving relationships entail some sorrow and pain) this mad affair with all of you, my fellow lake lovers. This year, I am over the top to be welcoming some great thinkers who not only love water as we do, but have delved into the mechanics and poetry of that relationship. From Wallace J. Nichols, we gain a sense that our "Blue Minds" have been developing for millions of years, as heirs of sea born organisms long synchronized to the tides and waves. From Andrew Fusek Peters, we learn that water and nature can very well love us back, and in doing so rescue our very souls. We will also hear new lake science, ask our burning questions and revel in our accomplishments. It won't be the same without you, so please join us in Point in early April. Water needs you now! 💧

"You need water. And water needs you now."

~ Wallace J. Nichols



www.uwsp.edu/uwexplakes

Wednesday Pre-convention Workshops

Pre-registration
required.

For more in-depth descriptions of workshops and main convention sessions, go to our website at www.uwsp.edu/uwexlakes.

Wednesday, April 5 ~ 9:00 am – Noon

Aquatic Plant Ecology and Identification (*Limit 25; Additional fee \$25*)

In this aquatic plant workshop, we will focus on aquatic plant ecology and identification. Participants will learn to identify aquatic plants using freshly defrosted plant specimens collected last summer and a variety of plant keys and other resources. We will focus on distinguishing plants with similar growth forms and among species in the larger genera. Participants will receive materials to guide them through plant identification, including the latest edition of Through the Looking Glass. If possible, attendees should bring a hand lens.

Citizen Lake Monitoring Network Training (*Limit 40*)

There are over 1,000 citizen scientists throughout Wisconsin who are collecting data on area lakes. Citizen Lake Monitoring Network (CLMN) volunteers are collecting water clarity, water chemistry, temperature and dissolved oxygen information. The data that volunteers collect is used to determine impaired waters status as well as assist with grants, long-term trend research and general lake health. In addition to water quality, volunteers are also monitoring their lakes for invasive species and native aquatic plants. This workshop is designed as a refresher class for CLMN volunteers who are monitoring for water chemistry (total phosphorus and chlorophyll-a), but is open to anyone who has an interest in interpreting water quality data or learning more about this program.

Healthy Lakes Initiative (*Limit 35*)

Learn about the statewide Healthy Lakes Initiative with an emphasis on project planning. We will briefly share Wisconsin's 2014-2017 Healthy Lakes Implementation Plan, the five best practices described within it and funding options. We will discuss tools such as DNR's Shoreland & Shallows Habitat Monitoring Field Protocol, Decision Tool: Managing Runoff with Healthy Lakes Best Practices, and the updated 350 ft² Native Planting Companion Guide. There is an afternoon workshop titled *Techniques for Controlling Shoreland Erosion* that will cover some of the technical aspects of the Healthy Lakes best practices.

Lake Associations: The Beginning (*Limit 48*)

No matter their size, lake associations can be more effective in managing their lake if they are effective in managing themselves. This basic-level workshop aims to answer many of the questions that lake associations frequently ask by providing training on areas such as good governance, record-keeping, obtaining and retaining a tax exemption, and more. An attorney, whose practice focuses on small nonprofits, will also be available. From questions of initial formation to tax exemption to employment law to the thorny issue of lobbying, this workshop combines short educational presentations with discussions of participants' issues in a free flowing exploration of legal topics often faced by Wisconsin's lake associations.

Lake District Commissioner Training (*Limit 48*) - Are you a new member of a Lake District Board of Commissioners? Maybe your lake district recently formed. This workshop is meant to walk you through the basics of Wisconsin's unique lake districts and the important roles that elected and appointed commissioners play in making them work. We'll cover the basics of Chapter 33, the state statute that governs lake districts, and other relevant rules and laws that every commissioner should know.

Systems and Scenarios: New Ways of Engaging Your Community in Water Sustainability (*Limit 48*)

Achieving a future with clean and healthy lakes and rivers requires new ways of thinking. This workshop will present and engage participants in two innovative thinking tools that can enhance community engagement efforts among lake associations and related organizations. ThinkWater is a national initiative to promote and enable systems thinking in water education, outreach and research. Yahara 2070 is a Wisconsin-based scenarios project intended to encourage long-term thinking in decision-making about land and water. Participants will walk away with a better understanding of these related ways of thinking and how they can employ them in their own outreach efforts.

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Wednesday Pre-convention Workshops

Wednesday, April 5 ~ 1:30pm – 4:30pm

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Introduction to Blue-green Algae: Identification and Ecology (*Limit 25*)

In this introduction to identifying blue-green algae, learn what characteristics can be observed in the field with the naked eye or hand lens to distinguish blue-green algae from other common lake algae. We will review the environmental conditions that cause blue-green algae to grow to nuisance levels. We will also discuss the health impacts on animals and people who ingest, inhale or have skin contact with blue-green algae. We will cover health guidelines for blue-green algal toxins, and how to determine the safest recreational levels of blue-green algae in Wisconsin's lakes. If possible, participants should bring a hand lens or magnifying glass for some hands-on identification practice. Due to the short duration of the workshop, we are unable to cover algal identification based on light microscopy. This Wednesday workshop is intended for water professionals and field staff.

Techniques for Controlling Shoreland Erosion (*Limit 48*)

Looking to restore or enhance a shoreline? This workshop will focus on shoreland restoration and erosion management beyond issues addressed by the Healthy Lakes Initiative. The presenters will give an overview of the new/different techniques used to alleviate soil erosion and restore shorelands. They will present the technical details of planning, calculations, installation and the online shoreland permitting processes, as well as answer NR Chapter 30 questions. There will be time for discussion.

Lake Organization Advanced: Capacity Techniques (*Limit 30*)

To be most effective, lake associations need to understand their capacity to meet their mission and where gaps lie that need to be addressed. Using a powerful new capacity assessment tool developed here in Wisconsin specifically for our lake organizations, participants will get a snapshot of their organization's current capacity level, and how it compares to other organizations. Then, we'll break into groups at similar levels of capacity and work through exercises designed to help participants develop a plan to build the capacity they need. Designed for leaders ready to take their association to the next level, participants will leave with a better sense of their organization's direction and gain valuable insight from both the presenters and other lake organization colleagues from around the state.

Lake District Treasurer Workshop (*Limit 25*)

This workshop is designed specifically for Lake District Treasurers. Managing a lake district budget is not the same as working with a lake association or other type of organization. This workshop will provide participants with the tools and knowledge needed to create and manage a lake district budget. We will cover specific compliance rules that lake districts need to follow.

Get All the Details and Register Online

More details about speakers, special sessions, concurrent sessions, networking opportunities and more can be found on the convention website.

If you do not have access to our website, please give us a call and we would be happy to help you (715-346-2116).



www.uwsp.edu/uwexplakes

Spirituality and Water: How Faith Communities Connect with Water and How Lake Groups Can Connect with Faith Communities (*Limit 48*)

Spiritual beliefs can be foundational to how people of faith perceive and practice their relationship with nature and their communities. To many spiritual traditions, water is integral to symbolism, story and ceremony. In this workshop, leaders from various faith communities in Wisconsin will share how water is part of their spiritual tradition, which will lead us to reflect on and share our own spiritual connections with water through an exercise called "water dialoguing." We will wrap up our experience with a practical discussion on how lake associations can connect with faith communities in their areas and work together to protect their waters.

Wednesday Workshops, continued

Pre-registration
required.

Wednesday, April 5 ~ 1:30pm – 4:30pm

Therapeutic Horticulture: How the Plants Around the Lake Contribute to Your Personal Well-being (*Limit 25*)

Those who love lakes recognize that they feel better in many ways just by being near the water. You can enhance the positive impacts of nature by paying careful attention to the plants, trees, and groundcovers that live on shore. In this interactive workshop, we will touch on the evidence for “natural benefits” found in recent research and attempt to capture what particular elements constitute an ideal lakeside property. Be prepared to share personal successes and “learning opportunities” with others for valuable take-away ideas.

Introduction to Lake Eutrophication Modeling and Using the Wisconsin Lake Modeling Suite (WiLMS) (*Limit 25*)

Lake eutrophication modeling uses characteristics of the lake and watershed to better understand the current trophic condition of a lake and evaluate how that can change. This workshop will examine some of the principals of lake eutrophication modeling and introduce attendees to the Wisconsin Lake Modeling Suite (WiLMS) for lake water quality evaluation and planning. This workshop is geared towards individuals interested in performing simple lake eutrophication modeling or to better understand modeling results developed for their lake. **Participants will need to provide their own laptop computer as this session will include hands-on applications of WiLMS.**

Working With Wordpress Websites (*Limit 12; Additional fee \$30*)

WordPress is a very popular website builder that does not require coding skills but still allows organizations to customize their site to meet their communication goals. This workshop will utilize a WordPress network (see lakekit.net) which runs a collection of separate and distinct lake organization sites. The network approach minimizes site hosting expenses and greatly simplifies administration tasks for the lake organization. During this workshop, participants will work to adapt a site template to their lake organization. Participants will need to provide their own laptop as they will be creating and editing webpages using WiFi throughout this hands-on workshop. Prior to the workshop, participants will receive some preparation tasks from the workshop educator to help them use their time most effectively. Registration in the workshop will provide the participating organization with 2017 network membership, including website hosting.

2017 Wisconsin Lakes Photo Contest

Fallen Reflection by Elisabet Pietz received honorable mention in the *People Enjoying Lakes* category at last year's photo contest. Find out how to enter your lake photo on our website:

www.uwsp.edu/uwexlakes

Deadline: March 10, 2017

Other Convention Deadlines

Call for Posters: February 23

Early-bird Registration: March 15

**Don't miss these
deadlines!**



www.uwsp.edu/uwexlakes

Friday Post-convention Workshops

Friday, April 7 ~ 1:30pm – 4:30pm

Introduction to Blue-green Algae: Identification and Ecology (*Limit 25*)

In this introduction to identifying blue-green algae, learn what characteristics can be observed in the field with the naked eye or hand lens to distinguish blue-green algae from other common lake algae. We will review the environmental conditions that cause blue-green algae to grow to nuisance levels. We will also discuss the health impacts on animals and people who ingest, inhale or have skin contact with blue-green algae. We will cover health guidelines for blue-green algal toxins, and how to determine the safest recreational levels of blue-green algae in Wisconsin's lakes. Participants should bring a hand lens or magnifying glass for some hands-on identification practice. Due to the short duration of the workshop, we are unable to cover algal identification based on light microscopy. This Friday workshop is intended for citizen scientists and others with an interest in algal identification.

Loon Watch (*Limit 30*)

For over 35 years, LoonWatch has engaged an active volunteer network of *Loon Rangers* as its primary tool to collect critical long-term data on loons in Northern Wisconsin. Loon Rangers also help protect loons by spreading the word to their neighbors and other lake users to steer clear of loons on nests and on the water. In this workshop, participants will learn how to monitor loons, hear about new loon research and meet other loon enthusiasts.

Project RED: AIS Identification (*Limit 30*)

Wisconsin's rivers are vulnerable to a number of aquatic invasive species, from Eurasian watermilfoil to Japanese knotweed. The key to successfully protecting a river is to detect invasives early through monitoring programs like Project Riverine Early Detectors (RED). That is when invasives can be isolated or even eradicated. During this Project RED workshop, participants will learn which invasive species threaten local rivers, how to differentiate them from native look-a-likes and how to spot them from the water or on shore.

SWIMS and the Lakes and Aquatic Invasive Species Map Viewer (*Limit 25*)

Interested in learning more about SWIMS and the Lakes and Aquatic Invasive Species Viewer? Come and get a general walk-through of both and stay to get more in-depth information of how to maximize the available tools. Demos provided will include how to add, find and update information in the SWIMS database as well as how to create a quick map, add graphics, share maps and add your own data to the viewer. Time will also be set aside at the end for questions and answers as well as a brief overview of upcoming tools and functions.

Like the Logo? Get a T-shirt!

If you love this year's logo as much as we do, you might want to get a t-shirt! You can easily order one while registering for the convention (if you need to use a separate payment method, that is also available). They are only \$10 each if you order by March 15 (\$15 after that). Only a limited number will be available at the convention, so pre-orders are your best bet.



Story-telling as Science Communication: Using Story to Communicate Clearly and Effectively

(*Limit 25; Additional fee \$20*)

It can be a major struggle to communicate complex scientific content in a way that is engaging and useful to non-specialists. Whether talking to community members, a town board or a state agency, it's easy to get bogged down in the details and lose touch with an audience. Stories provide a great framework for identifying interesting questions, choosing and using evidence and shaping a compelling message for nearly any audience or communication situation. This workshop will start with some simple improvisational theater to help participants gain comfort with shifting, dynamic situations. Then we'll move on to learning and practicing the common elements of good story structure that make them understandable and memorable. We will also have time for each participant to practice applying these principles to specific communication challenges.

Sign Up - Get Free Stuff!



It's time to sign up for the 2017 Fourth of July Landing Blitz. Join other Clean Boats, Clean Waters volunteers from across Wisconsin in educating boaters on the steps they can take to stop the spread of aquatic invasive species! By signing up, you and your lake organization will have access to materials that will help you promote your event as well as the always popular Landing Blitz towels. Sign up today and help boaters stop aquatic hitchhikers! 🐸



If you already have a QR code app on your phone, just scan this code and sign up today!

Sign up here: <https://goo.gl/enUp7A>

CLEAN WATER CALLS

March 1-2, 2017 – International Conference on Water Management, Toronto, Canada

For more information: <http://www.icwmm.org/>

March 3, 2017 – Deadline for Wisconsin Stream Monitoring Award Nominations

For more information: <http://watermonitoring.uwex.edu/wav/monitoring/awards/about.html>

March 7-8, 2017 – Fox-Wolf Watershed Alliance Conference, Green Lake, WI

For more information: <http://fwwa.org/our-work/events/watershed-conference/>

March 9-10, 2017 – Wisconsin AWRA Annual Meeting, Elkhart Lake, WI

Wisconsin's Chapter of the American Water Resources Association will hold its 41st annual meeting in Elkhart Lake this year, titled *Wisconsin's One Water - Breaking Boundaries*.

For more information: <http://state.awra.org/wisconsin/2017meeting.html>

March 9, 2017 – Red Cedar Basin Conference, Menomonie, WI

Are you interested in joining fellow citizens in the Red Cedar area to develop a vision and action plan to restore and maintain a healthy water system for our future? The *Red Cedar: Land, Water and People Coming Together* event is an opportunity to bring best practices and innovative ideas to the forefront. For more information: <http://www.uwstout.edu/profed/redcedar/>

March 15, 2017 – Early Bird Deadline, Wisconsin Lakes Partnership Convention

For more information: <http://www.uwsp.edu/uwexplakes> or see pages 10-14 of this issue.

March 15-17, 2017 – Wisconsin Land+Water Conference - Elkhart Lake, WI

For more information: <http://wisconsinlandwater.org/events/annual-conference>

April 5-7, 2017 – Wisconsin Lakes Partnership Convention

For more information: <http://www.uwsp.edu/uwexplakes> or see pages 10-14 of this issue.

May 4, 2017 – Clean Rivers, Clean Lake Conference, Germantown, WI

Join water professionals, government representatives, nonprofit organizations and private businesses at this event titled *Collaboration and Adaptive Planning for a Resilient Future*.

For more information: <http://www.swwtwater.org/conference/>

May 17-20, 2017 – Citizen Science Association Conference, St. Paul, MN

Take advantage of this gathering being so close to home and join with other citizen scientists from across the nation. For more information: <http://citizenscience.org/association/conferences/citsci2017/>



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Reflections

*Swimming is about feeling alive
– whatever fear is in my head, as
soon as I am in the water, it has
gone, slam-splash-dunked. So
although swimming alone didn't
save me from depression, it broke
the pattern.*

~ Andrew Fusek Peters

