

2012 NALMS Notes



September 2012

President's Message

This month I'd like to write about nominations for the NALMS achievement awards. An organization like ours depends on the selfless dedication of those that volunteer so much of their time for us. Each fall their efforts are recognized at the NALMS Awards and Recognition Reception and Banquet at the International Symposium. The awards presented include various categories for Technical Merit, the Jim Flynn Award for an organizational member, and Friends of NALMS. The ceremony usually concludes with our most prestigious award, the "Secchi Disk Award", which honors the individual NALMS member who has made the most significant contribution to the goals and objectives of the Society.



With friends at the Centre for Aquatic Research, UNAN, Nicaragua, 2010

For this recognition to occur, we need you to nominate fellow members that have made a special contribution. I know that many deserve recognition, but we only received one nomination by the August 15 deadline. Please take a moment to consider who you might nominate! More details on the nomination process and the various categories were in the summer edition of *LakeLine* and are on our web site at: <https://www.nalms.org/home/about/nalms-achievement-awards>.

In closing, I'd like to draw your attention to the upcoming September 14 deadline for early bird registration and the October 5 deadline for conference hotel rates at the 32nd International NALMS Symposium at Madison, WI. Our conference committee works very hard to obtain exceptional value for registration fees and hotel rates, compared to any other comparable symposium. Don't let these deadlines pass without taking advantage of them!

Al Sosiak
President - NALMS
Al.Sosiak@telus.net

WITHIN NALMS

Membership in Motion

We kicked off our fall membership period on August 16th, and we've been receiving a steady stream of applications for renewing members and new members. We have 190 members up for renewal during this period, and our goal is a renewal rate of at least 85%. We also hope to match our new member acquisition total of 54 members from last year's fall membership period.

If you know of anyone who might be interested in NALMS membership, please let me know and I will send them some samples of our publications and offerings. And if your own membership is up for renewal during this period, you may [renew on the NALMS website here](#) or you may [fill out a Membership Registration Form](#) and send it to the office. As always, please call me at 608.233.2836 or email me at garenz@nalms.org with any questions.

NALMS is currently made up of 954 members. Here's a big THANK YOU to all of our members for working towards the responsible management and protection of our lakes and reservoirs. I'd also like to highlight everyone who renewed their membership or joined NALMS during the last month! Thank you!

New NALMS Individual Members: Lee Bodkin, Norman Buccola, Kristi Carter, Yvette Christianson, Patricia Cicero, Kelly Dooley, Wendy Drake, Michael Duval, C. Emi Fergus, Barb Gajewski, MaryJo Gingras, Corey Godfrey, Josiah Hawley, Jeff Maxted, Paul McGinley, Diane Menuz, Rob Montgomery, Daniel Opdyke, Heather Palmquist, Cynthia Paszkowski, Hallie Rajkovich, Dave Roberts, John Rodgers, Donna Sefton, Quita Sheehan, Amanda Stone, David Sweetnam, David Taylor, Amy Thorp, Ryan Thum, Rebecca Willison

Renewing NALMS Individual Members: Michael Anderson, Roderick Dunn, Douglas Durbin, Linda Green, Michael Horvath, Tammy Karst-Riddoch, Donald Kretchmer, Melissa Laniel, Tina Lundell, Michael Martin, Andrew McNaught, Michael Michalski, Ellen Preece, Jessica Rice, Roy Stein, Mike Stephenson, Kathryn Tackley, Lenore Tedesco

New NALMS Corporate Members: [Premier Materials Technology, Inc.](#), Tennant's Industrial Dredging, [Turner Designs, Inc.](#)

Finally, I always like to end my article by highlighting a NALMS membership opportunity or benefit. NALMS recently initiated an excellent opportunity for our student members. Our mentorship program aims to connect a student with a current NALMS member who will act as a mentor and facilitate the student's engagement with NALMS and lake management. If you are interested in either becoming a mentor or participating in this program as a student please contact NALMS' Student Director, Dana Bigham, at dlbigham@ufl.edu.

As always, please don't hesitate to take advantage of all your membership benefits and opportunities! If you have any questions or concerns about your membership, please contact me at 608-233-2836.

Greg Arenz
Membership Services Coordinator
garenz@nalms.org

NALMS Office Notes

The calendar may say that summer doesn't end until September 22, but here in Madison things are feeling pretty autumnal. The State of Wisconsin doesn't allow school to start until after Labor Day, so the character of Madison changes over the course of the weekend from Summer Madison to School Year Madison as University of Wisconsin students move back into town, increasing the city's population by about 40,000 people, many accompanied briefly by their parents. My wife and I have a tradition of going camping (and getting rained on most years) to avoid the madness.

Also, with Labor Day comes the realization that the Annual Symposium is only about 2 months away. With the exception of a hole here and there, the conference program is pretty much

set, and I begin the task of putting it down on paper for printing. We're also finalizing all of the details of the conference, such as room placement and setup, ordering audio-visual equipment, setting menus, and so forth; all without knowing exactly how many people will actually be attending the conference. Using data from past conferences, we're able to make reasonable estimates and do our best not to over order anything, particularly food, which we have to pay for in advance and makes up the bulk of your conference registration fee. This is why we have to charge cancellation fees or not offer refunds of conference registrations after a certain date.

While the conference preparations have shifted into high gear, so have a couple of other activities. Elections for new board members are taking place (have you voted yet?), and our soon-to-be President, Ann Shortelle, is working on drafting her budget for 2012 with input from other board members, committee chairs, and NALMS staff. All of this activity comes at the end of a very busy year where we've already organized one conference with over 1,000 attendees, and now we're heading into the autumn of 2012 at a sprint, as we do every year. Good thing I paid a visit to the Olympic Training Center last month!

Philip Forsberg
Program Manager

NALMS' Student Silent Auction

NALMS is looking for your support! Please consider donating an item to the Silent Auction at our upcoming Symposium in Madison. Proceeds from the Silent Auction go to support student travel and attendance to the Symposium.

Every item is appreciated; past donations have ranged from calendars to gift cards to fishing rods. Although there have been many generous donations to the silent auctions in years past, we are working to make this year's auction the BEST one yet! We know with your help that we can make that happen.



Please consider supporting NALMS students by donating an item to this year's Silent Auction. For more information or to setup your donation you may call the NALMS office at 608.233.2836 or send an email to info@nalms.org. NALMS' students are the future of lake management and your support will help ensure the quality of our lakes and the excellence of our lake management efforts for years to come!

UPCOMING CONFERENCES & EVENTS

Symposium Register for NALMS 32nd Annual Symposium

Attendees may now register for NALMS 32nd Annual Symposium: Lakes in the Landscape: Values > Visions > Actions. Held at the Monona Terrace in Madison, WI from November 7th – 9th, 2012, the Symposium will emphasize the science of lakes in the landscape, ranging from in-lake to watershed to global, as well as approaches that facilitate lake management...from satellites to surveys to shorelines.



[Click here for our Registration Page!](#)

Full conference registration includes:

- Access to all technical sessions, Wednesday – Friday.
- Included lunch & refreshment breaks Wednesday – Friday, continental breakfast Wednesday – Friday, Wednesday reception and Thursday reception and banquet.
- Daily registrations include access to technical sessions, meals and included receptions only on the selected day of attendance.

Please note that One-day registrations may not be combined to create a two-day registration and that Guest registration does not include access to technical sessions.

Exhibition and Sponsorship at NALMS 2012 Symposium

We're still accepting Exhibitors and Sponsors for NALMS 32nd Annual. Please consider the following in making your decision to exhibit and/or sponsor:

- NALMS 2012 offers [Targeted Quality Sessions](#) that our Symposium Exhibitors and Sponsors can associate with their products or brands while pinpointing a targeted audience. The Symposium has a reputation for providing the highest quality sessions to a targeted field of lake and reservoir management professionals, academia, and interested citizens across a wide range of lake management topics.
- NALMS 2012 typically brings together an audience of 500-600 **Premium Attendees** to whom our Exhibitors and Sponsors can extend their brand visibility. NALMS leads the way in lake and reservoir management education and has a large geographic reach extending from North America to an international community that draws upon influential consumers, community leaders and business decision-makers within the lake and reservoir management field.
- NALMS 2012 will **Enhance Your Corporate Image** by building upon your brand identification while strengthening your association with NALMS, our valued members,

high-quality publications and programming, and the superior sessions and events at our Symposium.

[Click here for more information on Exhibiting at NALMS 32nd Annual Symposium](#) or you may also contact Philip Forsberg at forsberg@nalms.org.

[Click here to learn more about Sponsoring NALMS' 32nd Annual Symposium](#) or you may also contact Greg Arenz at garenz@nalms.org.

Absentee Voting While you are Away to Madison

Make sure you remember to get your vote in for the presidential race. The symposium will be held during the presidential election. Make sure you vote early or vote by absentee ballot.

North Carolina Lake Management Society Annual Meeting and Fall Workshop – October 4, 2012

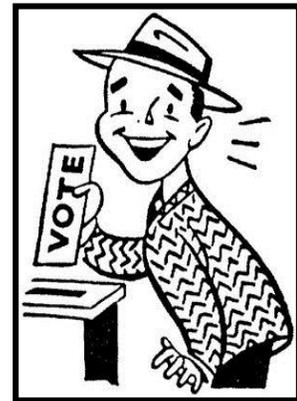
U. S. National Whitewater Center in Charlotte, NC

The North Carolina Lake Management Society (NCLMS) is holding their Annual Meeting and Fall Workshop on October 4, 2012 at the U.S. National Whitewater Center in Charlotte, NC. The one day workshop is titled “Get the Dish on Fish” - Fish Consumption Advisories in the Carolinas. For more information, go to <http://www.nclakemanagement.org/>.



NALMS 2012 Election runs from September 6, 2012 through October 21, 2012

- You may **Vote Online** using the following:
 1. Navigate your browser to www.nalms.org
 2. Click on the 'Member Login' link at the top of the page
 3. Enter your email address and password (see NOTE)
 4. Click the "Login" button to go to the Members' Only section
 5. Click on the "Board Election" link on the member navigation panel on the right-hand side of the page
 6. Read the Ballot Instructions and cast your vote



- NOTE: If you do not have a password on file with NALMS, you may request a new one by entering your email address into the email login field and clicking on the "Reset/Request a Password" link above the password field.

A paper ballot may be requested by contacting the NALMS Office by phone at 608-233-2836 or by email at membershipservices@nalms.org. All paper ballot requests must be received by **October 6, 2012**. Paper ballots must be returned to the NALMS Office via fax, email or mail by **October 21, 2012**.

LAKE NEWS & INFORMATION

NALMS member Bob Kirschner in the news on shoreline planting

Source: The Chicago Tribune By: John P. Huston - September 4, 2012. From the Chicagoland News (<http://www.chicagotribune.com/news/local/ct-met-botanic-gardens-restoration-20120905,0,5010800.story>)

The Chicago Botanic Garden on Tuesday unveiled the largest perennial planting in its 40-year history — a 10-month project that uses native plants to knit the soil surrounding the garden's North Lake into a firm, erosion-resistant mixture that also enhances the habitat for animal life.

The experts who engineered the project at the Glencoe site say it can be a guide for similar efforts at thousands of lakes and ponds in northern Illinois that suffer from erosion.

The goal is to make a friendly environment for freshwater inhabitants like turtles, fish and reptiles, as well as migratory birds, like a great egret that has begun calling North Lake its home.

After draining 54 million gallons of water from the lake in December, the Botanic Garden and the Army Corps of Engineers collaborated to regrade 1.25 miles of the lake's edge to create shelves for underwater plantings to accompany shoreline plants — more than 120,000 perennials in total, officials said.

Erosion traditionally is controlled with boulders and sheet piling that extends above the water's surface. But with this project, the Botanic Garden opted for "bioengineering" techniques that also would enhance water quality and provide a healthy habitat for plants and animals.

Bob Kirschner, director of restoration ecology at the Botanic Garden, hopes the project can act like a testing laboratory for others to learn from.

"We want to make all the mistakes that can be made for the end users so they can look at what we did here and go home knowing it can work," he said.

Erosion is largely due to fluctuating water levels, and it's common among thousands of small lakes and retention ponds across the area, Kirschner said. At the Botanic Garden, a heavy rain can cause the water level to rise up to 5 feet, he said. Without proper grading or plants along the shore, changing water levels can cause the bank to collapse.

"You end up almost with a vertical bank, and that will essentially perpetuate itself forever because there are no plants to hold the soil in place and now the steepness of the grade is so extreme that plants can't move in," Kirschner said.

He said choosing the correct plant life is essential in establishing a long-lasting shoreline that withstands the water and the work of animals such as muskrats, deer, geese and ducks.

Project designers selected plants from more than 200 native species, some of which extend their roots nearly six feet down and "knit the soil in the shoreline together" to protect it from erosion, Kirschner said. Custom plastic meshing protects the shallow depths from bottom-feeding fish like common carp.

More than 1,000 shrubs also were installed because of their value to migratory birds that follow the Lake Michigan coast, he added.

As the Botanic Garden on Tuesday celebrated the completion of the project, the sixth in a series of shoreline restorations that began in 1999, a great blue heron flew across the lake, providing an unexpected example of what a thriving wetland can provide — even one within earshot of a major highway.

John Rogner, assistant director of the Illinois Department of Natural Resources, noted the difficulty in successfully establishing plantings in an urban wetland, and that Kirschner and his team's work on the project will benefit others.

"I think you all have written a book on how to do these things," Rogner said. "You're the tip of the spear and we all as wetland restoration practitioners have a lot to learn from your experiences here."

Kirschner said he hopes the Botanic Garden can help influence private owners, as well as public entities like park districts, to use similar techniques on their shorelines.

"This is entirely applicable for implementation on a small scale in a homeowner's pond," Kirschner said. "It's not going to cost them \$59, but for a lot less money than oftentimes the structural enclosures or stone and sheet piling, it can be just as effective a solution — and we think looks nicer as well."

USGS celebrates success of artificial habitat for lake sturgeon

Source: The Detroit News – Metro and State By: Jim Lynch – August 28, 2012. From The Detroit News (<http://www.detroitnews.com/article/20120828/METRO/208280420#ixzz262gwxw2pw>)

Officials with the U.S. Geologic Survey didn't have to wait long to see if their project — to create an artificial habitat for lake sturgeon — would work.

This spring, even before the underwater reef project was complete, the massive fish known as "the gentle giants" began moving in.

A partnership between federal, state and private entities came together earlier this year to begin work on boosting native fish populations as part of the Great Lakes Restoration Initiative, started in

2010. On Tuesday, representatives from many of those groups were on-hand at Algonac City Park to celebrate some early returns.

"Initially, it appears to be very successful — you might even call it spectacular," said Leon Carl, regional executive with USGS. Other partners in the effort include the National Oceanic and Atmospheric Administration, Michigan's Department of Natural Resources, U.S. Fish and Wildlife Service and the Michigan Wildlife Conservancy.

Many fish species in the Lake Huron/Lake St. Clair/Detroit River system have been impacted negatively by more than a century of human interference. Efforts to improve shipping lanes via dredging and other invasive techniques have scraped away habitats for fish like the sturgeon, walleye and whitefish.

Sturgeon is among the better-known species in Lake Huron and St. Clair, distinctive for their size. The fish can reach nine feet in length and weigh well over 300 pounds.

Earlier this year, USGS workers began creating a series of nine reefs in the Middle Channel of the St. Clair River near Dickinson Island. The reefs consist of limestone and fieldstone rocks piled 40 feet wide, 120 feet long and 2 feet high.

As part of Tuesday's presentation, USGS officials showed video footage taken by divers around the new reef. And sure enough, adult sturgeon can be seen cruising in and around the structure, while eggs are clearly visible nestled in between the rocks.

Freshwater mussels at risk as rivers, lakes shrink

Source: JSONline Journal Sentinel Milwaukee Wisconsin - Published on Aug 25, 2012 by Meg Jones, <http://www.jsonline.com/news/wisconsin/freshwater-mussels-at-risk-as-wisconsin-rivers-dry-116js1v-167452495.html>

Cornfields, lawns, and gardens are not the only victims of this summer's drought in southern Wisconsin. Count Wisconsin's native freshwater mussels among the creatures affected by soaring temperatures, below normal rainfall and shrinking lakes and rivers.

Why should we care when native freshwater species such as buckhorn, monkeyface, mapleleaf, yellow sandshell, and snuffbox mussels are left high and dry? Because they're a critical part of the state's ecosystem and an important food source for animals like otters, muskrats, and raccoons.

Calls have flooded into the state Department of Natural Resources this summer by folks worried about native freshwater mussels piled on sandbars or boiling in rapidly heating pools of shallow water, said Lisie Kitchel, a DNR conservation biologist and mussel expert.

The DNR is advising folks who see mussels left dry on river beds or sandbars to simply pick them up and throw them into deeper water. Among the rivers affected, judging by calls from the public, are the middle to lower Wisconsin River and some of its tributaries; the Wolf River; tributaries of the Milwaukee River; the Mukwonago River; and the Sugar River in Rock County, said Kitchel.

Wisconsin has more than 50 native mussel species and more than half are endangered, threatened, or listed as a species of concern. That does not include invasive mussels such as the hated zebra and quagga mussels.

Normally, mussels will seek deeper water when things start to dry up. A small protuberance, called a foot, though it looks more like a tongue, is used by the mussel to move around. Depending on the species and size of the mussel, the critters can move as much as 10 yards in a day. Which for a mussel might be Usain Bolt speed, but it's often not quick enough to stave off death when water swiftly recedes during a drought.

Water temperatures in the low 90s will quickly stress mussels and kill them, said Nathan Eckert, mussel biologist at the Genoa National Fish Hatchery on the Mississippi River. As long as the bivalve's interior stays cool and moist, they're fine. But as the drought dries up creeks, lakes and river beds, it's pushing more mussels into less water, crowding them together.

Eckert was working in a trailer set up next to the Mississippi River where juvenile mussels are raised for planting in lakes and rivers in the Midwest. The fish hatchery in Genoa, about 20 miles south of La Crosse, is operated by the U.S. Fish & Wildlife Service and is the only facility in Wisconsin where native freshwater mussels are propagated to rebuild mussel stocks. Pulling up a clump of mud inside sinks filled with water filtered from the nearby Mississippi River, Eckert showed off various species of 2- to 3-year-old mussels - the size of dimes or quarters - including some that are threatened, such as the Higgins eye.

Native freshwater mussels act as water filters; a single mussel can filter a gallon or more of water each day, removing algae and bacteria. They also remove pesticides and heavy metals such as mercury that can build up in wildlife. Mussels are food for fish like drum and carp, birds like ducks and great blue herons, and mammals ranging from mink to otters.

Mussels also need fish to survive. Tiny mussel larvae, half the size of a grain of salt, attach themselves to fish for several weeks while they grow larger and eventually drop into the mud. No one is sure why, but many mussel species will only use specific fish as hosts. For example, deertoe, fawnsfoot, and pink heelsplitter mussels will use only freshwater drum as hosts.

At the Genoa Fish Hatchery, mussels get a helping hand with propagation. Eckert uses a syringe to flush out larvae from mussels, collects them in beakers and then places fingerling fish such as drum, walleye, catfish, and large and small mouth bass in larvae baths. Thousands of larvae attach themselves to the fish, which are then placed in cages and dropped 4 to 8 feet deep in lakes and rivers - to protect them from predators. The larvae eventually drop off their hosts and into the mucky bottoms.

Johnson Reservoir closed to fishing because of blue-green algae

Source: Denver Post Dot Com by Joe Vaccarelli, Aug 27, 2012,

http://www.denverpost.com/news/ci_21406730/johnson-reservoir-closed-fishing-because-blue-green-algae#ixzz262koF6Zx

Elevated levels of cyanobacteria have prompted park officials to temporarily close Johnson Reservoir at Clement Park in Littleton. Swimming and boating on the lake are not allowed at any

time, but Colin Insley with the Foothills Park and Recreation District said additional signs barring fishing and encouraging park visitors to keep their pets from jumping into the lake have been put up.

Aqua Sierra, a Morrison-based fisheries and water-quality consulting firm, is testing the water at the lake. With cooler temperatures on the way, Insley said he hopes the levels are subsiding. Insley said he believes heat is the primary reason that algae levels have grown this summer but added that Foothills Park and Recreation wants to be thorough with its testing. It will keep the lake closed as a precaution until it is known how to fix the issue.

Exposure to blue-green algae can cause rashes, skin and eye irritation, allergic reactions, gastrointestinal upset, and other effects. At high levels, exposure can result in serious illness or death, according to the California Department of Public Health. However, according to Clement Park supervisor Tim Sanchez, testing isn't showing levels that are too high, and the closure is purely a precaution.

Lake Champlain Water Quality Gets Worse As Summer Winds Down

Source: Vermont Public Radio - By John Dillion, http://www.vpr.net/news_detail/95691/lake-champlain-water-quality-gets-worse-as-summer/

A bad summer for water quality in Lake Champlain seems to be getting worse. Over the past week, hot weather, low water levels, and a huge bloom of blue green algae have combined to cause a massive fish kill in Missisquoi Bay.

The waves lapping on the east shore of the bay are a strange, turquoise teal color. They're thick with blue green algae. Darren Defoe has lived here all his life, but he's only launched his boat once in the past few months. He's outside on the dock with his family listening to music, but he's not going in the water.

Out in the bay, a catfish floats belly up. Overhead, sea gulls and turkey vultures circle, looking for a free meal. The blue green algae release a toxin that can sicken people and pets. Defoe says he can't remember a worse year for water quality.

Just over the border in Phillipsburg, Quebec, the rocky beach is littered with hundreds of dead fish of all shapes and sizes. The bodies of small perch and alewives are mixed with carp and largemouth bass. According to a report in the Montreal Gazette, thousands of fish began washing up on the Canadian shoreline a week ago.

Lake Champlain is usually big enough for fish to swim away from the oxygen-deprived water. But this year the blooms were too widespread for the fish to escape. The blue green algae blooms are fueled by phosphorus flowing into the lake from farm fields, sewage treatment plants, and stormwater run-off. The record spring floods of 2011, followed by Tropical Storm Irene, washed even more phosphorus from the land into the water.

University of Vermont fisheries biologist Ellen Marsden says the lake's shallow bays are also affected by high temperatures and low water levels. Warmer water holds less oxygen. When the whole bay is warm and oxygen starved, the fish have nowhere to go.

Marsden says sporadic fish kills are not that unusual in the summer. She says the increased phosphorous combined with this year's low lake level makes a bad situation worse. For Darren Defoe, the pollution means his seven year old son can't wade in the water during the heat of the summer. He says everyone who contributes to the pollution, from farmers to sewage treatment plants, to camp owners with defective septic systems, has to help.

Back-to-back algae outbreaks threaten all life in Indian River Lagoon

Source: *Orlando Sentinel* Aug. 20, 2012 Written by Kevin Spear,
http://articles.orlandosentinel.com/2012-08-20/news/os-indian-river-lagoon-algae-attack-20120819_1_sea-grass-brown-tide-algae

The lagoon that hugs much of Florida's east coast and has the richest array of marine plants, fish and wildlife in North America is under attack from the worst known outbreak of harmful algae in its history.



A large portion of the [Indian River Lagoon](#), an essential estuary for everything from manatees and sea turtles to sport fish and shrimp, now has the appearance of muddy water, as if roiled by the runoff of a flash flood.

Dead sea grass piles up on the shores of the Indian River Lagoon. Scientists think an intense algae bloom occurring in lagoon waters is blocking sunlight that sea grass needs to survive. (Kevin Spear, Orlando Sentinel) (Aug 20, 2012)

Steamy summers bring jellyfish to surface of Manitoba lake

Source: *Brandon Sun* - By Jenny Ford, Posted: 06/09/2012 8:36 AM
<http://www.brandonsun.com/breaking-news/some-like-it-hot-168734396.html?thx=y>

Larry Santa, a cottager at Star Lake, with a live jellyfish in a jar. He wonders what ecological impact they will have.



It's a strange sight for Manitoba cottagers that may become more common with hotter summers, scientists said. For the second time in two years, Star Lake residents have spotted hundreds -- if not thousands -- of little, translucent jellyfish.

"They're neat to watch, but you wonder how will this species grow," said longtime Star Lake cottager Larry Santa, who saw the jellyfish on Monday when out boating.

The dime- to nickel-sized freshwater jellyfish, known as *Craspedacusta sowerbyi*, were spotted in Star Lake in August 2010, for what cottagers said was the first time. The jellyfish have returned this year, said Santa, who took a few in a jar back to Winnipeg.

However, scientists said the harmless jellyfish have been in Manitoba lakes for decades. The first reported sightings brought to retired biologist Lane Graham's attention were during the 1970s. Graham said the jellyfish can spend decades in the polyp stage of their life cycle at the bottom of the lake creating more polyps. They only float to the surface when they reach the medusa stage -- what a typical jellyfish looks like -- when the water is warm. But with hotter summers in Manitoba, we may be seeing more jellyfish, he added.

Santa said in his 35 years at Star Lake he has never seen jellyfish until the bloom two years ago. There are not only more this year, but that they also have a more greenish colour, which Graham attributes to the jellyfish eating more algae-eating plankton.

Although *Craspedacusta sowerbyi* is an invasive species from China, it has been in North America since the 1800s, making them more integrated in our ecosystems, said Graham. Manitoba Conservation and Water Stewardship said the jellyfish are a concern because the effect they have on Manitoba ecosystems is unknown.

US, Canada sign Great Lakes water quality pact

Source: Wall Street Journal on Line. September, 7 2012 4:04 am ET,
<http://online.wsj.com/article/AP96f1995f15304c4d9121084ff9686c63.html>

The U.S. and Canada renewed a 40-year-old Great Lakes environmental pact, pledging stepped-up efforts to reduce pollution, cleanse contaminated sites, and prevent exotic species invasions.

The updated Great Lakes Water Quality Agreement binds both nations to continue a cleanup and restoration initiative begun when the freshwater seas were a symbol of ecological decay. Many of their beaches were littered with foul algae blooms and dead fish. The Cuyahoga River, which flows into Lake Erie in Cleveland, was so choked with oil and chemicals that flames erupted on its surface in 1969.

The pact calls for further action on problems that inspired the original agreement three years after the embarrassing river fire and a second version in 1987. It pledges to "restore and maintain the chemical, physical, and biological integrity" of the five lakes and the portion of the St. Lawrence River on the U.S.-Canadian border.

It sets targets for reducing nutrients that cause foul algae blooms and recommends further cleanup of harbors contaminated with toxic chemicals.

The new version includes new sections on challenges that have emerged more recently: climate change, loss of wildlife habitat, and a wave of invasive species such as zebra and quagga mussels and Asian carp. It also calls for the region's governments to identify potential threats so they can be dealt with before developing into big problems.

The agreement's success will depend on whether state and federal governments carry it out by enacting and enforcing strong laws and providing money, environmental activists said.

President Barack Obama's administration has spent more than \$1 billion on a Great Lakes restoration program and has requested \$300 million for the current fiscal year. But Canada is eliminating hundreds of government scientist positions, and proposals have been made in both countries to weaken clean water laws. Canada's federal government would uphold its obligations under the agreement and had begun negotiations with the province of Ontario about carrying out the deal over the next five years.

Along with the federal Clean Water Act, the 1972 agreement was credited with leading governments in the region to ban phosphate detergents, which led to a significant drop-off in algae blooms. But the problem has worsened on Lake Erie and portions of Lake Michigan in recent years, a problem some scientists blame on runoff from farms and cities.

The new agreement requires governments to set phosphorus reduction targets within three years and action plans within five years. It also sets a two-year deadline for putting together a system for early detection of new invasive species and rapid action to limit their spread. But it imposes no timelines for finishing cleanup of the region's 43 most heavily polluted areas designated under the 1987 update. The toxic hot spots have problems such as fish with tumors, foul drinking water, and beaches unfit for swimming.

Work has been completed on just four, three in Canada and the Oswego River and Harbor in New York, although EPA officials say several others are nearly finished.

Canadian Council of Fisheries and Aquaculture Ministers Continue to Work Together to Protect Canada's Fisheries

Source: U.S. Politics Today, http://uspolitics.einnews.com/pr_news/113627005/canadian-council-of-fisheries-and-aquaculture-ministers-continue-to-work-together-to-protect-canada-s-fisheries

Federal, provincial, and territorial ministers concluded the annual meeting of the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) in Victoria, British Columbia. Ministers discussed a range of issues such as aquaculture, aquatic invasive species, and protecting Canada's fisheries.

The meeting was co-chaired by the Honourable Keith Ashfield, federal Minister of Fisheries and Oceans, and the British Columbia Ministry of Agriculture. In addition to Minister Ashfield, the Honourable Ministers responsible for fisheries and aquaculture in Yukon (Currie Dixon), Nunavut (James Arreak), Manitoba (Gord Mackintosh), Nova Scotia (Sterling Belliveau), New Brunswick (Michael Olscamp) and Prince Edward Island (Ron MacKinley) attended the meeting. Representatives from Newfoundland and Labrador, Quebec, Ontario, Saskatchewan, and Alberta also participated.

"I am pleased and proud that we can come together as federal, provincial, and territorial partners to support the long-term sustainability and prosperity of our fisheries and aquaculture sectors," said Minister Ashfield. "Recognizing the economic contribution of Canada's fisheries and aquaculture

sectors, we are all committed to working together to make sure they continue to thrive in the future."

Representatives from all provinces, territories, and the federal government recognized that cooperation is needed to protect Canadian waters from aquatic invasive species with the goal of preserving the biodiversity of aquatic ecosystems, while avoiding duplication and ensuring alignment among both levels of government.

Representatives also discussed the development of an aquaculture regulatory program that will support sustainable fish and seafood production while ensuring the effective management of aquatic animal health and protection of the environment. This will provide stability and will allow aquaculture continued growth as a contributor to the Canadian economy. Aquaculture currently generates about \$2 billion in economic activity, creates good jobs in rural communities and occurs in all provinces and in Yukon.

The Atlantic Council of Fisheries and Aquaculture Ministers and representatives also took time to meet and discuss matters relevant to Atlantic Canada. Atlantic Ministers discussed the importance of the lobster fishery to Atlantic Canada and agreed to continue discussions aimed at ensuring stability and viability of this important fishery.

At this meeting, Ministers also discussed ongoing science activities such as stock assessment and agreed that these activities are important to both the health of ecosystems and the long-term economic prosperity of the fishing and aquaculture industries. The 2013 annual meeting of the Canadian Council of Fisheries and Aquaculture Ministers will be hosted by Quebec.

Website of the Month –

http://www.epa.gov/watersense/test_your_watersense.html

Think you know everything there is to know about water? You can't be sure until you Test Your WaterSense!

Try EPA's new interactive online quiz! Move the water-efficiency hero Flo through water pipes and answer water-efficiency questions while avoiding water-wasting monsters such as Sogosaurus and Drainiac. Use the information you've learned on the WaterSense Web site and test your knowledge of water-using behaviors and common water-saving opportunities.



NALMS Professional Certification Program

Looking for a Certified Lake Manager (CLM) or Professional (CLP) in your area?

Browse our list of CLM's and CLP's at <https://www.nalms.org/home/programs/list-of-certified-lake-managers-and-professionals/>

Interested in becoming a CLM or CLP?

Find out how to establish yourself as an expert in the field of lake management at <https://www.nalms.org/home/programs/professional-certification/professional-certification.cmsx>

Lake Photo of the Month

Lake Wingra at Sunset

<http://www.flickr.com/photos/rahimageworks/7399071424/in/pool-nalms>

By [Richard Hurd](#)

To be considered for NALMS' Lake Photo of the Month please submit your photo to the North American Lake Management Society (NALMS) Flickr Group. Be sure to include the name or location of the lake in the title.



NALMS on Yahoo Groups!, Facebook, Linkedin and flickr

To learn more about these and other NALMS social and discussion groups navigate to the following links!

http://tech.groups.yahoo.com/group/lake_management/

<http://www.facebook.com/pages/North-American-Lake-Management-Society/159923186867>

http://www.linkedin.com/groups/North-American-Lake-Management-Society-3809234?gid=3809234&trk=hb_side_g

<http://www.flickr.com/groups/nalms>

NALMS Bookstore

If you're looking for some great Lake Management Resources check out the NALMS Bookstore!

<https://www.nalms.org/home/publications/bookstore/book-store-and-subscriptions.cmsx>

NALMS Affiliate Member Newsletters

Looking for information on your local NALMS Affiliate member organization? Check for local news you can use on our Affiliate Newsletter Page at

<https://www.nalms.org/home/publications/affiliate-newsletters/newsletters.cmsx>

To submit a Newsletter please send a PDF version to Greg Arenz at membershipservices@nalms.org

Looking for a Job or have a Job to post?

NALMS maintains an online Job Board for job seekers at

<https://www.nalms.org/home/programs/job-board/job-board-home.cmsx>

Do you have a job that you would like to post on the NALMS Job Board?

Simply fill out the Job Posting Form found at <https://www.nalms.org/media.acux/98e37b01-3af1-4557-a2bd-610cdc244a1d> and fax it to 608.233.2836, mail it to PO Box 5443 Madison, WI 53705, or email it to info@nalms.org.

Post an Event

Do you have an event that you would like to share on the "Upcoming Events" page on the NALMS website? Let us know at events@nalms.org

Update Contact information

NALMS members can now go online to correct their own contact information and are encouraged to do so. Please tell your friends and colleagues who are NALMS members to check and update their records. If they are not getting LakeLine, the Lake and Reservoir Management journal, or NALMS Notes something is wrong. If they don't have access to fix their own contact info, they can call the NALMS office at 608.233.2836 or email Greg Arenz at (garenz@nalms.org) to get changes made. This goes for postal service mail as well.

Open Invitation to Add to the Next E-newsletter

If you are having a conference, have a lake-related question, need advice, looking for similar lake problems/solutions, have an interesting story to share, or just want to be heard throughout NALMS, please send your material to Steve Lundt at slundt@mwr.dst.co.us. All e-newsletter material is due to Steve Lundt by the first Friday of each month to be considered for inclusion in that month's e-newsletter. The newsletter goes out electronically monthly.

NALMS Notes is Co-edited by James Vennie & Steve Lundt

James Vennie

James recently retired from the Wisconsin Department of Natural Resources, Lakes Partnership. He worked on Wisconsin Lakes for 32 years. He is a Professional Hydrologist, Limnologist, Hydro geologist, and WI-DNR's expert on Algal Toxins. James graduated from University of Wisconsin - Stevens Point in Water Science. He is the past Chairman of NALMS Technology Transfer Committee for many years. Also, started the first NALMS website and supported E-Mail distribution system Lakes-L for decades.



Steve Lundt

I was born and raised just west of Mt. St. Helens. By growing up in the lush Pacific Northwest, I enjoyed all things wet (which was about everything) - rain, fog, fishing, mountain biking, baseball, hiking, and lakes. I stayed in the Portland area for my undergraduate degree in Sociology and Chemistry. I then explored Hawaii and Yellowstone for a couple of summers and ended up in Denver as a bicycle messenger. After a couple of years working in various labs, I



went to Indiana University and received a MSES at the School of Public and Environmental Affairs. I do have to admit that I have to basically thank Bill Jones for everything after 1997 - my education, involvement with NALMS, and for my career on lakes. I have worked on Oswego Lake (Portland) and a couple of downstream reservoirs in Denver over past 14 years. I have been lucky to have a career where it seems like I drive a boat more than a car. I live in Denver with a great wife and two boys, 10 and 7. From managing lakes to raising kids, the little things do matter the most.