March

President’s Message — Exotic Species: Friends, Foe, and/or Innocent Bystanders

I know you have to read this article with a title like that, so here it goes, and I hope you are not too disappointed! I am currently in South Florida evaluating fish populations in several canals, many of which are dominated by exotic species such as the Orinoco Sailfin Catfish *Pterygoplichthys multiradiatus* and the Mayan cichlid *Cichlasoma urophthalmus* shown in the picture. The interesting thing about these canals is that the ones dominated by native fish species (e.g., Largemouth bass *Micropterus salmoides*, blue gill *Lepomis macrochirus*, redear sunfish *Lepomis microlophus* and others) instead of the exotics also have abundant Hydrilla *Hydrilla verticillata*, which is an exotic submersed aquatic plant. Does this make Hydrilla a good plant or is it a menace just because it is an exotic? I have recently co-authored a paper where we examined the impact of hydrilla on aquatic plant, aquatic bird, and fish populations in Florida lakes (Hoyer et al. 2008, Lake and Reservoir Management. 24:331-338). I have since had numerous discussions with aquatic professionals and laypersons about my findings and some discussions were quiet heated. If you are a NALMS member, you can log into the membership section on our web site, download the paper, and see what all this discussion is about. If you are not a member, please join so you can download the paper and/or convince your local library to subscribe to Lake and Reservoir Management. And, yes my objective this year is to show people the value of being a NALMS member so our membership will grow.

Another reason for writing about exotic species follows a telephone call that came into the NALMS office asking the following questions about the Asian Carp threat to the great lakes:

1) Is NALMS taking any action and creating a position statement?
2) Is NALMS developing any programs?
3) Is NALMS doing nothing?

NALMS does have several people working on a policy committee, but there are literally hundreds of issues like this throughout North America and it would be difficult if not impossible for this small committee to research each issue thoroughly and draft a policy statement for approval by NALMS. An example of why you need to research things thoroughly comes from discussions I had with several NALMS members about this Asian carp issue. Most thought that the general term Asian Carp referred to only one carp species when actually there are eight species of Asian Carp that have established populations in the US (grass carp *Ctenopharyngodon idella*, common carp *Cyprinus carpio*, silver carp *Hypophthalmichthys molitrix*, largescale silver carp...
Hypophthalmichthys harmandi, bighead carp Hypophthalmichthys nobilis, black carp Mylopharyngodon piceus, common goldfish Carassius auratus, and crucian carp Carassius carassius). Each species has a different life history and may reside in a different trophic level yielding variable impacts if introduced into an aquatic system. These factors need to be considered along with social, political, and economic considerations before a solid policy statement can be established. While NALMS cannot make strong specific policy statements on the majority of the current environmental issues because they are all independently complicated, I believe that I do not go too far out on a limb if I say that NALMS does not support the introduction or spread of any exotic species in any environment. The underlying premise in this case can stand without a policy statement. This is important because specific policy statements without supporting research do not have many teeth. I believe a big strength of NALMS is the vast collective knowledge that its membership possesses together with our ability to disseminate this knowledge. If anyone has a desire to contribute information on a topic, including the Asian carp, NALMS has many outlets at your disposal. Individuals can submit scientific work to Lake and Reservoir Management for peer review publication. Case studies or interesting scientific work that is not original in nature can be submitted to NALMS LakeLine Magazine. NALMS also has a monthly newsletter with an open invitation to submit appropriate articles dealing with all aspects of lake management. Finally, I would suggest if members truly believe that NALMS should develop a policy statement on an issue I would ask that they send a white paper to the leadership of NALMS with some initial research showing the pros and cons surrounding the issue. This will give the leadership and the policy committee a place to start.

The final exotic species I would like to talk about is me, a Florida adapted individual visiting the NALMS staff, in Madison Wisconsin, in February with two feet of snow. My first mistake was leaving my big coat in the bag that I checked for the trip - it arrived safely in Detroit while I arrived safely in Madison. All that aside, I had a great visit with Sarah and Philip, our NALMS staff. The trip helped me to understand the duties that they perform and recognize the areas where they may need assistance. I helped them clean out some old files and got a wish list for those things that would help them better perform their duties. One such item, that NALMS has not budgeted for, is a digital print/scanner that can take stacks of documents and turns them into PDF files (approximately $900). NALMS needs to do this for all of the old files (and new ones) to better manage historical and future activities. Tom Conry and Bev Clark have already graciously donated $100 each to this need (Thanks Tom and Bev) and who else will help to make sure this happens by the next newsletter? The final thing I want to say here is that we have an excellent staff that is doing a great job for NALMS. The next time you call the office, please thank them for their work and dedication to our organization.

Thanks,

Mark Hoyer
President, NALMS

WITHIN NALMS
Membership in Motion - Sarah Unz

Our March membership renewal period is here! If your membership expires in March you should have received an invoice from me. If you don’t know your membership expiration date or have not seen an invoice yet, please contact me. Thank you to everyone who has already renewed! We can’t move NALMS forward without you!

There have been some recent updates to our NALMS Store. We have added some merchandise and reduced our prices on many items. Please check it out! Use the pull down menu to choose “Merchandise”, “LakeLine Magazine”, or “Books,” add items to your shopping cart and then proceed to check out. Once you enter your credit card information and your order is received at the NALMS office, we will verify your membership and then reimburse all NALMS members for their 20% discount! Are you missing any mugs from previous conferences? How about showing your NALMS pride with a NALMS t-shirt or cap?! Bulk discounts are available as well as offline orders, but please contact me at the office for additional information.

As Mark mentioned above, we had a great visit with him last month. We were able to clean out the office and get better organized. I want to thank Mark for taking the time to visit, and I would also like to thank Richard Wedepohl for agreeing to help Philip and I clear out all the items pegged for the trash.

As always, please feel free to contact me with any questions or concerns regarding your membership.

Take care,

Sarah
Membership Services Coordinator

UPCOMING CONFERENCES & EVENTS

2010 NALMS Southeastern Lakes Management Conference
Hosted by NCLMS in Winston-Salem, NC – Managing Extremes: Watersheds and Climate Disruptions

The North Carolina Lake Management Society (NCLMS) invites you the
19th Annual NALMS Southeastern Lakes Management Conference at the Hawthorne Inn and Conference Center in downtown Winston-Salem, NC May 4-7, 2010. The Southeastern Lakes Management Conference is an excellent opportunity to build expertise, enjoy the regional attractions, and network with others in lake and watershed management. We will examine extreme weather and water quality strategies and other lake and watershed issues.

The conference is centrally located in North Carolina and accessible by I-40, I-85 and I-75 with excellent regional airport connections at the Piedmont Triad Regional Airport, serving the greater Greensboro, Winston-Salem, and High Point (Triad) area of North Carolina.

The program has been developed with broad support and interest from speakers throughout the SE and the US. The Program Committee is finalizing diverse and informative technical sessions that reflect the broad range of issues affecting lakes and watersheds in the Southeast. Topics in the concurrent sessions include – Drought and Flood management, Water Conservation, Water Quality, Storm Water Management, Stream and Watershed Restoration, Water Supply Issues, Climate Change Initiatives, Invasive Species and other important topics.

Two full day workshops will be offered on May 4th: Man vs Stats – A Survival Guide for the Statistical Wilderness by Dr. Dennis Helsel and Taxonomy and Ecology of Algae by Dr. Linda Ehrlich and Dr. JoAnn Burkholder. There will be two half day workshops offered on May 5th: Life and Death for Lakes, Basic Properties and Processes by Dr. John Hains and a Stream Restoration Walking Tour led by Darrell Westmoreland.

Registration fees will be the same as in 2005, with early full conference rate of $175 and daily and student rates will also be available as in past SE conferences. Additional workshop and conference registration information and registration forms can be found on the NCLMS website at http://nclakemanagement.org/conferences/SE19/index.html – check back frequently for program updates and session topics. For exhibitor registration information, contact Cary Martin at cary.martin@aquaccontrol.com.

Several important deadlines for the SE10 Conference are coming up soon. They are:
- Early Bird Registration – April 1, 2010
- Conference rate on hotel – April 2, 2010

We encourage you to sign up early to take advantage of the discounts available.

Our thanks to our sponsors, including NC Department of Environment and Natural Resources, Duke Energy, Peroxygen Solutions, and Georgia Power.

If you have questions relevant to the program, please contact Conference Co-Chairs: Dave Buetow (704-336-3983), david.buetow@mecklenburgcountync.gov or Jef Morgan (336-707-1829) jmorgan10@triad.rr.com.

Opportunities for Extension in a Changing Environment: Lessons from the Last Frontier
Association of Natural Resource Extension Professionals 7th Biennial Conference Sunday June 27 - Wednesday June 30, 2010 University of Alaska Fairbanks
The 7th Biennial ANREP National Conference at the University of Alaska Fairbanks offers a forum for sharing methods, tools, and programming to help us address the challenges we are facing in providing research-based community outreach in a changing environment. The conference will emphasize creating effective multistate and multi-agency collaborations to meet these challenges with the greatest impact and efficiency.

New this conference - Optional Pre & Post Conference Study Tours of the Southern Transect: A review of Climate Change impacts and Sustainability of terrestrial and marine resources on a scenic route extending from Fairbanks south along the Tanana Valley and a visit and tour of the Denali National Park.

Conference Registration is now open. Go to http://www.anrep.org/conferences/2010.

**7th Annual Water Quality Monitoring Conference in Denver**
If you are heading to Denver this April for the Water Quality Monitoring Conference, consider coming in early to catch a Colorado Rockies baseball game with the NALMS board. On Sunday, April 25th, approximately 30 NALMS board members and Colorado Lake and Reservoir Association (CLRMA) members will be heading to Coors field to watch the game against the Florida Marlins. Tickets cost $28. If you are interested, contact Steve Lundt at slundt@mwrd.dst.co.us.

**Alum Workshop during the Water Quality Monitoring Conference in Denver**
NALMS will be offering their one-day alum workshop in Denver, CO on Thursday, April 29th. This workshop will be similar to the pre-NALMS symposium workshop. In Colorado, State officials are beginning to permit for in-lake alum treatments. Additionally, the state has rolled out draft phosphorus standards for lakes so alum may need to be in the toolbox for lake managers in Colorado. Cost: $150. For more information and a registration form, contact Steve Lundt at slundt@mwrd.dst.co.us.

**2010 Natural History Science Field Seminars by Humboldt Institute**
In support of field biologists, modern field naturalists, and students of the natural history sciences, Eagle Hill offers specialty seminars and workshops at different ecological scales for those who are interested in understanding, addressing, and solving complex ecological questions. Seminars topics range from watershed level subjects and subjects in classical ecology, to highly specialized seminars in advanced biology, taxonomy, and ecological restoration. Eagle Hill has long been recognized as offering hard-to-find seminars and workshops which provide important opportunities for training and meeting others who are likewise dedicated to the study of the natural history sciences.

Eagle Hill field seminars are of special interest because they focus on the natural history of one of North America's most spectacular and pristine natural areas, the coast of eastern Maine from Acadia National Park to Petit Manan National Wildlife Refuge and beyond. Most seminars combine field studies with follow-up lab studies and a review of the literature. Additional information is provided in lectures, slide presentations, and discussions. Seminars are primarily taught for people who
already have a reasonable background in a seminar program or in related subjects, or who are keenly interested in learning about a new subject.

May 23 - 29     Inventory and Monitoring of Amphibians and Reptiles     Bryan Windmiller
Jun 20 - 26     Applied Field and Laboratory ID of Northeastern Freshwater Fish     David Halliwell
Jun 27 - Jul 3     Freshwater Invertebrates and their Ecology     Steven K. Burian
Jul 4 - 10     Dragonflies and Damselflies of the Northeast     Ronald Butler
Jul 11 - 17     Forest Ecosystem Analysis for Sustained Forestland Values & Uses     Norman A. Richards
Jul 25 - 31     Freshwater Diatoms: Taxonomy and Biomonitoring     Jeffrey R. Johansen
Aug 8 - 14     The EPT Taxa: Taxonomy and Biomonitoring     Steven K. Burian
Sep 26 - Oct 2     Integrated Ecological Restoration of Rivers and Streams     John Munro

Descriptions of these seminars along with information on lodging options, meals, registration, and costs may be found at http://www.eaglehill.us/programs/nhs/nhs-calendar.shtml. Syllabi are available for these and many other fine natural history training seminars on diverse topics.

For more information, please contact the Humboldt Institute, at mailto:office@eaglehill.us

AFFILIATE TALK
To foster better communication amongst the diverse group of NALMS Affiliates, this section will feature a monthly topic or question which may be of interest to many affiliates. The goal is to help affiliate groups learn from each other, be more efficient with their time and resources, and better manage their lakes and reservoirs.

This topic comes up often but because there is just no clear answer. What is the best way to keep geese off of a lakefront lawn? More specifically, does Concord grape extract products make the lawn taste bad and keep the geese away?

Recently a member of a NALMS affiliate posted a question on the NALMS Affiliate Yahoo group about a specific product, Rejex-it® Migrate TM For Turf. This technique is also nothing new; it has been around since at least the early 1990’s. The concept is that if you use a chemical to make the food not palatable, then the geese will quickly move on (to your neighbor’s lawn).

So far, the responses from other affiliate members have not been in favor of this product. Some have noticed that it doesn’t work and that it takes a multi-deterrent approach. One person even soaked bread in the product and the young geese ate it up with no problem.

A drawback to this approach is that the product must dry completely on the grass. Rain, frequent watering, foot traffic, and mowing may alter the treated grass and not be as affective.

There are lots of other geese deterrent products out there and many of them are gimmicks. An affiliate did say that he has tested many of them and only swears by two of them. They are 1) putting stakes along the shoreline with a string tied to make a barrier about 15 inches high and 2) a
Goose Control Beacon that sends out a signal that disrupts the sleep pattern of geese. An energetic border collie is also another good choice to have or better yet, don’t have a lawn done to the water’s edge. Geese love to have a clear line of sight between the water and their food source.

**Affiliate Websites – Check out this one**
A great way to see what other affiliates are doing is to check out their websites and see what they are up to.

WALPA – Washington State Lake Protection Association. They are an affiliate to NALMS and been protecting Washington lakes since 1986. They even are helping implement the phosphorus ban on detergents in Washington and helped local neighborhoods figure out what alternative detergent products are best for them. This is a great website with good information.

**LAKE NEWS & INFORMATION**

**Landsat Enables Remote Detection of Dangerous Water Pollutants**

**Toxic Mercury in Utah Lakes will be treated with Mixing**
Scientists might not know why Utah lakes are so polluted, but they think they might have an answer to dramatically reduce the bioaccumulative mercury levels. The possible solution: mixing the water so less methylmercury works into the food chain.

David L. Naftz of the U.S. Geological Survey explained the idea has been tried successfully in Finland. If the funding comes through, the three-year project would involve installing a pump on a platform in Newcastle Lake or one of the other three lakes in southwestern Utah that contains fish shown to have high levels of mercury.

Once in place, the pump would circulate oxygen and heat into lower layers of the lake water. And warmer water with more oxygen dissolved limits the biochemical transformation of elemental mercury into its poisonous form, methylmercury.

The three-year pilot project would cost nearly $600,000, with the wildlife division, the water-quality division, and USGS all pitching in.
Expanding Efforts to Prevent Invasives near Lake Tahoe

Conservation officials in the Sierra Nevada are expanding their efforts to combat invasive species at Lake Tahoe to other lakes and reservoirs in the area, Donner Lake, Independence Lake, Stampede Reservoir, Boca Reservoir, and Prosser Creek Reservoir.

The effort is being funded through a $231,000 grant from the Truckee Meadows Water Authority, Reno's water provider. This money could pay for six full-time boat inspectors. The agency is trying to protect both the Truckee River basin and Lake Tahoe by coming up with a regional plan to inspect boats. A user-friendly, universal boat inspection may help protect more than just one lake.

A couple of strategically located boat inspection sites and a well thought out boat tagging system could help improve boat inspections and make the process quicker for boaters to get out on the water.

Big Fish

A man was being credited with tying the 77-year-old world record for catching the biggest largemouth bass. The International Game Fish Association announced in January that it had confirmed the 22-pound, 4-ounce fish caught by Manabu Kurita. The Florida-based group said Kurita caught the fish July 2, 2009 on Lake Biwa, Japan's largest lake (this lake was featured in a NALMS newsletter 2009 at one of the world’s oldest lakes).

Kurita's fish tied the record of George Perry, who caught his bass on Georgia's Montgomery Lake on June 2, 1932. Kurita used 25-pound test line and a live blue gill as bait.

Surfs Up, Chicago Style

In 1987, a severe blizzard roared through the Great Lakes. North winds of 50 to 70 mph raised the levels of Southern Lake Michigan around 2 feet, producing 12 to 18 foot waves that caused 7 million dollars worth of damage to the Chicago shoreline.

For Chicagoans that day, it was the perfect storm to stay indoors. If it happens again in 2010, it will be the perfect storm to grab your dusty surfboard and head to your closest surfacing beach. Soon, it will be legal to surf at several Lake Michigan beaches in Chicago thanks to a group of avid Midwest surfing enthusiasts.
This spring, City park managers will updated park rules and make policy changes to cover appropriate signs for each beach, coordination with Coast Guard, police, and fire officials, and make sure this new lake recreation is done safely with the other shore area recreational activities.

The Chicago Park District has agreed to begin taking steps to open as many as five of its beaches to surfing this year between Labor Day and Memorial Day. Surfing may also be allowed at the 41st Street Beach year round. Offseason surfing may be allowed at the Kathy Osterman, Montrose Avenue, 57th Street, and Rainbow beaches.

For more information and a complete surfing report, go to www.surfriderlakemichigan.org/news/chicago_beaches_are_officially_open.

**New Boat Seals to Help with Exotic Species Control**

American Casting & Manufacturing Corporation, a new member of NALMS, has created a new market niche with their security seals products – WID Seals. A WID Seal is a tamper-evident Watercraft Inspection/Decontamination (WID) seal that secures a boat to its trailer once they have been officially decontaminated, inspected, or removed from a lake known to be invested with an exotic species.

The WID seals are being used by the Colorado Division of Wildlife (CDOW) and some private lake associations to combat the spread of the quagga mussel. The WID seals are placed between the boat and the trailer to document inspections and decontaminations. The CDOW came out with their Aquatic Nuisance Species Watercraft Inspection Handbook which contains watercraft inspection and decontamination procedures and how to use the WID seals.


**First-Ever Human-Powered Winter Circumnavigation of Lake Baikal**

The goal of completing the first ever human-powered winter circumnavigation of Lake Baikal on mountain bikes is to promote environmental conservation in Russia. The lake is frozen at this time and the five bikers are riding entirely on snow and ice for an estimated 43 days. Lake Baikal has never been circumnavigated by bicycle, and no one has ever made a circumnavigation by human power in winter conditions.

The Great Baikal Trail organization is attempting to build a recreational trail system around the lake to promote conservation, and to create a sustainable economy based on preservation of this unique feature. To track the bikers and to see how they are traveling around the lake, go to www.cyclebaikal.com.

Maybe these five adventurous can do the next symposium lunch-time talk!
Featured Lake – Ancient Lakes of the World – Lake Maracaibo

Maracaibo is estimated to be the second oldest lake in the world, having been created approximately 36 million years ago. Maracaibo is the largest lake in South America and is connected to the Gulf of Venezuela by a narrow strait in the north, making it slightly saline. The Lake Maracaibo basin includes the largest oil fields in Venezuela. It also holds almost a quarter of Venezuela's population.

Maracaibo is just over 13,000 square kilometers in surface area with a maximum depth of 60 meters. The entire volume of this lake is 280 cubic kilometers.

In 2004, the lake had a major infestation of duckweed, estimated to have covered as much as 1,500 square kilometers or approximately a quarter of the entire lake. The type of duckweed comes from either Texas or Florida and is likely to have been transported by a ship.

Lake Maracaibo acts as a major shipping route to the ports of Maracaibo and Cabimas. The surrounding Maracaibo Basin contains large reserves of crude oil, making the lake a major profit center for Venezuela. A dredged channel gives oceangoing vessels access to the bay. The General Rafael Urdaneta Bridge (8.7 km long; completed 1962), spanning the bay's outlet, is one of the longest bridges in the world.

Although petroleum production is the most significant economic activity locally, sugarcane, cacao, and livestock are raised within the watershed. In addition, fish are caught in the lake, despite pollution from agricultural runoff and oil spills. The lake is surrounded on three sides by mountain ranges creating a hot and humid lowland ecosystem. The north end of the lake is semiarid while the southern end of the Lake receives 50 inches of rain annually as can be seen by the image taken from the Space Shuttle in 1985.

Website of the Month – www.trails.com

To avoid no vacancies, it is time to plan your summer camping trips. Trails.com is a good starting point but you can also search the web for camping next to lakes for any state. Below is an example of some websites that focus on camping near lakes.

For California = http://www.totalescape.com/active/water/lakelist.html
For Indiana = http://www.indianaoutfitters.com/statemap.html
For Maine = http://www.meliving.com/camping/lakes_more.shtml
For Montana = http://www.campingmontana.com/
**Update Contact information:**
Please let the NALMS Office (slunz@nalms.org) know if you have or are planning to change your contact information, so we can make sure you do not miss any of the NALMS monthly newsletters, updates, or general NALMS announcements. NALMS appreciates this.

**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@mwrd.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.