LAKE TIDES

A newsletter for people interested in Wisconsin Lakes

Volume 18 No. 1 Spring 1993

Sands in the Hourglass:

A History of the Wisconsin Lakes Convention

by Lowell Klessig

It began in the summer of '74. The Wisconsin Lake Management Law (Chapter 33), just signed by Governor Lucey, was to be introduced to the citizens of Wisconsin in three stages over three years.

Conferences were held in Cable and Hazelhurst for citizens and second-homers of the North. These were the first statewide meetings prepared by the government (DNR and UWEX) for citizens who cared about inland lakes. Meanwhile on the private side, the Wisconsin Federation of Lakes had been holding biannual meetings of voluntary lake association leaders for some years.

When Extension agents in the central and southern areas heard of the response from citizens in the North, they didn't want to wait for future years. So four more regional conferences were held in the impatient parts of the state before the fall equinox of 1974.

Regional meetings were held over the next three years. They evolved from an unveiling and exploration of the lake district organizational option to workshops in lake biology and sociology. The first Wisconsin Lakes Convention was held on the UW-Madison campus in 1978. Attendance was modest by current standards, but people who care about inland lakes had found a single forum--a forum that was destined to grow.

The Wisconsin Association of Lake Districts was formally constituted by the participants at the 1980 convention. The Wisconsin Federation of Lakes endorsed the convention, and in 1984 became full partners in co-sponsoring the event. By 1992, these groups merged into a solid coalition, the Wisconsin Association of Lakes, promoting wise use of our inland lakes.

Political and agency leaders were invited. Governors Earl and Thompson; Senators Proxmire, Kasten, and Kohl; DNR Secretary Besadny; and numerous state legislators presented keynotes or served on panels.

The Wisconsin Lake Stewardship Awards were first presented in 1987 to honor those volunteers who exhibited unusual dedication to the care of a lake.

The convention outgrew the University of Wisconsin-Stevens Point and moved to the Holiday Inn. With more space, the educational options were enlarged with displays and exhibits. Attendance passed the 600 mark in 1992.

The future is never clear; always unfolding. However, there is one thing that is perfectly clear: The people and events surrounding the Wisconsin Lakes Convention have and will continue to play a vital role in shaping the future of Wisconsin's lakes.

Wisconsin Lakes Convention Brochure Enclosed in this Issue.

ON THE WATERS

Eurasian Water Milfoil in Wisconsin

A Report to the Legislature

Eurasian water milfoil (*Myriophyllum spicatum* L.) is a submerged aquatic plant native to Europe, Asia, and Northern Africa. It is the only one of eight milfoil species found in Wisconsin that is not native to the state. The problem with Eurasian water milfoil is its propensity for explosive growth and its incredible ability to regenerate. It can outcompete important native aquatic plant communities, especially in areas where the lake bottom or shore is disturbed.

Eurasian water milfoil has been an all-too-well-known nemesis in Wisconsin's southern counties for the past three decades and is spreading north. The plant is now found in 54% of Wisconsin's counties.

In the last budget adjustment bill (Act 269), the Department of Natural Resources (DNR) was directed to compile a report on Eurasian water milfoil. That report was drafted by a team of lake professionals and concerned citizens.

The report recognizes four keys to deterring the spread of Eurasian water milfoil:

- Creating awareness through education,
- Maintaining a healthy lake ecosystem,
- Protecting native aquatic plants, and
- Preventing the introduction of Eurasian water milfoil.

The report recommended a program for controlling the spread of this exotic plant. The document also describes the location and spread of Eurasian water milfoil.

The document will be presented to the newly formed Aquatic Nuisance Control Council. Members were selected by Governor Thompson to advise the DNR on exotics ranging from Aquatic plants such as Eurasian water milfoil to Zebra mussels.

Lake Hale:

A Prescription for a Healthy Lake

This spring, UWEX and DNR will unveil LAKE HALE. LAKE HALE is a model plan designed to help local communities. This model is an example of a plan describing Hale Lake, a fictitious lake district.

For communities in the early stages of planning, the Lake Hale Model will describe the types of studies that might be conducted. For communities that have completed several planning grants, the model shows how to present the results to citizens and local officials. The model also exhibits a specific implementation schedule.

A workshop on using the model plan is scheduled for the Wisconsin Lakes Convention. Extension Community Resource Development Agents and DNR District Lake Coordinators will be holding local sessions later in spring to prepare lake organization leaders to apply the model in their community.

Like any model, it will not fit any community perfectly. But if a community is dedicated and committed, like the fictitious Hale Lake District, their lake will have a better chance of staying healthy. Perhaps there is a wellness prescription in the model: "Do everything you can to preserve a healthy lake."

And in contrast to other prescriptions, the prescription is free. *Contact your County Extension Office about obtaining the model and guidance in using it.*

Wisconsin Lakes Convention

April 16-17, 1993

Holiday Inn - Stevens Point

Register Now!

CLIP AND SEND

PLEASE PREREGISTER BY APRIL 8

Name(s)_____

_____

Address_____

_____

Lake_____

County_____

Stream most likely to attend_____

Registration fee of $33 per person covers materials, breaks, and Saturday lunch. Send check payable to *UW-Extension* to:

Diane Lueck, UWEX
College of Natural Resources
Univ. of Wisconsin
Stevens Point WI 54481
715/346-3783

☐ Would like a table for a display.

LODGING: A block of rooms is being held at the Holiday Inn until March 25. Call 800/922-7880 (out of state 715/341-1340) and ask for the Lakes Convention block. $49 single, $62 double, $66 triple, $70 quad. Other motels within two blocks: Comfort Suites 800/228-5150; Road Star 715/341-9090; Super 8 715/341-8888.

Have you attended the convention before? _____ If yes, how many times? _____

Note: Spouses are encouraged to register and participate in the entire convention. Children are welcome to attend the Wildlife Stream, Video Room, and Exhibits. Extra tickets for Saturday lunch may be pre-purchased for $15.00.

1993 Wisconsin Lakes Convention

Swim A Stream

The **1993 Wisconsin Lakes Convention** will feature some familiar faces and events as shown on this brochure. And it will also feature new faces and new events.

George Meyer, the new Secretary of the Department of Natural Resources, will share his vision for Wisconsin and specifically for Wisconsin lakes. Phil Pister, a fisheries scientist and philosopher, will join us from California.

Workshop Organization The workshops have been arranged into "Streams." Each Stream consists of three workshops coordinated by the same moderator. If you'd prefer more diversity, you can take shorter dips in three different "Streams," selecting a different topic each session. The Streams provide an opportunity for greater depth, but some people want to learn about a lot of different topics. The solution, of course, is to plan on coming back in future years.

Share Your Ideas Lake organizations and non-profit groups are invited to bring displays, posters or sample materials. Tables (3'x8') will be available. Please provide whatever other supporting structure you need. To reserve a table or space for your display, check the box on the registration form.

The Stream Moderators invite you to immerse yourself in an educational swim at the 1993 Wisconsin Lakes Convention.

Jeff Bode, DNR, Planning Stream
Paul Cunningham, DNR, Fish Stream
Mike Dresen, UWEX/UWSP, Development Stream
Bill Engfer, DNR, Boating Stream
Elmer Goetsch, Wisconsin Association of Lakes, Organization Stream
Lowell Klessig, UWEX/UWSP, Convention Coordinator
Bob Korth, UWEX/UWSP, Organization Stream
Jim Leverance, DNR, Plants Stream
Karin Van Vlack, Wisconsin Association of Lakes, Wildlife Stream

SPONSORS:
University of Wisconsin Extension
University of Wisconsin Stevens Point
Wisconsin Association of Lakes
Wisconsin Department of Natural Resources

Important: This is the only brochure you will receive. There will not be a separate mailing! ***See pages 7-8 for the convention agenda.***

ECONOTES

The Carp in the Fox House

by Mark Sesing and Robert Korth

If you have travelled through the farmlands of south central Wisconsin, you may have had an opportunity to visit Fox Lake. Located in Dodge County, this lake plays an indispensable role in the county's activities. Fox Lake is hypertrophic (very nutrient rich). Some lake users and landowners on Fox lake perceived the lake's carp (*Cyprinus carpio*) population as a major cause of the poor water clarity and loss of game fish and wildlife habitat. To discover what impact the carp were having on Fox Lake's water quality and aquatic vegetation, a mark/recapture population estimate of the lake's carp was proposed. The Fox Lake Protection and Rehabilitation District and the Department of Natural Resources jointly funded the project.

A 1992 Beaver Dam River Priority Watershed Report had identified the sources of most nutrients in the lake. Internally generated phosphorous was presumed to be coming from lake sediment, wind resuspension, and the carp.

Two study elements were apparent. First, any strategy for carp control must consider the percentage of existing phosphorous load caused by carp and the relative significance of carp to the lake's water quality and habitat. Second, that significance is directly related to the number of carp in Fox Lake.

The Marking Run

The mark/recapture population study involved the capture of carp, then marking them with a fin clip (called the marking run). During the marking run, 5,194 carp 18 inches or larger were caught and fin clipped. The marked fish were released, allowing them to mix back with the unmarked population. The idea was to subsequently recapture carp to establish the ratio of marked vs. unmarked fish. With that ratio in hand, a fairly accurate estimate of carp numbers can be calculated.

A 1/2 Million Pound Carp

The calculation estimated 75,278 individuals 18 inches or longer. When the average weight was added to the mix, it calculated out to 182 pounds of carp per acre, or 478,183 pounds of carp in Fox Lake. Another formula developed for Minnesota's lakes concluded that each carp adds about 0.011 pounds of phosphorous back into the water column per year. Now, if you are still with us, apply that number to the total pounds of carp (478,183) and the results are an annual estimated phosphorous load of 5,260 pounds just from the carp. In Fox Lake's Appraisal Report, the average annual phosphorous load estimate was 41,430 pounds per year. That means the carp are responsible for 12-13% of the total phosphorous load annually.

Impact

Carp, if abundant enough, have a significant impact on their environment. Removal of carp will lessen the rapid regeneration of phosphorous caused by carp physiology via digestion and its practice of stirring up sediments. Less phosphorous can mean reduction in algae density; therefore, clearer water. Carp have a habit of rooting out native aquatic plants. Fewer carp mean more plants, improving fish and wildlife habitat. Where aquatic plants become reestablished, there is less resuspension of sediments from the winds.

Caveat

Historically, carp have had a deleterious impact on Fox Lake. A massive control project was attempted in 1966 with gains in water quality and improved fish and wildlife habitat. That control was expensive and temporary. Remember, this report is based on models and math; use caution when applying the findings. Total control of carp may not greatly improve water quality. Recall that 12-13% of the phosphorous was attributed to carp; that means that 87-88% comes from other sources. Proposals for large expenditures of money and resources for carp removal need to be critically reviewed.

Mark Sesing is the DNR Water Resources Manager for Horicon Area. Bob Korth is an Extension Lake Management Specialist.

Cleaning Up Our Act:

Laundry Detergents in our Lakes

Following World War Two, chemical breakthroughs led to a vast array of chemical household cleaners. They leave your house and clothes spotless, but many are made from compounds that are toxic or increase nutrient levels in our waters. In many localities, synthetic laundry detergents are considered significant contributors to water pollution.

Detergents are predominantly composed of two ingredients: surfactants and builders. Surfactants, or surface-active agents, clean by replacing dirt and aid in carrying dirt away. Builders ensure the action of the detergent by preventing the neutralization of the surfactant ions. But there is one problem: builders are comprised of phosphorous. As we have learned, phosphorous entering lakes and rivers hastens eutrophication (the aging process) with its inherent increase in algae and aquatic plants.

Before the mid-1960s, surfactants were not biodegradable and often produced foam in streams and lakes. They have been altered and the problem with foaming has been vastly reduced. Many states, including Wisconsin, have limited or banned phosphorous in detergents.

You Can Help

You can reduce the amount of phosphorous entering lakes by refraining from activities using detergents, soaps, and shampoos near lakes and rivers. This includes bathing or shampooing in lakes and washing pets, boats, or vehicles in or near the water.

Use non-phosphate detergents. Don't buy a detergent that fails to list the phosphate content on the label. Use biodegradable cleaning products. The increased pressure by consumers for environmentally friendly cleaning products has led to a decrease in the phosphorous content in detergents across the US. We can improve the quality of our waters by being careful consumers.

Based on information from the New Hampshire Department of Environmental Services.

Alternatives for Hazardous Wastes

Product/Hazardous Materials	Alternative
Household batteries (mercury, zinc, silver, lithium, cadmium)	Solar powered batteries, rechargables.
Oven cleaners (potassium or sodium hydroxide, ammonia)	Baking soda and water applied directly to surface.
Ammonia-based cleaners (ammonia, ethanol)	Mix 1/2 to 1 cup of vinegar in gallon of warm water.
Abrasive cleaners and powders (trisodium phosphate, ammonia, ethanol)	Scrub area with 1/2 lemon dipped in borax
Drain cleaners (sodium or potassium hydroxide, sodium hypochlorite, hydrochloric acid, petroleum distillates)	Flush with boiling water followed by 1/4 cup baking soda and 2 oz. vinegar.
Disinfectants (diethylene or methylene glycol, sodium hypochlorite, phenols)	Mix one gallon of water with 1/2 cup borax.
Bleach cleaners (sodium or potassium hydroxide, hydrogen peroxide, sodium or calcium hypochlorite)	Vinegar or baking soda.

Friday - April 16

9 a.m.-12:45 p.m. **Video Room**

Delavan Lake Story
License to Dam
Tale of Two Lakes
In Current Repair

10 a.m - 6:30 p.m. - ***Vendors Exhibits Open*** - Mary Platner, Wis. Assn. of Lakes, Coordinator

10 a.m. - **Pre-conference Seminars**

- Self-Help Program: Update for Volunteers - Jo Temte, DNR
- The Role of Chemicals in Aquatic Plant Management Strategies: A Debate
  Dave Marshall, DNR, Moderator
  Warren Porter, UW-Madison
  Doug Pullman, Aquest Corp., Flint, MI

1 p.m. - **Opening Plenary Session**

- Welcome - Chancellor Keith Sanders
- State Keynote - George Meyer, DNR Secretary
- Adopt-A-Lake - Chari Towne, UW-Stevens Point

3:15-3:40 - ***Break*** (Silent Auction Begins)

3:40 - **Concurrent Workshops**

A1. Planning	Grants Available, including Priority Watershed - Mary Danoski, Fox Lake; Jeff Bode	D1. Boating	Emergency Procedures on the Water Bart Halverson, DNR; Dave Brandley, Dane Co. Sheriff's Dept.
B1. Fish	Interactions between Aquatic Plants and Fish - Christine Storlie, DNR; Annette Trivitz, UW-Madison	E1. Development	Lake Access and Lake Crowding - Mike Dresen; Randy Schumacher, DNR
C1. Plants	Biological Invaders: Eurasian Milfoil and Others - Stan Nichols, UWEX/ Wis. Geol. & Natural History Survey	F1. Organizations	Legal Issues for Existing Lake Organizations: Open Meeting law, Public Records, Budget, Incorporation, and 501(C)3 Status - William O'Connor, Attorney

4:45-6:30 **Social Hour - Cash Bar, Hors d'oeuvres**

5:15 **Silent Auction Closes, Raffle Begins** - Betsy Schulte, Wis. Assn. of Lakes, Coordinator

7:00-8:15 **Video Room Open**

8:30 p.m. **Waterful Brazil**: Resource Management in the Amazon and Elsewhere (a one-hour slide show) - Lowell Klessig, UWEX/UWSP

Saturday - April 17

7:30-noon ***Exhibits and Video Room Open***

7:30 a.m. **Annual Meeting** of Wisconsin Association of Lakes (with Continental Breakfast)
- Lisa Conley/Elmer Goetsch

8:30 **Plenary Session - Ethics and Lake Management**
- Phil Pister, California Fish and Game (retired)

9:30 - **Concurrent Workshops**

A2. Planning — Model Lake Plan - Lowell Klessig, UWEX/UWSP and Buzz Sorge, DNR

B2. Fish — Harping on Carp: Management Case Histories - Jim Congdon, DNR; Kendall Kampke, DNR; Paul Cunningham

C2. Plants — Cedar Lake: Use of Aeration for Algae Control - Paul Garrison, DNR

D2. Boating — Who Enforces Boating Laws - US Coast Guard Rep; John Lacenski, DNR; Dave Brandley

E2. Development — Controlling Shoreline Development: Piers, Boathouses, and Shoreland Protection - John Gozdzialski, DNR; Tere Locke, DNR

F2. Organization — Liability Concerns for Lake Organizations - Tim Mentkowski, Attorney

G2. Wildlife — *Children and Spouses Welcome* Curious about Critters: Activities from Aquatic WILD - Jo Temte, DNR

10:45 - **Concurrent Workshops**

A3. Planning — Handling State Grant Money - Larry Fritag, DNR

B3. Fish — Tournament Fishing - Ron Poff, DNR; Bob Bergstrom, Wis. Conservation Congress; Paul Cunningham

C3. Plants — Aquatic Plant Management: Pewaukee Lake - Charlie Shong, San. District

D3. Boating — Forming and Financing a Boat Patrol - Bob Auchinleck, Lauderdale Lakes; Bob Tucker, DNR

E3. Development — Role of Citizens in Land Use Decisions - Susan Jones, DNR; Kate Fitzgerald, DNR

F3. Organization — Organizing a New Association or District - Betsy Schulte, Windsor Lake District; Elmer Goetsch, Three Lakes Waterfront Homeowners Assn.

G3. Wildlife — *Children and Spouses Welcome* Loon Rangers - Terry Daulton Dunn, Sigurd Olson Institute

12:00 p.m. ***Lunch***

Music and Entertainment - Whitewater (Amasa, Michigan)

Grand Prize Raffle Drawing - Betsy Schulte

1:30 **Awards Ceremony** - Jeff Bode, MC; Lisa Conley, Rep. Jim Holperin, Presenters

2:15 ***Adjourn***

Zebra Mussel Invasion

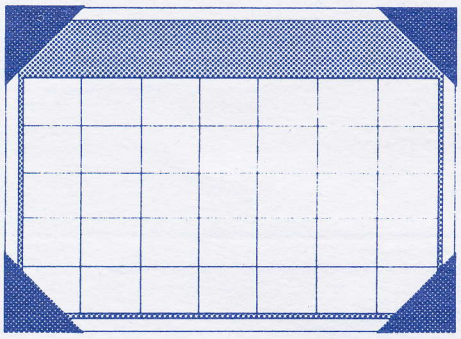
Is my lake safe? With the increase in zebra mussel densities in Lake Michigan and the detection of zebra mussels in the Mississippi River, the infestation of other Wisconsin inland waters has become a very real possibility. Inland water users are now facing the question of whether zebra mussels have infested their rivers, lakes, and streams.

The University of Wisconsin Sea Grant Institute conducts educational workshops on this menace.

"The Zebra Mussel Invasion of North America." General program with particular emphasis on threats to inland waters and precautions for prevention.

"Zebra Mussel Monitoring for Inland Water Users." Training to identify zebra mussels and to set up and run your own monitoring program.

Contact Clifford Kraft or Jeff Hieb at 414/465-2798 or 2795 for more information. Sea Grant Advisory Services, UWGB, 2420 Nicolet Dr, ES-105, Green Bay WI 54311.



Calendar

***April 16-17* Wisconsin Lakes Convention**

Watch for **Lake Fairs** coming in your area. The upcoming year promises to hold plenty of educational opportunities.

June 5 - Lac LaBelle, Waukesha Co.
June 5 - Shawano County Park, Shawano Co.
June 12 - Noquebay, Marinette Co.
June 19 - Solon Springs, Douglas Co.
June 19 - Amherst, Waupaca Co.
June 26 - Minocqua, Oneida Co.
June 26 - Webster, Fort Follis, Burnett Co.

Water and Timber

Even though it's considered a sound forestry practice, a "clear cut" makes many folks wince. A muddy space torn by heavy equipment, tree roots tipped to the sky, no safe place left for a bird to land or a squirrel to climb. Apart from the aesthetic impressions, poor logging practices near rivers and lakes can have unfortunate impacts. Operations such as road building and certain cutting methods can have a drastic influence on water quality.

The Badger State's forests play a vital role in maintaining clear lakes and rivers. Forest lands act as buffers, storing nutrients and preventing sediments from entering the water. Trees shade lakes and rivers, modulating water temperature increases. Water is a fundamental requirement for all wildlife; trees near water provide habitat for much of that wildlife. Many insects that live in the trees and bushes bordering our lakes and river become nourishment when they drop in the water.

There are limited regulations on forestry management practices near the state's waters. These practices vary from county to county and tend to be more rigorous on state forest lands.

The DNR Forestry Bureau has brought together agency people and professional foresters from around the state to develop a set of Best Management Practices (BMPs) for **voluntary** use in Wisconsin's forests. At meetings held in Wausau and Madison in January, committees were formed to generate a list of sound practices to lessen the potential impact of logging on the state's waters. Other areas that will be considered include developing an education and training strategy, finding financing, and creating a method for monitoring the success of the program.

Look for more articles on forestry and water in future issues of Lake Tides.

REFLECTIONS

A Tale as Old as Time

The staff of *Lake Tides* is compiling a history of Wisconsin's inland lakes for future publication. We are looking for stories dating back to the first Europeans to use the lakes. If you are willing to share with the people of Wisconsin any old accounts or narratives of the original settlers, first outboards, resorts, big fish, or fascinating events on your lake, we would appreciate your assistance.

If you know any "old timer" willing to be interviewed, or other sources of information, please pass it along. We believe a better understanding of the way life used to be on Wisconsin's lakes will spark the aspiration to preserve and protect these liquid lands.

If you are interested in this project, please contact Robert Korth, c/o Lake Tides UWEX/ UWSP, Stevens Point WI 54481 (715/346-2192).

printed on recycled paper PRINTED WITH SOY INK

Lake Tides #8466
College of Natural Resources
University of Wisconsin
Stevens Point WI 54481
715/346-3783

Non-Profit Organization
U.S. Postage
PAID
Permit No. 19
Stevens Point, WI

UWEX

Published Quarterly
Editor: Robert Korth
Production Editor:
Diane Lueck
Senior Editor: Lowell Klessig
DNR Coordinator:
Richard Wedepohl
Photography: Robert Korth