

Lake Lingo

Limnology: Scientific study of freshwater ecosystems, including the history, geology, biology, physics & chemistry of lakes.

Riparian: Relating to or living/owning property on the bank of a natural freshwater course (stream, river, lake).

Watershed: The land area that drains surface water to a lake or river. Also called a drainage basin.

Nonpoint Source Pollution: Organic and inorganic contaminants (fertilizers, pesticides, eroded soil, heavy metals, pet waste, etc.) whose sources cannot be traced to a single point such as a wastewater discharge pipe. Frequently delivered to downstream water bodies as runoff.

Runoff: Water from rain, snowmelt, or irrigation that flows over the ground surface and returns to the lake. Runoff can collect pollutants from land and carry them to receiving waters.

Eutrophication: The process of nutrient enrichment of a lake leading to increased production of algae and aquatic plant growth. Eutrophication can be accelerated by human activity such as agriculture, development and improper waste disposal.

Exotic Species: Non-native organisms that can out-compete native species and upset the ecological balance of an ecosystem. Examples include Eurasian milfoil, zebra mussels and carp.

Thermal Stratification: Layering of lake water caused by temperature-created differences in water density. Prevents mixing.

Turnover: Seasonal mixing, top to bottom, of a lake caused by cooling and wind-driven energy. Loss of thermal stratification.

Lake District: Special purpose unit of government with authority to manage a lake and raise funds through mill levy, user charge, special assessment, bonding and borrowing. May or may not have police power to regulate surface water use or to zone land. Unique in that non-resident property owners have a voice in governmental decision making.

Lake Protection: The act of preventing degradation or deterioration of existing lake qualities.

Lake Restoration: The act of bringing a lake back to its attainable uses that pre-dated human disturbance and manipulation.

Public Trust Doctrine: Provision in the Wisconsin Constitution authorizing the state to hold all natural navigable waters in trust for the public. Extends to the Ordinary High Water Mark.

Ordinary High Water Mark: Physical demarcation line, indicating highest point that lake levels reach on a recurring basis.

Slow-No-Wake: Operation of a motorized watercraft at the slowest possible speed while still maintaining steerage control.

Riprap: Rock, cobbles or boulders placed on the bank of a stream or lake to protect it against erosion.

Bioengineering: Biological erosion-control methods that use vegetation and biodegradable materials to protect shorelines.

Ripples

Lake Ripley Management District
P.O. Box 22
Cambridge, WI 53523

Presorted Standard
U.S. Postage PAID
Cambridge, WI
Permit No. 5



Ripples

LAKE RIPLEY
PRIORITY LAKE PROJECT

Vol. 12, No. 2

Summer 2004

BOARD OF DIRECTORS

John Molinaro
Chair
(608) 423-4743

Mike Sabella
Treasurer
(608) 423-4603

Derek Hoffman
Secretary
(608) 423-1414

Joanne Knilians
Commissioner
(608) 423-3067

Dennis McCarthy
Commissioner
(608) 655-3455

Paul Jorstad
Town of Oakland Rep.
(608) 423-4949

Sheri Waltz
Jefferson County Rep.
(920) 648-6428

STAFF

Paul Dearlove
Project Manager
(608) 423-4537

LAKE DISTRICT OFFICE

101 E. Main Street, Suite 2
P.O. Box 22
Cambridge, WI 53523

Phone:
(608) 423-4537

E-mail:
ripley@bminet.com

Web site:
www.lakeripley.org

FROM THE HELM



In 1989, a small group of concerned lake residents saw that Lake Ripley was having a problem with a non-native lake weed, called Eurasian milfoil. They organized, raised funds, purchased equipment, and began to remedy the problem using mechanical harvesting. This group of volunteers was the beginnings of the Lake Ripley Management District.

Margaret Mead said "never doubt that a small group of thoughtful, committed citizens can change the world. In fact, it's the only thing that ever has." We witnessed this phenomenon back in 1989, and it continues to this day through Lake District-sponsored litter cleanups, water quality testing and various other volunteer-based initiatives. Over the last several years, volunteers have also played a crucial role in the success of our Lake Watch program. Thanks to the leadership of Board Member Joanne Knilians, the Lake Watch crew has helped make the lake safer and more enjoyable for everyone, mainly by monitoring lake use and reporting illegal boating activities to the Town of Oakland Police.

Building on this history of volunteer activism, we are now looking to establish a 'Friends of the Lake District Preserve' group. In 1997, we were able to purchase the 100-acre property located at the lake's inlet off Highway A. We have since restored the prior farmland back to its original wetland and A proposed 'Friends' group could work with the Lake District to help manage this valuable community asset, allowing us to accomplish much more than our limited staff and budget would normally allow. Possible activities include collecting prairie seeds, assisting with controlled burns, maintaining wood duck and bluebird nesting boxes, recording wildlife observations, helping with educational tours, and generally offering recommendations on how to improve an already great public resource.

To learn more about these and other volunteer opportunities, I urge you to contact the Lake District office at 423-4537.

John Molinaro
Chair, Lake Ripley Management District

Aquatic Habitat Study Underway

Many anglers can attest that certain fish (largemouth bass in particular) are often found lurking under piers. Conventional wisdom might imply that a pier must then provide some form of habitat value that fish find attractive. Shelter from the sun? Cover to hide from predators? Camouflage for ambushing unsuspecting prey? Spawning substrate? Food sources? All of the above?

Piers and their impact on lake ecology are frequently a source of controversy, especially when new piers are proposed within rare fish-spawning sites and other sensitive areas. Their value as habitat for fish and other aquatic organisms is especially controversial. For example, do piers augment or detract from naturally occurring sources of habitat that fish need in order to live, feed and reproduce? What diversity of fish, plants and macro-invertebrates (aquatic insects that juvenile fish eat) can be found under piers compared to other areas? Does a pier's size or shading potential make a difference? How about associated boat traffic and other common user disturbances?

(Continued on next page)

Habitat Study (cont.)

To begin answering these and other questions, the Lake District was awarded a research grant and has partnered with the Jefferson County Land & Water Conservation Department and Wisconsin Department of Natural Resources to study the issue. The study—conducted on both Ripley and Rock Lakes—will attempt to quantify how fish, macro-invertebrates and aquatic vegetation are influenced by various near-shore structures, shading scenarios and other factors.

Fieldwork for the study has already commenced and will continue throughout the summer. It involves monitoring aquatic life and sunlight availability under a number of randomly-selected (and anonymous) piers, as well as at nearby control sites around the lake. Only heavily disturbed areas that contain sand beaches or evidence of aggressive weed control were eliminated as prospective study sites.

Ultimately, the study should offer useful insights into the shading effects of piers on littoral zone (shallow water) habitat and biological diversity. We look forward to learning more about these inter-relationships, and hope to share our results with you sometime this winter.

Top 10 Ways to Help Lake Ripley

#10. Don't litter. Make sure trash is properly disposed of and doesn't accidentally fly out of your boat or vehicle.

#9. Report illegal dumping, suspicious discharges, flagrant boating violations, and any other activities that may be harmful to fish, wildlife or water quality.

#8. Help keep non-native ("exotic") species from in-

vading the lake. Inspect and clean your boat, trailer, fishing tackle and live wells after each use to make sure they are free of nuisance species. It only takes one tiny zebra mussel or one fragment of Eurasian milfoil to infest a lake.

#7. Keep yard waste out of the lake. Leaves, grass clippings, fertilizers, and ash from burn piles make our lakes overly fertile from too many nutrients. This fertility contributes to algae growth and reduced water clarity. If you must fertilize, use phosphorus-free products.

#6. Keep soil in its place. Whether you're farming, building, gardening or looking after your lawn, soil erosion threatens downstream water quality and fishery habitat. Protect against erosion by planting rain gardens, covering or vegetating exposed soils, and by allowing water to infiltrate into the ground.

#5. Use and dispose of chemicals properly. Rain and melting snow can wash contaminants like oils, greases, road salt, pesticides and car care products into water bodies—regardless of how far away you might live. Some chemicals can also leach through the soil and pollute groundwater.

#4. Reduce the amount of water-impervious surfaces on your property. Driveways, patios, rooftops and other hard surfaces causes runoff by preventing rain water from naturally infiltrating the soil.

#3. Observe slow-no-wake rules and other boating regulations. These rules are in place to help improve safety, share limited space, and protect sensitive habitat areas. The aggressive operation of motor boats in shallow water (less than several feet deep) can re-suspend bottom sediment, destroy fragile plant communities, contribute to the spread of Eurasian milfoil, and lead to poor water clarity.

#2. Reduce, reuse and recycle. Failing to conserve water and other resources is bad for the environment. Start paying attention to how much water you use around the house and what you normally throw "away" each day without giving it a second thought.

#1. Stay informed, and support local lake-management efforts.



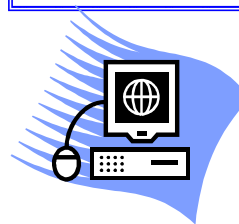
From top to bottom: (1) Light-intensity meters are used to measure sunlight availability under piers and at open-water reference sites; (2) a minnow trap is deployed to glean information about the local fish population; (3) backpack fish shockers temporarily stun fish so they can be identified and counted.

Lake Ripley News Briefs & Official Notices

2005 PROPOSED BUDGET			
BUDGET HEARING			
AUGUST 14, 2004, 9:00 A.M. @ OAKLAND TOWN HALL			
PROJECTS	2004	2005	% CHANGE
LRPLP LAG*	34000	39000	+14.7
LRMD ACRA CONTRIBUTION**	10000	4500	-55.0
WEED HARVESTING	4500	4500	
LAKE DISTRICT PRESERVE	4900	3000	-38.8
LAKE WATCH	250	250	
CONSERVATION EASEMENTS	1500	1500	
NO-WAKE REGULATION	3500	3500	
INSURANCE			
GENERAL LIABILITY	1400	1400	
MARINE & TRUCK	1000	1000	
WORKER'S COMPENSATION	900	900	
OPERATIONS			
LEGAL COUNSEL	3000	3000	
DUES/CONFERENCES	1000	1500	+50.0
OFFICE/MAILINGS	500	700	+40.0
CONTINGENCY	1500	1500	
COMMISSIONER STIPENDS	4900	4900	
CAPITAL RESERVE & LAND ACQUISITION	10000	10000	
TOTAL:	82850	81150	-2.1
LESS ANTICIPATED CARRY OVER:	<26300>	<34500>	
REQUIRED TAX LEVY:	56550	46650	-17.5

* Contribution to supplement \$46,350 state grant for implementing the Lake Ripley Priority Lake Project
** Contribution to supplement \$25,610 state grant for cost sharing through the Priority Lake Project

ANNUAL MEETING	
AUGUST 21, 2004	
9:00 A.M. @ OAKLAND TOWN HALL	
I.	CALL TO ORDER
II.	APPROVAL OF 2003 ANNUAL MEETING MINUTES
III.	NOMINATION OF BOARD CANDIDATES (Nominations to appear on ballot: Mike Sabella; Jane Jacobsen-Brown)
IV.	CHAIRMAN'S REPORT
V.	TREASURER'S REPORT
VI.	BUDGET & TAX LEVY
VII.	TABULATION OF VOTE AND ELECTION OF OFFICERS
VIII.	ADJOURNMENT



Don't forget to check out our website at www.lakeripley.org for the latest news and information pertaining to Lake Ripley.

SPLASH FOR TRASH

AUGUST 14, 2004
10:30 A.M. - 12:30 P.M.

The Lake Ripley litter cleanup is being sponsored by the Lake District, Cambridge Aquatic Environmental Club, and Cambridge Divers LLC. Garbage bags (and collection), gloves, safety vests, and refreshments will be provided. Our goal is to have teams of volunteers targeting various locations on and off the water.

This is a fantastic opportunity to get the whole family involved in cleaning up the lake! To find out more about participating, contact the Lake District office at 423-4537 or ripley@bminet.com.

CAMBRIDGE AQUATIC ENVIRONMENTAL CLUB

Cambridge High School's Aquatic Environmental Club is one of the Lake District's most active and long-standing local partners. Recent 'Adopt-a-Lake' activities include water quality testing (now in its 12th year), and a traveling puppet show that teaches kids about the importance of lake stewardship and protecting our natural resources. The Club is currently planning to rewrite a community brochure for living environmentally friendly with Lake Ripley. Planning is also underway to partner with the Wisconsin Association of Lakes in the 'Clean Boats - Clean Water' exotic species monitoring and educational program.

National activities have included conducting teacher-training workshops, presenting to Congress in Washington DC, and working with the Minnesota and Wisconsin Sea Grant Institutes. This summer, Club members are headed out to Custer State Park to conduct in-depth limnological research on the park's four lakes.

"Doing fieldwork that has a practical purpose renews my excitement in the field of science, and brings it alive for the students."
-Mr. Ed Grunden, Teacher & Club Sponsor

"This is my first year in the Club, and already I feel like I'm making an impact."
-Lauren Synder, Club Member