

## NEWS FROM THE KLINE WETLAND & CONSERVATION AREA

**WE NEED YOUR HELP!** The LMEC has been reluctant to call attention to a long-term problem with vandalism at the Kline Wetland and Conservation Area but we now feel the need to ask for the community's assistance in this matter.

Since the Kline was constructed there have been a few cases each year of people removing boat barriers to gain access for larger boats (at least until concrete pillars were installed). Sometimes parts of the control levy have been removed or the control pipe itself has been damaged in some way so as to alter the level of the water flow. We have been very patient with this. LMEC members put in many hours fixing the damage as well as removing trash and litter left there by some of those who use the area.

This past fall, our Council Chair and his family spent two weekends digging up and hauling heavy glacial stones from their farm to the levy to help with both nutrient and sediment filtering and to improve the aesthetics. Within ONE WEEK someone went into the wetland and carried off every single stone!

Just this April, another of our council members visited the Kline and found that somebody had cut through two locks and two chains so they could steal the iron cover that restricts access to the control flow pipe—a very heavy 34" by 34" grate. To make matters worse they then stuffed what appeared to be a small pine tree down into the pipe opening. After pulling out the tree it became clear that whatever else these people did it has completely shut down the water flow that runs in the pipe between the wetland and the lake channel.

The LMEC is working with the IDNR to replace the control structure's safety cap and determine the full extent of damage. We ask that any walkers, hikers, bikers, or other outdoor enthusiasts, please include the Kline in your travels. It is a beautiful place to watch birds, fish, or simply explore and your occasional presence might provide some extra measure of wetland protection. Maybe just knowing that the rest of us are watching will discourage further destruction. To report problems at the Kline or any other wetland area around Lake Maxinkuckee call the IDNR at 574/896-3673 or contact the LMEC office at 574/842-3686.

## RALPH C. VONNEGUT, JR FUND PROVIDES SUPPORT FOR 2008 ENVIRONMENTAL PROJECTS

In 2007 the Ralph C. Vonnegut, Jr. family established an annual endowment fund to support projects that promote the long-term health of Lake Maxinkuckee. Mr. Vonnegut's long time love affair with our beautiful lake now benefits us all. His generosity provides another funding source for projects that deal with the preservation of Lake Maxinkuckee's water quality as well as safety and recreational issues.

The Vonnegut Fund is administered by the Marshall County Community Foundation which insures that the money will be used for qualified lake related projects.

Applications for the Vonnegut Fund were made available in January of this year for the first time with a submission deadline of January 31st. Awards were announced on April 1st with the Lake Maxinkuckee Environmental Council being awarded grant funds for two companion programs that focus on the invasive aquatic plant hydrilla. *(The Environmental Bulletin insert included with this newsletter has been paid for by a portion of one of the two Vonnegut grants we were awarded.)*

LMEC Executive Director Kathy Clark, Environmental Council Chair Allen Chesser, and Environmental Fund Director Pam Buxton attended the awards ceremony at the Community Foundation's office. The LMEC received two grant awards, one for \$10,575 to help fund professional hydrilla searches this year and a second for \$1,715 to provide for equipment and materials to use for educational purposes. "These awards have made it possible for us to implement the entire 2008 Volunteer Lake Monitoring Program without sacrificing any of our other environmental projects", explained Ms. Clark at the ceremony. "We are so thankful to the Vonnegut family and the Marshall County Community Foundation for their consideration and recognition."

## INDIANA GENERAL ASSEMBLY ENACTS BAN ON DISHWASHER DETERGENTS THAT CONTAIN PHOSPHORUS—BUT CAN WE DO MORE?

Phosphorus is a natural mineral that comes from rocks and occurs naturally in small amounts in the water of this region. It is in fertilizer, pesticides, and detergents. Excess phosphorus becomes fertilizer for the algae in our lakes and streams. Over time, algae and other microscopic plant life can become super abundant and "choke" a lake. The water in these highly enriched lakes and streams have a low transparency and low dissolved oxygen. Fish and aquatic animals die.

Following numerous states around the country, the Indiana General Assembly, led by our own Representative Nancy Dembowski, approved House Bill 1120 that restricts the amount of phosphorus in detergents for use in household dishwashers. Dishwashing detergents contain as much as 8.7% phosphorus by weight. Phosphorus is not required to clean dishes, enzymes are more important. Consumers Reports reported in March 2005 that phosphate-free dish detergents cleaned just as well as those with phosphorus. The new Indiana legislation limits the amount of phosphorus in dishwasher detergents to 0.5% by weight effective July 1, 2010.

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**SCENES FROM OUR WETLANDS—SOME MAY BE MAN-MADE BUT THEY'RE ALL WORKING ACCORDING TO MOTHER NATURE'S DESIGN**

**Bullfrogs croak** amid the cattails, and an inset buzzes above your head, its droning punctuated by honks from a flock of Canada geese.

The sound of rushing water grows fainter as you walk along the levee that protects the marsh.

Dragonflies soar through warm air that is saturated with fragrances. A snapping turtle moves slowly at your right, a muskrat splashes in the water, and at your approach a sord of mallards takes flight.

Photography by Richard Fields (Note to our donors: There was no added cost to use color printing for these photographs)

Text is taken from an article written by Culver's own Fred Karst for the Indiana Department of Natural Resources' Outdoor Indiana magazine. The LMEC wishes to thank the IDNR for granting us permission to use photographs and text from that piece. The complete original article, including more beautiful photographs, was issued Sept/Oct of 2001. A copy can be found in the Outdoor Indiana archives section of the IDNR's website at [www.IN.gov](http://www.IN.gov) along with information on how to subscribe to this wonderful publication.

Above is the Kline Wetlands and Wetland Conservation Area—



Right: Dense vegetation at the Wilson Wetlands, including cattails and ferns, act as a biological sponge to filter runoff water before it reaches the lake.

Bottom left a family of Canada geese watch for "surprise attacks" from territorial redwing blackbirds nesting along the levee at the Kline. I know, pretty in the wetland, not so much on our lawns.

Below is a juvenile toad basking on duckweed at the Kline wetlands.



**Detergent Ban** (from page one) **The LMEC is asking WHY WAIT till July of 2010? We ask all of you who have dishwashers (the mechanical kind, not the husband kind) to start now. The table below shows some brands' phosphorus content. Don't use Gel Pacs/Tabs! Some Liquid Gel types look like the way to go for now—unless you can find Seventh Generation!**

Detergent Brand	Powder		Liquid Gel		Gel Pacs/Tabs	
	% Phosphorus	Grams/Tbsp.	%Phosphorus	Grams/Tbsp.	% Phosphorus	Grams/Tbsp.
Cascade w/Bleach	6.9%	1.1	5.0%	1.0	8.0%	1.1
Cascade	6.4%	1.0	4.5%	1.0	8.0%	1.1
Everyday Living	6.1%	0.9	4.0%	0.7		
Target	6.0%	0.8			8.0%	1.9
Polmolive			3.3%	0.6		
Electrasol	4.5%	0.72	3.7%	0.7	8.7%	2.2
Seventh Generation			0%	0		

Please begin today to help in this small way—use the detergents you find with the LOWEST percentage you can NOW!

## UNUSUAL WINTER CAUSES HEAVY DAMAGE TO WILSON DITCH PROJECT- Wilson Wetland appears unharmed

The Indiana Department of Transportation's (INDOT) major ditch realignment project at Queen Road and S.R. 10 was badly damaged by heavy amounts of precipitation from two major storm events this past winter.



The Indiana Department of Environmental Management (IDEM) and the Lake Maxinkuckee Environmental Council have been involved with INDOT since the project's early design discussions in 2005.

The Wilson Wetland (1987) was the first constructed wetland in the State of Indiana. The LMEC has invested countless volunteer hours since that time maintaining the wetland area. Dave Blalock, Head of Grounds for the Culver Academies and a member of the LMEC, now oversees wetland maintenance and the cleaning of the sediment trap that helps to remove a large portion of both sediment and nutrients from downstream before they reach the wetland itself.

When the heavy snowfall came January 1st it created too much stress on the newly planted banks along the Wilson ditch and they began to sag. About four of the bio-logs pinned along the waters edge to help stabilize the new plantings and bank soils dislodged and fell into the water. From there each new rain and snow event continued to cause more damage. The LMEC began inspections and photo recordings on the 1st of January and began working with INDOT and IDEM personnel to try to identify ways to control the damage and prevent any destruction to the upstream wetlands.

Stephen Collins, Environmental Manager at INDOT, noted that this project has been a special one for all involved due to its environmental sensitivity. Dan Garpow of INDOT said they have spent approximately \$1,000,000 to date on this project, a large portion of which is due to the extra care needed at the wetland. INDOT will work with the LMEC to remove the large amount of soil that has partially filled the sediment trap at the mouth of the wetland. They will then begin restoring the banks (with new, below water reinforcements) and replanting and reseeding the area. Stressed areas around the concrete culverts will also be addressed. It has been our pleasure to work with such caring professionals at both INDOT and IDEM. We all look forward to this project's successful outcome and give a special thanks to Stephen and Dan and to Katherine Smutzer, the Project Engineer for INDOT, for their continued help and attention.



**For Those of You Who Weren't Here January 1st** this was the snowy view on Queen Road looking south from S.R.10. The **Wilson Wetland** is on the right and the Academy's bird sanctuary is on the left. Beautiful but sometimes so destructive!

Photo by Marlene Mahler

## 2008 LMEC Events Calendar

### May 17— Invasive Aquatic Plants I.D Workshop

10:00 a.m.—Noon, Culver/Union Library

The LMEC has invited aquatic plant specialist Mark Mongin to Culver to teach us how to identify the hydrilla plant and distinguish it from other aquatic plants common to lakes in this area. This workshop is intended for all lake users and will include marking and reporting procedures to be followed if the plant is found. Attendees will be working with live plant species as well as mounted plants.

### June 12—Aquatic Control Co. Hydrilla Search

10:00 a.m.—3:00 p.m. Lake Maxinkuckee

The IDNR is currently working with this nationally known vegetation control company and the LMEC is pleased that we have been able to contract with them for our lake searches this bloom season. The less the lake bottom is disturbed while the diving and underwater searches are being conducted the better the data collected will be. We respectfully ask that you keep your in-lake activities down to a minimum on this day until the search teams are done.

### June 18—Lakescaping Workshop

4:00 p.m.—6:00 p.m., Culver/Union Library

Plan on attending this panel presentation for the latest information on shoreline landscaping tips, in-water planting programs, and the LMEC's new glacial stone program. Presenters will include Angela Sturdevant and Gwen White of LARE; Chris Kline and Sara Peel of JFNew; and Allen Chesser (LMEC) with Tony Sellers (Sellers Landscaping and Lawn Care). This panel workshop will teach you everything you need to know about the latest do's and don'ts in friendly lake-side landscaping. Arrange a visit to the local JFNew nursery!

### August 21—Aquatic Control Co. Hydrilla Search

10:00 a.m.—3:00 p.m. Lake Maxinkuckee  
Please see June 12th announcement.

### August 23—Invasive Aquatics I.D. Workshop

10:00 a.m.—Noon, Culver/Union Library  
Please see May 17th announcement.

**No reservations are required—please take a couple hours out of your time with us to learn ways to keep our lake healthy!**

## Spring Lawn Care Tips

In a lake community it is important to increase everyone's awareness of the connection between their property and the lake. Inappropriate lawn care practices can increase the amount of organic matter that gets into the lake. Whether its grass clippings and leaves, or the increased nutrients from fertilizers; the cumulative effect can be significant. Small changes by a number of landowners can make a big difference.

- Test your soil before beginning a fertilizer program and don't apply if not needed (especially not phosphorus)
- Leave an untreated band of turf at least 10 ft from the water (the greater the slope, the wider the buffer.)
- Leave grass clippings on the lawn. Sweep from sidewalks and streets.
- Soil testing information available through your lawn care professional, County Extension office, and Fulton Marshall Co-Op in Inwood.

## If you think picking up dog poop is unpleasant, try drinking it!

Pet waste washes into storm drains, polluting the lake we play in!

**GET THE SCOOP! DON'T POLLUTE!**

From [www.epa.gov](http://www.epa.gov) - Getting In Step outreach training program

### Lake Maxinkuckee Environmental Council Members

**Allen Chesser, Chair**

Dave Blalock  
Dusty Henricks  
Dan Osborn  
Bill Rhodes  
Gary Shaffer  
Dr. John Bernero  
Tammy Shaffer  
Luke Felde

### Lake Maxinkuckee Environmental Fund Members

**Mary Anna Swennumson, President**

Carol Zeglis, Vice President  
Jim Sturman, Treasurer  
Pam Buxton  
Kevin Berger  
Allen Chesser  
Tom Story  
Litt Clark  
Jack Cunningham, Advisor  
Tom Sams, Advisor

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# LAKE MAXINKUCKEE VOLUNTEER LAKE MONITORING PROGRAM

2008—LAKE MAXINKUCKEE ENVIRONMENTAL COUNCIL  
Executive Director, Kathy J. Clark

Today more than ever before, we are a mobile society. An angler's most treasured hours are spent searching far and wide for that perfect fishing spot; duck hunters crawl through the country's backwaters each fall and winter; recreational sailors vie for state and regional trophies all season long; many of us haul our personal watercraft from our winter home to our summer home and back again. Our public waters are there to be treasured and enjoyed by all; but - it is important to remember that along with the freedom to use these beautiful lakes, rivers, and streams comes the responsibility to protect and care for them.

The twenty six year old Lake Maxinkuckee Environmental Council has been working for many years along side the Indiana Department of Natural Resources to monitor and manage the native vegetation around the lake. We have a regular plant monitoring program in place that includes plant surveys done by outside professional firms, as well as treatment programs conducted by our volunteer council members.

Currently, Eurasian water-milfoil is the only non-native invasive plant found in our lake. Eurasian water-milfoil is native to Europe and Asia and was introduced to North America in the 1940s. It spread rapidly and is now present across the United States, including many of the public lakes in Indiana. With selective herbicide treatments we have managed to control this weed and we will continue to work towards its complete eradication from Lake Maxinkuckee.

This year the Lake Maxinkuckee community must be on the front lines of battle against one of the most problematic invasive water plants ever – hydrilla. Hydrilla can grow in still or flowing waters. The leafy stems grow rapidly (about 1 inch a day) toward the surface. It can grow in low light conditions, at depths up to 25 feet, and creates a dense mat upon reaching the water's surface. The plants die back completely to the sediments by early winter, a remarkable vanishing act given the amount of biomass involved.

Hydrilla can reproduce by four methods: fragmentation, tubers, turions, and seeds. New plants can sprout from stem fragments containing as few as two nodes or groups of leaves. Tubers are "nut-like" structures formed on the rhizomes and each plant can produce 6,000 new tubers per year. Turions are small buds that form in the leaf axils of the plant, drop off into the sediments, and will generally sprout the following spring. Unfortunately, the tubers may remain dormant for several years in the sediments and this is what forces a multi-year treatment when eradication is the goal. This fast growing plant can choke out all native water plants and ultimately result in a major reduction of the fish population.

In 2006 this plant was found just 23 miles away in neighboring Lake Manitou by the IDNR. Lake Manitou is the only water body in the Midwest where hydrilla has been found. The source of the infestation has not yet been positively identified but the majority opinion is that it was brought in inadvertently either on a boat or boating/fishing equipment that was not cleaned properly upon leaving infested waters. The IDNR immediately began working hard to design a program to eliminate hydrilla from the lake in Rochester and at the same time implemented measures to prevent its spread to other lakes, rivers, and streams in Indiana. According to Doug Keller of the IDNR, they spent \$350,000 at Manitou in 2007. They had been expecting to spend more than \$500,000 but the lack of rainfall worked in their favor. They have capped the treatment contract for 2008 at \$425,000 but hope that a "regular" season of rainfall will keep the cost around the \$350,000 mark again.

The aim of the IDNR is to completely eradicate hydrilla which could take at least four consecutive years of aggressive treatments at a total cost approaching \$1.5 million. In order to prevent its spread to other lakes while treatment is going on the IDNR closed Lake Manitou to outside boats in the fall of 2006. Those same restrictions will remain in place at Lake Manitou throughout 2008 and until the chance of moving the plant are minimal. Treatment will be required through 2010 at least; with similar sums expected to be spent each year.

The Lake Maxinkuckee Environmental Council is starting a three part program to prevent hydrilla from entering our lake. After collaborating with the IDNR and groups like Purdue University and the Indiana Lake Management Society (ILMS) we have determined that three things must happen simultaneously: two professional underwater searches will be conducted during the bloom season of April through September; all media sources will be utilized and workshops will be given to educate the public about hydrilla and its methods of transfer and growth; and most importantly – we will train a team of volunteers to work with the IDNR to conduct some form of volunteer boat and equipment inspections at the public lake access points.

Please join us—its' your lake too! Call the LMEC at 842-3686 or e-mail us at [lmec@culcom.net](mailto:lmec@culcom.net) for details in how to get involved!

# LAKE MAXINKUCKEE VOLUNTEER LAKE MONITORING PROGRAM

## OUTLINE OF THE OUR THREE PART PLAN—2008

**PROFESSIONAL LAKE SURVEYS:** Aquatic Controls of Seymour, Indiana will conduct Hydrilla Detection Surveys on Lake Maxinkuckee June 12<sup>th</sup> of this year and again on August 21<sup>st</sup>. They will be working at points around the lake chosen by the LMEC as the “most active” access points. These sites include the IDNR West Shore public landing, Venetian Village channels, the Culver Marina area, and the 18B Road public landing. Along with rake sampling procedures used by the IDNR; Aquatic Controls will be using underwater cameras and GIS equipment for reporting purposes and doing dive surveys beginning at shore points and extending 300 ft. out at each site. They will have three certified divers on staff as required by regulation.

Aquatic Controls has also agreed to train two local volunteer divers in hydrilla identification and will work with them while conducting the diver transects. We are extremely pleased to announce that local volunteers Mr. Mike Grover, Chief of the Culver Union Township Volunteer Fire Department and Mr. Dan Baughman, a Science Instructor for the Culver Academies will be participating in this important program. Once they have successfully received instruction, they in turn can instruct their respective dive partners on how to conduct these searches. Our being able to use local divers at numerous times throughout the bloom season each year will increase our monitoring capabilities tremendously.

The LMEC will be receiving assistance from the Lake Patrol on both search days to assure that safe distances between the divers and boat traffic are maintained. The Lake Maxinkuckee Association's Lake Patrol unit will also be actively participating in hydrilla identification training and monitoring throughout the 2008 season.

Public announcements will be made requesting that boaters limit their time on Lake Maxinkuckee both of these days until the searches are completed. This will help to prevent disturbance of the lake bottom which will allow for as much water clarity as possible during the dives and underwater camera work.

**GENERAL EDUCATION PROGRAM:** All opportunities to join with lake-user groups and others to promote hydrilla prevention methods and identification will be utilized. The following is an example of joint stakeholder efforts:

- The LMEC joined with The Big Ten Collegiate Anglers Association to promote hydrilla prevention while at the same time promoting their Big Ten Tournament held on Lake Maxinkuckee April 12<sup>th</sup> and 13<sup>th</sup>. This opportunity to gain the assistance of such an important group of young people to reach out to Bass fishermen in general, one of the most “mobile” user groups, was viewed as extremely important to the success of our program. Joint radio interviews were conducted at WKVI – Kankakee Valley Broadcasting in Knox, Indiana and WTCA-Wzoc in Plymouth, Indiana prior to the event. Print press was contacted and extensive coverage was given by The Culver Citizen. The South Bend Tribune was contacted by the IDNR to cover the event. Members of the LMEC welcomed the student anglers at the IDNR landing at 6:00 a.m. on the practice day and distributed hydrilla identification cards for their 90 plus anglers competing in their seasonal kick-off tournament. This type of mass education can help to generate a high level of public interest and was shown to be very successful for both parties. *Update: The PURDUE BASS CLUB took first place! Special thanks to Aaron McAlexander, President of the Purdue Bass Club who is a fisheries major and worked closely with the LMEC to coordinate public hydrilla awareness efforts—he was also the BIG WINNER at the tournament! Congratulations Aaron—keep spreading the word, not the weed!*

Handout materials about hydrilla will be passed out at special events and periodic environmental bulletins providing both cleaning instructions and other important information will also be made available. These materials will be provided free of charge at locations around the community where lake users congregate on a regular basis.

**MAXINKUCKEE VOLUNTEER MONITORING AND INSPECTION TEAM:** Our goal is to identify and train at least 12 volunteers in 2008 that will assist us on lake inspections, volunteer boat inspections at designated access points around the lake, and with other educational efforts where necessary. All opportunities to speak at local civic organizations, fishing clubs, boating clubs, etc. will be sought. It is within groups like these that we will find our best volunteers for the formal monitoring and inspection team.

The LMEC will be providing two specific invasive aquatic plant identification workshops this year for both the general public and target lake user groups—each newly trained pair of eyes is to our benefit! See the 2008 LMEC Events Calendar in the May newsletter for dates, times, and locations.

**It is important to clean all boats, personal watercraft, and fishing and recreational equipment (Including toys, coolers, and buckets) before entering a lake, river, or stream! Use hot water and a mild bleach solution - high pressure washing works too! Let everything dry at least five days before entering another body of water. Help support our ONLY CLEAN BOATS FLOAT campaign!**

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