Cattail Chronicles

Issues Affecting the Surface Waters of Lake County

Volume 22, Issue 1 **Spring 2015**

Special points of interest:

- Learn about simple actions you can take to make your lawn more natural and improve water quality.
- What new aquatic invasive species should you be on the look out for?
- Learn tricks on the best way to catch carp.

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From Your Lawn to Your Lakes:
Best Landscaping Practices for a Healthy Watershed

By: Alana Bartolai

The ground may be covered in snow, but around the corner is spring—where temperatures start getting warmer, there are longer hours of sunlight, and the landscape around us starts to turn green. It is not too early to start thinking about ways to improve your landscaping so that as our lawns turn green our lakes do not. With simple actions, we can all improve the water quality of our lakes and streams.

What is the problem?

Residential and urban areas have increased in Lake County, which means more land devoted to lawns and impervious surfaces. Typical maintenance of conventional lawns include turfgrass, fertilizer application, and pesticides to control weeds. Runoff from these lawns will bring fertilizer and pesticides into our waters. Even if you do not live directly on a lake or other body of water, runoff from your property goes down storm drains, which are then directly connected to our rivers, lakes and wetlands.

Runoff from yards typically has excess nutrients, causing algae blooms which are commonly seen in our lakes . Algae blooms can also lead to low dissolved oxygen levels; as the algae die, the decomposition process uses up the available dissolved oxygen. Fish, macro-invertebrates, and other organisms rely on that oxygen. Pesticides on lawns that runoff into the water can also be harmful for the environment.

It is possible to have a lawn that looks good and does not harm your health or the environment. Natural lawn care restores balance to the soil system –including the microbes, organic matter, and soil structure. Healthy soil is a key step towards healthy lawns. A healthy lawn will require less watering, fertilizing, and mowing, which saves you time and money!

Image courtesy of the Erie Department of Environment and Planning , www.erie.gov

"Even if you do not live directly on a lake or other body of water, runoff from your property goes down storm drains, which are directly connected to our rivers, lakes, and wetlands."

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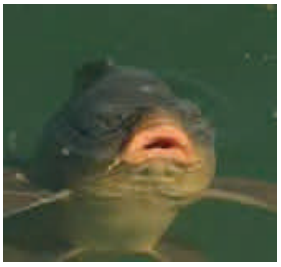
For information contact:

Population Health
Ecological Services
847- 377- 8030
http://health.lakecountyil.gov/Population/LMU

LakeCounty
Health Department and
Community Health Center

A Guide to Catching Carp: *Cyprinus carpio*

By: Gerard Urbanozo



Carp are considered to be one of the most damaging invasive fish species. Originally introduced to the Midwest waters in the 1800's as a food fish, carp can now be found in 48 States. In the U.S., the common carp is most abundant in manmade impoundments, lakes, and turbid sluggish streams and less abundant in clear waters or streams with a high gradient. They are also highly tolerant of poor water quality.

The common carp has a dark copper-gold back with sides that are lighter, a yellowish belly and olive fins. They have 2 pairs of short barbells on their upper lip and their dorsal and anal fins have a leading spine that is serrated. They spawn from early spring to late summer in water ranging from 60-82°F and prefer freshly flooded vegetation as spawning substrate. They prefer to spawn in shallow weedy areas in groups consisting of one female and several males. A single female can produce up to 100,000-500,000 eggs, which hatch in 5-8 days. The spawning ritual involves a lot of thrashing in shallow water contributing to turbidity problems. Carp are omnivorous and feed over soft bottom substrate where they suck up silt and filter out crustaceans, insect larvae and other desirable food items. Carp are very active when feeding and can be observed around shallow areas where they uproot plants which increase turbidity and nutrient concentrations. Increase in nutrients causes algal blooms and reduction in light penetration that impact aquatic plants.

Finding the best place to fish for carp is fairly simple. Do a little bit of scouting by walking around the lake until you spot them. Carp will spook easily along the shoreline and will bolt, leaving a mud trail in the shallow water. Scan the surface of the lake since carp will jump and feed at the surface. Once you've identified potential carp holding areas use "chum" to attract carp closer. Chum is a way of using food to lure fish to the area you plan on fishing. Canned corn is a popular chum since it is readily available and works effectively. There are endless varieties of food which may be used to attract carp. These clever fish have a "sweet tooth". Add vanilla extract and sugar to the corn as scent and flavor enhancement. Take a handful of corn and throw it about 20 to 30 feet into the lake. Carp will usually find the scattered corn on the bottom of the lake within half an hour. The chummed area may turn slightly muddy when the carp are actively feeding.

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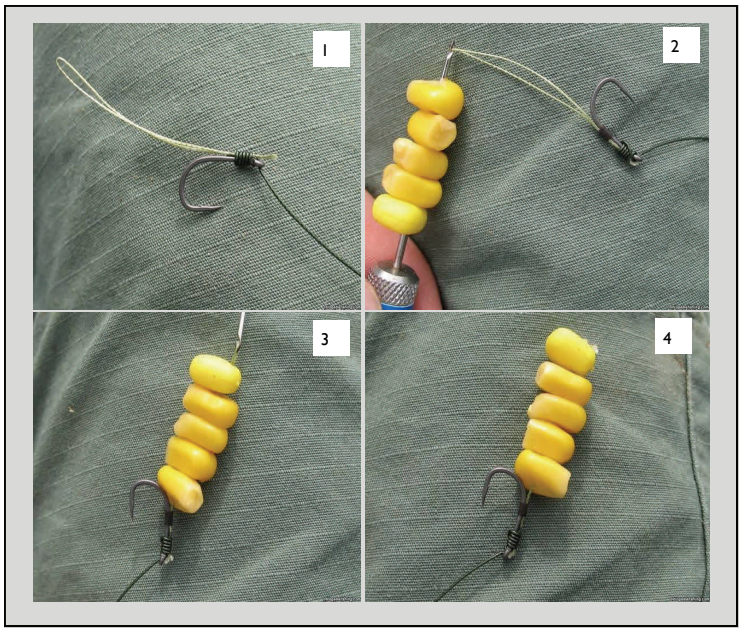


Tips for creating bait:

1. Use a short shank hook and incorporate a loop or "hair" into a snell knot.
2. Insert corn kernels into a needle threader.
3. Slide corn kernels into the "hair".
4. Place a small piece of plastic or toothpick at the end to secure the bait.

A Guide to Catching Carp (continued from Page 2)

A seven foot, medium action spinning rod with 12# test will work for most of our inland lakes. Carp usually average around 3-6 lbs. with several fish over 10#. A properly set drag will allow you to take on a carp that weighs more than the breaking strength of your line. Keep the rig simple. Start with a size 4 to 8 short shank hook and a small split-shot 12" above the hook.

Thread the corn kernels on the hook and leave the tip exposed. Cast it out to the area where you placed the chum and put the rod securely on a bank pole holder. Leave a little slack on the line and then most importantly walk away from your rod or sit quietly and don't move. Carp are very sensitive to noises, especially from people walking along the bank.

When a fish takes your bait, it feels the hook in its mouth and will try to spit it out. The exposed hook point will usually snag inside the carp's mouth as it tries to expel the bait. The carp will panic and try to swim away as it feels the resistance from the line and sets the hook on itself. At this point pick up the rod from the pole holder and take your time reeling in the fish. After successfully landing the fish, add another handful of chum to attract more carp into the area.

There are various methods and baits that are effective on catching carp. The "hair rig" is the most popular setup used by avid carp anglers. The bait is not on the hook, but it is threaded on a short line behind the hook. This allows the carp to take the bait along with the bare hook, causing the carp to bolt and instantly set the hook.

Try this technique and have fun catching carp in your lake. Dispose of your catch properly by composting, cooking or donating your catch and never throw a carp back into a lake.

Removing carp will lead to an improved water quality by decreasing turbidity, suspension of nutrients and allow more rooted aquatic plants to grow.

Lake Education Assistance Program (LEAP)

Are you a teacher or not-for-profit organization, such as a lake association, scouting group or community group? Do you want to enhance awareness about watershed and lake issues within your organization or community? The Lake Education Assistance Program (LEAP) is part of an education initiative offered by the Illinois Environmental Protection Agency (IEPA). LEAP offers small grants, up to $500 per group, to enhance lake watershed education of teachers, students, organizations, or the community. This can be in the form of educational field trips, seminars/workshops, or various projects and activities, and educational material. Examples of items and materials that LEAP funds can be used for include: educational materials, scientific equipment, substitute teacher payment, buses/drivers, seminars, workshops, software, and visual materials.

All projects that apply for LEAP must have stated goals that involve enhanced lake/lake watershed education. Projects must address the study of lakes, ponds, and/or their watershed and funds are not available for the study of rivers or creeks. At the end of the project, the IEPA will require a final one page report.

Application Deadline:
September 30th and January 1st of each year.

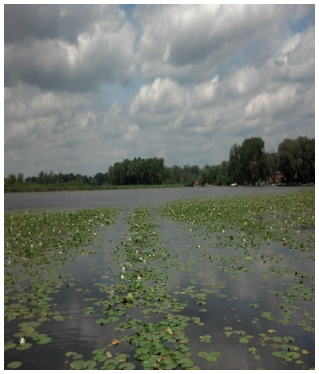
Details: Only one application per school or organization for each application period will be accepted.

How to apply: download application from the Illinois EPA website and mail to their office.

For more information and to apply, visit:
http://www.epa.illinois.gov/topics/water-quality/surface-water/leap/

or

(217) 782-3362



From Your Lawn to Your Lakes

(continued from Page 1)

There are many ways to create an attractive lake-friendly lawn. Take the Lawn to Lakes Pledge! Visit www.iigscp.org

There are many different steps you can take to create an attractive lake-friendly lawn.
Convert to healthy natural lawn by mowing the grass 3 or 4 inches tall with a sharp lawnmower blade. Leave clippings on the lawn as a source of nitrogen for the soil and core aerate in the fall to improve roots and watering. Follow these useful tips:

- **Add compost to your soil.** Compost improves the soil's ability to hold water and nutrients and helps make a healthier soil.
- **Test your soil.** Many soils do not need additional phosphorus.
- **Shrink your lawn.** How much lawn do you really need? Reduce areas of your lawn that are unused to a more natural landscape. This will help infiltration and save you time and money since you have less yard to maintain!
- **Choose Plants Wisely.** Different plants have specific water, nutrient, and light requirements, and pests attack poorly adapted plants.
- **Build a rain garden.** Keeping rainwater on your property reduces runoff and stormwater pollution. Rain gardens can help infiltrate water into the ground, and are great habitat for pollinators.
- **Buy a rain barrel.** Rain barrels capture rain water from your gutter that would normally runoff into storm drains, carrying nutrients and pollution. Rain barrels help minimize stormwater runoff, and provide you with a way to water your plants with saved up water.
- **Water Smart.** Over-watering reduces the health of your plants. Proper watering and reducing the water requirements of your lawn and landscape can save you time and money. In addition, many municipalities have watering restrictions.
- **Plant Shoreline buffers:** If you live directly on a lake or a channel, consider building a shoreline buffer between the lake edge and your property of native plants. This will slow down runoff into your lake and help filter out pollutants.
- **Integrated Pest Management.** Persistent problems with pests can be a sign of poor lawn and landscape health. Use an integrated approach to pest management, including creating healthy soil and using the right plants.

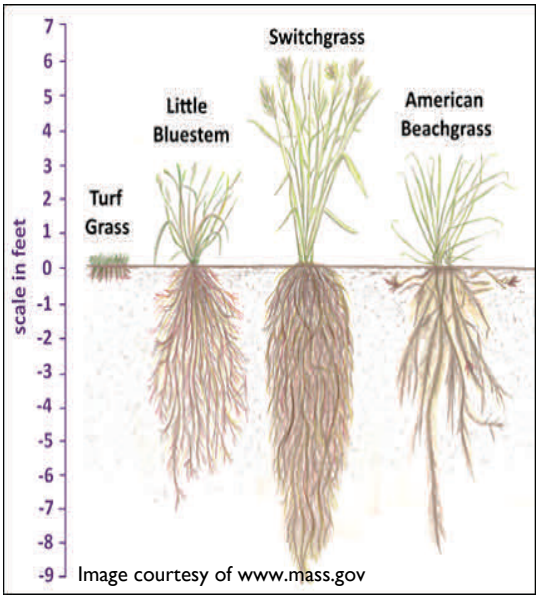


Image courtesy of www.mass.gov

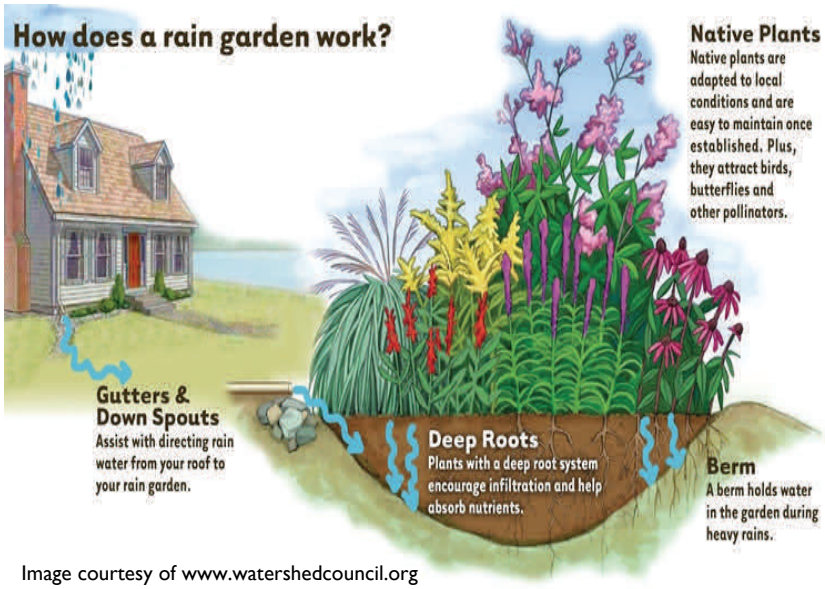


Image courtesy of www.watershedcouncil.org

Native plants have deep roots compared to conventional turf grass. Deep roots help encourage infiltration and absorb nutrients. Consider adding native plantings to your landscape—it's beneficial for water quality and wildlife habitat!

AIS Spotlight

Hydrilla: Coming Soon to a Lake Near You!

By: Kathleen Paap

Hydrilla (*Hydrilla verticillata)* is classified as a federal noxious weed. Although not found in Illinois lakes to date, folks who recreate on Illinois waters should be on watch for this species as it is likely to surface at any time as it has been discovered in states whose borders are shared with Illinois. It is widely spread by fragments adhering to boats, waterfowl and even hitchhiking on aquatic plant material. If allowed to establish, Hydrilla can cause adverse impacts to home values, drainage canals, navigation by watercraft, native plant populations, habitat quality for fish and other wildlife, as well as water quality parameters such as dissolved oxygen and water temperature.

Hydrilla features are very similar to one of Illinois' native aquatic plant species, American waterweed (*Elodea canadensis*). The difference between the two species are that American waterweed or Elodea has three leaflets in a whorl along its stem, where Hydrilla has whorls of more than three leaves often with visibly toothed edges and small visible spines along the underside leaf vein. It has slender stems which can branch and can grow up to 25 feet long. It reproduces mainly by turions which are overwintering structures and potato like tubers which are the "roots" of the plant. Much like Eurasian Watermilfoil, it is able to also reproduce through fragmentation and also by seed.

Hydrilla has been coined a "Superweed" due it's being a vigorous invader; it is capable of growing up to an inch a day resulting in a dense mat of vegetation forming at the water surface. It's widely recognized in southern states such as Florida where they have spent millions of dollars in attempts to control populations. Hydrilla was thought to be an invader mainly of southern states until relatively recently when the monoecious biotype of Hydrilla was found to be capable of surviving the harsher winters of northern climates. It has caused major eradication problems in states such as Indiana, where an infestation went unnoticed until it became well established. The lake was closed for nearly five years before Hydrilla was considered eradicated and the lake allowed to reopen. Therefore, it is important that a Hydrilla infestation is detected before it has an opportunity to establish a population within Illinois, and lake communities should have a plan in place in order to remove it before it becomes a problem.

In 2011, the Lake County Health Department, Chicago Botanic Garden and Northeastern Illinois Invasive Partnership collaborated to secure a grant from the United States Department of Agriculture to develop a detailed Hydrilla Early Detection Rapid Response (EDRR) plan for Illinois to avoid significant ecological, economic, and recreational impacts. Since that time, an Illinois Hydrilla Task Force was assembled and statewide information exchange relating to Hydrilla has taken place; efforts of the Task Force have resulted in the development of educational materials which have been distributed to targeted users (bait shops, marinas and Illinois volunteer lake monitors) and a media campaign initiated. As of July 2014, the EDRR Plan for Hydrilla was finalized and is in place to effectively deal with an invasion of Hydrilla throughout Illinois.

Hydrilla Hunt! NIIPP.NET

Join the Search!

To learn more about Hydrilla and how to identify it, go to www.niipp.net/hydrilla

To find out how to report or to report a potential Hydrilla sighting contact HydrillaHunt@niipp.net or Mike Adam, Lake County Health Department, (847) 377-8002.

The above photos show how quickly Hydrilla can take over a lake. These two photos are separated by only 18 days!

"Hydrilla has been coined a "Superweed" and is a vigorous invader; it is capable of growing up to an inch a day"

Hydrilla: Coming Soon to a Lake Near You

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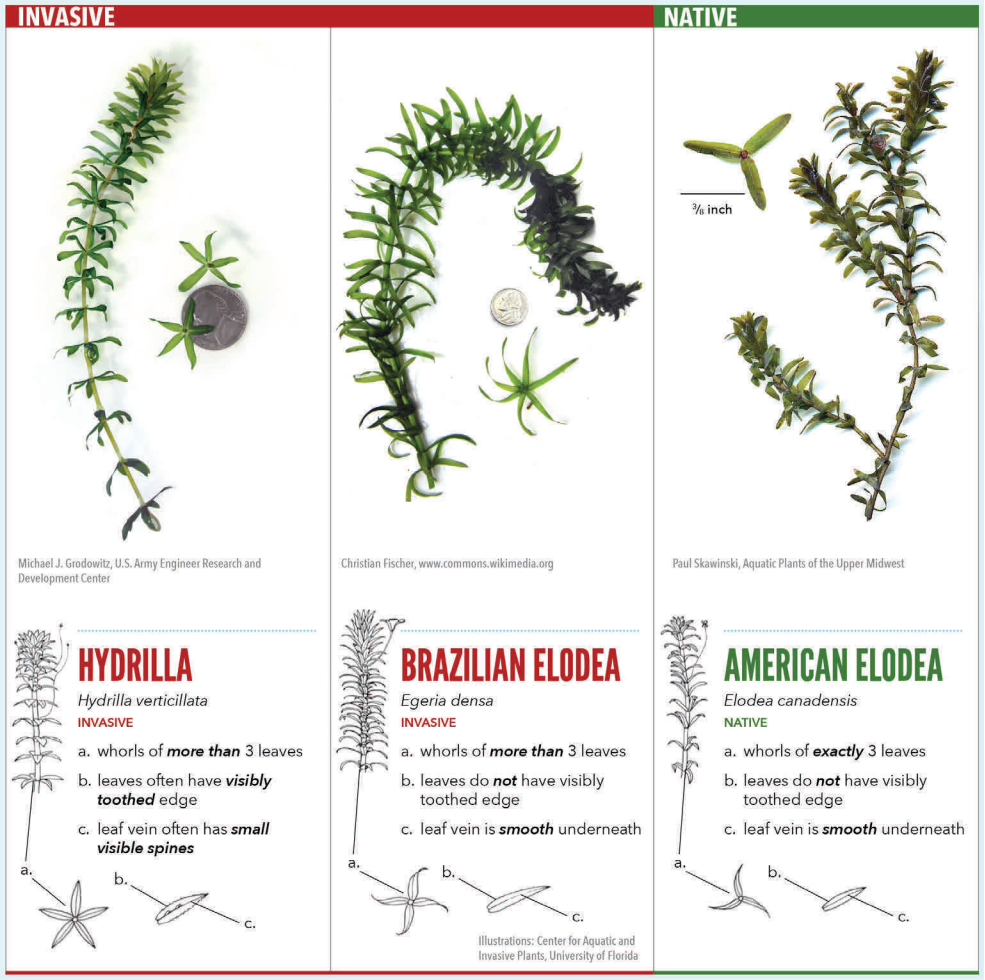
AIS SPOTLIGHT

Help Discover Hydrilla:

1. Learn to identify hydrilla
2. Keep a sharp look out for this plant at your local lake or pond
3. Report what you found by taking a picture and recording it's location and sending that information to: HydrillaHunt@niipp.net



Great Lakes Early Detection Network

Want to record invasive species with your smartphone? There's an app for that!

The Great Lakes Early Detection Network (GLEDN) is an invasive species early detection and warning system for the Great Lakes region developed through funding provided by the National Park Service as part of the Great Lakes Restoration Initiative. It is an online system that collects invasive species reports from casual observers, verifies these reports and integrates them with other networks. The system then uses this integrated information to send customized early detection email alerts.

GLEDN also allows you to use the power of your smart phone to help discover non-native invasive species early in their infestations! The app allows you to upload location information along with images for verifiers to confirm.

The app is available for Android or iPhone. You can download the app in the iTunes store by searching for Great Lakes Early Detection Network or GLEDN in google app for android. Check out the GLEDN website for more information.

Ibis.colostate.edu/gledn

Join the Volunteer Lake Monitoring Program

The Volunteer Lake Monitoring Program (VLMP) was established in 1981 to gather information on Illinois inland lakes, and to provide an educational program for citizens. In the Basic Monitoring Program, citizens select a lake in which they have an interest in and are then trained to measure water clarity (transparency) using a Secchi disk. This increases citizen knowledge and awareness of the factors that affect lake quality so they can understand the lake watershed and ecosystem and make informed decisions. Other observations recorded by volunteers include water color, suspended algae and sediment, aquatic plants and odor are also recorded. Volunteers monitor twice a month, May through October. If you would like more information or are interested in joining VLMP for a lake of your interest, please contact:

Alana Bartolai
(847) 377-8009
abartolai2@lakecountyil.gov

Dick Schick
32 year VLMP
www.epa.state.il.us/water/vlmp/index.html

Free Invasive Plant Workshops

The Northeast Illinois Invasive Plant Partnership (NIIPP: www.niipp.net) is hosting free invasive plant workshops. During each workshop Cathy McGlynn, Coordinator of NIIPP, will provide information about the natural history and identifying characteristics of new and common invasive plants in the Chicago region. In addition, attendees will learn about online resources for reporting and controlling these species. Please see below for a list of locations where free invasive plant workshops will be held in the coming months. Please register by contacting Cathy at cathy.mcglynn@niipp.net or 847-242-6423.

Location: City of Evanston, Ecology Center
Time: 9:00 am - noon
Date: Feb 19th

Location: Brushwood Center at Ryerson Woods
Time: 6:30pm - 9pm
Date: Wednesday, March 11th

Location: Glencoe Park District, Takiff Center,
Time: 9:00 am - noon
Date: Friday March 13th

Location: Wilmette Park District, 3555 Lake Avenue, Wilmette, IL
Time: 9:00 am - noon
Date: Tuesday March 24th

Location: Zion Park District, Leisure Center,
Time: 9:00am – noon
Date: Saturday, April 18th

Location: Brushwood Center at Ryerson Woods
Time: 6:30pm - 9pm
Date: Wed., April 22nd

Location: McHenry County Conservation District, Lost Valley Visitor Center
Time: 6:00 pm – 9:00 pm
Date: Tuesday, May 19th

Go Green
Go Paperless

Sign up to receive an electronic version of Cattail Chronicles:

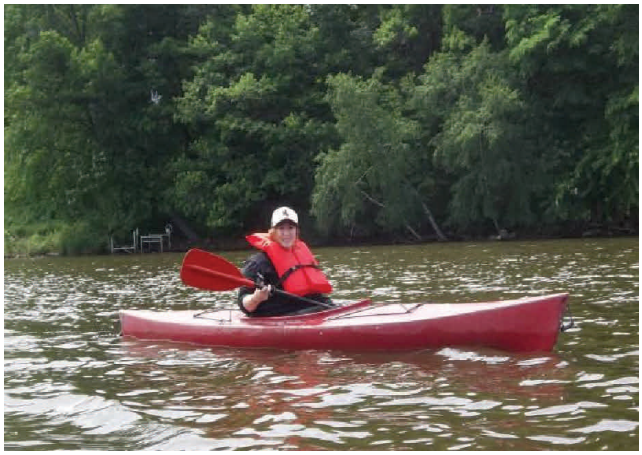
Send us an e-mail requesting the environmentally friendly version of Cattail Chronicles

PRatiff@lakecountyil.gov

or give us a call (847) 377-8030.

Welcome to New Staff:

Alana Bartolai joined Ecological Services at LCHD in the winter of 2014. Alana attended Highland Park High School and earned her BA in Geology from Macalester College in St. Paul, Minnesota and a Masters of Science degree in Water Resources Science from the University of Minnesota. She has had several seasonal water quality fieldwork positions in places such as Wyoming and Northern California. Before joining Lake County Health Department, she worked as a Program Assistant for a watershed nonprofit in southeastern Minnesota in charge of the water monitoring and watershed outreach program. Alana is happy to be back home working for Lake County. In her free time, she enjoys spending time in the outdoors hiking and camping, travelling, and hanging out with her dog, Kota. Feel free to contact her with any questions or concerns at 847-377-8009 or abartolai2@lakecountyil.gov.



Lake County
Health Department -
Ecological Services
847- 377- 8030

Mike Adam:
Senior Biologist

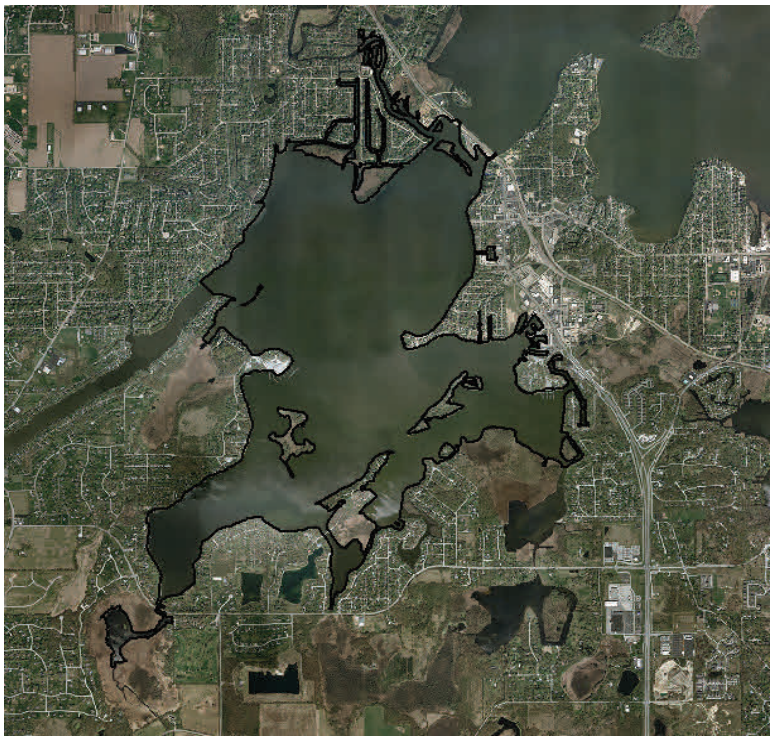
Kathleen Paap:
Water Quality Specialist

Gerard Urbanozo:
Water Quality Specialist

Alana Bartolai:
Water Quality Specialist

Peggy Ratliff:
Administrative Assistant

Can you name this lake?



Clues:

- **Max Depth:** 30 ft
- **Surface Area:** 1740 acres
- **Average Depth:** 5.2 ft
- **Spans two counties:** Lake & McHenry County
- **Part of the Fox Chain'O'Lakes**

Think you know the answer? Email your best guess to abartolai2@lakecountyil.gov. The first correct response receives a free packet of native plant seeds!

We're on the web! Visit
http://health.lakecountyil.gov/Population/LMU/
to find out information about your local lake,
beach advisories, and more.

LakeCounty
Health Department and
Community Health Center

Ecological Services
500 W. Winchester Road, #102
Libertyville, IL 60048

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