



Friends of Lake Wingra



Promoting a healthy Lake Wingra
through an active watershed community

Wingra Watershed News

Spring/Summer 2007 volume 4, number 1

Carp Key to Clearing Wingra

David S. Liebl

Men in waders seining Lake Wingra was once a common sight. According to W.E. Nolan (1951), over 58 tons of carp were taken from the lake during the 1930s-40s.

Introduced to Wisconsin in 1879, the common carp (*Cyprinus carpio*) soon became a dominant species. Evidence from many research projects around the world indicates that the presence of carp is a primary cause of poor water quality and destruction of native macrophytes, and Lake Wingra is no exception.

In 2005, with funding from a Lake Management Protection Grant awarded to Dane County and the Friends, DNR's Richard Lathrop placed an enclosure on the north shore of Lake Wingra and removed the carp from it. The aerial photo on page 2 shows the greatly improved water quality within the enclosure, as compared to the turbidity in the rest of the lake.

Ongoing monitoring of native macrophytes shows improved native plant habitat, demonstrating what the lake could be like with low carp densities. However, maintaining a carp-free environment over the long-term does not seem feasible because the occasional inundation of the Wingra spillway provides access to the lake by carp coming from Wingra Creek and Lake Monona. Since the introduction of carp to Lake Wingra in the mid-1800s, there have

been repeated attempts to control their population through periodic whole-lake seining, but this technique harms macrophytes and game fish.

Another eradication approach, the wholesale poisoning of all fish species with subsequent reintroduction of those deemed beneficial, is incompatible with our vision of lake stewardship.

Now, the Wisconsin Department of Natural Resources, University of Wisconsin, Dane County, City of Madison, Madison Fishing Expo, and Friends of Lake Wingra are collaborating in a project to study how to reduce the population of common carp in Lake Wingra, with the

hope that the improvements seen within the enclosure will become widespread.

We are proposing to suppress the carp population through methods that do not threaten other fish and plant species. Over the last year, a study of carp movement (see sidebar on page 3) in Lake Wingra discovered that carp congregate in the warmer waters of Vilas Park lagoon during the spring. We believe this situation presents us with an opportunity to remove significant numbers of carp during the spring spawning period, without harming other species or aquatic plants.

Continued on page 2



Seining carp from Lake Wingra in the 1950s

Friends of Lake Wingra, Inc.

Mission

We promote a healthy Lake Wingra through an active watershed community.

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Special Thanks To:

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Joan Laurion
Betty Les
Professor Stephen Carpenter and Scenario Thinking Seminar graduate students

Become a Friend

To become a Friend of Lake Wingra, send your tax-deductible contribution to Friends of Lake Wingra Inc. c/o Office of Advancement, Edgewood College, 1000 Edgewood College Drive, Madison, WI 53711-1977. Please make checks to Edgewood College - FOLW.

Friends of Lake Wingra, Inc.

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Carp Key to Clearing Wingra (cont.)

By erecting a fish trap weir at the entrance of the Vilas lagoon, and barriers at the channels to the east lagoon, we expect large numbers of spawning carp to enter and remain confined in the lagoon. Then, commercial fishermen will be employed to seine the lagoon in mid-to-late May.

Using fin-clip data from the carp, we will be able to estimate the total Lake Wingra carp population, allowing us to evaluate our ability to establish a long-term strategy for whole-lake suppression. If this approach proves to be effective, we expect to remove carp from the lake in subsequent years, until the carp population is reduced to the low-

est level feasible. As a result, we expect to see dramatic improvements in Lake Wingra's aquatic habitat.

For more information on the project see: www.lakewingra.org



Wingra carp enclosure in July, 2006

Wingra Health Goals Update

Matt Diebel

Thanks to the efforts of many people, we are making progress toward a vision for a healthy Lake Wingra. In February, 37 people gathered for our Winter Windows on Wingra workshop, where we refined draft goals for the future of Lake Wingra.

Following that workshop, it was clear that people want Lake Wingra and its surroundings to be many things, ranging from a dark sky preserve for stargazing, to a diverse fishery supported by natural reproduction, to a focal point for nature education. Our next challenge is to distill this diversity of ideas into a clear and inspiring vision.

A graduate seminar at UW-Madison, led by professor Stephen Carpenter, is working on a parallel effort—the

development of scenarios for the future of Lake Wingra and its watershed. Scenarios are stories about how the future of a system might unfold, given uncertainty about factors that influence that system.

Lake Wingra is not isolated from the world around it. Its future will be influenced by events occurring at scales ranging from the watershed, to the state, to the world. Scenarios capture plausible sets of these events, and suggest how they might affect Lake Wingra.

The outcome of this scenario exercise will help us make our vision for the lake more achievable. The scenarios will be presented as both stories and artwork, and will be available from www.lakewingra.org this summer.



Participants in the Scenarios Workshop consider the future of Lake Wingra.



When you see sediment flow along the street towards the storm drain and the lakes, follow it upstream to its source.



You might find that it comes from a poorly managed construction site or a failed silt fence at a construction site.

Watershed Watch

Be a Watershed Investigator through 'Report a Problem'

The spring-summer construction season is here, and a new link on the City's 'Report A Problem' website will take you straight to a form where you can report problems with erosion from construction sites.

Practice your skills as a watershed investigator by keeping your eyes out for tracks and trails of dirt leaving construction sites, being carried to the streets, down the storm drain, and directly into our lakes. You may notice failing silt fences at construction sites, or you may find sites with no erosion control measures at all.

The sooner that City staff learn about a problem that harms lakes, the sooner they can take action to correct it.

To complete your investigation, go to the City's Website at www.cityofmadison.com/reportAProblem/, click on the link to 'Erosion Control' and make your investigator's report.

Where's the Carp?

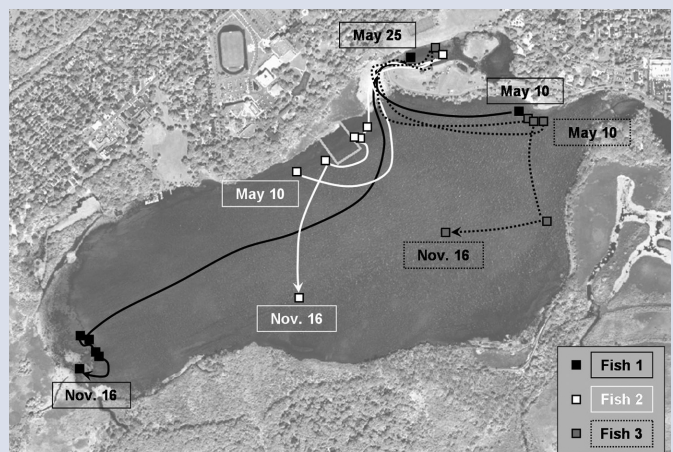
Grazing the bottom of Lake Wingra, carp stir up silt, re-suspending nutrients and obscuring their location.

Except for the short spawning period when they can be seen thrashing the surface of shallow waters, Wingra's thousands of carp are out of view. Outfitted with a radio transmitter though, a carp's movements can be easily tracked year 'round.

Two summers ago, DNR's Kurt Welke and scientists from the UW Center for Limnology began using radio tracking to map the movement of carp.

The results are fascinating. This map shows three carp between May and November 2006. Despite spending time in different places during the rest of the year, all three fish entered the Vilas lagoon during the spawning season. Triggered by cooler weather, they sought refuge for the winter in deeper water and around the outlets of springs.

Thanks to these efforts we now know that carp are congregating in a location where they can be easily removed.



Locations of three radio-tagged carp in Lake Wingra from May to November, 2006.



UW Center for Limnology scientists tracking carp in Lake Wingra.



Although Pete Jopke has many tall fish tales to tell, fishing with his kids, 11-year-old Jordan and 8-year-old Jessica, tops his list.

Pete navigates the bureaucratic channels of Dane County and the DNR with skill and enthusiasm. His leadership has helped make best use of the strengths of the FOLW, Edgewood College, Dane County and the DNR to implement the project's diverse components.

Featured Partner:

Pete Jopke, Dane County Watershed Project Manager

Anne Forbes

Pete Jopke, Watershed Project Manager for the Dane County Land and Water Resources Department, is one of the Friends of Lake Wingra's best friends, as well as a best friend to conservation throughout the county.

Pete is the action behind the success of the DNR Lake Management Protection Grant, written in partnership with the Friends of Lake Wingra, that provides the native vegetation buffer along the lagoon in Vilas Park, control of invasive purple loosestrife and buckthorn along the lake's shoreline, and the macrophyte demonstration (carp enclosure) project in the lake itself.

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As Pete points out, "the results will benefit the lake for a long time to come."

Pete also plays an active role in supporting citizen monitoring on Wingra Creek, as part of his tireless leadership to expand the capacity and effectiveness of citizen monitoring countywide for over nine years.

In addition to big conservation stories, Pete also has his own brand of big fish stories. He fishes competitively in walleye tournaments around the upper Midwest. One prize was an 11 lb. walleye caught in the Mississippi River.

There is fishing right out the door of the home he shares with his wife Angie, their children Jordan and Jessica, and yellow lab Holli Berri on Black Earth Creek. He volunteers to share his passion for fishing with youth, and he also finds time to coach youth football and basketball.

Others before us have recognized Pete. He received the 2006 "Pioneer" Award from the Wisconsin Water Action Volunteers, and was recognized as the Citizen-based Monitor of the Year by the Citizen-Based Monitoring Network of Wisconsin in 2005.

How does Pete feel about this work? "I get to work on conservation projects that I care about with people I enjoy who share the same passion for our waters."

The Friends of Lake Wingra feel the same way about Pete. As we work on conservation projects we care about, having a friend in Pete Jopke has made all the difference.

We are proud to add Pete Jopke to this list of previous featured partners.

Greg Fries, City of Madison Engineering, Spring/Summer 2004

Daryl Sherman, Rain Gardener and Watershed Resident, Fall 2004

Martha Sample, Green Club, West High School, Spring/Summer 2005

Friend & Volunteer Event, special awards to Karen Andro, Joan Laurion, Bob Liska, Tanya Meyer, and Jim Trumpy, Fall 2005

American Indian Science and Engineering Society (Middle School Youth), Spring/Summer 2006

Matt Krueger, Sustain Dane, Fall 2006

Caring for the Urban Forest

Anna Healy

Spring is a great time to enjoy the urban forest of the Lake Wingra watershed. While remnants of the magnificent oak savanna and natural forest that once surrounded the lake remain, many of the trees in the watershed were planted by either the City of Madison or private property owners.

These trees do more than provide shade and add beauty to the neighborhoods of the Lake Wingra watershed. The watershed's urban forest helps maintain the ecological integrity of the lake. Studies have found that up to 37% of the water from a summer rainstorm is intercepted by the leaves and branches of an urban forest. This water then evaporates back into the atmosphere, instead of washing pollutants into the lake.

There are several actions watershed residents can take to be good stewards of the urban forest.

Use firewood that was purchased locally and certified by APHIS (Animal Plant and Health Inspection Service) to be kiln dried and pest free. Firewood can carry insects and beetles such as gypsy moth and emerald ash borer. When firewood is moved, pests under the bark or in the wood are given a free ride and the opportunity to infest trees locally.

While the emerald ash borer has yet to be discovered in Wisconsin, the closest known infestations are located about 40 miles south of the Illinois / Wisconsin border in Kane and Cook Counties, Illinois.

At this time, no pesticide treatment has been developed that will kill the beetle. The best way to prevent the spread of the emerald ash borer and other pests is to prevent their introduction to Wisconsin.

Ash trees that are being attacked by emerald ash borer will show signs of

crown dieback, cracked bark, epicormic sprouts, and woodpecker activity. More information on the emerald ash borer can be found on the web at emeraldashborer.wi.gov or emeraldashborer.info or by calling 1-800-462-2803.

Mulching street and yard trees offers them some protection from the harsh



Emerald Ash Borer (photo by David Cappaert)

urban environment. Mulch benefits urban trees by retaining soil moisture, reducing competition from grass and weeds, breaking the impact of rain, reducing erosion, minimizing trunk damage from mowing equipment and reducing soil compaction from foot traffic.

Mulch applied improperly, such as a "mulch volcano" mounded around the base of the tree, can cause the tree to decline and die. An example of proper mulching can be seen locally on the grounds of the State Capital.

Aggressive pruning, ropes, chains, and nails wound trees and are invitations for attack by pests and diseases.

Take care of our trees so they can help take care of Lake Wingra.

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A carp leaps the spillway at Lake Wichita, Kansas (photo by Jason Palmer).

New Wingra Dam Could Prevent Carp Invasion

David S. Liebl

While lowering the carp population is key to improving water quality in Lake Wingra, carp moving up Wingra Creek from Lake Monona present an ongoing threat.

A new Lake Wingra dam proposed by the City may help prevent the passage of this invasive fish into Lake Wingra, allowing carp removal efforts to succeed.

Built in 1916 to allow boats to pass between Lake Wingra and Wingra Creek, the lock and dam fell into disuse in the 1970's. Today, only the spillway and metal weir used to measure flow remain. When the water is high, carp are able to swim up the spillway and into Lake Wingra.

Preventing carp passage at the dam will help improve water clarity and the quality of both panfishing and sport fishing in Lake Wingra.

To accomplish this, the City plans to design a single 24" drop in elevation from Lake Wingra to the creek, to replace the long sloping spillway. This will prevent carp from entering the lake, except during the rare event when the dam is submerged for a short time.

As an extra benefit, the new dam is expected to continue to attract the large muskies that create a public spectacle when they congregate at the spillway overflow during March and April.

Stay tuned for more information on the dam replacement and opportunities to comment on its design and function.

Native Garden Planting at Wingra Creek on June 2

Come join in the planting of a native prairie garden overlooking Wingra Creek at Beld Street. The "Beld Street Bluff" is within Phase 1 of a City project to revitalize the entire Wingra Creek corridor.

The garden will attract birds and butterflies, filter storm water runoff, and offer a pleasant spot for visitors to view the creek.

The planting is made possible by a grant from the Graham Martin Foundation through a grant written by City Engineering and the Friends of Lake Wingra.

Meet near the Beld Street Bridge, just off West Wingra Drive, anytime from 9:00 am to 3:00 pm on Saturday June 2 (rain date Sunday, June 3). Please contact Genesis Bichanich (266-4059 or GBichanich@cityofmadison.com) for more information.

As Phase One from Park Street to the second railroad bridge shows its colors through the 2007 growing season, stay tuned for more information about site-specific planning for Phase 2, from Fish Hatchery to Park Street.

Southwest Bike Path Plant Restoration

Have you noticed the flags ringing areas along the Southwest Bike Path? Last season, volunteers pulled invasive plants and planted native species in those areas.

Volunteers and city engineers have started a demonstration project to eradicate some of the toughest invasive plants and give the new native plants a fighting chance to take their place. All of this is aimed at native plant restoration and improved storm water management in our neighborhood.

You can help! To place your name on the email list to directly receive announcements of scheduled work parties, contact Sandy Stark, 255-4195, sestark@wisc.edu, or Steve Glass, 278-2939, sbglass1@mac.com.

We'll also post announcements on the kiosk at Glenway Park. You can also ask Sandy or Steve for a work assignment that you can complete on your own schedule.

Fundraising

The Friends of Lake Wingra depend on financial support of individuals and grants to carry out our mission.

A big thanks to all of the donors this year who have helped us raise \$7,000 since July 2006. Your contributions support a variety of projects including Windows on Lake Wingra events, Shoreline Restoration, Fall Leaf Cleanup Campaign, and Wingra Watershed Bike Maps and Wingra Water Trail maps.

If you are considering making a donation, please contact us for more information or follow instructions on page 2 of this issue.

You will receive a copy of our twice yearly newsletter and regular postcard/email updates for upcoming events. You are always welcome to attend our monthly board meeting and various events!

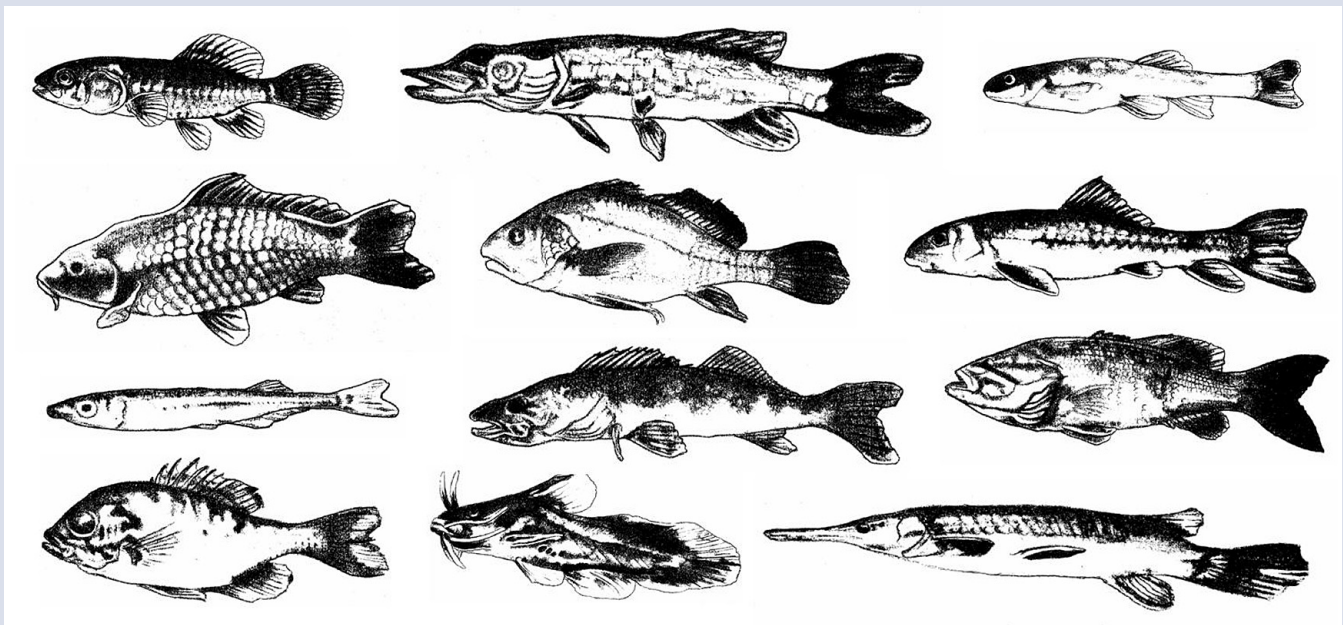
Volunteer Corner

Looking to do good works for Lake Wingra and the watershed community? To get involved, send an email expressing your interests to: info@lakewingra.org. Here are just a few of our needs for volunteer support:

- ◆ Anyone who is a team player and has time and energy!
- ◆ Fundraising & development expertise
- ◆ Web site maintenance
- ◆ Kiosk coordinator
- ◆ Community organizing
- ◆ Writing and editing
- ◆ Graphic design
- ◆ Archivist/Historian
- ◆ Shoreline caretakers
- ◆ Watershed watchers

Kid's Corner—Can you find the carp?

All of these fishes are native to Lake Wingra except one—the carp. Can you spot the carp? Bonus points for identifying the others. See back page for answers.



Drawings by Pam Williams

Spring/Summer Calendar

See our online calendar at www.lakewingra.org for more details on these and other upcoming events.

**May 24, June 28, July 26, August 24, and September 28,
5:30 - 7:30 p.m.**

Monthly FOLW Board Meetings

Mazzuchelli Center, Edgewood College. All are welcome.
Please contact info@lakewingra.org or 663-2838 to confirm the location and the agenda.

Saturday, June 2 (Rain Date Sunday June 3)

Native Garden Planting

Wingra Creek Restoration, Beld Street Bridge, just off West Wingra Drive. Contact info@lakewingra.org or 663-2838 for more information.

June 9 - 15

Take a Stake in the Lakes week

Kickoff on Saturday June 9 with a Clean Lakes Festival at Warner Park, sponsored by the Mad-City Ski Team, complete with live bands, food, festivities and more. Annual Take a Stake in the Lakes Clean Ups on Saturdays, June 9 and 16. Other on-water activities June 11-15. Watch <http://www.danewaters.com/> for information.

Saturday, June 9 at 9:00 a.m.

Capitol Water Trails Annual Wingra Creek Cleanup

Meet at the canoe landing at Goodman Park 1402 Wingra Creek Pkwy (previously Franklin Field). Bring a canoe if you have one. Drinking water, trash bags, provided. Children under 16 must be accompanied by a guardian. Contact cwt@capitolwatertrails.org or 223-0995.

Saturday, June 16

WOW! Windows on Wingra: Lake Clean-up, Teach-in, and Voyageur Paddle

9 am - Noon: Join Friends of Lake Wingra and Dudgeon Monroe Neighborhood Association for the annual lake clean-up & teach-in at Wingra Park. Paddle Lake Wingra like a French Voyageur, and stay on for DMNA's Jazz in the Park. Watch our web site for more details. Or contact us at 663-2838 or info@lakewingra.org

Fish Names

Mudminnow
Carp
Silverside
Bluegill

Pike
Drum
Walleye
Bullhead

Minnow
Sucker
Bass
Gar

Friends of Lake Wingra, Inc.

c/o Office of Advancement

Edgewood College

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