



Friends of Lake Wingra



Promoting a healthy Lake Wingra
through an active watershed community

Wingra Watershed News

Spring/Summer 2011 volume 8, number 1



Jim Lorman, FOLW co-founder and current board president, accepts the 2011 Wisconsin Lake Stewardship Award at the Wisconsin Lakes Convention in Green Bay. Photo by Sandy Gillum.

"This honor really speaks to the dedication and spirit of collaboration that is shared by the membership of Friends of Lake Wingra. The ongoing efforts of this group are evident in both the quality of the water in the lake, and in the quality of the lake's shoreline habitats."

Jim Lorman

Friends of Lake Wingra Receives 2011 Wisconsin Lake Stewardship Award!

- Paul Dearlove

The Wisconsin Lakes Partnership—which includes the Wisconsin Department of Natural Resources, University of Wisconsin-Extension and Wisconsin Association of Lakes—honored the Friends of Lake Wingra (FOLW) with the 2011 Lake Stewardship Award at this year's Wisconsin Lakes Convention ceremony in Green Bay on April 13.

These highly competitive awards are presented each year in celebration of the extraordinary volunteer and professional efforts made to protect and improve Wisconsin's lakes.

The award was presented in recognition that FOLW carries out its mission "to promote a healthy Lake Wingra through an active watershed community" solely with volunteers.

It was further recognized that even without staff, ongoing efforts are making a clear and significant difference in public awareness and understanding of lake water quality issues, and are resulting in noticeable improvements in the condition of Lake Wingra and its shoreline habitats.

In the words of the Partnership: "This is our 23rd year of celebrating Wisconsin's outstanding lake stewards. All nominees have performed outstanding

service for lakes, which makes the selection of winners in each category a difficult task."

FOLW was the winner of this year's "Organized Group" category, joining the ranks of only 24 other groups throughout the state who have received this honor since 1987.

"This honor really speaks to the dedication and spirit of collaboration that is shared by the membership of Friends of Lake Wingra," said Jim Lorman, Professor of Biology and Academic Program Director of the Sustainability Leadership Graduate Program at Edgewood College.

"The ongoing efforts of this group are evident in both the quality of the water in the lake, and in the quality of the lake's shoreline habitats."



Friends of Lake Wingra, Inc.

Mission

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

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Special Thanks to: Arboretum Cohousing, for hosting a fundraising event for FOLW.

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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Wingra Watershed Management Plan Progress Update

- Genesis Steinhurst and Steve Arnold

When the Friends of Lake Wingra completed the document, *Lake Wingra: A Vision for the Future*, it was the successful first step toward the development of concrete strategies and policies for achieving our practical vision of a healthy Lake Wingra.

Progress toward that practical vision occurred last summer when the Friends of Lake Wingra asked the city of Madison for Storm Water Utility funds to be directed toward the creation of a detailed watershed plan.

City Engineering was receptive and included funds in the 2011 budget to initiate the proposal. The city plans to include comparable funds in the 2012-2013 budget. The FOLW has agreed to contribute \$8,000 in addition to the \$125,000 being directed to the project by the city this year.

Several FOLW members joined city staff in meetings this past winter to start the planning process. A project manager will be hired and will bring together water quality specialists, engage stakeholders, garner public input, and compile information into a final, integrated plan.

The plan will include a detailed implementation time line, identification of roles and responsibilities of stake-

holders, and relevant costs of all recommended practices and policies.

An executive committee comprised of city staff, FOLW members, and others will help oversee the consultant and the general direction of the planning process.

A number of task groups, facilitated by the consultant, will be created to work on specific components of the plan.

Task groups will deal with issues related to detailed watershed analysis (e.g., identifying significant sources of sediment and nutrients), in-lake analysis (e.g., evaluating the importance of sediment re-suspension due to carp and/or wind and the role aquatic vegetation plays in re-suspension), invasive species management strategies, road salt impacts, sources of bacteria, and significant public outreach with extensive stakeholder engagement.

The process to hire a consultant is underway, with the hope of having a person or small team on board by early summer.

Plan to see announcements for public input sessions and other meetings related to the Wingra Watershed planning process - we look forward to hearing from you.

Wingra Creek Restoration Update



- Eric Jacobsen

As mentioned in our previous updates, the final two stages of the Wingra Creek restoration are tentatively scheduled for installation during the winters of 2011-2012 and 2013-2014.

Two previous phases to correct and prevent severe erosion along the creek's banks were completed in recent years.

FOLW has played an active role with coordinating community involvement with the previous phases. We plan to continue our advocacy for the creek and its users.

We will keep you informed of upcoming project meetings and other related news via our list-serve. (Subscribe at http://lists.danenet.org/listinfo.cgi/friends_wingra-danenet.org)



Photos by Amy Callies

Wingra Watershed Education Project 2011

- Amy Callies

On May 20 and 21, fifty educators from throughout the Madison Area will be participating in a hands-on workshop that will equip them with the resources and knowledge to conduct their own water based course at school and offer free classes during the summer at Wingra Boats about the Wingra Watershed.

This two day workshop is a collaborative effort between teachers and instructors in the Madison Metropolitan School district, Wingra School, Edgewood College, Wingra Boats, Friends of Lake Wingra, UW Arboretum, and the Wisconsin Department of Natural Resources. Funding from the Bourne Family Foundation has initiated and supported this educational project over the past three years.

During the two day workshop teachers will paddle to the Mazzuchelli Center to learn about the history of the Wingra Watershed from Jim Lorman, Edgewood College Professor and Chair of Friends of Lake Wingra. Teachers will explore

Lake Wingra from boats and from shore using water samplers, Secchi disks, seine nets, dip nets and aqua scopes. They will also learn about service learning projects that their students can participate in that will benefit the Wingra Watershed.

This year the Wingra Watershed Education Project received additional funding from the Natural Resources Foundation's C.D. Besadny Conservation Grant Program. These funds were used to purchase materials to have on site at Wingra Boats to educate the general public.

Wingra Watershed Workshops for the general public will be held throughout the summer of 2011 on Thursday evenings from 6-7 p.m. at Wingra Boats (The boathouse location by Wingra Park). These free classes will take place on the following dates: June 16, June 23, June 30, July 14, July 21, July 28 and August 4. For more information regarding these classes, go to Wingraboats.com.

Van Hise Elementary Raingarden

- Bob Armstrong

Van Hise Elementary School has many great outdoor learning opportunities for children.

Vegetable and flower gardens were created and planted early last fall, and will be replanted this spring.

A rain garden has been designed, which will be constructed and planted this May by the students, parents, and volunteers.

One goal of the gardens is to create an environment that invites learning, not only among the students, but the community as well.

A second goal is to grow an environment that will stimulate the senses with plants to smell, taste, and feel.

The plants have been selected to attract birds, bats, butterflies, and bugs. The children will learn how plants can adapt to both flood and drought, and how the landscape changes along with the seasons.

To learn more about the gardens or how to get involved, visit www.vharden.wordpress.com.

The Odana Project: A complicated way of doing a simple thing

- David H. Thompson

If you've ever walked the Odana Hills Golf Course, you've noticed a small building near Odana Pond. It's the site of a project to replenish groundwater. It started with the best of intentions, but has since raised some concerns.

The project began with plans for the CoGeneration plant on the west UW campus—a heating and cooling plant for University buildings, combined with a generating plant, to be built by MG&E. The facility withdraws a staggering 76 million gallons a year (mgy) from Lake Mendota—water which is lost from the Yahara basin, mostly as vapor.

The Odana Project is a complicated “water swap” worked out between MG&E and DNR, to compensate for taking so much water. Experts reasoned that Lake Mendota would always have enough water, but that the flow of the Yahara River might drop excessively during times of drought—enough to threaten fishing, boating, and aquatic life.

To replenish the Yahara during low flow, MG&E planned to use old wells near the river to pump groundwater into the Yahara.

But groundwater in Madison is already being drawn down by the City's wells, so if pumping to the Yahara is needed, the groundwater will have to be replenished in turn. It doesn't really matter where the groundwater is replenished, so MG&E planned to take storm water from Odana Pond.

The Odana Project takes water from the pond, filters it, then pumps it uphill to a sandy area, where it trickles from an “infiltration field” into the ground. When the filters are cleaned, 11% of the water is sent to the sewage plant—and lost from the watershed.

Two permits were issued by DNR to cover the project. The first allows the discharge of storm water into the ground. The second requires the injection of up to 80.4 mgy, the essence of the deal. MG&E monitors test wells nearby to see how the groundwater is affected.

The project was completed in 2006, but quickly ran into problems. First, the infiltration field would not accept enough water and had to be reconstructed.

Second, as soon as they began pumping in 2006, one well showed the groundwater was becoming salty—the result of excessive road salt in the Odana watershed, particularly on the beltline and at Westgate Mall.

Road salt (usually sodium chloride) dissolves into separate sodium and chloride ions in water. Wisconsin's groundwater laws set the following regulatory limits for chloride:

- 125 mg/l - Protective Action Limit (PAL, intended as the trigger for actions to prevent more serious contamination)
- 250mg/l - Enforcement Standard (ES, the maximum concentration allowable)

By 2007, the salt had reached the PAL at the two downstream test wells, and by 2008 had reached or exceeded the ES at both wells. The issue lay uncorrected until late 2010, when Friends of Lake Wingra noticed the high chloride levels while going over data posted on the internet.

Since then, FOLW has met with MG&E and DNR to discuss options for correcting the problem.

One option would be to reduce pumping when the water in the ponds is too salty, but this could result in not enough water infiltrated to meet the target in the DNR permit.

A more sustainable solution would be for MG&E to work with residents and businesses in the area that drains to Odana Ponds to reduce salt use. This approach would allow MG&E to meet their volume requirements for groundwater recharge while protecting the quality of that water.

Ultimately, lessons learned through this effort could lead to salt reduction city-wide, which would have significant benefits for the quality of our surface and groundwater.

Addressing Nuisance Urban Geese

- Terri Bleck, Edgewood College Student in Sustainability Leadership

Vilas Park and Vilas Beach are both important leisure destinations within the City of Madison. People use the large open spaces of the park for picnics, a game of kickball, softball or soccer, to play Frisbee, or to take a walk in a lovely natural setting.

The park and beach have been entertaining people since 1904, when the park was first established by land received from William and Anna Vilas under the conditions that it be set aside "for the uses and purposes of a public park and pleasure ground."

Another inhabitant of the park and beach has increasingly been the giant Canada goose (*Branta canadensis maxima*). A small flock of geese can be enjoyed by park and beach goers.

However, the goose population has been increasing each year and causes health concerns due to large amounts of feces in the park lawns and at the beach. Each year, the beach has been closed for longer periods of time due to high bacteria levels in the water. In the summer of 2010, the beach was closed for 43 days.

Goose feces is most likely a major contributing factor to the high bacteria levels. The geese can also damage the turf when grazing which causes increased erosion.

A single Canada goose can eat up to four pounds of grass and produce up to two pounds of excrement each day. They can live up to 24 years and produce 3 to 12 eggs each year.

Canada geese prefer open grassy areas near bodies of water. Vilas Park provides the perfect habitat for geese and their population has been increasing dramatically since the 1980s.

A project is being planned to bring together neighbors and area businesses in an outreach and educational effort that is part of a larger management plan to reduce the goose population at

Vilas Park. Local area businesses will be contacted to get involved. "Goose cards" will be developed that include background on the giant Canada goose and the Vilas goose management plan. These cards will also have coupons for discounts at local businesses and an invitation to a website quiz where correct answers enter the respondent in a monthly prize drawing.

Teams of volunteers will be organized to help implement a strategy for distributing the Goose cards, for engaging

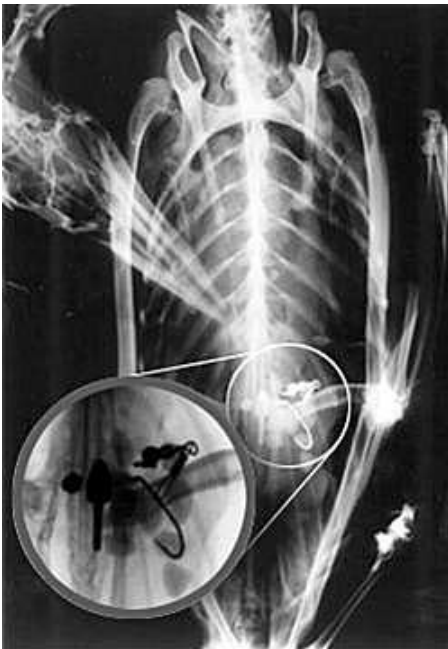


Canada geese in Vilas Park. Photo by Terri Bleck.

local businesses, and for participating in the Vilas Goose Management Ambassadors Program which will conduct outreach and education activities in classrooms, community meetings, and neighborhood events.

If you would like to volunteer for this project to help reduce the goose poop and keep our beaches open, please contact Terri Bleck by email: terribleck@gmail.com.

Get the Lead Out Anglers protect wildlife by using lead-free fishing tackle



In this x-ray of a dead loon found on a northern Minnesota lake, lead fishing tackle is clearly visible. Photo credit: pca.state.mn.us

Reprinted from the Lake Ripley Management District's "Ripples" Newsletter, based on information from Northland College's LoonWatch campaign and the Minnesota Pollution Control Agency.

Lead is a toxic metal that can adversely affect the nervous and reproductive systems of mammals and birds. Found in most fishing jigs and sinkers, lead is poisoning wildlife such as loons and eagles. In fact, ingestion of lead tackle is the leading cause of loon deaths in many U.S. states.

When lead fishing sinkers are lost through broken line or other means, birds can inadvertently eat them. Water birds like loons and swans often swallow lead when they scoop up pebbles from the bottom of a lake or river to help grind their food. Eagles and osprey ingest lead by eating fish which have themselves swallowed sinkers or jigheads.

A bird with lead poisoning will have physical and behavioral changes, including loss of balance, gasping, tremors, and impaired ability to fly.

The weakened bird is more vulnerable to predators, or it may have trouble feeding, mating, nesting, and caring for its young. It becomes emaciated and often dies within two to three weeks after eating the lead.

Research on loons from six New England states has shown that on most lakes where dead adult breeding loons were found between 1987 and 2004, about 26% of these loons died from lead poisoning. Some lakes were identified as hot spots with lead causing over 50% of documented deaths.

In Michigan, another 17-year study examined 204 dead loons and revealed that lead poisoning—primarily from lead jigs—was the second leading cause of death at 22% of overall mortality.

Limited research in Minnesota has also documented lead poisoning of loons. A study conducted by the Minnesota

Pollution Control Agency concluded that lead poisoning accounted for 12 percent of adult loon deaths.

Between 1980 and 1996, the Raptor Center at the University of Minnesota reported lead poisoning in 138 of 650 eagles they treated.

Most of the time, the source of the lead cannot be detected as the birds have cast the material out of their systems.

Because lead shot was banned in waterfowl production areas in the early 1990s, bullet fragments in big game carcasses, lead shot lodged in upland game, and lead fishing tackle are considered possible sources of lead poisoning of eagles.

The problem is so widespread that lead tackle bans are becoming more common. States like New Hampshire, Vermont, Maine and New York all have partial bans in place, as do some national parks and wildlife refuges.

But there is hope! There are now non-toxic alternatives to traditional lead tackle. Anglers can purchase sinkers and jigs made from non-poisonous materials such as tin, bismuth, steel, ceramic, glass, and tungsten-nickel alloy—and they can find them at established sporting goods retailers and on the Internet.

Non-lead tackle is generally only pennies more than lead equivalents. A list of suppliers that carry lead-free tackle can be found by visiting www.northland.edu/loonwatch.

Parents can help by teaching good stewardship to young anglers. Outfit kids' tackle boxes with non-lead weights. They are nontoxic and safer for youngsters to handle. Plus, inexperienced anglers tend to lose the most sinkers, so you'll be cutting down on the amount of lead getting left behind in our lakes.

Which watershed am I in?

- Judi Dilks

If you travel east from Wisconsin to Pennsylvania by car as I sometimes do, you will encounter a large sign along the PA turnpike near the town of Somerset. It announces, "Entering the Chesapeake Bay Watershed—be a friend to the Chesapeake".

If you wanted to dip your toes in the bay itself, you would need to travel some 200 miles to the southeast, nearly a 4-hour drive away. I looked it up once; although the bay is located in Maryland and Virginia, its massive watershed extends all the way to New York State, covering ~64,000 square miles, and includes portions of six states (Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia) and the District of Columbia.

That sign is doing its job—although it is far from the water it hopes to protect, it always makes me think about the Chesapeake Bay.



Signs that mark watershed boundaries are good tools to raise public awareness because they help passersby realize how far away the body of water whose name they recognize is from its watershed boundaries.

Our Lake Wingra watershed includes all or part of 14 different Madison neighborhoods. Because some protected natural areas like the UW Arboretum are also included, the Wingra Watershed contains diverse ecological communities and numerous species of mammals, reptiles, amphibians, insects, birds, and fishes.

However, about half of the land use is

residential neighborhoods and about 15% is commercial, so instead of native prairie, forest and wetland vegetation, much of the watershed is covered by roads, parking lots, buildings, and lawns.

When rain falls on these surfaces, runoff carries pollutants, including dirt, oil, road salt, pesticides, fertilizers, and trash into gutters and storm sewers and eventually into Lake Wingra.

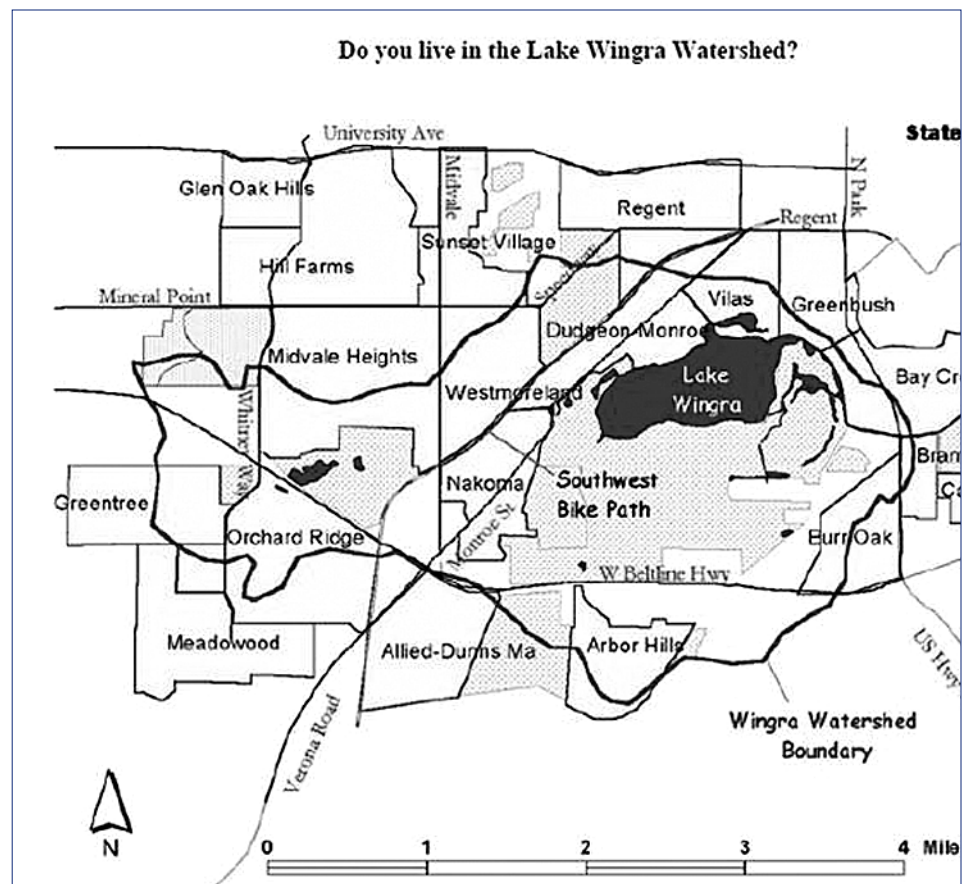
The Friends of Lake Wingra want to help protect lake water quality by increasing awareness and fostering a feeling of ownership for the lake. So, in addition to the other steps described throughout this newsletter, we plan to install signs to mark the Lake Wingra watershed boundaries. The specific locations and design of the signs are still under discussion.

All land is in some watershed and every property drains directly to a creek or

water body, because these are as close as the nearest storm drain. We hope watershed boundary signs will make everyone think—Do I live in the Lake Wingra watershed? Will the leaves on my street, garden chemicals from my lawn, or runoff from my downspout contribute to a green and cloudy lake? What can I do to help care for our precious water so we all can enjoy the lake and lakeshore, where nature and people co-exist in the midst of city life?



An example of a watershed sign used in nearby Lake Geneva.



Friends of Lake Wingra, Inc.

c/o Office of Advancement
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1000 Edgewood College Dr.
Madison, WI 53711-1977



Upcoming Events

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

FOLW Board Meetings are held on the first Thursday of each month and are open to the public. Check the calendar at www.lakewingra.org to confirm the time, location, and meeting agenda.

Wingra Creek Cleanup

June 11 9:00 am to noon

Help keep Wingra Creek clean for urban paddling. Bring a friend and your canoe or kayak (or work from the shoreline). Gloves, trash bags and water and t-shirts will be provided. Meet at the Strand Assoc. parking lot on Plaenert Dr., located at the steel pedestrian bridge midway between Park St. and Fish hatchery Rd.

Lake Clean-Up and Jazz in the Park

June 18

Anytime between 9:30 am and noon at Wingra Park boat landing. Trash bags will be provided. Wingra Boats will provide free use of canoes for the clean-up. Stay on into the afternoon for Jazz in the Park, sponsored by Dudgeon-Monroe Neighborhood Association. Friends of Lake Wingra will have educational activities throughout the day - please join us!

Wingra Watershed Bike Ride

July 16 8:30 am

Meet at Wingra Park for a bicycle tour of the Wingra watershed. The route will be chosen by participants, but will be between 7 and 16 miles. We will visit several natural and cultural landmarks along the way. Maps will be provided.

Wingra Boats Events

Wingra Boats at Wingra Park is organizing a variety of public events this summer. Visit their website for more information: <http://www.wingraboats.com/events-excursions>



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