The Sheboygan River Explorer

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UW Extension COOPERATIVE EXTENSION

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The goal for the Sheboygan River is to reduce the contamination and improve habitat enough so as to raise its "grade" as a Great Lakes river from an "F" to a "C".

It's Your Turn!

Whew! The big projects are done, with only a little wrap-up needed this upcoming spring.

Deb Beyer, UWEX

More than 2,600 pounds of PCBs and 300,000 cubic yards of sediment have been removed from the river. Sections of shoreline have been re-shaped, reinforced, and planted with native grasses, shrubs and trees and other plants. Rocks, logs, root-wads and nesting boxes have been installed. Monitoring will take place over the next few years and decades, in some instances, to determine the environmental response.

What's next? Now it is up to everyone who lives here to take an active part in continuing the good work. Fun volunteer projects and trainings are described in this newsletter . . . read on and sign up!

In addition, everyone living in the area can promote river health by living in earth-friendly ways every day, from lawn care, to garbage disposal, to transportation and food choices. Think of one earth-friendly practice to turn into a habit each month. It will be good for you, the river, all of us!

Inviting you to explore and restore your river,

Deb

Debbie Beyer, UW-Extension Natural Resource Educator

Want to see more Sheboygan River photos?

Stacy Hron, WDNR

Amy Kretlow, UWEX

Stacy Hron, WDNR

Check out http://sheboyganrivercleanupproject.shutterfly.com/ to choose from 22 albums featuring nearly 300 pictures of the dredging projects, habitat projects, programs and events. Photos will continue to be added, so check back!

Be a Sheboygan River Citizen Scientist

In 2010-2011, WDNR biologists conducted a "rapid ecological assessment", a series of plant, fish and wildlife surveys aimed at providing baseline information as to what plants, animals and natural communities are found here and which ones we would expect to find here that are missing.

Results showed that the Sheboygan River and its adjacent habitats are indeed important to a wide range of fish and wildlife. Thirty-four rare animal species and 10 rare plant species are known to occur here. At the same time, Sheboygan River habitats and species are under constant threat from habitat loss, pollution, invasion by non-native species, and other causes.

A variety of volunteer programs are available so that you can help gather more information about the plants and animals living here and help improve habitat. Your volunteer work can take place on public land along the river, and in some cases, on your own property. You'll be in contact with specialists who can answer questions along the way. See pages 3 and 4 for volunteer programs on birds, invasive plants, bats, and frogs and toads.

Explore Your Sheboygan River This Year!

Canoe and kayak access points will be open this year from Esslingen Park down to the Harbor, with the exception of the 8th Street Bridge landing being closed until mid-June. Explore and enjoy!

Volunteer Citizen Scientists Needed!

Have fun, get into nature, continue Sheboygan River restoration, and meet fellow Sheboygan River enthusiasts! Contact Deb Beyer at 920-459-6644 or deb.beyer@ces.uwex.edu, or Amy Kretlow at akretlow@uwm.edu, to join one of the projects and register for a training session. Learning and fun will be had by all!

Jon Gumtow, SRBP

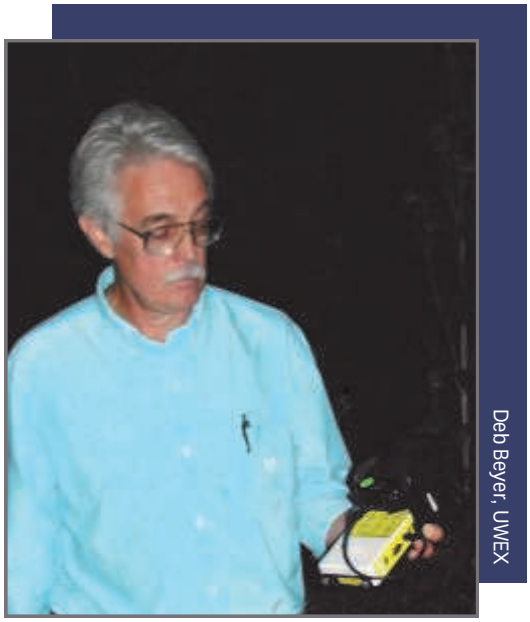
Nest Box Check-ups: Get trained to observe and record information on the success of birds using nesting boxes along the Sheboygan River. Time commitment is from March –July, with data submittal in September. Great family activity! Training, but no prior experience, required.

eBird – Calling all birders! We're looking for a few people to regularly bird along the Sheboygan River Area of Concern and enter their observations on Cornell Laboratory's eBird web-based database. Time commitment is one outing monthly year-round, with more frequent outings in spring. Birders of all skill levels welcome!

Plant Surveys: If you have advanced botany training and can identify a wide variety of native plants, we need you! Further botanizing needed in certain high-quality natural communities identified within the Sheboygan River Area of Concern. Call Stacy Hron at (920) 892-8756 x 3051 and stacy.hron@wi.gov to discuss the project.

Invasive Plant Ground-Army: Join in Sheboygan County's fight against invasive species by adopting a portion of the Sheboygan River bank or floodplain to protect it from invasive plants. Participate in a training to learn how to control these aliens along the river or on your own land. Great family or club activity!

Bat Surveys: Learn about bat biology and use of the Ana-Bat Detector, a gadget that records bat vocalizations imperceptible to the human ear. If desired, select from a variety of locations to detect bats in the night sky three times during the spring and summer. Also, learn how to search for bat roost locations. Training, but no prior experience, required. Great family activity!



Deb Beyer, UWEX

Frog and Toad Survey – By Ear: Participate in a training on Wisconsin frog and toad biology, how to identify them by their calls, and techniques for participating in Wisconsin's Annual Frog and Toad Survey. Time commitment is three evening outings from March – July. Training, but no prior experience, required. Great family activity!

Gerlinde Hoebel, UW-Milwaukee

Trainings for New Volunteers

All trainings are located at the Sheboygan County UW-Extension Office. Contact Deb Beyer at 920-459-6644 or deb.beyer@ces.uwex.edu or Amy Kretlow at akretlow@uwm.edu to register.

Saturday, March 23, 10:00 am-noon
Nest Box Training: Join Vice President of the Bluebird Restoration Association of Wisconsin, Kent Hall, to learn how to do weekly checks to record bird activity, nestling numbers, health, predation, etc. No prior experience needed.

Saturday, March 23, 2:00 - 4:00 p.m.
Wisconsin Frog and Toad Survey Training: Join UWEX Natural Resources Educator, Deb Beyer, to learn about frogs and toads found in this area and how to identify them by call. Be introduced to the long-standing Wisconsin Frog and Toad Survey techniques and if desired, select survey locations to monitor along the Sheboygan River this spring and summer.

Monday, March 25, 7:00-8:00 pm
Introduction to eBird: Join Maywood's eBird coordinator, Andy Raddatz, for an introduction to the web-based eBird database and the birding hotspots established for the Sheboygan River. If desired, sign up to be a designated Sheboygan River birder who will identify birds regularly along a designated stretch of river. Or, come just to learn.

Tuesdays, April 16 and 30, 6:30-8:00 pm
Invasive plant identification and control: Learn to identify the dirty dozen species for this area and best methods for controlling them either on your land, in your yard, or on your project site along the river. Meet invasive plant specialists who will support you in your efforts. If desired, select a Sheboygan River project area to call your own! You need to come to one training only. April 30th is a repeat of April 16th.

Wednesday, May 22, 7:30-9:30 pm
Bat-Man and Bat-Woman Training: Join WDNR Biologist, Paul White, to learn about the biology of Wisconsin bats and how to detect them as they hunt for insects in the night sky, using a fun gadget called the "Ana-Bat Detector". Sign-up to survey a section of the Sheboygan River three times throughout the summer. *(Note: Alternative training date available May 23, 7:30 pm, Woodland Dunes Nature Center, Two Rivers, (920) 793-4007*

Upcoming Events

Sarah Dezwarte, Camp Y-Koda

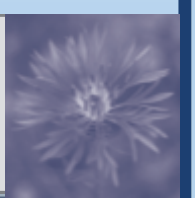
7th Annual Sheboygan River Clean-up and Festival
May 18, 10:00am-2:00 pm, Camp Y-Koda
Pick up litter by canoe or on foot, or stencil storm drains. Free lunch and activities at Camp. Great individual, family, or club volunteer event! Contact Camp at 467-6882 and campykoda@sheboygancountyymca.org to register.

Jenny Loehr, Plymouth High School

Testing the Waters High School Student Symposium
April 22, 9:00 am – noon, Sheboygan South High School
Key note presentation by Steven Choy, Toxicologist, U.S. Fish and Wildlife Service.

Nest box check-ups are important for getting the best nestling survival rates possible!

Invasive plant control is important because such aggressive plants crowd out our native plants that are crucial for a healthy ecosystem.



What's Next for the Fish and Wildlife Habitat Projects?

Now that the snow (and rain, and then snow) is flying, construction of the fish and wildlife habitat restoration projects has stopped for the season.

This fall, most of the work was completed on the restoration sites at the corner of Taylor Drive and Indiana Avenue, Esslingen Park, Wildwood Island and Kiwanis Park. Some of the improvements at these sites include; planting native trees, shrubs and plants, creating buffers along the shoreline, adding in-stream and shoreline habitat features, placement of bird, bat, owl and duck houses, an osprey platform at Taylor Drive wetland and a heron rookery at Wildwood Island, wetland restorations at the former Taylor Drive pond and at the northeast corner of Taylor Drive and Indiana Avenue, removal of invasive plant species and contaminated soil.

There is a bit more work to be done in the spring, after the ice breaks up and the ground thaws. At Kiwanis Park there will be more grasses and wildflowers planted, cedar fencing will be installed and the area where dredge spoils were offloaded will be repaired.

Stacy Hron, WDNR

At Wildwood Island and Taylor Drive & Indiana Avenue more shrubs will be planted and there will be more invasive weed removal. You will continue to see the orange temporary fencing and the goose exclusion fencing (sticks with twine strung between them) until the sites are stabilized. The contractor that installed the landscaping will be maintaining the new vegetation as well as removing invasive weeds through 2015.

We will also continue to monitor the restoration sites to make sure that the vegetation is established and the other improvements function as planned. Outdoor exhibits will be installed at the project sites with information on the restoration work.

Stacy Hron, WDNR Sheboygan River AOC Coordinator

What's Left on the Dredging Projects?

Dredging on the Sheboygan River is complete! Approximately 300,000 cubic yards of contaminated sediment were removed August 2012 through early January 2013. As a result, Sheboygan river-goers will enjoy a deeper river with better navigation and access, and cleaner habitat for fish and wildlife to thrive.

The Sheboygan Harbor Project dredged over 153,000 cubic yards (7,650 dump trucks!) of sediment from the area downstream of the 8th Street Bridge. The navigation channel depth is now approximately 11 feet, or 15 feet below the low water datum in this area.

Deb Beyer, UWEX

Dredging upstream of the 8th Street Bridge for the Great Lakes Legacy Project totaled 147,000 cubic yards (7,350 dump trucks) of contaminated sediment. Water depths in the area of the Legacy Act project were measured in December to be generally between 15 to 8 feet below the low water datum, with some areas extending to 20 feet.

Both contractors have been performing site cleanup and demobilization efforts in January, with some final site restoration work to be performed in spring. In spring 2013, contractors will deposit six inches of sand throughout various areas of the Legacy project. This sand cover will provide clean, new habitat for aquatic organisms and help contain any particles of remaining residual sediment, achieving the project goal of an average of 1 ppm (part per million) of PCBs at the surface. The work should take about three to four weeks and will be performed following springtime fish passage. The overall depth of the river in areas to receive sand will remain considerably lower than pre-dredge levels.

Caitie McCoy, Environmental Social Scientist
Illinois-Indiana Sea Grant

Natural Resource Damage Assessment to Begin on the Sheboygan River

2012 was a busy year for cleanup at the Sheboygan River and Harbor, with multiple cooperative projects removing contaminated sediment from the riverbed. 2013 will also be a busy year, as the natural resource trustee agencies have started a Natural Resource Damage Assessment. While the cleanup is intended to reduce the risk posed by the contamination, the damage assessment has a different but related goal: to restore natural resources injured by the contamination and compensate for the past harmful effects of the contamination.


WDNR

What is a Natural Resource Damage Assessment?

A Natural Resource Damage Assessment (NRDA) is a legal process authorized by the same regulations that govern cleanup of contaminated sites. Through the NRDA process, trustee agencies measure the harm which hazardous substances caused to natural resources, such as fish and birds and their habitats. Trustees then determine the type and amount of environmental restoration required to compensate the public for that harm. The trustee agencies for the Sheboygan River and Harbor are

- Wisconsin Department of Natural Resources (DNR)
- U.S. Dept. of the Interior, U.S. Fish and Wildlife Service (FWS)
- U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration (NOAA)


WDNR

The trustees gather and evaluate data to identify the natural resources that have been injured by contamination and to quantify the injuries, such as increased tumor rates in fish or reduced prey available for fish to eat. Once the injuries are known, trustees work with the public to identify and select projects to restore, rehabilitate, replace, or acquire the equivalent of the natural resources lost or injured. For example, this could include creating wetlands that would serve as fish foraging habitat along the river. Trustees seek funding for or implementation of these restoration projects from the entities responsible for the contamination.

How have hazardous substances affected natural resources in and around the Sheboygan River?

The site is comprised of the lower 14 miles of the Sheboygan River and the adjacent floodplains. Throughout the 20th century, industrial facilities released hazardous substances including PCBs, PAHs, metals, and other chemicals into the river and adjacent floodplains. These chemicals have been measured in sediments and in fish at concentrations high enough to harm the natural resources. The contamination has also limited the public's ability to use and enjoy the Sheboygan River. For example, PCB contamination has required limitations on consumption of fish and waterfowl.

What is the status of the damage assessment?

In 2012, the trustees undertook a preliminary assessment of information on sediments, soils, water, invertebrates, fish, birds, mammals, and reptiles in the Sheboygan River to determine whether it is reasonable to pursue a damage assessment. The trustees concluded that injury to these resources was likely and that damage assessment is warranted. The next step in the NRDA process is the trustees' development of an Assessment Plan that will describe the methods which will be used to quantify environmental damages. The public will be given the opportunity to comment on the Assessment Plan once the trustees release it.


Kansas Dept. of Wildlife and Parks

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Vic Pappas, Wisconsin DNR
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Victor.Pappas@wisconsin.gov

For Additional Information:

Administrative Record website hosting case documents: Further information on NRDA: http://www.fws.gov/midwest/es/ec/nrda/sheboyganharbor/

Further information on NRDA: http://response.restoration.noaa.gov/environmental-restoration/natural-resource-damage-assessment.html

Who's Who? On Sheboygan River Projects ...

Marc Tuchman


Catie McCoy, IISG

Degrees: B.A. Biology--Colgate University, Ph.D. Natural Resources--University of Michigan
Title: Great Lakes Legacy Act Program Manager, U.S. Environmental Protection Agency
Years of experience: 29
Role: I am part of the federal, state and local government team that facilitated the dredging and habitat restoration work in the Sheboygan AOC.
Marc said, "*The tremendous amount of clean-up and restoration work that took place on the Sheboygan River over the past year was the result of an outstanding collaboration among federal, state and local governments and funding support from the federal Great Lakes Restoration Initiative. This extraordinary effort could not have taken place without the support of the local community.*"

Dale Katsma


WDNR

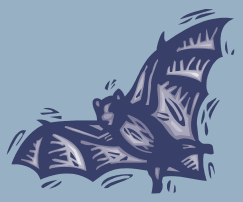
Degrees: B.S. (Natural Science) in Wildlife Ecology, M.S. in Wildlife Ecology – both from U.W. Madison
Title: Area Wildlife Supervisor, WDNR
Years of experience: 35
Role: I've involved in early efforts documenting contaminants in wildlife of the Sheboygan River AOC, including in the floodplains. I am currently on the Sheboygan River Fish & Wildlife Technical Advisory Committee and project leader for some recent GLRI funded studies in the AOC, including the small mammal and mink survey, kingfisher nest monitoring & wintering bird survey. Field work was conducted by wildlife biologist, Dustin Miller.
Dale said, "*Contamination in the Sheboygan River was 'discovered' around the time that I began working as a wildlife manager in Sheboygan County, so it is gratifying to see so much of the contamination in the river being cleaned up toward the end of my career.*"

Travis Motl


WDNR

Degrees: B.S. Biology, UW-Stevens Point. MASC Tropical Marine Ecology and Fisheries Biology, James Cook University, Townsville, AU
Title: Fisheries Biologist for the Wisconsin Department of Natural Resources
Years of experience: 6
Role: Fish and Wildlife Technical Advisory Committee member, responsible for all recent fish surveys in the Sheboygan River, project manager of in-stream habitat projects.
Travis said, "*This has been an exciting project to work on and my hope is the Sheboygan River becomes a destination fishery that will be enjoyed for generations to come.*"

Five Bat Species Found Here



Five species of bats were recorded in 2010 and 2011 surveys along the Sheboygan River; the big brown bat, little brown bat, eastern red bat, hoary bat and silver-haired bat. Two of these are threatened in Wisconsin and three are species of special concern. Help us to learn more about our insect-eating friends by volunteering to get trained May 22 and spend three summer nights surveying bats!

Debbie Beyer
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For programs, volunteering, or materials requests contact:

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For dredging or habitat project questions contact:

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Explore the Sheboygan River at your leisure:

Wisconsin AOCs info & resources for citizens,
Including narrated slide presentations:
http://fyi.uwex.edu/aocs

Wisconsin AOCs official maps, records and reports:
http://dnr.wi.gov/org/water/greatlakes

Sheboygan River canoe and kayak trips:
http://sheboygancountyymca.org/camp-y-koda

Sheboygan River Basin Partnership:
http://www.sheboyganrivers.org

All Great Lakes AOCs information:
http://www.epa.gov/es/aoc

Great Lakes RESTORATION

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