

Shiawassee Stream Team Takes to the River!

Teams of Volunteers Collect Bugs from Throughout the Watershed.

By Heidi Frei, Director, FOSR

As stewards of our natural resources, how can we determine the effectiveness of our actions on the watershed and how can we track our improvements over time? For many in the business world, evaluating results can be as straight-forward as reviewing sales, new accounts, or analyzing a survey. However, in the realm of natural resources when your targets include protecting habitat for endangered mussels, engaging the community in conservation, and limiting erosion, evaluation may not come so 'naturally'. But as members of the Shiawassee Stream Team discovered it sure is fun!

Volunteers from all over Shiawassee, Genesee, and Livingston Counties came together to collect macroinvertebrates (or small creatures without a spine yet large enough to see) from the River system to gage quality of the habitat for fish and mussel. Teams choose from one of five locations within the Shiawassee watershed in Shiawassee County and five in Livingston County. Collections from each site will be identified to determine how 'good' the habitat is just as you could assess the quality of habitat on land by the type of species found. For example, an area home to only raccoons, squirrels and mice is likely more degraded than a property home to bear, moose, and coyote.



Stream Team members take a break at Webb Creek after sampling on a perfect fall day. Photo: T. Cook.

Macroinvertebrate Identification Helps to Monitor River Health

While any Stream Team member will tell you collecting bugs from the river environment is a lot of fun, they're not out there just to have a good time. The bugs our team collects from locations in Shiawassee and Livingston Counties are preserved for identification to help managers from The Nature Conservancy, Friends of the Shiawassee River, Livingston County Office of the Drain Commissioner, and the Michigan Department of Environmental Quality better understand conditions in the River.



Volunteers in Livingston County check out the insect population. Photo: H. Frei.

Bugs are collected twice per year and each collection is assigned a score based on the diversity of species and how sensitive they are to degraded habitat. By keeping track of bug populations we can all gain a better understanding of how good habitat is for recreationally important fish and other aquatic species.

Join the Stream Team

If you missed out on our fall sampling you can still participate in the spring! Collections will be taken from the same sites each spring and fall to observe changes in habitat over time. To join the Shiawassee Stream Team, contact Heidi Frei, shiawassee_mi@tnc.org or 989.723.9062, or Matt Bolang, mbolang@co.livingston.mi.us or 517.552.6870.

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Dates with Friends

Thurs., Feb. 5, 7 - 8 p.m.
FOSR Annual Meeting
Shiawassee Arts Center
Join the FOSR a review of conservation in 2008! Steven Kahl, Refuge Manager, will give a presentation of activity at the Shiawassee Nat'l Wildlife Refuge.

Thurs., March 12, 7 p.m. - 8 p.m.
Invasive Species & Your Property
FOSR Winter Speaker Series
Learn about the top species that threaten our native landscapes. Steve Woods, Land Steward for The Nature Conservancy, will give an overview of the most common unwanted species and management options.

Saturday, April 4, April 18 & May 9
Garlic Mustard Removal
DeVries Nature Conservancy
9 a.m. - 12 p.m.
Come help remove one of the most common invasive species from the natural habitat at DNC.

Saturday, April 25
River Stewardship Day &
Shiawassee Stream Team
Monitoring 9 a.m. - 12 p.m.
Join the FOSR in keeping the river environment clean or help to collect insects from the River's habitat.

Tues., April 28 6 p.m. - 8 p.m.
Macroinvertebrate Identification
Help identify the insect collections from River Stewardship Day! No experience is necessary. RSVP to 989-723-9062 or shiawassee_mi@tnc.org .

Saturday, May 2, 10 a.m. - 1 p.m.
Garlic Mustard Removal and
Spring Wildflower Walk
Join us for a walk in the woods to learn about native wildflowers after the garlic mustard workday.

Friday, May 15
Garlic Mustard Festival
Come celebrate another year of successful land stewardship! Enjoy fare created with garlic mustard removed from local woodlots.

Shiawassee River Provides Recreation Close to Home

by Heidi Frei, FOSR and The Nature Conservancy in Michigan

The Shiawassee River is known as the best remaining example of a warm-water stream in the region. The wetland systems in the headwaters, or where the river begins, region in Oakland County are ecologically significant for the rare species they support. The river itself has a high quality fish population, including rare species, as well as remnant mussel beds. The River system support a diverse assemblage of rare plants and animals, including several globally rare animal species such as the Indiana bat, the pugnose shiner minnow, and the poweshiek skipperling butterfly. Additionally, the wetlands at the lower end of the river have one of the best populations of the Eastern fox snake in the Great Lakes region. These wetlands also provide significant habitat for migrating waterfowl and shorebirds on their way to the Shiawassee National Wildlife Refuge and the Saginaw Bay.

An Ecologic and Economic Resource

But did you know that the Shiawassee River is also a great recreational resource for our community? In addition to recreational opportunities at a number of County Parks and along the James Miner Trail in Owosso and Corunna, the Shiawassee is a fantastic river to canoe or fish. As the river winds across the landscape from Livingston and Oakland Counties into Shiawassee, it passes through pristine woodlots, like that at the YMCA Camp near Bancroft, historical features, such as Knagg's Bridge, and serene landscapes. Follow the River north through the county and stop and visit the Cities of Corunna, Owosso, or Henderson.

Though the River is an excellent resource for our community and for visitors to our community, many are unaware that such a valuable recreational feature exists so close to home. Through the Shiawassee River Recreation Initiative, the FOSR will be working with the Cities of Owosso and Corunna and Shiawassee County to improve access to the river at several locations and also to increase knowledge, awareness and appreciation for the River.



Enjoy beautiful scenery while paddling along the Shiawassee. Photo by: M. D-L Jordan.

Did you know that the Shiawassee River is also a great recreational resource for our community?

Canoe Guide Available

Find out more about canoeing the River by downloading a copy of our canoe guide at www.shiawasseeiver.org. The guide includes details on eight suggested trips in Shiawassee County and places to take in or take out from Byron to Parshallsburg (near Ditch Rd., Oakley).

Or, find out more about canoeing opportunities upstream along the Shiawassee River Heritage Water Trail at www.headwaterstrailsinc.org/shiawassee_river_trail.htm.

Did you know that your **Friends of the Shiawassee River** membership is tax-deductable?

Help support conservation locally by becoming a member today!

Members will receive a reusable grocery bag, courtesy of Meijer!

The Friends of the Shiawassee River are a non-profit 501c3 organization dedicated to protecting the integrity of the Shiawassee River for all to enjoy. Please see page 6 for a membership application.

Thank you to all of our members!

Friend

Dr. Timothy Atkinson
Henry & Heather Barta
Marie Bennett
Andrea Berry
Jackie & Michael Bruff
C. Randel & Virginia Burns
M. June Caponi
Dan & Sue Comrie
Rodger & Reta DeVore
Norman DeWeese
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John & Joann Hannah
Melissa Higbee
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Bill & Grace Burk
Bruce & Jackie Cook
Tom Cook & Anna Owens
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DeVries Nature Conservancy
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Michael & Ruth Goergen
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James and Sandra Miner
Dr. James & Nancy Park
Robert Roty, M.D.
Paul & Cindy Schluckebier
Marvin & Marcia Schultz
Clark & Joann Shanahan
Kevin & Mary Smith
David & Elizabeth Talbert
Tina & Jeff Tuller
Jeff Voight
Jerry & Connie Voight
Alan & Joy Welty

The Friends of the Shiawassee River regret any errors reported or missing from our membership list. Please promptly notify us of any omissions or corrections!

YEAR IN FRIENDS REVIEW

Thank you to all of our volunteers and supporters that have donated their time and talents to protecting our freshwater! Through your dedication and support in the last year, the Friends of the Shiawassee River have expanded their activities to include the Annual Shiawassee River Cleanup, several Garlic Mustard Workdays, Shiawassee Stream Team sampling and Spring River Stewardship Day! We're fortunate to work with a number of area partners like DeVries Nature Conservancy, the Shiawassee Conservation District, Shiawassee County Environmental Health and Natural Resources Conservation Services to help ensure our freshwater resources will stay healthy and viable for future generations.

Thank you!!

2008 Summary of Activity

Total Volunteer hours	1103
River Cleanup/Stewardship Day	704
Invasive Species removal	169
Shiawassee Stream Team	230
Pounds of Garlic Mustard removed	300
Yards of debris removed	20



Shiawassee Stream Team members relax in the sun while collecting insects. Photo by H. Frei.

FY 08 Opening Balance	\$24,514.81
Earnings	\$3,706.71
FY 08 Net Income	\$6,256.55
FY 08 Ending Balance	\$34,478.07
Income	
Contributions	\$10,850.00
Earned Revenues	\$13.00
Special Events	\$3,874.00
Total Income	\$14,737.00
Expenses	
Grants paid out	\$1,200.00
Travel & supplies	\$6,338.98
Business expenses	\$770.00
Misc. expenses	\$171.47
Total Expenditures	\$8,480.45
Net Income	\$6,256.55



A dedicated crew from Owosso Middle School lend a hand. FOSR Archives.

Major Sponsors and Funders

The Nature Conservancy
 The Great Lakes Commission
 Michigan Clean Water Corps
 Meijer Stores
 Wachovia Securities
 Main Beverage Company
 The Wrought Iron Grill
 Chemical Bank
 Shiawassee Conservation District
 Waste Management
 Mancino's Restaurant
 Shiawassee County Environmental Health



Servers at the Annual Wine Tasting Fundraiser prove volunteering really is a good time. FOSR Archives.

Stream Monitoring in Livingston County

by Matt Bolang, Environmental Specialist, Livingston County Drain Commissioner's Office
and Livingston County Department of Public Health

Hello Friends of the Shiawassee! As many of you read in the Spring edition, our office received a volunteer stream monitoring grant working in partnership with The Nature Conservancy and the Friends of the Shiawassee. At that time, I was working full time for the Livingston County Health Department and had limited involvement working with macroinvertebrates. Who knew, that in a few short months, I would be knee (waist, or chest) deep in stream monitoring. Part of this effort includes establishing baseline data for our surface waters to measure potential impact of different land use practices. So, naturally, this stream monitoring program fits right in.

Watersheds

Livingston County has three major watersheds that drain the county to three different Great Lakes. The Huron River watershed encompasses many communities in the southeastern part of our county, including Hartland, Brighton, Hamburg, and Pinckney. This area eventually drains to Lake Erie. The Red Cedar River watershed begins its headwaters in Marion Township (just south of Howell), and flows west toward Lansing and joins the Grand River, which drains to Lake Michigan. We also have a very small piece of The Looking Glass River, which flows up to Shiawassee County. Then there is the Shiawassee River watershed, which

makes up a large part of the northern part of our county, including Howell, Cohoctah, Deerfield, and northern Hartland, and drains to Lake Huron.

Sampling

We have initially chosen five sites to monitor in Livingston County. One of the sites is located on Hartland Schools property, which we sampled on October 29th. I had 45 high school students in North Ore Creek for over an hour in 35° F weather. It was a blast, and we collected a good assortment of bugs. Then on November 1st the other 4 sites collected. We had a real good turnout of volunteers and the weather was remarkable for early November. Lots of bugs were collected with only one volunteer casualty (one volunteer found a deep hole in the South Branch Shiawassee and got a little wet). By about 12:30pm all volunteers had completed sampling and everyone had a great time!

Bug ID

We completed initial bug identification efforts on November 19th. About 10 volunteers looked through our earlier catch and categorized the bugs into groups that have varying tolerance to



A happy student from Hartland High School looks for macroinvertebrates in the creek. Photo: M. Bolang.

contamination.

Volunteers then completed data sheets, based upon the bugs they identified, that eventually lead to a stream "score". Livingston County sites scored primarily in the "good" range.

I am excited to be involved with The Friends of the Shiawassee and I look forward to collaborating for years to come.

Goals of the Friends of the Shiawassee River

Care for the River

Maintain and improve the River's water quality, habitats, and natural banks.

Enjoy the River

Increase recreational access and responsible use of the river for anglers, canoeists, walkway users, park visitors, and others who enjoy the River.

Share the River

Enhance the community's appreciation and knowledge of the River, especially among our youth.

Become a 'Friend' of the River on page 6. For more information about the Friends of the Shiawassee River and membership, contact Heidi Frei at 989.723.9062 or shiawassee_mi@tnc.org.

Friends of the Shiawassee River Board Members

Andrea Berry, Chair
Phil Hathaway, Vice-Chair
Ken Algozin, Treasurer
Tom Cook, Secretary

Mike Beaulac
Kit Kuhlman
Melissa Higbee
Lance Little
Gary Burk
Gene Paez
Kevin Smith
Vacant

membership

Do *your* part to help protect our freshwater!

Just 3 percent of the world's water exists as fresh water-
2 percent is locked in the polar ice caps,
less than 1 percent resides in freshwater lakes and streams.

You can help protect the Shiawassee River by becoming a member today!

Your membership supports the Friends' programs, including River Cleanups and educational events.



Membership Levels

- _____ \$15 Friend
- _____ \$30 Supporter
- _____ \$50 Benefactor
- _____ \$100 Blue Heron

Please make check payable & mail to:
Friends of the Shiawassee ·
P.O. Box 402 · Owosso, MI 48867

Name _____
Address _____
City/ST/Zip _____
Phone _____
Email _____

The **mission** of The Nature Conservancy is **to preserve** the plants, animals and natural communities that represent **the diversity of life on Earth** by protecting the lands and waters they need to survive.

The Conservancy and its 1 million members worldwide have protected more than 117 million acres on Earth. The Nature Conservancy embraces a **non-confrontational, market-based** approach for accomplishing its **science-driven** mission.

For more information, visit <http://nature.org/michigan>.

This publication produced by Friends of the Shiawassee River volunteers.



Friends of the Shiawassee River

The Friends is a nonprofit volunteer organization in Shiawassee County, MI.

Friends of the Shiawassee River
c/o The Nature Conservancy in Michigan
Shiawassee River Program Office
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Owosso, MI 48867

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