

RiverCurrents

The Voice of the St. Joseph River Watershed

SPRING 2012

A Quarterly Publication of the
Friends of the St. Joe River Association, Inc.

Waterfront Wise

Contributing to the Health of Your Local Waterway

The health of our waterways is declining due to polluted runoff from homes and lawns. What we do in our own yards can affect the health of local waterways and Lake Michigan. While some people live next to a stream or lake, almost everybody lives within a half-mile of a storm drain, ditch, stream, river or lake. Most of those waterways eventually drain into the St. Joseph River and Lake Michigan. We all need to do our part to take care of our waterways. By changing a few simple practices, you and your family can help keep our water healthy.

POLLUTED RUNOFF

The number one problem for our streams, rivers and lakes is polluted runoff. When it rains or the snow melts, the water runs off streets, driveways, rooftops and lawns, and picks up various pollutants like oils, greases, nutrients, fertilizers and sediment. Impervious surfaces speed up the flow of runoff from the landscape and prevent water from soaking into the ground where it can be naturally cleansed by the soil.

Pollutants can also reach our waterways through soil erosion because many chemicals attach themselves to soil particles. The runoff carries the soil particles to the nearest drainage system (i.e. ditches, stormwater pipes, detention ponds, etc.), or natural waterbody (i.e. stream, river, lake or wetland). Either way, soil erosion can lead to more than just sediment polluting the water.

GETTING WATERFRONT-WISE

Start by recognizing that our actions on land impact water quality, especially if we live along the water's edge. We can all make a difference by adopting these simple clean water practices, including:

- Do not fertilize, but if you must, use a phosphorus-free fertilizer and don't over-fertilize (test your soil to see what is needed).
- Recycle grass clippings by allowing them to remain on the lawn or use them in a compost pile.

- Minimize polluted runoff from your property by directing downspouts to planted areas where the water can soak in or by using bricks or paving stones set in sand for walkways, patios and driveways.
- Limit lawn watering to reduce polluted runoff and conserve water by only watering in the morning.
- Have your septic system professionally inspected and pumped every three years.
- Incorporate more native plants in your landscaping because they are better suited to the site and will require minimal amounts of water, fertilizer and pesticides.
- Never dump anything down a storm drain.

WATER-FRIENDLY ACTIVITIES FOR PROPERTY OWNERS

As mentioned, human activities anywhere in a watershed can pollute our lakes and streams; however, waterfront properties can be the most critical because of the direct connection between the land and water. There are additional actions to those listed above that waterfront property owners can do to protect water resources, including:

- Establish a border of low maintenance vegetation along the shoreline to filter sediment, absorb nutrients, slow runoff and provide wildlife habitat.
- Never fertilize within 25 feet of the shoreline.
- Keep grass clippings, other yard waste and animal waste away from stream banks, waterways or the water's edge.
- Fix all leaks from motorized watercrafts.



About us

The Friends of the St. Joe River Association, Inc. (FotSJR) was established in April of 1994, and operates as a 501(c)(3) not-for-profit organization.

Mission

To unite a diverse group of stakeholders throughout the watershed in a collaborative effort to protect, restore and foster stewardship of the St. Joseph River Watershed.

Become a Friend

Join a group of stewards restoring and protecting this natural resource. We offer a variety of tax-deductible membership levels for both Personal and Business contributors.

Meetings

Monthly meetings of the Board of Directors and Watershed Council are usually held on the fourth Thursday of the month at the Three Rivers (Michigan) Public Library at 1:00 p.m. EDT. These meetings are open to the public. For more information and to verify dates and times, visit www.fotsjr.org.

"Shoring Up!" Water Quality Begins at the Shoreline with Native Plants

Shorelines are the last line of defense against the forces that may otherwise destroy a healthy waterbody.

Shorelines which incorporate native plants, trees, shrubs and grasses, filter runoff generated by surrounding land uses, removing harmful chemicals and nutrients. At the same time, natural shoreline vegetation protects the water's edge from erosion. The shoreline also provides critical habitat for aquatic insects, microorganisms, fish and other animals.



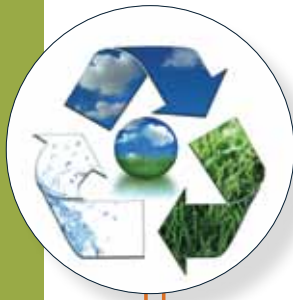
Naturally Vegetated Shoreline

Native plants have adapted to the geography, hydrology and climate of the St. Joseph River Watershed over thousands of years. Using native plants as much as possible along a shoreline eliminates the need for fertilizer and pesticides whose excessive use can be a source of polluted runoff or non-point source pollution. Many native plants have low water and maintenance requirements, virtually eliminating the need for watering and wasting of precious resources.

Once established these types of plants require little care and input in your own yard. The benefits of native plants include:

- Deep roots decrease soil compaction and increase water infiltration.
- Fertilizers, pesticides and mowing are unnecessary in most cases.
- Taller plants and deep roots filter out pollutants.
- Native plants add beauty, habitat, food and cover.

For more information and tips on how to beautify your shoreline the natural way, visit <http://water.epa.gov/type/lakes/lakestipsfull.cfm>.



Get Into the Recycle of Things

Properly Disposing of Household Hazardous Waste for a Healthy Watershed

Many of us may use a variety of household products that are potentially hazardous. In fact, the average home can collect as much as 100 pounds of household hazardous waste. Many cleaning products, solvents, batteries and pesticides contain moderately to highly toxic chemicals. The dangers of improper use, storage and disposal of these hazardous products are an issue of growing concern. Yet, many communities in the St. Joseph River Watershed offer a variety of free to low-cost options for conveniently and safely managing such wastes.

What is Household Hazardous Waste?

Household Hazardous Waste (HHW) involves any substance that is corrosive, explosive, flammable, or contains toxic chemicals or any other potentially harmful materials. Unlike most hazardous wastes, which are by-products of industrial and commercial operations, many household products contain only small amounts of toxic substances. Motor oil, pesticides, adhesives, discarded paint cans, mothballs, weed-killers, medicine and household cleaners may seem like everyday items, but they can become hazardous waste when improperly disposed. Improper disposal of HHW can include pouring them down the drain, on the ground, into storm sewers, or in some cases putting them out with the trash. The dangers of such disposal methods might not be immediately obvious, but improper disposal of these wastes can pollute the environment and pose a threat to our drinking water.

Prevention Begins at Home

To avoid the potential risks associated with household hazardous wastes, it is important to monitor the use, storage, and disposal of products with potentially hazardous substances in the home. The following are some tips for individuals to follow in their own homes:

- Use and store products containing hazardous substances carefully.

- Never store hazardous products in food containers; keep them in their original containers and never remove labels.
- When leftovers remain, never mix HHW with other products. Incompatible products might react, ignite, or explode, and contaminated HHW might become unrecyclable.
- Remember to follow any instructions for use and disposal provided on product labels.
- Call your local environmental, health, conservation district or solid waste agency for instructions on proper use and disposal, and to learn about local HHW drop off programs and upcoming collection days.

Benefits of Proper HHW Management

Reduction and recycling of HHW conserves resources and energy that would be expended in the production of more products. Reuse of hazardous household products can save money and reduce the need for generating more hazardous substances. Proper disposal prevents pollution that could endanger human and animal health, water quality and the environment.

Alternatives to HHW

With a little extra effort, you can reduce your HHW footprint through alternative household maintenance methods:

- Use water-based or latex adhesives.
- Choose rechargeable batteries (removable, so they can be recycled) and mercury-free batteries when possible.
- Choose soap- or detergent-based cleaners when possible. Avoid non-water soluble and corrosive cleaners when others offer an effective substitute.
- Look for ways to reduce your need for household pesticides products through organic gardening and hand-pulling weeds. Many native plants and herbs repel insects, slugs and aphids, and require minimal watering and maintenance.

"Fen-tastic!"

Wetland Restoration Projects Improve Rare Butterfly Habitat

Two restoration projects in Southwest Michigan are rejuvenating wetland habitats as a hospitable home for endangered species, including one of the world's rarest butterflies.

The projects, which began in 2003, were a joint effort of the Michigan Department of Transportation, U.S. Fish and Wildlife Service, Michigan Department of Natural Resources and The Nature Conservancy to preserve and improve the Blue Creek Fen in Berrien County and the Paw Paw Prairie Fen in Van Buren County, both in the Paw Paw River Watershed, which is part of the St. Joseph River Watershed. The work included removal of invasive plants with herbicides and the prescribed burning of encroaching shrubs and trees. Both projects were honored in 2011 with an *Exemplary Ecosystem Initiative* award from the Federal Highway Administration.

The Blue Creek Fen is one of the last remaining habitats for the Mitchell's satyr butterfly, according to state officials. The chocolate brown, medium-sized butterflies are found in less than 20 fens in southern Michigan and northern Indiana. Prairie fens are also home to two other rare species, the Eastern massasauga rattlesnake and Eastern box turtle.

"Fen-Tastic" Wetland Habitats!

Prairie fens are globally rare wetlands dominated by sedges and grasses. They are a unique type of peat dominated wetland with a continuous supply of cold groundwater coming from springs and seeps which supply nutrients and create an environment that is less acidic than other wetlands. In addition to being incredibly rich in biological diversity, prairie fens form the headwaters of many rivers and lakes. Like many wetlands, prairie fens deliver important ecological services: providing clean water for streams and lakes, storing

and slowly releasing storm and floodwaters, and serving as habitat for a wide-range of plants and animals.

The rare species that inhabit prairie fens are declining due to several factors related to habitat loss:

1. Alteration of hydrology from surrounding development or agriculture.
2. Invasion of aggressive native and non-native plants.
3. Suppression of natural disturbance events such as fire and possibly beaver activity.

Conservation organizations are continually working to restore these unique habitats and give the endangered species that inhabit them a chance at survival by restoring hydrology, conducting prescribed burns, cutting back shrubs and removing invasive species.



Prairie Blazing Star (Liatris pycnostachya) in bloom at Paw Paw Prairie Fen

Learn More!

The Friends of the St. Joe River, along with several partners, are half-way through the three-year Wetland Partnership Project funded through the USEPA. This project will support the efforts of organizations working to protect and restore these important habitats. For more information about this project, visit <http://www.fotsjr.org/WetlandPartnership>.

5th Annual SJR Watershed Council Meeting Explores "Marshy, Mucky & Ducky Places"

The FotSJR hosted the 5th Annual Meeting of the St. Joseph River Watershed Council on Monday, March 26, 2012 at the Sturges-Young Auditorium in Sturgis, Michigan. Over 100 attendees heard guest speaker Tom Springer, author and senior editor at the W.K. Kellogg Foundation, present "It's a Swamp Thing: How to Help the Public Care About Marshy, Mucky and Ducky Places." Tom provided some lively and powerful reasons we can all fall in love with buggy, snake-infested, boot-sucking swamps. Mr. Springer shared his own humorous childhood experiences of exploring the St. Joseph River Watershed. He also shared stories about how life and land can intersect creating a deeper appreciation of the natural communities surrounding us.

Back for a second year at the annual meeting was the silent auction. The FotSJR appreciates all the wonderful items donated for the auction, which raised nearly \$2,000 to help fund future programs in the watershed. The FotSJR Board would also like to thank this year's annual meeting sponsors: Indiana Michigan Power, Grubb & Ellis|Cressy & Everett, Pheasants Forever (Chapter 592) and the Southwest Michigan Land Conservancy. Their generous support was greatly appreciated and contributed to the success of the annual meeting.

FotSJR Welcomes New Board Members; Bids Farewell to Longtime Secretary

Prior to the 5th Annual St. Joseph River Watershed Council Meeting, the FotSJR Board held their annual business meeting. Officers were elected including: Matt Meersman (President), Maria Mast (Vice-President), Danielle Meersman (Treasurer) and Melanie Stoughton (Secretary). Rudy Kappe and Eric Kerney were reelected to serve the Board for another three-year term, and Rachel Smith was elected as a new Board member. Dona Hunter, former Secretary for the FotSJR, opted to not serve another term on the Board as she retired from the LaGrange County Soil and Water Conservation District. Dona has been an integral part of the FotSJR for many years and will be greatly missed. We wish Dona and her family much love and success on this new chapter in her life.

Creature Feature

Mitchell's Satyr (*Neonympha mitchellii mitchellii*)

The beautiful, chocolate-brown Mitchell's Satyr butterfly are found in less than 20 fens in southern Michigan and northern Indiana. The Mitchell's Satyr has a wingspan of up to 1.75 inches and is distinguished by rows of four to five, orange-ringed, black circular eyespots on each of its wings. Mitchell's satyr adult butterflies typically fly between the third week of June to third week of July. The biggest threat to the continued survival of this species is habitat loss and modification. Satyrs need a special kind of wetland habitat found in prairie fens. Other threats include contamination by pesticides, fertilizer and nutrient runoff from adjacent agriculture.

Conservation Status: Endangered



Photo courtesy of John B.1, Flickr

FlowFacts

The way a river responds to rainfall and snowmelt is an important indicator of watershed health. A stream rising slowly after a storm generally has a healthier watershed than one rising quickly. The USGS continuously monitors streamflow (or discharge) in the St. Joseph River Basin at 12 separate gauging stations. Real-time stream flow data from each gauging station is available through the USGS web site below.

FlowFacts from the USGS gauging station at Elkhart, Indiana.

Period of Record August 1947 to present:

- Drainage Area: 3,370 square miles (72% of SJRW)
- Average Summer Flow: 3,445 cfs* (June, July, August)
- 2010 Peak Flow: 9,210 cfs* (May 22)
- Maximum Flow on Record: 18,800 cfs (February 27, 1985)

*cfs = cubic feet per second

FlowFactoid

9,210 cfs would fill Notre Dame Stadium in about **37** minutes, but 18,800 cfs would fill Notre Dame Stadium in about **18** minutes!

Visit <http://waterwatch.usgs.gov> to find a gauging station nearest you and watch the **flow** of the Joe!

FotSJR Names 2012 Al Smith Watershed Stewardship Award Winner

Bob Owens was awarded the Al Smith Watershed Stewardship Award, an award honoring individuals who display a passion for the health of the St. Joseph River Watershed. Bob is a true champion of the St. Joseph River and has actively supported the FotSJR since the organization was founded. Bob has been a lead organizer of one of the largest river clean-up events on the St. Joseph River for 17 years, and he promotes the FotSJR at the event and encourages clean-up participants to join as members.

Bob has paddled the entire length of the St. Joseph River (210 miles) several times. He shares stories with and about the people he meets along the way. It is obvious they learn as much from him as he does from them. Although his navigation of the entire main branch of the river is impressive, his ultimate goal is even more impressive. He is determined to paddle every mile of every navigable tributary of the St. Joseph River. For Bob, a navigable stream simply means there is enough water to float a canoe, never mind the brush and tree fall that blocks passage around every bend.



Bob Owens (L) with Matt Meersman (R)

At almost 80 years old, Bob is still working on his goal. His knowledge of the entire St. Joseph River Watershed is amazing and he enjoys sharing it with others. He was there beside Al and Margaret in the beginning and he is still there today, cleaning up the river and helping others appreciate the truly wonderful water resources in the St. Joseph River Watershed.

For more information on the award and the nomination process for next year, visit <http://www.fotsjr.org/StewardshipAward>.



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Support the Friends

The Friends of the St. Joe River are working with individuals and partner organizations to implement important restoration and protection projects throughout the watershed.

Pledge your support for our efforts by making a tax-deductible donation. Your support and generosity will help us improve and protect the quality of the water and other natural resources we depend on. Visit www.fotsjr.org for more information.