



# Marion County Soil & Water Conservation District

## Conservation in the Neighborhood

Summer, 2013

Indianapolis, Indiana

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The Marion  
County Soil  
and Water  
Conservation  
District works to  
provide technical,  
financial, and  
educational  
services to help  
Marion County  
land users  
conserve soil,  
water, and related  
natural resources.

## Know Your Soil

### *Why soils information is important*

Soil affects our lives everyday whether we recognize it or not. It is the basis for plant & animal life, our food chain, energy and minerals. It sometimes also can cause problems such as potholes in our streets, mildew, excessive populations of mosquitoes, and standing water in our yards.

Learn what type of soils you have in your neighborhood by looking it up on with the web soil survey: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

Have a soil test done to determine if adjustments to pH or if any fertilization is needed. Check our website for information on how to take a soil sample and where to send it to be analyzed: <http://marionswcd.org/soil/nutrient-management-and-soil-testing/>

Armed with your soils information and looking at the topography of your lot, you can use it to help you make many decisions:

- ◆ What land type uses are best suited to my soil type?
- ◆ What type of trees, shrubs and plants will grow well in my yard?
- ◆ Can I expect a great garden out of this soil?
- ◆ Why are there so many potholes in my neighborhood and what can be done to stop them from forming?
- ◆ Why does water stand in my back yard for three or more days after a rain?  
How can I get it to drain to get rid of these mosquitoes?

Check out your soil type –  
live WITH you land!

### **Sign Up for IUPUI's Soils Class to Learn More!**

IUPUI is providing an excellent soils course this fall semester beginning on Wednesday, August 21st. Class will meet each Wednesday from 4:00 to 6:40 p.m. in Cavanaugh Hall.

Two classes are available: G404 offers 3 credit hours for undergraduates and G704 offers 3 graduate credits. Both classes will participate in four field trips to give you "hands-on" experience in the field.

To view options and be admitted to the register at IUPUI, contact the Admissions Center at [enroll.iupui.edu/admissions](http://enroll.iupui.edu/admissions) or phone 317-274-4591.

For further course information contact Dr. Rick Bein at 317-274-8877 or email him at [rbein@iupui.edu](mailto:rbein@iupui.edu)

# Soil Health

It's time to investigate your SOIL. The newest trend for production agriculture is emphasis on improving the health of their soil. But soil health is just as important in town – for our lawns, flowers and vegetable gardens. Healthy soil creates healthy plants.

“It doesn't matter what kind of landowner you are, a small farmer, large farmer, organic grower or even homeowners and gardeners. You can easily examine your soils. Take a quick look and you can learn a lot,” says Indiana's Soil Health Specialist Barry Fisher.



**LOOK**—Look for plant residue on the soil surface and a living canopy or cover. The soil structure should look like chocolate cake with air holes permeating throughout. You should see organic matter and live roots that extend way down. And of course, you should see earthworms—our wonderful soil engineers!

**SMELL**—Healthy soil should have the aroma of geosmin, which is a byproduct of soil microbes called actinomycetes. Geosmin has a sweet, earthy aroma like nothing else.

**TOUCH**—Soil should be loose and crumble easily. In healthy soil, roots can grow straight and deep, allowing plants to reach nutrients and water they need to produce the food we love to eat.

Why should we care about soil health? Fisher explains that healthy soil is important for agriculture and our state's ability to feed the nation, but it actually has a direct impact on many larger issues that affect life as we know it.

Soil health can improve and regulate water, sustain plant and animal life, filter potential pollutants, cycle nutrients, and support building and structures. Healthy soils hold more water, which can reduce flooding and help with drought. Healthy soils also resist runoff and erosion; they suppress weeds and pests naturally, and sustain our precious natural resources.

Simply put, healthy soils are productive soils and they are important to every one of us. Grab a spade and dig a little. You can learn a lot! Visit <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/>.

## Thank You Affiliate Members!

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Marion County Farm Bureau

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Professor Frederick Bein  
George Haerle in honor of Eli Bloom

### **Copper Members**

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Affiliate Member***

**Contact the SWCD  
office at  
317-786-1776  
or check out more  
information at our  
website:**

**[www.marionswcd.org](http://www.marionswcd.org)**

# Geist Water Quality and You: Make A Difference!

**G**eist Reservoir is one of Indianapolis's three main sources of drinking water. The water quality issues we deal with today are not just a few people's problems or those who live directly on Geist, but rather *everyone* who lives in this community.

Do you know where rain water goes once it runs off your roof, through your downspouts and out of your yard? Much of it ends up in the storm drain which dumps into the nearest stream, river, pond, or lake without being filtered or treated. If you live along Geist, your storm water runoff probably runs directly into the reservoir. This is a problem because the water could be carrying a lot of pollutants with it.

"Water is a precious resource and meets one of our most basic needs," says Leslie White, Fall Creek Watershed Partnership coordinator. "What each of us does to protect, conserve or contaminate water upstream, downstream and around the globe eventually comes full circle to affect us all. Take advantage of the Marion County Soil and Water Conservation District and the Fall Creek Watershed Partnership staff's expertise and resources. We offer educational, technical and some financial assistance to help you put projects in place for cleaner water, healthy soil and natural resources."

In addition to reducing local water pollution, these following conservation practices can help reduce maintenance for the landowner while increasing the value of the given property:

- Filter strips or buffers (native vegetation planted along bodies of water)

- Vegetative streambank stabilization (stopping erosion using natural materials and plants)
- Rain gardens (flowerbeds that are planted in a slight depression and capture rain water runoff from rooftops, patios, driveways, or sidewalks)
- Bioswales (similar to rain gardens but linear in shape)
- Native tree/shrub plantings (planting native species which provide more of an environmental benefit than typical ornamental species)
- Green roofs (installing plants on rooftops)
- Pervious pavers (concrete or individual pavers that have pore space through which water can infiltrate)
- Rain barrels (barrels or other systems to capture and store rain water)
- Wildlife habitat plantings (butterfly gardens, prairie plantings...)
- Phosphorous-free lawn fertilizers (fertilizers without the nutrient phosphorous which most established lawns don't need anyway) Remember, the first number on the bag of fertilizer represents Nitrogen, the second, Phosphorous, the third, Potash. You always want the middle number to be "0" such as 28-0-3.

"Some people might ask, 'Why do I need to use phosphorous-free fertilizer,'" says Scott Rodgers, Vice President and founding board member of Geist Lake Coalition. "Geist represents two main resources. First it's a metropolitan drinking water reservoir, and secondly, it's a public recreational asset for boating, swimming and fishing. Phosphorous

and sedimentation from erosion plus other nutrients clearly adds to our algae problems in Geist. The health of this lake not only impacts community property values but also affects nearby businesses and a whole array of stakeholders."

For help & financial assistance contact:

Fall Creek Watershed Partnership (FCWP) – This Clean Water Indiana grant-supported program offers 50% reimbursable funding with 50% match (in-kind and/or cash) required. Maximum request is \$2,000 per landowner applicant with the exception of bundled individual projects that demonstrate broad community initiative and impact. Next deadlines are June and August of 2013. [www.hamiltonswcd.org](http://www.hamiltonswcd.org)  
Contact: Leslie White, Fall Creek Watershed Partnership Coordinator

Upper White River Watershed Alliance (UWRWA) – Critical areas in need of conservation practices are eligible for cost-share assistance. This IDEM 319 Clean Water grant-supported program offers 75% reimbursable funding with 25% match (in-kind and/or cash) required. Deadlines are May 31 and September 30, 2013. [www.uwrwa.org](http://www.uwrwa.org)  
Contact: Michelle Kearns, Upper White River Watershed Alliance Coordinator [michelle@uwrwa.org](mailto:michelle@uwrwa.org)  
Ph: 937-475-3750

Visit **At Geist Magazine** at [http://issuu.com/tombritt/docs/geist\\_june2013/1](http://issuu.com/tombritt/docs/geist_june2013/1) for the full article by Janet Streibel.

# Native Plants Crucial for Songbirds

Have you noticed fewer insects smashed on your windshield these days? Song birds are noticing this as well. Experts estimate that half of all the birds threatened with extinction (510 species) are because of invasive plants. These plants, such as Asian Bush Honeysuckle, Multiflora Rose and Garlic Mustard, affect birds in many negative ways.

First of all they replace native plants that are needed by birds for shelter, food and nesting places. Several of the invasive plants like Asian Bush Honeysuckle and Multiflora Rose produce food of inferior nutritive quality. Birds need high levels of protein and fat. Most invasive plant fruit is high in carbohydrate and low in protein and fat. Native shrubs like the dogwoods, spicebush and serviceberry produce the high quality food needed by birds.

The second major problem with invasive plants that impacts bird life is that insects find many of the invasive plants unpalatable and even worse, many are toxic to insects. This leads to fewer insects and less food for the birds (as well as fewer bugs on the windshield). Fewer insects can also lead to fewer birds.

Birds require insects, spiders and insect larvae (caterpillars, etc.) as a food source for the high quality protein they need for producing hatchable eggs in the spring and summer. That same high quality protein and fat provide the young hatchlings the food needed for a quick and strong start to life.

Another disturbing fact is studies have shown that predation of certain species of birds, like Wood Thrushes and the American Robin increases when they nest in shrubs like the bush honeysuckles as opposed to nesting in native shrubs. Without doubt the loss of native plant habitat is the single most important cause of the decline of bird species. You can bring back some of the necessary habitat in your yard by planting native shrubs and trees. Many birds never visit feeders and those that do get only a small portion of their nutrition from feeder food. Native plants in the landscape help bring back species that are attractive to birds, especially butterflies, moths, beetles and the plants themselves.

You can purchase native trees and shrubs at the Marion County SWCD Fall tree sale. Watch our website - [www.marionswcd.org](http://www.marionswcd.org) - for ordering information!



## SWCD Fall Tree and Shrub Sale

**Watch for the order form in our next newsletter. Orders will be taken in September and early October. Pick up will be at the State Fairgrounds.**

# Pathway to Water Quality - Celebrating 20 Years

Volunteers at the Pathway to Water Quality exhibit have been teaching Indiana State Fair visitors about watersheds and conservation for 20 years! The Marion County SWCD was an active partner, heavily involved in the creation of Pathway to Water Quality back in 1993. A multitude of SWCD and other conservation partnership employees from across the state have worked throughout the years to guide state fair goers around the exhibit.

Less than 1 percent of water on earth is fresh water. The average person in the U.S. uses 70 gallons of water every day. So water is very important to all of us. Pathway was created to help the public appreciate and protect Indiana's waters.



Volunteers at the Pathway to Water Quality exhibit educate visitors about water conservation practices and how they can make a difference at home. "A lot of these practices are things people can do in

their own backyard and land, and it can really make a difference for water quality," said Becky Fletcher, public affairs specialist at the Natural Resources Conservation Service.

Examples include not washing cars in the driveway, which can cause oils from the car to reach water bodies. Fletcher also suggested using a rain barrel to catch water that can be used to water plants.

"We recognize that Pathway gets about 50,000 people who walk through here during the fair, and most of those people live in an urban or suburban environment," she said. "So we want to share as many conservation practices that they can use to take home as we can. We also want to show them what farmers are doing to keep sediments from running off of the land and into the water."

The Pathway to Water Quality exhibit was created out of a parking lot in 1993.

It has grown into a beautiful park-like setting over the 20 years. It is a model watershed, so we educate people on what a watershed is. We teach conservation practices, games and activities during the three weeks



*Opening day at Pathway - 1993*

of the Indiana State Fair.

The exhibit provides shade from the hot August sun and also offers guests free water. Around 220 people volunteer from eight different organizations to staff the display during the fair.

To honor the tradition, leaders of the Indiana Conservation Partners announced plans to update the front pond. Invasive plant species will be removed, the pond will be drained and restored and new plants will be added to the habitat.

We always hear people say they didn't know Pathway was here, so in some ways it's still one of the best-kept secrets of the fair.

**Save natural resources by having this newsletter emailed to you! Contact Marilyn at our office to make the switch: [marilyn-hughes@iaswed.org](mailto:marilyn-hughes@iaswed.org)**

**From a parking lot to a piece of the country and nature - Pathway to Water Quality brought watershed education to Indiana. Visit it this summer during the State Fair Aug. 2-18!**

# Cost Share Assistance Helps Turn Abandoned Lot into Valuable Rain Garden

A brown, abandoned lot on the near northside is becoming a valuable rain garden and urban greenspace thanks to the Fall Creek Watershed Partnership, Highland vicinity neighbors, the Children's Museum staff, Urban Patch, Fall Creek Gardens, Diversity Landscaping, Greencycle and the Indianapolis Department of Public Works. Funding for the project came through the Upper White River Watershed Alliance EPA 319 Clean Water grant.

Neighborhood projects such as these are invaluable to the community. They provide stormwater management, water quality improvements, increases in the neighborhood property values and beautification and enjoyment to the residents. Starting projects such as this one we hope will spur other homeowners and neighborhoods to do the same.

More information on watershed projects in our county, rain gardens, bioswales and other urban conservation projects can be found on our website:

[www.marionswcd.org](http://www.marionswcd.org)



*James Whitfield and Shawn Smith Sr. giving the thumbs up of approval for a rain garden installation and conservation practice well done! Finishing touches of mulch, pathway material and additional perimeter plantings are to be completed in phase II.*

## Marion County SWCD Rain Barrel Sale

*Conserve Water!*

Contact the office at  
317-786-1776 for details

[www.marionswcd.org](http://www.marionswcd.org)



Conservation in the Neighborhood is a semi-annual publication to give information to landusers by the Marion County Soil & Water Conservation District, Discovery Hall, 1202 E. 38th St, Suite 200, Indianapolis, IN 46205  
Phone: 317-786-1776 FAX: 317-786-1757  
website: [marionswcd.org](http://marionswcd.org)

# Heather Buck New SWCD Supervisor

The Marion County SWCD has appointed Heather Buck to complete the SWCD Supervisor term vacated by Marvin Brethauer. Heather has served as an associate supervisor for many years and we appreciate her experience and interest in soil and water.

Being born and raised in Celina, Ohio Heather grew up near crop and livestock farms, Grand Lake St. Marys, and several small towns. This environment created an appreciation for the outdoors, conservation, and the need to better understand the interactions between the individual parts of the larger ecosystem. She graduated from Ohio Northern University (Ada, Ohio) with a B. S. in Biology and Environmental Science, then received a Master of Science degree from the University of Findlay (Findlay, Ohio) in Environmental Safety and Health Management.

She began working in the natural resources field as a Watershed Coordinator for the Grand Lake St. Marys watershed in Mercer and Auglaize Counties in Ohio.

There she worked with local officials, urban and agricultural landowners, and schoolchildren making a positive impact throughout the watershed. After 6 years of working as a Watershed Coordinator, her family moved to Indianapolis where she now is a Resource Planner



at Christopher B. Burke Engineering, LLC. This position has afforded her the opportunity to continue to work with a wide variety of landowners, elected officials, and state representatives in the watershed realm. She also feels fortunate to work with these people in local natural hazard mitigation, stormwater management planning, water quality monitoring, and other important efforts to help us better understand the positive and negative impacts we all have on the larger environment.

She, her husband Keith, a Civil Engineer with Christopher B. Burke Engineering, LLC, and their 3 children; Caleb, Katie, and Brandt, reside in Franklin Township where their family is involved in the Franklin Township 4H club, Girl Scouts, and Boy Scouts. Aside from serving on the SWCD Board, she serves as the President of the Indiana Lakes Management Society Board and as an Area Representative for EnviroCert International's Certified MS4 Specialist program.

Buck shares, "I look forward to serving on the SWCD Board and I genuinely look forward meeting and working with others who share the same interest in forwarding the SWCD's mission of helping Marion County land users conserve soil, water, and related natural resources."

## **Best Wishes Marv!**

*After over 40 years with the Indianapolis International Airport, 6 years volunteering as our SWCD Associate Supervisor and 10 years as a Regular SWCD Supervisor, Marvin Brethauer is retiring.*

*The county has been privileged to have him working on many "green" projects in his role at the airport including habitat mitigation for the federally endangered Indiana Bat, managing airport owned farm ground and storm water. His volunteer activities include many education and outreach opportunities for scouting organizations, schools, and professional groups.*

*We wish Marv health and happiness in his retirement and thank him for all of his many years of service to the community.*

Marion County Soil & Water Conservation District  
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Marion County Soil & Water Conservation District

## Summer Lawn Care Tips - Naturally!

Summer is in full swing and so is our lawn care time and expense! The Marion County SWCD encourages residents to consider more natural lawn care techniques which are safer for children, pets and water quality. In the long run they will also be easier on your wallet.

The focus of good natural lawn care is on improving the health of the soil, which in turn improves the health of plants. Strong healthy plants are less susceptible to disease and insect damage, need less water because of deeper root systems and they look great!

Check the list at the right for what to do now for lawn care. Late summer and fall are ideal times to have your soil tested for what it needs to produce healthy plants.

\* Mow high to improve root structure and help crowd out weeds.

\* Irrigate in the early mornings, only as needed – provide a total of one inch of water, including any rainfall each week. Watering deeply once a week encourages root growth while frequent quick waterings will give you shallow rooted plants.

Choose natural, phosphorus free fertilizers for your fall application (zero will be the middle number). Phosphorus levels in the soil are usually stable and additional applications unnecessary. Phosphorus is a major water quality concern causing excessive algae growth.

For more information on how to have a healthy, natural lawn and garden check out our website: [www.marionswcd.org](http://www.marionswcd.org) and look at the “Lawn & Garden” page on the “Go Green” tab.

### *Lawn Care Check Lists:*

#### June & July

- 1) Hand-pull weeds or spot treat with herbicidal soaps
- 2) Irrigate as needed\*
- 3) Mow as needed\*
- 4) Monitor for insects in early summer - look for chinch bugs, billbugs and sod webworms

#### August & September

- 1) Hand-pull weeds or spot treat with herbicidal soaps
- 2) Irrigate as needed\*
- 3) Mow as needed\*
- 4) Monitor for grubs, chinch bugs & sod webworms
- 5) Fertilize in September according to soil tests with natural, phosphorus free mixtures
- 6) Renovate or overseed in early September if needed
- 7) Corn Gluten application if no seeding is being done.