Conservation in the Neighborhood

VOL. 36, NO. 4 AUTUMN, 2015

INSIDE THIS ISSUE:

SWCD's Fall Tree & Shrub Sale

Fall is the best time to plant trees and shrubs as it allows the plants to get established and begin growing during the most ideal times for growth – the fall and spring months. The Marion County SWCD is providing high quality trees and shrubs as a fund raiser for conservation work in our county. These trees and shrubs are superior young trees because of their known parent stock and the "Root Force System" of 3 step air root pruning which stimulates lateral root production. The Root Force System trees have such a well developed root system that they virtually begin growing as soon as they are planted. They are easy to plant, have a high survival rate and give quick results. Each tree comes in its own container. Newly planted trees need extra TLC – be sure to provide an inch of water for them every week if we don't have adequate precipitation.

Check our website (www.marionswcd.org) for more tips on caring for new trees the first year. Also check our website for a description of the trees available. The descriptions include whether the tree is best suited to full sun or partial shade, the type of soil it grows best in and the size the plant will be at maturity.

A Tree & Shrub order form can be found on pages 7-9 of this newsletter.

Order Deadline

September 1st

———————

Pick up Date

Saturday, October 17th

11 a.m. to 1 p.m.

PATHWAY TO WATER QUALITY

Visit the Pathway to Water Quality at the Indiana State Fair!

Want to Green Up? Plant a Tree!

By Blake Wilson, SWCD Board Supervisor

Joyce Kilmer, (Trees, 1913) wrote a poem that begins; "I think that I shall never see a poem lovely as a tree." Inspired by the beauty of trees, at the time he wrote this poem, he had no idea that a tree is not only beautiful but, also is Mother Nature's cure for a number of current environmental issues which plague society today, such as climate change and noise pollution.

Wikipedia defines a tree as "a perennial plant with an elongated stem or trunk, supporting branches and leaves." Most people would define a tree as tall and green with leaves that provide shade. While this is true, you might not know that some trees can live up to several thousand years and the tallest, a redwood, stands 379 feet high. Trees are technically grouped into two categories, evergreen or deciduous. Evergeens, such as the blue spruce, have foliage year round, while deciduous, such as the maple or oak, shed their leaves each year at the end of a growing season. Trees bring a natural beauty to any landscape, with their flowers, green foliage, fruits and nuts. They have become the main landscape feature in many urban settings.

Trees not only provide beauty and comfort to a community, they also provide an environmental function that most people do not realize. Trees can and do reduce air pollutants, noise, and soil erosion, filter rain water, and even reduce temperatures. City planners regard trees as an intricate part of their greenway and green initiative plan and design. Many communities have tree programs as part of their green initiative to help improve the environment in their local area. Two mature trees can provide enough oxygen for one person for a year and absorb up to 240 pounds of particulate pollutants each year. The leaves of a tree act like a filter and trap, hold, and settle out particles of dust and pollutants in the air. A tree can also absorb carbon dioxide, one of the greenhouse gases known for causing the climate change. An average size tree can store about 13 pounds of carbon each year. Trees can also reduce city hot zones, reduce wind speeds, provide conduits for storm water to recharge groundwater supplies, reduce a home owner's electric/gas bill, provide bank stabilization along water ways, act as noise barriers, block unsightly views, and make communities livable. Trees have proven to raise property values and speed up the sale of properties. Consumers tend to migrate to areas where trees are abundant and will have a higher willingness to spend more for goods and services where trees are present.

Trees create a visual impact in the environment. It has been proven that trees can create a sense of well-being in humans and reduce stress, even provide a healing effect in most people. Studies have shown that trees will even reduce violence in communities. They provide a good habitat for many wildlife species and reduce exposure to harmful UV-B rays from the sun. The one thing trees do very well is absorb carbon dioxide and release oxygen; this is good for any community.

If you are looking to landscape your lawn or green up your property, look to a tree but do your homework, know the tree you want to plant and always look for native trees in your area. Tree size does matter. Always ask the following questions when looking for that right tree for your site:

What size does it grow to?

How wide can it get?

Is it a deciduous or evergreen?

Does it have shallow or deep roots?

(Continued on page 3)

Support the Marion County SWCD by becoming an Affiliate Member. For information check our website: marionswcd.org or email marilyn-hughes@iaswcd.org

For more information on Tree Planting visit our website: www.marionswcd.org

(Continued from page 2)

Does the tree require well drained soil or a very wet type?

Does the tree require a lot of sun or shade?

Is the tree native to the area?

Does it attract certain wildlife?

Does it bear fruit?

Always study the type of tree you want. The last thing you want is to find out the tree you selected just two years earlier must be cut down because you did not look to see if it was the right fit for the location you planted it in.

Two good tree guides recommended by the Marion County Soil & Water Conservation District (MCSWCD) are "Trees of Indiana" by Charles Deam and "Your Yard Your Tree, A Homeowner's Guide" by Bob Eddleman and others. These guides explain the different native trees of Indiana, how to plant, and care for the tree you select. Another good source to obtain information about native trees is the Marion County Soil & Water Conservation District office. They will be very happy to provide you with information about planting, growing, and caring for your tree, and if you are looking for a tree now the MCSWCD can help you out with their fall tree sale. The current order form can be found on pages 7-9. Please stop in and take advantage of the trees we are offering.

(References for this article are available on our website: www.marionswcd.org)

District Education Corner

Sign up for Wildlife Enhancement Today! In July, the U.S. Department of Agriculture (USDA) Indiana Farm Service Agency (FSA) announced that an additional 20,150 acres of agricultural land in Indiana is eligible for funding for wildlife habitat restoration. The initiative, known as State Acres for Wildlife Enhancement (SAFE), is part of the USDA Conservation Reserve Program (CRP), a federally-funded voluntary program that for 30 years has assisted agricultural producers with the cost of restoring, enhancing and protecting certain grasses, shrubs and trees to improve water quality, prevent soil erosion and reduce loss of wildlife habitat. In return, USDA provides participants with rental payments and cost-share assistance. CRP has helped farmers and ranchers prevent more than 8 billion tons of soil from eroding, reduce nitrogen and phosphorous runoff relative to cropland by 95 and 85 percent respectively, and even sequester 43 million tons of greenhouse gases annually, equal to taking 8 million cars off the road.

Interested producers can offer land for enrollment in SAFE and other CRP initiatives by contacting their local FSA county office at http://offices.usda.gov. To learn more about the 30th anniversary of CRP and to review 30 success stories throughout the year, visit www.fsa.usda.gov/CRPis30 or follow Twitter at #CRPis30. And for more information about FSA conservation programs, visit www.fsa.usda.gov/conservation.

August 20th, Conservation Cropping Systems, Your Choice—Not Theirs

Columbus, IN Spend the day with Dr. Ray Weil, Professor of Soil Science at the University of Maryland. He is best known for his ecological approach to soil science. He is a leader in researching and promoting the adoption of more sustainable agricultural systems in both industrial and developing countries. His research focuses on soil organic matter management for enhanced soil ecosystem functions and nutrient cycling for water quality and agricultural sustainability.
Click here for registration information.

August 26th, 11:00 a.m. to 12:00 p.m. Leaves of Faith Free Webinar.

Got faith? Looking to add an ecological powerhouse to your green team? Are you ready to steward a meaningful change in your community? Learn about the impact one congregation can make with proper tree planting. The fruits of your labor will multiply...and you already have partners here to help you!
Click here to register for Leaves of Faith

For more information on upcoming events visit our website at marionswcd.org

Soil Health: Assessing & Addressing

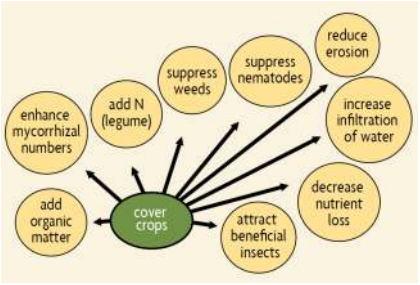
NRCS District Conservationist Jerod Chew, NRCS State Agronomist Victor Shelton, and Indianapolis Zoo Horticulturist Andy Norman take a close look at the zoo's garden soils.

One of the best ways to assess soil health is to dig in. Healthy soil should look, smell, and feel alive.

Researchers and laboratories can help us dig even deeper. The Cornell University soil health lab utilizes six cups of soil per sample to comprehensively measure indicators of soil physical, biological, and chemical health. These assessments contain summaries of the indicator's measured, what each of these indicates about the soil's health status, and how they may influence key soil processes. They also give land users short term and long term management suggestions for addressing constraints or maintaining a well-functioning soil. The Marion-Hendricks SWCD Soil Health Mini-Grant program is helping gardeners and small farmers to further explore their own soils' health through Cornell Soil Health Assessments.

For more information, visit the Cornell Soil Health website: http://soilhealth.cals.cornell.edu/

In agricultural systems, improving soil health regularly involves the use of cover crops. SWCD technical assistance and the mini-grant aim to help growers incorporate these soil building plants into their crop rotations. With a living plant protecting the soil and priming its biology, Indianapolis winters are about to get greener!



Building Soils for Better Crops. 2009 USDA-NIFA-SARE

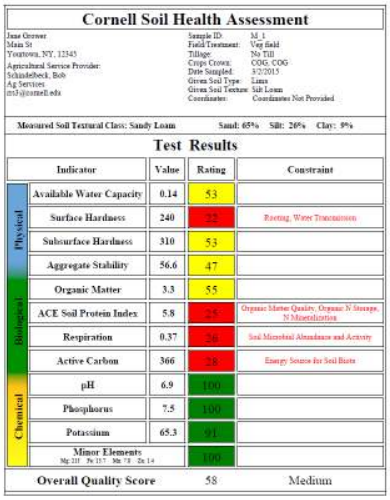
Cover crops make a perfect fit with a diversity of growing styles seen in central Indiana. But before utilizing a cover crop on your soil, be sure to do your homework! If you are looking for a quick introduction, see Rodale's OrganicLife Cover Crop Basics. For appropriate cover crop seeding dates, see The Midwest Cover Crops Council decision tool. Managing Cover Crops Profitably, 3rd Edition's management recommendations helped guide the SWCD soil health specialist and Fall Creek Gardens with a conservation cropping rotation of a fall planted legume followed by a transplanted pepper in May.

Contact Kevin Allison, Urban Soil Health Specialist at 317-786-1776.

SWCD staff is available to assist you with your soil and water resource needs. Call the office to set up an appointment

317-786-1776

Dr. Sean Berthrong of Butler University's Department of Biological Sciences helps farm manager Tyler Gough sample for soil health at Indy Urban Acres Farm.



Cornell Soil Health Assessment

Jane Grower
Main St
Youtown, NY, 12345

Agricultural Service Provider:
Schindelbeck, Bob
Ag Services
rls3@cornell.edu

Sample ID: M_1
Field Treatment: Veg field
Tillage: No Till
Crops Grown: COG, COG
Date Sampled: 3/2/2015
Green Soil Type: Loam
Green Soil Texture: Silt Loam
Coordinates: Coordinates Not Provided

Measured Soil Textural Class: Sandy Loam — Sand: 65% Silt: 26% Clay: 9%

Test Results

	Indicator	Value	Rating	Constraint
Physical	Available Water Capacity	0.14	53	
	Surface Hardness	240	22	Rooting, Water Transmission
	Subsurface Hardness	310	53	
	Aggregate Stability	56.6	47	
Biological	Organic Matter	3.3	55	
	ACE Soil Protein Index	5.8	25	Organic Matter Quality, Organic N Storage, N Mineralization
	Respiration	0.37	36	Soil Microbial Abundance and Activity
	Active Carbon	366	28	Energy Source for Soil Biota
Chemical	pH	6.9	100	
	Phosphorus	7.5	100	
	Potassium	65.3	91	
	Minor Elements		100	
	Overall Quality Score	58	Medium	

Click above to see a sample soil health assessment for vegetable production!

Waterway Woes

By Glenn Lange, Resource Conservationist

With the heavy and numerous rainfall events Indianapolis has just experienced in June and July, homeowners are paying more attention to waterways in the county. They are noticing increasing amounts of streambank erosion and contacting our office for assistance with this natural resource issue. Small streams have become larger streams, waterway widths and depths have increased and many streams are developing wider meanders, taking up more space in the floodplain (the area needed by the stream to accommodate flood water). What is causing the increase in erosion along our streams and what can be done to reduce the problem?

Erosion along streams is natural, they meander back and forth cutting a little on each curve and depositing the material on the other side. This is nature's way of slowing down a stream, overall decreasing the potential for high rates of erosion. What we are seeing however is an accelerated rate of cutting and erosion which is due to a number of natural and manmade factors. While heavy rainfall events can certainly play a roll, the way we manage urban areas is also contributing to making it impossible for streams to stabilize and mitigate high erosion rates.

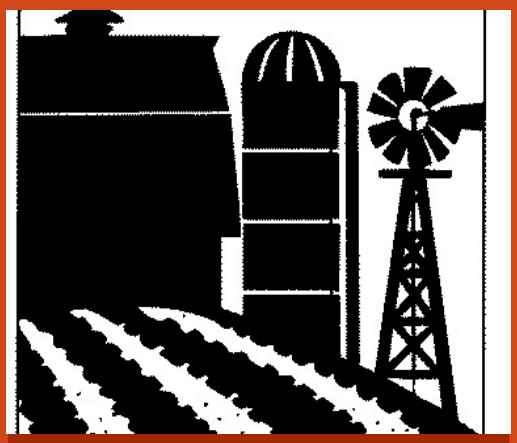
Increasing rainfall event trends. Very large rainfall events can certainly cause relatively stable banks to fail. Using National Weather Service (NWS) data, Indianapolis has experienced 18 ***top ten*** record rain events for nearly all months of the year, repeated months and several seasonal periods in the last decade, more than any decade since 1871. Rain events are occurring in higher numbers and with greater volume, intensity and duration.

Increases in non-pervious surfaces. Before urbanization, more water could soak into the soil and be caught and used by plants. Buildings, streets, parking lots and sidewalks all increase the runoff to streams because the water goes directly from the surface to the stream through storm drains and ditches. As hard surfaces increase in Marion County, water volume increases will only cause more stream erosion problems. Even the existence of retention ponds do not reduce the overall water volume our streams have to handle.

Landscape choices. In addition to adding hard surfaces and Mother Nature's increasing rainfall events, the way we landscape our homes and businesses contributes to increasing water handling stresses on our waterways. And there is no bigger trend than covering more and more of the landscape with turf grass. While turf grass areas can absorb some rainfall, the very short root systems of this non-native plant combined with our numerous Marion County high clay soils creates a situation where most rainfall is shed after quickly becoming saturated. In addition, many streamside landowners attempt to maintain turf

Continued on page 6

Streambank erosion can cause substantial property damage in urban areas.

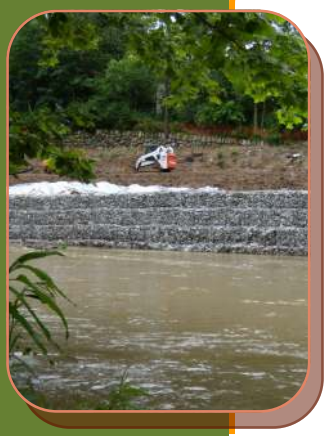


FSA NEWS

The latest updates on Farm Service Agency programs and sign up dates can be found on their website:

www.fsa.usda.gov

or call 317-736-6822



Gabion Baskets are one form of erosion control for extremely critical areas of a stream

Join our Stop That Dirt Campaign at marionswcd.org

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grasses right down to the waters' edge, eliminating more natural vegetation that can more effectively hold the stream banks. Other exotic, non-native and even invasive plants, such as Bush Honeysuckle, have been used for landscaping or allowed to proliferate eliminating more natural vegetation that can more effectively protect the streambanks.

Crowding our waterway areas. Another problem is the encroachment upon our floodway and floodplain areas. Development pressures to utilize challenging terrain, waterway ridge top areas, and reducing forested waterway buffers all create increased runoff and reductions in areas that could be used for allowing streams the room to adapt and stabilize to increasing rainfall events without endangering manmade structures.

What can be done? In general, residents can encourage better conservation measures in making wise land use decisions to reduce the amount and speed of runoff, and protecting and restoring waterway corridors to a more natural state. Every landowner can participate by utilizing rain gardens, bioswales, planting and protecting native plants, reducing invasive non-native plants, and reducing turf grass areas. Native trees, shrubs and other herbaceous plants have deep root systems and allow the soil to hold much more water. Landowners with property along waterways can apply various erosion control practices that will help them control erosion of their streambanks. Each site must be evaluated separately in order to find a solution that will fit both the location and the homeowner's budget. Many vegetative options are now available in many situations that are aesthetically pleasing and less expensive than hard armoring, such as stone rip-rap. The Marion County Soil and Water Conservation District has several publications that will be of help:

-What To Do About Streambank Erosion – Investigation and Decision Making

-Obtaining Permits for a Residential Streambank Restoration Project

-Streambank Restoration – Websites for Helpful Information

-Getting Help with Projects – Service Provider List

These and more helpful information can be found on our website's Water Quality link:

http://marionswcd.org/water/water-quality/

District personnel are also available to assist landowners with technical advice who are having streambank erosion problems. Contact us at 317-786-1776 or www.marionswcd.org for more information.

Marion County SWCD 2015 Fall Tree & Shrub Sale

Species	Size Available	Price Each	Quantity	Amount
American Plum	3 gallon	$25		
Black Cherry	3 gallon	$25		
White Oak	1 gallon	$18		
White Oak	3 gallon	$25		
Swamp White Oak	1 gallon	$18		
Swamp White Oak	3 gallon	$25		
Shingle Oak	3 gallon	$25		
Bur Oak	1 gallon	$18		
Bur Oak	3 gallon	$25		
Chinquapin Oak	3 gallon	$25		
Red Oak	3 gallon	$25		
Shumard Oak	3 gallon	$25		
Elderberry	3 gallon	$25		
Coralberry	3 gallon	$25		
Bald Cypress	3 gallon	$25		
Arrowwood Viburnum	3 gallon	$25		
Blackhaw Viburnum	3 gallon	$25		
Red Maple	3 gallon	$25		
Sugar Maple	3 gallon	$25		
Ohio Buckeye	1 gallon	$18		
Allegheny Serviceberry	3 gallon	$25		
Black Chokeberry	1 gallon	$18		
Black Chokeberry	3 gallon	$25		
Shellbark Hickory	1 gallon	$18		
Shellbark Hickory	3 gallon	$25		

Species	Size Available	Price	Quantity Ordered	Total
River Birch	3 gallon	$25		
Shagbark Hickory	1 gallon	$18		
Shagbark Hickory	3 gallon	$25		
Buttonbush	1 gallon	$18		
Buttonbush	3 gallon	$25		
Redbud	1 gallon	$18		
Redbud	3 gallon	$25		
Silky Dogwood	1 gallon	$18		
Silky Dogwood	3 gallon	$25		
Gray Dogwood	1 gallon	$18		
Gray Dogwood	3 gallon	$25		
Red Osier Dogwood	1 gallon	$18		
Red Osier Dogwood	3 gallon	$25		
Persimmon	3 gallon	$25		
American Beech	1 gallon	$18		
American Witch Hazel	3 gallon	$25		
Spicebush	1 gallon	$18		
Spicebush	3 gallon	$25		
Sweetgum	3 gallon	$25		
Blackgum	3 gallon	$25		
Common Ninebark	1 gallon	$18		
Common Ninebark	3 gallon	$25		
Sycamore	3 gallon	$25		

Total Quantity Ordered	**#**
Total Amount Due (Sales tax already included in price)	**$**

Transfer Totals to the next page.

An updated listing of availability as well as a description of each tree and shrub species is available on our website under the "Trees" tab— www.marionswcd.org

Order forms and further information can also be received by email. Make requests to Marilyn-hughes@iaswcd.org

Pick up will be at the Indiana State Fairgrounds. A reminder and directions will be posted on our website and will also be emailed to you. Call the office (317)786-1776 with any questions before the Saturday pickup date as our office is closed on Saturdays.

Rain Barrels are also still available. See our website for details.

MARION COUNTY
SOIL AND WATER
CONSERVATION DISTRICT

Orders due by September 1st

Pick Up on Saturday, October 17th

11:00 a.m. to 1:00 p.m.

Tree & Shrub Totals (Sales tax included)	Qty.- _____	$_____
Minus Discount*		- $_____
*$25 off orders of 10 or more trees & shrubs *$200 off orders of 100 or more		
Total minus Discount		$ _____

Make checks payable to:

Marion County SWCD and mail to Discovery Hall, Suite 200 1202 East 38th St. Indianapolis, IN 46205

Name _____

Address _____

_____ **Zip** _____

Home Phone: _____ **Cell:** _____

Email Address: _____

Pick up your orders in front of Discovery Hall in the northwest corner of the State Fairgrounds. Be sure to bring a vehicle large enough to accommodate your order. If your trees are not picked up on October 17th (unless other arrangements have been made before this date) they will be donated. NO REFUNDS.

MARION COUNTY
SOIL AND WATER
CONSERVATION DISTRICT

Discovery Hall, Suite 200
1202 East 38th Street
Indianapolis, IN 46205

Phone: 317-786-1776
Find us on the web:
www.marionswcd.org

The Mission of the Marion County Soil & Water Conservation District is to assist Marion County land users in conserving soil, water, and related natural resources by providing technical, financial and educational services.

THANK YOU Supporting Affiliate Members!

Copper Members

Robert Eddleman **Mark Kautz**
Beth Mason **Stephanie Schuck**

Ruth & Paul Hayes, in honor of Eli Bloom & George Haerle

Nickel Members

Rick Bein **George Haerle, in honor of Marilyn & Eli Bloom**

Silver Member

Marion County Farm Bureau

There is still time to register for the IUPUI Soils Class!

There is still time to register for the IUPUI Soils Class! Soil affects our everyday lives in more ways than you would ever expect. We highly recommend this class for anyone who will ever buy a home, plant a tree or make any other land use decisions. The Soils Geography Course is being offered at IUPUI this coming Fall Semester. It meets Thursdays at 6:00 – 8:40 PM starting Aug 27, 2015 in Cavanaugh Hall 203. Three options available from a 1 or 3 credit undergraduate class, and a 3 credit graduate level. Field trips will be taken for all three options.

To view options and be admitted as a visiting or non-degree student bring documentation of academic degrees to the registrar at IUPUI, contact the Admissions Center at <http//enroll.iupui.edu/admissions> or phone (317) 274 4591. For walk-in admissions information and assistance with registration go to Admissions Center, 255 Campus Center, 420 University Blvd. For further course information contact: Dr. Rick Bein - Phone: (317) 274-1100; Department (317) 274 8877; Fax: (317) 278-5220 [rbein@iupui.edu] IUPUI, Cavanaugh Hall, Room 213D, 425 University Blvd, Indianapolis, IN 46202

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