



LAND TO LAKE

magazine

issue four | spring 2016 | landtolake.com

a closer look at
TREES!

- **Benefits Trees Provide**
- **Local Opportunities**
- **Tree City USA**
- **Maple Syrup Production**

plus

- **Community Projects Update**

EVENTS | NEWS

Upcoming Events

March 18

Defiance SWCD Tree Sale order deadline. See back page for order form. Pick up trees mid-April.

March 26

Maple Syrup Day @ Williams County Fairgrounds 9:00am–12:00pm. Enjoy real maple syrup with a pancake breakfast and see how maple syrup is made.

April 22

Earth Day. Nature Walk @ Penney Nature Center 4:30–5:30pm.

April 29

Arbor Day. Plant a Tree!

May 21

NW Ohio Woodland and Wildlife Family Festival @ 4-H Camp Palmer 10:00am–2:00pm. Enjoy kids activities, zip line, log rolling, and wildlife displays.

June 1-3

Kids' Wildlife Camp for K-2nd graders @ Penney Nature Center. 9:00–11:30am daily.

June 4-7

Kids' Outdoor Science Camp for 3rd-8th graders at 4-H Camp Palmer. The theme for this residential camp is "EveryBODY Loves Science Camp".

June 21-23

Black Swamp Educators' Extravaganza @ Secor Metropark National Photography Center. From 8:00am–4:00pm daily.

August 6

SAVE the DATE for Canoe Trip and River Events in Defiance.

Youth Contests

April 8

Poster

Contest entries

due, theme is "We All Need Trees."

April 15

Photo Contest entries due, theme is "Defiance County Conservation,"

in 5 categories.

April 27

High School Envirothon.



Celebrate Defiance 2016



As a community Defiance has many things worthy of celebration. The Defiance Development and Visitors Bureau (DDVB) is coordinating monthly celebrations to reinforce the attributes that contribute to our Quality of Life. Natural, man-made, historical, cultural and commercial assets throughout the area will all be included in this recognition process. Each month will focus on a different aspect of our community. A listing of our monthly focus as well as activities and events for each month will be published at visitdefianceohio.com. We hope you will join us in 2016 as we *Celebrate Defiance!*

RESCUING LAKE ERIE

Great Lakes leaders committed to reduce the amount of nutrient pollution, specifically phosphorus, flowing into western Lake Erie by 40 percent. A huge step forward.



LANDToLAKE magazine

is published to provide the community with information on protecting the water resources of the Maumee River Watershed throughout Defiance County.

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On The Cover: Participants of last year's summer canoe trip had a great view of this bald eagle perching along the Maumee River.

Identify Our Cover Tree and WIN a Tree ID Book!

visit LandtoLake.com/contest to enter or call 419.783.4355

Winner will be announced in our next issue.

History of Maple

By Jennifer English, MS4 Coordinator, City of Defiance

Maple syrup production began as a North American activity and remains that way today. Canada is known by the sugar maple leaf on their national flag. Vermont is synonymous with maple syrup production—it is depicted on their state quarter. There are 10 or more states, including Ohio, with a robust maple syrup economy, primarily situated in the deciduous forests of the Northeast. Early historical accounts and myths about sugaring can be found surrounding various tribes of the Eastern Woodland Indians. Activity begins with the spring thaw and leads up to the first full moon of spring, which is traditionally called the Sugar Moon, a nod to the seasonal harvest.

When trees lose their leaves in fall, nutrients are sent to the roots for winter storage. The warmer days in late winter signal to the tree that it is time to wake up and start pumping nutrients back to the branches in liquid form. Sugaring intercepts that flow at the very beginning of the season when the nights are freezing and the days are warmer. Traditional methods for harvesting the “sugar bush” have changed over time; some farmers continue to tap trees by hand and hang individual buckets that must be collected daily when the sap is flowing. Technology has transformed much of the commercial production into larger, modern systems that operate with vacuum lines and hoses that are



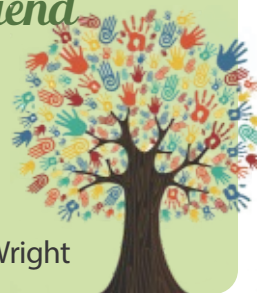
hooked up at the beginning of the season and collected without the hand work of emptying individual buckets. After the sap is collected it is heated in an evaporator, often using wood heat, which will concentrate the sugars in order to produce syrup. Either way, it is a laborious process—an average of 40 gallons of sap must be collected for a single gallon of finished maple syrup.

The unpredictability of our weather makes maple syrup production tricky—some years are abundant, while others are scarce. If you are a farmer—you are already familiar with this dynamic thanks to Mother Nature. If you are a consumer, put off by the price of the “good stuff”—it is wise to understand

that the dramatic fluctuation in weather impacts each year's harvest. The enjoyment of pure maple syrup cannot be replaced by any substitute, no matter how sweet. The silver lining is that maple syrup provides antioxidants, vitamins and minerals with every bite, another great reason to celebrate trees!

*The best
earthly friend
of man is
the tree.*

– Frank Lloyd Wright



Trees Can Stand Between Us *and Clean Water*

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Everyone wants clean water. It is essential for our survival. Although sometimes clean water from the faucet is taken for granted, the Toledo water crisis and the recent activities in Flint, MI have brought this essential resource into the limelight.

Since many cities like Defiance get their drinking water from rivers, it is best to start with clean rivers and streams! How can we stop nonpoint source pollution like chemicals, fertilizers, untreated septic, and pet/livestock waste from washing into our streams with every rain shower? What if we could put some type of filter along the streams to prevent pollution from entering? What if there was something feasible to buffer pollutants from entering our water supply?

Fortunately, there is something that all of the technology and brain power in the world can't duplicate that nature has already provided. TREES. Yes- trees, shrubs, grasses, and plants of all sorts can provide this filtering function. Areas along streams and rivers that contain plants are known as riparian buffers. Riparian buffers serve many important functions:

Filtering: As pollutants pass through these vegetated areas, the plant roots can absorb and process pollutants before they enter the water.

Absorbing: Likewise, the plants absorb excess water reducing flooding.

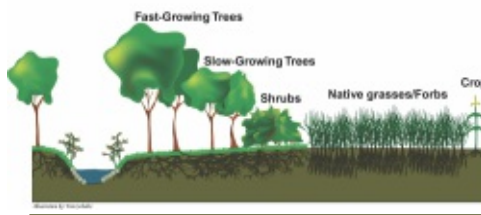
Protecting: The roots also protect the stream bank by holding soil in place.

Cooling: The shade provided by the plants cools the water making it more hospitable for desirable fish/aquatic life and less conducive to harmful algal blooms.

Homes & Food: The vegetated area along the stream provides vital habitat for many wildlife species that share Northwest Ohio with us.

Planting a buffer along your stream is a great way to protect our water while enhancing the beauty of your property.

**If you own crop land,
it may be profitable
to plant a riparian buffer.**



Lake Erie Conservation Reserve Enhancement Program (CREP) has a few programs available (see side box, right). If your land is not crop land, and you would like to plant a riparian buffer or wildlife habitat, other programs are available on a limited basis. If you have a good place for a riparian buffer, please persist in this important endeavor. Great deals on tree seedlings are available from the Defiance SWCD tree sale and we can advise you on proper species and funding options.



\$ USDA Land Conservation Programs

- **Hardwood Tree Planting:** Area enrolled must be adjacent to a stream, river, or eligible drainage ditch. The buffer will be 35 feet – 300 feet of native trees and shrubs. A grass berm is allowed next to maintained drainage ditches. The average yearly payment on floodplain soil is around \$400/acre. The contract is for 15 years with a bonus payment of \$100/acre for tree planting and \$500/acre for an additional 15 year extension to the contract.
- **Riparian Forest Buffer:** This is very similar to the Hardwood Tree Planting in specifications and payments. This practice allows for an optional grass strip between the trees and crop field.
- There are other programs available through Farm Service Agency and Natural Resource Conservation Service for filter strips, wildlife habitat, and pollinator plantings as well as whole field conservation.

Get Started

Contact Land to Lake to discuss options for making your riparian buffers a reality.

WHO DO I CALL?

For questions about city tree maintenance, planting requests, sidewalk policy, etc., call:

City Parks Department
419.784.2745

Tree Planting Tradition

Did you know that the Defiance SWCD has been conducting an annual tree sale since 1975? If you see a tree planting in Defiance County, it is very possible that they were purchased at the annual sale and lovingly planted by the landowner.

“Acts of creation are ordinarily reserved for gods and poets.

**To plant a pine,
one need only own
a shovel.”**

—Aldo Leopold

Some people have made this an annual tradition, planting a few trees every year, to look back and see that they have planted a forest. Others enjoy a few beautiful specimens in their yard.

If you would like to plant some trees but don't know where to start,

call Defiance SWCD,
419.782.1794,

for guidance on species, tips on planting, and even rental of planting equipment.



TREE CITY USA®

MAKING URBAN TREES WORK *For Our Community*

Defiance has been a proud Tree City USA for the last 21 years. Many of the programs being implemented by the City Parks Department are as a result of this affiliation and with our working relationships with Ohio Division of Natural Resources (ODNR) Regional Urban Forestry Program.

Emerald Ash Borer (EAB) Update: Defiance has approximately 12 remaining ash trees that are successfully being treated for EAB, after removing hundreds over the last several years. Thanks to the Village of Montpelier for their assistance and guidance, the City now treats these every other year with an insecticide that keeps EAB at bay. Some of these ash trees can be seen at Defiance Public Library, Kingsbury Park and Triangle Park.

Planned Planting: With support from ODNR Regional Urban Forester, Stephanie Miller, the City is implementing a program for street trees called “Planned Planting”. Under the supervision of Service Director Rob Cereghin, the City Parks Department is working hard to “*plant the right tree in the right place*”. This starts with a process called the Urban Site Index (USI). The score is comprised of factors that include utility conflicts, soil condition, site factors—such as the distance between the curb and sidewalk. Once the site has a score, a tree with the appropriate size and hardiness is selected from a list

of approved trees that is updated annually by the Shade Tree Commission. Not only will these decisions help to minimize future conflicts with utilities and sidewalks, it will also ensure that the trees planted are a diverse mix.

While this effort will take many years to “bear fruit” our urban forest will persist long into the future, providing shade and benefits for all.

Shade Tree Commission: This group is comprised of community volunteers that are invested in keeping Defiance a “Tree City USA”. Special thanks go to Roger Herrett who has worked hard with City crews over the last few years to identify and document the condition of City trees. This effort was a huge undertaking and it is currently being converted into a digital format that will allow the City to evaluate the overall condition of our urban forest and make informed decisions about future planting. Using a software program called “Tree Tracker” the Parks Department will have a new and improved tool for managing our local urban forest.

Trees Add Value: A mature tree absorbs thousands of gallons of storm water per year, preventing run-off and minimizing water pollution.

Trees are the only component of municipal infrastructure that increases in value over time.

IN & AROUND DEFIANCE

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Auglaize Riverbank

The final steps of the riparian restoration project on the west bank of the Auglaize River have been completed. This bank stabilization project is expected to capture some 13,000 tons of sediment over the life of the project. 150 native hardwood trees and 100 native shrubs were planted during 2014. During the fall of 2015 the Envirolok bags were seeded with a native grass and wildflower seed mix.

In 2016, efforts will focus on a native grass planting on the upper portion of the bank.



Rotary Walkway

With support from the Rotary Club of Defiance the riverfront area of Downtown Defiance will be seeing improvements during 2016. Rotary has generously made a \$25,000 donation to the City for improvements to the “Rotary Walkway” along Fort Street and Washington Avenue, adjacent to the Defiance Public Library and Historic

Fort Grounds. This project, featuring new benches, picnic tables, lighting upgrades and other amenities, is an initial phase of a comprehensive City plan to create more access and visibility to the rivers and highlight the confluence of the Maumee and Auglaize Rivers.

Penney Nature Center Tree Planting

This past year, the SWCD staff was busy planting over 8,000 trees and shrubs at the Penney Nature Center to meet forested wetland restoration objectives. To increase survival rates, over 6,500 tree tubes were also installed. The tubes are essential to protect from deer browse and rodent gnawing, as this has been a serious problem in getting trees established. Tree mats were also fitted around many trees to reduce competition from other plants.

A very appreciative thank you goes out to the groups that helped plant trees and contributed to the success of the Penney Nature Center! Thanks to Fairview FFA, Patrick Henry High School, St. Paul’s United Methodist Church, and Bethlehem/St. Marks’s Lutheran Church for making the planting a success!

Penney Nature Center is on Ashpacher Road between Rt. 15 & Rt. 18. It is open to the public to enjoy trails from dawn to dusk.

Diehl Park

Bioretention is still being planned, with funding provided in part by Ohio EPA – Surface Water Improvement Fund (SWIF) Grant, with a modified design that will protect multiple mature trees in order to avoid a conflict with utilities. The result is that this project will be completed in 2016 instead of 2015 as planned. In the meantime – watch for an installation of new playground equipment near the bioretention project area in Diehl Park, funded by an ODNr Natureworks Grant.



Silva Cells make it possible for parking lots to support healthy, thriving trees without compromising above ground surface areas. Our goal for Diehl Park is to install trees with larger canopies and longer life spans than those found in typical parking lots.

Benefits of Trees



Trees provide oxygen

In one year an acre of mature trees can provide enough oxygen for 18 people.

Trees conserve energy

Three trees placed strategically around a single-family home can cut summer air conditioning needs by up to 50 percent.

Trees help prevent water pollution

Trees reduce runoff by breaking rainfall thus allowing the water to flow down the trunk and into the earth below the tree. This prevents stormwater from carrying pollutants to the river. When mulched, trees act like a sponge that filters this water naturally and uses it to recharge groundwater supplies.

Trees help prevent soil erosion

On hillsides or stream slopes, trees slow runoff and hold soil in place.

Trees provide food

An apple tree can yield up to 15-20 bushels of fruit per year and can be planted on the tiniest urban lot. Aside from fruit for humans, trees provide food for birds and wildlife.

Trees heal

Studies have shown that patients with views of trees out their windows heal faster and with less complications. Children with ADHD show fewer symptoms when they have access to nature. Exposure to trees and nature aids concentration by reducing mental fatigue.

Trees reduce violence

Neighborhoods and homes that are barren have shown to have a greater incidence of violence in and out of the home than their greener counterparts. Trees and landscaping help to reduce the level of fear.

Trees are teachers and playmates

Whether as houses for children or creative and spiritual inspiration for adults, trees have provided the space for human retreat throughout the ages.

Trees provide a canopy and habitat for wildlife

Sycamore and oak are among the many urban species that provide excellent urban homes for birds, bees, possums and squirrels.

Trees increase property values

The beauty of a well-planted property and its surrounding street and neighborhood can raise property values by as much as 15 percent.

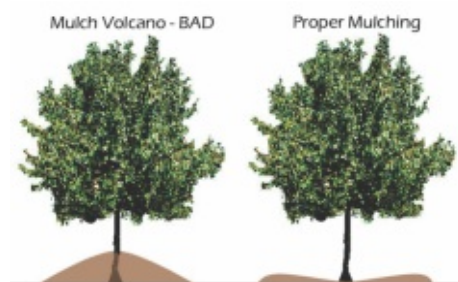
Trees increase business traffic

Studies show that the more trees and landscaping a business district has, the more business will flow in. A tree-lined street will also slow traffic – enough to allow the drivers to look at the store fronts instead of whizzing by.

From treepeople.org

fyi Mulch It Right!

You can help assure the health and longevity of trees on your property with the correct use of mulch. When used properly, mulch retains moisture and helps regulate soil temperature. But too much depth of mulch up a tree's trunk can be detrimental. When applying mulch, be sure to keep the mulch depth shallow nearest the tree trunk.



Seeking Volunteers

Land to Lake has been involved with several different projects that require landscaping maintenance and/or monitoring for invasive species on rain gardens, bioretention and/or bank stabilization. If you are interested in learning more about native and invasive plants while assisting with a project site – please contact Jennifer English at 419.783.4355 or by email at jenglish@cityofdefiance.com

Get Involved

Visit the Land to Lake website for more ideas and information.



2016 Tree Seedling Sale

Order Deadline Extended to March 18

	# of Packets	Packet Description	Price	Total
Coniferous Trees		10 - American Arborvitae 8" - 14"	\$8.00	
		10 - Blue Spruce 9" - 15"	\$8.00	
		10 - Norway Spruce 10" - 18"	\$8.00	
		10 - Red Cedar 10" - 16"	\$8.00	
		10 - White Pine 10" - 16"	\$8.00	
		10 - White Spruce 10" - 18"	\$8.00	
Deciduous Trees		10 - Black Gum 12" - 18"	\$9.00	
		10 - Bur Oak 12" - 18"	\$9.00	
		10 - Ohio Buckeye 12" - 18"	\$9.00	
		10 - Red Bud 12" - 18"	\$9.00	
		10 - Red Maple 12" - 18"	\$9.00	
		10 - Sassafras 12" - 18"	\$9.00	
		10 - Swamp White Oak 12" - 18"	\$9.00	
Deciduous Shrubs		10 - American Elderberry 12" - 18"	\$8.00	
		10 - Silky Dogwood 12" - 18"	\$8.00	
		10 - Winterberry 12" - 18"	\$8.00	
Planting Aids		1 - 3' Tree Shelter Kit	\$4.75	
		1 - 4' Tree Shelter Kit	\$5.35	
		10 - Marking Flags	\$1.00	

Name: _____

Street Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

Grand Total

**Ask About Borrowing
a Dibble Bar or Hoedad
Tree Planter**



Please make checks payable to: **Defiance SWCD**, 06879 Evansport Road, Suite C, Defiance, OH 43512. *All orders must be paid in full.* You will be notified in April via postcard or email when your order will be available for pickup.

defiance-county.com/swcd

For Office Use Only:

Order Number _____

Receipt Number _____