

# CONSERVATION NEWS

Newsletter of  
the Defiance  
Soil & Water  
Conservation  
District



In Cooperation with the Defiance County Commissioners

Winter 2018

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DEFIANCE  
**Soil & Water**  
CONSERVATION DISTRICT

*The mast picture captures ice on  
a cereal rye cover crop.*

## Farm Fair 2018

Despite the wintery mix of ice and snow, the 2018 Farm Fair was eventful and successful. Tractors, equipment, vendors, and informative displays lined the mall providing entertainment for all ages.

Highlights this year included a Cooper Farms area including an incubator with hatching turkeys. The honey bee/pollinator display was a big attraction with the Honey Bear making a guest appearance. As always, Nature's Nursery brought live wildlife and Henry County Dairy Producers had a newborn calf. Tinora Young Farmers did a pedal pull and Defiance SWCD booth included the Virtual Watershed and the Streamulator. Mark your calendar for the 2019 Farm Fair over Martin Luther King Jr. weekend.



*The Ohio State Beekeepers Association's Honey Bear, visits with guests.*

## TREE ORDER FORM INSIDE

Due March 16<sup>th</sup>

Tree Planting Workshop: March 5<sup>th</sup> Fruit Tree Sale: details on back page

## Us and Them by Tyler Miller

*I*t is human nature for people to pick out things or people that are similar to ourselves and we assimilate them with "us". In the same token we also notice objects, people, or groups that have differences from ourselves. Since these things are not the same as we are, they are considered "them". This is human nature and it has been documented through countless psychology experiments. I know I looked at a lot of those articles and experiments, in the writing of this article. Before I get into the meat of my article I want to apologize to all of my English teachers that taught me in school. Sorry, I am about to thoroughly butcher some pronouns. You taught me well or good, whatever it should be. I also want to give credit where credit is due. The basis of this article stems from a sermon at our Lutheran Church a few weeks ago, that got me thinking about this concept. So, thank you pastor and yes, I do listen sometimes. I don't want you to think less of them but do realize that in this situation them has a negative connotation. While that is wrestling in your head, also think about the concept that for every us there is a them and for every them there is an us. Are you us or a them and who is your opposing side? Why is all this rhetoric important? Because, Lake Erie stands at a crossroads. We have vowed to reduce phosphorus loading 40% by the year 2025 and that date is quickly approaching. We need answers NOW and we need to forget who the us and them are. Lake Erie has a rich history of triumphs and failures. The problem is that right now it seems as though the Lake is near a time of failure.

*Continued on page 4*

## Ag Appreciation/Hall of Fame Breakfast

March 20<sup>th</sup> from 8-10 a.m. at Defiance Knights of Columbus, \$4. Keynote speaker, Dr. Hans Kok presenting "The Dutch-Buckeye connection, a not-so-objective comparison of agriculture in Ohio and the Netherlands." Register by March 13<sup>th</sup> by contacting Bruce Clevenger, clevenger.10@osu.edu or call 419-782-4771.

**Oath of Office**

Congratulations to Jeff Hange and Bill Moats who were sworn into office January 16, 2018 by Commissioner Ryan Mack. Both Jeff and Bill were re-elected to a three-year term and will continue to serve as Supervisors with current Board members Roger Zeedyk IV, Keith Schroeder, and Terry Behnfeldt. Thank you to the entire Defiance SWCD Board of Supervisors and the Defiance County Commissioners for their leadership and support. The District greatly appreciates the opportunity to maintain and improve the natural resources of Defiance County.



Continuing Defiance SWCD Board members are sworn in by Commissioner Ryan Mack. Left, Jeff Hange and right, Bill Moats.

**Cletus Vetter Memorial College Scholarship Available**

Defiance SWCD is excited to announce the availability of the Cletus Vetter Memorial Scholarship. This college scholarship is meant to bring back into focus the vital necessity and passion for resource conservation by encouraging college-bound students to consider a career in conservation, natural resources, agriculture or a related field. This scholarship is given in loving memory of Cletus Vetter, a man who leaves a legacy of love and respect to not only his family but to the many people he selflessly gave himself to. He was a lifelong farmer who

loved to nurture the soil and watch his crops grow. One **\$1,000** college scholarship will be awarded to a resident/student of Defiance County. The recipient must be enrolled as a full-time student at a two-year or four-year accredited college, university or technical school beginning in the fall of **2018**. The scholarship will be payable directly to the college or university. Applications are available at the Defiance SWCD website. The deadline to apply is **March 31, 2018**.

**Addressing Nutrient and Sediment Concerns with Ag BMPs**

Undoubtedly, nutrient and sediment loading are two of the most significant impacts to water quality in Northwest Ohio. The best way to address these non-point sources is to first identify those situations that are contributing pollutants, assessing and prioritizing the magnitude of these resource concerns, and then implementing practices to correct the situation.

Many times, the resource concern and the solution are quite obvious. However, in other instances, there can be uncertainty in the best course of action. Thanks to Ohio State Extension with the partnership

of Ohio SWCDs along with funds through a grant provided by the Ohio Soybean Council and NRWF, a website has been developed to provide guidance with Ag Best Management Practices. Visit the website at: <https://agbmps.osu.edu>. The Defiance SWCD also has printed copies of the manual for those preferring this format. Included is a description of each BMP with references in regards to practice effectiveness plus general engineering or implementation steps. In addition, pros and cons of each practice are reviewed. Please take a look at this valuable guide, providing a suite of practices to include in each of our conservation toolboxes.



Steve Emehiser with his Atomic Clock.

**Word Search Winner**

Congratulations to the autumn 2017 word search winner, Steve Emehiser. Steve's correct entry was randomly drawn to win an atomic clock. Thanks to all participants!

**The Story of America's Private Lands Conservation Movement**

USDA's Natural Resources Conservation Service (NRCS) presents a documentary on soil conservation pioneer Hugh Hammond Bennett, the history of the agency and the birth of the private lands conservation movement in the U.S. The 21-minute documentary can be viewed on YouTube at: <https://youtu.be/G78ihulTx1k>

**SWCD Office Hours**

Mon.-Fri. 7:30 a.m. – 4:00 p.m.

The SWCD Board of Supervisors typically holds its regular monthly meeting (open to the public) on the 3<sup>rd</sup> Tuesday of each month at 7:30 a.m. Any changes to this date/time will be posted in the local newspaper.

The Defiance SWCD and the U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department.

## **Just Following The Regulations Isn't Always Enough** by Manuel Lay

As many who handle manure can understand, even though you may be applying nutrients in an appropriate manner, a violation of Pollution Abatement may still occur. There are many factors that come into play and as many of us know, the weather is quite unpredictable. As a Soil & Water Conservation District, we want landowners and producers in the Western Lake Erie Basin (WLEB) to be as informed as possible when it comes to the application of nutrients and the regulations that pertain to those nutrients.

### **The Regulations**

Since 2015, Ohio farmers in the WLEB have been under regulations set forth by the state of Ohio restricting the application of manure and fertilizer, known as Senate Bill 1. It states that manure and fertilizer is not to be applied under certain conditions. Frozen ground is one such condition and is defined as soil that is un-penetrable by a steel object such as a digging shovel. Under frozen conditions, the manure or fertilizer has no way to absorb into the soil and will sit on the surface or leave the field as runoff. Senate Bill 1 also restricts application on saturated ground, which is defined as soil in which the pore space is filled with water in the top two inches and includes water pooling on the surface. It is a violation of Senate Bill 1 to apply on snow-covered ground. Snow covered ground is defined as soil and plant residue that are covered by at least a half inch of either snow or ice. Restrictions also apply when it comes to the weather that is being forecasted. If the weather forecast shows a 50% chance or greater of more than one inch of rain in a 12-hour period, fertilizer application is restricted. For manure, if the local weather forecast is calling for a 50% chance or greater of a half-inch in twenty-four hours, then manure application is restricted.

### **The Exemptions**

Given these restrictions, Senate Bill 1 does have some exemptions. Nutrients can be applied to restricted fields under specific circumstances. The manure or fertilizer can be directly injected into the ground or can be incorporated within 24 hours following application. Nutrients can also be applied on an established over-wintering crop, such as wheat or a cover crop. A growing crop or cover crop is defined as any crop that will be harvested or that was planted as an over-wintering cover crop. This established crop is to create approximately 70% coverage.

Even though there are exemptions which allow for nutrient application, applicators should exercise caution when applying nutrients under restricted conditions. Applicators should keep in mind that there are Agricultural Pollution Abatement Laws that are still enforced. Violations could very-well be issued if there are nutrient discharges into waters of the state, as stated in Ohio Revised Code (ORC) 939. ORC 939 states that any agricultural pollution entering the waters of the state is a violation and may be subject to fines and punishments.

### **What is defined as a "Water of the State"?**

Waters of the state are defined as all streams, lakes, ponds,

wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth, that are situated wholly or partly within or border the state of Ohio. In layman's terms it is any collection of water that has potential to contribute to a larger body of water. Agricultural pollution means failure to use management or conservation practices in farming operations to abate the degradation of soil and the waters of the state by residual farm products, manure, or soil sediment, including attached substances. Simply stated, any nutrient rich runoff from agricultural lands is a violation of pollution abatement.

Pollution from both agricultural and non-agricultural areas have been deemed a major cause for the algal blooms in Lake Erie. This is an issue that is not going away any time soon, and will require an effort from agricultural and non-agricultural sectors to reduce nutrient pollution. From an agricultural standpoint, voluntary use of guidelines will prevent further issues. Refusing to follow these guidelines puts your farm, and those of others at risk of having more mandated restrictions. Potentially, future restrictions could state there will be no application allowed in the winter months.

### **An Example**

Given all this information, let's consider an example. A farmer applies liquid manure in late December on soil that is frozen, there is 25% chance of ¼" rain, and the application is on an established growing crop. At the first glance, this farmer is within all regulations of Senate Bill 1. However, for whatever reason, the liquid manure is discharged into the creek, which is waters of the state. This could be due to receiving more rain than predicted or runoff due to the ground thawing. This is considered a violation, even though this farmer under SB1 did nothing wrong, he is still in violation of Pollution Abatement due to the discharge.

Could this have been prevented? Unfortunately, sometimes the answer is no. However, the risk of it happening could be greatly reduced by following the Natural Resources Conservation Service (NRCS) 590 guidelines for application. These guidelines give setbacks from waters of the state and recommends not applying on more than 20 continuous acres with 200' buffers during winter along with other guidelines that will help prevent the pollution of waters of the state.

Should you ever have any questions on stockpiling, application, or are looking for information, contact Manuel Lay, [nutrient.specialist@pauldingswcd.org](mailto:nutrient.specialist@pauldingswcd.org), 419-670-2187, or call the local Soil and Water Conservation District.

***“Simply stated, any nutrient-rich runoff from agricultural lands is a violation of pollution abatement.”***

## *Us and Them* by Tyler Miller

*Continued from page 1*

The Lake needs our help to turn it around. In the 1960s and 1970s the Lake had major algae issues, but was saved by a huge reduction in point source pollution. Point source pollution is anything that comes from a piped known source, mainly municipalities and industrial waste. Then the glory years of Lake Erie ensued when the Lake was named the "Walleye Capitol of the World". All was well until the late 1990s and early 2000s when the algal blooms made a resurgence. Even though phosphorus loading stayed very close to the targeted load, a different type of phosphorus was rearing its head, dissolved reactive phosphorus (DRP). To compare, DRP is 100% bioavailable to plants and algae while particulate phosphorus (PP), phosphorus that is tied to soil particles, is around 25% bioavailable. So, even if pounds of phosphorus stay the same, the available phosphorus is up significantly due to the availability of that nutrient. This situation reached fever pitch in 2011 and 2015 with huge blooms and the City of Toledo having a water crisis in 2014. We seem to be in a situation that every year is a sizable bloom and it is dependent on the weather as to how bad the bloom is. Now the question is, where are the nutrients coming from and why now?

Much research has been done in the last fifteen years about where is this phosphorus coming from. I want to thank Heidelberg University and The Ohio State University for spearheading much of this research with help from government entities, grant money, and countless volunteers. Now these values can be argued but understand that whether you alter these percentages slightly one way or another, it does not change the outcome very much. The Maumee River watershed is the largest watershed in the Great Lakes. Of that watershed, nearly 70% of the area is involved in agriculture. The Sandusky and Detroit Rivers are major players in the Western Lake Erie Basin but their impact is dwarfed by the sheer size and output of the Maumee. All the research that has been compiled places nonpoint sources as approximately 80% of the phosphorus loading. Agriculture is the dominant nonpoint source. Of this 80%, somewhere between 70-90% of that discharge occurs during the highest flow time that results from about 10 storm events per year. Sewage treatment plants and combined sewer overflows contribute approximately 10% of the phosphorus loading. Home sewage systems contribute about 4% of the load. While internal loading from lake sediments is somewhere between 3-7% of the phosphorus load. Nearly 95% of the lawn care fertilizers have followed Scott's Miracle-Gro lead and pulled phosphorus from their fertilizers. The bottom line is that nonpoint sources in the Maumee River watershed are a major player in the phosphorus loading. As I said before, these values could be slightly off but the overarching findings remain the same. So, everyone is an us and a them, but some people are more of a them. But be careful who you are labeling as a them, because you could be someone else's them. Hope you can follow that logic, but in more basic terms do the right thing.

Understanding agricultural nutrient (nonpoint) losses has been a struggle. Research has shown that fertilizer application rates have decreased since the early 1990s. Since that time, soil tests being taken has increased greatly. Most application rates now fall to plus or minus five pounds of crop removal rate. Research has shown that about 40% of the acres in the Maumee watershed is accounting for about 80% of the total phosphorus runoff. Most of these acres in this 40% have soil test levels above 100 pounds phosphate and should have no additional application, according to Tri-State fertility guide, until levels decrease. Stratification also occurs, which is the build-up of phosphorus near the soil surface. When additional phosphorus is applied on the surface, those levels can become increasingly high. This will result in additional runoff. Our soils in the Western Lake Erie Basin are inherently leaky and runoff will always occur but we need to limit that runoff to reduce algal blooms. Let's look at some ways that we can reduce this runoff.

I have spent entire articles on some of these practices; so I will just touch on some of the practices to reduce runoff. The simplest

practice is to take regular soil tests every two to three years and then apply nutrients according to the 4R's. The 4R's are the right time, right place, right rate, and right source. Subsurface placement of fertilizer is placing fertilizer in the soil profile to ensure that the nutrients contact soil. Subsurface placement allows producers to maintain soil structure through no-till farming while also getting fertilizer in the soil. Filter strips that maintain buffers between applied areas and surface drainage ditches is a great way to reduce phosphorus entering waterways. Drainage water management artificially raises the water level in tile systems which can reduce tile phosphorus runoff by 50%. Blind inlets can replace riser pipes which allows for greater infiltration and reduced phosphorus runoff. Cover crops do not uptake large amounts of phosphorus but they do increase water infiltration and reduce runoff which keeps phosphorus in the field. Also increasing organic matter allows soil to hold more water which reduces nutrient loaded runoff. This is an abbreviated list of agricultural conservation practices that can help reduce phosphorus losses. Now, how are we going to get to this 40% reduction with all of these tools.

I believe that what will truly determine who is the us and who is the them will be in how we solve this algae problem. The best scenario is through outreach and education in order to get voluntary acceptance. The next best alternative is through incentivizing adoption. This can be expensive and this is the stage we are currently in. The final stage is through regulation to mandate adoption of conservation practices. Do you want to take the carrot or the hammer? If the first two approaches are not effective in getting results then regulation will be the final solution. No one wants to get to regulation but if you refuse to be an us then there will be no other option.

Regulation may be closer than we think. Recently the US EPA told the Ohio EPA to review its assessment of Lake Erie and its algal issues. As you recall the Ohio EPA did not designate the WLEB as an impaired watershed. That decision may be in jeopardy, some may be applauding, but regulation is not a desirable place to be. Places like Grand Lake St. Mary's and Chesapeake Bay have been there and it changes everyone's situation. The problem is that a move to regulation hurts us and them, at that point there is no separating the groups. The only way to avoid regulation and mandates is to become ONE not the us and them. We all need to do our part. I already went over many of the agricultural practices that need to be implemented but the non-ag needs to make sure they are in the us category. Make sure that your septic system is properly functioning. Reduce water running to the ditch as much as possible by using rain barrels, rain gardens and retention areas. We are all in this together.

Here we are, back at our crossroads. Are we going to have the thriving Lake Erie of the 1980s or continue with the polluted algae filled lake of the 1970s? The answer lies within us and by that, I mean we all need to part of the us and avoid trying to find the them. We all have stake in this battle. We are all part of the Lake in one way or another. We need to protect it like our livelihoods depend upon it, because more people than you think are in that situation. So, when you are making decisions on farm practices, fertilizer applications, manure applications, and septic system alterations I want you to think about us. So, do you really want to be a them? When those decisions are made will someone think of you as a them or do you want to be an us. You may be pointing the finger at someone else, blaming them, but remember that you are them to someone else. If we remain in this us and them cycle we cannot and will not head towards a cleaner Lake Erie. If we remain in that cycle I don't even know if we can make the Lake clean with regulation. It is paramount that we become us, that we can act as one, and stop pointing fingers. Here at Defiance Soil and Water we are looking for more people to join us in helping to clean up our watershed. If you have questions about what you can do to help, give us a call at 419-782-1794. Will you be with us? Do you want to be an us or a them? Part of the solution or adding to the problem?

# 2018 Tree Seedling Sale

Defiance Soil & Water Conservation District

**Tree Planting  
Workshop  
March 5th**

	<u>Packets Ordered</u>	<u># Per Packet</u>	<u>Packet Description</u>	<u>Price</u>	<u>Total</u>
<b>Coniferous Trees</b>		10	American Arborvitae 8-14"	\$10.00	
		10	Colorado Blue Spruce 9-15"	\$8.00	
		10	Eastern White Pine 10-16"	\$8.00	
		10	Norway Spruce 10-18"	\$8.00	
		10	Red Cedar 10-16"	\$10.00	
		10	White Spruce 10-18"	\$8.00	
<b>Deciduous Trees</b>		10	Black Gum 12-18" *	\$9.00	
		10	Bur Oak 12-18"	\$9.00	
		10	Paw Paw 12-18"	\$13.00	
		10	Persimmon 12-18"	\$9.00	
		10	Red Bud 12-18" *	\$9.00	
		10	Red Maple 12-18"	\$9.00	
		10	Swamp White Oak 12-18"	\$9.00	
		10	Tulip Poplar 12-18"	\$9.00	
<b>Deciduous Shrubs</b>		10	Black Chokeberry 12-18" *	\$9.00	
		10	Spicebush 12-18"	\$10.00	
		10	Winterberry 12-18" *	\$10.00	
<b>Misc.</b>		8	Native Ornamental Variety Pack 2 trees of each asterisked species above (*)	\$10.00	
		10	Marking Flags	\$1.00	

Name: \_\_\_\_\_

**Total**

Street Address: \_\_\_\_\_

**Order Deadline**

City, State, Zip: \_\_\_\_\_

**March 16, 2018**

Phone: \_\_\_\_\_

Tree Shelters Available for Purchase  
Contact District for Pricing

Email: \_\_\_\_\_

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 early April via postcard or email when your order will be available for pickup.

**Bare Root Fruit Trees: 4-species pack, \$50, order online:**

**<https://fs7.formsite.com/infoofswcdorg/form22/index.html>**

For Office Use Only: Order Number \_\_\_\_\_

Receipt Number \_\_\_\_\_

# Tree Seedling Descriptions

## Coniferous Trees

**American Arborvitae** – A pyramidal shaped conifer that grows well in a wide range of soils and drainage conditions. Excellent for screens and windbreaks as it is dense and full to the ground. Recommended spacing for windbreak planting is 6 feet. [40-60 feet tall by 10-25 feet wide]

**Colorado Blue Spruce** – A dense, conical evergreen with stout, prickly 3/4 - 1 1/4 inch needles, bluish green to bright silvery-blue in color. Adaptable, it prefers rich, moist soil, full sun, and thrives in dry well-drained sites. Recommended spacing for windbreak planting is 10 feet. [70-90 feet tall by 30 feet wide]

**Eastern White Pine** – Pyramidal in youth, this shade tolerant tree forms a graceful plume-like crown at maturity. Thrives in moderately well-drained soil types. The soft needles occur in 5's, are 3-5 inches long, and are rich green to bluish green. Recommended spacing for windbreak planting is 10 feet. [75-100 feet tall by 50 feet wide]

**Norway Spruce** – An extremely attractive pyramidal evergreen with strong, weeping branches that extend all the way to the ground. Needles are shiny green 1/2-1 inch long and flat. One of the fastest growing of all spruces. Recommended spacing for windbreak planting is 10 feet. [60 feet tall by 25 feet wide]

**Red Cedar** – A small, dense, pyramidal, native conifer with somewhat prickly, scale-like needles. Tolerates many soil types and conditions and grows where many other woody plants will not survive. Excellent tree for windbreaks and erosion control. Recommended spacing for windbreak planting is 6 feet. [40 feet tall by 20 feet wide]

**White Spruce** – A cone-shaped, medium to fast growing evergreen. The 1 inch needles are light green/bluish. Branches extend to the ground giving excellent low level wind protection. Adapted to cold weather and wet clay soils. Not preferred by deer. Recommended spacing for windbreak planting is 10 feet. [60 feet tall by 20 feet wide]

## Deciduous Trees

**Black Gum** – Spectacular fall color. High wildlife value. Spring flowers are beneficial to pollinators and fall berries are important food source for birds and mammals. Does best in moist soils but has a high drought tolerance. Straight trunk and uniform crown. [50-75 feet tall by 25-35 feet wide]

**Bur Oak** – A slow growing but long lived tree. Does best in full sun and can tolerate a wide range of soil conditions. One of the most drought-tolerant oaks. Will mature to a massive size with trunks up to 10 feet in diameter. The acorns, which are the largest of native oaks, have a big, deeply furrowed cap and provide a source of food for many mammals and birds. [70-80 feet tall by 80 feet wide]

**Paw Paw** – A small tree with long, drooping tropical-looking leaves with a moderate growth rate. Paw Paws are prized for their production of delicious fruits that have a taste resembling a creamy blend of banana, mango, and pineapple. Often found in the forest understory on rich, moist, well-drained soils. Young trees require shaded areas during first few years of establishment, after which, they can tolerate partial to full sun. [25 feet tall by 15 feet wide]

**Persimmon** – A slow to medium growing tree typically with a short trunk and rounded crown. Possesses distinctive, brownish-black bark that is divided into a patchwork of small square blocks. Well known for its edible, pinkish-orange fruit in the fall that

requires a few mild freezes to fully ripen. Although it prefers moist, well-drained soils, it is very adaptable to various soil types and is drought resistant. [50 feet tall by 30 feet wide]

**Red Bud** – A small, moderate growth rate, native tree that produces showy, lavender-pink flowers in early spring. When mature, tree has a rounded, vase shape. Tree prefers full sun to partial shade. Reddish-purple leaves change to dark green, then to yellow in the fall. It provides winter food for birds and can be used for nesting sites and materials. [30 feet tall by 10 feet wide]

**Red Maple** – Brilliant red fall foliage makes an excellent landscape tree. Extremely rapid growing with oval shaped crowns. Can thrive in a wide range of soil conditions. [65-75 feet tall by 25-35 feet wide]

**Swamp White Oak** – A medium-sized tree with dark green leaves and a whitish gray bark. Well adapted for growth in very wet, swampy conditions, but is also very drought-tolerant. The acorns are eaten by squirrels, chipmunks and deer. The Swamp White Oak is valued for its timber used for furniture, flooring and cabinet making. [70 feet tall by 50 feet wide]

**Tulip Poplar** – A large tree that is fast growing without the common problem of weak wood strength. Prefers moist soils and is relatively flood tolerant. It is a magnificent tree that has beautiful bright green leaves that turn yellow in the fall. The tulip-like flower has a yellow outside with an orange band and produces large quantities of nectar. [80 feet tall by 40 feet wide]

## Deciduous Shrubs

**Black Chokeberry** – An extremely hardy deciduous shrub that will reach maturity in five years, making it a good ornamental plant. If left alone, the plants can form colonies that provide food and shelter for wildlife. Adorned in spring with white flowers and glossy leaves, then black berries, it ends the growing season with spectacular fall color. Can grow in wet to dry conditions. [3-6 feet tall by 3-6 feet wide]

**Spicebush** – An understory shrub of moist to wet woodlands with dark green, glossy foliage similar to a Paw Paw. Although it prefers partial shade and moist soils, it is very adaptable and will handle sunny and drier sites as well. One of the first shrubs to blossom in late winter with female shrubs producing red berries by late summer that are preferred by wildlife. Shrub gets its name from the spicy fragrance emitted when branches are scraped. [12 feet tall by 15 feet wide]

**Winterberry** – Extremely showy dense clusters of bright red berries remain on the branches throughout the fall and winter. Although berries are great wildlife food, they are toxic to humans. Leaves are dark green in the summer with small white flowers. Grows in both wet and dry sites, it is an adaptive naturalizer. A tough plant that is easy to grow with few diseases or pests. [5-15 feet tall by 10 feet wide]

### Need More Tree Information?

Visit USDA's *PLANTS* database site at [www.plants.usda.gov](http://www.plants.usda.gov). Here you will find detailed plant descriptions, means of identification, and distribution maps for plants throughout the nation. Also refer to **NRCS Appendix B - Tree/Shrub Recommendations** that is posted on our website at [www.defiance-county.com/swcd](http://www.defiance-county.com/swcd). Information on rooting pattern, growth rate, shade tolerance, drought sensitivity and numerous other parameters are included in this publication for a majority of the trees we offer.

**Pond Word Search:** Enjoy searching for words related to pond management below. Please return your completed entry to our office by March 30<sup>th</sup> to be entered into a drawing for two bags of Crystal Blue pond treatment . Get all of your pond questions answered at our May 8<sup>th</sup> Pond Clinic from 6-8:30 p.m. at Oxbow Lake, Defiance. Register for this free event by May 1<sup>st</sup> by emailing [swcd@defiance-county.com](mailto:swcd@defiance-county.com) or calling 419-782-1794.



F P E Y I L B A W U I O N S I L K U T K V P Q E S  
 X L F I S H H A B I T A T E N E X U C G M C N E E  
 E W O A M P H I B I A N Z D M H R H A V O I I Z C  
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 M L T Z P E V J S P C B V H T G N M G T I E X L S  
 I R P A N E N O I T A E R C E R G T W U Z E E O R  
 F Y X X A L D O O J N O K R K T S P S L P K Z I E  
 F D L K G G N B N U D N I H B V F M D P J G P H F

- |                |            |               |                |
|----------------|------------|---------------|----------------|
| AMPHIBIAN      | DROUGHT    | MARSH         | SHALLOW        |
| AQUATIC PLANTS | ECOSYSTEM  | MAY           | SHORELINE      |
| ARTIFICIAL     | EXCAVATE   | NATURAL       | STANDING WATER |
| BACKYARD       | FISH       | NUTRIENTS     | TURTLE         |
| CONSERVATION   | FLOODPLAIN | OXBOW         | WATERFOWL      |
| CONSTRUCTION   | FROG       | POND          | WATER LEVEL    |
| DEPRESSION     | HABITAT    | RECREATION    | WATER LILIES   |
| DEPTH          | LANDSCAPE  | RESTORATION   | WATER SOURCE   |
| DRAINAGE       | MANAGEMENT | SEDIMENTATION |                |

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

# CONSERVATION NEWS

## Defiance Soil and Water Conservation District

06879 Evansport Road, Suite C, Defiance, Ohio 43512  
Phone 419-782-1794 Fax 419-782-1791  
swcd@defiance-county.com  
www.defiance-county.com/swcd

### Board of Supervisors

Bill Moats  
Keith Schroeder  
Roger Zeedyk IV  
Jeff Hange  
Terry Behnfeldt

### District Personnel

Jason Roehrig  
Terri Agler  
Ben Gerken  
Tyler Miller  
Stephanie Singer  
Manuel Lay

### Ditch Maintenance Personnel

Kevin Hancock  
Josh Limber  
Tyler Rosebrock  
Dave Sines

### NRCS Personnel

Steve Snyder  
Lori Shank  
Mike Boff  
Cristhian Carrasquillo  
Jake McClain

## Upcoming Events!

- **Tree Planting Workshop** Monday, March 5<sup>th</sup> from 6-7 p.m. at Defiance SWCD. Learn the proper way to plant tree seedlings to increase survival with John Mueller, ODNR Service Forester. Free, register by March 2<sup>nd</sup>.
- **Upper Maumee Watershed Partnership Meeting** “Accessing U.S. Geological Survey Water Resources Data for Platter Creek, Ohio” presented by Kimberly Shaffer, US Geological Survey, Wednesday, March 14<sup>th</sup>, from 6-7 p.m. at Justin Coressel Community Room at the Sherwood Branch Library.
- **TREE SALE ORDER FORM INSIDE**—**Deadline is March 16<sup>th</sup>**.
- **Bare Root Fruit Trees** 4-species pack, \$50, order online:  
<https://fs7.formsite.com/infoofswcdorg/form22/index.html>
- **Ag Appreciation Breakfast** Tuesday, March 20<sup>th</sup> from 8-10 a.m. at Knights of Columbus Hall in Defiance. \$4, register by March 13<sup>th</sup> by emailing [clevenger.10@osu.edu](mailto:clevenger.10@osu.edu) or calling 419-782-4771.
- **Maple Syrup Festival** Saturday, March 24<sup>th</sup> from 8 a.m.-12 p.m. at Williams County Fairgrounds.
- **Photo Contest & “Watersheds: Our Water, Our Home” Poster Contest** Open to students K-12 who are residents of Defiance County or attend a Defiance County school. Details can be found on the Defiance SWCD Facebook page. Entries are due by April 27<sup>th</sup>.
- **Pond Clinic** Tuesday, May 8<sup>th</sup> from 6-8:30 p.m. at Oxbow Lake, Defiance. Topics include healthy ponds and fish, water quality, weed management, product application, and an electrofishing demonstration. Register for free event by May 1<sup>st</sup> to [swcd@defiance-county.com](mailto:swcd@defiance-county.com) or call 419-782-1794. Hot dogs, chips & drink provided.
- **Kids Outdoor Science Camp** June 4-7<sup>th</sup> at Camp Palmer for 3<sup>rd</sup>-8<sup>th</sup> graders.
- **Outdoor Camp at Penney Nature Center** June 12-14<sup>th</sup> from 9 –11:30 a.m. for K-2<sup>nd</sup> graders.
- **Black Swamp Educators’ Extravaganza** June 19-21<sup>st</sup> at Simpson Garden Park in Bowling Green.
- **MauGlaize River Fest** June 22-24<sup>th</sup> at Defiance River Parks. [visitdefianceohio.com](http://visitdefianceohio.com)
- ⇒ **Woodland & Wildlife Family Festival** June 23<sup>rd</sup> from 10 a.m.-2 p.m. at Pontiac Park, Defiance.



Follow us on Facebook and be sure to sign up for our electronic newsletter at:  
<http://eepurl.com/cjFCdL>



DEFIANCE  
**Soil & Water**  
CONSERVATION DISTRICT