

Conservation News

Newsletter of
the Defiance
Soil & Water
Conservation
District



In Cooperation with the Defiance County Commissioners

Spring 2015

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Ag Appreciation & Hall of Fame Breakfast

Congratulations to this year's Ag Hall of Fame inductees! Three very deserving individuals; Carl D. Higbea, Ada D. Arps, and Daniel H. Singer were recognized on March 18, 2015 for their leadership and influence throughout the agricultural community. This is truly an honor and a testament to the impact that these individuals have had and continue to have on agriculture in Defiance County!



Pictured are the 2015 Ag Hall of Fame Inductees: (left to right) Carl D. Higbea, Ada D. Arps, and Daniel H. Singer. In their honor, plaques will be added to the Ag Hall of Fame display at the Evergreen Lane Office Complex.

The induction was part of the Ag Appreciation breakfast held at the K of C Hall in Defiance to celebrate National Ag Day. The event was organized by OSU Extension, the Defiance Chamber of Commerce, and the Defiance SWCD.

Thank you to our keynote speaker, Randy Frazier, for his "big picture" perspective of agriculture. Randy did a phenomenal job of demonstrating the adaptability of farmers through several humorous stories and heartfelt anecdotes. Mike Wolf from

Northwest State Community College also presented on the college's new crop and soil management degree.

We would also like to thank our sponsors, exhibitors, and each of the 285 attendees. Be sure to continue the celebration of agriculture and share agriculture's story!

Save the Date:

Soil & Water Open House

Defiance SWCD is inviting the public to attend our 2nd annual Open House. We will open our doors on Monday, August 10th from 3-7 pm to conduct Supervisor elections and highlight our services to Defiance County residents.

Dinner and ice cream will be served. Adults can vote for Board members, view displays, and talk with staff and Board members. Children's activities will include a tractor pull, wildlife mounts, and conservation crafts.

Make sure to mark your calendar now, as this will be a fun and informative event that you will not want to miss!

Land to Lake Conference & Canoe Trips Scheduled

On Thursday June 11th we will be holding a Land to Lake Conference at Defiance College from 9 am to 3:30 pm. The conference is open to anyone interested in local issues and solutions that affect the water quality of our rivers and Lake Erie. It is designed for residents, businesses, nonprofits, educators, and local government officials to better understand our role in decreasing pollution to our rivers and building a stronger local economy centered on our rivers. For a complete agenda, visit landtolake.com.

A local leaders' canoe trip will take place

Continued on page 3

Lake Erie Water Bill Signed by Governor Kasich

In late March, the House of Representatives passed a compromise bill known as *Substitute Senate Bill 1* that combines parts of the House and Senate bills addressing water quality that were passed earlier this year. Senators Randy Gardner, R-Bowling Green, and Bob Peterson, R-Sabina sponsored the bill. Governor John Kasich signed the bill April 2, 2015 at Maumee Bay State Park. It will take effect in July.

The bill has broad support within agriculture for not only what it does, but also what it does not, include.

“We thank Governor Kasich for signing Senate Bill 1 today in an ongoing effort to support clean and healthy water in Lake Erie. The Ohio AgriBusiness Association supports the bill because its fertilizer application limits are based on sound agronomics, and because it addresses issues with water treatment plants and the dumping of dredged material in Lake Erie,” said Chris Henney, OABA president and CEO. “We appreciate the governor and the General Assembly’s comprehensive approach to the issue and their willingness to work with, and listen to, the agricultural community through this process.”

The final version of Senate Bill 1 does the following:

- The bill bans the application of fertilizer and manure: on snow covered or frozen soil; when the top two inches of the soil are saturated from precipitation; in surface application of fertilizer when the weather forecast calls for a 50% or greater chance of precipitation of 1 inch or more in a 12-hour period (a half inch of rain in 24 hours for manure) in the Lake Erie Basin Watershed.

- Exemptions to fertilizer application restrictions include: if injected into the ground; if incorporated within 24 hours; or if applied on a growing crop.

- Fertilizer is defined as nitrogen and phosphorous.

- Violators may face civil penalties of not more than \$10,000. The person must be afforded the opportunity for adjudication.

- Medium and small animal feeding operations may apply for an exemption of up to two years if they are unable to meet the new expectations but are working toward compliance. Because the new regulations will require some farms to add costly manure storage facilities, language in the bill was changed to include these exemptions.

- Farms applying manure from a Confined Animal Feeding Operation will be required to have a Livestock Manager Certification or be certified for nutrient application under SB 150. This applies to any farms applying manure from a CAFO statewide.

- Requires the state legislature to review the legislation after three years.

- Bans disposal of dredge material into Lake Erie in Maumee Bay after July 1, 2020 unless authorized by the director of the Ohio EPA.

- New monitoring requirements for water treatment facilities, including certain publicly owned treatment work to begin monthly monitoring of total and dissolved phosphorous by December 1, 2016.

- Requires a publicly owned treatment works that is not subject to a specified phosphorous effluent limit on the bill’s effective date to complete and submit an optimization study that evaluates its ability to reduce phosphorous to that limit.

- In issuing sewage sludge management permits, the director of Ohio EPA may not allow the placement of sludge on frozen ground.

- The bill shifts administration and enforcement of the Agricultural Pollution Abatement Program from the Ohio Department of Natural Resources to the Ohio Department of Agriculture by July 1. Both ODA and ODNR will be authorized to investigate complaints with regard to possible violations of the

prohibitions.

- Creates a coordinator for the Office of Harmful Algae Management and Response as well.

- Shifts the Healthy Lake Erie Fund mission to support conservation measures in the Western Basin as determined by the director of ODNR. The Fund will be used for assistance for soil testing, winter cover crops, edge of field testing, tributary monitoring and animal waste abatement, and for any additional efforts to reduce nutrient runoff.

Article by Matt Reese from Ohio Country Journal. www.ocj.org

Materials and comments from the [Ohio Soybean Association](#), the [Ohio AgriBusiness Association](#) and [Peggy Kirk Hall](#), Ohio State University Asst. Professor, Agricultural & Resource Law were used for compiling this information.

District Continues Focus on Nutrient Stewardship

With the passing of Senate Bill 1, the District continues its commitment to making a positive difference in the water quality/nutrient challenges facing Ohio. We are reaching out to farmers, landowners, and so many more in an effort to educate on the importance of the 4 Rights, the importance of conservation practices such as controlled drainage structures, cover crops, and many more practices—in addition to sharing beneficial programs and resources needed to make an impact in the right direction.

We believe that by working together, we can utilize nutrient management plans, conservation practices, and programs that can aid in the water quality efforts. We are committed to being a part of the solution to these challenges.



Local High Schools Participate in Rain Barrel Painting Contest

As part of the Land to Lake “Watershed Awareness Campaign”, local high school students took part in a rain barrel painting contest.

The painted barrels were on display at the Home & Garden Show in Defiance on March 13 & 14. About 250 people voted on their favorite barrel.

The first place barrel was painted by Defiance High Students, Samantha Speiser, Hannah Homier and Madison Larson. Their art teacher is Ms. Melanie Wilson. To reward their artistic talents, they received a \$30 gift certificate along with conservation related books and posters.

The second place barrel was painted by Hicksville High School students, Abbye Shock and Cheyenne Cunningham. Their art teacher is Mr. Joey Stevenson. They received a \$20 gift certificate along with conservation related books and posters for their creative work.

The beautiful painted barrels were a great attraction to the Land to Lake booth staffed by the City of Defiance, Defiance Soil & Water, and the Defiance Health Department. They helped bring attention to one way that homeowners can take steps in their own backyard to promote healthy water. Rain barrels collect roof water, saving it for a sunny day. Every rain barrel installed

decreases the amount of pollution entering into our rivers by lessening the amount of sewer overflows and reducing runoff carrying substances such as gas,



First Place: *Samantha Speiser (front), Hannah Homier (left) and Madison Larson (right)*

oil, grease, litter, pet waste, fertilizer, and yard waste. Rain barrels also act as a money saver allowing homeowners to use less treated water from the water plant or from their well pump.

The Land to Lake Initiative has held several Rain Garden & Rain Barrel workshops to teach area residents the importance of these backyard practices. Workshop participants were also eligible for reduced prices on rain barrels and rain garden kits thanks to a grant from the Ohio EPA.

What’s Causing Lake Erie’s Algal Blooms?

We frequently have landowners inquiring about the causes of the harmful algal blooms in Lake Erie. Unfortunately, as much as we would like to have a definitive answer for folks (and the ability to concentrate efforts to implement solutions), no one has been able to pin-point one particular causative agent. What we do know, is that dissolved reactive phosphorus—that phosphorus that is readily available for plant uptake and utilization—has increased steadily over the last several years.

A recent article in the *Journal of Soil and Water Conservation* takes a broad look at potential natural and agricultural factors that may play a role in soluble phosphorus transport and that could contribute to algal blooms. The authors

note that although urban and suburban factors are not evaluated in this particular document, these factors also “are important contributors of P loads to the lake.”

The authors theorize that changes to numerous ag production factors, as well as climate change and even the invasion of zebra mussels, may be having an impact on the algal blooms in Lake Erie.

Another important conclusion that the author’s make is that “current Lake Erie water quality issues are the result of the complex interactions among economic, management, climatic, and political factors.” In addition, the authors present a realistic view stating that “the changes we make today may not lead to decreasing P loads tomorrow. There is a tremendous amount of P already in the system, and lag times for P transport can vary from a few months to greater than 10 years.” As a result of this lag time, “we must make progress today if we want to see future improvement in the water quality of Lake Erie.”

If you are interested in reading the entire article, it can be viewed at:

[http://www.jswconline.org/
content/70/2/27A.full.pdf+html](http://www.jswconline.org/content/70/2/27A.full.pdf+html)

Smith, D.R., K.W. King, and M.R. Williams. 2015. What is causing the harmful algal blooms in Lake Erie? *Journal of Soil and Water Conservation* 70(2):27A-29A;doi:10.2489/jswc.70.2.27A.

Land to Lake/Canoe Trips

(cont. from page 1) on Friday, June 12th from 1-5 pm. Local Leaders are invited to get a first-hand view of the Maumee River. The trip is designed to encourage additional cooperation in improving our water resources.

The next day, Saturday June 13th, we invite the public to join us on a second canoe trip on the Maumee River. It begins at 10 am and will end at approximately 2 pm at Pontiac Park. No experience necessary! Canoes, life vests, and safety instructions provided by Ohio Department of Natural Resources.

To register for the conference or either canoe trip, please contact Stephanie Singer at (419) 782-1794 or email ssinger@defiance-county.com.



Second Place: *Abbye Shock (left), Mr. Stevenson and Cheyenne Cunningham (right)*

Overholt Drainage School

The Ohio State University in connection with Defiance Soil & Water Conservation District and Defiance County OSU Extension held the Overholt Drainage School during the week of March 16-20, 2015. Many great educators in agricultural drainage from across the Midwest came together to put on a training for contractors, technicians, and engineers from around the world.



Overholt participants learning about wood-chip bioreactors for nutrient control.

The drainage school focused on ag drainage and within that category many of the topics took a conservation and resource management approach. These topics ranged from the environmental impacts of drainage systems to subsurface irrigation. The sessions

included water control structures, wood-chip bioreactors, and phosphorus filters. These practices work to hold back excess water, nitrogen, and phosphorus respectively. Subsurface irrigation was the topic of a session, and the water conservation that it offers in comparison

to traditional center pivot irrigation systems. Many of the sessions were connected to benefiting water quality while maintaining crop yields.

Defiance SWCD and Defiance OSU Extension were proud to host The Ohio State University, Overholt Drainage School and welcomed all of the participants to Defiance County. The Ohio State University is a leader in ag drainage and nowhere is it more important than Northwest Ohio. Ohio State has educated many, on the importance of ag drainage in connection with food production, while also practicing a high level of resource management in order to maintain healthy land and a healthy lake.

Top Ten Things to Do This Spring

1. **Take a kid fishing!** If you give a kid a fish, they will eat for today, if you take a kid fishing, they will have FUN!
2. **Explore the Outdoors!** Take the time to observe and explore nature. Local recreation opportunities listed at landtolake.com
3. **Soil Test.** Test your lawn, garden, landscaping, and fields BEFORE adding fertilizer. Don't apply fertilizer unless your soil test shows you need it. It is a waste of money and excess fertilizer causes algal blooms in our waterways and Lake Erie. Tests available at OSU Extension offices.
4. **Plant native pollinator friendly plants.** 1 out of every 3 bites of food we eat depends on pollinators. Make sure the plants you purchase are not treated with neonicotinoids. Consider replacing some of your lawn with native plants.
5. **Install a rain barrel and/or rain garden.** You can make a difference

6. **Listen to Frogs.** The spring peeper pictured on the cover of this newsletter is one of the first that you will hear 'peeping' this spring. Learn more at: wildlife.ohiodnr.gov/species-and-habitats/species-guide-index/amphibians
7. **Plant a Tree!** The benefits of trees are endless. They provide shade, flood control, oxygen, filtering, wildlife homes, wildlife food, and beauty. If you have time, you can volunteer to help plant trees at Penney Nature Center- we could really use extra hands!
8. **Set your lawn mower blades at 4 inches.** Studies show that mowing your lawn to 4 inches prevents crabgrass as effectively as a chemical herbicide. Plus less mowing means you will save fuel costs and have more time to do this 'Top Ten' list.
9. **Mulch Trees.** Mulching helps retain moisture and cuts down on

weed competition. Use natural mulch in a 3-10 foot circle making sure not to allow the mulch to touch the trunk.

10. **Buy Local.** Make a commitment to buying local produce. You will be supporting local farmers, saving energy, and eating more nutritious and delicious food. The Defiance Farmers Market runs from May-Oct. 31 on Tues. 2-6 pm, Thurs. 11 am-3 pm, & Sat 9 am-noon in the Northtowne Mall parking lot. The Hicksville Farmers Market runs from May 26-Oct. 22 on Tues. 7:30-11:30 am & Sat. 8 am-12 pm at the Grace United Methodist Church. Or consider a subscription to a local CSA – Community Supported Agriculture.

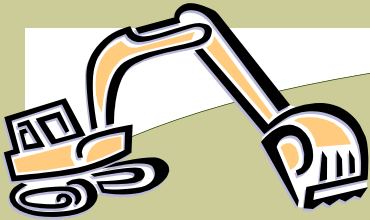


SWCD Office Hours

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 3rd 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.



2014 Ditch Maintenance Annual Report

Administered by Defiance Soil & Water Conservation
District in cooperation with the Defiance County
Commissioners & Defiance County Engineer

Ditch Maintenance Report

In December of 1989, the Defiance County Commissioners and the Defiance County Engineer entered into an agreement with the Board of Supervisors to manage and operate the Defiance County Ditch Maintenance Program as required by the O.R.C. Since that time there have been 70 improvements added to the program. Currently, we have 200 improvements under maintenance, totaling 352 miles. The Soil and Water office also has 12 requests for new Conservation Works of Improvement projects.

The Defiance County Ditch Maintenance Department treats drainage improvements as vital infrastructure to Northwest Ohio. Agricultural producers and rural landowners in Northwest Ohio have been concerned with the need to dispose of excess water. For agricultural



Work Completed in 2014

- 6.6 miles bottom cleaned
- 150 miles brush and cattail control
- 602 ton of rock for bank protection
- 2,170 pounds grass seed and fertilizer
- 38 improvements repaired
- 637 feet of tile/pipe repairs
- Leaning tree/log jam removal
- Tons of broken concrete for bank protection

producers, excess water means delays in plantings, replanting, soil compaction, reduced yields and delay in harvesting. For homeowners in the urban area, excess water can mean damage due to flooding of dwellings and property.

The cost of new construction or the reconstruction of drainage improvements greatly exceeds the cost of maintaining the improvement once construction is completed. That is why, once a project is constructed, the County Commissioners are required by law to place the improvement under the Defiance County Ditch Maintenance program.



DITCH MAINTENANCE ANNUAL REPORT cont.

2014 Revenue

Local & Other Counties' Taxes	\$367,192.11
Equipment Maintenance/Other	\$34,160.33
Total Revenue	\$401,352.44

2014 Disbursements

Salaries/Benefits	\$141,660.07
Materials/Supplies	\$58,566.72
Equipment	\$35,888.30
Fuel	\$22,549.28
Contracted Services & Repairs	\$80,438.86
Utilities	\$2,350.38
Advertising/Printing	\$1,500.00
Other Expenses (Jt. Projects)	\$12,786.09
Workers' Compensation	\$1,067.72
Total Disbursements	\$356,807.42

Ditch Maintenance Steering Board

Warren Schlatter
 Otto Nicely
 Tom Kime
 Ryan Mack
 Mike Zeedyk
 Louis Shininger
 Gary Mavis
 Dan Vetter
 Keith Schroeder
 Tom Beck
 Bill Moats
 Roger Zeedyk IV
 Jeff Hange
 Jason Roehrig
 Ben Gerken

Josh Limber: New Ditch Maintenance Employee

The Ditch Maintenance Department recently hired Josh Limber as a full-time Ditch Maintenance Technician. Josh is a 2000 Ayersville High School graduate and a 2002 graduate from Hocking College with an Associate degree in Environmental Restoration. He currently lives in Farmer with his two sons, Josh & Aidan.

Josh comes with extensive knowledge in the field drainage area with past employment with Harry L. Davis Sons and Zimmerman Farm Drainage tile installation contractors.

Josh is excited to help repair and maintain Defiance County's drainage infrastructure.

Word Search Winner

The word search winner for the winter edition of *Conservation News* is George and Barbara Wells, of rural Defiance. The Well's received a \$20.00 gift certificate to Bob Evans for completing the "Soup" word puzzle and sending it back to the District. Their puzzle was randomly drawn from well over 100 puzzles submitted. Congratulations!

What Are You Doing for Conservation?

Are you taking an innovative approach to dealing with resource concerns on your property? Have you created unique



Barbara Wells receiving a Bob Evans gift card for winning the winter edition word puzzle.



Josh Limber, Ditch Maintenance Employee, prepping equipment for upcoming projects.

habitat areas for local wildlife? Are you providing conservation education to the community? If so, the District would like to hear about these activities. Please contact Stephanie Singer at 419-782-1794 if you would be willing to share your story with us! We would like to acknowledge your efforts while sharing and promoting your ideas.

Word Search

Complete the word puzzle below relating to those factors that have been theorized as having potential influence on nutrient loading to Lake Erie within the “What’s Causing Lake Erie’s Algal Blooms” article on page 3. Complete and return the puzzle by June 26, 2015 to be entered into the puzzle drawing. One winner will receive a potted tree.

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

Additives
 Climate Change
 Crop Genetics
 Fertilizer Placement
 Fertilizer Timing
 Larger Farms
 Microcystis

No Till
 Rainfall
 Sediment
 Soil Testing
 Tile Drainage
 Algal Blooms
 Commodity Prices

Cropping System
 Fertilizer Rates
 Glyphosate
 Manure
 Nitrogen
 Nutrient Efficiency
 Rental Agreements

Soil Biology
 Soluble Phosphorus
 Zebra Mussels
 Buffering Capacity
 Complex Interactions
 Ethanol Production
 Fertilizer Source

Lake Erie
 Microbial Communities
 Non Growing Season
 Preferential Flow Paths
 Rotations
 Soil pH
 Stratification

Name: _____

Phone Number: _____

Conservation News

Defiance Soil and Water Conservation District

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Josh Limber

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Dean Houchen

Upcoming Events!

- **June 3-6** – “Camp Underground!” for Campers - Kids finishing Grades 3rd–8th. Explore: Bats! Fossils! Sinkholes! Earthquakes! 4H–Camp Palmer, Fayette
- **June 6-7** – Black Swamp Historic Farm Implement Show at Auglaize Village
- **June 11** – Land to Lake Conference 9 am-3:30 pm. Agenda at: Landtolake.com. Registration required
- **June 12** – Local Leaders Maumee River Canoe Trip, 1–5pm. Register at ssinger@defiance-county.com
- **June 13** – Maumee River Canoe Trip. Open to the public, 10 am–2 pm. Register at ssinger@defiance-county.com
- **June 16-18** – Black Swamp Educators’ Extravaganza at the 577 Foundation in Perrysburg
- **August 10** – District Open House and Election at Evergreen Lane Office Complex from 3-7 pm
- **August 22-29** – Defiance County Fair



More information about events at: defiance-county.com/swcd.

Be sure to visit our Facebook page and like us to receive event updates and conservation tips!