



Muskingum Soil & Water Conservation District

"Your Soil and Water Conservation Specialists"

225 Underwood Street, Suite 100, Zanesville OH 43701

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Newsletter Issue 1

muskingumswcd.org

Winter 2022, Published Quarterly

2021 Annual Celebration of Conservation Meeting and Banquet



Van Slack

The Muskingum Soil and Water Conservation District (MSWCD) hosted their 77th annual meeting and banquet on November 4, 2021. The meeting was held at Bryan Place in Zanesville, Ohio. The theme of the meeting was Healthy Food Begins with Healthy Soil. Van Slack served as the Master of Ceremony.

After the meal, several awards were presented. The award for Resource Conservation in the Ag Division was presented to Bob Daniels. Bob has been a cooperator with the Muskingum Soil and Water Conservation District for 41 years. The non-Ag award was given to Nestle Purina PetCare for their many conservation practices at their facility in downtown Zanesville. The Educator of the Year Award was presented to

Cadelee Bankes, who teaches physical science at Maysville High School. She takes every opportunity to inform her students about the importance of conservation and being a good steward of the earth and its species. Joan Cameron was presented the Backyard Conservation Award for her conservation practices in her home gardens. Joan's gardens are a good example that conservation practices can be done in the backyard. There were two Friends of Conservation Awards presented. The first award went to the Muskingum County Commissioners, who have provided support and funds to help MSWCD further their efforts to educate the community on strong environmental practices. It was because of their generosity that we were able to have our special speaker for the meeting. The second Friends of Conservation Award went to the WHIZ news team of George Hiotis, Brenda Larrick and Phil Sakal. They have supported MSWCD by allowing our staff to get the conservation word out on radio and TV. They have also participated in and supported our events throughout the years. The Muskingum Big Tree Award winners were Wilbur and Betty Rambo.

After the awards presentation, our speaker for the evening was Neal Kinsey. Mr. Kinsey is the author of *Hands-on Agronomy*. He shared his experiences in helping farmers in many areas understand their soil, and advised them on what they could do to make the soil healthier and productive. He talked about his experiences working with the rich and famous in Germany and California.



Neal Kinsey

2021 Supervisor Election Results

Another great election is in the books for 2021. We are so thankful to have had a great group of candidates run this year. Each candidate brings a unique vision and set of skills to our county. We want to thank all of our candidates for running this year. It was a very close race, and the District wasn't going to lose no matter who was elected!

Congratulations to Mark Sterling, who is new to the Board and will begin his three year term January 2022. Congratulations to Mark Weiser for his reelection to serve on the board for another three year term. Both gentlemen will be sworn in at the January 11, 2022 Board Meeting.



Mark Sterling



Mark Weiser



Ag Award winner Bob Daniels, award accepted by Elizabeth Reeb with Keith Dilley, MSWCD Board Chairperson



Backyard Conservation Award winner Joan Cameron with Mark Weiser, MSWCD Board Treasurer



Educator of the Year Award Cadelee Banks with Becky Vansickle, MSWCD Board Member



Non-Ag Award winner Nestle Purina PetCare accepted by Alyssa Frutechy and Todd Burdine with Lance Deal, MSWCD Vice-Chairperson



Friends of Conservation Winner Muskingum County Commissioners accepted by Commissioners Cindy Cameron and Mollie Crooks with Doug McConnell, MSCWD Board Secretary



Friends of Conservation Winners WHIZ news team Brenda Larrick and Phil Sakal with Doug McConnell, MSWCD Board Secretary
Not pictured: George Hiotis

2021 Resource Conservation Award Winners

Thank You!

A big thank you to Keith Dilley for his many years of serving Muskingum Soil and Water Conservation District as a Board Supervisor. Your wisdom and knowledge will be greatly missed.



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The SWCD and NRCS prohibit discrimination in any program activity or employment on the basis of race, color, national origin, sex, religion, age, disability, retaliation, political beliefs, sexual orientation, marital or family status, or genetic information. Persons with disabilities who require alternative means of communication (Braille, large print, etc.) or who need special accommodations for meetings should contact the SWCD office at (740) 454-2027.

Tree Shelters - Are They Worth The Cost?

The Muskingum SWCD has been selling tree shelters for many years. To provide a good comparison of sheltered versus non-sheltered trees, we asked several past tree shelter customers why they continue to use shelters year after year.

One farmer that we visited has been planting trees since he purchased the property in 2015. As time has gone on he has increased the percentage of sheltered trees. He sees multiple benefits from using the shelters, including what is likely the most important-protection from the deer. Small twigs are high in nutrients throughout the year, which makes these desirable snacks for the deer, especially in late winter. The shelters also discourage the bucks from rubbing the trees. In addition to deer protection, the shelters also increase growth significantly.

In the spring of 2018, American Plum were planted in several areas of the farm, and in just one growing season those that were sheltered have outperformed the unsheltered ones by at least a four to one ratio. The faster the trees grow the quicker they will produce mast for wildlife feed. There has also been a significant reduction in damage caused by moles, voles, mice and rabbits. While these small animals typically won't eat the tree, they will strip the bark to eat, which in turn essentially strangles the trees.

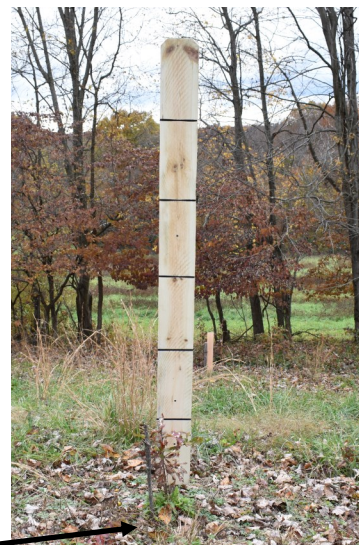
This landowner in particular has seen, and continues to see, the value in tree shelters. In addition to increased growth rates, deer protection, and other animal protection, shelters have also greatly reduced the labor needed to control weeds around his trees. He is able to spray the weeds and reduce competition with much less concern of any herbicide getting on the trees due to the shelter. To decrease the time period to maturity you can either spend \$50 plus on a 3/4" caliper tree and then have to plant a large ball or you can buy a \$2 seedling and protect it with a \$10 shelter and have the same result in the next five years. If you have any questions regarding the benefits of tree shelters please contact the office at 740-454-2027.

Tree shelters can be picked up during tree seedling pickup. Orders of 50 or more shelters, please call the office for bulk pricing. Deadline for orders is March 4th, 2022.



Sheltered Tree

Bur Oaks planted within 50' of each other on a farm in northern Muskingum County. The tree on the left was placed in a shelter at that time, while the one on the right was not. The one on the left has grown out of the top of the 5' tall shelter and is well on its way to the 6' mark while the one on the right just barely reaches the 1' mark.



Unsheltered

Tree Shelter Order Form

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Cell: _____

Please make checks payable to: **MSWCD**

To order by credit card, please stop by the office or order on-line. Credit card orders will not be accepted through the mail.

Tree	Price Each	Plus Tax	Total Price	#	
Three Foot	\$8.39	\$0.61	\$9.00		
Four Foot	\$11.19	\$0.81	\$12.00		
Five Foot	\$12.12	\$0.88	\$13.00		

Total Amount Due \$ _____

2022 MUSKINGUM SWCD TREE ORDER FORM

Name: _____

Address: _____

City: _____	State _____	ZIP _____
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Daytime Phone #: _____	Cell Phone #: _____
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E-mail: (update you when the orders come in) _____

Supply is limited. Deadline to order is **Friday, March 4, 2022**. Projected pick-up date is mid-April 2022.

If you are tax exempt, please figure your total without the sales tax included and submit a Tax Exemption form with the order, regardless of the method of payment.

SPECIES	PACKET PRICE	PLUS TAX	TOTAL PRICE	# OF PACKETS	TOTAL COST
THESE ARE SOLD IN 25 TREES PER PACK					
BLACK CHERRY	\$ 20.51	\$ 1.49	\$ 22.00		
DOUGLAS FIR	\$ 16.78	\$ 1.22	\$ 18.00		
SHAGBARK HICKORY	\$ 28.90	\$ 2.10	\$ 31.00		
RED OAK	\$ 28.90	\$ 2.10	\$ 31.00		
WHITE OAK	\$ 16.78	\$ 1.22	\$ 18.00		
PERSIMMON	\$ 27.04	\$ 1.96	\$ 29.00		
WHITE PINE	\$ 22.38	\$ 1.62	\$ 24.00		
AMERICAN PLUM	\$ 22.38	\$ 1.62	\$ 24.00		
NORWAY SPRUCE	\$ 18.65	\$ 1.35	\$ 20.00		
BLACK WALNUT	\$ 23.31	\$ 1.69	\$ 25.00		
PIN OAK	\$ 25.17	\$ 1.83	\$ 27.00		
THESE ARE SOLD IN 10 TREES PER PACK					
SERVICEBERRY	\$ 17.72	\$ 1.28	\$ 19.00		
PAW PAW	\$ 21.45	\$ 1.55	\$ 23.00		
WILD LIFE PACKET PACK INCLUDES 5 TREES OF EACH SHAGBARK HICKORY, WHITE OAK, PERSIMMON, AMERICAN PLUM, BLACK WALNUT.	\$ 24.24	\$ 1.76	\$ 26.00		
			TOTAL BULK AMOUNT DUE \$ _____		
			PACKET COST \$ _____		
			TOTAL AMOUNT DUE FOR ALL TREES \$ _____		

Mail order form & payment to



















Muskingum SWCD

225 Underwood Street, Suite 100, Zanesville, Ohio 43701

For more information contact the office at (740) 454-2027, or visit our website at muskingumswcd.org.

All sales are final, no refunds or exchanges. We reserve the right to make substitutions. No shipping. Please check your tree order well, upon receipt, and notify the office immediately of any issues such as receiving the wrong trees, receiving the wrong amount of trees, trees are not healthy, etc. To order by credit card, please stop by the office or order on-line. Credit card orders will not be accepted through the mail.

2022 MUSKINGUM SWCD TREE SEEDLING SALE

COMMON NAME	INFORMATION	COST + TAX PER BUNDLE	SIZE	AGE	MATURE HEIGHT	SOIL MOISTURE	GROWTH RATE	LIGHT
THESE TREES ARE SOLD IN PACKS OF 25 TREES								
BLACK CHERRY	  	\$22/25 TREES	12-15 INCHES	1 YEAR	50'-60'	MWD-WD	M-F	S, P
DOUGLAS FIR	 	\$18/25 TREES	18-24 INCHES	4 YEARS	60'	WD-MWD	F	P
SHAGBARK HICKORY	  	\$31/25 TREES	10-15 INCHES	3 YEARS	100'	SPD-WD	M	P
RED OAK	  	\$31/25 TREES	12-24 INCHES	3 YEARS	50'-60'	MWD-WD	F	S, P
WHITE OAK	  	\$18/25 TREES	3-6 INCHES	1 YEAR	50'-70'	MWD-SPD	M-M	S, P
PERSIMMON	   	\$29/25 TREES	18-24 INCHES	2 YEARS	25'-40'	SPD-WD	M	S
WHITE PINE		\$24/25 TREES	12-18 INCHES	3 YEARS	60'-80'	MWD-SPD	F	S
AMERICAN PLUM		\$24/25 TREES	8-10 INCHES	2 YEARS	20'	WD	M	S, P
NORWAY SPRUCE		\$20/25 TREES	15-18 INCHES	4 YEARS	50'-70'	MWD-SPD	S-M	S, P
BLACK WALNUT		\$25/25 TREES	18-24 INCHES	1 YEAR	60'	WD-MWD	F	P
PIN OAK		\$27/25 TREES	18-24 INCHES	2 YEARS	50'-75'	WD-SPD	M	S
THESE TREES ARE SOLD IN PACKS OF 10 TREES								
SERVICEBERRY		\$19/10 TREES	12-24 INCHES	2 YEARS	25-30'	MWD-WD	M	S, P
PAW PAW		\$23/10 TREES	6-10 INCHES	2 YEARS	25'	MWD	M-F	S, P

5- SHAGBARK HICKORY	5-AMERICAN PLUM 5-BLACK WALNUT	WILD LIFE PACKET - \$26.00
5- WHITE OAK		
5- PERSIMMON		

WD= Well Drained
MWD= Moderately Well Drained
SPD= Somewhat Poorly Drained
PD= Poorly Drained

F= Fast
M= Medium
S= Slow

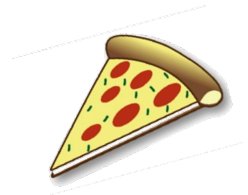
S= Sun
P= Part Sun/
Shade
SH= Shade

Supply is limited, so order early. For more tree information, visit: <http://forestry.ohiodnr.gov/trees>, or contact our office. All sales are final—no refunds or exchanges. Deadline to order is Friday, March 4, 2022. Projected pickup date is mid-April 2022. .



THE VAN & CLIFTON SHOW

PIZZA, POP & PROFIT



Come and discuss nutrients and crop management with Van and Clifton.

Rural Service Building Meeting Room
225 Underwood Street
Zanesville, Ohio 43701

The dates for the 2022 episodes are January 28, February 25, and March 25; all meetings are from 12:00 PM to 2:00 PM. Topics for 2022 include nutrient management, soil balancing, enterprise budgets, Tri-State recommendations, voluntary nutrient management plans and a one and only “One Field Challenge”.

The upcoming crop year is shaping up to be volatile, to say the least. People are hearing reports of fertilizer and chemical supply shortages. Prices of crop protection products and fertilizer are pushing, if not surpassing, historic highs. How can crop production remain profitable in a climate such as this?

Pizza, Pop, & Profit 2022 will try to address some management ideas to cope with the current economic conditions in agriculture. Unless Covid shows up, we will be live in the meeting room at 225 Underwood St., Zanesville, Ohio for these meetings. There will also be a Zoom option if you are not comfortable with crowds and can't make it in, but you will have to supply your own pizza.

Registrations are required for all the meetings, both live and Zoom. To register for live meeting or get a link to register for Zoom option call the office at 740-454-2027 or register online at www.muskingumswcd.org/events. We look forward to seeing you in 2022!

New and Improved!

Check out the new look on our website at www.muskingumswcd.org.

2022 “One Field Challenge”

In 2022, Muskingum SWCD is challenging local farmers to a “One Field Challenge”. Many times farmers are curious about trying something new on their land but are concerned about failing and/or losing money. Muskingum SWCD would like to challenge the farmers to try something new in 2022 on one field, but continue doing what they are currently doing on the rest of the farm to see if there is a difference. For example, if you are currently grazing, try strip grazing.

Other suggestion include:

1. Current fertilizer rates vs. Tri-State fertilizer rates
2. Tri-State fertilizer rates vs. Kinsey/ Albrecht suggestions
3. Current Nitrogen rates vs. Maximum Return to Nitrogen (MRTN)
4. No cover crop vs. cereal rye cover crop
5. Cereal rye cover crop vs. multiple species cover crop
6. Whole field grazing vs. split pasture grazing



Again this challenge does not have to be the whole farm but can be just one field. If you are interested in participating in the “One Field Challenge” please contact Van Slack or Melissa Devore at (740)454-2027 for more information.

SO ARE YOU UP TO THE CHALLENGE?



Allie Murphy has news to share . . .

I am now the Urban Ag and Educational Specialist with MSWCD. Toward the end of the summer, I filled the Urban Agriculture role as a seasonal employee in hopes of earning the permanent position. I have been lucky enough to have not only earned a permanent position here at MSWCD, but to also have earned the Educator position as well! I am very passionate about environmental education and have gained an appreciation for urban agriculture through my work with MSWCD. I have already given a few classroom presentations and am eager to continue reaching out to our community and forming long lasting connections!

2022 Farmland Preservation

The Clean Ohio Local Agricultural Easement Purchase Program (LAEPP) provides funding to assist landowners and communities in preserving Ohio's farmland, our most vital resource. The program purchases agricultural easements from landowners who volunteer to keep their land in agricultural production in perpetuity. In 2013, the program was changed to the Local Agricultural Easement Purchase Program (LAEPP) to reflect the increased role of the Ohio Department of Agriculture's (ODA) local sponsors in farmland preservation: counties, cities, townships, Soil and Water Conservation Districts and land trusts.

The Muskingum Soil and Water Conservation District is a local sponsor and **we will be hosting an informational meeting on Thursday, January 13, 2022 at 2:00 p.m. for interested farm landowners.** We encourage those interested to pre-register so that property maps can be generated before the meeting.

If you are interested, but unable to attend the informational meeting, or do not feel comfortable attending a meeting due to Covid-19, please contact the office for an individual appointment.

To register call 740-454-2027 by January 12, 2022, or register online at www.muskingumswcd.org/events.

Also, check out Ohio Department of Agriculture Website: <https://agri.ohio.gov/wps/portal/gov/oda/programs/farmland-preservation-office>

Intern Opportunities Available

The MSWCD is looking for Volunteer Interns for the summer of 2022. To be eligible, students must be high school graduates and in college. Those interested will be required to fill out an application and submit a resume and short essay. Selected students must be able to pass a criminal background check.

Interns will assist the District staff with programs in agriculture, forestry, water quality, urban agriculture, pollinator plants, and education, including a youth day camp. Students in environmental sciences, agriculture, or teaching fields of study are encouraged to apply. Those selected to assist must be able to work during camp times (to be determined yet, but typically in June), otherwise the schedule is flexible.

While these are all volunteer positions, there is a scholarship opportunity available. The MSWCD Board has approved granting up to three \$1,000 scholarships to interns who successfully meet the requirements and standards for the position and complete the required hours. Also, a copy of the students' 2022 fall college class schedule will be required for college enrollment verification. To be considered for the scholarship opportunity, the application (found on-line), resume and essay must be submitted by March 14, 2022 to lisa.crock@muskingumswcd.org. The essay must explain why the student is interested in becoming a volunteer intern, what he/she hopes to gain from the experience, and why he/she would make a good intern. Applicants will be contacted for phone interviews.



Farming After Dark....Finding a Better Way

One of the very few good things that has come out of dealing with Covid is looking at doing meetings a little differently. The district will continue to offer monthly Zoom opportunities to look at different topics in natural resources.

Our 2022 season will kick off on January 19, 2022 at 7:30 PM with Henry Peller, new Doctor from The Ohio State University currently working for NRCS in Muskingum County. He will share his experience from spending time in Belize, what he learned, and how it may help here in Ohio. This presentation will definitely be thought provoking!

Our February 16, 2022 Jay Hoover from Blain, PA will join us at 7:30 PM for this episode. Jay and his family run a 750 sow farrow-to-finish operation. Tune in to hear their story of change, adapting and adoption. Their farm is located in the Chesapeake Bay Watershed.

The March 16 episode at 7:30 PM will feature a discussion of our new "One Field Challenge" initiative. Water quality has become a hot topic over the last 50 years. With the adoption of conservation practices, along with a change in management, we can see improvements.

Registration is required for these meetings. Check out our website www.muskingumswcd.org to find more information. Use the link located on the Events page then choose Farming After Dark.

MUSKINGUM SWCD 5 MINUTE NATURE CHALLENGE

Muskingum SWCD will be hosting a monthly five-minute nature challenge during 2022. Each month we will give a subject for you to look for and photograph during the month. For example, the month of January is birds. We would like for you to get outside during the month and take pictures of birds. You can submit your photos to our Facebook page, <https://www.facebook.com/MuskingumSWCD>, Twitter <https://twitter.com/home> or post to Instagram using #5mintuenaturechallenge. Once you submit your photos, you will be entered into the quarterly drawing for an insulated water bottle.

Muskingum SWCD would also like for you to submit your photos to iNaturalist <https://www.inaturalist.org/projects/muskingum-swcd-5-minute-nature-challenge>. We are also planning an in-person family event in February to get out and enjoy a local park. The event will be posted on our social media pages and website. So let's get outside in 2022 and enjoy the beautiful outdoors!

GOING ON A TRIP... A BUS TRIP!

The day you quit learning is the day you die, whether you are six foot under or not! The District has secured funding through a generous grant from the J.W. and M.H. Straker Charitable Foundation to subsidize a bus trip to the Chesapeake Bay Watershed area in Pennsylvania and Maryland. The tentative dates for the trip are July 12-14, 2022. Participants will have the opportunity to hear from farmers from the area, the PA No-till Alliance, the Chesapeake Bay Foundation, Stroud Water Research Center, the Rodale Institute and much, much more!

Trust me, you don't want to miss this!



Water quality is at the forefront of discussion, especially in the agricultural community. The Chesapeake Bay has suffered from water quality issues that have led to regulations that the agricultural community has had to deal with for years. This trip is an opportunity to hear their stories and what changes they have made that have benefited their operations and the bay. The water quality of the bay is showing signs of improvement because of their actions. Our part of Ohio has not seen any funding yet from the H2Ohio program, but it might be coming. This bus trip can jump start our conversation about what, if any, changes we can make on our operations before more regulations come. Our part of the state helps contribute to the water quality issues in the Gulf of Mexico.

Please consider joining us for this unique and exciting learning opportunity to expand our horizons! I have heard it said that you can either be part of the problem or part of the solution. Opportunities and challenges abound in agriculture! Stay tuned for more information. Call the office at 740-454-2027 and talk to Van if you are interested. You can also stay up-to-date by checking out our website at www.muskingumswcd.org.



Thank you to the J.W. and M.H. Straker Charitable Foundation for making this trip a possibility.

Welcome Henry Peller!



Henry Peller returns to his hometown of Zanesville after completing a PhD in soil science at The Ohio State University. Over the past decade he conducted extensive research on soil fertility and management and organized agricultural education projects in Belize, Haiti, Ohio, and beyond. Early on in his journey, Henry became fascinated by soils: the humongous, magnificent, and mysterious ecosystems upon which all terrestrial life depends. He is usually thinking about how people interact with land, what we can do to improve biology, structure, and health of our soils, and how we might make a decent living at the same time. Henry also loves growing and propagating just about every edible plant cultivar he encounters, emphasizing the importance of crop diversification in our farms, gardens, and forests. Whether working on the family farm in

Roseville or serving Muskingum and Morgan Counties as an NRCS Soil Conservationist, Henry is excited to learn from the wealth of local knowledge and contribute new ideas.

Covering Zanesville's Soils

by Henry Peller, PhD and NRCS Soil Conservationist

A century ago the hollers of Muskingum County looked very different than they do today. Forest patches were few and far between, and much of the farmland was badly degraded. Amidst the Great Depression, a newly formed Soil Conservation Service (since renamed NRCS) selected a site in Brownsville, just west of Zanesville, as one of only 10 locations across the United States for an experimental farm. From 1934 to 1942, the Northwest Appalachian Conservation Experiment Station curated studies on causes and solutions to soil erosion (see Figure 1).¹ Researchers found clear evidence that vegetative cover, specifically the addition of grasses and legumes into crop rotations, reduced surface water runoff and inhibited soil losses. Their recommendations were broadly adopted, including by way of a field day held on October 2nd, 1947 that was attended by some *fifty thousand* locals!

The advent of mechanized no-till in the late 20th century has largely assuaged soil erosion concerns in Muskingum County, coupled with the transition of steep slopes to forest and pasture. As is well known, no-till farming involves simple technology to apply tillage only in the immediate zone where seed contacts soil, minimizing disturbances. Surveying crop fields today, however, we might ask whether there is any experimentation left to be done. Are we doing our best to keep the soil covered and relatively undisturbed? Put in terms of the contemporary soil health movement, what opportunities exist to improve the structure, fertility, and biological activity of managed lands?

Planting cereal rye (*Secale cereale*) as a cover crop is an excellent way to begin exploring these questions.² If it is mid-August to early November (8/15-11/1) with good precipitation in the forecast, then it is a great day to plant cereal rye. The NRCS specifies a seeding rate of 50 lbs./acre, drilled ¾-1½ inches deep. Planting later into November/December is also viable if the seeding rate is increased. Using a drill will make more efficient use of seed, but simply broadcasting works well too and may provide better coverage. I prefer to broadcast at least 150 lbs./acre (3 bushels) right after picking corn to ensure an excellent, weed-free stand, which costs about \$50 in seed (~\$16/bushel). I also mow the corn stalks and other crop residues to cover the rye in light mulch. Within a couple weeks, the rye forms a bright green carpet and then in April/May explodes into a 6-foot-tall mass.

Once it is time to plant the main crop—corn, beans, pumpkins, tomatoes, and so on—farmers approach the rye in different ways. Many growers ‘crimp’ it with a bladed roller to terminate and flatten ahead of planting; others ‘plant green’ while the rye is still living, then spray it with herbicide. Livestock farmers temporarily move animals into the field to graze a cover crop down and deposit manure. Gardeners and small-scale growers “smother” rye with a silage tarp for a week or two; using everyday tools, others mow it with a sickle (Figure 2) or brush mower when the rye is flowering around mid-May. However we chose to terminate, a tremendous quantity of residue—up to 10,000 pounds of dry matter per acre (equal to 200+ square bales)—becomes a generous layer of straw mulch that suppresses weeds, retains soil moisture, and improves nutrient availability for crops all summer long. Below-ground, the dense, fibrous rye roots loosen compaction, improve drainage, lend crumbly structure to the soil, and feed soil organisms.



Figure 1. Gully erosion in Muskingum County, Ohio. From Borst et al. 1945.



Figure 2. Tomatoes freshly transplanted into rye, vetch, and crimson clover terminated by hand sickle. Roseville, 22 May 2021.

As always, it's best to trial new concepts on a small area before scaling out. One important nuance is to supply a little extra fertility to the crop early on (at or soon after planting) to overcome temporary nitrogen tie-up in the rye. Once we have succeeded with cereal rye, we are prepared to diversify cover crop options. Adding hairy vetch, annual crimson clover, turnips, daikon radish, buckwheat, and a plethora of other plants into the ecosystem can expand the benefits and opportunities. As with every new chapter in the history of agriculture, our work begins with asking questions together and courageously experimenting to find answers.

¹Borst, McCall and Bell, 1945. Investigations in Erosion Control and Reclamation of Eroded Land at the Northwest Appalachian Conservation Experiment Station, Zanesville, Ohio, 1934-42. *USDA Technical Bulletin No. 888*. Washington, DC.

<https://naldc.nal.usda.gov/download/CAT86200880/PDF>

²Midwest Cover Crop Council, 2021. Cover Crops Field Guide 3rd edition. <https://mccc.msu.edu/>

Do you have Spotted knapweed in Your Pasture and Hay Fields? STOP it now!

Do you recall finding pink wildflowers in your pastures, hayfields, and roadsides last summer? If so, your land may be in serious trouble! Spotted knapweed (*Centaurea stoebe*) is one of the most aggressive perennial weeds in southeastern Ohio. Left uncontrolled, it can take over entire fields in just a couple years while offering no forage value to livestock.

The very best control program for spotted knapweed is to identify and treat it promptly. It looks similar to chicory with thistle-like blooms. The basal leaves are long and narrow and form a rosette shape. In late July, it produces flowers that have white centers with magenta petals and a pineapple-like bulb base with black spots.

If spotted knapweed is growing in your pasture or hayfield, then you should contact the Muskingum SWCD or NRCS office to ask about the special funding through the RCPP—Spotted knapweed Treatment for Ohio Producers (STOP) Program. STOP funds three back-to-back years of broadleaf chemical treatment following OSU Extension's herbicide recommendations.

January 14, 2022 is the deadline to apply for this last year of the program. Please call the Muskingum SWCD office at 740-454-2027 or NRCS at 740-454-2767 Extn 3 for more information.



Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) is offered by the USDA's Natural Resources Conservation Service (NRCS). EQIP is a voluntary conservation program that provides financial assistance to help producers and landowners apply conservation practices on the land. Working together, NRCS and producers invest in solutions that conserve natural resources for the future while improving agricultural operations. The signup deadline for EQIP is Jan. 14th, 2022.

NRCS provides producers/landowners with one-on-one help that includes making farm visits, determining needed conservation practices, and then developing a plan for applying the practices. Through the competitive EQIP Program, the producers/landowners can then apply for financial assistance to install the needed practices.

EQIP funding is offered for a variety of conservation practices for woodland management, pasture/livestock operations, cropland management, wildlife/pollinator habitat, organic operations and more. To participate in the EQIP Program, applicants must be owners or operators of the land where the practices will be applied, must establish farm records at the Farm Service Agency, and meet other eligibility criteria.

To learn more about EQIP, or other technical and financial assistance available through NRCS conservation programs, contact Lori Ryan-Griffin at your local NRCS Office at 740-454-2767 Extn 3. The NRCS office is located at the USDA Zanesville Service Center at 225 Underwood St., Suite 100, Zanesville, OH 43701.

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MUSKINGUM SOIL AND WATER CONSERVATION DISTRICT
225 UNDERWOOD STREET, SUITE 100
ZANESVILLE, OH 43701

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HENRY PELLER

Save the Date

Live at Noon	January 11
MSWCD Board Meeting	January 11
Farmland Preservation informational Meeting	January 13
MSWCD Office Closed	January 17
Radio	January 18
Farming After Dark	January 19
Live at Noon	January 25
Pizza, Pop, and Profit	January 28
Live at Noon	January 31
MSWCD Board Meeting	February 8

Live at Noon	February 8
Radio	February 15
Farming After Dark	February 16
MSWCD Office Closed	February 21
Pizza, Pop, and Profit	February 25
Tree Sale Ends	March 4
MSWCD Board Meeting	March 8
Radio	March 15
Farming After Dark	March 16
Live at Noon	March 22
Pizza, Pop, and Profit	March 25

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Check out the new look on our website at www.muskingumswcd.org.



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