

Conservation Update

West Polk Soil and Water Conservation District Crookston MN 56716 218-281-6070 www.westpolkswcd.org www.facebook.com/WPSWCD

WINTER 2023

EQUAL EMPLOYEMNT OPPORTUNITY

Volume 66 ISSUE 1

Office Hours

Monday—Friday 8:00 am - 4:30 PM

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Scan this QR Code to go to our website.

West Polk SWCD Soil Health Incentive Program

In 2022, West Polk SWCD started a conservation program to help farmers learn about the benefits of healthy soil and ways to start farming with soil health in mind. "Soil health" is a broad concept that weighs soil's ability to perform as an ecosystem that can sustain plants with consistent yields, fewer inputs and less erosion. Farmers are likely to see these as plusses, but the changes in practices needed to turn inert dirt into functioning soil can be expensive and frustrating. If you're interested in finding out how to make your farm's soil work with you and spend less time fighting compaction, erosion, and volatile input costs, we want to help make working toward that goal easier.

Our soil health program consists of three parts:

First is education. Academic and industry experts are working hard to figure out how the reduced tillage and cover crop practices that prove successful in other areas can apply to the northern Red River Valley. And farmers in our area that are building off this knowledge are refining the techniques and making them work for their soil and their bottom line. Discussing options that have helped other farmers navigate roadblocks can give you a clearer view of the road ahead. West Polk SWCD is hosting **soil health workshops** were interested and/or experienced farmers can learn and talk about the latest research and technology and figure out the best ways to start applying it to their own ground.

We are also offering **cost-share** to help offset the cost of seeding and terminating cover crops on a trial basis. We will pay \$20.00 per acre for a single species or \$40.00 per acre for three or more species (including at least one broadleaf), with an 80-acre cap. If you're new to cover crops, this can be a good way to mitigate some of the risk of your first try. If you've had luck with cover crops in the past, it's available to help incentivize further experimentation such as: earlier seeding dates, trying different species/mixes and interseeding. Keep an eye on this program. With enough involvement in this pilot year, options and funding will only grow in years to come. Call our office for details or to sign up for a fall, 2023 planting.

Third, we will be holding **summer field visits** where we can grab shovels and take a close look at some Red River Valley soil as it starts coming back to life after a 100year nap. These visits will be an opportunity to discuss the history, challenges, progress and goals of individual fields across West Polk County. All farms and fields are different and although that will create challenges, it can also provide a great opportunity to show how problems can be solved or worked around.

Being the West Polk SWCD tree guy, I have learned a lot about working within the rules of an ecosystem that wants to see my efforts fail. My goal is always to find ways to help folks establish trees with as little effort, expense, and frustration as possible. Species selection and proper planting technique are important considerations, but to ensure long-term success, healthy soil is always the number one factor. (How many of you have heard me promote mulch rings and cooperative ground cover?) "Keep it black" used to be the mantra

back when we looked at soil + trees as a math problem instead of an ecosystem. Sure, rototilling is quick and reduces competition, but those gains come with collateral damage that will add up. Instead of focusing on fast growth, putting effort into creating healthy soil leads to reduced plant stress, fewer inputs and consistent, sustainable growth.

I'm looking forward to continuing to learn from and work with West Polk farmers toward reduced inputs, more resilient crops, and cleaner water. The more natural fertilizer we throw at the wall, the more will start to stick.



Sugarbeets in small grains stuble in West Polk County.

Low Interest Loans Available for Conservation

West Polk SWCD cooperates with the Minnesota Department of Agriculture to offer **the Ag BMP Loan Program** to West Polk farmers and landowners. This program can make expensive purchases more affordable by providing low-interest loans for machinery and structures intended to reduce erosion and runoff pollution. A wide range of practices are eligible for Ag BMP loans including erosion control structures, conservation tillage implements, precision fertilizer applicators, manure management facilities and more. If you're interested in improving your operation to conserve your soil and protect water quality, contact West Polk SWCD for more information about a low interest loan. We'll let you know if your plan is eligible and get you started on the process.



West Polk SWCD Tree Program Species Highlights

West Polk SWCD's annual tree sale is all about offering hardy, useful species at competitive prices, so virtually all of our offerings are the common species that call our area home. Our dogwoods, plums, and oaks, for example, are genetically almost identical to those that have evolved to fit our area over the ages.

But along with these common, "wild type" species, we also offer a few varieties that came about with a little nudging from a human hand. Years ago, someone got the idea to fertilize the New World's eastern cottonwood with pollen from the Old World's black poplar. After fertilizing many female flowers with pollen from many different male flowers, one seedling was selected to become the Norway poplar (Populus x 'Norway') we know and love today. Since these trees are cloned (grown from cuttings) to produce new seedlings, all of them share the same genes, hardiness, adaptability, disease resistance and hybrid vigor of the very first one.

Sometimes these varieties are just the result of someone taking advantage of a common variance among a wild type population. Thornless honeylocust (*Gleditsia triacanthos inermis*) is an example of this. Wild type honeylocusts are terrifying plants. Hundreds of thousands of years ago, they evolved an armor of giant, needle-sharp spines all over their trunks to protect themselves from the wooly mammoths of the Pleistocene. Now that these animals are extinct and with them has passed the need for such excessive defense, some individuals developed mutations that omit the thorns in accordance with life in a much less threatening world. ("Inermis" means "unarmed" in Latin.) On behalf of all tree climbing arborists everywhere, I would like to say, "Thank you!" to whoever decided to start cultivating inermis honeylocusts!

But unlike trees resulting from cloned hybrids or from variances found in the wild, the third character in this story was a one-of-a-kind genetic lottery winner noticed by an observant plant lover in a local nursery.

The Red Splendor crabapple (*Malus* 'Red Splendor') got its start when its outstanding winter hardiness was brought to Melvin Bergeson's attention at his nursery back in 1950. Knowing his market of wind-hating, wildlife-loving prairie residents, he immediately saw a big future for this little tree. And after years of trials and observation, it became clear that winter hardiness wasn't to be this tree's only claim to fame:

Its disease resistance allows it to maintain its value to wildlife and windbreaks in the face of an inhospitable landscape.

Few trees can reliably put on such an astounding spring floral display. If you've ever been near one in bloom, you know you're one of thousands to take note (Buzz buzz!).

Possibly most notable is its ability to hold its fruit all winter long. The copious tiny apples it produces never leave the tree until a hungry animal makes use of them during our otherwise bleak winter months. Red Splendor crabapple is the cozy motel next to a 24-hour restaurant you find on a long trip down a desolate highway. They're an invaluable rest and refueling stop for birds heading south in fall, returning in spring and, of course, those that call northwest Minnesota home all winter long.

Melvin Bergeson's Red Splendor crabapple is one that will always be on West Polk SWCD's tree list. Providing winter cover for wildlife, spring pollen for bees, nesting habitat for birds, safe summer roosting, and fuel for long migrations; this little tree is full of life and beauty all year long. On behalf of all the feathered, furry, and human residents of our area, West Polk SWCD would like to thank the Bergeson family for bringing this gem to our landscape!

Photos by thedailygardner.org



Melvin Bergeson in 1955



Red Splendor Crabapple



Melvin & Olga Bergeson in 1933

Learn more about Melvin, The Man Behind the Red Splendor, at - https://thedailygardener.org/ota20200131/

WCA

The regulatory provisions of the Minnesota Wetland Conservation Act (WCA) Rules MN Chapter 8420 differ from FSA (or NRCS) wetland regulation, so before you begin a project, please contact the West Polk SWCD to discuss your proposal. Under the Wetland Conservation Act, wetlands may not be filled, excavated, altered, or drained unless they are determined to be exempt from the replacement requirements of WCA. Failure to comply with the MN Wetland Conservation Act may result in a violation that will require restoration to the pre-altered condition.

If your project includes tiling, please note that in the proximity of wetlands, setbacks based on soil types, will need to be determined and employed. West Polk SWCD can assist in determining appropriate setback distance(s) and depth(s) and may consult with tiling contractor/firm. Your tiling project may not be approved as planned, even if you have been issued a permit from your local Watershed District, unless wetland impacts are avoided or replaced accordingly.

Prior to starting your project, please contact the West Polk SWCD WCA Local Government Unit <u>aaron.habermehl@wpolk.mnswcd.org</u> 218-281-6070.

RMB environmental laboratories water testing

West Polk SWCD is now a distribution partner for RMB Environmental Laboratories offering free* water testing kits. RMB water test kits (3 grades) analyze total bacteria, nitrates and, if elected, arsenic and lead contaminants. Tests come with instructions for collection and RMB payment scales enclosed. Telephone, email or visit West Polk SWCD field office to acquire a test kit; kits may be returned to field office, for courier service to laboratory, Monday – Thursday before 10:00am.

*kit is free; RMB charges for analyses.





cost-share \$

West Polk SWCD has Erosion Control and Water Management (State cost-share) monies available to help offset the costs of decommissioning (sealing) unused or abandoned wells in rural West Polk County. Please contact <u>aaron.habermehl@wpolk.mnswcd.org</u> 218-281-6070 with inquiries or for any further information. West Polk SWCD also has funding and expertise available to address erosion concerns for landowners or renters (w/ landowner approval). Please call or email any questions regarding erosion or MN Cost-Share Program (ECWM).

Red River Partners Summer Tour

Seven watersheds and water management groups from Minnesota and North Dakota gathered in East Grand Forks, MN and Grand Forks, ND, August 23rd and 24th, 2022 to partake in the first of its kind, the Red River Partners Summer Tour. The summer tour started with a dinner and social at the Boardwalk Bar and Grill in East Grand Forks, MN, with presentations on historic flooding, current flood reduction and water quality restoration efforts over the last 25 years and future needs. On the second day there was the Red River Bus Tour to see projects in the Red River Basin in both Minnesota and North Dakota. These projects showcased water quality, drainage, flood damage reduction, soil conservation, fish and wildlife, and outdoor recreation. More than 100 people attended!



Board of Water and Soil Resources (BWSR) Executive Director John Jaschke, West Polk SWCD Manager Nicole Bernd, BWSR Asst. Director Justin Hanson and MPCA Watershed Division Director Glenn Skuta tour the Agassiz Valley water resource management project during today's Red River Partners Summer Tour. #MnBWSR; Photo by BWSR

Sand Hill River One Watershed One Plan (1W1P) Awarded Planning Grant

In the spring of 2022, the Sand Hill River Watershed District was awarded a Board of Water and Soil Resources (BWSR) 1W1P planning grant. The 1W1P is a program through BWSR that supports partnerships of local governments in developing prioritized, targeted, and measurable implementation plan on a watershed scale.

Partners include West Polk SWCD, East Polk SWCD, Norman County SWCD, Mahnomen County SWCD, Polk County, Norman County and Mahnomen County.



2023 Buffer Program Update

2023 will see West Polk SWCD's buffer monitoring campaign resume as usual. We're using aerial imagery and onsite field checks to identify areas where additional buffer width is needed to meet the minimum required by Minnesota state law. If you receive a letter from Polk County Planning and Zoning informing you that a parcel you own is deficient, you will have ample time to correct the situation and bring your parcel into compliance with the law. If you have any questions about how Minnesota's buffer law applies to parcels you own or farm that abut public ditches or waterways, please call West Polk SWCD for information. And if you own or rent a parcel that you think might have a deficient buffer, West Polk SWCD staff will do an evaluation and let you know what needs to be done to meet the minimum requirements. Our goal is to help you bring your parcels into compliance with as little hassle to farmers and landowners as possible.

Middle-Snake-Tamarac Rivers One Watershed One Plan (1W1P) Approved for Implementation

On August 24th, 2022, the Board of Water and Soil Resources (BWSR) Board of Directors approved the Middle-Snake-Tamarac River 1W1P, a.k.a. Comprehensive Watershed Management Plan. The completion of this plan was achieved by the collaboration of Marshall and Polk Counties, Marshall, West Polk, Pennington and Kittson SWCDs, and the Middle-Snake-Tamarac Rivers Watershed District. Funding has been received to implement conservation practices and flood retention projects through prioritization in the watershed boundary.



Middle -Snakelamarac RIVERS CWMP

Middle-Snake-Tamarac Rivers Comprehensive Watershed Management Plan

DISTRICT CHARGES FOR SERVICES & MATERIALS

PLANTING CHARGE \$.50/tree Min. Charge (less than 400 trees) - \$200.00

DISTRICT DOES NOT PLANT POTTED SPRUCE OR STOCK BIGGER THAN 24" Sales tax will be added to trees NOT planted by the District

MATERIALS 48" Tube Enclosure 1"X1"X48" Stake 36"X36" Fabric Mats

\$3.50/each \$1.50/each \$2.50/each

ENGINEERING/SURVEYING Side Water Inlet (SWI's) additional SWI(s) on the same field

\$300/survey for the first Side Water Inlet (SWI), \$200 for

NO sales tax for engineering/surveying.

West Polk SWCD 2023 Tree Program

West Polk SWCD is now accepting orders for the spring 2023 tree planting season. Please make selections on the enclosed order form and submit it with your payment (cash or check only, please). Bare root trees and shrubs are sold in bundles of 25 (minimum order) and container grown evergreens are sold individually.

Orders should be placed by February 23rd, 2023 to ensure best selection. To reserve trees, hand plant orders and machine plant stock must be paid in full. A storage fee of \$2.00 per bundle/container will be charged each week after pickup day.

Trees are delivered to us in late April/early May depending on weather. Expect a post card from us around that time with specific dates and times when your trees will be available for pick-up. You can also check our website for updates: www.westpolkswcd.org/tree-page . West Polk SWCD does not accept any responsibility for the survival of any trees, and we are unable to offer leftover discounted trees.

If you want assistance with designing a windbreak, we have GIS mapping tools that can help us plan your project and estimate cost. We also provide a bare root tree planting service for windbreaks, wildlife habitat and living snow fences. (You provide worked soil, utility tractor and driver and we provide tree planter and labor.) **Cost-share is available for field windbreaks** – we can offset up to 75% of the total cost of installation (tree and planting cost).

In addition to providing trees and shrubs for windbreaks, wildlife, and snow fences, we also offer riparian species that do an excellent job of holding erosion-prone soil. If you have areas that see bank sloughing or perennial field gullying and you want to add resilience to the vulnerable stream bank past your field's edge, we offer many shrub species with tough root systems that will keep your soil in place and help prevent bigger problems in the future.

Feel free to call me at (218) 281-6070 or (309) 299-1993 or email me at <u>morgan.torkelson@wpolk.mnswcd.org</u> if you have any questions about selecting trees that will fit your needs and thrive on your property.

Buffers Limit Soil Loss and Improve Water Quality

A long and snowy winter that seemed to transition into spring thunderstorm season over the course of five minutes made for a terrible start to 2022 in the Red River Valley. Houses were flooded, roads were damaged, and planting was delayed or prevented altogether. It felt like we were all holding our breath for two months waiting to dry out and finally get some work done (besides fixing sump pumps and opening ditches). While we were out in our rubber boots watching the water inch closer to our foundations, one West Polk resident was already in the field, being put to the test and working as expected.

Although field gullying, soil loss and waterway sedimentation is heartbreaking to see for anyone who works on the land, the grass buffers that West Polk farmers have been working hard to establish along our public ditches and waterways ensured that our situation wasn't as bad as it could have been. The buffers protected vulnerable grades between cropland and waterways and helped keep field gullying from advancing downslope and into channels. It might seem trivial but considering how much work it can take to repair that kind of damage, I think it's a win. If overlooked, gullies that begin cutting through streambanks and ditch slopes only get bigger and lead to more soil loss and surface water degradation over time. At some point, the only fix might be a structure that could cost the landowner and taxpayers thousands of dollars to fix.

Buffers can't be expected to keep every bit of your field's soil and nutrients in place and working for you, but what we saw on the ground last spring showed us that they do a pretty good job of keeping silt fans in the grass and out of Lake Winnipeg. And in some fields where roots and residue were allowed to remain all winter long, runoff barely even scratched the field's surface, let alone the buffer's. I imagine not having to spend extra time repairing field gullies and cleaning ditches was a welcome break after a spring like that!

"There are three principal means of acquiring knowledge... observation of nature, reflection, and experimentation. Observation collects facts; reflection combines them; experimentation verifies the result of that combination."

— Denis Didero

West Polk Soil and Water Conservation District 528 Strander Ave Crookston MN 218-281-6070 www.westpolkswcd.org

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ORDER YOUR TREES BY EARLY FEBRUARY, 2023 SUBMIT YOUR PAYMENT WITH YOUR ORDER QUESTIONS contact: <u>MORGAN TORKLESON</u> morgan.torkelson@wpolk.mnswcd.org 309-299-1993.