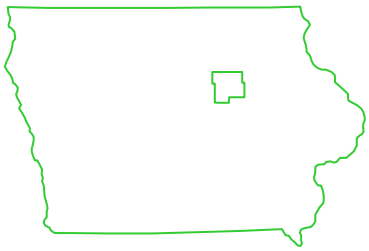
GRUNDY COUNTY IOWA
SOIL AND WATER CONSERVATION DISTRICT



Demonstration Farm

The Grundy Soil and Water Conservation District is in the beginning stages of identifying cooperators for a demonstration farm. There is much in the news surrounding carbon markets and soil health and the SWCD wants to demonstrate locally that soil rejuvenation practices will not harm yields and productivity. We feel technology is available so that no-till and cover crops can be done without hurting yields. The SWCD acknowledges that at the end of the day, yield matters and practices that improve soil health will not be adopted until it is shown that it can be done here.

An ideal farm would be one that is at least 80 acres in size and could be split to farm two different ways. One half can be treated as it always has, and the other can begin to be no-tilled, cover cropped, gleaned with livestock, split-applied nitrogen or any combination of the activities to track soil improvements. We envision the same hybrids used on both pieces, the same total nutrients, and input costs will be tracked. At the end of the season, both yields and profits can be calculated. This experiment would need to be carried out for 3-5 years to follow the changes.

The SWCD will be seeking grants and partners to implement this for the 2024 crop season. If you are interesting in being included on future information, please email courtney.myers@usda.gov or call the office at 319-824-3634 option 3.

Tree sales: A tree-mendous time of year!

We are at that time of the year again, Tree Sales! Tree sales were successful last year, let's keep it going! Order for spring, pick from a variety of barefoot shrubs, conifers, and trees. You may place your order with the Grundy Soil and Water Conservation District at 805 West 4th Street, Grundy Center, by filling out order form and returning. We order through Schumacher's Nursery, please order before November 25th, 2022- REMEMBER! first come, first serve. The delivery dates will be between April 24th, 2023 and May 5th, 2023.

We Thank You!

The Grundy County Soil and Water Conservation District would like to say THANK YOU to everyone who has already donated to the SWCD Conservation Club this year. We would also like to thank the Grundy County Board of Supervisors for their continued support. We appreciate the support of all of everyone!

Donated funds are used to for a variety of projects to promote and educate conservation programs such as educational material for school, stewardship materials, scholarships for a high school seniors, poster contest, Appreciation banquet and Awards program, and conservation programs and tours in the county, field days, along with our newsletter.

If you have not already donated to the Grundy SWCD Conservation Club, you can send or drop off a donation to our office at 805 W. 4th St., Ste 2, Grundy Center, IA 50638. Make your check payable to Grundy SWCD. All donations are tax deductible. Thank you all for your continuing support of conservation in our county.

INSIDE THIS ISSUE

Controlling Invasive Trees on CRP

Most landowners in Iowa will have an invasive tree encroachment issue at some point in their CRP contract. The Farm Service Agency (FSA) requires that trees on non-tree CRP practices must be controlled on a current CRP contract. From a biological stand point many grassland species that utilize CRP are declining in the Midwest and the invasion of trees into grasslands is one of many reasons for their decline. There is no silver bullet to control trees, but there are management practices available to control trees on CRP to prevent costly tree removal expenses when they are too large for these management options. Please contact your local FSA office before conducting any maintenance on your CRP contract.

Photo by Dan Borchardt

Mowing

Like thistle control, mowing alone will probably not eliminate a tree problem. Mowing should be avoided May 15th to August 1st which is the primary nesting season in Iowa for grassland birds. Annual mowing outside the nesting season for cosmetic purposes is strictly prohibited. Mowing will keep the trees at a manageable size, however they will more than likely re-sprout and continue to be a problem. A follow up prescribed fire or herbicide application should be used.

Prescribed fire

Fire should be used in late spring to help control trees in CRP. Timing the burn immediately after the tree leafs out is effective because the tree has used up a lot of stored energy and is in a weakened state. The intensity of the fire will also determine the effectiveness of control you will get on trees. Backburns (fire creeping into the wind) are found to be more effective than headfires in killing small trees. Fire must also be used in a short rotation of 2 to 5 years, depending on regrowth and new tree invasion. Once the trees are thick enough to shade out the grass, a fire will not burn hot enough to negatively affect the trees. Landowners can get permission from FSA to burn more frequently than MCM requires to control trees and noxious weeds.

Herbicide Application

Mention of herbicide trade names below is for convenience of the reader and does not imply any endorsement of that product. Consulting with a herbicide applicator is recommended, and always reading and following the label directions is required.

These applications can be used as a stand-alone treatment or in combination with the above practices.

Foliar application: Trees less than 15 ft. tall can be foliar sprayed effectively after August 1st while the tree is actively growing. This will provide excellent control of the trees, but forbs are likely to be harmed from overspray. Herbicides with an active ingredient of Triclopyr (Garlon 4), Aminopyralid (Milestone), Picloram (Tordon), or Clopyralid (Sendero) are commonly used for this practice. Some herbicides that use a combination of these active ingredients (Grazon) are highly affective. Krenite S herbicide can also be used on a small scale and has minimal effect on grasses and forbs because it is a tree bud inhibitor. Krenite's higher cost may be a limiting factor for a lot of landowners.

Basil bark application: This can be used on just about any sized tree at any time of the year. Exceptions to this would be when there is snow on the ground or the tree is in standing water. A herbicide mixed with a basal bark oil carrier is applied from the ground up to about 18 inches, around the entire circumference of the tree. Herbicides with an active ingredient of Triclopyr, Imazapyr (Stalker) and Aminopyralid are commonly used for this practice.

Manual/Cut Stump

This practice is used on trees taller than 15 ft. and should be done after a prescribed fire if possible. Trees can be cut with a forestry mower type machine or manually cut with a chainsaw. The stumps should then be treated within 24 hours with a chemical labeled for such application to prevent re-sprouting. Herbicides with an active ingredient of Triclopyr, Imazapyr, and Aminopyralid are commonly used for this practice. A 50/50 solution of Glyphosate is also a good option in highly sensitive areas. Conifer trees like cedars cut at ground level do not need to have herbicide applied to prevent re-sprouting.

To conduct ANY management activities during the Primary Nesting Season, May 15th-August 1st, you will need to request permission from the FSA County Committee.

Scenario:

During a site visit in the summer, a 2-year-old CP-42 seeding is found to have encroaching 4 foot cottonwood seedlings at about 20 trees per acre.

Options 1: Conduct a prescribed burn the following spring after leaf out. Request permission from FSA to conduct an MCM burn on all CRP acres that have trees. Mow the firebreaks this fall. After the burn, check for trees that leaf out again. A follow up cut stump, foliar herbicide, or basal bark application may be needed.

Option 2: Spot spray the trees after August 1st using a foliar herbicide application. Use equipment and herbicides that will be most effective in killing just the trees and not the surrounding vegetation.

Scenario:

During a site visit, a 7-year-old CP-33 seeding is found to have encroaching 10-foot box elder trees at 30 trees per acre.

Option 1: Manually remove (chainsaw or forestry mower) the trees after August 1st and treat the stumps. Trees will have to be hauled off the CRP acres. Stumps should be treated with herbicide as soon as possible after cutting.

Option 2: Foliar spray the trees as late into the fall as possible, before the leaves change color. Spraying at this time will minimize the effects of overspray on desirable vegetation. An MCM interseeding at the rate of half the original seed mix might be necessary on these acres to reintroduce forbs lost through shading and overspray.

Article by: Greg Schmitt, Iowa DNR Private Lands Biologist for Northeast Iowa

MEET DON DAVIDSON: OUR TREASURER

Hi! I am Don Davidson, from Grundy Center, and I have been a Grundy County Soil Commissioner since January of 1993. Let me tell you a little bit about myself.

I reside on our family's Century Farm in Palermo Twp, where I have lived most of my life. I farmed this farm for around 20 years, with help from my father and uncle, until I had a life-changing experience 20 years ago with a near heart attack. I made the decision at that time to take employment off the farm, and many of you may know me as "that guy at the FSA Office" where I worked for the next 20 years, until my retirement in January of 2020. Since that time, I've been working on my farm, with my tenant, to try and improve our soils and our yields, as both of those things are extremely important to both me and my tenant!

In my formative farming years, I learned how important soil conservation techniques were to the survival of the family farm. And not only could the techniques conserve the soil, they also had to help provide for the family living on the farm. In other words….they had to be PROFITABLE. They had to help the farm make money. You could not afford to try a new technique or practice that resulted in reduced yields, or increased weed pressures. But, you also could not afford to see our "Grundy Gold" go washing down into the creeks and streams after every 2" inch rain, or bumping over gullies and washouts with the combine. A compromise had to be struck.

I come from a long line of conservation-minded farmers. My grandfather traded horses for Allis-Chalmers tractors in 1930 and never looked back. Yet, he continued to raise a Corn-Corn-Oats-Meadow-Meadow rotation on the farm into the 1950s, even though he no longer needed the oats for the horses. And, he did build farmable terraces on our gently rolling Palermo hills, with help from the local Grundy County Soil Conservation Service in the late 1940s.

My father and uncle continued in conservation tradition in the 1950s and 1960s. First, they gave up the moldboard plow for the Graham chisel plow, and switched to a Corn-Corn-Soybeans-Oats-Alfalfa rotation in the 1950s. In 1963, my Uncle Gordon attended an Iowa State field day in Ames, and saw for himself a brand-new idea: the Till-Plant system. It was a planter, that had mounted to the row-planting unit, a coulter/sweep and "trash rods" mounted just ahead of the planting "shoe", followed by a pair of covering disks. It was designed to plant directly into last year's standing cornstalk rows. The planter would vertically cut through the standing corn stalks; sweep the stalks and root butts off to the side and plant the corn seeds right into fresh, untilled soil, and leave that soil uncovered with residue, so that the soil would be able to warm with the sunshine. Uncle Gordon's eyes glazed over. "I had to try this!" he exclaimed.

The very next year (1964) he purchased a Buffalo Till-Planter and tried out 4 acres, behind the house where no one could see it. And it worked! The corn yielded well. So well, that next year (1965) he decided to do it on his whole farm, for all the world to see. And continued this farming technique into his retirement in to the 1980s, when I took over the farm.

The till-plant system was very good at helping to conserve soil, improve rainfall infiltration and keep the soil covered during the winter. However…there were some tradeoffs. it took very specific equipment, and knowledge and skill to run that equipment. The till-plant system also required 2 cultivations per crop, and sometimes, Mother Nature would not cooperate well in giving you enough dry days in June to allow that to happen. Also, all your harvesting equipment had to "fit the rows" so that the combine didn't run too closely to the corn rows, as that was your planting surface for the following year. It was not easy to get neighbors to help you in case of a major combine breakdown and heavy rain was threatening on the horizon. And, I will admit, it seemed that the yields had hit a plateau. Could there be a better system?

I had started to look at other conservation systems, like no-till and even working in cover crops into the cropping system, when I had my life-changing event. So, at that point in 2001, all of my plans got put on hold, as other priorities were pushed to the forefront. The farm was leased to a neighbor (my tenant now,) and we asked that they not do excessive tillage, but some tillage was ok. They used what I call the conventional Grundy County Farming System; a one-pass of a soil finisher on bean stubble ahead of the corn planter, and fall-chiseling of corn stalks, and a pass of the soil finisher ahead of the bean planter. Yields were good. Life was good. In 2008, my tenant started planting the beans no-till into the corn stalks; even better!

This system sufficed this way on our farm for several years. I did worry about the increased lack of residue following corn planting, but so far, after 10 years, I wasn't seeing signs of increased soil erosion, so I told myself "everything will be ok." Until…..Memorial Day weekend of 2013, when we had two 4-6" rains back to back. I had gullies on my farm. I had washouts on my farm. I felt like I had let my ancestors down. The profits were there; but is this the price you have to pay to get good yields and profitability?

The next year (2014) I repaired the gullies and washouts, and had a talk with my tenant. I did not want to see this happen again. Is there a better way?

I'll discuss our plan in my next article. Hang tight!!

- Don Davidson, Grundy Center-

Grundy Soil & Water Conservation District
Financial Report
July 1, 2021 – June 30, 2022

District Funds		
Beginning balance July 1, 2021		**$33,536.06**
Receipts		
Comm. Expense Income	$2,750.00	
Bank Interest	$11.13	
Conservation Club	$4,720.00	
Board of Supervisors	$4,000.00	
Tree Sales	$6,499.18	
Miscellaneous	$150.00	
TOTAL RECEIPTS		**$18,130.31**
Expenditures		
Commissioner Expenses	$9,256.65	
Prior Year Comm. Expenses	$369.04	
Miscellaneous	$1,251.40	
Sales Tax	$501.28	
Scholarships	$1,500.00	
Subscriptions	$53.00	
Tree Sales	$3,399.09	
Water Monitoring Equipment	$49.65	
Donations	$600.00	
TOTAL EXPENDITURES		**$16,980.11**
Balance June 30, 2022		**$34,686.26**
Payroll/BHCWS Account		
Beginning balance July 1, 2021		**$9,345.60**
Receipts	$68,686.65	
Total Receipts	$78,032.25	
Less Total Expenditures	$70,509.48	
Balance June 30, 2022		**$7,522.77**

Savings		
Beginning balance July 1, 2021		**$46,683.70**
Receipts	$59.14	
Total Receipts	$46,742.84	
Less Total Expenditures	$-	
Balance June 30, 2022		**$46,742.84**
Petty Cash		
Beginning balance July 1, 2021		**$2.11**
RECEIPTS		
Deposit from chg. ***1840	$50.00	
Refund milage Harvin	$3.00	
TOTAL RECEIPTS		**$53.00**
EXPENDITURES		
Postage	$13.80	
TOTAL EXPENDITURES		**$13.80**
Balance June 30, 2022		**$41.31**

State Cost Share Program

IFIP Iowa Financial Incentive Program

FY 2022 allocation $18,895.68

Recalled by DSCW $18,895.68

Balance 6/30/2022 $0.00

REAP Practice

FY 2022 $7,964.91

Recalled by DSCW $2,651.01

Balance 6/30/2022 $0.00

REAP Forestry/Native Grasses

FY 2022 $2,657.68

Recalled by DSCW $121.26

Balance 6/30/2022 $0.00

MEET OUR NEW CONSERVATION ASSISTANT
BRIANNA STANEVICIUS

I am the new conservation assistant for SWCD Grundy county. I am originally from Frankfort, IL. I came to Iowa to attend Iowa State University and never left. I graduated with a degree in Animal Ecology focusing on the option of interpretation. I love creating impacts and memories in the natural world through education.

I had many amazing opportunities through ISU to create outreach programs and interpret the natural world around us with the general public. I was a part of a learning program in 2019 to go to Yellowstone National Park and meet with various biologists of the park and learn they're take on the environment. My favorite accomplishment was working in Yellowstone National Park in 2021 at Roosevelt Corrals leading activities, immersing guests in the natural world, and discovering the history of the park.

I love the opportunity I have now working for Grundy County Soil and Water Conservation District because I can expand my knowledge on soil health while learning alongside our producers.

What's New in FARMS?

FARMS is the cost-share software used by the State of Iowa Department of Agriculture and Land Stewardship. A new system has been launched that allows user access for all our producers and staff. All future applications for cost share practices, such as cover crops, can be done right at home. Our new system allows you to create an account and send in an inquiry for what you would like to apply for. Once your inquiry is approved, all documents will be sent to you via email and can be signed with an electronic signature. We do have the option to keep things on paper if that is what you prefer, but we are also here to assist with the online option! All applications can be done from the comfort or your home, or tractor!
You can reach the applications and register at https://costshare.iowaagriculture.gov/

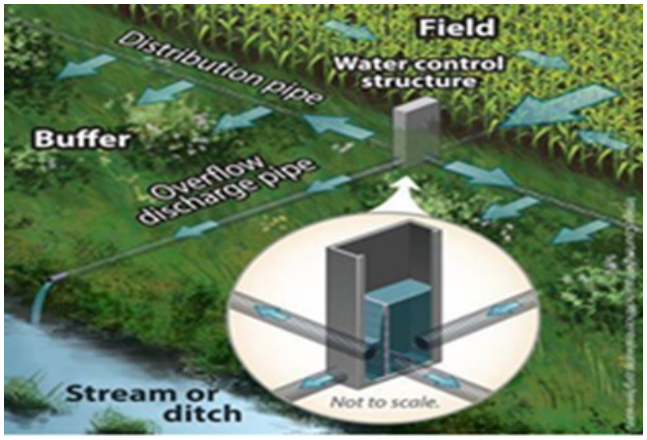
If you have any questions, please contact us at *(319) 824-3634, ext. 3*

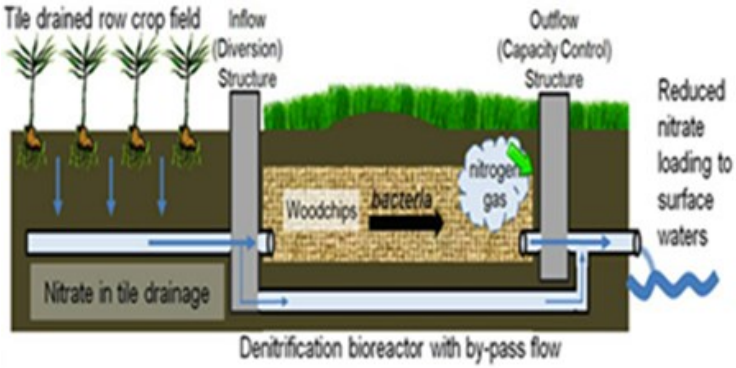
Cedar River Clean Water Partnership

The Iowa Department of Agriculture and Land Stewardship, The City of Cedar Rapids and local partners are currently scaling up efforts to implement the Iowa Nutrient Reduction Strategy in reducing nitrates by treating tile water, with the primary focus on saturated buffers and bioreactors. Through efforts of our partners we have secured funding to install practices in Black Hawk Creek at no cost to landowner. As well as offering a $1000 incentive per tile outlet treated. For more information visit: https://www.bentontamanutrientreduction.org/crcwp.html

Saturated Buffers:

Tile water is diverted to a lateral line parallel to the stream or ditch and nitrate is treated (denitrified) as it moves through the soil profile and drains into the stream or ditch. In high flow conditions the water can bypass the lateral line and discharge, preventing the water table from getting too high in the field. During high flows stop logs may be removed to prevent any saturation of field.





Bioreactors: A bioreactor functions similarly to a saturated buffer but has less restriction in location but does require more upkeep as the wood chips need to be changed about every 10 years, to ensure a fresh microbe population. A portion of the tile water is diverted into the bioreactor chamber. The nitrate in the tile water is treated (denitrified) through using the woodchips to convert nitrate into nitrogen gas and returned to the drainage tile.

Sites we are looking for:

*Fields with Pattern Tile Drainage systems draining 15 – 100 acres with outlets to Waterways or Streams
*Land located adjacent to Black Hawk Creek
*Fields with Vegetated Filter Strips or CRP along waterway or drainage ditch
*Interest in installing a Filter Strip or CRP along a waterway or drainage ditch.

If you are interested in having your field surveyed for practice suitability, give Faith Luce a call at (319) 824-3634 or send an email to faith.luce@ia.nacdnet.net.

The *"Partners in Resource Management"* newsletter is provided free to owners and operators of land in Grundy County, Iowa, and others interested with issues involving resource management.

Send questions or comments to: Grundy County Soil and Water Conservation District

805 West Fourth Street, STE 2

Grundy Center, IA 50638-1069

Phone: (319) 824-3634, ext. 3

Office Hours: 8:00 to 4:30, M-F

We are always looking for new assistant commissioners to join the Board! Anyone is welcome to join! If you have questions or are interested in applying, please contact us at *(319) 824-5416, ext. 3*

Grundy County Soil and
Water Conservation District
805 W 4th Street, STE #2
Grundy Center, IA 50638

GRUNDY COUNTY IOWA
SOIL AND WATER CONSERVATION DISTRICT

MISSION STATEMENT

The mission of the Grundy County Soil and Water Conservation District is to provide leadership to people regarding technical, educational, and financial assistance that conserves natural resources.

A Grundy County producer seeds a mix of rye, radishes, and rapeseed on seed corn end-rows to keep down weeds and protect for harvest traffic.