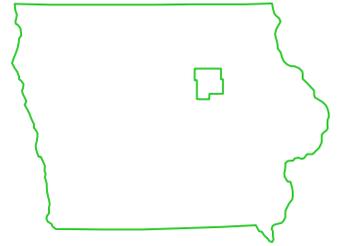




Visit our website at:
www.grundyiaswcd.com



Newsletter provided by the Grundy County Soil Water Conservation District

COVER CROPS AND SOIL HEALTH AT THE GRUNDY COUNTY FAIR

The Grundy Soil & Water Conservation District held a workshop on Wednesday July 18th at the Grundy County Fairgrounds. We want to thank all who attended, PT Grillers for the meal, and ISU Extension for allowing us to have this event at the fair..

The speakers provided a wealth of knowledge and came from all areas of the state WITH many different backgrounds

Mitchell Hora, a 2017 ISU graduate, discussed how his consulting business, Continuum Ag, is using new technologies to address soil health issues. Utilizing the Haney Soil Test and a plethora of data, Continuum Ag focuses on understanding nutrient availability in the soil to optimize inputs and improve profitability for farmers. Hora spoke of soil health improvements through cover crop management and other conservation practices.

Doug Adams is a 6th generation farmer from Humboldt County, Iowa. He started using no-till on his soybean acres and strip till for his corn acres 18 years ago with a goal to improve water infiltration on his farm. This also allowed him to be more efficient on his farm and allowed him to become Soil Conservation Technician at the Humboldt County NRCS office. Six years ago he started using cover crops on his farm to learn more about them and be able to discuss them with clients at the NRCS office to help other reduce nitrate loss, recycle nutrients, improve soil health, and reduce soil erosion.

Chris Henning of Cooper, Iowa grew up on a farm and since 1992 has been managing her own farmland in Greene County, Iowa. Chris has implemented numerous conservation practices on her farm including buffer strips along streams, wetlands, conservation on highly erodible land, CRP pollinator habitat cover crops and 3 year crop rotations. She also plants non-GMO soybeans and edible crops such as beans, potatoes and other vegetables. Protecting her farms soil and water resources are the reasons why she began using conservation practices and still uses them today. She talked about landlord tenant relations as to how she has convinced her current tenant to go along with her ideas of good stewardship on her farm.

Seth Watkins of Clarinda, Iowa is a 4th generation farmer practicing good stewardship on the family farm. In 1994 Seth took over the operation of the family heritage farm that was established in 1846. The influence of his grandmother and 4-H Founder Jessie Field Shambaugh played a role in Seth coming back to farm. Seth's farm consists of 600 cows, in addition to hay and corn to feed his cowherd and calves. Seth demonstrates agricultural land conservation for Leadership in Energy and Environmental Design or LEED certification, and runs an outfitting business for hunting. Seth has numerous conservation practices in place on his farm such as rotational grazing, restricted wildlife areas, riparian buffers, ponds, shallow water habitats, integrated pest management, prescribed burning of CRP acres, windbreak restoration, no-till, cover crops, terraces, inter-seeded legumes in the pastures, prairie restoration/CRP, late season calving (calving around nature's cycle), and row crops integrated with prairie strips. He's being provided with technical assistance from NRCS and ISU on the prairie strips. Seth put many of these conservation practices in place in 1998 when he decided the cows should work for him not the other way around. Cows should eat grass and their calves drink milk. He's calving when grass is rejuvenated in the spring so cows and calves can better utilize the growth. Seth conserves fossil fuel, protects the land, and works with mother nature to improve ecology; these 3 things improve the success of his farm.

Fall 2018

Inside this issue:

<i>Annual Report</i>	2
<i>10 causes for cover crop failure</i>	3
<i>5 questions for landowners</i>	4
<i>Importance of Soil Health</i>	5
<i>4th Grade Tree Planting</i>	6
<i>Summer Intern, Parades</i>	7
<i>Windbreak Awards</i>	8
<i>Conservation Club update</i>	8

The staff in Grundy Center urges you to call first before you come in. There may be times when no one is in the office due to field work or meetings.

TREE SALE TIME

Our tree sale last year was a great success. Thanks to all who purchased from us. We are again offering for sale this year potted conifers, bare-root shrubs, and trees. Order your trees now for Spring. The order form is inserted in this newsletter. We have trees for cost-share projects such as windbreaks, and riparian buffers. If you need some trees to fill in your existing windbreak, take a look at our listing.

You may mail your order to the Grundy SWCD at 805 W. 4th St., Grundy Center 50638 or stop by the USDA office before November 26, 2018. Orders placed after this date may not be guaranteed due to limited supply and there are no survival guarantees on stock at these prices.

The proceeds provide funds for district programs, field days, and educational materials.



**Grundy Soil & Water Conservation District
Financial Report
July 1, 2017 – June 30, 2018**

District Funds	
Beginning Balance	\$22,885.17
*Income- DSCWQ 1M Funds	\$ 3,500.00
Conservation Club Donations	\$ 3,180.00
Tree Sales	\$ 4,286.00
Seed reimbursement	\$ 557.50
Contractor mtg. donations	\$ 570.00
Interest	<u>\$ 12.74</u>
Total Income	\$12,106.24
Expenses- Dues/subscriptions	\$ 1,100.00
Commissioner Mileage/Exp.	\$ 2,106.22
Tree Sales expense	\$ 2,358.34
Cover Crop seed	\$ 560.00
Petty Cash	\$ 50.00
Newsletter/printing	\$ 1,797.19
Postage	\$ 830.49
Field Day & Meetings	\$ 1,784.17
Mule/trailer expenses	\$ 767.21
Advertising	\$ 1,212.73
Outdoor classroom	\$ 1,225.00
Office Supplies	\$ 1,102.50
Parade float expenses	\$ 209.99
Sales Tax	\$ 217.00
Checks ordered	\$ 23.54
Shirts	\$ 266.00
Nursery certificate	\$ 25.00
Cover Crop Displays	\$ 418.49
Miscellaneous expenses	<u>\$ 377.89</u>
Total Expenses	\$16,431.76
Ending Balance	\$18,559.65
Savings Account	
Beginning Balance	\$19,866.09
Board of Supervisors	\$ 4,000.00
Interest	<u>\$ 20.74</u>
Ending Balance	\$23,886.83
District Employee Account	
Beginning Balance	\$55,441.09
Income-IDALS Intern funds	\$ 2,448.00
Farm Bill Allocations	\$ 5,989.50
Interest	<u>\$ 31.71</u>
Total Income	\$ 8,469.21
Expenses- Payroll & Taxes	\$11,831.44
Advertising/meetings	\$ 335.79
Accountant Fees	<u>\$ 250.00</u>
Total Expenses	\$12,417.23
Ending Balance	\$51,493.07
Petty Cash	
Beginning Balance	\$ 24.26
Income-from district ckg.	\$ 50.00
Expenses-office supplies	<u>\$ -46.79</u>
Ending Balance	\$ 27.47

State Cost Share	
Grundy County has been given allocations for use in cost sharing on permanent soil and water conservation practices. Following is a breakdown of FY2018 practices for which certifications have been submitted to the Iowa Dept. of Agriculture Division of Soil Conservation and Water Quality for payment, obligated, and paid.	
<u>Iowa Financial Incentive Program</u>	
FY 2018 Allocation	\$17,329.00
Prior years obligated funds	\$29,987.50
Obligated/Spent	\$33,248.75
Recalled by DSC	\$14,067.75
Balance 6/30/2018	\$.00
<u>REAP Practices</u>	
FY 2018 Allocation	\$ 8,349.32
Prior years obligated funds	\$ 9,308.25
Obligated/Spent	\$ 7,922.63
Recalled by DSC	\$ 9,734.94
Balance 6/30/2018	\$.00
<u>REAP Forestry/Native Grasses</u>	
FY 2018 Allocation	\$ 2,424.87
Prior years obligated funds	\$ 1,500.00
Obligated/Spent	\$ 2,482.29
Recalled by DSC	\$ 1,442.58
Balance 6/30/2018	\$.00

Gordon & Evelyn Davidson Scholarship Fund**	
Beginning Balance	\$10,154.45
Interest	\$ 38.61
Ending Balance	\$10,193.06

*1M funds are provided by the State of Iowa and allocated to the District by the Iowa Department of Agriculture and Land Stewardship-Division of Soil Conservation. These can only be used for dues, mileage, office supplies, newsletter, postage, field days, meetings, workshops, and stewardship expenses	
**The Davidson Scholarship Fund was set up to use the interest earned for scholarships for students going into the fields of agriculture or nursing. Minimum scholarship amount will be \$500.00.	



10 Most Common Causes of Failure of a Cover Crop

Brown, Gabe; Williams, Allen. "10 most common causes of failure of a cover crop."

Dakota Farmer. Informa, June 13, 2018.

Not determining your resource concern first. Too often, producers do not take the time to determine what they want the cover crop to achieve.

- **Not allowing adequate time for cover crops to grow.** In northern environments, many try planting cover crops after a small grain harvest which only leaves a few weeks prior to frost.
- **Planting method and machinery.** The method you should use is highly dependent on moisture.
- **Planting a monoculture instead of a polyculture.** One of the biggest mistakes we often make as farmers is treating our cover crop like one of our cash crops and thinking it, too, must be a monoculture.
- **Forgetting about herbicide residue implications.** Prior herbicide use can have profound impacts on success of subsequent covers due to residue.
- **Failing to consider the carbon-to-nitrogen ratio.** The carbon-to-nitrogen ratio, or C:N, is a very important consideration in determining the specific species to include in your cover crop mixes relative to the prior crop and the next planned crop in the rotation.
- **Buying "canned" mixes from someone because they told you that was the best mix for your area.** Cover crop seed companies that have extensive experience in your region can make the correct recommendations relative to specific cultivars that work best for your farm, soils and climate.
- **Failure to understand proper termination ahead of the next cash crop.** Method and timing of termination are crucial to success of the subsequent cash crop. There are several options to termination, depending on the specific mix you plant.
- **Failure to utilize the cover crop as a revenue generator.** Cover crops can be a good source of revenue generation and a good source of fertilizer inputs for the next cash crop. Livestock grazing of the cover crop can net you as much or more per acre as compared to the typical cash crop.
- **Only considering yield to determine cover crop success.** Cover crops provide a wide range of services, such as feeding soil biology, keeping nutrients on your land so they are not lost down the watershed, increasing soil organic matter, improving soil aggregation and thus water infiltration, and decreasing wind and water erosion.

For more information about cover crops, visit the Grundy County

This land pulses with life. It breathes in me; it breathes around me; it breathes in spite of me. When I walk on this land, I am walking on the heartbeat of the past and the future. And that's only one of the reasons I am a farmer.

Brenda Sutton Rose



Five Questions Non-Operator Landowners Should Ask Their Farmers about Soil Health

by Elisa O'Halloran, Natural Resources Conservation Service in [Farming Conservation](#)

More than half of all cropland in the United States is rented. This means the person who owns the land – a non-operator landowner – is often separate from the farmer making daily management decisions that have long-term impacts on the land. If you are one of those landowners, you may not be thinking about your soil and how it is managed. Your soil is your most valuable asset and building soil health is a capital improvement. It is an investment – in your land's long-term productivity and resiliency. How can non-operator landowners and tenant farmers work together to build land that's healthy, resilient, and productive? Barry Fisher, an Indiana farmer and nationally-recognized soil health specialist with USDA's Natural Resources Conservation Service, recommends that non-operator landowners ask their farming partners these five questions.



Barry Fisher, a national leader in the Soil Health Division at the Natural Resources Conservation Service, suggests non-operator landowners and tenant farmers work together to build healthy, resilient soils.

1. Do you build organic matter in the soil?

Organic matter – carbon – may be the most important indicator of a farm's productivity. The amount of soil organic matter often determines the price farmers will pay to rent or buy land. "Finding a farmer who is interested in building organic matter by using practices like no-till and cover crops is like finding a bank with a better rate on a Certificate of Deposit," Fisher says.

2. Do you test the soil at least once every four years?

Optimizing fertility and pH levels is important to your farm's productivity. Regular soil testing can give an indication of trends in soil fertility, pH, and levels of organic matter in a field. These tests help determine the amount of fertilizer each field needs and potentially saves money for farmers on fields with adequate or high fertility. New soil tests that indicate active carbon levels and populations of important soil biology are also available to help monitor soil health. If a field has a history of manure application and very high fertility, for instance, a farmer could potentially plant cover crops to keep those nutrients in place rather than applying more nutrients that may not be needed.



Healthy soil generally looks dark, crumbly, and porous, and is home to earthworms and other organisms. Fisher recommends soil tests at least every four years to learn about factors you can't necessarily see, such as pH and fertility.

3. Do you use no-till practices?

Some landowners like the look of a clean-tilled field in the springtime. But that "nice look" can be very short lived. "The reality is, a field that has bare soil is subject to erosion and loss of organic matter since it no longer has the protective cover from the crop residue on the surface," Fisher says. "No-till farming utilizes the crop residue to blanket the soil surface and protect it from the forces of intense rainfall and summer heat. This protective blanket will conserve moisture for



Five Questions Non-Operator Landowners

4. Do you plant cover crops?

Cover crops provide a green, protective blanket through the winter months or fallow times. “The green-growing cover is collecting solar energy, putting down roots and providing habitat when the soil would otherwise be lifeless and barren,” says Fisher. “This habitat provides food and shelter for a broad population of wildlife above ground and beneficial organisms below ground.” Cover crops hold onto nutrients left from the previous crop and release them to the next crop. The solar rays these plants collect are powering photosynthesis, taking in carbon dioxide from the atmosphere to produce food for organisms living in the root zone. Cover crops also build nutrient-rich organic matter in the soil and improve the soil’s ability to take in water.



Cover crops can be used to reduce soil erosion, improve nutrient cycling, build soil organic matter, and improve the soil’s ability to take in water.

5. What can we do together to improve soil health on my land?

According to Fisher, the duration of the lease agreement is perhaps the most critical matter in encouraging the adoption of soil health management practices. “Farmers can actually build the production capacity and resiliency of their landowner’s soil, but it may take several years to realize the full benefits of doing so,” Fisher says. He suggests that landowners.

The Importance of Soil Health

By Michael Pittman, District Technician
(https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1082147.pdf)

Improving soil health is key to long-term, sustainable agricultural production. With a rising world population, food production will need to increase by 70% to sustain a populace expected to reach 9 billion by 2050. Additionally, millions of acres of farmland in the U.S. have been lost to development and urban expansion.

Healthy soil is defined as the “continued capacity of a soil to function as a vital, living ecosystem that sustains plants, animals, and humans.” Healthy soils are productive soils, which can reduce production and input costs, increase yields and profits, and protect natural resources. They sustain wildlife habitat and populations while reducing nutrient and sediment runoff.

The path to healthy soils includes a few basic principles and practices. First, keep the soil covered. Doing so protects soil from the impact of rain drops, decreases runoff, and increases water infiltration. It also regulates the soil temperature which improves microbe habitat.

Also, maximize continuous living roots and use diverse crop rotations to increase the diversity of life in the soil. Planting a mixed species of warm and cool season cover crops (legumes, brassicas, grasses) will provide above and below ground growth, in addition to crop residue. Diverse plants provide food for a diverse group of micro-organisms which will increase nutrient cycling and nutrient availability for cash crops.

Lastly, minimize soil disturbances through reduced tillage practices, such as no-till or strip-till and reduced chemical application. These practices result in many benefits, including: reduced fuel usage, reduced labor, reduced soil erosion, improved soil tilth, increased organic matter, and enhanced air and water quality.

Following these soil health principles and implementing conservation practices provides environmental, economic, health, and societal benefits. We can save energy by using less fuel for tillage and maximize nutrient cycling. We can save water and increase drought tolerance by increasing water infiltration and water holding capacity as soil organic matter increases. We can improve plant health, reduce disease and pest problems, and improve income sustainability.



4th Grade Foresters Tree Planting

The Grundy SWCD teamed up again with Greenbelt Bank to show 4th grade students in the county how to plant trees. Each student was given a Burr Oak tree to take home and plant themselves. We would like to thank Luke Wagner at Calkins Nature Center and Peggy Rash-Daniels at the Grundy NRCS office for showing the students the proper steps to planting trees and how to take care of them. Always remember to call 811 Iowa One Call before you do any planting. I apologize to the BCLUW students for not getting a picture of them with their trees.



Left: Peggy Daniels and the Grundy Center 4th grade students



Above: AGWSR students with their tree planted



Below: Michael Pittman and Devin Hinders planting a large tree on the school grounds.

Right: Luke Wagner telling AGWSR students how to plant their tree seedlings.





New Summer Intern, Sarah Hockemeyer

You may have seen a new face in the NRCS office this summer. Sarah Hockemeyer was our summer intern. She is currently attending Hawkeye Community College studying Ag Business. She helps out on the family farm north of Holland with crops and cattle.



Sarah was a great help to our office staff. She was able to learn about the many things that the NRCS office does. Some of these included surveying & design, and checking a variety of practices including CRP in the field. A couple of different practices that she was able to observe were a saturated buffer and a blind inlet.

She had the opportunity to learn about soil health, organic farming, and LIDAR. If you saw the Grundy SWCD parade float during a town celebration, Sarah did a great job of painting that for us.

WE ALL LIVE IN A WATERSHED!

That was the theme of this year's Grundy SWCD float in local parades. Did you know that every one of us live in a watershed?

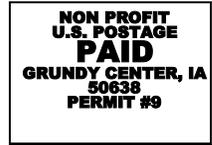
A watershed is a basin-like landform defined by high points and ridgelines that descend into lower elevations and stream valleys. A watershed carries water "shed" from the after rain falls and snow melts. Drop by drop, water is channeled into soils, groundwaters, creeks, and streams, making its way to larger rivers and eventually the sea. Water is a universal solvent, affected by all that it comes in contact with: the land it traverses, and the soils through which it travels. The important thing about watersheds is: what we do on the land affects water quality for all communities living down stream.

It is up to all of us to protect our land and water. Please do your part and help keep it clean!



Grundy County Soil & Water Conservation District

Return Service Requested



805 West Fourth Street Ste. 2
Grundy Center, Iowa 50638-1069
Phone: (319) 824-3634, ext. 3



SWCD Prairie Site located east of Stout.

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.

The U.S. Department of Agriculture prohibits the discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue SW, Washington, DC 20259-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

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

Reminder...

Please call the office to make sure someone is available before you come. Since some of the staff is shared with another county or may be in the field, there are times when no one is in the office.

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.

COMMISSIONERS

Fred Abels (Chairman)
Jim Kadner (Vice Chairman)
Don Davidson (Treasurer)
Jim Everts
Steve Henze

ASSISTANT COMMISSIONERS

Harvin Meyer John Oltman

STAFF

Nicky Williams(DC)
Jim Allen (SC)
Denise Freeseaman (Conservation Asst.)
Peggy Rash-Daniels (Soil Technician)
Michael Pittman (District Technician)
Dawn Van Dyke (Elyon employee)

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. To date, we currently have 50 members who have donated a total of 2,910! We would also like to thank the Board of Supervisors for their continued support. We appreciate the support of all of our members!

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.

Each year, the Grundy SWCD selects windbreaks to submit for the state Izaak Walton windbreak award. There are three windbreak categories, Newly Established (2-5 years of age), Farmstead (at least 5 years old), and Field Shelterbelt. (at least 5 years old)

The windbreak award winners for 2018 are:

- Field Shelterbelt-Robert and Juanita Fiddick
- Farmstead Windbreak- Marjorie Steinfeldt and Bill Steinfeldt
- Newly Established Windbreak-Michael and Jennifer Palmer

In addition, the Fiddick shelterbelt was selected as the state award winner and presented a plaque at the Soil and Water Conservation District's Annual Conference.

Congratulations to all our award winners!

If you know of someone who has an excellent windbreak, please contact our office.