Richland County Soil Conservation District

SUMMER 2021

2021 Achievement Award Winner

The Richland County Soil and Conservation District is pleased to announce the winners of the 2020 Conservation Achievement Award to Paul and Brigid Langseth along with Mike and Chandra Langseth of Langseth Family Farm. The Langseth's farm is located north of Barney ND. Paul and his wife Brigid have been in the farming industry for over 40 years with their son Mike and his wife Chandra joining 6 years ago.

The Langseth's are involved in EQIP, CSP and the 319 Watershed programs offered through NRCS and the Richland County Soil Conservation District. Their farming consists mainly of corn and soybeans using the no till system on soybeans while using strip till on corn acres. Cover crops are also part of the Langseth's farming operation. Mike says he is "Always looking ahead to find ways to improve the soil and get the best production out of the land." He also says, "You have to plan ahead for each year and make improvements, that is what is so interesting about farming. Every year you can be in a different situation. Always be willing to try something new."

Mike attended University of Minnesota after high school, he then decided to change careers and go into farming with his Dad. He has taken several courses at NDSU in soils to help him be more knowledgeable in his farming career and to help him become a better steward of the land. His wife Chandra also graduated from NDSU in soils and after her completion became involved in the extension service, she was the Richland County extension agent until this past fall. She is now a Precision Ag teacher at NDSCS in Wahpeton. Congratulations to the Langseth Family and their achievements.

Due to COVID the annual convention has been postponed so the Langseth's will be recognized in November 2021.

5 Principles of Soil Health

We started 140 years ago with 3 feet of 6-7% O.M. (Organic Matter) topsoil, today we only have 6-12" of 1-3% O.M. topsoil. Soil loss in the 1930's was about 5 inches on 10 million acres. In fertility that equals 40 years of Nitrogen and Phosphorus applications at today's rates were lost. From 1940 to present we have lost another 5-6 inches. One dime's thickness equals 5 tons/ac/ year which is the acceptable loss by the NRCS today. That 5 tons/ac/year equals to 800 tons or 32 truckloads on 160 acres.

On March 23rd, 2021, Chris Walberg and Tyler Zimmerman put on a Soil Health Day Workshop. This workshop covered the 5 Principles of Building Soil Health. I will now pass on the information discussed and what we all learned that day.

Minimize Disturbance

Some ways to minimize disturbance to the soil include reduction in tillage passes, vertical tillage, single disc drills, no-till and reduce chemical and biological disturbance, such as overgrazing, and over application of fertilizer and pesticides. Benefits that you will see from minimized soil disturbances are earth worms, less weed seeds getting planted by tilling, less soil erosion, Mycorrhiza Fungi (critical members of the plant microbiome, forming a symbiosis with the roots of most plants on Earth), water infiltration increases, and better trafficability.

Soil Armor

Ways to achieve soil armor is to leave more crop residue, add cover crops, minimize tillage passes and crop rotations. Why do we want soil armor? It helps to keep the soil cooler and moist. Soil armor also gives beneficial bugs and insects protection. With soil armor in place, weed seeds have a hard time growing through the mat of residue and there is also less erosion taking place.

Plant Diversity

Some plant diversity that Chris and Tyler practice are corn with inter-seeded cover crops, 5-7 species crop rotations and cover crops following cool season crops. They try to incorporate the 4 crop types (cool/warm season grasses and broad leaves) both into their cash crop rotations as well as cover crop mixes. If you look at nature to learn, you will see that it never has any monocrops. More plant diversity is better. The benefits of plant diversity are that the plant roots feed the soil microbes. Different plants feed the different biology in your soil. A diverse crop rotation helps control weeds, insects, and disease, and can also help control residue. The shorter season crops can help get cover crops seeded sooner in the fall. Your diversified cover crops also create a great livestock feed.

Living Roots in the Soil

You want living roots in your soil as long as possible. One monocrop and you will only have living roots in the soil for approximately 150 days, what about the other 215 days? You can capture more of the suns energy before and after our monocrops. You can put living roots into your soil by planting cover crops, perennials, practicing relay cropping or inner cropping. Why would you want living roots in your soil, you may ask? Living roots provide moisture control, nutrient cycling, they feed the soil biology and give more time to produce food for the soil microbes. The soil biology is what glues the soil together. A spoonful of healthy soil has more life than there are humans on earth today.

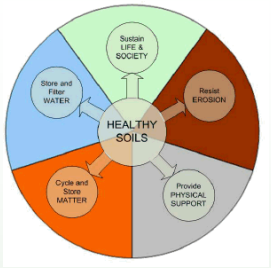
Livestock Integration

You can integrate livestock and feed them by planting cover crops after your small grain harvest, or by inner-seeded covers into your corn crop. You can even have season long covers seeded for summer or fall grazing. Livestock help convert the high carbon crop residue to low carbon organic material, also keeps nutrients in the field instead of transporting the feed to a feed lot. The manure and urine, from livestock, adds biology to your soil as well. Livestock hoof action helps to breakdown the residue and keep it in your field. This will give you added revenue, extra grazing acres and added feed in drought situations.

Every Farmer Has Livestock

Every farmer has livestock; the soil microbes are your livestock. Your soil livestock, listed from smallest to largest, are bacteria, fungi, protozoa, nematodes, pot worms, arthropods, and earthworms. There are over 2,000 pounds of soil livestock (microbes) in every acre of soil. Soil livestock need to be fed (diverse plant root exudates) on a regular schedule (longer you have living roots in the soil the longer your microbes get fed) and need shelter (soil armor and no disturbance). So healthy soil livestock=healthy plants=healthy animals=healthy people.

Soil Health



Why should we care about our soil health? Healthier soils lead to improved plant health, to improved physical and mental health of people, to improved livestock health, to reductions of crop inputs over time, to improved soil structure that will infiltrate more water and reduce soil erosion. If we don't start working on this, soon the government will create regulations so we do, try to be a step ahead as we don't want or need more government regulations.

Precision Agriculture

Pheasants Forever was also there to talk about Precision Agriculture and how they can tie into your farming program. Pheasants Forever can help implement conservation-minded practices based on economics and sound agricultural business planning. They have plans that can improve your soil health and potentially increase your water quality. Pheasants Forever offers 100% voluntary options for a variety of programs and cost-share opportunities to help farmers be more effective and profitable. Their consultations are done at no cost to the farmer and are there to help you work through challenges of program or equipment constraints. Contact info: Austin Lang, Precision Ag and Conservation Specialist. 701-763-6110.

The overall goals are to have less inputs, less equipment cost, trafficability, grazing opportunities, regenerative agriculture, along with organic and non-GMO possibilities.

Attended by Billie Jo Hinders & Keith Kinneberg. Submitted by: Billie Jo Hinders, District Clerk

From the District Technician Desk
by Keith Kinneberg

We made it through a very nice winter and an early spring. I guess we shouldn't complain then. Time sure goes by fast when you are having fun is what I often hear. I really cannot disagree with that saying after the very mild winter. Spring tree planting came a few weeks early this year and so the District was able to complete everything on time. Thank you so much to Bev and Billie Jo for being such great co-workers and helping to put in some long days to help get the planting and fabric application done. It was another great year of putting in many trees (for windbreaks and shelterbelts) and the District wants to thank each of those customers for allowing us to provide the services.

Just a side note to remind those who did get trees in to please continue to water them often to keep them from drying out. With the dry conditions and being newly planted, those roots will need extra care to develop and get down into the soil. Please feel free to call the Soil Conservation District if you have questions about trees and we will try our best to get you an answer. It is also time to start thinking about tree planting for next year. We do have a few cost sharing programs that may be made available so please call and inquire if there are any available and if you are eligible. I do have a list started and will contact those who have already wanted to be put on the applicants list when the cost share programs are made available.

We will start taking hand plant orders for the 2022 spring season starting in October of this year. A handplant order will be placed in the 2021 fall newsletter. Please do not wait until the last minute to order as the possibility of that variety of tree can be out of stock early. We are still having issues with our website, so it is not up and running yet. We are hoping the issues will be solved very soon. We do have a Facebook page that we try to keep updated and you can message us through that.

We have added rototilling (7 foot wide) to our list of services available and if you are interested in having your garden or in between tree lines tilled this fall please contact us and we can give you a cost estimate and get you on a list to have the tilling done. This is another service the board of directors felt would be good to provide for our county. The tilling has picked up and hopefully will keep the staff busy this fall, so we are happy to provide that service. The District hopes you have a safe and enjoyable summer.

RICHLAND COUNTY SOIL CONSERVATION DISTRICT

SUMMER 2021

Grass Seeding:

$25.00 an acre– with minimum charge of $250

Rototilling:

$75.00 per hour-with minimum charge of $250 (Tilling will be used for tree planting contracts and grass seeding areas. Will also do large garden areas if time permits. Other uses may be available if approved by Board of Directors.)

NEW DISTRICT CONSERVATIONIST

I would like to take this opportunity to introduce myself. My name is Jessica Paler, I am the new NRCS District Conservationist at the Wahpeton Field Office. I am very excited to be working in a county that has such a diverse mix of cropland, rangeland, traditional, organic, dryland, and irrigated land. I grew up near Moorhead, MN and received a Bachelor of Science and Master of Science in Soil Science from North Dakota State University. Prior to working for the NRCS, I worked for the Soils Department at NDSU for many years doing in field and in lab work on soil samples. I then moved onto intern at the East Ottertail Soil and Water Conservation District where I worked on projects all over the county. I became an East Ottertail Soil and Water Conservation District Technician shortly after and continued to learn about the different conservation opportunities the SWCD offered. From there I started working for the NRCS in Grant County, MN at the Elbow Lake Field Office. I was a Soil Conservationist in that office for 3 years where I got to work with cover crops, no-till operations, pollinator plantings, and grazing. I live in the country with my husband and dog where we manage the woodland around our home. My hobbies include gardening, food preservation, cooking and baking from scratch. My husband and I enjoy spending our free time together reading, playing games, and spending time outdoors. I look forward to meeting you in the future and assisting you with your conservation needs.

NEW DISTRICT CLERK

Hello everyone. My name is Billie Jo Hinders, and I joined the Richland Soil Conservation Districts team, as the District Clerk, in January 2021. I'm excited to have been given the opportunity to work with such an amazing group of people and really enjoyed my first season of tree planting. I grew up outside Fergus Falls, MN on a small grain farm. We also raised cattle and had horses. My sister and I competed in rodeos. I was very active in our 4-H Chapter and FFA Chapter. My love for agriculture and passion for helping others created in me a desire to attend college at South Dakota State University, for Agriculture Education. I student taught and then taught full-time in North Dakota for most of my teaching career. Later, I moved to South Dakota. While in South Dakota I met my husband and started a family. When I'm not busy running after kids my hobbies include recreational and competitive horseback riding, fishing, hunting and leather work. I look forward to assisting you with your conservation needs.

~From the Desk of the District Conservationist~
Do you know about our Financial Assistance Programs?

CSP

Our Conservation Stewardship Program (CSP) helps you build on your existing conservation efforts while strengthening your operation. Whether you are looking to improve grazing conditions, increase crop resiliency, or develop wildlife habitat, we can custom design a CSP plan to help you meet those goals. We can help you identify natural resource problems in your operation and provide technical and financial assistance to solve those problems or attain higher stewardship levels in an environmentally beneficial and cost-effective manner. For example, we can look at ways to address the amount of soil lost; mitigate the impact of excess water; reduce the contribution of agricultural operations to airborne soil particles and greenhouse gas emissions; improve the cover, food, and water available for domestic and wildlife species; or promote energy efficiencies for on-farm activities. If you are already taking steps to improve the condition of the land, chances are CSP can help you find new ways to meet your goals.

EQIP

The Environmental Quality Incentives Program (EQIP) provides financial and technical assistance to agricultural producers and non-industrial forest managers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, increased soil health and reduced soil erosion and sedimentation, improved or created wildlife habitat, and mitigation against drought and increasing weather volatility. This voluntary conservation program helps producers make conservation work for them. Together, NRCS and producers invest in solutions that conserve natural resources for the future while also improving agricultural operations. Through EQIP, NRCS provides agricultural producers and non-industrial forest managers with financial resources and one-on-one help to plan and implement improvements, or what NRCS calls conservation practices. Using these practices can lead to cleaner water and air, healthier soil and better wildlife habitat, all while improving agricultural operations. Through EQIP, you can voluntarily implement conservation practices, and NRCS co-invests in these practices with you.

If you are would like to know more about these programs please call 701-642-5997 or visit https://www.nrcs.usda.gov/

I look forward to assisting you with your conservation goals.

Jessica Paler
NRCS District Conservationist

Make & Paint Rain Barrel Workshop
Was held at Crooked Lane Farms, Colfax
on April 20th & 27th from 6-8 pm.

A rain barrel is used to catch and store rainwater from your roof, that would otherwise runoff, until it is needed for landscaping or gardening purposes. A rain barrel can save a homeowner an average of 1,200 gallons of water during peak summer months! A 1,200 sq. ft. roof yields an average of 700 gallons of water per inch of rain. Our rain barrels are composed of 55-gallon re-purposed drums. They are inexpensive and easy to install next to any residential gutter downspout and offer many great benefits for you and the environment.

The first night participants viewed a short presentation, given by Clay County SWCD, on the benefits of a rain barrel. They were each given their barrel and fittings needed. Then the participants began the construction of cutting out the holes for the fittings, sanding and then installing the fittings to the barrel. The second night, they completed the construction and with their creativity, painted their barrel to fit into their landscape. There were 19 people that attended and had a blast. The cost of the workshop covered the cost of the barrel, barrel kits, paint, and class supplies.

The event was sponsored by the Richland Soil Conservation District, Wilkin County SWCD, Clay County SWCD and Crooked Lane Farms.

RICHLAND COUNTY SOIL CONSERVATION DISTRICT

WILKIN SOIL & WATER CONSERVATION DISTRICT

CLAY Soil & Water Conservation District

RICHLAND SOIL CONSERVATION DISTRICT BOARD MEMBERS

Do You Know Your Board Members? (left to right)

Mike Haverland - Supervisor/Walcott
Kelly Klosterman - Supervisor/Mooreton
Chris Walberg - Supervisor/Leonard
David Muehler - Supervisor/Hankinson
Carson Klosterman - Supervisor/Wyndmere

> The waste of soil is among the most dangerous of all wastes now in progress in the United States.
>
> *Gifford Pinchot, 1910*

Eco-Ed

Eco-Ed 2021

Excited for a year of openings! Can't wait to get info out to you. We will be in contact with the schools soon.

319 Antelope Creek Watershed News

By Jennifer Klostreich

The District continues to work with the North Dakota Department of Environmental Quality (NDDEQ) holding grants through the EPA 319 Project. We continue to monitor the water on the Antelope Creek and the Wild Rice River, this sampling occurs March (spring melt) until freeze up or when the water dries up, usually September. The District offers cost-share on practices in the Antelope Creek Watershed for projects that can improve water quality such as filter strip, well decommissioning's, and septic replacement on failed or improperly installed systems installed prior to 2010. These are just a few of the cost share opportunities. The District will be applying for another grant this fall to ensure we maintain a seamless funding source. Enjoy the rest of the summer it is flying by.

OFFICE STAFF:
Jennifer Klostreich - **Watershed Coordinator**
Keith Kinneberg –**District Technician**
Billie Jo Hinders—**District Clerk**
Jessica Paler—**NRCS District Conservationist**
Tanner Tougas –**NRCS Soil Conservationist**
Amy Gnoinsky— **NRCS Soil Conservationist**
Arlene Hafner - **NRCS Contractor**
Dianne Kriz—**NRCS Contractor**

OFFICE HOURS:
8am - 4:30pm Monday-Friday
701-642-5997 Ext. 3

TENTATIVE BOARD MTG SCHEDULE
July 13th
August 10th
September 14th
October 12th
November 9th
December 14th

Richland County Soil Conservation District
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Wahpeton, ND 58075

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