



# THE LANDSAVER



LAMOURE COUNTY SOIL CONSERVATION DISTRICT

Fall/Winter  
2023

Volume 33  
Number 2





# 26<sup>th</sup> Annual Eco Ed Camp Held for 6<sup>th</sup> Graders

The LaMoure County Soil Conservation District hosted the annual Eco Ed day camp on September 6th at the LaMoure County Memorial Park. The 6th graders from LaMoure County schools of Edgeley, Kulm, LaMoure and Marion attended the camp, totaling 46 students!

The goal of this camp is to provide hands-on learning about ecology - the study of living things and their environment.



The camp includes 5 outdoor classroom sessions of Water Quality, Rangelands, Woodlands, Soils and Wetlands and a presentation from Jim Gerholdt and his "Remarkable Reptiles."

The Students were tested at the end of the day with the highest scores receiving a medal and the highest school average receiving a trophy, which went to the 6th grade class of LaMoure!







LaMoure County  
Soil Conservation District

# GOOD & BAD SITE PREP

It is time to think about ground prep for new tree plantings. When prepping your site, it is best to work the site to a garden-like condition. Soil should be flowable and free of large chunks that have air pockets which prevent good root-to-soil contact. The removal of large rocks and roots, weeds, and debris also helps the planting process and thus bare root trees will establish quicker. Having your tree site prepared properly is essential for a successful planting.



GOOD SITE PREP



BAD SITE PREP



## **Ideal Site Prep:**

Prepare the ground, the earlier the better. Ideally, the fall before! We offer a tiller that can be rented for this purpose! This allows trees to easily be planted and thrive without competition from weeds or struggling from poor soil composition.

## **Less than Ideal Site Prep:**

It's not good for planting, and most importantly, it's not good for the trees! Lumpy, uneven soil with air pockets, weeds and grasses, or soil dried from excessive tillage prevent newly planted trees from flourishing.





# FSA STAFF 2023-24



*Allie Slykerman*  
*Farm Loan Officer*



*Jill Dunn*  
*Farm Loan Manager*



*Kelsey Peterson*  
*Loan Analyst*

The Farm Service Agency Loan Program offer loans to help farmers and ranchers get the financing they need to start, expand or maintain a family farm.



*Dennis Holen*  
*County Executive Director*



*Taylor Clark*  
*Lead Program Technician*  
*Acting County Executive Director*  
CRP



*Christina Oien*  
*Program Technician*  
Acreage Reporting, Eligibility  
HELC/WC, MAL



*Danielle Bowen*  
*Program Technician*  
ARCPLC, Organic, Livestock  
Disaster Programs

## Meet the staff!

Our County FSA office staff facilitates USDA programs to provide benefit to local farmers and ranchers.

Each program has a technician that can assist you with all your program questions, formal reporting and documentation.



*Harmony Rode*  
*Program Technician*  
Administrative Support



# From the Desk of Sue...

What a difference a year makes! I re-read my article from the fall of 2022 and it recapped all of the rain delays we had that previous spring. This spring was nothing like that! We planted AND installed weed barrier fabric without one single rain delay! While we were getting a lot of field work done in a timely manner, there was a looming concern about the lack of rain. Add in the fact that we were taking trees from a dormant state in a 38° degree cooler and planting them in 90° degree temps. There was definitely stress on the trees we planted this spring. Some handled it better than others. A giant shout out to the tree crew for all their hard work on those hot days as well! Darrell Prochniak, Wyatt Braun, and Michael Christensen made up the seasonal tree crew, and along with Ellie Lux and I, we got the job done! Now on to planning trees for next spring. As always, if you are interested in having some trees planted, be sure to contact me!



**WE PLANTED 26.1 MILES FOR 28 LANDOWNERS  
INSTALLED FABRIC ON 24.3 MILES  
SOLD ABOUT 7,400 TREES TO INDIVIDUALS TO PLANT!**



## Education & Outreach Report Card



I have officially been the Ed & Outreach Coordinator for LCSCD for a year now! What a journey! I have learned so much in my first year, some of my favorite memories include: Ladies Ag Night, Tree Planting, & Eco Ed Camp! Hoping to continue to bring fun events to help spread the word about conservation practices to both adults and kids in this next year! Keep watching our facebook page and website for more outreach coming towards you!

– Ellie Lux

### District Staff:

Susan Muske  
*District Manager*

Ellie Lux  
*Education & Outreach Coordinator*

### Board Members:

Chirstof Just, *Chairman*  
Aaron Stroh, *Supervisor*  
Boyd Dallman, *Supervisor*  
Lynn Haro, *Supervisor*  
Ann Moch, *Supervisor*

### NRCS Staff:

Amanda Brandt  
*District Conservationist*  
Rani Lloyd  
*Business Tools Specialist*

**Office Location : 211 Main St • LaMoure | 701-883-5344**

*District Programs are offered on a non-discriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap. USDA is an equal opportunity provider, employer and lender.*

*District board meetings are held the 3rd Tuesday of each month, 7 p.m., LCSCD office, but are subject to change. Be sure to contact the office for the latest info. Meetings are open to the public.*





## **DON'T MANAGE WATER WITH TILLAGE BY JON STIKA, USDA-NRCS-ND - 2019**

Understanding how water is used and moves through the soil can shed some light on why tillage is not an effective tool for managing excess soil water. Even during dry years farmers have to deal with wet areas in their fields. Options to manage excess soil water by improving soil quality are, growing plants that use water and managing crop residue without tillage.

Most wet areas in a field are wet because they receive additional water from higher places on the landscape by surface or subsurface flow and don't have an outlet for the excess water. Tillage typically makes wet areas wetter because it causes less water to soak into the wet areas, and more water to run off the uplands and into the wet areas of a field. Tilling the soil causes more runoff because it destroys the pathways water follows to soak into the soil. One pathway water takes to infiltrate the soil is between soil aggregates. Tillage smashes soil aggregates leaving fewer pathways between aggregates and clogging the spaces that remain with the smaller pieces of smashed aggregates. Because tillage is devastating to soil microbes and soil microbes make up much of the glue that holds soil aggregates together, tillage not only smashes aggregates but smashes the microbes that help maintain soil aggregates.

Another way tillage reduces water infiltration into the soil is because tillage shears off pores that had been created by roots and earthworms. Pores that are not continuous with the soil surface don't conduct water down into the soil very well. Destruction of soil aggregates and pores with tillage results in less water infiltrating into the soil and more water running off uplands and less water soaks in on low areas of the landscape. The net result is more water in low areas with no place to go but up (evaporation). When the weather and soil are cool in the spring, evaporation is a slow process.

Growing plants use a lot of water. Wheat may use 16" of water and alfalfa 24" of water in a growing season. Weeds are less moisture efficient and use even more water than most crops. If you want to get rid of excess water, growing plants will get it out of the soil very well. Tillage will not get rid of excess water if the tillage kills growing plants. Growing plants on all parts of the field for as long as possible will use the most water.

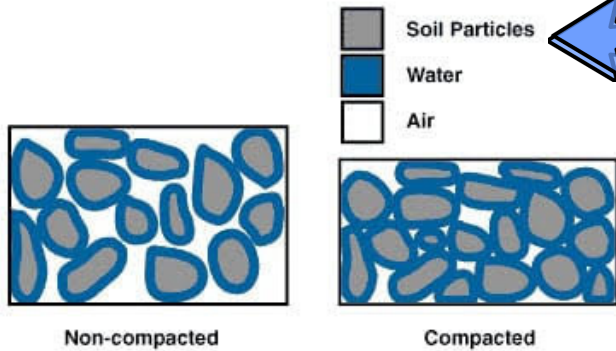
Standing crop residue is an excellent pathway for water to move into the soil. Infiltrating water will quickly follow stems and roots of previous crop residue down into the soil. Also, standing crop residue does a good job of trapping snow. Every three inches of standing crop stubble can catch the snow-equivalent of an inch of water. To keep the water infiltrating benefits of crop residue without the snow catch, mow (don't till) crop residue short in parts of the field that are typically too wet. This will help to limit the amount of snow caught and water infiltrated in those areas. Residue left intact on the upland portion of the field will aid in water infiltration, so the water does not run down to the low areas.

While it is true that bare soil becomes warmer and allows water to evaporate more readily, the damage tillage does to the soil will result in more water accumulating in low areas. Water can be better managed by disturbing the soil less and managing excess residue with clipping or grazing. Improving soil quality, allowing plants to use water, and managing crop residue without tillage are key strategies to manage excess water on cropland.

NDSU has good information on this subject online at:

<https://www.ndsu.edu/soilhealth/water-management-suggestions-to-improve-soil-health/>.





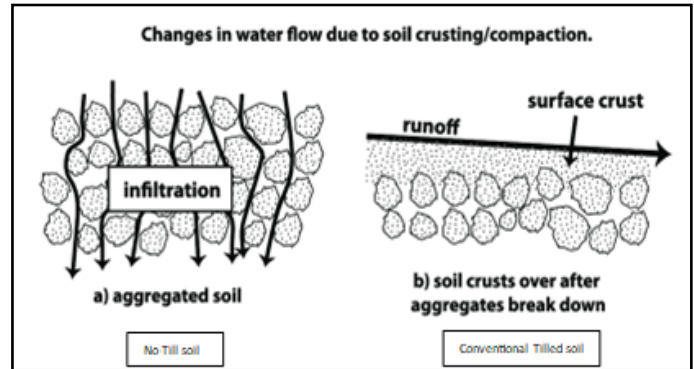
Soil Compaction reduces the total pore space of a soil, limited pore space is restrictive to air and water movement throughout the soil. Compaction can be caused by tillage, wheel traffic, crop rotation (or lack of) or raindrop impact.

Source: University of Minnesota Extension (DeJong-Hughes et al., 2001)

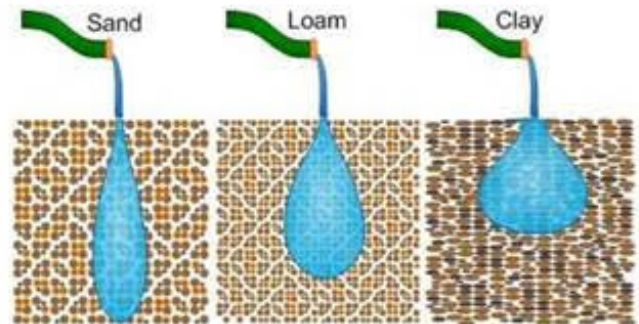
Water infiltration and runoff into well-aggregated and weakly aggregated soil.

Source: Understanding and Managing Soil Compaction in Agricultural Fields, January 2013, NM State University, Cooperative Extension Service.

A soil stability test, or slake test, is one of the easiest and most revealing ways to evaluate important indicators of soil health. The longer the soil takes to break down in water, the more stable it is. This demonstration shows how stable soil aggregates resist erosion from wind and water. Stable soils also improve water infiltration and holding properties. (Photo below by LCSCD)



## RESPONSE OF WATER TO DIFFERENT SOILS



## PROGRAMS

**EQIP:** The Environmental Quality Incentives Program is the best program for practices such as wind-break renovations, mulch till, no till, nutrient management, and cover crops. Or if you have livestock, some common practices are pipelines, tanks, and wells, cross fences, and a prescribed grazing plan. Financial assistance may be available to help you adopt these practices to improve the quality of your farm or ranch and address your resource concerns.

**IRRIGATION:** Managing the rate, amount, and timing of water application according to the seasonal crop needs and giving consideration to the soil intake and water holding capacities are all part of Irrigation Water Management (IWM). Some benefits of IWM are dependable yields, improving crop quality, reducing labor, reducing the potential of water runoff and erosion, and managing salinity in the soil. Cost share may be available through EQIP for retrofitting existing irrigation systems only (not new systems).

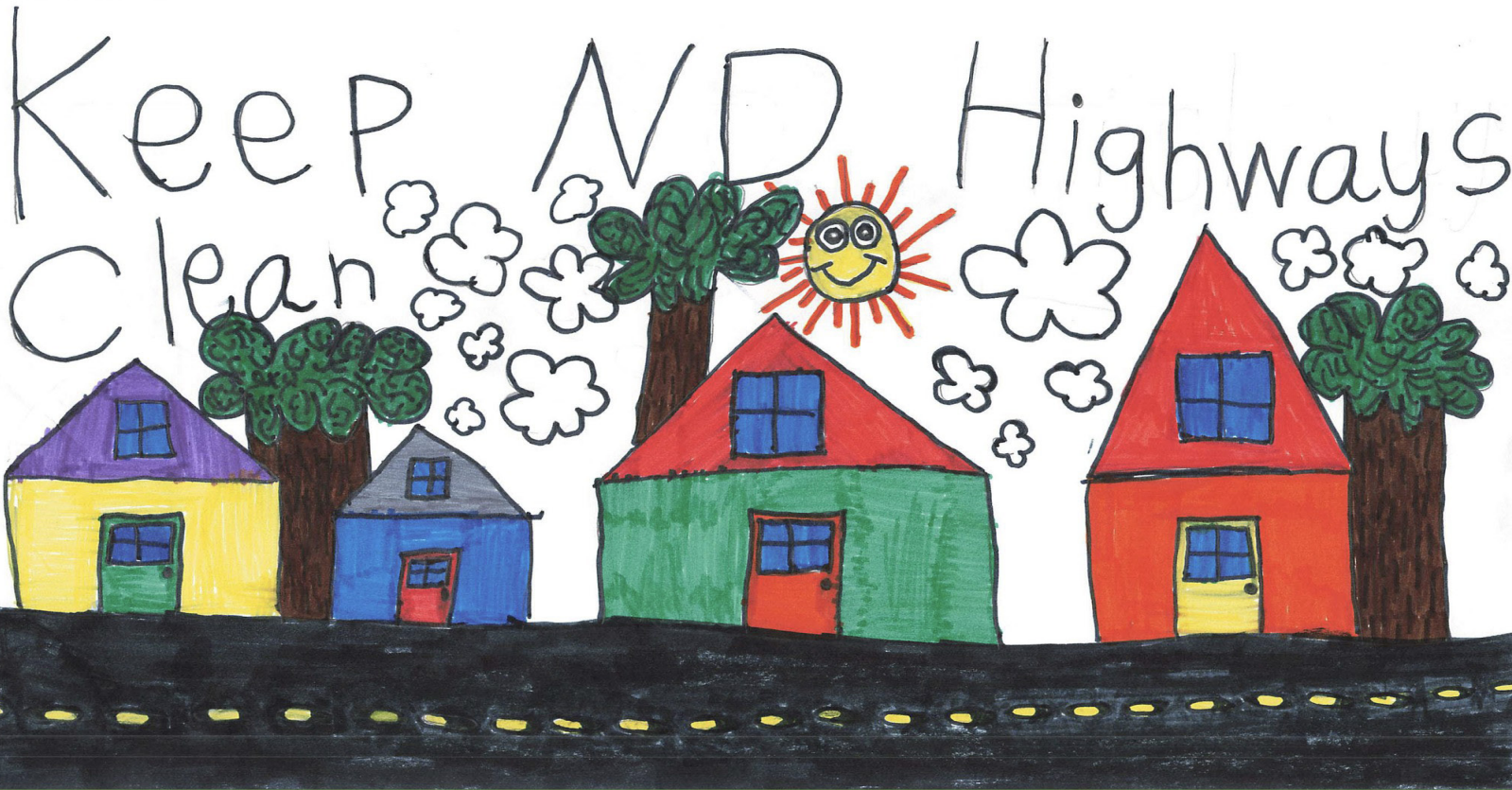
**Give us a call if you have questions about NRCS programs or need technical assistance  
701-883-5344 EXT. 3**



LaMoure County SCD  
PO BOX 278  
LaMoure, ND 58458  
Return Service Requested

Non-Profit Organization  
U.S. Postage Paid  
Permit #4  
LaMoure, ND 58458  
Presort

TREE  
ORDER  
FORM  
ENCLOSED!  
PLACE YOUR ORDER  
THIS FALL TO ENSURE  
AVAILABILITY!



1st Place State Wide Winner - 2023 1<sup>st</sup> Grade Poster Contest  
*Congrats to Astrid Lundgren*  
Kulm Public School