

The Conservation Dirt

Benton Soil & Water Conservation District
2023 Spring Newsletter

District Manager: Gerry Maciej
Gerry.Maciej@mn.nacdnet.net

District Tech: Mike McMillin
Michael.McMillin@mn.nacdnet.net

District Tech: Nathan Sanoski
nathan.sanoski@mn.nacdnet.net

District Tech: Jessica Hoheisel
Jessica.Hoheisel@mn.nacdnet.net

Administrator Assistant : Renee Thell

Renee.Thell@mn.nacdnet.net

**Watershed & Outreach Specialist:
Emily Forbord**
emily.forbord@mn.nacdnet.net

Benton SWCD Supervisors

Meet the Staff



Back row left to right: Renee Thell, Jessica Hoheisel, & Emily Forbord. Front row left to right: Gerry Maciej, Mike McMillin, Nathan Sanoski.

This Issue:

- ★ Benton SWCD Staff & Supervisors
- ★ Outstanding Conservationist
- ★ MAWQCP
- ★ Rain Gardens
- ★ Shoreline Buffers
- ★ Erosion Prevention
- ★ Cover Crops & Soil Health
- ★ Tree Orders
- ★ MDA Waste Pesticide Disposal Program
- ★ Well Sealing & Septic Systems

Contact Us:

14 2nd Ave W
Foley, MN 56329
(320)-968-5300 ext. 3

We would like to welcome Mike Winkelman, our new District three supervisor, who was sworn in at the beginning of 2023.



Left to right: Bernie Thole, Wade Bastian, Joe Jordan, Chuck Rau, & Mike Winkelman.

**BENTON SWCD CELEBRATING
75 YEARS! 1948-2023**



Outstanding Conservationist 2022

In December, Mark and Shelley Czech were honored as outstanding conservationists at the annual meeting of the Minnesota Association of Soil and Water Conservation Districts (MASWCD). They were selected by the Benton Soil and Water Conservation District (SWCD) for the award.

Each year, the state's SWCDs recognize individuals and organizations for outstanding accomplishments in implementing conservation practices and improving Minnesota's natural resources. The award program is done with support from The Farmer magazine.



Mark and Shelley Czech were recognized for a variety of conservation practices, said Jessica Hoheisel. Some of those practices or achievements include installing an Ag-Waste Storage System to reduce feedlot runoff and provide storage to avoid winter manure spreading. They installed a Water and Sediment Control Basin in 2017 that resulted in pollution reductions of 110.25 tons of sediment and 127 pounds of phosphorous per year in the watershed, as well as completing a Livestock Environmental Quality Assurance Program Assessment for their farm.

"We're really proud of Mark and Shelley Czech and what they have done for conservation in Benton County," said Hoheisel. "The Czech's provide a wonderful example for conservationists by hosting various field days and tour stops over the years for the NRCS and SWCD."

For more information on these programs, contact Jessica Hoheisel or Mike McMillin at Benton SWCD, phone number (320)-968-5300 ext 3.



Minnesota Agricultural Water Quality Certification Program

Minnesota Ag Water Quality Certification Program (MAWQCP)

A voluntary program for farmers and landowners that helps protect Minnesota's water resources. MAWQCP recognizes producers for their work in promoting water quality. It puts farmers in touch with local conservation district experts to identify and mitigate any risks their farm poses to water quality laws and regulations for 10 years. Farmers can use their certification status to promote and market their operations as water quality protectors.

Through this program, certified producers receive:

- Regulatory certainty: certified producers are deemed to be in compliance with any new water quality rules or laws during the period of certification.
- Recognition: certified producers may use their status to promote their business as protecting water quality
- Priority for technical assistance: producers seeking certification can obtain specially designated technical financial assistance to implement practices that promote water quality



Landowner James Wollak became certified in 2022 for MAWQCP.



Landowners Glen and Brian Kaschmitter with Benton SWCD's Jessica Hoheisel.

This is a program available through the Minnesota Department of Agriculture (MDA) with assistance from Soil and Water Conservation Districts across the state. The Benton County SWCD is taking applications on a continual basis for enrollment into the MAWQCP.

If you are interested in this program, contact the Benton SWCD office. Jessica Hoheisel is the certification specialist for MAWQCP.

Third Street Brewhouse Partnership:

We are proud to part with the Third Street Brewhouse in Cold Spring to sponsor MAWQCP. Third Street Brewhouse believes "Great Water equals Great Beer" and awards each certified farm with their product.

What Are Rain Gardens?

A rain garden is a simple, cost-effective tool that collects rain water from a roof, driveway, or street and allows it to soak into the ground. Rain gardens can also help filter out pollutants in runoff, recharge groundwater, and provide food and shelter for butterflies, song birds and other wildlife.



A Rain Garden:

- Reduces erosion, allows sediments to settle and plants to absorb excess nutrients
- Helps reduce local flooding by reducing the amount of water entering our waterways during rain storms
- Protects water quality
- Provides the opportunity to establish native plant communities, creates needed habitat for pollinators
- Native plants improve soil health

Design and Placement

Rain gardens designs can be simple or elaborate, depending on your gardening interest and experience. A few things to consider before you start digging:

- Location of the garden
- Size you need
- Shape you want
- Type of soil you have
- Which plants you'd like to include
- How much runoff you typically have

Building and Planting

- Lay out a rope or hose in the desired shape to use as a guide for digging
- The depth may vary from 4-10 inches
- For best infiltration, the bottom should be level
- If your garden is placed on a slope, use the soil from digging to create a berm on the downhill side of the rain garden
- Remove excess soil from the site



For More Designs and Ideas:

- Building a rain garden | UMN Extension
- Soak Up the Rain: Rain Gardens | US EPA
- Rain Gardens - A how-to manual for homeowners (bluethumb.org)

Shoreline Buffers

A natural shoreline buffer can have numerous impacts on lakes and streams, it can act as a buffer zone, intercepting nutrients and reducing runoff, erosion, and sedimentation. This complex ecosystem sustains fish and wildlife by providing food and shelter for ducks, songbirds, and other animals while reducing problems caused Canada Geese and burrowing muskrats. Tall plants like bulrush, lake sedge, and cattail can reduce the energy of wave action to minimize erosion and help maintain water quality.

Creating the a buffer zone is the essence of the "lakescaping" concept. A buffer zone is strip of native vegetation that hasn't been mowed that extends 25-50 feet from shore. Even having a 10-15 foot buffer strip provides some benefit. Buffer zones can restore many functions critical to the health of the lake that may have been eliminated previously by sod, hard structures, or mowing.



River shoreline without any natural buffer and has been mowed right to the stream bank. Stream bank erosion issues are a result.



Natural buffer on both sides of the stream bank.

Misconceptions About Natural Buffers

Creating and maintaining natural buffer zones along the shore does not mean your property has to look unkempt. Buffers and upland islands of trees, shrubs, and flowers can bring natural beauty to your yard. Additionally, tall native plants typically have deep root systems. They will slow erosion, decrease ice damage, increase rain infiltration, and act as a barrier to discourage geese from walking on your shoreline property.

How To Create a Buffer Zone

- Stabilize shoreland and reduce erosion
- Increase fish and wildlife habitat
- Filter nutrients and pollutants
- Enhance water infiltration and storage
- Trap sediments
- Reduce lawn maintenance
- Lessen the impact of wave action causing shore erosion.



Natural lake shoreline.

Erosion Prevention

What is soil erosion? Soil erosion is the movement of soils from wind, water, and mass movement (soil creep). This is a common problem many landowners experience and can create numerous consequences to the land. The landscape can lose essential nutrients from the soil surface as an effect of erosion, which lowers the chance of crop success.

Signs of Erosion on Your Land

Do you have channels that are running through spots on your field(s)? The channels can be small or as deep as 0.3m, these are referred to as rill erosion (<0.3m) and gully erosion (>0.3m). Are you seeing dust clouds or soil accumulation along fence lines or snowbanks? Your field is most likely experiencing wind erosion due to exposed topsoil, which reduces levels of soil organic matter. Soil organic matter is composed of living and dead things in various states of decomposition and are the primary source of carbon that gives energy and nutrients to soil organisms that support the growth of crops. Have you noticed degrading hillsides with soil, rock and other debris built up below the slope? There may be soil creep happening, and can result in a loss of topsoil.

For site visits, BMP determination and design help contact us at (320)-968-5300 ext. 3.

Prevention Practices

- Cover crops
- Establish wind breaks (shelterbelts)
- Mats on steep grades and inclines
- No-till farming
- Terrace farming
- Strip cropping
- Contour cropping
- Overgrazing prevention



Rill erosion on a farmer's field in Benton County.



Gully erosion in Benton County.



Wind erosion deposition in Benton County.

Cover Crops & Soil Health



Cover crops and cattle grazing.

Farmers are realizing that cover crops are critical to the growth success of future crops. Cover crops help with soil erosion, improve soil health, crowd out weeds, control pests and diseases, increase biodiversity, and can bring a host of other benefits to your farm or garden, including increased profitability.

Cover Crops can be planted any time of the year, but typically are planted after your main crops have been harvested, and are grown until you plant the next crop in the spring. Some of the typical cover crops recommended are grasses, legumes, forbs, annual ryegrass, oilseed radish, oats, and winter cereal rye.

Soil Health Funding

Benton SWCD has financial assistance available through grants to provide up to 75% of cost-share on your project.

Projects include: Cover crops, no-till, strip-till, and filter strips.

Contact us for more info:
(320)-968-5300 ext. 3



Cereal rye, radish, and turnips in Benton County.

How to Improve Soil Health

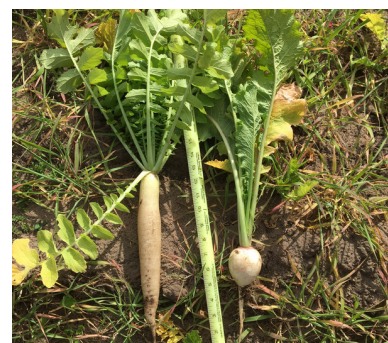
- **Minimize disturbance** - limit tillage, optimize chemical output, rotate livestock
- **Maximize soil cover** - cover crops, organic mulch, leave plant residue
- **Maximize biodiversity** - plant diverse crops, crop rotations, integrate livestock
- **Maximize presence of living roots** - reduce fallow, cover crops, diverse crop rotations



Cover crops in Benton County.



Multiple species over winter.



Cover crop harvest.

Tree Order Pick-Up

- April 27th from 7 am to 7 pm
AND
- April 28th from 7 am to 12 pm



MDA Waste Pesticide Disposal Program

The MDA's waste pesticide disposal program accepts only waste pesticide. The program does not accept treated seed, fertilizer, pesticide or fertilizer rinsate, foam markers, adjunctive etc. Waste pesticide disposal is FREE for up to 300 pounds. For waste pesticide volumes in excess of 300 pounds, please call 612-214-6843. The MDA may charge for waste pesticide volumes in excess of 300 pounds.



Recycling & Waste Disposal | Stearns County, MN - Official Website (stearnscountymn.gov)

Well Sealing & Septic Systems



Stop in the office or call (320)-968-5300 ext. 3 for more information on grants and programs to help fund a well that needs to be sealed or for septic system replacement.

