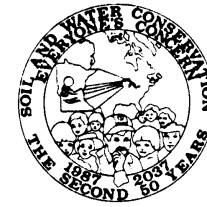


Nicollet Soil & Water Conservation District  
501 7th Street, PO Box 457  
Nicollet, MN 56074  
507-232-2550

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# Nicollet SWCD News

August

2024

## COVER CROPS

### Cover Crops: Selecting the Best Type(s) for your Needs

Cover crops maintain and improve soil fertility in a number of ways. Protection against soil loss from wind and water erosion is perhaps the most obvious soil benefit, but providing organic matter is a more long-term and equally important goal. Cover crops contribute indirectly to overall soil fertility and health by catching nutrients before they can leach out of the soil profile or, in the case of legumes, by adding nitrogen to the soil. Their roots can even help 'unlock' some nutrients in the soil, converting them to more available forms. The amount and availability of nutrients from cover crops will vary widely depending on such factors as species, planting date, plant biomass and maturity at termination date, residual soil fertility, temperature and rainfall conditions.



Depending on what your goals are for your field, there is a cover crop to meet that need. Here are some of the top concerns farmers want to address when they inquire about cover crops and how to address them:

#### Erosion Control

Plant something fast-growing, like oats, or use cereal rye if you want to make sure to protect your soil from spring rains. Legumes also help prevent erosion, support beneficial insects and pollinators, and they can increase the amount of organic matter in soil, although not as much as grasses.

#### Nitrate Scavenging

Cereal rye reliably produces the most biomass of cover crops grown in Minnesota, so it's a good choice for maximizing the uptake of soil nutrients.

#### Nutrient Provision to Cash Crop

Winterkilling broadleaves like radishes or turnips are more likely to break down quickly and provide nutrients the following spring. Legumes like hairy vetch or clovers can build organic N in the soil. Legume cover crops can generally fix N, ranging from 50-150 pounds per acre, depending on growing conditions. You can often reduce your nitrogen fertilizer inputs following a legume.

#### Compaction Reduction

Brassicas like turnips and radishes have good taproots to break up compaction, but make sure you plant them early enough (after wheat or canning crops) to get good growth.

#### Weed Control

Weed control with cover crops requires excellent stands (<1000 lb biomass/ac) to out-compete spring-emerging weeds. A high rate of cereal rye is recommended.

While all cover crops provide many of these benefits, planting a multi-species cover crop mix allows you to attain multiple objectives at once. Cover crop mixtures offer the best of both worlds by combining the benefits of grasses and legumes, or using the different growth characteristics of several species to fit your needs. Compared to pure stands of legumes or non-legumes, a multi-species mix usually produces more overall biomass and nitrogen, tolerates adverse conditions, increases winter survival, provides ground cover, improves weed control, attracts a wider range of beneficial insects and pollinators, and provides more options for use as forage.

One of the biggest challenges of cover cropping is how to fit them into your current rotations. If you would like to learn more about how to best incorporate cover crops, give Blake or Mackenzie a call at the Nicollet SWCD office, 507-232-2550.

We acknowledge the **University of Minnesota Extension and Sustainable Agriculture Research & Education** for this information.

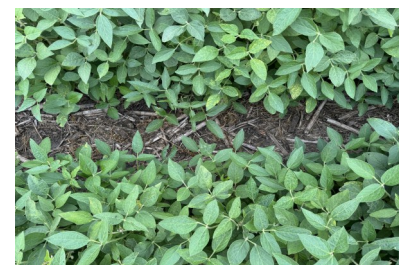
## STRIP-TILL FIELD DEMONSTRATION

**TENTATIVE** Date: November 7<sup>th</sup>

Time: 10am-3pm

Location: Marvin Krohn Farm (43527 Co Rd 4, Nicollet, MN 56074)

During this session, attendees will learn about the differences between strip-till and conventional tillage equipment (displayed), watch an in-field soil testing demonstration from TopCrop Consulting, and see an in-field demonstration of a strip-till machine creating planter strips & applying fertilizer for the 2025 growing season. This will be followed by a grower discussion on the conversion from conventional tillage to strip-till. A harvest combine with GIS mapping will be available for checking current harvest maps of harvested fields.



Please RSVP on our website by October 28<sup>th</sup>, 2024.

Check the Nicollet SWCD Website for details as the final date will be weather and harvest dependent.

This newsletter is published by the Nicollet Soil and Water Conservation District, 501 7th St., Nicollet, MN 56074 and USDA NRCS, 112 5th St, Gaylord, MN 55334. For more information regarding this newsletter, contact (507) 232-2550. **USDA is an equal opportunity provider, employer, and lender.**

Board Meetings are held the first Wednesday of each month at 8:30 a.m. Agenda posted on the website one week prior.



### The Nicollet Soil and Water Conservation District

501 7th Street  
PO Box 457  
Nicollet, MN 56074  
Phone: (507) 232-2550

#### District Board

Don Hermanson, Chair  
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Bruce Hulke, Secretary  
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Kevin Ostermann  
*District Manager*

Blake Honetschlager  
*District Technician*

Mackenzie Bratsch  
*District Technician*

Judy Beetch  
*Administrative Assistant*



#### Office Hours:

Monday-Friday  
8:00am-4:00pm

**Natural Resource Conservation Service**  
Phone: (507) 237-5435 ext. 3

Reyna Chavez  
*District Conservationist*  
Jacob Stich  
*CST Lead*



Online version available @ [www.nicolletswcd.org](http://www.nicolletswcd.org)  
Email [info@nicolletswcd.org](mailto:info@nicolletswcd.org) for updates  
"Like us" on the Nicollet Soil & Water Facebook page!



## EQIP APPLICATION DEADLINE

Environmental Quality Incentives Program (EQIP) application deadline is **September 6<sup>th</sup>, 2024**.

Farmers, ranchers, and forest landowners and operators (renters) are eligible to apply for technical and financial assistance to implement practices that have benefits including improved water, air quality, reduced soil erosion and increased soil health. The local NRCS (Natural Resources Conservation Service) office is here to help find solutions for environmental issues on your property. EQIP is perfect for full operation practices and perfect for trying new practices on smaller acreage.

A list of common practices is reduced tillage, no tillage, cover crops, nutrient management, pest management, waste facility closures, animal mortality facilities, waterways, sediment control basin and filter strips, and many more. When properly implemented, soil health practices (such as strip tillage and cover crops) may improve water infiltration over time. This would be beneficial by providing moisture availability during drought and flood resistance in a wet spring.

There are currently multiple initiatives in place; more funds are available for climate smart (soil health, forestry) activities, pasture, and organic transitioning acres.

Please give the Gaylord Field Office a call (507-237-5435) to learn more about our programs.

## KERNZA AND WINTER CAMELINA

My name is Ben Penner, and I am a Nicollet County area Farmer and Great River Greening's [Regenerative Ag Specialist](#). I want to share why I'm so excited about some new initiatives we have going in Southern Minnesota around Continuous Living Cover (CLC) crops – especially Winter Camelina.



Photo of a Winter Camelina Field in Nicollet County, May 2024  
Photo Credit Ben Penner

Winter Camelina is a new oilseed crop being developed by the University of Minnesota's [Forever Green Initiative](#) (FGI) and supported by Cargill and non-profits such as Great River Greening, who are committed to working with farmers and community members on regenerative agriculture practices through education, consultation, and technical assistance. I planted this field of Winter Camelina in the photo in September of 2023.

With the help of our state and federal legislatures and funding agencies, and with the foresight of partners like Cargill and Great River Greening, we are poised to develop collaborative efforts in Southern Minnesota that can make a real difference on climate and water quality issues with the tools we have at hand right now. This crop is a win-win-win for farmers, our local communities and economies, and the environment.

The Forever Green Initiative has been working on climate-friendly crops like Kernza and Winter Camelina for over a decade. Since 2018, and as former Vice President of the [Perennial Promise Growers Cooperative](#), I have been heavily involved in helping to create the necessary supply chains and infrastructure, and I have also helped to pilot and launch Winter Camelina as a viable oilseed feedstock for the ambitious goal of decarbonizing the aviation industry through the MSP Sustainable Aviation Fuel (SAF) hub now being developed here locally.

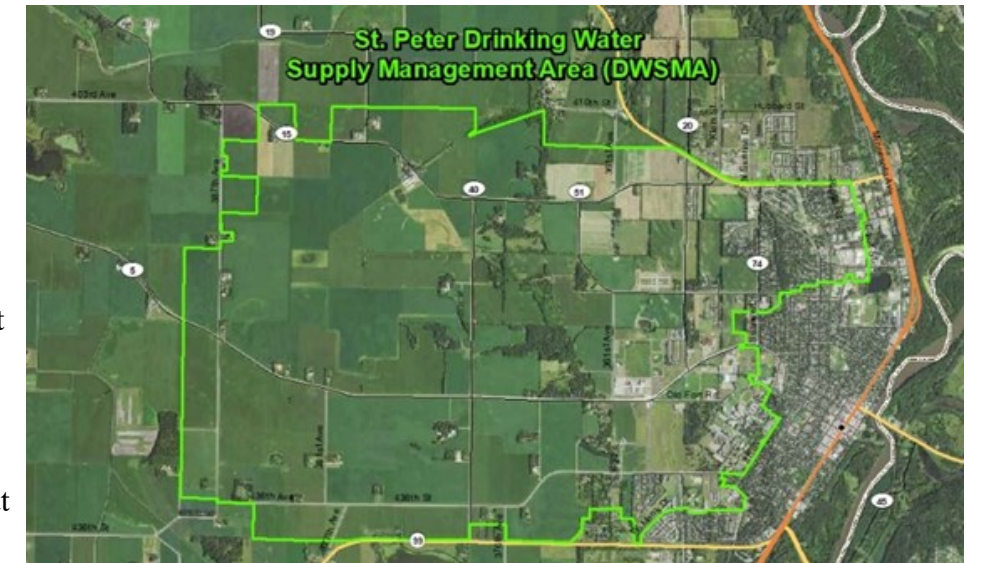
The potential local and regional economic and environmental impact of this crop is very high as we anticipate that it will take several million acres of this crop over the next 10-15 years to meet the demand for this new biofuel.

On Wednesday, August 28<sup>th</sup>, from 12:30-2:00 p.m., Great River Greening will be hosting a [roundtable discussion](#) in St. Peter at the St. Peter Food Coop where I, along with other industry leaders, will discuss the agronomy, economics and future infrastructure needs and plans for this new crop. I hope to see you there!


You can reach me with any questions at [bpenner@greatrivergreening.org](mailto:bpenner@greatrivergreening.org) or at 507-995-7756.

## ST. PETER DRINKING WATER SUPPLY

The City of St. Peter's public wells have elevated levels of nitrate-nitrogen. The Minnesota Groundwater Protection Rule provides a framework to work with local farmers to address this issue. Since 2021, the Minnesota Department of Agriculture has been working with a local advisory team from the St. Peter area to develop a list of nitrogen fertilizer Best Management Practices (BMPs). This list, which will be published this year, will apply to all cropland within the St. Peter Drinking Water Supply Management Area (see map). It will describe a set of practices that affect the timing, source, placement, and rate of commercial nitrogen. Farmers have three growing seasons to adopt the practices starting with the 2025 crop year. An evaluation will occur no sooner than 2027 to determine the level of adoption. If less than 80% of cropland acres (excluding soybeans) are following the BMPs, the rule will move to regulation, at which point the BMPs will become enforceable. Alternative Management Practices (AMTs) are also available to allow for flexibility with the published BMPs. AMTs are additional practices that can further reduce nitrate leaching losses.



For more information, please refer to the contact information below, or visit [www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr)

 **DEPARTMENT OF AGRICULTURE** Travis Hirman | 612-201-4194 | [travis.hirman@state.mn.us](mailto:travis.hirman@state.mn.us)

## BLUE EARTH-NICOLLET COUNTY USDA FARM SERVICE AGENCY MANAGER UPDATES

With the recent storms, there have been a lot of questions coming into our office about disaster relief due to flooding and excessive moisture. As of August 15, 2024, both Blue Earth and Nicollet, along with several other counties, have had disaster designations approved which initially opens up access to Emergency Loans through the Farm Loan Department in our office. Most USDA programs that are released for disaster relief, other than emergency loans, are typically a year down the road once yields and tax years go by. As an example, the 2022 Emergency Relief Program (ERP) began in the fall of 2023 and ended on August 14, 2024.



USDA has not sent out paper newsletters for several years and many of you are signed up for the emailed newsletters, but if you would like to sign up to receive our monthly newsletter by email, please go to <https://www.farmers.gov/working-with-us/stay-connected> to sign up for our emailed newsletters or contact our office to update your email address in our system if you are not receiving these. You can scan the QR code here to see the newsletter from August 8, 2024.

If you have Conservation Reserve Program (CRP) contracts with our office, please be sure that you are checking that property to ensure your cover is successfully maintained and you are taking care of any weed or volunteer tree issues. Part of being eligible for reenrolling a CRP contract at the end of its contracted years is verifying that the current cover is being maintained and has the required seed variety that the contract was put in for. If it is not being properly maintained, it may be ineligible to reenroll. Occasional maintenance activities such as prescribed burns or mechanical mowing is necessary to ensure the plant species diversity is maintained according to your conservation plan. If you have questions about your contract and what your conservation plan requires, please contact our office.

Please contact the office at (507) 345-4651 ext 2 or email us at [mnankato-fsa@usda.gov](mailto:mnankato-fsa@usda.gov) regarding any questions pertaining to the information within this article, or any other concerns you may have. We would like to wish all of you a safe harvest this fall as you head into a very busy time of the year for your operations.

**Bradley Flatin, CED**