

GREEN BAY WEST SHORE DEMONSTRATION FARMS NETWORK



REPORT



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Year 4 (2024)
Annual Report

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ABOUT THE DEMONSTRATION FARMS

The Green Bay West Shore Demonstration Farms Network, a collaboration between U.S. Department of Agriculture, Natural Resources Conservation Service, and Oconto County Land & Water Conservation Department, in partnership with Marinette and Shawano Counties, was formed in 2021. The network's goal is to test and demonstrate conservation practices to reduce phosphorus, nitrates, and sediment entering the Great Lakes basin.

The four demonstration farms represent a range of crop and farm types, but all have a common goal – to share the knowledge learned on their farms about innovative techniques to improve soil health. These farmers, with technical support from the project management team, voluntarily implement conservation agricultural



practices in their operations. They also host educational field days and share their soil health journeys with other farmers and the public with the goal of helping others implement soil health practices in their operations. In this way, the Network tests and demonstrates the best conservation practices to reduce non-point source pollution entering the Great Lakes basin.

CONTACT OUR TEAM

- **Matt Brugger** (Project Manager)
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FARM SUMMARIES



BROWN STAR DAIRY

OCONTO COUNTY

- In 2024 the farm, in cooperation with UW Extension Agent Scott Reuss, again collected data for an on-farm research project looking at N rates on Winter Triticale covers. This work is one of a series of sites that is being used to guide updated N rate/timing recommendations for these crops. The work has shown the importance of moderate fall-applied nitrogen, but also that manure N may be difficult to accurately account for in these crops' recommendations.
- The farm continues to apply manure using two tanker mounted Low Disturbance Manure Injection (LDMI) bars.
- In 2024, Brown Star Farms began grazing animals just north of the main dairy, establishing covers and summer annuals to feed animals throughout the growing season.

Plans for the Future

- The farm plans to continue rotational heifer grazing and to plant cover crops to graze after crop harvest.



MAHONEY FARMS

OCONTO COUNTY

- The farm continues to implement no-till/minimal till practices on a number of acres.
- The farm has experimented with wide row corn for 4 years, utilizing 30" twin rows next to a 60" gap with a cover crop planted in between. Yield results have varied, but for the most part the 60" corn has resulted in lower yields overall.
- In 2024 the farm experimented with 20" & 40" corn rows, which showed better yields than 30" & 60" corn.

Plans for the Future

- The farm plans to continue to implement cover crops and experiment with wide row corn, for 2025 they are looking to continue comparing 30" & 60" rows to 20" & 40" rows. They will also continue to implement soil health practices to hopefully increase corn yields.

FARM SUMMARIES



FINGER FAMILY FARMS

MARINETTE COUNTY

- The farm has been adopting no-till and Low Disturbance Manure Injection (LDMI) practices.
- In 2024, Fingers continued using a tanker mounted LDMI toolbar for their farm. Finger's hosted a pop-up field day showing how they use their tanker.
- The farm used a drone to interseed around 20 acres in 2024.

Plans for the Future

- The farm plans to continue to find ways to utilize LDMI and cover crops to benefit the dairy cattle and improve soil health.



WAGNER FARMS, INC

SHAWANO COUNTY

- The farm has utilized no-till and cover crops on many of their acres, recognizing the benefits to soil health. After adopting these practices, the farm has continued to see yield increases in crops.
- Wagner Farms in 2024 added a 360 Rain Unit to their farm to spread nutrients like leachate onto 140 acres of cropland.
- The farm has also utilized summer applied manure to spread manure across the growing season and feed a sorghum crop following triticale harvest. The sorghum and triticale provide heifer feed for the farm.

Plans for the Future

- The farm plans to continue harvesting cover crops for forage, planting green into covers and growing sorghum following cover crop forage harvest.

OUTREACH ACTIVITIES



In-Person Outreach

Farmers learn best from other farmers and when the information they receive is locally-based and relevant to them. For this reason, one of our main outreach strategies is in-person field days. Farmers, agency personnel, and county conservation professionals attend in-person field days where they are shown local soil health practices our demonstration farmers are using.

Participants can ask questions of demonstration farmers, and can see on-the-ground practices that are working. They may also find practices that aren't working so well, and can explore ways to adapt these practices to work better in their systems.



In-Person Outreach at a Glance

This year, in conjunction with our partners and with the support of the demonstration farmers, we hosted three field days and a farmer meeting event.

Farmer Meeting

Joint Meeting With Shawano County Forage Council

- Topics included: Farmer Panel, cover crops with dairy operations, local research updates
- February 28th

Field Days

Field Day at Wagner Farms

- Topics included: 360 Rain Unit operation, planting green
- July 18th

Co-Sponsored Tom Kilcer Visit with Lower Fox and Door Kewaunee Demo Farms.

- August 1st

LDMI Pop Up Field Day at Finger Family Farms

- Topics included: Low Disturbance Manure Injection
- October 22

Cover Crop Grazing Field Day at Brown Star Farms

- Topics included: cover crop grazing, rotational grazing
- October 31

Participants at a field day.

FARMER MEETING

February 28th, 2024

The Farmer Meeting was held at the Blue Spruce in Lena. The meeting was held through a partnership between the Green Bay West Shore Demonstration Farms (GBWS), NRCS and University of Wisconsin Division of Extension. Just over 60 local farmers, agronomists and other agricultural industry professionals attended.

The first speaker of the day was David Trimner of Miltrim Farms near Athens, WI. He shared with the group how his farm is utilizing soil health and conservation practices.

Next, NRCS Grazing Specialist Adam Abel discussed the value of heifer grazing. He covered a number of aspects, including animal health, feed costs and harvest cost savings.

Brooke Stewart presented on drone uses in agriculture. She talked about how drones can be used for seeding and aerial applications. Brooke also discussed limitations on how drones can be used for agricultural applications.

A farmer panel made up of the GBWS Demo Farmers discussed projects and practices on their farms. Each shared reasons for their decisions as well as plans for the future.

The meeting closed with University of Wisconsin Division Of Extension Agent Scott Reuss giving some local updates on research data. The Shawano County Forage Council then held their annual meeting auction following the presentations.



David Miltrim of Miltrim Farms talks about conservation practices used on his farm.



Adam Abel discusses grazing.



Scott Reuss discusses research updates.

FIELD DAY AT WAGNER FARMS

July 18th, 2024

This field day showcased Wagner Farms new 360 Rain Unit. Dave Murphy from 360 Rain discussed the farm's setup. He also shared how the unit follows the corn planter's path. The discussion also included the different attachments that could be used, cost considerations, and how the unit could be adjusted.

Shawn Wagner from Wagner Farms discussed how the unit was fed from the leachate pit. Participants were able to see the pumps and base station for the 360 Rain Unit. Shawn also showed the feed tank that allows the farm to supplement nitrogen solution through the system as well.

Participants were able to then see the 360 Rain Unit in the field. The farm pumped leachate through the unit, allowing the attendees to see how the unit worked. Shawn and Dave emphasized the variety of technologies available on the Rain 360, including the ability to start and stop the unit from a phone app. They discussed the unit's power source, a diesel engine, which had a fuel tank that only needed to be filled once a month while the unit was operating.

This field day was hosted in partnership with Oconto and Marinette County Departments of Land and Water Conservation as well as 360 Rain, local 360 Rain dealer Schwahn Seed and NRCS.



Shawn Wagner welcomes attendees.



360 Rain in the field.



Shawn & Hank Wagner, along with Dave Murphy discuss pumps.

FINGER FAMILY FARMS LDMI FIELD DAY

October 22, 2024

This field day was hosted by Finger Family Farms and was intended to bring participants out to see a Low Disturbance Manure Injection (LDMI) tanker in action.

Finger farms applied manure to a field just east of the dairy. The field received manure by tanker, with injection being handled by the Zimmerman Manufacturing LLC (ZML) toolbar attached to the rear of the tanker. The tanker was applying at a rate of approximately 8,000 gallons to the acre. The plan will be to no-till plant the field in the spring, likely to corn.

Participants were able to see how the injection system applied the manure as well as how little disturbance was caused to the soil. Discussions included managing the field without tillage, depth of injection and nutrient management compliance.

Project Manager Matt Brugger and NRCS GLRI Coordinator Barry Bubolz fielded questions from participants. Foremost among the questions was whether or not a field receiving manure by LDMI can be no-tilled into. While there are several different types of toolbars with varying amounts of disturbance, most fields can be no-tilled following LDMI under the right conditions.

Attendees discuss the application with Barry Bubolz.



Field during the application.



LDMI tanker applying manure.



BROWN STAR FARMS GRAZING FIELD DAY

October 31, 2024

This field day was hosted by Matt Bjelland of Brown Star Farms Inc and was intended to bring growers in to see his cover crop grazing setup and discuss cover crop options. The ability to graze different mixes at different times throughout the year was on display as Brown star utilized multiple cover crop species from spring until fall.

Attendees got to see dairy cattle grazing on an interseeded corn silage field. The field was planted in twin 60" rows (alternating 30" and 60" gaps) with covers planted in between. The cover mix included sorghum, soybeans, sunflowers, clover, vetch and more!

Gillett in 2024 started dry, becoming wet during planting season and early summer, and ended with a dry fall. While the covers established well, the dry weather after harvest led to less growth in the fall than was hoped for, but still provided a grazing opportunity.

The farm was able to graze cattle across several acres throughout the 2024 season and discussed plans for future grazing as well. Matt discussed what he would do again as well as what he would do differently in the future with attendees.

Attendees walking out to see cattle grazing.



Discussion of cover crop species.

Matt Bjelland describes his grazing experience.



OUTREACH ACTIVITIES

(CONTINUED)



Digital Outreach

This year we continued to utilize and expand our digital outreach. Aside from in-person events, our main outreach tactics have been to create digital materials that are available online for farmers to access at their convenience. This has included utilizing Facebook posts to share material. We also utilized our text service to share not only our events, but other pertinent events for farmers and Ag industry personnel.

In 2024, mother nature took us from dry to wet and back to dry throughout the growing season. Despite planting issues, the demo farms continued to find ways to innovate.

For the future, we plan to continue hold an annual meeting type event to help reach out to farmers and share the stories of not only our four demo farms, but other conservation minded farms as well.

Digital Outreach at a Glance

Educational Materials Created:

- Facebook posts
 - Our materials
 - 20 posts
 - Sharing Others' Materials
 - 3 posts

Event Promotion, Thank You's, and Photos

- 12 posts

Communication Platforms Utilized

- EZ Text
- Facebook
- Twitter

MANAGING ON FARM CONSERVATION IN NORTHERN WI

February 28th 10 am- 3 pm
The Blue Spruce in Lena
8096 Co Rd A, Lena, WI 54139

TOPICS

**Tackling The Hurdles of Conservation
and Finding The Middle Ground**

David Trimner - Miltrim Farms, Inc.

**Why Every Heifer In Wisconsin Should
Be Grazed**

Adam Abel - NRCS

Drone Uses In Agriculture

Brooke Stewart - Agridrone

Looking Back At 2023 (And Forward to 2024)

Farmer Panel

Local Updates

Scott Reuss - UW Division of Extension



**\$5 REGISTRATION
(LUNCH PROVIDED)**

**PAY AT THE DOOR,
CASH OR CHECK
ONLY. CHECKS CAN
BE MADE OUT TO:
OCONTO LWCD**

Annual meeting invite posted to Facebook.

Project Partners



Partner Contacts

Person	Role	Phone	Email
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Report Credits

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WE'RE LOOKING FORWARD TO 2025!

GREEN BAY WEST SHORE DEMONSTRATION FARM NETWORK

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