UPPER FOX-WOLF DEMOFARM NETWORK **Upper Fox-Wolf Demonstration Farm Network** Protecting Wisconsin's Soil and Water Resources

Year 3 (2021) Annual Report



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ABOUT THE DEMONSTRATION FARM

The Upper Fox-Wolf Demonstration Farm Network, a collaboration between U.S. Department of Agriculture, Natural Resources Conservation Service, and Waupaca County Land & Water Conservation Department, in partnership with Fond du Lac, Green Lake, Marquette, Outagamie, Portage, Shawano, and Winnebago counties and the Green Lake Association, was formed in 2018 to test and demonstrate conservation practices to reduce phosphorus, nitrates, and sediment entering the Great Lakes basin.

The ten demonstration farms represent a wide range of 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

CONTACT OUR TEAM

• Matt Brugger (Project Manager)

mattetilthag.com

920-470-3889

Derrick Raspor (NRCS Coordinator)

o derrick.rasporeusda.gov

715-258-8380

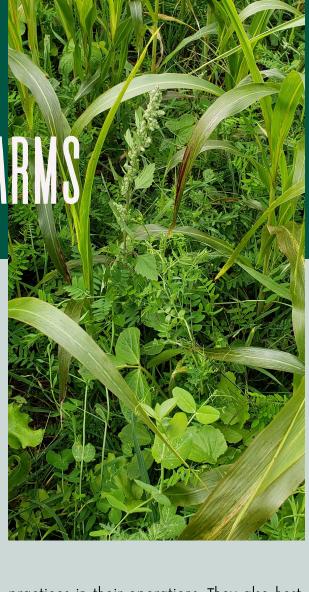
• Brian Haase (Waupaca County Conservationist)

o brian.haaseeco.waupaca.wi.us 715-258-6482

• Maranda Miller (Outreach Specialist)

o maranda.miller@wisc.edu

608-590-5758



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.





Jamie Albright

ALBRIGHT BROTHERS, LLC

- The farm has utilized no-till on many of their acres, recognizing the benefits to soil health. The farm has found that their no-till acres are more accessible during the year and are able to avoid getting stuck in wetter areas of fields that would be full of ruts under normal tillage conditions.
- The Albrights also utilize cover crops following their row crops, especially wheat.

Plans for the Future

 They hope to try interseeding in the future as a way of establishing covers in their corn grain fields.



Dan & Ruth Boerst

BOERST FARM

- Dan has embraced many soil health practices on his farm including multi-species cover crops and no-till practices.
- In Fall 2020, Dan fenced in some of his crop fields and began grazing cover crops after harvest of his row crops.
- In 2021, the farm planted a 60" corn plot with interseeded covers with the intent of grazing the covers after harvest.
- Dan also hosted an LDMA field day on his farm in August 2021.
- Dan grows his own cover crop seed and also provides many of his neighbors with seed as well.

Plans for the Future

• The farm plans to continue to innovate and try new practices while focusing on soil health.



Adam & Kristy Erickson and family

ERICKSON DAIRY FARM

- The farm has begun implementing no-till practices on some of their acres.
- In Fall of 2020 they started using their own Bazooka LDMA tool bar mounted on a tanker.
- In 2021 Erickson's planted a multispecies cover crop after taking off their Wheat crop.
- In August 2021, Erickson's hosted an LDMA Field Day in cooperation with Outagamie County Forage Council featuring 3 different LDMA toolbars.

Plans for the Future

• The farm plans to continue to implement cover crops and expand their no-till acres.



Rick & Kimberly Gehrke and family

GEHRKE FAMILY FARM, LLC

- The farm has planted no-till for many years and has started planting green as well.
- In 2021, new land Rick purchased began its conversion to no-till.
- The farm began soil health testing on the new conversion acres, as well as burying two temperature sensors, one in a long term no-till field and one in the conversion field.
- In fall 2021, a weather station with temperature and moisture sensors was installed on the farm.
- Rick establishes multi-species cover crops following wheat and rye crops.
- For the last two years, the farm has interseeded rye into standing corn.
- The farm also began trying a biological product in furrow for improving soil health in Spring 2021.

Plans for the Future

 The farm plans to continue to find new ways of integrating cover crops and hopes to find a way to integrate livestock.



Matt & Sara Hintz with their son

HINTZ FARM

- The Hintz Farm practices no-till farming with cover crops.
- In Fall 2020, they planted 8 different cover crop mixes in plots and planted into the residue of those covers in Spring 2021.
- In 2021 Haney soil health tests were pulled on 3 fields to use as a benchmark for soil health improvements.
- The farm also utilized a roller crimper to knock down rye covers in their soybean fields.

Plans for the Future

• The farm plans to continue experimenting with interseeding and biological amendments.



Ed Montsma

PINEY LAWN ACRES

- Ed Montsma has practiced no-till for over 20 years.
- The farm has started experimenting with cover crops and for the last two years planted multi-species covers after wheat.
- In 2021, the farm planted green into the multispecies cover crops planted after wheat.
- Ed also experimented with leaving a growing cover in his corn until the corn got about knee high (V5-V6)

Plans for the Future

• The farm plans to continue experimenting with covers to improve soil health.



Chris Pollack

POLLACK-VU DAIRY, LLC

- The farm has implemented some no-till practices on some of their acres.
- Chris has grown 60" corn the last two years in an effort to have cover crops that can be grazed by steers.
- In 2021, the farm utilized a roller crimper to roll rye after planting soybeans green into the cover.
- The farm also had temporary temperature sensors installed in a no-till field and a conventionally tilled field.
- The farm worked with Fond du Lac County to take some Haney soil health tests.

Plans for the Future

 The farm plans to continue planting more acres of cover crops and adding more no-till acres.



Dave and Dusty Schultz

SCHULTZ LEGACY FARMS

- Schultz Legacy Farms practices no-till across all of their acres.
- Over the last few years they have integrated cover crops into their operation.
- The farm has pulled Haney soil health tests and in 2021, added more fields in cooperation with the Demo Farms and Fond du Lac County.
- Schultz's have a self-propelled Hagie modified for cover crop seed they use to do late season interseeding in corn and beans on their acres as well as doing custom work.
- The farm uses rye cover crops as well as utilizing some multi-species cover crops.

Plans for the Future

 The farm plans to continue implementing more cover crops as well as experimenting with different cover crop mixes.



Greg & Steve Tauchen

TAUCHEN'S HARMONY VALLEY FARM

- In 2021 this farm had ~500 acres in rye cover crop, some of which was harvested for feed.
- The farm also interseeded a multispecies cover crop mix on 20 acres of corn silage for the third consecutive year. Following harvest they made a Low Disturbance Manure Application (LDMA) using an Aerway unit.
- Haney Soil heath tests and Pre-Sidedress Nitrate
 Tests (PSNTs) were pulled in the interseeding
 field and a neighboring conventional tilled field.
 The hope is to see how Haney Soil Health
 nitrogen recommendations compare to a
 traditional PSNT.
- The farm also planted a rye cover crop following their winter wheat crop to keep the soil covered longer through the season.
- In July 2021, Tauchen's co-hosted a field day in cooperation with the UFW Demo Farms, Fox Wolf Watershed Alliance, Shawano County, and neighboring grazers Jesse and Sacia Mueller.

Plans for the Future

 The farm plans to continue utilizing cover crops as well as continue to evaluate interseeding as a way of establishing multi species covers.



Zeb & Melanie Zuehls and family

ZUEHLS FARMS

- The farm has gone to strip-till and no till across all it's acres.
- In 2021, the farm experimented with planting 60" corn to use as a way of growing a grazeable cover for steers.
- The farm also had temporary temperature sensors installed in two fields to monitor changes through the season.
- The farm utilizes rye cover crops and has experimented with multi-species cover crops and interseeding.

Plans for the Future

• The farm plans to continue to integrate cover crops and look for ways to improve soil health.

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 inperson field day. Farmers, agency personnel, and county conservation professionals attend in-person 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 one large field day, and three field days on the fly.

Field Day

- Farmland to Shoreland
- Partnered with Fox-Wolf Watershed Alliance
- Tauchen's Harmony Valley Farm
- Mueller Farm (Jesse, Jeff, & Sacia)
- July 14

Field Days on the Fly

- Low Disturbance Manure Application with Zimmerman toolbar
- Boerst Farms
- August 18
- Harvestable Buffer Installation and Esch Drill Demonstration
- Nina Much Farm
- August 20
- Low Disturbance Manure Application with Zimmerman toolbar, Schuitemaker, and Bazooka Farmstar unit
- Erickson's Dairy
- August 26

FARMLAND TO SHORELAND FIELD DAY

July 14, 2021

This field day was a partnership with the Fox-Wolf Watershed Alliance. It was geared towards all watershed residents and showcased how practices utilized by local farmers are protecting Shawano area water quality and how non-farmer watershed residents could help at home.

Eric Evenson, of Wisconsin Department of Natural Resources and Kimberly Schmidt of University of Wisconsin – Extension gave an overview of the watershed and some of the challenges with water quality caused both by agriculture and urban pollutants, and how soil health practices can support water quality. As farmers in the watershed, Tauchen brothers, Greg and Steve shared their experiences

with no-till, interseeding, and grazing practices and how they are helping improve water quality. Barry Bubolz demonstrated the rainfall simulator, showing the crowd the importance of soil health. Jamie Patton discussed conservation of shorelands, and how maintaining plants with large roots on lakeshore property helps improve lake water quality.

At the second farm, Sacia Mueller demonstrated her rotational grazing methods. Participants viewed the fencing she uses, how she moves her cows, and how she keeps them watered. Derrick Raspor, of Natural Resources Conservation Service added comments on how rotational grazing supports soil health.







FIELD DAYS ON THE FLY

POP-UP LEARNING OPPORTUNITIES FOR FARMERS



LOW DISTURBANCE MANURE APPLICATION

August 18 - Boerst Farms

This field day featured low disturbance manure application using the Zimmerman toolbar and a Schuitemaker. Participants looked over both units, and Steve Schneider from Phil's Pumping (the company that sold the Zimmerman to the hauler) answered questions. A discussion of how each machine could be applied in different cropping situations rounded out the day.



HARVESTABLE BUFFERS & ESCH DRILL DEMO

August 20 - Nina Much Farm

At this field day, participants got to view the Network's new Esch no-till drill in action. The day involved a discussion about harvestable buffers, benefits of them, and how they can be used. Participants inspected the Esch drill and learned how it worked. The day ended with a demonstration of the no-till drill planting a harvestable buffer along Nina Much's field edges.



3 LOW DISTURBANCE MANURE METHODS

August 26 - Erickson Dairy

Participants at this day viewed three low disturbance manure application methods and the equipment used; Zimmerman toolbar, Schuitemaker applicator, and a Bazooka Farmstar unit. Participants saw demonstration applications of the three methods, and got to compare the various levels of disturbance as well as manure incorporation rates for each method.

OUTREACH ACTIVITIES (CONTINUED)



Digital Outreach

This year we continued to utilize and expand our digital outreach. Most notably, we built a website (UFWDemoFarms.org), and created a Youtube channel.

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 educational Facebook posts, and videos around soil health topics. We also share other group's news that relates to our Network's soil health goals.

We also purchased, in partnership with Between the Lakes Demonstration Farms Network, audio and visual equipment to support our outreach specialist in producing professional materials.



Digital Outreach at a Glance

Educational Materials Created:

- Promotional video (Dan Hagenow Video Creation)
- 7 videos
- Facebook posts
 - Our materials (text with photos or short video clip)
 - >25 posts
 - Sharing Others' Materials
 - >15 posts

Digital Material Creation Software Acquired:

- Canva (graphic design)
- Hitfilm Express (video editing)
- Adobe Rush Premier (video editing)
- Google Images/Video editor
- Audacity (audio editing)

Communication Platforms Utilized

- MoboMix Text
- Google Forms
- Facebook
- Twitter

Outreach specialist, Maranda Miller, poses with the new video and audio recording setup Upper Fox-Wolf Demonstration Farm Network helped purchase. Wisconsin Feature Success Story - October 20, 2021

Soil Health Farm Feeds Local Residents





Meet Ruth and Dan Boerst, of Manawa, Wisconsin, who farm with soil health practices to help mitigate the effects of food insecurity in their rural American town

They partnered with the U.S. Department of Agriculture's Natural Resources Conservation Service to implement a variety of soil health and conservation practices to heal their land, while preparing it to be in the best condition to grow produce for the local community.

READ MORE



Natural Resources Conservation Service

www.wi.nrcs.usda.gov

USDA-NRCS Wisconsin State Office, 8030 Excelsior Drive, Suite 200 Madison, Wisconsin, 53717

Phone: (608) 662-4422

Find your local USDA Service Center

IN THE NEWS

The Upper Fox-Wolf Demonstration Farm Network and participating farms were featured in a number of articles and a TV interview this year. Here are a few of the highlights.



Natural Resources Conservation Service U.S. DEPARTMENT OF AGRICULTURE

Feature Story - March 17, 2021

Farm Perseveres Through Uncertainty

Conservation Helps Heal Landscape



When you meet the Hintz family, of Amherst, Wisconsin, you can feel their true passion for farming. They've weathered through difficult times, uncertain markets, bad crop years and a pandemic. It's a huge accomplishment these days to persevere and continue to run the family farm successfully. Click below to read their story.



CONTESTS ~

DIGITAL CENTER >

WISCONSIN STATE FARMER

Business Features Editorials Classifieds

educates farmers, public about land

Upper Fox-Wolf farms network

GreenBay











Posted: Jun 17, 2021 / 04:20 PM CDT / Updated: Jun 17, 2021 / 04:20 PM CDT

conservation Dan Hansen Correspondent

d 9:16 p.m. CT Dec. 21, 2020 | **Updated 11:29 p.m. CT Dec. 22, 2020**



















ADDITIONAL PROJECTS

At the beginning of 2021, we finalized and released our promotional video from Dan Hagenow Video Creation. This video advertises who we are, and what we do as a network. It also highlights our demonstration farmers and why they are doing soil health practices

We expanded our partnership with the Fox-Wolf Watershed Alliance. We contributed multiple articles to their newsletters including Winnebago Waterways e-news, and their semi-annual Basin Buzz mailer. We are co-hosting a 2022 Farmer Roundtable event with FWWA, and have been planning with them for a few months at the end of 2021.

To aid farmers in implementing soil health practices, with financial support from Fund for Lake Michigan, we purchased an Esch no-till drill. Farmers in the watershed could borrow the drill, with priority given to Demonstration Farmers. We also purchased an interseeder for farmers to use. However, the implement didn't function properly, so we've gone back to the drawing board with the manufacturer. Hopefully the improved interseeder will be functional for the 2022 planting season.

We also continued to monitor the impacts of the innovative soil health practices our farmers are doing. Specifically, we performed soil temperature tests to evaluate how cover crops affect them. These results will be made available to farmers in 2022. Additionally, we explored options for installing an edge of field monitoring system to measure runoff and erosion on the demonstration farms. We intend to pursue this project into 2022.

Matt Brugger, demonstration farm project manager, discusses an interseeder and how it can be used to promote soil health.



Project Partners



Partner Contacts

Person	Role	Phone	Email
Greg Baneck	Outagamie County Conservationist	3 920-832-5074	greg.baneck@outagamie.org
Paul Gunderson	Green Lake County Conservationist	920-294-4051	pgunderson@co.green- lake.wi.us
Scott Frank	Shawano County Conservationist	3 715-526-6766	scott.frank@co.shawano.wi.us
Steve Bradley	Portage County Conservationist	3 715-346-1334	bradleys@co.portage.wi.us
Chad Casper	Winnebago County Director	920-232-1951	ccasper@co.winnebago.wi.us
Paul Tollard	Fond du Lac County Conservationist	3 920-906-4672	paul.tollard@fdlco.wi.gov
Patrick Kilbey	Marquette County Conservationist	3 608-296-2815	pat.kilbey@wi.nacdnet.net
Stephanie Prellwitz	Green Lake Association Executive Director	3 920-294-6480	stephanie@greenlakeassociation.com

Report Credits

Report Text Written by - Maranda Miller & Matt Brugger

Cover Image by - Dan Hagenow Video Creation

Report Images by - Maranda Miller, Matt Brugger, Dan Hagenow Video Creation, Wisconsin Corn Growers Association, USDA NRCS, and news outlets (as credited on "In the News" page)

WE'RE LOOKING FORWARD TO 2022

UPPER FOX-WOLF DEMONSTRATION FARM NETWORK

Protecting Wisconsin's Soil and Water Resources