

Producer-Led Watershed Protection Grants

Bimonthly
E-News Update

Water Tours

Farmers Improving Soil Health and Water Quality Throughout Wisconsin's Watersheds

August 2017

Story and photos provided by: UW-Discovery Farms

Protecting water quality requires that everyone take action and be open to learn across industries. The second annual Professional Dairy Producers of Wisconsin (PDPW) and UW-Discovery Farms Water Tours held in June brought together people from different professions to highlight innovative ways farms, municipalities and businesses are supporting water quality initiatives. Tours were held in Marshfield and Rivers Falls and each tour included a stop that focused on a farmer-led watershed group in the area.

During a tour discussion at Eron Agronomics, UW-Extension Agent Ken Schroeder and John Eron, farm leader of the [Farmers of Mill Creek Watershed Council](#), emphasized their focus on experimentation and partnerships.

The council is working to reduce phosphorus loading of the Mill Creek by trying out a range of practices

About the grants

- Began in Spring 2016
- \$250,000 available each fiscal year
- \$20,000 maximum grant award per group per year



to determine what strategies work in their unique watershed. For example, the group has acquired two no-till drills that can be modified for inter-seeding cover crops and used by Farmers of Mill Creek Watershed Council members. Several participating farmers have also started cover crop demonstration plots in partnership with UW-Extension to better understand the relationship of various cover crop species to soil moisture, soil temperature, and crop yield. The overall goal of the demonstrations is to determine appropriate cover crops suitable for planting on heavy, somewhat poorly drained soils.

In addition, a positive relationship has been built between the lake association and the farmers in the watershed. The lake association, the Petenwell and Castle Rock

Stewards (PACRS), are working with the Farmers of Mill Creek Watershed Council to improve water quality of Lake Petenwell, Castle Rock Lake and the Wisconsin River.

The PACRS attended a field day to learn more about the farmer-led project and the council joined the PACRS on Lake Petenwell for discussions on blue-green algae and to see firsthand the negative impacts it has. Rick Georgeson, President of PACRS, explained a new appreciation that was gained through these

Continued on page 2



Water Tours *continued*

events by both groups regarding the concerns and challenges created by elevated phosphorous levels in the Wisconsin River and how both urban and rural communities have an impact.

The stop at Eron Agronomics led one tour attendee to take away just how important these types of relationships are. "Relationships, relationships, relationships. It was really inspiring to hear John's story about the no-till drill to get more cover crops planted. People talking to people, that is how work gets done."

On the River Falls tour, Dan Sitz with the Pierce County Land Conservation Department reviewed the [South Kinni Farmer-Led Watershed's](#) efforts, which include collaborating on a cover crop test plot with his department and implementing a wide range of conservation practices.

Whether it's a farm, cheese plant, city, or wastewater treatment plant, each sector is trying new innovations. Shared innovations don't necessarily mean that each sector is implementing the same practice, it means that they are able to take ideas from each other to figure out what works best in each scenario.

The Water Tours made it clear that there is a growing need for tinkering and creativity. Just look at the Marshfield Wastewater Treatment Plant, one of the tour stops, which took a chance and switched from a traditional system to one with biological phosphorus removal that cost \$48 in supplies and now saves them \$140,000 a year.

The main lessons from this year's Water Tours were clear:

- First, find groups with similar end



goals. Local lake groups, farmers, and wastewater treatment plant all want to see a reduction in the amount of phosphorus entering their waterways.

- Second, as Amber Radatz, co-director of UW Discovery Farms explained, "It is not a choice whether we employ the tools that we know of or not. The choice is how you individualize it for yourself and whatever situation you are in. Whether you are a city, a farm, or industry, it is our choice how we adapt the tools to our personal situations and make them work."
- Lastly, think outside the box. As one attendee suggested, "There is no magic bullet. We saw a lot of people making a change by trying something really small. I hope that gives people inspiration to try something new and learn from it."

A closing statement from one attendee sums up the Water Tours well, "We are all in this together. My children and grandchildren are going to drink this water."

Start collaborating and innovating today, to ensure good water quality for the future. Every drop counts.

Water Quality Tours *Overview*

Day one: Marshfield

- **Marshfield Wastewater Treatment Plant**, trades phosphorus and currently treats wastewater with the help of microbes - and no chemicals.
- **Eron Agronomics**, cash crop farmer John Eron leads the Farmers of Mill Creek Watershed Council, a producer-led group that farms a combined 8,600 acres in the watershed.
- **Mullins Cheese**, the largest family-owned and operated cheese factory in Wisconsin. Facility includes a wastewater treatment plant and a recently installed membrane system.

Day two: River Falls

- **City of River Falls'** storm water ordinance and best-management practices.
- **Ellsworth Creamery's bio tower**, the only in the state that processes food wastewater.
- **WI Farmer-Led Watershed Council Project**, farmer-led groups focusing on monitoring, on-farm research and conservation strategies in NW WI.

Peninsula Pride Farms

Collaborator: Wisconsin Center for Agriculture and Environmental Resources



Peninsula Pride Farms (PPF) is a farmer-led, not-for-profit organization comprised of farmers, businesses and agency partners focused on improving surface and ground water quality in Kewaunee and southern Door counties. The group focuses on ideas, practices and technologies that balance water quality with farm sustainability.

Their 2016 Producer-Led Watershed Protection Grant assisted with startup costs, hosting field days and workshops, providing expert consultation, and demonstration projects. They also used funding to go toward cost-sharing with farmers to try new practices, including the development of a Cover Crop Challenge program. Nutrient management will be a dominant tool for the group and eventually they hope to implement a farm evaluation program similar to Yahara Pride Farms Certification in southern Wisconsin.

PPF's work plan for 2017 includes two research projects with UW-Discovery Farms for evaluating nitrogen and phosphorus loss to tile drainage systems and to look at nitrogen use efficiency to improve understanding of nitrogen loss and fine-tune nitrogen management. They will also focus on several outreach, education and communications programs including pathogens in the environment, the new Door-Kewaunee Demonstration Farm Network and the mapping of sinkholes and depth to bedrock.

The group will hold several field days and events as part of the Demonstration Farm Network as well as an event on manure composting. They will also continue their Water Well community service program that works to prevent rural residents from getting sick from E. coli.

For more information on the group, visit their website: <http://peninsulapridefarmsinc.org/>

Accomplishments

- Established as dues-paying 501(c) (3) organization
- Fifty members with 50 percent of cows and acres in area
- Collected data on nitrogen use efficiency with UW-Discovery Farms
- Held field day to demonstrate depth to bedrock and sensitive field identification
- Held field day to demonstrate use and benefits of cover crops
- Established Cover Crop Challenge program; budget of \$60,000
- Launched Water Well program to assist with E.coli well contamination prevention
- Created member newsletter, website and Facebook page
- Organized and held first annual meeting
- Received more than \$50,000 in community support donations
- Received two \$20,000 awards through the Producer-Led Watershed Protection Grant program

PPF Members

- 50 dairy and crop farmers
- Dairy sizes, 60 to 6,000 cows
- 34,755 cows – 50% of area cows
- 69,737 acres – 50% of tillable acres
- Supportive businesses

Farmers in Yahara Watershed dramatically reduce phosphorus delivery in 2016

News release and photos provided by:
Yahara Pride Farms

Yahara Pride Farms (YPF) has just released its 2016 Annual Report that documents information and research on the reductions in phosphorus delivered to nearby surface waters by farmers in the Yahara watershed in 2016. YPF has measured on-farm results for four years, but this is the first year that an annual report has been compiled to share program outcomes with the public.

Aided in part by cost-share dollars, farmers have made changes to their farming practices that have resulted in more than **27,000 pounds** of documented phosphorus remaining in the soil and thus not entering surface water since the group began in 2012.

"Farmers in this watershed are committed," said Jeff Endres, a dairy farmer from Waunakee and chairman of YPF. "We have a role to play in water quality, and we take that responsibility seriously – this report documents our work."

Highlights of the report include:

- A commitment by farmers to reduce soil loss and phosphorus to the Madison chain of lakes
- Documentation about how specific farming practices are reducing phosphorus
- The data set is made up of farms in the Yahara watershed, all numbers are from the Yahara watershed
- Data shows that farms are reducing phosphorus losses from their fields
- Long-term, this report provides hope and assurance that agriculture nutrient losses are being addressed



"We have a role to play in water quality, and we take that responsibility seriously – this report documents our work. Jeff Endres, dairy farmer and chairman of YPF"

- More than 11,000 lbs. of documented phosphorus reduction in 2016; 27,000 lbs. since 2012
- There are barriers to water quality in Dane County, such as legacy phosphorus, that are beyond farmer's control

In 2016, five practices were promoted by YPF: Strip tillage, low-disturbance manure injection, low-disturbance deep tillage with cover crops, cover crops and headland stacking of manure. Additional data was collected for combining practices, continuing a practice for multiple years and combined practices over time.

The report breaks down phosphorus delivery reduction achieved, along with the number of acres and the cost per pound of phosphorus for each practice. It is important to note that conservation techniques endorsed by YPF have been adopted as best-management practices by farmers in the program. For each practice, the number of acres without cost-share far exceeds the number of acres with cost-share.

"Together, we have created a culture of continuous improvement among farmers in the watershed," said Endres. "We rely on our community partners

to support this paradigm shift both with their investment and their belief that we must strive for excellence to sustain our farms."

The YPF board of directors and resource managers are available for group presentations and individual questions. The report is available for free download at yaharapridefarms.org.

Yahara Pride Farms, established in 2012, is a farmer-led 501c(3) non-profit organization that strives to preserve agricultural heritage while simultaneously encouraging farmers to engage in proactive environmental stewardship within the Yahara Watershed. Participating farms employ practices that result in the preservation and enhancement of soil and water resources for today, and for generations to come.

New Demonstration Farm Network

Northeastern Wisconsin's Door-Kewaunee Watershed is now home to a network of farms that will demonstrate the best conservation practices to protect the Great Lakes. The Wisconsin Department of Agriculture, Trade and Consumer Protection and the USDA Natural Resources Conservation Service are supporting this effort in cooperation with Peninsula Pride Farms, a farmer-led organization, and the Door and Kewaunee Land Conservation Departments.

Groundwater and surface water quality are top priorities for the farmers of the Door-Kewaunee Watershed Demonstration Farm Network, who contend with shallow, fractured bedrock that can provide a direct path for contaminants to groundwater. The network will test how well specific conservation practice systems reduce erosion and sedimentation, control phosphorus runoff, increase soil organic matter, and improve soil health in these conditions. This initiative will involve many partnerships to provide educational opportunities for the public, farmers, land managers, agribusiness, natural resource agencies, elected officials and research entities.

Goals of the Network

- Test the effectiveness of current and innovative conservation systems for controlling runoff
- Establish a mechanism to transfer technology and provide information on effective conservation systems to farmers, land management agencies, agribusiness and the general public
- Create opportunities for environmental research agencies and agribusiness to test research, provide technical assistance, and show conservation practices and technologies on the demonstration farm sites
- Host field days, farm tours, workshops, and provide additional outreach to share information and lessons learned to other natural resource managers, researchers, and stakeholders throughout the Great Lakes basin

To learn more about the project, visit the Demo Farms webpage: https://datcp.wi.gov/Pages/Programs_Services/DemoFarms.aspx

Join us for the kickoff field day!

**SEPT 7, 2017
DEER RUN DAIRY LLC**



DOOR-KEWAUNEE Demonstration Farms Network

Demo Farms

The four farms participating in the network are:

- **Augustian Farms LLC**, operated by Aaron and Todd Augustian
- **Brey Cycle Farm LLC**, operated by Tony, Jacob and William Brey
- **Deer Run Dairy LLC**, operated by Duane and Derek Ducat and Dale Bogart
- **Kinnard Farms**, operated by Lee Kinnard and family

Each of these farms will play a significant role in testing, demonstrating, and sharing information about leading-edge practices and technologies applied on their farms including **cover crops, low disturbance manure injection and reduced tillage** as well as other innovative practices that help increase organic matter, improve soil health and reduce soil erosion.



Save the Date: Annual Producer-Led Watershed Protection Grants Workshop

For producer-led groups and collaborators

December 13, 2017

Glacier Canyon Lodge at The Wilderness, Wisconsin Dells

To register: <http://wisconsinlandwater.org/events/producer-led-annual-workshop>

Nutrient Management Farmer Education (NMFE) Grants

Interested in hosting a nutrient management training?

DATCP awards grants for organizations to perform nutrient management training and assist producers with nutrient management plan development and implementation through the NMFE grant program. Producer-led groups that are interested in incorporating nutrient management into their projects are encouraged to apply to this program.

For more information on this funding, [visit the NMFE webpage](#).

For more information:

Visit our producer-led webpage:
https://datcp.wi.gov/Pages/Programs_Services/ProducerLed-Projects.aspx

Questions?

Contact:
608-224-4622
Rachel.Rushmann@wi.gov

