Peninsula Pride Farms has gained plenty of attention in the three and a half years since it was established. Residents, environmental groups, lawmakers, businesses, consumer organizations and others have taken notice of the farmer-led group’s efforts to protect water quality in Kewaunee and southern Door counties.

The awareness rose to a new level in October when PPF was featured on a global stage. Don Niles, PPF’s president, was one of just a dozen speakers at The Wall Street Journal Global Food Forum in New York City. He appeared among leaders from Cargill, McDonald’s, U.S. Department of Agriculture, World Bank and others.

Niles sat on a panel alongside Suzy Friedman, who is senior director of agricultural sustainability for the Environmental Defense Fund, and Robert Lee Hotz, science writer for the newspaper.

**PPF’s mission featured in front of global audience**

**Niles talks about water quality commitment at international food forum**

By Jamie Mara for Peninsula Pride Farms

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Niles sat on a panel alongside Suzy Friedman, who is senior director of agricultural sustainability for the Environmental Defense Fund. The group is one of the world’s largest environmental organizations, with 2.5 million members and a staff of 700 scientists, economists, policy experts and other professionals.

Continued on page 2
Global audience (continued from page 1)

This was an opportunity for Niles to explain PPF's mission and the innovative and collaborative spirit of the group's members. Here is an edited portion of the discussion from the forum:

**Topic: How dairy farmers can improve water quality.**

**Niles:** We're doing things such as putting in methane digesters, where they're feasible, to reduce the pathogen level in the manure. We also find fairly simple practices by doing our own research. One is that if we apply manure on a sunny day, the UV rays from the sun are going to break down almost all the bacteria. The traditional practice had been to inject the manure deep into the soil to prevent surface runoff, which is also a goal of ours, but if we put that on the surface on a sunny day, we kill the bacteria and then work it in the next day; we get a double benefit. That's the kind of innovative thinking we're trying to put in place.

**Friedman:** It's going to depend on what the situation is on that farm and the combination of practices that is going to deliver the good quality water. It's also important to have metrics for a farmer to be able to assess what's working and being able to track the outcomes, how this is working for the bottom line, what is going to work best for an individual farm. And — this is one of the exciting things I've learned about what Peninsula Pride Farms is doing — what's working for that watershed, because one farm in isolation can be doing a great job, but if it's not supported by other activities in that watershed, there can still be difficulty delivering water quality.

**Topic: How water quality challenges differ between small and large farms.**

**Friedman:** When you're larger, there is more to manage. But often also with size comes added resources and labor to be able to have technology and additional expertise around management. So, size isn't going to determine if are you a good manager or not a good manager. But size can sometimes open up opportunities. Sometimes you like to think that smaller is better, bigger is not. But it all comes down to management.

**Niles:** Surely any technological upgrades that we make — a methane digester or new water separation technology, for example — those are quite expensive. Our farmer-led group is made up of both large and small farms, crop and dairy farms. What we're finding is the advantage of working together can supersede any of those individual advantages by combining our efforts. We have 50 of us working together, so five of us can try one procedure and five can try another, and then we combine our results and data and can work for the betterment of all sizes.

**Topic: The sustainability challenge in water use for the dairy industry.**

**Friedman:** The biggest challenge is finding ways that we can have clean water, a stable climate, enough water and still have viable dairy farms, because we need both. We need to be able to eat, we want to be able to have milk and we need to be able to have those environmental outcomes. That's a real challenge these days. We're facing an agricultural economy that is pretty stressed. So, digging in to find ways that conservation can bring economic return is really important.

**Topic: The challenge of bringing farmers together for a group initiative.**

**Niles:** We found ourselves in a conflict. We had a group of environmentalists that were saying things about dairy production, and dairy farmers saying it was all about the septic systems. Eighty percent of the people in the county were sick of it. They want the farms to be there, but they don't want us to mess up the environment. That's pretty reasonable. So, we got together as a group of farmers and said we think that we can find better ways to do what we've been doing. We think if we work together we will make faster progress because we'll learn from each other. We decided that we were going to take on this challenge.

**Topic: How to create more progress in protecting water quality.**

**Friedman:** I think there's still a lot of opportunities for initiatives like Peninsula Pride Farms to help achieve water quality goals. I think that there's a lot of progress that's been made. There's still a long way to go in regions like the Chesapeake Bay and the Upper Midwest where we've still got some pretty severe water quality challenges. And we need initiatives like PPF, but we also need local, state and federal policies to really support initiatives like this.

**Topic: Whether smaller farms can remain productive.**

**Niles:** There are certainly successful dairies out there with 40 cows. There are unsuccessful dairies with thousands of cows. One is not a guarantee. I think that the key is that the only system that doesn't work properly — no matter what size farm or business model — is to try to do exactly what you've done for the last 20 years, for the next 20 years. That's not sustainable.
Greetings once again from Peninsula Pride Farms.
It seems like not too long ago I put together last fall's newsletter greeting, in which I talked about preparing for a cold, wet autumn. Maybe I should’ve just sent you all a reprint of that because we are back in the same boat. Fall work is never without its challenges, but Mother Nature continues to go above and beyond.

In order to prepare for fall manure handling in our current conditions, PPF asked both Door and Kewaunee county staff as well as the state Department of Natural Resources to sit down with us to brainstorm regarding this year's conditions and best manure application practices. The meeting, held in Brussels, was well attended with about 100 farmers present. While we found no magic bullets for a stress-free autumn, the discussion was good.

Some keys points:
• Communication between farmers and the county/state offices is very important.
• Take photos and document applications and field evaluations.
• Consider down-slope as you are making applications.
• The state's manure advisory system forecast is very accurate.
• Consider planning forward to keep fields meeting soil loss tolerance.
• Have restriction maps updated and with the application equipment.
• Consider reviewing winter spreading options before conditions drastically change.
• Keep good records and use good judgment.

Turn to Page 4 of the newsletter for more information.
I also had a chance last week to attend the The Wall Street Journal Global Food Forum in New York City. This is an annual event that the newspaper puts together to bring together a wide spectrum of people involved in food production.

As a dairy farmer in the audience, I paid close attention to the rather heated debate between James Mulhern of National Milk Producers Federation and Jessica Almy from the Good Food Institute, the lobbying arm for the milk substitute industry. Mulhern came out on top!

I also found myself on stage for one session, to represent Peninsula Pride Farms. The topic was agriculture and water quality. I was paired with Suzy Friedman of the Environmental Defense Fund to discuss the views of farmers and environmentalists.

Anybody who was looking for sparks was probably disappointed. We both agreed that we need a strong agricultural community in the United States, and that the dairy community needs to continue getting better and more creative in reducing our environmental impact.

We also agreed that these things take time, creativity and support. It is by working together and not being afraid to innovate and try new practices that we will succeed. Even when it’s raining.

Good luck with the rest of fall!

- Don

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Enroll in the PPF cost-share program

Forms are due Dec. 1

PPF is once again offering members an incentive program to encourage conservation practices. This is a great opportunity to try different practices on your farm with reduced risk. Low-disturbance manure application assistance is new for this year. All types and sizes of farms are encouraged to enroll.

2019 cost-share programs:
• Cover crops — $30/acre up to 50-acre maximum
• Harvestable buffer — $325/acre, max of 4.6 acres
• Depth of soil over bedrock — max $1,500/member
• Split nitrogen application — $10/acre, max $1,500/member
• Low-disturbance manure application — max $1,500/member

Download the enrollment form with full details at peninsulapridefarmsinc.org under “About us” > “Cost Share Program” and submit no later than Dec. 1.

Questions? Contact Nick Guilette at (920) 304-6293 / nickguilette9@gmail.com, Nathen Nysse at (920) 858-5756 / nathen@tilthag.com or Adam Barta (920) 255-2703 / acbarta@riocreekfeedmill.com.
Challenging conditions highlight need for proactive communication

By Lauren Brey for Peninsula Pride Farms

This year has been extremely challenging for farmers, and with record-setting rainfall continuing this fall, the obstacles are not going away.

Peninsula Pride Farms hosted a meeting on Sept. 30 about how to face the challenge of harvesting crops and spreading manure in a late and wet fall while protecting soil health and water quality. Farmers, agronomists, custom manure haulers, county conservation staff and state Department of Natural Resources (DNR) staff were in attendance.

Nathen Nysse, agronomist with Tilth Agronomy, facilitated the discussion. A panel of Door and Kewaunee county conservation staff and a DNR staff person shared their perspectives and answered questions.

Key themes from the meeting were proactive communication and accurate recordkeeping. Farmers who are unsure what avenue to take should contact the county conservation department to discuss options ahead of time.

Top 5 takeaways:

1. Evaluate fields and monitor weather forecast prior to spreading. Use the DATCP Wisconsin Runoff Risk Advisory Forecast tool available at manureadvisorysystem.wi.gov/runoffrisk/index.
   • Wet soils need to be checked. It is possible to apply to high spots in a wet field. If in doubt, contact your county conservation staff.
   • Take a screenshot of the Runoff Risk Advisory Forecast if you want extra documentation.
   • Take photos before and after applying if applying around a wet spot to document conditions.

2. Ensure you have accurate soil maps. If you want to verify soil depths, contact your county conservation staff to determine how to do this.

3. Work with your agronomist to document any changes to your nutrient management plan and explain reasons for changes in the narrative.

4. Understand NR 151 and how it affects your farm.
   • Door County summary available at map.co.door.wi.us/swcd/ under “Summary of Silurian Bedrock Standards.”
   • Kewaunee County summary available at bit.ly/2VFPT5X under “NR151 Cheat Sheet”

5. If you're anticipating issues (like a manure pit nearing capacity) and are unsure about what actions to take, contact the county conservation staff to discuss options.

When harvesting crops and spreading manure, it is important to keep the roads as clean as possible. It was recommended to keep a skid-steer near the field being harvested or fertilized.

In the event of a manure spill, immediately take action to stop the spill and then contact the DNR 24-hour Spill Emergency Hotline at 1-800-943-0003. Learn more about what to do in the event of a spill at dnr.wi.gov/topic/AgBusiness/ManureSpills.html.

Although it will be a late fall, don’t rule out the option of planting cover crops, particularly rye. Even if the plant does not grow prior to winter, it is likely to survive and could be harvested in spring for forage as well as take up plenty of nutrients, so manure could be applied after harvest in spring.

While the challenges won't go away, it is important that farmers, custom operators, agronomists and conservation staff all communicate to find solutions.

Contact Door Co. staff Erin Hanson or Dale Konkol at (920) 746-2214 or swcd@co.door.wi.us.

Kewaunee Co. staff Davina Bonness can be reached at bonness.davina@kewauneeco.org or (920) 845-9743, and Travis Engels at engels.travis@kewauneeco.org or (920) 845-9742.

PPF member conservation practice survey

From PPF

PPF requests members take a brief survey to understand what conservation practices are being done on the land. This survey will help the group get a better idea of what metrics can best capture desired conservation outcomes.

The 2019 survey is underway. Members can expect a call or text. It is critical that we have 100 percent participation.

To complete the survey, go to peninsulapridefarmsinc.org and under “About us” and select “Member survey.”

If you have any questions, contact Paige Frautschy at page.frautschy@tnc.org or (608) 316-6437.
Dry ground: What’s the risk when applying manure to your fields?

By Aaron Wunderlin, Discovery Farms

Discovery Farms staff members often discuss the risk for nutrient loss when manure or fertilizer applications are made on wet soils because there is increased chance of runoff. But there are also risks associated with applying manure on excessively dry soils.

In fields with heavier soils, cracks can form when it gets dry. This is the result of clay particles drying out and shrinking. Cracks serve as preferential flow paths directly to tile lines or groundwater.

In Discovery Farms’ tile flow data, there are clear examples of preferential flow to tile lines during dry conditions. In August 2009, for example, a 1.8-inch rain event occurred on dry soil where cracks had been visible for weeks. Early in the rain event, tile flow increased sharply. When the rain ended, flow decreased sharply before tapering off. This sharp peak and decline was the result of water moving through macro pores, including cracks in the soil.

In comparison, in the same field two days later when soil moisture increased to 35 percent, another 1-inch rain event occurred. When water moved more slowly through the wetter soil, there was a gradual recession after flow peaked.

Discovery Farms continues to collect tile drainage data to further understand links between soil moisture and tile water quality.

Water moving through cracks receives little filtration. When excess nutrients are present, they have the potential to be picked up and moved with the water. This presents risk to both surface and groundwater quality. Remember to keep these risks in mind when making manure applications. All manure in the presence of enough rain can contribute to the nutrient load to water bodies. If soil cracks are present in areas with tile drainage or karst landscape, water quality could be at risk.

Inspect your fields for soil cracks if it has been dry. Knowing soil cracks are there can help farmers make decisions regarding where manure applications should be made. If cracks are present and you have no other place to go, pre-tillage can break up the soil enough to prevent manure or runoff from entering these preferential flow paths.

Managing manure on dry ground is just as important as managing it when the soil is wet. Knowing the conditions of your fields gives you one more piece of information to use when managing your manure.

What is the Dairy Strong Sustainability Alliance?
Supporting farmers in conservation and their sustainability journey

By Lauren Brey for Peninsula Pride Farms

The Dairy Strong Sustainability Alliance (DSSA) is a collaborative, industry backed effort to promote and support farmer-led solutions to today’s environmental challenges, taking into account business viability and community engagement.

The alliance was established in 2016, driven primarily by the Dairy Business Association, Edge Dairy Farmer Cooperative and The Nature Conservancy.

DSSA provides support for farmer-led conservation groups, including Peninsula Pride Farms, and helps connect individuals, organizations and companies that want to support their efforts.

Through the partnership of a farmer-led watershed conservation group with DSSA, mutual goals of the organizations can be achieved.

With services outlined in a memorandum of understanding, there is the opportunity for the farmer-led group to achieve increased membership, revenue and community engagement.

Collaborating with DSSA is intended to make more efficient use of time for both farmers and group collaborators. Additionally, services will help the group maintain a professional image and assist the group in realizing goals.

DSSA serves as an incubator and support system for PPF and other groups. The alliance offers various services that each group can choose from depending on its individual needs. Examples include administrative support, communications, strategic services and connections with experts. DSSA also serves as a conduit between the farmer organizations, experts and other entities that can help in achieving their goals and promoting their good work.

Additionally, DSSA can help groups secure money for research projects or other initiatives they may not otherwise have funding for.

Besides PPF, DSSA supports the Lafayette Ag Stewardship Alliance, Sheboygan River Progressive Farmers, Western Wisconsin Conservation Council and Yahara Pride Farms.

To learn more, visit dairystrong.org/sustainability or contact Lauren Brey at lbrey@voiceofmilk.com.
Some farmers have heard of the term “planting green.” However, many are unaware of the planting method and some have predetermined that it’s “crazy and can’t work this far north!”

Planting green refers to no-till planting into green and actively growing cover crops. This contrasts with past no-till practices, when no-till planting occurs into dead residues from the past year or cover crops that have been previously terminated for several weeks.

Fortunately, farmers in Door and Kewaunee counties have four USDA Natural Resources Conservation Service demonstration farms funded through the Great Lakes Restoration Initiative that took the challenge this past year to plant green and share what they learned.

The four farms, like many others in the region, have grown in their comfort level of utilizing cover crops and have seen the benefits over the past several years. Benefits associated with cover crops are well documented in their ability to decrease erosion, scavenge residual nutrients, increase infiltration and increase organic matter levels. However, when planting green, the benefits become much greater.

Augustian Farms and Deer Run Dairy both planted winter cereal rye as a cover crop in fall 2018, following the harvest of corn silage. Augustian Farms even planted rye after fourth crop alfalfa that was fall-terminated with plans to plant corn this past spring.

Not shocking to anyone, this spring turned out to be anything but normal. Cool temperatures and ample moisture caused some fields to not be planted and many to be delayed and then planted into less than desirable seedbeds. Several days of dry weather in a row this spring to allow for tillage and then planting was very uncommon, however, both farms were able to plant green into their winter rye cover crops, which continued to grow under spring conditions. Winter rye that grew during the wet spring continued to take up water from the soil and provided a firm foundation due to the increased soil structure, allowing for corn planting.

The winter cereal rye on both farms was terminated after planting. Termination after planting is a major key to success in planting green. Corn planters running through cover crops that have started to die off (starting to turn yellow) tend to wrap and plug up. When planting into the green vegetation of a growing cover crop, the planter can more easily cut and slide through. In addition, the growing winter rye helped to remove excess moisture from the seed bed and allowed the planter to achieve even stands of corn.

Additional biomass achieved from planting green was dramatically increased due to the delayed termination of the winter rye. Several Augustian Farms field biomass samples were taken by Nick Guillette of Ag Source Labs and analyzed for biomass. The results were dramatic, with samples showing...
7,000 to 9,000 pounds of dry matter per acre. This did not account for the below-ground root biomass that wasn’t measured!

This mat of rye residue remained between the rows as we entered September, however it is being greatly reduced by the thriving soil ecosystem utilizing this material to build soil structure, increase organic matter, feed beneficial soil microbes and cycle nutrients.

As you may have guessed by now, planting green does require changing some management techniques and practices. Aside from patience and not being the very first to plant in the spring, a big change is nitrogen management.

Winter rye, as shown, can produce large amounts of biomass. As rye matures, the carbon to nitrogen ratio (C:N) increases. A well-balanced soil allowing for microbes to release Nitrogen (N) and other nutrients is optimal at a C:N ratio of 24:1. Depending on the maturity of the cover crops when terminated, the residue may have a C:N ratio that is much higher, resulting in a “tie up” of nitrogen. To achieve optimal corn yields, we know that nitrogen is crucial at the early stages of growth, therefore when planting green into cover crops more of your nitrogen budget is needed early on to overcome any N that is being tied up by the additional carbon in the system from cover crops. Utilizing resources such as Pre-Plant Nitrogen and Pre-Side Dress Nitrogen tests can enable producers to determine nitrogen needs, as well as working with your agronomist or conservation professional.

With continued rain at corn silage harvest, farmers once again faced muddy fields, resulting in costly compaction. Like last year, fields that utilized cover crops and no-till planting had greater soil structure and better harvesting conditions. With the reductions in field work, time, fuel and improved harvesting conditions, more farmers are seeing economic advantages of implementing a soil health system.

A late corn silage harvest will cause cover crop planting to be delayed this fall. Winter rye is the best choice for late planted cover crops. Rye will germinate at temperatures as low as 35 degrees and will be the first to start growing the following spring.

While this year has been hard and challenging, we have learned much on the Demo Farms. Planting green into living cover crops can be successful and will be a management tool that should be used to build soils and protect water quality in northeastern Wisconsin.

If you are interested in finding out more about soil health, cover crops and the financial and technical assistance NRCS provides to farmers, visit wi.nrcs.usda.gov and make an appointment at your local USDA Service Center.

Peninsula Farmer | Fall 2019

Photo: Corn silage nearing harvest time at Augustian Farms.
Dates to remember:

- Nov. 5 - Board meeting
- Dec. 1 - Member surveys, cost-share enrollment due
- Dec. 10 - Board meeting
- Dec. 11 - Discovery Farms Conference, Wisconsin Dells
- Feb. 13 - PPF annual meeting
- Feb. 19 - Producer-led watershed grant workshop, Stevens Point
- Feb. 20 - Cover Crops Conference, Stevens Point

2019 PPF member survey & cost-share enrollment due Dec. 1!

Go to peninsulapridefarms.com > About us
> Member survey
  OR
> Cost-share

We ask that all members complete a short survey about conservation practices you’re using on your farm to help us track our progress. Surveys must be completed in order to be eligible for cost share.