LASA
Lafayette Ag Stewardship Alliance

Summer 2022
lafayetteagstewardship.org

Cover crops spread across Lafayette County

Research shows farmers' conservation practices protecting water quality

By Anne Moore for LASA

Just 10 years ago in Lafayette County, there were very few green fields after harvest and before the traditional spring planting. Now, a drive through the countryside showcases green fields year-round as conservation spreads across the county in the form of cover crops.

Brian Schilling credits the growing green acres to the Lafayette Ag Stewardship Alliance (LASA) members and partners, who have made cover crops a top priority. The crops are plants used primarily to slow erosion, improve soil health, enhance water availability, smother weeds, help control pests and diseases and increase biodiversity.

LASA members planted 8,405 acres of cover crops in 2021, the equivalent of nearly 6,400 football fields.

Schilling dairy farms in southwestern Wisconsin, milking 2,100 cows and working 5,200 acres. Schilling Farm recently expanded by purchasing another local dairy, doubling the farm's acres. Schilling and his brother, Andy, are third-generation farmers.

Schilling is proud to say he has always incorporated conservation practices, such as no-tillage and contour strips. The farm also plants cover crops, does split applications of nitrogen and has used a nutrient management plan for the past 15 years. The Schillings plan to plant 1,500 acres of cover crops this year.

"I am proud of what LASA has become and the huge influence we've had in our area. I see many cover crops being planted that 10 years ago we would not have seen," Schilling said.

"I feel we have a responsibility to help protect our environment, and I want to do anything and everything I can to protect it."

Schilling is a board member of LASA, a farmer-led watershed conservation group in Lafayette County with 35 members. The six-year-old group represents 59,307 acres and 92,565 dairy animals, beef cattle and pigs. The alliance collaborates with university researchers, environmental groups and community leaders.

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LASA's 2022 cost-share

The LASA cost-share program is designed to be inclusive to help every member meet his/her soil and water conservation goals. The practices we are including this year have been shown to provide a suite of benefits, including but not limited to, reducing soil erosion by wind and water, limiting nutrient losses via leaching, runoff or other loss pathways, and improving soil health.

To participate, each applicant should indicate which program(s) they would like to enroll in and the number of acres/samples they are enrolling. Receipts are required for some programs.

LASA's cost share program is intended to be a learning opportunity for members, so we ask that members be willing to share lessons learned from trying a new practice with the group. The practices that are offered to cost-share include cover crops, 4R nutrient stewardship, no-tillage, and reduced/limited strip till. A new offering for 2022 will be planting green.

Final cost-share payments are dependent on available funds and will be distributed at the end of the year. If you are not yet a LASA member, please fill out the membership form (available at lafayetteagstewardship.org) and pay the $250 membership dues.

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Schilling's farm has seen many benefits from the conservation practices, especially when it comes to erosion. He said it is most noticeable in the spring when he no longer sees the soil or silt in the ditches; instead, it is cleaner water running. He has also noticed a yield benefit — approximately six bushels an acre on corn and cost savings by doing split applications of nitrogen. He's also found improvement in soil health and fertility.

"We are applying less product to our fields than what we used to. By utilizing nutrients from the cows' manure, we are able to use less synthetic products, too," he said.

In addition to the cover crops, LASA members reduced soil tillage on 25,693 acres in 2021. Members also use soil sampling and nutrient management plans. Overall, the group has seen a 67% increase in the number of acres with conservation practices since 2018.

Cover crops and other field practices adopted by LASA farmers are significantly reducing the chance of harmful runoff into streams and lakes, according to modeling-based analysis. The farmers in 2021 potentially prevented an estimated 116,659 pounds of phosphorus from leaving the fields and reduced 29,590 tons of sediment erosion along with reducing carbon dioxide equivalents by 11,680 tons, according to an analysis shared by Wisconsin Department of Agriculture, Trade and Consumer Protection, the University of Wisconsin-Madison, and The Nature Conservancy (TNC).

For comparison, a mid-size dump truck can carry 10 tons of sediment, and 1 pound of phosphorous in a lake or stream has the potential to cause the growth of up to 500 pounds of algae, which can degrade water quality. The amount of greenhouse gas emissions reduced equals 2,540 cars driven for a year.

The modeling-based analysis calculated an estimate of the potential impact of cover crops, low-disturbance manure application and reduced tillage compared to more conventional methods typical to the group's area.

TNC, a key supporter of LASA, helped complete the analysis, which is based on surveys from the farms.

"LASA farmer members are increasingly adopting sustainable practices to ensure they not only meet the increasing demands of a growing population but also safeguard our water and soils for future generations," Steve Richter, TNC's director of agriculture strategies in Wisconsin, said.

By being a member of LASA, Schilling continues to accomplish his conservation goals. He said it helps to have farmer-to-farmer conversations so the farm isn't doing all of this by trial and error. The Schilling brothers can see new practices in action at field days which sparks their interest in trying them.

"Our farm is proactive, and we are proud to see the growth across the county. Some (farmers) might not be members, but by seeing what's happening around them, neighbors have taken on the conservation practices," he said.

Friends of LASA

By Jim Winn, LASA president

It's springtime here in southwestern Wisconsin, and the weather is as unpredictable as ever for Wisconsin. As I write this, we have already seen temps as high as 90 and now today back in the 50s. It has been an interesting spring.

With warm temperatures in March, many thought we might get an early spring, but we were dead wrong, as we have had several weeks of cloudy, very cool temperatures and even a few evenings of below-freezing temperatures. It was late into April before much fieldwork began. To say the least, we have had a very late spring; however, we have prevailed. Much of the corn is now planted and first-crop hay harvest is just a few days away.

It is my privilege to share a group update since we were last together. We had a great annual meeting back in February. Highlighting the event was Dr. Paul Mitchell, professor and extension Specialist from the University of Wisconsin-Madison, who presented on commodity and input costs. The group also heard from researchers and presenters from the University of Wisconsin-Platteville on how farmers saw improved soil health and water quality after implementing conservation practices.

As you all know, the pilot project with Grande has garnered LASA great exposure, and Doug Thomas from Houston Engineering was on hand to give us some updated results from the project. We've got some great numbers to show continuous improvement. Please check out our website to see these improvements, along with the first two years' results.

This year, we continue to have exciting opportunities for our members. In mid-May, a few other members and I attended the final Southwest Wisconsin Groundwater and Geology (SWIGG) study findings held in Lancaster. LASA participated with Lafayette County in the study. We will publish the results on our website.

Mike Berget shares how he planted green into a standing rye crop.

On May 20, after our board meeting, LASA held its first field day of the summer in one of Mike Berget's fields. Mike shared his experience of planting green into a standing rye crop with attendees. Dennis Busch from UW-Platteville presented on his rain simulator. It was a great way to kick off our summer events.

Speaking of planting green, I have talked to quite a few of our members who are experimenting with this practice. Great job to all for trying this newer practice. I think there will be more members doing this in the future.

We're busy with plans for a summer picnic happening at 5 p.m on July 18. at The General Store in Gratiot. This will follow our farmer-to-farmer workshop that same day. Doug will meet with farmers in the pilot project and go through each farm report with them.

We plan to have our annual summer field day in August. One of our members stepped up to offer his farm for that event so be on the lookout for an announcement with more details in the very near future. All members are encouraged to lend their thoughts on what they want to see for that larger field day.

We have also talked about hosting quick evening 30-minute field visits; these pop-ups would allow members to check out a field where a member has tried a new practice. Another farmer-led group in the state has tried this and found success with them. It all stems back to finding more value for a membership with LASA.

Did you know we have a snapchat group? Our board is always looking for ways to keep members connected, so we recently created a snapchat group —Lafayette Ag Stewardship Alliance. You can ask a board member to get you added. We are just using this to share pictures of our fields, animals, anything conservation-related within our group. It is a more casual way of sharing. Please consider joining the snapchat group. I am even on it!

Lastly, I urge all members to check our website to see the most up-to-date information and news on what is happening with LASA. That is where we publish all our results from the pilot project and our field day events. I hope everyone has a safe and profitable summer, and we hope to see you at one of our events.

Sincerely, Jim

Nationally recognized LASA project builds on positive progress

Wisconsin initiative measures environmental, financial impact of conservation

By Anne Moore for LASA

Newly released data in LASA's nationally recognized farm-level sustainability project shows that farmers are making continued progress in key environmental categories while at the same time remaining profitable.

Entering its third year, the pilot project involves 15 farmers who are teamed up with partners in the dairy food supply chain, an environmental group and others. The farmers are tailoring conservation practices most effective for their individual farms and documenting the environmental and financial effects. The goals: protect the environment, remain profitable and demonstrate to communities, customers and regulators that farmers are taking action on sustainability.

An analysis of performance to date showed the farms' practices are contributing to increased protection of water quality and significant reductions in greenhouse gas emissions, without losing crop yields and with larger gross returns.

"It is rewarding to see this comprehensive approach to farm-level conservation making a positive difference," said dairy farmer Jean Stauffacher, co-owner of Highway Dairy Farms, a participant in the project. "We are rolling up our sleeves and doing the hard work. There is still more to be done; we don't have it all figured out. But we realize this is a long-term commitment. Tailoring our practices and measuring results is becoming the standard way of doing business."

Lauren Brey, FSF managing director, and Jim Winn, LASA president, walk cover crop field.

Stauffacher and other farmers in the project are part of Lafayette Ag Stewardship Alliance (LASA).

The assessment uses nationally accepted metrics from Field to Market: The Alliance for Sustainable Agriculture to address on-farm sustainability indicators, such as greenhouse gases. A tool called Prioritize, Target and Measure Application (PTMApp) is being used for measuring impact on waterways.

Changes farmers are making include practices like planting cover crops, using no-tillage and reduce-tillage, and creating nutrient management plans. The findings are detailed in a 40-page report.

Among them:

- A cumulative water quality score increased 18 percent from 2019, when baseline data was established, to 2021. This means fewer nutrients were able to leave the field from the surface or subsurface and make their way into streams and rivers.
- Participants decreased greenhouse gas emissions by 15 percent over that time period.
- Energy used for producing the crops decreased by 15 percent. For perspective, the amount of energy used to grow and harvest crops on nine acres in the project is equivalent to the average home energy consumption in the U.S. each year.
- Farmers are cutting sediment loss in the watershed by an estimated 56,700 tons per year as of 2021, assuming equal adoption of practices across all farms and fields. That is the equivalent of 4,200 dump truck loads of sediment per year or 11½ per day not leaving the farm fields.
- The average gross return per acre for corn grain production was $917.26 in 2020, the latest available data. This is $180.67 greater than the average among Wisconsin farms included in a University of Minnesota benchmarking database called FINBIN. The farms in the database are not participating in the project.
- The average gross return per acre for corn silage production in 2020 was $1,020.25, which is $122.18 greater than the average.

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Save the Date - July 18

Pilot project participants are invited to attend the **farmer-to-farmer** workshop at **1 p.m. on July 18** at the The General Store, Gratiot.

Doug Thomas from Houston Engineering and the Southwest Wisconsin Technical College team will present aggregate results and facilitate discussion for participants to learn from one another.

The all member picnic will follow at 5 p.m.

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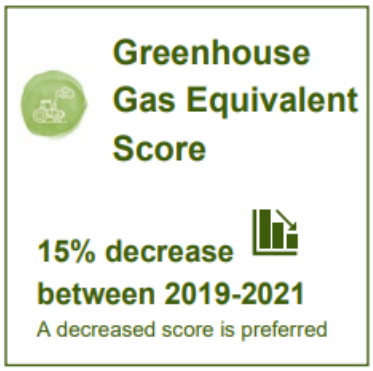
• The average gross return per ton for alfalfa production in 2020 was $1,646.05, which is $419.44 greater than the average.

• Scores for some of the project's key categories showed declines in the three-year average from 2019 to 2021. For example, overall there was a slight decrease in the amount of carbon sequestration in the soil over the three years. However, data from 2021 alone suggests that on average, fields are still showing positive scores for this metric and likely gaining soil carbon

LASA worked with two main partners to develop the project: Farmers for Sustainable Food, a nonprofit organization of food system stakeholders, and Grande Cheese Company, an Italian cheese manufacturer in southeastern Wisconsin. A host of others, including The Nature Conservancy and Southwest Wisconsin Technical College, are supporting the effort. The broad collaboration drew a national sustainability award last year from the Innovation Center for U.S. Dairy.

"A key to success in our project is the diverse partners who help make it happen," said Lauren Brey, managing director of Farmers for Sustainable Food (FSF). "From the farmers doing the work, to the team documenting what



is happening in the fields and analyzing the data, to organizations providing guidance and funding, each group brings value to the collaboration. It's proof that we are more successful when we work together toward common goals."

Brey said she is confident other farmers around the country could see positive results by replicating the project. It's based on a first-of-its-kind framework the partners have made available at no cost. FSF is already supporting similar projects across the Upper Midwest with other farmer-led groups, processors and individual farms. The Lafayette County project is set to run for five years.

"Grande takes great pride in the growth and development of its producer-direct milk supply. Developing a common vision that supports the growth of both partners, while supporting our customers, is critical," said Greg Siegenthaler, vice president milk marketing and supply chain management for the company.

"As the dairy industry evolves, the days of simply exchanging money for the transfer of milk are over. Looking forward, it will be important for processors to understand key components of the producer-processor relationship, extending beyond the milk itself," he said. "The environmental impacts associated with the production of milk play a role in how dairy products ultimately go to market."

The Nature Conservancy provides environmental insight and funding support for the project. Director of Agriculture Strategies Steve Richter said this is a long-term commitment, but he is impressed with the results thus far.

"This project illustrates the value of many different partners coming together, all adding a different perspective and playing a different role to make this a success," Richter said. "As a group, we've brought together incentives for conservation practices, a national model for farmers to track conservation efforts, and an economic study showing the value of soil health practices, and the results we're seeing show that both the farmer and the environment are benefiting."

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Upcoming events

Mark your calendar and plan to join us at these events. Watch your email for more information.

- July 18 – 1-4 p.m. Pilot Project Farmer-to-Farmer workshop, The General Store, Gratiot
- July 18 - 5 p.m. LASA member picnic - The General Store, Gratiot
- July 28 - summer annual plot at USDA building (host: Josh kamps)
- August - large field day event (host: Keith Wilson)
- August - 2022 member conservation survey released
- September - 2022 cost-share program launches

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