



Farming for the Future in Wisconsin

We've got milk in Wisconsin. Corn, soybeans and cheese too. Agriculture is a big part of our economy here in the Badger State, contributing \$88.3 billion annually and providing almost 12 percent of our state's employment.

But traditional farming practices can have negative impacts on water quality—nutrients in manure and other fertilizers, along with soil, can run off into streams after heavy rains and potentially seep into the groundwater.

The Nature Conservancy is working with farmers who want to lead the way on producing milk, corn, soybeans and cheese more sustainably.

Joe Wagner is one of those farmers. Joe farms in Greenbush, between Sheboygan and Lake Winnebago. He and his wife Laura grow corn, soybeans and wheat on their farm.

The Wagners are part of the Sheboygan River Progressive Farmers, a group of farmers who came together in 2017 to improve soil health and water quality through conservation farming practices and community engagement.

Through their collaboration with the Conservancy and with funding from the Kohler Trust for Preservation, the group kicked off an incentive program last fall that reimburses farmers 75 percent of the cost to plant cover crops that reduce nutrient runoff and improve soil health.

The Wagners are planting grass buffers along streams and other erosion-prone areas, reducing how much they till the soil in their fields and planting cover crops. "These are practices we feel will ensure that the land is better when we leave than when we got here," says Wagner.



TOP: Farmers in Lafayette County are testing no till and other conservation practices that protect water quality and improve soil health, measuring results and sharing with other farmers. © Paige Frautschy/The Nature Conservancy

LEFT: Joe and Laura Wagner are farming sustainably to help ensure that their land is "better when we leave than when we got here." © Photo courtesy of Joe and Laura Wagner

BELOW: Healthy soil offers incredible economic and environmental benefits. Dig deeper into those benefits at nature.org/soil. © Soil Health Partnership



Building on Success

“The work we are doing with the Sheboygan River Progressive Farmers is part of the Conservancy’s nationwide and global effort to help farmers, ranchers and fishermen provide the food we all need without sacrificing the environment,” says Steve Richter, Nature Conservancy conservation programs director in Wisconsin.

The work we are doing today builds on a successful 10-year project in the Pecatonica River watershed. Starting in 2009, we worked with farmers, public agencies and academic partners to target conservation practices on those farm fields with the most potential to lose soil and nutrients (phosphorus primarily) to nearby streams during major rain events. We wanted to see if we could make a measurable, significant difference in reducing that loss. Four years after full implementation of the conservation practices by farmers, we saw a 55 percent reduction in phosphorus runoff to streams during major rain events.

“And the best part is it’s already making a difference for trout and other fish in the stream,” says Richter. “Where before there were primarily white suckers and chubs in the stream, now there are sensitive cold water species like mottled sculpin, brook lamprey and both brown and brook trout. The numbers of trout increased 70 to 150 percent or more.”

Improving Water Quality and Soil Health

As our license plates still say, Wisconsin is America’s Dairyland. In Dane, Kewaunee/Door, Lafayette and St. Croix/Pierce counties, dairy farmer-led groups have banded together under the umbrella of the Dairy Strong Sustainability Alliance. The Alliance, which includes The Nature Conservancy, the Dairy Business Association and other players in the dairy industry, is also working to strengthen on-farm conservation practices, build soil

health and help protect groundwater and water quality in area lakes and streams.

“Farmers are busy people,” says Maria Woltd, director of industry relations for the Dairy Business Association. “We saw an opportunity to help them organize these coalitions, handle logistics and facilitate sharing lessons learned so they can focus on running their farms.”

One of the things farmers are focused on is soil health. When soil and nutrients are lost to streams, it’s not good for the environment or farmers. Soil is precious, and losing it in runoff, along with valuable nutrients, hurts a farm’s productivity.

Lee Kinnard, a member of the farmer-led Peninsula Pride Farms coalition, runs a large dairy operation in Kewaunee and Door counties. He is particularly interested in the regenerative effects that his use of no-tilling and cover crops like barley is having on his soil.

“I’m increasing the amount of organic matter in my soil so it retains more water and requires less nitrogen to grow the same bushel of corn,” he says. “That’s a strong economic argument for improving soil health. And now, when I fly over my

land in the fall and early spring, my fields aren’t the only ones that are green.”

“Healthy soil offers incredible benefits,” says Richter. “Ninety-five percent of the world’s food is produced on land, and healthy soil also provides crucial water filtration and storage, along with millions of dollars in economic benefits to U.S. farmers.”

An interdisciplinary team of Nature Conservancy scientists, environmental economists and agriculture experts have created a roadmap for improving soil health on more than half of U.S. soy, wheat and corn croplands by 2025.

Wisconsin is contributing to that goal by bringing farmers and the scientific research community together to implement conservation practices on farm fields and measure the impacts on soil health, water quality and farm productivity.

“We’re excited to work with so many progressive farmers here in Wisconsin, and together I believe we can improve soil health, protect our waters and grow food sustainability, creating a big win for farmers, communities and nature.”



© Bridget Besaw

Learn more about our work with U.S. farmers to meet the growing demand for food, while protecting lands and waters for people and nature. [nature.org/NA_agriculture](https://www.nature.org/NA_agriculture)