

Cover Crops, Conservation Practices Paying Dividends for Dairy-Licious Farms

If you didn't know better, you might think a business named "Dairy-Licious" was a place you could go to grab a delicious ice cream treat. Instead, Dairy-Licious, as in Dairy-Licious Farms, is the pride and joy of conservation-minded Dan and Ruth Boerst of Manawa, WI. "My wife Ruth came up with the name 'Dairy-Licious Farms' because of all the delicious foods that come from dairy."

The Boersts purchased their farm in 1982 not far from the banks of the Little Wolf River. Realizing their farming activities would have a direct impact on the health of the environment and nearby river, they soon started working with NRCS and the Waupaca County Land Conservation staff to develop projects to conserve and enhance soil and maintain clean surface water.

Dan and Ruth are passionate about conservation. It has been a central part of their farming practices stretching back almost 40 years. In the early 1980's, they installed grassed waterways. In the mid 1990's, they built a manure storage structure to manage nutrients from their growing dairy herd. In 2012, they installed a series of water and sediment control basins on land draining directly into Bear Lake, in the heart of what is now Bear Lake National Water Quality Initiative (NWQI). They installed another series of basins on the home farm in 2018. More recently they restored a wetland and plan to pair that with pollinator habitat next year.

Dan also began experimenting with soil health techniques such as cover crops, companion crops, and low-disturbance tillage. "I no-till everything," Dan said. "I also try to put a cover crop or living crop on all my acres." Currently, the farm consists of 500 acres on which they generally grow alfalfa, corn, grass, soybeans, winter rye, and cover crop mixes on clay and sandy loam soils.

One example of their cover crop mixes was last year's planting of an eight-species mix including mustards, radishes, buckwheat, kale, rape, turnips, peas, and sunflowers. "We planted this mix to enhance soil health and then no-tilled a crop into it the following year. The root mass and all the fibers that developed in just 60 days were amazing," said Dan.

This year, after combining rye, Dan applied 10,000 gallons of liquid manure, then planted 1 bu/ac of barley along with 3 lbs/ac of balansa clover. Then, around the third week in October, Dan planted 60 lbs/ac of winter peas in 30" rows in the same field. Next spring, around the end of May, he'll plant an 85-day corn and crimp roll the peas and clover. "My goal is that I won't have to spray and the peas and clover will supply all the nitrogen the corn needs."

When it comes to alfalfa, Dan keeps it in 3-4 years, followed by Italian ryegrass and red clover, which he plants in spring at 30-35 lbs/ac, fertilizing with either 100 lbs of AMS or 5,000 gallons of liquid manure. Dan takes five cuttings a year with a 16' sickle and makes baleage in round bales.

The Boersts milk 76 Holsteins in a Double 8 Herringbone parlor built in 2000. They also manage 90 head of beef cattle. They are transitioning away from dairy production to a more beef-centered operation in order to, as Dan said, "slow down a bit now that I'm 64." He added, "We are opening a meat store at our other farm and will sell our own meat."

Originally, the dairy operation included an exercise lot that was contributing to unwanted runoff. Instead of installing an expensive barnyard system to address the issue, the lot was downsized and part of it, along with an additional 20 acres of cropland, was converted to



Dan in a rye cover crop seeded last fall. After harvest he'll no-till corn into it.



Radish, part of a cover crop mix planted in 2020, showing soil health. "Soil looks like coffee grounds and sticks together."



Eight 30" rows of corn and soybeans alternated across the field to prevent run-off into Bear Lake.

rotationally grazed pasture where they now graze heifers. The Boerstes rotate heifers daily and enjoy seeing their animals on grass.

Throughout this process they have worked closely with conservation and extension staff to install new practices, host field days, plant test plots, and conduct studies on their land. In fact, due to their conservation efforts, the Boerstes were chosen in 2019 to be a Demonstration Farm as part of the Upper Fox-Wolf Demonstration Farm Network, funded through the Great Lakes Restoration Initiative. They hosted two field days to highlight cover crops and soil health and may be hosting more. The Boerstes are a prime example of how a well-planned conservation effort can be truly impactful to overall soil health and improved crop production.

In addition to the value Dan finds in his conservation practices, he also finds value in his MFA membership. “It’s not always easy finding good information about growing forages, but MFA seems to have useful nuggets in every issue of *Forage Focus*. It’s been a valuable tool for me as both a forage farmer and a livestock producer. I especially enjoy MFA meetings where I can visit with other farmers and see what types of things are working for them.” Dan has been an MFA member since 2004.



Heifers grazing on Italian rye grass, meadow fescue, and red clover, moved daily throughout the summer.