

Manitowoc County Farmers Protect Soil and Water Quality by Using Cover Crops

November 10, 2017

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Manitowoc County farmers own and manage 230,735 acres, or 61%, of the county's land base. The practices they implement on their fields can greatly impact the surrounding environment. As stewards of the land, many farmers in Manitowoc County are utilizing practices that improve soil and water quality. One practice that has been gaining momentum with farmers in the county is planting cover crops.

What is a Cover Crop?

A cover crop is a type of crop farmers grow in between their usual planting sequence to improve soil and water quality. Legumes such as clover, and grasses such as rye, are mainly used as cover crops. There are a number of different crops that can be planted as a cover crop depending on the farmer's goals and needs.

Why do farmers use Cover Crops?

- **To improve soil fertility:** Cover crops are high in nutrients, therefore can provide extra nutrients in the soil, reducing the need for fertilizer usage.
- **To increase organic matter:** Organic matter in soil is very important to farmers. It provides the living, breathing, filtering part of soil. High crop yields depend on a healthy, organic topsoil.
- **To increase carbon storage:** When a farmer increases the soil's organic matter, they also increase the amount of carbon that can be stored, which can offset the rise in carbon dioxide levels in the atmosphere.
- **To moderate temperature:** Cover crops moderate temperature by shielding the soil from direct sunlight.
- **To help hold soil in place:** Plants in the field help to slow the speed and force of water running down fields, reducing the amount of soil that is lost due to rain events.
- **To improve water quality:** With less soil being lost from the field, there is less soil and nutrient loss to rivers and lakes, therefore improving water quality.
- **To naturally control pests, weeds, and diseases:** Cover crops provide diversity during the growing season to reduce insects, weeds, and disease. In many cases, this reduces the need for herbicide or pesticide usage.

Manitowoc County farmers share their experience:

As a result of the known benefits from cover cropping, an increasing number of Manitowoc County farmers are shifting gears to incorporate this practice into their cropping systems. Among the numerous producers in Manitowoc County who are making this shift are two who shared their personal experiences:

Dan Meyer, owner and operator of Dan Meyer Farms in Schleswig, has been using a combination of cover crops and no-till practices on his cropland for years and is noticing a difference in his soil and production. Meyer states that, "The fields we have had in no-

till for 10 years or longer are now our most productive". Meyer also noted that his soil structure is improving as a result of using cover crops with no-till in the crop rotation: "The more we do no-till and cover crops the better our soil environment becomes," Meyer stated. The improved soil structure on his fields helps to keep soil in place and is most visible during spring storms: "The best time to see the real benefit of no till and cover crops is after a spring storm," Meyer continued. A wet fall season won't stop Meyer from harvesting either! "We keep harvesting in spite of wet conditions because of great soil structure". Meyer concludes his exciting cover crop and no-till experience by saying: "Every year, we learn a little more about the benefits of no- till and cover crops."

Jay Binversie, owner and operator of Robinway Dairy LLC in Meeme, has been using cover crops and no-till practices for three years. He has been planting barley as a cover crop after an alfalfa crop. Then, following the barley, he planted corn using a no-till method. According to Binversie, "The yields on those fields have been very good". Binversie has noticed abundant life as a result of using cover crops as well. "If you dig up the ground you will see lots of worms," he said. Binversie mentioned that having cover crops in his field has saved him time in spring, "Because we don't have to work and pick stones." He stated he was pleased to see his fields being protected from erosion as a result of this practice.

*These two individuals are among ten total who have volunteered to participate in a Cover Crop Tour in Manitowoc County for 2017. Look for next year's cover crop tour on the County Website.

Be a part of the movement!

Manitowoc County Soil and Water Conservation Department can help connect farmers to resources available for cover cropping. If you, or anyone you know, is interested in planting cover crops to improve soil and water quality, please contact our office at 920-683-4183. We would be glad to help with cost-sharing and/or planning. If you would like more information on soil health or cover crops, please visit our website at www.manitowoc.wi.us and search "cover crops" in the search field. You may also consider attending our annual Cover Crop and Soil Health Forum in early Spring of 2018, which is sponsored by: Manitowoc Co. Soil and Water Conservation Department, Manitowoc Co. UW-Extension, USDA Natural Resource Conservation Services, Wisconsin Farmers Union, InDepth Agronomy, and Soaring Eagle Dairy, LLP.