

**Wabasha County Farmer Profile, part 6 of a series of 6: Jeremy Holst Article**  
**Interview conducted and transcribed by Melendy Miller**

Soil health is all the buzz in the ag world. The Wabasha Soil and Water Conservation District and the Izaak Walton League of America, Wapashaw Chapter (Ikes) have partnered on a project to learn what progressive farmers in Wabasha County are doing to improve soil health. With funding provided by the Ikes' Upper Mississippi River Initiative, we have been conducting interviews with 30 farmers from throughout the county.

The sixth and final farmer that we are highlighting in our soil health profiles is Jeremy Holst of Lake City. Jeremy runs a 120-cow dairy farm. He grows hay and corn for corn silage and buys his grains. He has most of his land in hay and pasture as a means to increase soil health. Throughout his farm, Jeremy has been implementing the six principles of soil health. The six principles of soil health are: keep the soil covered, minimize disturbances, increase diversity, keep living roots in the soil, integrating livestock, and context.

Jeremy has most of his crop land as hay. Hay is a great way to keep the soil covered because at the end of the crop season hay continues to grow. This leaves a nice covering on the soil throughout the winter. Having the soil covered is super important for soil health because it provides a shelter for all the living organisms in the soil and prevents soil from being carried away by wind and water. Jeremy keeps his fields in a hay longer than most farmers because of the rolling hills he farms on. "I'm big on keeping hay ground anywhere from five to eight years. We have an eight-year hay field right now. There are some fields I probably should have plowed up years ago, but I can make more money growing dry hay and selling it." Having hay ground for five to eight years also helps to minimize the disturbances of the soil. Alfalfa is a perennial, so it doesn't need to be planted from year to year allowing the soil to remain undisturbed for years.

Tilling the soil destroys biology living in the soil, increases compaction and erosion, and tilled soil is bare and unprotected from the elements. Jeremy is working towards moving away from tillage on his corn ground in the fall, but when he spreads manure on the harvested corn ground, he likes to incorporate the manure into the soil with a plow. This helps to reduce manure runoff. In order to balance out the tillage he does to incorporate the manure on the corn ground, Jeremy has been using cover crops. Cover crops help to increase the diversity on the crop ground. Jeremy has been using cover crops since 2006. Although he is only using rye as a cover crop, adding a cool season grass to his crop rotation provides a little more biodiversity.

Diverse crop rotations provide more biodiversity, benefiting the soil food web. This, in turn, improves rainfall infiltration and nutrient cycling, while reducing disease and pests. Cover crops help with the next principle of soil health as well. They keep living roots in the soil all year round. "Keeping a living plant on the soil all year is the biggest thing. You already know I'm big on hay, so keeping that for multiple years really helps the soil. Cover crops are also beneficial for keeping something growing all year." Here in the Minnesota tundra it may seem impossible to have living roots in the soil even in the dead of winter, but it is possible. Rye can grow in temperatures as low as 33 degrees and once it is established it can tolerate temperatures as low as -30 degrees, so it is perfect for planting late in the fall and surviving the Minnesota winter. Cover crops have allowed Jeremy to incorporate livestock onto more of his land and for longer. He can start grazing the winter rye earlier in the spring than the pasture which allows the pasture more time to grow.

Jeremy attended Farm & Industry Short Course at University of Wisconsin- Madison where he took a grazing course. This piqued his interest in rotational grazing and gave him the extra push he needed to try it on his own farm when he got back. “We get so much more feed off the acre when we’re rotational grazing versus having them in the same pasture all summer.” Some benefits to rotational grazing are better regrowth on resting pastures, managing weed pressure, higher nutritional diet, and reduced livestock waste. Jeremy has been able to see the benefits of incorporating livestock on his land firsthand. “If we didn’t have livestock, we wouldn’t have hay ground, and keeping hay ground is a big thing for soil health. The livestock also provide our biggest source of fertilizer, so we don’t have to buy as much fertilizer.” The final principal of soil health is context. Which is how farmers are able to fit the other five principles of soil health into their operation. Jeremy has found a way to fit soil health onto his dairy farm by using hay, rotational grazing, and cover crops. Soil health is nothing new to Jeremy, but it is something that will always be important to him. “It’s something that was instilled in me ever since I was a little kid. Treat the land and soil with respect and it will take care of you.” Thank you for reading our series on soil health!

To learn more about soil health, activities relating to this project and other conservation programs in Wabasha County please contact Jen Wahls, Ecological Technician with Wabasha SWCD by phone 651-560-2051, email [jennifer.wahls@mn.nacdn.net](mailto:jennifer.wahls@mn.nacdn.net) , Terri Peters, District Manager, phone 651-560-2044, email [terri.peters@mn.nacdn.net](mailto:terri.peters@mn.nacdn.net) or stop in the office at 611 Broadway Ave, Ste 10 in Wabasha.