

Wabasha County Farmer Profile, Part 3 of a series of 6: Raleigh Merkhens of Merkhens' Family Farm

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 provide by the Ikes' Upper Mississippi River Initiative, we have been conducting interviews with 30 farmers from throughout Wabasha County.

The third farm family that we are featuring is the Merkhens. I got the chance to sit down with Raleigh Merkhens and talk to him about the things his family is doing to improve the soil health on their farm. Raleigh grew up farming, and now he farms alongside his brothers and dad on their 600-cow family dairy farm. They want to make sure that they are taking care of the soil on their farm in order to get the best crops possible to feed their cows. "I think the biggest thing is if you don't have good soil you don't get good crops. That's basically all there is to it." They grow corn, alfalfa, beans, oats, peas, and grasses. Merkhens have a crop rotation system so they can make sure they aren't depleting the nutrients in the soil by planting one crop year after year. Growing the same crop on the same field for many years gradually depletes the soil of nutrients. Crop rotation helps to reduce soil erosion, increase soil fertility and crop yield. Rotation also helps to control pests and pathogens in the soil. By having a crop rotation system and a wide diversity of crops, Merkhens are helping their soil stay healthy.

Soil health is something the Merkhens have been focusing on for a while now. Their focus on soil health started around ten years ago when they began planting cover crops. "Right away we were a little bit skeptical of doing it. We've gotten a lot braver, and now we just no till into the

rye.” Most farmers that I have talked to were skeptical of cover crops when they first started using them, but now they wouldn’t farm without them. Planting cover crops is an extra job to do on the farm, and farmers are busy people. If they didn’t see the benefits of planting cover crops, they wouldn’t do it. Over the last ten years, Merkhens have changed their practices for planting cover crops as they learned more. “When we started out planting the cover crops, we were tilling before we planted them. Now we no till them into the soil, and I think that has made a huge difference as far as erosion.” They have been using no till practices for four years now. They don’t harvest their cover crop, so that means they no till their beans into the cover crop in the spring. The cover crop was sprayed with an herbicide to kill it prior to having the cash crop planted into the biomass. “This year I no tilled the beans into knee high standing rye. It doesn’t seem to bother the beans at all because the rye just dies right when the beans are coming up and they don’t even notice the rye.” Planting corn into the cover crops can be a little trickier since corn needs a lot more nitrogen. If the cover crops get too big, they will use more nitrogen, competing with the corn and the crop can suffer. “The biggest struggle we had was trying to plant corn into rye that got too big. It seemed to hurt the corn more because the rye sucked a lot of the nitrogen out of the ground. We’re trying not to do the rye onto the corn ground as much, and we’re focusing on doing it really well on the bean ground.”

Cover crops are a great way to improve the organic matter in the soil. The more roots and plant material in the soil, the better the organic matter will be. Merkhens plant their cover crops heavy to ensure they have a lot of root mass in the soil. “We always plant the rye heavier than they recommend. It’s recommended to plant 50 lbs per acre, but we plant about 150 lbs per acre. It means that much more roots and material. The soil gets all the nutrients from the decaying rye.” They have seen the benefits of planting heavy cover crops from the increase in organic matter in

their soil tests. Organic matter is one of the slowest growing part of the soil. “The neatest thing is we had this field right by the dairy we took a soil test on it seven years ago and it was 2.8% organic matter. This year that field was 3.5% organic matter. In seven years, we gain seven tenths of a percent. I was really excited about that.” Raleigh is hoping to see the soil make it to 4% organic matter in his lifetime. They are satisfied with the results they have seen from their hard work so far, but they are excited to continue learning and improving their dairy farm’s soil. The Merkhens received recognition from the Wabasha SWCD as the 2019 Conservation Farmer of the year because of their management practices.

The Merkhens family have almost 100 acres in the Conservation Reserve Program (CRP). CRP is available to farmers through the United States Department of Agriculture. The program was developed for land that is hard to farm, highly erodible, or environmentally sensitive. Farmers take this environmentally sensitive land out of production, so instead of growing a crop that can be harvested, they grow a vegetative cover that will reduce soil erosion, improve soil and air quality, and helps to develop wildlife habitat without having to replant it year after year. They utilize this and other programs and practices to assist them with their management to farm their lands to achieve less runoff and erosion. They have been able to improve their land and preserve it for the future generations by putting land into the Conservation Reserve Program, using some no till practices, and planting cover crops.

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.nacdnet.net , Terri Peters, District Manager, phone 651-560-2044, email terri.peters@mn.nacdnet.net or stop in the office at 611 Broadway Ave, Ste 10 in Wabasha.