

# Great Lakes Restoration Initiative

## Cover Crops Build Better Soil

*Tinedale Cropping is located in the Lower Fox Watershed in northeast Wisconsin. The Lower Fox Watershed is the location of a NRCS Great Lakes Restoration Phosphorus Reduction Pilot Project.*



Scott Theunis of Tinedale Cropping has been farming with his brothers his whole life. Scott is in charge of the cropping on the 5,200-acre operation. Their family farm, like most, had humble beginnings. Starting with 80 acres 150 years ago, the business has grown from 100 dairy cows to 2,000 in the last 20 years. Scott's willingness to try new things has contributed to the business's success.

Most recently, Scott has started planting cover crops. In 2012, he experimented with tillage radish as a cover crop.

His main motivation was to reduce the amount of work he'd have to do in the spring. He had tried no-till with some success, and he thought tillage radishes would be a good way to break up the soil without doing his regular regimen of tillage.

Scott's management system before he tried cover crops was labor intensive. It started with the harvest of winter wheat in August, then he would land spread manure at 12,000 gallons/acre. Incorporating the manure meant two passes with the disk and one pass with the chisel plow. His soil is heavy and fighting wetness and compaction is commonplace. In the spring, the heavy soils would be so wet and clumpy, he would do three passes with the field cultivator and then plant.

Compare that to his current system of radishes. After harvesting wheat last summer, Scott land spread 6,000 gal/ac manure and then lightly tilled in the manure once with a field cultivator. Using his no-till drill, he planted radishes at 11 lbs/acre. They came up beautifully, and died out on their own in the winter. Scott was then able to no-till his corn crop in the following spring. He noticed drier field conditions and softer ground. Before planting corn he did spray herbicides to control any weeds. This year he says his best yield was definitely no-till corn after radishes.

Next year he is planning on planting 500-800 acres. "Cover crops are going to be a new staple of the Tinedale operation" Scott says with confidence. The benefits of planting cover crops include reduced soil erosion, fertilizer costs and improved yields.

The Great Lakes Restoration Initiative is the largest federal investment in the Great Lakes in over two decades, with funding provided through the U.S. Environmental Protection Agency.