Area 2

Farming for Healthy Soil

"What you see depends on how you view the world. To most people, this is just dirt. To a farmer, it's potential." --Doe Zantamata , Author

I come from a family of farmers whose livelihood depends on soil. I understand the importance of soil and keeping it healthy. Through practices such as sowing cover crops, no-till farming, and agricultural drainage, farmers work to be good stewards of the earth.

Farmers in this area sow cover crops to prevent erosion and to help build soil organic matter and tilth. Examples of cover crops are wheat, rye, turnips and tillage radishes. Having a cover crop ensures that something is green and growing during as much of the year as possible, an important soil health concept. Cover crops help protect the soil from splash erosion which can occur as rain impacts the soil. Another benefit of cover crops is that they improve snow catch in the winter and reduce wind erosion in the spring. The soil structure is also benefited by the cover crop's growing roots.

"No-till, the practice of leaving crop residue on the soil surface instead of plowing it under, is considered one of the most important innovations in the history of U.S. agriculture.", (Reeder, 2012) It provides environmental benefits by increasing wildlife habitats, increases soil organic matter, improves soil quality, and prevents runoff and erosion. When cover crops are added to a no-till system, a farmer can benefit the soil and enhance the performance of the field crop, which can lead to higher yields. A large percentage of the row crops in Todd County are planted using this method.

Agricultural drainage removes excess water from the soil to enhance crop production. In Todd County, surface drainage is popular and people construct waterways that allow the water to leave the field rather than causing prolonged wet spots. On our farm, not only do we have waterways but, have tiled some fields to allow excess water to leave the field. When the water table in the soil is higher than the tile, water flows into the tubing which lowers the water to the depth of the tile, therefore lowering the water over the course of a few days.

The three methods I described above can take more planning and management on the farmer's part. The benefits however have environmental and economic advantages, of which, the farmer sees the potential.

By Clay Henderson

Sources Cited

Cover Crops for Soil Health for Soil Health by Paul Jasa September 2011,Iowa State University

Plenty of Positives With No-Till System by Randall Reeder 2012

Ag 101, Drainage by the U.S. Environmental Protection Agency, June 2012