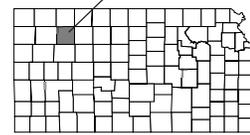


Conservation on the Ground...

Conservation Technical Assistance Solves Soil Erosion Problem with Terraces

Kansas - Sheridan County



Level terraces in wheat field

In January 2006, a local producer, Jim Mader, requested the Natural Resources Conservation Service's (NRCS) assistance in solving an erosion problem on 172 acres of cropland. Jim's normal farming rotation is no-till for his row crops and conventional till for the fall crop, which is normally wheat. Residue amounts vary widely from 80 percent in the no-till years to 30 percent in the conventional-till years. The average soil loss is always below T, yet at times there seems to be more erosion than NRCS's charts predict. (T represents the tolerable soil loss for any specific soil.) The slope of this field ranges from 1 to 3 percent. The problem is that rainwater builds up on the flat slopes and then breaks to the steeper slopes causing sheet and rill erosion. The solution to this kind of problem is a combination of flat-channel and level terraces.

Conservation At A Glance

Natural Resource Concern...

Soil Erosion

How Addressed:

No. Acres: 172 acres

Practices Applied:

- 13,917 feet of flat-channel terraces
- 7,732 feet of level terraces

Partners and Financial Assistance Provided by...

Natural Resources

Conservation Service (NRCS)

- Technical Assistance

Sheridan County Conservation District

- State Conservation Commission's Water Conservation Resources Cost-Share Program

Jim and the landowner, A. L. Abercrombie Revocable Trust, were presented with an estimate of the footage needed and the approximate location of the terraces. State cost-share money would be used to fund the project. The local limit of money would not be enough to complete the project in one year, so when the decision was made to build the terraces, the landowner wanted to finish the project at his own expense. This decision was mainly made so the project would not disrupt the cropping rotation.

When the project was completed in April 2006, 13,917 feet of flat-channel terraces and 7,732 feet of level terraces had been installed. The switch from flat-channel to level terraces occurred when the land slope increased to 2.5 percent. It was estimated during the low residue cycle (row crop) of the rotation approximately 3 tons per acre of soil would be saved by installing the terraces.

Both the landowner and the operator seemed pleased with the project



and realized that even with their overall increase in residue management there was still a place for structural practices.

Flat-channel terrace in wheat field

Helping People Help The Land