

**2008 YOUTH GRANT PROGRESS REPORT**  
**North Central Region**  
**Sustainable Agriculture Research and Education (SARE) Program**

Project Title: Soil Quality Demonstration Project

Project Number: YNC08-019

Youth/Project Leader: Kalen Hartel

Address (City, State Zip Code): 309 11<sup>th</sup> St. SE  
Watford City, ND 58854

Website: N/A

1. Describe the grant project work activities you have completed, any results from your project, and what you have learned so far.

My Soil Quality Project is a 6 year evaluation on how cover crops can help improve soil health and reduce AG inputs. On August 20<sup>th</sup> I completed soil quality tests on both of my project fields (see attachment Field 1 SQ data sheet 8-20-09 and Field 2 SQ data sheet 8-20-09). I also submitted soil samples for Soil Foodweb testing to determine how the micro-organisms are responding to no-till and cover crops (see attachment Field 1 Soil Foodweb analysis 2009 and Field 2 Soil Foodweb analysis 2009). Field one had a warm season cover crop last fall and this spring we planted corn for silage on it. We split the 33 acre field in half and only gave one half of it bulk fertilizer and the other half had no bulk fertilizer. We will harvest the two areas separately, in a couple weeks, and determine if the bulk fertilizer was necessary on areas that had previous cover crops planted. Field two had a cool season cover crop last fall and was planted to oats this spring. The oats had no bulk fertilizer applied and still ran 4½ bales/acre (5400#/acre). An eight-way cool season cover crop was seeded in August 8<sup>th</sup> on Field 2 (photo 1) and is currently growing well (photo 2). I am taking pictures weekly to show its growth throughout this fall and into winter. After the corn on Field one is silaged, I will seed Winter Triticale and Vetch. The Winter Triticale and Vetch will be hayed in 2010 and a cover crop will be seeded into its residue.

2. How have you shared information from your project with others? (Include the number of people who attended field days or demonstrations.)

I am currently working with my local Soil Conservation District to publish an article in their fall newsletter that will tell producers in my community what I have learned from my two year project so far.

Since Field 2 is located on Hiway 23, local producers can visually see the eight-way cover crop mix as it grows into winter.

In 2010 we will host a tour for producers to see the soil quality benefits no-till and cover crops are creating in these fields.



Photo 1



Photo 2