



WATERSHED
ASSISTANCE
THROUGH
EDUCATION &
RESOURCES

HERON LAKE WATERSHED DISTRICT

Cover Crop Field Day
Wednesday, November 7, 2012
1:00 p.m.



**Cover Crop Demonstration Plot funded through the
North Central Sustainable Agriculture Research & Education (NCR-SARE) Farmer-Rancher
Grant Program**

Timeframe – April 16, 2012 to April 30, 2014

Program Grant funds \$6,642.26

Demonstration Plot: The Cover Crop Demonstration Plot was aerielly seeded with purple top turnip, tillage radish, and cereal rye into standing soybeans and corn using a helicopter on August 26, 2012. The cover crop demonstration plot, directly adjacent to Jackson County Judicial Ditch 3, will address water quality problems by increasing nutrient uptake, reducing erosion, and minimizing nutrient leaching. The cover crop will directly benefit the community and watershed by slowing water and reducing sediment and nutrient runoff before it enters the ditch.





Benefits of cover crops: The deep root systems of the cover

crop will break up compaction to allow for better water infiltration and be used to draw nitrogen from deep below the surface back to the root zone for next year's crop. This seed mix will bring scavenged nitrogen to enhance soil fertility, add additional organic matter to improve soil composition, increase infiltration, diminish soil movement, and reduce weed competition. All of these ways to naturally improve the overall yield of the following year's crop while reducing nitrogen application costs.



Research: Tillage transects, infiltration measurements, plant tissue tests, and soil samples will be taken at the cover crop fields and control fields for comparison in the spring of 2012 and the spring of 2013 to gauge cover crop success.

The studies conducted identify a clear difference in residual nitrogen on the SE40 and the SW40. Based on the field history, this is attributed to the previous crop (the soil tests were taken in late May of 2012) and not anything resulting from the cover crops. The lack of rainfall prevented any significant growth in the August 2012 applications. The residue checks showed differences in the two 40s as well – but again, it was just from the residue from the previous crop. The differences in the infiltration tests were attributable to soil type differences. Basal Stalk Nitrate tests were taken on the corn. They showed a good deal of variability, but this is not uncommon.

Outreach: A newsletter was distributed that highlights the project and informs the public about the field day. A field day will be held on November 7, 2012. In addition to the NCR-SARE website, data and results from this project will be shared on the HLWD website at www.hlwdonline.org.



Please contact us with your questions or concerns!
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