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The Economic Analysis of Cover Crops, Soil Health, the Role of Livestock and Impact on Moisture

Project Titles: The Economic Analysis of Cover Crops, Soil Health, the Role of Livestock and Impact on Moisture

Coordinators: Mike McDonald and Paul Ackley

Location: Palmyra, Nebraska

SARE Grants: \$22,378.00

Duration: 2015-2017

To read the full project reports, go to www.sare.org/projects and search for project number FNC14-963.

May 2015 was the wettest month in history in the United States according to the National Centers for Environmental Information, and many communities in Nebraska saw record levels of rain and accompanying flooding. In 2014, three farm families in Nebraska and Iowa received a \$22,378 NCR-SARE Farmer Rancher grant to study a variety of economic indicators related to cover crop use on their farms.

At the time that they applied for the grant, they had no way to know that the project would be impacted by the 45" of rain they would receive in 2015. The project did show weight gain in cattle, a slight increase in soil health, and how cover crops mitigated soil loss during intense rains. While the project was inconclusive on cash crop yield gains and water usage, the team was able to document how all that moisture affected their fields and crops:

- Each producer either drilled or interseeded cover crop cocktails into corn and/or soybeans. Barley was drilled in the fall, but the severe winter killed the majority of the stand and the late spring prevented a planting to spring barley, oats, etc. Consequently, the options including grazing were very limited.



Barley Photo Credit: USDA Image Library

- The harvest was late because the weather did not allow crops to appropriately "dry down" in the fields.
- The excessive rains eliminated herbicide residuals. While this enhanced the ability to use different types of cover crops, the excessive weeds made it difficult to interseed and successfully initiate cover crops and fall drilling.
- Harvest generally went to the mid-to-late part of November which prevented drilling in most cases and in turn reduced cover crop options.

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For more information on McDonald and Ackley's NCR-SARE Farmer Rancher grant project, visit the SARE project reporting website. Simply search by the project number, FNC14-963, at www.mysare.sare.org, or contact the NCR-SARE office.

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