

Nebraska Report-Midwest Cover Crop Council 2016

An Extension Cover Crop Leadership Team initiated an in-service training on cover crops for Extension faculty and NRCS staff. Researchers provided an update on cover crop research activities, a farmer panel explained how they were using cover crops in their operations and industry people discussed trends in how cover crops are being used in cropping systems in Nebraska. The day ended with the participants discussing gaps in knowledge, what producers need to know and how we can move forward in determining the best use for cover crops in Nebraska cropping systems. Fifty people participated in this program.

A team of University of Nebraska faculty initiated a project in 2014 to evaluate cover crops. There are 4 locations across the state, 3 cropping systems, 2 seeding dates and 5 cover crop treatments plus a control. They are evaluating, soil moisture, herbicide systems, soil health & management, soil fertility and the economics of these systems. This was a grant (\$300,000) awarded jointly through the Nebraska Corn & Soybean Commodity Boards.

Three cover crop on-farm research projects were conducted through Nebraska Extension's On-Farm Research Network. These on-farm research projects evaluated impact on subsequent crop yields, grazing potential as forages and the economics of these systems.

In the fall of 2015, a SARE Research and Education Grant (\$200,000) comparing grazing of Cover Crops, ungrazed cover crops and no cover crops was awarded to the University of Nebraska. Researchers will evaluate subsequent crop yields and impact on soil physical and biological properties. There are four on-farm research fields and three experiment station research sites across Nebraska.

In central Nebraska the University of Nebraska and Central Platte NRD (Natural Resource District) are working together to reduce ground water contamination through research and demonstration. They are working with seed corn producers on irrigated corn fields, evaluating cover crops to scavange nitrogen.

Suat Irmak, Water Resources Engineer with Nebraska Extension and his research team have been conducting trials in multiple fields since 2012. This research will help identify quantifiable, predictable, and actionable relationships between cover crops and related management practices and between cover crop growth and termination timing for maximum soil fertility and water availability for the following growing season.

Paul Jasa – Extension Engineer is conducting research at the Rogers Farm in southeastern Nebraska to determine impact of cover crops on corn and soybean yields in Long-term Notill Plots and other tillage plots.

Keith Glewen, Extension Educator with Nebraska Extension at the Agricultural Research and Development Center (ARDC) conducted Crop Management Diagnostic Clinics throughout the summer with one full day focusing on soil health issues; cover crops for improving soil and cover crops for producing forage. A Cover Crop Conference is scheduled for February 25th at the ARDC.

Mary Drewnoski, Gary Lesoing and a producer, Mike McDonald were awarded a Nebraska NRCS Conservation Innovative Grant (\$75,000) in the fall of 2014. They are working with 39 farmer cooperators in south central, southeast and northeast Nebraska who have been using cover crops and practicing no-till and soil health on their farms. Three meetings were conducted with cooperators to discuss soil health and the use of cover crops. We held two cover crop/soil health tours and one cover crop/soil health field day in 2015. These field days focused on different types of cover crops and how they are being used, impact of cover crops on soil properties, grazing of cover crops and herbicide selection when using cover crops. Two spring field days are planned for March 2016. These will focus on cover crops that over wintered this spring.

Throughout 2015 and early 2016, over 1,000 participants have attended Nebraska Extension, NRCS and SARE sponsored cover crop/soil health conferences, field days and workshops throughout Nebraska; increasing their knowledge on cover crops and soil health.

Over 20 farmers and Ag Educators have received Travel Assistance to participate in Cover Crop/Soil Health Conferences/Workshops this past year from SARE.

Earlier this year 258 Nebraska farmers responded to a UNL survey, sharing information and insights on their current management practices and the use of cover crops. Farmers attending the 2015 Pesticide Safety Education Program Courses, Crop Production Clinics, and the Nebraska No-till Conferences were invited to take the survey.

A cover crop page has been developed on our *CropWatch* website. Here is the link to the cover crop page: http://cropwatch.unl.edu/covercrops.

Nebraska Extension participated in Husker Harvest Days, Nebraska's premier farm show, where up to 300,000 people visit over the three day show in mid-September. We had two displays focusing on Cover Crops in the University of Nebraska tent. We plan to repeat in 2016.