

Midwest Cover Crops Council
Kansas Report for March 13, 2018 Meeting in Fargo, ND

Contact Information:

Name: DeAnn Presley

Organization: Kansas State University

Email: deann@ksu.edu

Phone: 785-532-1218

Research: New and continued research on cover crops in a variety of crop rotations is occurring at several sites in Kansas. Some of the projects include:

- Chuck Rice – USDA NIFA water cap grant. Advisor to Soil Health Partnership, farmer's standard practices plus one new management. Validation and correlation of Haney and Cornell soil health tests.
- Lucas Haag – Rotation intensification. Colorado State CIG, covers for grazing, two years of data, 4 sites in Kansas. Spring and summer plantings.
- Kraig Roozeboom – Study initiated in 2007, continuing to present, at Ashland Bottoms. Wheat, Grain Sorghum, double crop Soybeans. Intensive insertion of cover crops. Kansas Agricultural Watershed and soybean diseases.
- Nathan Nelson – Kansas Agricultural Watershed site, cropping system impacts on water quality, cover crops and fertilizer management and sediment loss, nutrient cycling, soil fertility, soil health parameters. National CIG for water quality and Soil Health – long term No-Till.
- Peter Tomlinson – Kansas Agricultural Watershed site, cropping system impacts on greenhouse gas emissions from agriculture, soil biological measurements.
- DeAnn Presley – 3rd year state CIG. 4 sites in Kansas. NE KS – C-Sb, Wolf Creek – cover crop. Hutchinson and Halstead – irrigated. National CIG for vegetable production.
- Stu Duncan – Brown, Doniphan counties. Highland Community College. 10 treatments, three replications, in a corn-soybean rotation – winter cover. Profile sample out of each plot.
- Dan Devlin – USDA NIFA Water Cap. Grazing of cover crops.
- Gretchen Sassenrath – Water Quality Grand Lake, Grazing of cover crops – extended grazing period. No-Till in SE KS. Focus on Soil Health, No-Till – cc. Soybean diseases. Solvita soil health test – qualitative. Demonstration of Soil Health.
- Augustine Obour – Cover crops in W-S-F – spring planted using as forage – Hay, graze, no graze. Summer planting after wheat. Sorghum replacement. W-SF-CC for sorghum replacement. BD, penetrometer, soil water at planting and termination, soil biology, Colby – glyphosate resistant weeds.
- John Holman – 12th year – soil water soil organic matter, carbon. Weed suppression, 3years and nine site years of data. Hay or graze – H₂O use efficiency.
- Anita Dille – on farm studies on cover crops and weed suppression.
- Doug Shoup - Cover crops project at Ottawa in a corn soy rotation. Collecting crop yields and after 5 growing seasons of the study. Collected 3 yrs of standard soil analysis, Haney, Solvita, and PLFA.
- Jaymelynn Farney – Animal scientist, grazing cover crops, toxic plants.

Extension & Outreach:

- Many new and ongoing extension programs are active in Kansas
 - Professional Development Program, funded by SARE, titled, Soil Health Bootcamp and Applications to Sustainable Vegetable Cropping: Professional Development for Local Agricultural Educators. PI: Megan Kennelly, co-PIs, Cary Rivard, Kimberley Oxley, DeAnn Presley, and Raymond Cloyd. 2016-2018. \$64,307.
- Many cover crop field days and meetings occurred throughout the state with cooperation between Kansas State University Research and Extension, the Kansas NRCS, county Conservation Districts, and non-profit organizations such as the Kansas Alliance of Wetlands and Streams.
 - The Kansas NRCS and/or Conservation Districts have assisted with or been a part of numerous field days, tours, presentations, or workshops on soil health, cover crops, no-till, etc.
 - Numerous Kansas State University faculty giving presentations at local, state, and national level research or extension meetings on the topic of cover crops.

Contributors: Kansas State University, Kansas USDA-Natural Resources Conservation Service, Kansas Association of Conservation Districts, Kansas Alliance of Wetlands and Streams.