## Midwest Cover Crops Council Kansas Report for March 14, 2017 Meeting in Grand Rapids, MI

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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, one year of data, 4 sites in Kansas. Spring and summer plantings.
- Kraig Roozeboom 2007 study at Ashland Bottoms. Wheat, Grain Sorghum double crop Soybeans. Intensive insertion of cover crops. Kansas Agricultural Watershed and soybean diseases.
- Dr. 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.
- Deann Presley 3<sup>rd</sup> 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 reps CSB 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  $12^{th}$  year soil water soil organic matter, carbon. Weed suppression, 3 years and nine site years of data. Hay or graze  $H_2O$  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. I am collecting crop yields and after 5 growing seasons of the study I've collected 3 yrs of standard soil analysis, Haney, Solvita, and PLFA.

Extension & Outreach:

- In April 2016, Kansas went "live" on the MCCC selector tool, a culmination of a yearlong effort with over 20 cooperators in KS.
- 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 approximately 68 field days, tours, presentations, or workshops on soil health, cover crops, no-till, etc. from February 2016 to present.
  - DeAnn Presley gave 20 presentations on cover crops to 500 people during the reporting period (February 2016 to February 2017).

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