## Soil Health Initiative: Demonstrating soil health management across Nebraska

The University of Nebraska, the Natural Resources Conservation Service, and Nebraska farmers and ranchers are participating in a state-wide effort to enhance the adoption of soil health and rangeland health management systems through the Soil Health Demonstration Farms and Ranch Initiatives. These initiatives will establish in-field management comparisons across the state to showcase grazing management and cropping system comparisons.

The purpose of these efforts is to demonstrate soil health management systems applicable to various regions of Nebraska. This will allow farmers across the state to have a local opportunity to experience the results of soil health focused management first hand. The producers in this initiative are conducting strip trials of various cover crops, crop rotations, and/or management techniques in a field-wide treatment. These farmers are demonstrating the use of a soil health management system by planting cover crops and implementing any other supporting conservation practices. Each comparison topic was selected in collaboration with the local farmer in order to support them in answering a question they had about cover crops and soil health.

Data pertaining to the economics and soil resiliency are being tracked throughout each five year demonstration. Snapshots of change are developing as these comparisons get under way and will be developed into case study reports for dissemination. These snapshots will showcase the analysis and highlight the short and long term costs and benefits of building soil health.

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County	Treatment Comparisons
Chase	Cover Crop Mix w/out legumes vs. Mix w/ Legumes
Cheyenne	Cover Crop use in a Wheat, Corn, Fallow System
Colfax	Cover crop vs. No cover crops
Custer	Early termination vs. Late termination
Dodge	No-till corn/soybean rotation with Cover Crop following soybean vs. 5-yr no-till corn/soybean/Wheat/soybean/corn rotation with cover crop planted after each cash crop
Franklin	Nitrogen management of corn following cover crops. Evaluating adding a full season forage crop in rotation and evaluating broadcast vs drilled cover crops
Greeley	Cover crop vs. No cover crop
Howard	Cover crop vs. No cover crop
Keith	High Carbon Cover Crop Mix vs a balanced C:N ratio mix (Vetch, Rye, Barley vs. Vetch, Triticale, Barley)
Knox	Grazed vs Un-Grazed Cover Crops, Diversified Crop Rotation w/ High Intensity Short Duration Grazing
Lincoln	High Carbon Cover Crop Mix vs. a balanced C:N ratio mix
Merrick	Interseeding cover crops at V4 to V6 vs. dormant seeding behind cash crops vs. No cover crops
Nemaha	Winter terminated cover crop vs. winter hardy cover crop
Otoe	One source of carbon in high diversity mix vs. multiple sources of carbon in a high diversity mix
Seward	Low diversity Cover Crop Mix vs. High Diversity Cover Crop mix and Grazed vs Un-grazed Cover crops
Sherman	Broadcast seeding into cash crops vs. drilled after harvest
Stanton	Monoculture cover crop (Cereal Rye) vs. High Diversity Cover Crop

