

RESEARCH PROJECT SUMMARY

Project Title: Evaluation of methods used to improve grasslands as pheasant brooding habitat.

Need: Research to assess other management options such as haying, grazing, prescribed fire, chemical suppression, and/or combinations of these management options are needed. In South Dakota, haying is the most popular method used to meet Conservation Reserve Program (CRP) mid-contract management requirements, although it is unknown whether this method results in improved brood rearing habitat. Furthermore, research is needed to evaluate the longevity of benefits provided by mid-contract management specific to management practice and conservation practice. In South Dakota, approved CRP mid-contract management activities include haying, prescribed fire, and disking. Results from this study could be used to make recommendations to USDA Farm Service Agency on which management techniques are most effective at improving brood rearing habitat during CRP mid-contract management. Results from this study could also be used to guide management of grasslands managed specifically for upland game birds on state owned game production areas.

- Objectives:**
1. Determine and compare relative arthropod abundance among grasslands subject to several management techniques for three consecutive years post management.
 2. Determine and compare relative arthropod availability among grasslands subject to several management techniques for three consecutive years post management using human imprinted pheasant chicks.
 3. Determine and compare vegetation composition and structure among grasslands subject to several management techniques for three consecutive years post management.

Study Location: Central and Eastern South Dakota

Expected Completion: June 2016

Principal Investigator: Dr. Kent C. Jensen, Associate Professor, South Dakota State University

Other Personnel: Mandy Orth, Graduate Research Assistant, South Dakota State University

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