

**The Friends of Nachusa Grasslands
2016 Scientific Research Project Grant Report
Due June 30, 2017**

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2016 grant amount: \$1700.00

Please answer the following questions with 1- to 2- sentence summaries:

Research Project Topic: I am quantifying the effects bison reintroduction may have on grassland bird and artificial nest survivorship, as well as species composition. Vegetation, precipitation, restoration age, growing degree day, and burn interval are also being quantified to determine their impact on nests and species composition.

Research Project Purpose: The purpose is to understand and quantify how higher trophic levels are responding to the recent bison reintroduction and prairie management techniques using grassland bird nest success as a proxy. This project will be a part of a multi-institutional research effort that is currently studying how other trophic levels are impacted by these techniques.

Research Project Outcomes to date: I have found that survivorship of both natural and artificial nests are similar to each other and in areas with and without bison, but Brown-headed cowbird parasitism decreased over the last three years. Species composition is different in each site and are portioned into bison/no-bison communities.

Describe how the grant funds you have received from the Friends of Nachusa Grasslands have been used in regard to the above topic, purpose, and/or outcomes: The grant funds were used to buy artificial nest supplies including batteries, quail eggs, zip-ties, and clay. It was also used to buy supplies for the bioacoustic recorders (t-posts, batteries, post-pounder, sd cards, etc.) and for some of my travel cost to and from Nachusa.

Describe how your project has benefited the work and goals of Nachusa

Grasslands: My project has begun and continues to elucidate how grassland birds use the restored habitat at Nachusa and how management techniques impact their species composition and nest survivorship.

Describe how your findings can be applied to challenges in management practices for restoration effectiveness and species of concern: My findings can be used to give managers an idea of what vegetation composition, burn interval, and how bison reintroduction will impact grassland bird nest survival. This can be used as a benchmark in future restoration projects with management goals that are aimed to help conserve these declining species.

Please list presentations/posters you have given on your research:

Herakovich H*, Jones H. The effects of bison reintroduction on grassland bird nest success in tallgrass prairie. 2017 Chicago Wilderness Committee Meeting. January 31, 2017.

Herakovich H*, Jones H. The effects of bison reintroduction on grassland bird nest success in tallgrass prairie. 2016 Nachusa Science Symposium. October 22, 2016.

Herakovich H*, Jones H. The effects of bison reintroduction on grassland bird nest success in tallgrass prairie. Quad City Audubon Monthly Meeting. October 13, 2016.

Herakovich H*, Jones H. The effects of bison reintroduction on grassland bird nest success in tallgrass prairie. 2016 North American Prairie Conference. July 18, 2016.

Have you submitted manuscripts to scientific journals? If so, which ones? If not, do you anticipate doing so? (Please keep us informed on publications.) I have submitted a manuscript to Ecological Restoration, but have not heard back from them about whether or not it will be accepted.

Optional: Offer suggestions for improving the application and award process for future Friends of Nachusa Grasslands Scientific Research Grants: