## The Friends of Nachusa Grasslands 2014 Scientific Research Project Grant Report Due June 30, 2015

Name: Heather Herakovich

**2014** grant amount: \$2000.00

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

**Research Project Topic:** Restoring major ecosystem drivers in one of the world's most endangered ecosystems: The effects of restoration including bison reintroductions on declining grassland bird populations in tallgrass prairie

**Research Project Purpose:** The purpose is to understand and quantify the impacts prairie restoration and bison reintroduction have on the density and survivorship of grassland bird nests.

**Research Project Outcomes to date:** I have found the survivorship and density of grassland bird nests are low in remnant prairie compared to earlier plantings immediately after a burn. Artificial nests have a similar depredation to real nests and the majority of nest predators are small mammals.

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 trap cameras, batteries, rebar, quail eggs, and sd cards. It was also used to buy supplies for vegetation analysis (pvc pipe and tape) and for part of my travel cost to Nachusa.

Describe how your project has benefited the work and goals of Nachusa Grasslands: My project has begun to elucidate how grassland birds use the restored habitat at Nachusa and how management techniques impact their nest density and 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, fire return interval, and how bison reintroduction will impact grassland bird nest survival. This can be used as a benchmark in future restoration projects that are aimed to help conserve these declining species.

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