

**The Friends of Nachusa Grasslands  
2018 Scientific Research Project Grant Report  
Due June 30, 2019**

1. Please save this form to your desktop with a unique file name that includes “Friends 2018 Science Grant Report” and your last name.
2. Complete the form using the headings in bold as your guide.
3. Save the file as a Word document or a PDF.
4. Attach the file to an e-mail, and send it to: nachusafriendsscience@gmail.com no later than June 30, 2019.
5. The subject of the e-mail should be “2018 Scientific Research Grant Report” and your last name.
6. After your research project is complete, please contact Friends so that we may learn from and publicize the outcomes as appropriate.

**Name:** Sheryl Hosler

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**E-mail:** sherylhosler@gmail.com

**2018 grant amount:** \$1,000

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

**Research Project Topic:** Dung beetle activity related to the management practices at Nachusa

**Research Project Purpose:** To understand if/how management techniques at Nachusa benefit or harm the dung beetle community and boost/hinder the process of decomposition

**Research Project Outcomes to date:** Data indicate that reintroduction of bison has boosted numbers of dung beetles at Nachusa, but the community is dominated by one species. Decomposition seems to decrease as sites age.

**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 generous funding from Friends was used to purchase supplies to trap for and process dung beetles, to purchase supplies to test decomposition rates, and to pay for researcher mileage to and from Nachusa.

**Describe how your project has benefited the work and goals of Nachusa Grasslands:** My project provides insight into organismal groups that are integral to the success of the prairie restorations though they are not intentionally targeted as part of restoration efforts.

**Describe how your findings can be applied to challenges in management practices for restoration effectiveness and species of concern:** My findings provide broader context for how restoration management practices affect non-target species, including bringing attention to organismal groups and ecosystem processes that are often overlooked by land managers. While my findings probably will not be at the forefront of influencing manager decisions, they will hopefully play a role in helping determine the magnitude/extent of management technique implementation.

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

- Hosler M.S. Thesis Defense (oral presentation)
- Friends of Nachusa Science Symposium 2018 (poster)
- Ecological Society of America annual 2018 meeting (oral presentation)
- MEEC 2018 (oral presentation)
- Entomology Society of America annual 2017 meeting (oral presentation)
- Friends of Nachusa Science Symposium 2017 (oral presentation)

**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 anticipate submitting a manuscript of this research to scientific journals starting Summer 2019.

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