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: John Vanek

Address: 131 Oak Drive, DeKalb IL 60115

2018 grant amount:

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

Research Project Topic: Prairie Engineers: Investigating species associations of burrows in a world class prairie restoration

Research Project Purpose: Burrows created and maintained by mesocarnivores abound at Nachusa, but little is known about which species are creating, modifying, and using them. This project sought to understand what species were using burrows at Nachusa.

Research Project Outcomes to date: We documented a wide variety of mammals at Nachusa, and unexpectedly found > 25 species of birds using burrows or burrow aprons.

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: I purchased 10 infrared trail cameras and associated accessories (memory cards, etc.), and used grant funds to pay for travel to and from Nachusa.

Describe how your project has benefited the work and goals of Nachusa Grasslands: I documented American Badgers in several management units and confirmed successful badger reproduction for the first time in Lee County (with the help of others).

Describe how your findings can be applied to challenges in management practices for restoration effectiveness and species of concern: Badgers are permanent residents at Nachusa. This is an important part of the tallgrass prairie faunal community and is indicative of successful restoration. In addition, the presence of badgers means that any future reintroduction of Franklin's ground squirrels must be accounted for, as badgers are a major predator for this species.

Please list presentations/posters you have given on your research: Nachusa Science Symposium, 2018

Have you submitted manuscripts to scientific journals? If so, which ones? If not, do you anticipate doing so? Manuscript submitted to the peer-reviewed journal Small Carnivore Conservation

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