

A Prairie Calling

ISSUE 1 - MARCH 2020



FRIENDS OF
NACHUSA
GRASSLANDS



© Dee Hudson

Catch the Buzz!

*227 Bee Species Found
at Nachusa*

Each year Bethanne Bruninga-Socular (University of Minnesota) and colleagues Sean Griffin (University of Texas at Austin) and Laura Rericha-Anchor (Cook County Forest Preserve) find more bees. In addition to the goal of documenting the total bee diversity at Nachusa, Sean and Bethanne want to understand how all of these different bees respond to variation in habitat type and management type and frequency. To accomplish this, they analyze the number of bees and the number of species found at different sites around Nachusa.

Management Supports Wild Bee Diversity

In 2013, Bethanne Bruninga-Socular, a graduate student at Rutgers University in New Jersey studying bee communities, made a visit to a Nachusa. She wanted to investigate the possibility of using the site to research how ecosystem restoration might help wild bee communities, which are declining worldwide. Bethanne liked what she saw, and she and fellow graduate student Sean Griffin got to work right away. They set out to investigate the bee community in sites encompassing restorations ranging in age from two years to 26 years, as well as agricultural fields and remnant native prairie.

Between 2013 and 2017, Bethanne and Sean observed 11,137 bees from 136 species in 19 sites at Nachusa. The results show that Nachusa's

older restorations support more diverse bee communities, including many specialist bees. The team also noted that bee communities recover in the first five years of restoration and that patchy application of ecological factors like fire and bison grazing help diversify the bee community across the landscape.

Bethanne and Sean are preparing to come back to Nachusa this summer and build on their 5-year dataset.



Small bee
© Charles Larry



Sean Griffin, PhD.
© Dee Hudson

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Federal and State Endangered Species Confirmed

Rusty Patched Bumble Bee

The rusty patched bumble bee, both a federal and state endangered species, was documented by Bethanne Bruninga-Socolar, PhD. This species was found in a prairie planting, showing that Nachusa's prairie restoration efforts are working. As pollinators, bumble bees are a keystone species group that help wildflowers reproduce, which in turn provide seed and fruits for native wildlife.



Rusty patched
© Joyce Gibbons

Bethanne's research was funded by a Friends of Nachusa Grasslands Scientific Research Grant from 2015-2018.

FRIENDS MISSION

- Conducting and encouraging stewardship
- Funding endowments for long-term protection
- Supporting science and education

WANTED SCIENCE RESEARCH UNDERWRITERS

In order to increase funding for science, we are seeking underwriters who would fund research for one or more years at \$10,000 or more annually. There is the potential to fund specific lines of research. Underwriters will be recognized in our Annual Report. Please email Bernie Buchholz to discuss this opportunity:

NachusaGrasslands@gmail.com

Rare Nomad Bee

Nomada superba



© "Nomada superba"
by Sam Droege, Flickr,
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In 2019, Wildlife Biologist Laura Rericha-Anchor collected the very rare *Nomada superba* in a Nachusa prairie. Nomad bees are very opportunistic, as they sneak into other bee nests to lay their own eggs.

THANK YOU!

The content for this newsletter issue was provided by Bethanne Bruninga-Socolar, PhD.

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Nachusa has great nectar sources

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