# 2021 PROGRESS REPORT

Quarter: (circle one)

2021 1<sup>st</sup>

2021 2<sup>nd</sup>

2021 3<sup>rd</sup>

2021 4<sup>th</sup>

<u>Grant Program, Number and Title</u>: RCN; GSA 00070; Communication & Project Support for Xeric Habitats for Pollinators

Organization: 110 Chambers Alley, Boalsburg, PA, 16827

Project Leader: Elizabeth Crisfield

<u>Abstract</u>: Please provide a short (1-2 paragraphs) abstract that addresses EACH of the following: the objectives of your project, accomplishments to date, future plans and timelines with an estimate for when the project will be completed.

The Xeric Habitats for Pollinators project aims to improve habitat management at sites where this unique habitat type can still be conserved in support of rare bees and lepidoptera that are closely associated with well-drained, fire adapted conditions.

This contract supports the project by ensuring that the monitoring and habitat management components of the project are coordinated so that the data available in July 2022 allows the data analysis team to answer the key research questions by the end of the project in December 2023. With the analysis in hand, we also need to provide products in several formats to ensure at site managers have access to the lessons learned from this project. Furthermore, data generated by this project should be available to researchers interested in understanding species' ranges and community diversity for bees and nocturnal moths.

To meet these goals, the outline below explains how SSI supports the project through coordination and communication, data and monitoring components, and best management practices and other products.

### Were planned goals/objectives achieved last quarter?

Yes. This winter we hosted an update call for all interested parties. The call provided updates on bee, vegetation, nocturnal lepidoptera monitoring efforts including some corrective measures. It also provided an update on results from bee monitoring and vegetation data analysis. Throughout the winter I have supported the solicitation of budget requests from sites. We finalized protocols for nocturnal moth sampling and soil penetrometer readings. Penetrometers were purchased and will be sent to lep contractors immediately in the 2<sup>nd</sup> quarter. I worked with the bee team to refine the hypotheses and research questions based on what we now know about the solitary bee traits. I also worked to resolve some discrepancies in the bee transect data reported to the lab over the last 3 years and communicated specific coordinates to the nocturnal lep contractors to make sure lep data is co-located with bee transects.

Please see the detailed time sheet for specific activities.

### <u>Progress Achieved</u>: (For each Goal/Objective, list Planned and Actual Accomplishments)

This outline matches the contract scope of work. Hours in blue parenthesis track the actual vs. the estimated effort provided in the contract scope of work and match the detailed time sheet provided. Narrative assessment of progress toward these project components is provided above.

- a. Coordination and Communication (29/219 hours)
  - i. Calls and correspondence with John Heilferty and the sites as needed
  - ii. Maintaining the website and project mapping

- iii. Hosting calls in February 2021, Fall 2021, Spring 2022, and at the end of the project
- b. Data and Monitoring Components (49.2/305 hours)
  - i. Calls and correspondence with bee, lepidoptera, and vegetation collaborators
  - ii. Maintaining documentation of research hypotheses and questions, and correlations being explored
  - iii. Tracking lepidoptera, bee data, and soil data and making sure it is all getting to Helen and Drew
  - iv. Any other Data and Monitoring challenges that emerge
- c. BMPs and other products (0/250 hours)
  - i. Translating data outcomes to BMPs
  - ii. Summary report of Xeric Sites in the Northeast
  - iii. Coordinating with the Sandplain Grassland Working Group to review BMP recommendations
  - iv. Oversee and guide summary reports of Bees, Leps, and Management Lessons
- d. Administration (0/16 hours)
  - i. Quarterly progress reports

Difficulties Encountered: None

## **Activities Anticipated Next Quarter:**

In the next quarter I will work with the analysis team to identify data gaps that need to be filled. I will work with the bee and lep monitoring teams to make sure efforts are sustained across the sites. I will help John Heilferty generate contracts for additional habitat management work. I will update the website with nocturnal moth protocols. I will begin to download the SSURGO data needed for analysis.

Expected End Date: December 31, 2022

### Costs:

Total life to date expenses (include this quarter): \$10,882.48 (total project cost), \$7,073.61 (invoiced funds)

Total Approved Budgeted Funds: \$106,650 (total project cost), \$69,322.40 (invoiced funds)

Are you within the approved budget plan and categories? Yes

Signature: Elizabeth Cusfield

Date: April 6, 2021