

# 2021 PROGRESS REPORT

Quarter: (circle one)

2022 1<sup>st</sup>

2022 2<sup>nd</sup>

2022 3<sup>rd</sup>

2022 4<sup>th</sup>

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

Organization: Strategic Stewardship Initiative, 110 Chambers Alley, Boalsburg, PA, 16827

Project Leader: Elizabeth Crisfield

Abstract: 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 2022. 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. These are the goals set in my January 2022 report, with notes about completion:

- (with John) all sites are contacted to make sure data from bees, veg, and management activities is accurate.
  - John and I met with all sites by zoom (and Rocky Point by e-mail) to update them on our progress, get updated management activity reports from them, and request data to be sent to Helen.
- (with John) 2022 moth contracts are signed
  - OK, not quite, but these should go out any day.
- (with Helen and Drew) all data, 2018-present, has been submitted to Helen and Drew
  - I believe all the available data has been submitted to Helen and Drew but I will meet with them in April to go over an inventory and then reach out to sites for any additional needs.
- (with Clare and Sydney) bee data is updated in Discover Life with all coordinate corrections. All 2021 collected specimens are logged.
  - 2018-2020 bees have been ID'd and were included on a poster presented at NEAFWA in early April. 2021 bees have been logged, and I have reviewed the lat-long and other data entry details. Our sites were late sending the bees to the lab, with some trickling in as late as February.
- (with Sven, Neil, Rick, Mark, and Paul) all moth data is in one database
  - 2021 moth data has been compiled in one database and a poster overview of this data was presented at NEAFWA in early April.

- Introduction/Background/Context for BMP is written (i.e., what was known before we did this project.)
  - The front matter of the BMP has been drafted.

Please see the detailed time sheet for specific activities.

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

This outline matches the contract scope of work. Hours in blue parenthesis track the actual cumulative time used out of the estimated effort provided in the contract scope of work. Narrative assessment of progress toward these project components is provided above.

- a. Coordination and Communication (118/219 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 (296/305 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 (61/250 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 (8/16 hours)
  - i. Quarterly progress reports

Difficulties Encountered:

The amount of time needed to oversee the changing personnel for the moth contracts, and the data Quality Assurance for the invertebrate datasets exceeded projections. As shown above, I have only 8 hours left in my budget for Data and Monitoring Components, and still have moth contracts to oversee, datasets to collect, merge, check for errors, and analyze. Inconsistencies in the data labels sent to the bee lab in terms of names of sites and transects and coordinates, and errors in bee names are time-consuming to find and correct. Moth datasheets were not submitted in the exact format requested or with all the data fields filled in, and because there are duplicate species on each site datasheet, it is time consuming to merge the species lists and counts from all the sites into one dataset for analysis. Most of these challenges will continue until the datasets are finally analyzed next fall.

Activities Anticipated Next Quarter:

- Write management narratives for each site to communicate management history to Helen and Drew and others involved in project analysis.
- Review and revise the Introduction/Background/Context for the BMP and develop a carbon assessment of management practices
- Remind Pennsylvania and Rhode Island to monitor vegetation and return data in July.
- (with Helen and Drew) all data, 2018-present, has been submitted to Helen and Drew and any other data needs for project analysis have been met
- (with Clare and Sydney) get 2018-2021 bee data, complete ID's, from the lab by June 30.

- Host a call (or two) with moth contractors to discuss any changes between year 1 and year 2, and then stay in touch with contractors to make sure visits are happening and answer any questions

In general, I will be assuring data quality and availability for analysis in the 1<sup>st</sup> and 2<sup>nd</sup> quarters of this year and doing groundwork for final products. I'll be overseeing moth survey through fall 2022. The 3<sup>rd</sup> and 4<sup>th</sup> quarters of the year will focus on analysis and writing to complete reports by December 31<sup>st</sup>.

Expected End Date: December 31, 2022

Costs:

Total life to date expenses (include this quarter): \$59,676.24 (total project cost), \$38,781.16 (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: 

Date: April 7, 2022