2022 PROGRESS REPORT

October 2022 invoicing

<u>Quarter:</u> (circle one)   2022 1st   2022 2nd   2022 3rd   2022 4th

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

<u>Organization</u>: Strategic Stewardship Initiative, 110 Chambers Alley, Boalsburg, PA, 16827

<u>Project Leader</u>: 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 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.

<u>Were planned goals/objectives achieved last quarter</u>?
Yes. This fall we will finalize the bee and moth datasets, compete the analysis of the datasets, and draft the reports for the bee community, moth community, and Best Management Practices for review.
- Bee dataset: almost finished
- Moth dataset: contractors should finish ID's in November, and the dataset will be compiled immediately
- Best Management Practices: Draft has been shared with John and will be shared with collaborators in early November.
- Bee Report: Draft of lit review portion has been shared with collaborators
- Moth Report: Not started yet
- Data analysis: meeting with Helen and Drew held November 1 (not on this invoice). A second meeting is scheduled for November 29.

Please see the detailed time sheet for specific activities.

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

    a. Coordination and Communication
        i. Bee team met by zoom on June 10, July 21, and by e-mail
        ii. Moth team met by zoom on June 16, and by e-mail
    b. Data and Monitoring Components

   i. Final bee dataset was received from Clare but still needs QA/QC and to be merged with additional components (bee traits, regional bee datasets, RSGCN)

   ii. 2021 moth data was already complete, waiting for 2022 moth identification final datasets from moth contractors, and then preparation for analysis with other datasets

   iii. Vegetation datasets were finalized with coordination with the sites and Helen and Drew are working with them.

  c. BMPs and other products

   i. Draft BMP has been reviewed by John Heilferty

   ii. Draft report on bee community is underway (literature review complete, method drafted)

   iii. Draft report on moth community is underway (literature review started, method drafted)

  d. Administration

   i. Quarterly progress reports

Difficulties Encountered:

There are no new difficulties encountered this quarter.

Activities Anticipated Next Quarter:

This fall we will finalize the bee and moth datasets, compete the analysis of the datasets, and draft the reports for the bee community, moth community, and Best Management Practices for review.

In general, I worked on data quality and availability for analysis in the 1st and 2nd quarters of this year. I'm overseeing moth surveys through Fall 2022. The 3rd and 4th quarters of the year will focus on analysis and writing to complete reports by December 31st. I will assist John Heilferty with project report through the winter of 2023.

Expected End Date: March 31, 2023

Costs:

  Total life to date expenses (include this quarter): $91,666.46 (total project cost), $60,092.66 (invoiced funds)

  Total Approved Budgeted Funds: $129,765 (total project cost), $86,662.40 (invoiced funds)

  Are you within the approved budget plan and categories? Yes

Signature: *Elizabeth Crisfield*

Date: November 2, 2022