2021 PROGRESS REPORT

Quarter: (circle one)

2021 1st

2021 2nd

2021 3rd

2021 4th

Grant Program, Number and Title: RCN 2 Project 2 Job 1 GSA 00136 Nocturnal moth surveying, specimen ID, and data management.

Organization: Sven the Entomologist LLC

Project Leader: Sven Strnad

<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 objectives of this project are to conduct five overnight moth collections at each of four sites in PA and MD during the summer of 2021, identify the moths, and then enter the data into a spreadsheet. Supplemental information collected will include weather conditions, a photo inventory of flowering plants near the moth traps, and soil density measurements.

During the third quarter, the goals were to visit the all sites in July, August, and September/October and to report number of moths captured and their identifications that occurred during the second quarter.

Were planned goals/objectives achieved last quarter?

During the third quarter, area project leaders were notified of sampling dates. Two sites (Sideling and Green Ridge) were visited three times each and the remaining sites (Scotia and Michaux) were visited two times each. Moth collections and flowering plant observations were made at each visit. The second of two sets of soil density measurements were made at each site and were reported. Voucher specimens were collected. To date, over 200 moth species have been identified. The total number of moths identified (3,294) during the first two sampling visits was reported. No site exceeded the 1200 moth maximum per date.

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

At each site, traps were set at the same GPS locations as in the previous sampling period. All traps worked well as indicated by the UV light being re-activated in the morning by manual covering the photoreceptor trigger switch. One week's sampling was postponed one week due to predicted extremely warm conditions. Weather conditions were favorable with only a few brief showers encountered. Moths collected during that time were protected by rain covers on the traps. No traps were vandalized.

Difficulties Encountered:

During the July sampling period at Green Ridge and Sideling, extremely large numbers of moths were collected. Too many moths in the traps resulted in scale damage to some of the moths making identification difficult. Large numbers of moths also increase the time needed for identification to be completed.

Activities Anticipated Next Quarter:

The final sample will be collected at Scotia and Michaux. Sample processing and data recording will continue during that time.

Expected End Date:

January 31, 2022

Costs:

Total life to date expenses (include this quarter):\$19,258.24 (= 65% of 29,667.46)

Total Approved Budgeted Funds:\$38,000

Are you within the approved budget plan and categories? Yes

Signature

Date: 29 OCT 202