

# 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>

Grant Program, Number and Title: RCN2 Project 2 Job 1 GSA1333 Nocturnal moth surveying specimen identification and data management

Organization: Lloyd Center for the Environment: 430 Potomska Rd.; Dartmouth, MA 02748

Project Leader: Mark J. Mello

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.

Were planned goals/objectives achieved last quarter? Yes, the field work, identification of microlepidoptera and selected microlepidoptera have been completed, minus a few (13) Geometridae (*Eupithecia* sp) that will be identified by JoAnn Russo in 2022, Tortricidae that will be identified by Michael Sabourin in 2022 and other microlepidoptera given to Jason Dombroskie.

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

- a. Survey work completed as listed in the protocols prepared by Elizabeth Crisfield for 2021
- b. Soil crust characteristics using a soil penetrometer completed
- c. Vegetation survey completed
- d. Macrolepidoptera and microlepidoptera identified or handled as described under “Were planned goals/objectives achieved”.
- e. One thousand two hundred and thirty-seven moths have been pinned and readied for transport to University of Connecticut. An additional 468 macrolepidoptera specimens are temporarily housed at my Office that will eventually be placed in the Museum of Comparative Zoology at Harvard.
- f. Site and moth data has been prepared as described in this section per original protocols. Vegetation data has similarly been prepared and will be submitted next week, as I have some work to do on the Rhode Island vegetation data.
- g. This is the final report for 2021.
- h. The report summary will be filed as a separate document.

Difficulties Encountered: As described in previous progress report, Head of the Plains was under sampled. This was due to Scheduling the Ferry to Nantucket, which had to be done months in advance to secure a reservation, thus fixing unchangeable dates from May to August. This resulted Head of the Plains stations to be untrappable in May and August. Traps were able to be set at Linda Loring sits, as they were a little more sheltered than Head of the Plains, but the “catch” was likely reduced in those samples as well.

Activities Anticipated Next Quarter:

Similar to those in 2021 but exact details and number of trips not yet worked out.

Expected End Date: October 31, 2022 according to Scope of Services.

Costs:

Total life to date expenses (include this quarter): \$22,027

Total Approved Budgeted Funds: \$22,027

Are you within the approved budget plan and categories? Yes.

A handwritten signature in blue ink that reads "Mark J. Mello". The signature is written in a cursive style with a large initial "M".

Signature:

Date: January 1, 2022