

QUARTERLY PROGRESS REPORT

Quarter: (circle one)

2021 1st

2021 2nd

2021 3rd

2021 4th

Grant Program, Number and Title: Strategic Implementation of Regional Conservation Priorities for Freshwater Turtles at Risk in the Northeast: RCN Opportunity, Initiative 3. Road Mortality Hotspot Identification, Targeted Road Mitigation Assessment, & Best Management Practices. RCN 17-01 GSA 00033

Contractor: Clarkson University

Project Leader: Tom Langen

Abstract: The purpose of this project is to reduce turtle road mortality through improved mortality “hotspot” identification and mitigation strategies, advancing the goals of the Regional Conservation Priorities for Freshwater Turtles at Risk in the Northeast (Initiative 3), which include: (a) Improving our overall approach to identifying turtle road mortality concentrations, (b) Designing effective mitigation strategies and (c) Assessing the mitigation.

Progress in this quarter included (1) a presentation at the International Conference on Ecology & Transportation (ICOET) on evidence of the effectiveness of road mitigation measures for turtles, (2) a presentation to the Animal Behavior Society on locating critical locations for turtles on roads using hotspot and connectivity modeling. (3) The literature review and synthesis *General Guidelines for Surveys of Emydine Turtle Road Encounters and Mitigation Measures* is drafted, and will be distributed fourth quarter. (4) *General Guidelines for Emydine Turtle Road Mitigation* is being drafted, for distribution at the end of the 4th quarter or start of 1st quarter 2022.

Next quarter objectives include (1) Distribution of *General Guidelines for Surveys of Emydine Turtle Road Encounters and Mitigation*. (2) Distribution of *General Guidelines for Emydine Turtle Road Mitigation* (or completed sections). (3) Two presentations to the RCN group (in November and December). (4) Four video recordings of presentations, available on youtube, on (a) pinpointing critical locations for mitigation, (b) general strategies for evaluating effectiveness of road mitigation for turtles, (c) methods to survey for turtle road encounters, and (d) introduction to mitigation options for turtles.

The project is funded through 2023.

Were planned goals/objectives achieved last quarter? Some – see below

Progress Achieved:

Two presentations based on this project, at the International Conference on Ecology & Transportation (ICOET) and Animal Behavior Society.

General Guidelines for Emydine Turtle Road Mitigation is being drafted, for distribution at the end of the 4th quarter or start of 1st quarter 2022.

A literature review *General Guidelines for Surveys of Emydine Turtle Road Encounters and Mitigation Measures* completed and ready to distribute.

I continued work on the document *General Guidelines for Emydine Turtle Road Mitigation*.

I have continued to have regular meetings with collaborator Dr. Eric McCluskey on methodologies for identification of hotspots and on survey monitoring methods.

Difficulties Encountered in Meeting Goals and Objectives: None, except the start of the semester in September (end of quarter) slowed down progress. Progress has picked up in October.

Activities Anticipated Next Quarter:

Distribution of *General Guidelines for Surveys of Emydine Turtle Road Encounters and Mitigation* (for comment).

Distribution of *General Guidelines for Emydine Turtle Road Mitigation* (or completed sections).

Two presentations to the RCN group (in November and December).

Four video recordings of presentations, available on youtube, presenting key outcomes of each task (as summarized in the documents).

Distribute a survey the survey-monkey survey on road mitigation practices for turtles. Follow up with second requests, and contacts with informants who want to discuss components of the survey.

Continue to make progress on hotspot modeling projects. Will distribute a template for agencies to do hotspot projects, based on a draft document that has already been distributed for review.

Expected End Date: 31 December 2023

Costs:

Total life to date expenses (include this quarter): \$42,219.87

Total Approved Budgeted Funds: \$137,500.00

Are you within the approved budget plan and categories? Yes

The foregoing information is accurate as of the date set forth below.

CLARKSON UNIVERSITY

By: _____

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Title: Professor, Dept. of Biology, Clarkson University

Date: 29 October 2021