

QUARTERLY PROGRESS REPORT

Quarter: (circle one)

2022 1st

2022 2nd

2022 3rd

2022 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 90 minute presentation & discussion to the Northeast Transportation & Wildlife Conference (NETWC) ***Emerging Best Practices to Reduce Road Mortality and Increase Habitat Connectivity across Roadways for Turtles in the Northeastern US***. (2) a 20 minute presentation at Northeast Partners from Amphibian & Reptile Conservation (NEPARC) on ***Emerging Best Practices to Reduce Road Mortality and Increase Habitat Connectivity across Roadways for Turtles in the Northeastern US***. (3) Completed drafts of two documents (a) ***General Approaches and Recommended Designs for Turtle Road Crossing Structures Mitigation*** and (b) ***General Approaches and Recommended Designs for Turtle Warning Signage***. (4) Distributed for comments by the RCN working group seven documents (see below). (5) Distributed survey on road mitigation for turtles in northeastern US to around 250 natural resource or transportation agency personnel, conservation and wildlife NGO staff, herpetologists, academics, and environmental service company biologists. (6) Continued progress on new methods for identifying critical road locations for uncommon turtle species.

Next quarter objectives include (1) Receive comments (written and in a team meeting) for the seven distributed documents and revise each document. (2) Finish and distribute for comment two additional documents. (3) Add photo images to documents. (4) Post 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. (5) Continue to solicit information on turtle road mitigation projects in northeastern US. Collate, place in database, and analyze the data. Distribute to the RCN partners at the end of the 4th quarter or start of 1st quarter 2023. (6) Meet with RCN working group for comments on products.

The project is funded through 2023.

Were planned goals/objectives achieved last quarter? Yes, except I wasn't able to re-record the talks. I will do that this quarter.

Progress Achieved:

- ***General Guidelines for Evaluating the Effectiveness of Road Mitigation Measures for Turtles*** draft is distributed, comments to be received and incorporated in the 4th quarter.
- ***General Approaches and Recommended Designs for Turtle Road Crossing Structures Mitigation*** draft is written and distributed, comments to be received and incorporated in the 4th quarter.

- ***General Approaches for Locating Road-kill Hotspots or Other Critical Road Locations for Turtles*** draft is distributed, comments to be received and incorporated in the 4th quarter.
- ***General Approaches and Recommended Designs for Turtle Road Barriers*** is distributed, comments to be received and incorporated in the 4th quarter.
- ***A Quick Guide to Mitigating Road Impacts on Turtles*** draft is distributed, comments to be received and incorporated in the 4th quarter.
- ***General Approaches and Recommended Designs for Turtle Warning Signage*** is written, draft is distributed, comments to be received and incorporated in the 4th quarter.
- ***Methodology for Conducting and Documenting Road Surveys for Turtles*** draft is distributed, comments to be received and incorporated in the 4th quarter.
- ***General Approaches and Recommendations for Habitat Offsets*** is being written, ready for distribution and review the 4th quarter 2022.
- ***Mitigation of Road Effects on Turtles – General Considerations*** is being written, ready for distribution and review the 4th quarter 2022.
- ***Survey of road mitigation for turtles in the northeastern US*** is distributed the RCN state representatives, data will be received, collated, and analyzed 4th quarter 2022.

Difficulties Encountered in Meeting Goals and Objectives:

None

Activities Anticipated Next Quarter:

- Receive comments (written and in a team meeting) for the seven distributed documents and revise each document.
- Finish and distribute for comment two additional documents.
- Add images to all nine documents.
- Continue to solicit information on turtle road mitigation projects in northeastern US. Collate, place in database, and analyze the data. Distribute to the RCN partners at the end of the 4th quarter or start of 1st quarter 2023.
- Re-recording and posting of video recordings of presentations, available on youtube.
- Meet with RCN working group for comments on products.

Expected End Date: 31 December 2023

Costs:

Total life to date expenses (include this quarter): \$66,918.19

Total Approved Budgeted Funds: \$97,500.00

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: _____

Name: Tom Langen

Title: Professor, Dept. of Biology, Clarkson University

Date: 19 October 2022