

QUARTERLY PROGRESS REPORT

Quarter: (circle one)

2020 1st

2020 2nd

2020 3rd

2020 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 revision and completion of a survey instrument, initiation of two hotspot modeling projects, and continued work on the literature reviews. Next quarter objectives include distribution and analysis of results of the survey, continued work on the hotspot models, and continued work on the reviews with the goal of completing some drafts for review and comment. The project is funded through 2023.

Were planned goals/objectives achieved last quarter? No.

Progress Achieved:

I have received commitment from Dr. Eric McCluskey to work on the project. He will contribute eight hours per week, focused on identification of hotspots and on survey monitoring methods.

I have had two phone meetings with the project managers. I provided a Gantt chart of project activities and deliverables, and frankly discussed the progress on the project. We have set dates for monthly meetings with all state leaders on the project, starting in November. I have committed to a set of monthly meeting topics and deliverables for the next six months,

The survey on existing road mitigation projects for turtles has not been distributed as planned – quite simply the disruption from covid-19 closures and related crisis work duties prevented me from doing this, as planned. The plan now is to distribute in November, with responses received and data analysis started in Q1 2021.

I continued on two road-encounter hotspot-modeling projects intended for locating critical road segments for mitigation to reduce mortality and maintain connectivity for the priority turtle species. I have a graduate student working on this project, currently modeling Blanding’s turtle road encounter hotspots. Results are encouraging that these road encounter hotspots can be localized enough for practical use in mitigation. A second project that includes other colleagues at Grand Valley State University (Michigan) and SUNY Potsdam continues, but this far we have no results to report.

I continue to review, evaluate, and synthesize current hotspot identification methods for turtles, and current practices in monitoring turtle road encounters, and continue to work on a draft written report. I continue reviewing, evaluating, and synthesizing current published practices for monitoring effectiveness of mitigation for turtles and other small vertebrates, and continue working on the written review of existing published studies. I have a graduate student working with me to write a review of barrier design and effectiveness for turtles

Difficulties Encountered in Meeting Goals and Objectives: As a senior administrator (Interim Dean) who was part of the covid-19 planning and response team, I was distracted from research progress I had hoped to achieve. The situation is now normalizing, and I have contacted a collaborator to help with the project (and m searching for another). I failed to adequately communicate with the project managers, but had two zoom meetings in the quarter to clarify the work plan and timing of activities and deliverables.

Activities Anticipated Next Quarter:

A RCN Working Group phone meeting is scheduled for November 2020. We are scheduling monthly progress and information sharing meetings for the next six months. Each has a planned topic focus and deliverable.

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

Continue to make progress on hotspot modeling projects.

Continue to review, evaluate, and synthesize current hotspot identification methods for turtles, and current practices in monitoring turtle road encounters. Continue writing. The goal is to have a working draft product to send out for review and comment by sometime in Q2 2021.

Continue to review, evaluate, and synthesize current published practices for monitoring effectiveness of mitigation for turtles and other small vertebrates. Continue writing. The goal is to have a working draft product to send out for review and comment by sometime in Q2 2021. I will then create an instructional template for pre- and post-mitigation monitoring, with a goal for sending both (review and monitoring template) for send out for review and comment Q3 2021.

Expected End Date: March 31 December 2023

Costs:

Total life to date expenses (include this quarter): \$27,764.04

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: Tom Langen

Name: Tom Langen

Title: Interim Dean of Arts & Sciences, Professor, Dept. of Biology, Clarkson University

Date: 29 October 2020