2019 PROGRESS REPORT

Quarter: (circle one)
 $2019 1^{st}$ $2019 2^{nd}$ $2019 3^{rd}$ $2019 4^{th}$

Grant Program, Number and Title: RCN, GSA 00047; Eastern Box Turtle Status Assessment, Conservation Plan, and Best Management Practices.

Organization: H. Patrick Roberts (Independent Contractor)

Project Leader: H. Patrick Roberts

<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 objective of this project is to develop a status assessment and conservation plan for the Eastern Box Turtle (*Terrapene carolina carolina*) in the northeastern United States. This contract with the Wildlife Management Institute was executed at the very end of the first quarter of 2019. As a result of this delayed start, the timeline for the initial objectives of this project was shifted forward accordingly. During the fourth quarter of 2019, Patrick Roberts and Lori Erb (of MACHAC) held monthly Steering Committee calls in October, November, and December to discuss progress toward the overarching goals and objectives of the project. We have continued to revise the sampling protocol and field forms to incorporate suggestions from Steering Committee members. We have been in communication with leading statistical ecologist with USGS about methods that may improve the effectiveness of our protocol. We also held a conference call of the dog trainers throughout the region to provide insight into the development of a dog-based survey protocol. In addition to refining the sampling protocol, we began development of a complementary opportunistic genetic sampling protocol that could potentially, if desired, be implemented in conjunction with surveys. We also developed a standardized reporting form (derived from a form developed by S. Buchanan for Rhode Island) for state agency biologists to distribute to wildlife rehabilitators. Lastly, we have been in communication with lead state agency biologists.

At the end of the fourth quarter 2019, occurrence data had been received from all states except New Jersey and New Hampshire. We are continuing to contact and work with the remaining state agencies as well as other organizations and individual researchers to build this regional occurrence database. We are continuing to search for high-quality regional data layers that will be used in future modeling exercises. Immediate next steps will be to (1) continue to collect available occurrence data from throughout the Northeast, (2) search for relevant data layers until analyses are completed, (3) begin development of the regional species distribution model, (4) coordinate with state agencies in anticipation of the 2020 field season, and (5) continue to hold monthly conference calls. We expect to complete this project by February 2023.

Were planned goals/objectives achieved last quarter? Yes.

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

Planned and accomplished:

- Monthly conference calls
- Collaborated with MACHAC and ATO to refine the regional population monitoring protocol

- Continued to request occurrence data from state agencies
- Gathered regional data layers for use in future modeling for this project

Difficulties Encountered: N/A

Activities Anticipated Next Quarter:

- Continue to hold monthly conference calls
- Collect data from remaining sources (e.g., Herp Mapper, personal datasets)
- Develop and clean the regional occurrence database
- Continue to gather regional data layers
- Begin development of species distribution model
- Begin to develop public communications materials

Expected End Date: February 28, 2023.

Costs:

Total life to date expenses (include this quarter): \$26,344.84 (including match)

Total Approved Budgeted Funds: \$68,500

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

1~1/m Signature:

Date: 01/29/2020