

# 2020 PROGRESS REPORT

Quarter: (circle one)      2020 1<sup>st</sup>      **2020 2<sup>nd</sup>**      2020 3<sup>rd</sup>      2020 4<sup>th</sup>

Grant Program, Number and Title: RCN, GSA 00045, Assessment of Spotted Turtles in New York

Organization: SUNY Potsdam Research Foundation

Project Leader: Glenn Johnson

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.

The overarching objective of this RCN project is to support the strategic implementation of regional conservation planning for at-risk turtles in the Northeastern States, addressing the most time-sensitive research and management needs for at least five priority species (Blanding's, Eastern Box, Wood, Spotted Turtles, and Northern Diamondback Terrapins) through four separate but complementary initiatives.

SUNY Potsdam has specific tasks to contribute toward this overarching objective for **Spotted Turtles**. These are:

1. Coordinate selection of study areas with the State, and permissions and permits that will be required. This component of the project has been completed for sites to sample in 2020.
2. Conduct Trap Rapid Assessments (TRA), Demographic Assessments (DA) or Visual Rapid Assessments (VRA) surveys for spotted turtles at 10 – 15 sites. This task was for 2019 completed in the 2<sup>nd</sup> quarter.
3. Collect DNA samples of each individual spotted turtle encountered. This task for 2019 was completed in the 2<sup>nd</sup> quarter.

Future plans include conducting surveys at least four additional TRA sites in the 2020 field season. All field work (trapping and blood sampling) is anticipated to be completed by August 2020 with a final report prepared by November 2020.

Were planned goals/objectives achieved last quarter? Yes

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

## 1. Selection of study areas

Identification of possible survey sites was initiated by searching the New York State Amphibian and Reptile Atlas records and consultation with regional experts on this species. Selection was completed using a combination of ArcGIS and Google Earth followed by field visits. After identifying a potential site an attempt was made to contact the landowner. Not all sites identified were surveyed owing to a lack of permission. Wetlands were on a combination of state and privately owned lands. A single day at the start of a new trap period was set aside for reconnoitering possible wetlands. The assessment was made by first inspecting the wetland by air using a drone and then following up on the most promising wetlands on foot. Two determining factors for site suitability were the presence of narrow channels in the wetland and the verification of sufficient

water depth to allow deployment of Promar traps. After deciding on potential reference sites with the overall site as well as trap number and placement, personnel were dispatched to conduct trapping on the following day using the protocol developed by the Spotted Turtle Working Group.

Sixteen sites were selected for initial assessment as potential survey sites, eight of which had evidence of spotted turtle presence. Of these, 11 were assessed in 2019 and five were assessed this quarter; permission was granted for all and all were sampled with trapping events. NY-SL-BL was resampled in 2020 because of the odd sampling results in 2019 where 4 spotted turtles were all captured in the same trap on the same day and no other individuals were captured or observed over the sampling period. None were captured in the 2020 resampling.

## 2. Conduct Trap Rapid Assessments (TRA), No Demographic Assessments (DA) this quarter

### **Trap Rapid Assessment Results**

#### NY-LE-JA

- 5/26/2020 – 5/30/2020
- 4 full references deployed
- No spotted turtles detected

#### NY-SL-BL

- 5/26/2020 – 5/30/2020
- Revisit from 2019
- 2 High density references deployed
- No spotted turtles detected
- Note: This was a resampling; 4 CLGU caught in 2019

#### NY-LE-SB

- 6/2/2020 – 6/5/2020
- 2 High density references deployed
- 3 unique CLGU captured with tissue samples
- 2 Female, 1 Male
- 3 recaptured
- Trap time shortened due to weather

#### NY-LE-ML

- 6/2/2020 – 6/5/2020
- 2 High density references deployed
- 15 unique CLGU captured with tissue samples
- 3 Female, 12 Male
- 1 Gravid female
- 3 recaptured
- Trap time shortened due to weather

#### NY-JE-PS

- 6/9/2020 – 6/13/2020
- 4 full references deployed
- No spotted turtles detected
- Trap time shortened due to weather

NY-JE-PN

- 6/9/2020 – 6/13/2020
- 4 full references deployed
- No spotted turtles detected
- Trap time shortened due to weather

**Summary** – A total of 18 unique spotted turtles were captured this quarter and tissue samples were taken from each.

### 3. Collect DNA samples

Over all sites, 88 genetic (blood) samples were obtained over 2 field seasons, including 18 this quarter. There were only 2 sites where over 20+ samples were obtained, both in 2019.

#### Difficulties Encountered:

- Some difficulty setting and checking traps by one person at several hard-to access sites
- This year we had a weather event (extreme high winds) that made it difficult to check traps at one site that required a canoe paddle across open water. This site had no motorized access and alternate overland routes were difficult at best.
- Collecting very subjective habitat data i.e. percent underwater vegetation
- Data collection is lengthy for both turtle processing and trap setting, limiting sampling at only two or in some cases, one site per day.
- For some sites, there were delays in obtaining permission to access, but we were not denied at any site so far.

Activities Anticipated Next Quarter: Completion of all field sampling. Begin data entry and preparation of final report. Sending all genetic samples collected to date to the lab.

Expected End Date: November 2020

#### Costs:

Total life to date expenses (include this quarter): \$12,825.32

Total Approved Budgeted Funds: \$23,333.

Are you within the approved budget plan and categories? Yes

Signature:



Date: 12 July 2020