

NORTHEAST REGIONAL CONSERVATION NEEDS GRANT

2015 PROGRESS REPORT

Quarter: (circle one) 2015 1st **2015 2nd** 2015 3rd 2015 4th

Grant Program, Number and Title: 2013-02, The Northern Diamondback Terrapin (*Malaclemys terrapin terrapin*) in the Northeastern United States: A Regional Conservation Strategy

Organization: Conserve Wildlife Foundation of New Jersey, Inc.

Project Leader: Stephanie Egger

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.

Were planned goals/objectives achieved last quarter? Mostly. We have not received a completed terrapin Threat Assessment from CT (and therefore no Conservation Actions can be developed).

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

Objective 1A: Organize a Technical Review Board comprised of members of the Diamondback Terrapin Working Group (DTWG) – complete. The Technical Review Board of terrapin experts was combined with the Grant Advisory Committee and has 17 participants with at least several representatives from each of the eight states from this project.

Objective 1B: Conduct strategic conference calls and hold regional meeting(s) with the DTWG Technical Review Board – partially complete - ongoing. While no conference calls or meetings occurred during this quarter, email communication with partners occurred throughout the project period working through the objectives of the conservation strategy.

Objective 2A: Gather occurrence data from resource management agencies (e.g. State Biotics Data), researchers, NGOs, and other partners within the target states of the project – complete. Data requests were sent to approximately 35 partners / terrapin experts to gather occurrence data within the eight target states of the project. All occurrence data has been collected and uploaded/digitized into ArcGIS to form a NE Regional Occurrence GIS layer/shapefile. State and regional maps for terrapin occurrence in the NE were made from this shapefile. This shapefile was used in the habitat modeling aspect of this project. The Technical Review Board and other terrapin experts had the opportunity to review, comment, and make additional changes to this GIS shapefile.

Objective 2B: Research existing literature in order to gather additional occurrence data from previous studies and identify data gaps – complete. Reports have been gathered, and have been compared to existing data provided by terrapin experts thus far. Additional occurrence data has been digitized into the Regional Terrapin Occurrence GIS layer (shapefile).

Objective 2C: Compile data collected in (A) and (B) into a preliminary NDBT occurrence GIS shape file. – complete. All occurrence data has been collected and uploaded/digitized into ArcGIS to form a NE Regional

Occurrence GIS layer/shapefile. State and regional maps for terrapin occurrence in the NE were made from this shapefile. This shapefile was used in the habitat modeling aspect of this project.

Additional GIS layers i.e. Land Use/Land Cover, Shoreline (e.g. bulkheading), distance to wetlands, climate change (sea level rise), have been obtained for states from various sources in order to better inform threats and conservation focal areas for terrapins. We contracted Rutgers University to complete a terrapin occurrence model using our Regional Occurrence GIS layer and GIS layers mentioned above to identify areas of habitat suitability values. The habitat modeling was completed May 2015 (report attached).

Objective 2D: Identify focal areas of state and regional conservation importance based on data acquired, and conducting a threat and conservation action assessment (e.g. Spatial Extent, Intensity, Reversibility, Likelihood of Impact and Occurrence, Feasibility, Funding) using the lexicon system that is currently being developed by the Northeast Fish and Wildlife Diversity Technical Committee (NEFWDTC) for State WAP application and for development of conservation plans – partially complete – ongoing. Draft regional threat assessments have been conducted by both the Mid-Atlantic and NE states using the lexicon system by the NEFWDTC, with the exception of CT who have not completed theirs. Additional communication (email or conference calls are needed to refine and finalize conservation actions within the NE region (expected completion September 2015).

Objective 2E: GIS shape file of occurrence and focal areas of conservation importance will be reviewed by the DTWG Technical Review Board – partially complete. The draft Regional Terrapin Occurrence layer was completed and provided to the Technical Review Board and other terrapin experts (Year 1). Focal areas of conservation importance will be determined as strategic conservation actions are further developed and through species distribution modeling.

Objective 2F: Report any new NDBT occurrences to responsible State agencies from data gathered. – partially complete – ongoing. This has been conducted in New Jersey, but not in the other seven states during this quarter. It is likely that new occurrence data will be reported to the states towards the end of the project period (December 2015).

Objective 3A: Quantify and summarize population occurrence. Data from participating states will be compiled and then sorted for various subsequent analyses, including species distribution modeling and optimization modeling. To the extent possible, we will assess the impacts of several potential management actions with population projection modeling. – partially complete – ongoing. Data from resource management agencies (e.g. State Biotics Data), researchers, NGOs, and other partners within the target states of the project have been acquired and are being evaluated for compiling. Additional population data from some partners is still needed. Data collected lacks a consistent method of reporting that partners use in the Northeast. Population modeling may also not be possible for all states as not all researchers have gathered mark/recapture data and some researchers are not comfortable sharing their data for modeling purposes (e.g. Massachusetts). To analyze the available data for population modeling it will take a considerable amount of time to tease out and compile data into a format used for modeling. We currently have a population modeler analyzing data for NY at no-cost, but are continuing to search for supplemental funding in order to have the other states in the NE analyzed. We applied to two grant opportunities and expect to hear funding decisions by September/October 2015. To complete this objective we are seeking a no-cost extension until April 15, 2016.

Objective 3B. Evaluate population assessments and have reviewed by DTWG Technical Review Board. - not complete.

Objective 3C. Conduct a regional assessment of existing regulatory policies, including a synopsis of

enforcement actions and case studies – partially complete. Existing regulatory policies and cases are currently being reviewed. The USFWS provided information on closed enforcement actions/cases involving terrapins in the Northeast (by FOIA request).

Objective 3D. Conduct a regional assessment of possession and collection policies, including a synopsis of enforcement actions and case studies. - partially complete. Existing regulatory policies and cases are currently being reviewed. The USFWS provided information on closed enforcement actions/cases involving terrapins in the Northeast (by FOIA request).

Objective 4: Draft Status Assessment and Conservation Strategy/Plan – ongoing. Characterization and ranking of Threats, Development of Conservation Actions, Review of conservation and regulatory status and deficiencies by State are on-going.

Difficulties Encountered: The process of completing threat assessments and developing strategic conservation actions continues to take longer to complete than anticipated, some due to the varying opinions within the states and the number of participants involved. Connecticut has not completed their state Threat Assessment and therefore not able to move forward with the strategic Conservation Actions (as this is based on the results of the Threat Assessment) despite repeated requests. We recently received Threat Assessments from RI and DE, but currently do not have drafts of Conservation Actions from those states. Population modeling may also not be possible for all states as not all researchers have gathered mark/recapture data and some researchers are not comfortable sharing their data for modeling purposes (e.g. Massachusetts). Finding additional funding for population modeling has been a challenge, but we are continuing to seek and apply for funding. We applied to two grant opportunities and expect to hear funding decisions by September/October 2015.

Activities Anticipated Next Quarter: Our subcontractor, Rutgers University, complete the species distribution modeling and optimization modeling (May 2015), therefore data gaps will be identified through modeling using the Regional Terrapin Occurrence layer and additional data layers (i.e. Land Use/Land Cover, development, shoreline hardening [bulkheads], roads, and sea-level rise) to analyze habitat suitability based on these variables and how some variables (e.g. sea level rise) will impact the occurrence areas. Areas of conservation priority (focal areas) may be identified at this time based on the refinement and development of strategic conservation actions. The model and GIS maps developed from the model will be reviewed by the Grant Advisory Committee and other terrapin experts (3rd quarter 2015).

We continue to seek grant funding for a population modeler to complete that objective of this project as one was not included in the budget when developing the grant proposal. We applied to two grant opportunities and expect to hear funding decisions by September/October 2015.

Final threat assessments and conservation actions are expected to be complete by September 2015 (with the exception of CT since no Threat Assessment has been completed to date). Development of Section I of the Draft Conservation Strategy (*I. STATUS AND THREATS OF THE NDBT IN THE NORTHEAST AND MID-ATLANTIC REGIONS*) and Section III (*III. CONSERVATION STRATEGIES AND ACTIONS*) are ongoing.

Further coordination for the state/regional conference calls/meetings will occur.

Expected End Date: December 31, 2015. We continue to seek grant funding for a population modeler to complete *Objective 3A: Quantify and summarize population occurrence* of this project as one was not included in the budget when the grant proposal was developed. To complete this objective we are seeking a no-cost extension until April 15, 2016.

Costs:

Total life to date expenses: \$31,362.13 (RCN), \$69,005.66 (Non-Federal Match)

Total Approved Budgeted Funds: \$45,494 (RCN), \$51,500 (Non-Federal Match)

Are you within the approved budget plan and categories? Mostly. We continue to seek grant funding for a population modeler to complete *Objective 3A: Quantify and summarize population occurrence* of this project as one was not included in the budget when the grant proposal was developed. To complete this objective we are seeking a no-cost extension until April 15, 2016.

Signature:

A handwritten signature in black ink, appearing to read "Stephen Egan". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Date: August 15, 2015