

NORTHEAST REGIONAL CONSERVATION NEEDS GRANT

2014 PROGRESS REPORT

Quarter: (circle one) 2014 1st 2014 2nd 2014 3rd **2014 4th**

Grant Program, Number and Title: 2013-02, The Northern Diamondback Terrapin (*Malaclemys 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 did not receive terrapin occurrence data from two partners (CT) until January 2015.

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. A Maryland Diamondback Terrapin Meeting was held on November 19, 2014 and we worked through the Threat Assessment exercise in order to prioritize threats for Maryland. A follow-up meeting occurred (outside of the 4th quarter - February 2015) to finalize the Threat Assessment and begin discussions on strategic Conservation Actions for Maryland (based on the results of the Threat Assessment). Further coordination occurred with VA, NJ, NY, DE, and the Mid-Atlantic Region to finalize state and regional Threat Assessments and further develop Conservation Actions. Additional meeting/conference calls will be held throughout the project period working through the objectives of the development 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 is also being 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 is also being used in the habitat modeling aspect of this project.

Additional GIS layers i.e. Land Use/Land Cover, Shoreline alterative (e.g. bulkheading), wetland loss, 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 have contracted Rutgers University to complete a habitat occurrence model using our Regional Occurrence GIS layer and GIS layers mentioned above to identify areas of habitat suitability values. The habitat modeling is on-going but is expected to be completed by April 2015.

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. Threats were scored based on threat characteristics in order to identify priority threats. Further coordination occurred within the Mid-Atlantic Region to further develop strategic conservation actions that will be carried out (or proposed) by NJ, DE, MD, and VA as part of the Conservation Strategy. Coordination has occurred with members of the NE DTWG to work through strategic conservation actions within MA, RI, CT, and NY. Additional conference calls and regional meetings are needed and will continue throughout the project period working to refine and develop these conservation actions for eight states and then NE and Mid-Atlantic Regions.

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 before December 31, 2014. Some data was modified or omitted based on the review process by partners. 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. To analyze this data for population modeling it will take a considerable amount of time to tease out and compile data into a format used for modeling. Further, for population modeling analysis, a program such as MARK will likely need to be used.

CWFNJ initially was working with a statistician at Monmouth University (NJ) for this portion of the project. However, it appears that someone with greater experience is actually needed to complete this objective. We currently have a population modeler analyzing data for NY at no-cost, but we will need to find supplemental funding in order to have the other states in the NE analyzed. We are currently exploring grant opportunities.

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 are currently being reviewed following a CITES case involving NJ and MD. Wild adult terrapins were harvest from NJ and sold to an aquaculture facility in MD and 14,000 of their offspring were to be exported to Asia. In addition, 800 illegally harvested terrapins from NJ were bound for the same aquaculture facility in MD. In response to this case during the 4th quarter, we prepared and presented with Dave Jenkins, Chief of the NJ Division of Fish and Wildlife's Endangered and Nongame Species Program to the NJ Marine Fisheries Council Regulatory Committee, as well as prepared materials for the Commissioner of the NJ Department of Environmental Protection raising our concerns for terrapins and the commercial/illegal harvest as part of cumulative threats to this species. As a result, New Jersey has recently ceased the harvest of terrapins for the 2015 season as the level of harvest in New Jersey is of serious conservation concern and the demand for turtles in the Asian markets has not abated and will continue to stress New Jersey's terrapin population (Admin Order 2015-2, see attached).

A Freedom of Information Act (FOIA) request was sent to the USFWS for any closed enforcement action/cases involving terrapins in the Northeast in September; however, the FOIA request has not been completed by the U.S. Fish and Wildlife Service after several follow-ups.

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 are currently being reviewed in NJ following a CITES case involving NJ and MD. Wild adult terrapins were harvest from NJ and sold to an aquaculture facility in MD and 14,000 of their offspring were to be exported to Asia. In addition, 800 illegally harvested terrapins from NJ were bound for the same aquaculture facility in MD. In response to this case, during the 4th quarter we prepared and presented with Dave Jenkins, Chief of the NJ Division of Fish and Wildlife's Endangered and Nongame Species Program to the NJ Marine Fisheries Council Regulatory Committee, as well as prepared materials for the Commissioner of the NJ Department of Environmental Protection raising our concerns for terrapins and the commercial/illegal harvest as part of cumulative threats to this species. As a result, New Jersey has recently ceased the harvest of terrapins for the 2015 season as the level of harvest in New Jersey is of serious conservation concern and the demand for turtles in the Asian markets has not abated and will continue to stress New Jersey's terrapin population (Admin Order 2015-2, see attached).

A Freedom of Information Act request was sent to the USFWS for any enforcement action/cases involving terrapins in the Northeast; however, the FOIA request has not been completed by the U.S. Fish and Wildlife Service after several follow-ups.

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 the areas that we have been focusing on during Year 1 of the project.

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. However, the final threat assessments and conservation actions are expected to be completed by spring 2015.

Activities Anticipated Next Quarter: During the next quarter, we will continue work with modelers from Rutgers University for species distribution modeling and optimization modeling and will continue through April 2015. 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, but will not be verified until modeling is further along in the process. The model and GIS maps developed will be reviewed by the Grant Advisory Committee and other terrapin experts and adjusted as needed (likely in the 2nd quarter 2015).

We will 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.

Final threat assessments and conservation actions are expected to be completed by spring 2015 as well. 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

Costs:

Total life to date expenses (Year 1): \$22,799.91 (RCN), \$47,368.65 (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. The final RCN budget for Year 1 was \$22,847 and our total was approximately \$50 less at \$22,799.91. The travel budget for the PI in Year 1 exceeded what was budgeted by \$609.35. However, this amount could be pulled from the partner travel budget for Year 1 as \$606.64 remains. Partner match was nearly double what was anticipated for Year 1. A total of \$25,750 partner match was anticipated when in fact \$47,368.65 match was provided. We will 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. Overall work time by the PI has been greater than anticipated for this project. Therefore, we are currently looking for additional grants/funding to supplement these additional hours.

Signature:



Date: March 23, 2014