

NORTHEAST REGIONAL CONSERVATION NEEDS GRANT

2013 PROGRESS REPORT

Quarter: (circle one)

2013 1st

2013 2nd

2013 3rd

2013 4th

Grant Program, Number and Title: 2011-03, Conservation Assessment of Odonata (Dragonflies and Damselflies) in the Northeast Region

Organization: New York Natural Heritage Program and The Nature Conservancy (TNC)

Project Leader: Erin White

TNC Oversight: Troy Weldy

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.

Objective 1: Assess regional responsibility for all species of Odonata in the Northeast.

Objective 2: Assess regional vulnerability of each Odonata species occurring in the Northeast.

Objective 3: Combine responsibility and vulnerability into a single prioritization matrix and habitat crosswalk.

To date, we have had a preliminary meeting and workshop with our collaborators and several steering committee calls. The principal collaborators and steering committee agreed in early 2012 on a project schedule and timeline to complete our objectives by the deadline. The steering committee also issued a call for data in May of 2012 and incoming data was received by December 2012 and was compiled into a centralized database. A preliminary meeting with our Advisory Committee, with representatives from each of the Northeastern states, chosen by the Northeast Fish and Wildlife Diversity Technical Committee, was held August 29, 2012. In addition, a habitat list for Odonata species has been compiled, which relates to the Northeast Aquatic Habitat Classification, which is being incorporated into our conservation assessment. NatureServe completed drafting regional Odonata maps in mid-March 2013 which were used Apr-Jun in the responsibility assessment, and the Steering Committee drafted a process for the vulnerability assessment and regional vulnerability ranks for Northeastern Odonata species based on range extent, area of occupancy, trend information, and habitat specificity and vulnerability. We drafted a conservation assessment for all Odonata in the Northeast (responsibility and vulnerability) with the compiled data and reviewed this in a workshop at the Northeastern Dragonfly Society of the Americas (DSA) meeting with collaborators on June 22 and 23, 2013 in Griswold, CT. We have taken feedback from the review and revised our habitat specificity and habitat vulnerability data and have re-run our vulnerability assessment based on the revisions in Oct-Dec 2013. The resulting conservation assessment vulnerability scores are more in line with suggested changes received by experts at the June meeting. We made plans to finalize a prioritization matrix and draft a final paper next quarter and send this for additional review by our collaborators and advisory team. Following revisions, report finalization, and further review by collaborators in early 2014, our expected project completion is March 31, 2014.

Were planned goals/objectives achieved last quarter? Yes, planned activities were achieved last quarter. The Steering Committee made any final corrections/changes to the database based on feedback from advisors on how to handle vagrants and certain taxa in the region. We corrected further errors in the database as well. This final database was sent to NatureServe by early December 2013 and we anticipate receiving a final spatial geodatabase of US and Canadian Odonata ranges from them by January 2014. We revised our habitat

specificity and habitat vulnerability data based on feedback from our meeting in June with Odonata experts and re-ran our vulnerability analysis. We will re-run the responsibility piece and create a final prioritization matrix in January 2014. The Steering Committee met in December 2013 to discuss the revised vulnerability assessment and plans for finalizing the project. We divided tasks for working on the final paper of this project and expect to submit a final report by March 31, 2014.

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

As progress on all three objectives, we received all expected Odonata data from the region by December 2012 and have incorporated it into a single database. The steering committee issued a call for data in May of 2012 and incoming data was received by December 2012. We worked with the following project collaborators to obtain data, who are experts responsible for databasing Odonata records for their state: Mike Thomas and David Wagner (CT), Hal White (DE), Richard Orr and Jim McCann (DC and MD), Lynn Harper, Robert Buchsbaum, and Chris Leahy (all MA), Allen Barlow (NJ), Betsy Leppo (PA), Virginia Brown (RI), Michael Blust and Bryan Pfeiffer (VT), Steve Roble (VA), and Susan Olcott (WV). In addition, Steering Committee members Phillip deMaynadier (ME), Pam Hunt (NH), and Erin White (NY) combined data for their respective states. Further, Dennis Paulson (personal database from the Northeastern states), and John Abbott and Celeste Mazzacano from Odonata Central supplemented with additional records from the entire region. To obtain records outside the region for the entire species ranges for the U.S. and Canada (which we compared the northeastern ranges to for our responsibility assessment), we relied on Odonata Central to supply this information. The Access database that has this compiled data currently holds 248,059 records, some of which may be records duplicated between Odonata Central and our collaborators databases. The aforementioned collaborators compiled all confirmed, county level odonate data for their state from all years. Our database contains species name, county, state, and country location, year, voucher, and source information. Most of the records compiled were adult records since this life stage has been the most targeted in survey efforts in the region, but we also accepted confirmed larval and exuvial records as well. We relied on the collaborator submitting data to the project to ensure their dataset was comprehensive for their state and to determine the validity of the record, with the understanding that only accepted or confirmed records would be submitted for this study. In summary, every effort was made to produce the most comprehensive database for confirmed Odonata records in the Northeast. We have performed quality control and clean-up on the database.

The Steering Committee based the vulnerability assessment of northeastern Odonata on NatureServe's ranking calculator, combining rarity, threat, and trend factors into a regional vulnerability rank. We combined this rank for each species with a percentage of our region's responsibility of conserving it (based on the proportion of its entire range that occurs in our region) into a prioritization matrix. The vulnerability assessment and threat factor (habitat specificity) as well as the overall prioritization matrix was reviewed by 21 odonate experts at the 2013 NE DSA meeting in June.

We have taken feedback from the review and revised our habitat specificity and habitat vulnerability data and have re-run our vulnerability assessment based on the revisions last quarter. We have completed final vulnerability and responsibility assessments for 227 (all) odonate species known from the Northeast region based on this data. There were 5 species removed from our analysis this fall, as they were determined by Odonata experts to be vagrants to the region and not breeding residents. We worked with NatureServe to create the distributional maps for our responsibility piece and submitted a final database to them by early December 2013. We anticipate receiving a final geodatabase of Odonata distributions from them by mid-January 2014. We made plans to draft a final paper next quarter and send this for additional review by our collaborators and advisory team and finalize a report by the end of March 2014.

Difficulties Encountered: None

Activities Anticipated Next Quarter:

- Steering Committee drafts final report/manuscript in January 2014
- Collaborators and Advisors review manuscript March 2014
- Finalize project report based on feedback and submit to WMI by March 31, 2014

Expected End Date: June 1, 2014

Costs:

Total life to date expenses (include this quarter): \$52,291.20 (\$26,967.39 grant reimbursable/
\$25,323.81 match)

Total Approved Budgeted Funds: \$78,594.00 (\$38,604 grant reimbursable / \$39,990.00 match)

Are you within the approved budget plan and categories? Yes

Signature:



Date: January 31, 2014