

NORTHEAST REGIONAL CONSERVATION NEEDS GRANT

2015 PROGRESS REPORT

Quarter: (circle one)

2015 1st

2015 2nd

2015 3rd

2015 4th

Grant Program, Number and Title: Distribution and Conservation Status of the Newly Described Species of Leopard Frog in the Coastal NE

Organization: New York Natural Heritage Program

Project Leader: Matthew Schlesinger

Abstract: The objectives of our project are to define the distribution, status, field characters, and habitat use of the newly described species of leopard frog (*Rana kauffeldi*) in comparison to that of the southern (*R. sphenocephala*) and northern leopard frog (*R. pipiens*). Hundreds of person-nights of calling surveys were conducted across the region in late winter and early spring 2014 and 2015. These resulted in detections putatively of the new species, as well as southern and northern leopard frogs, in many locations. Follow-up sampling to photograph frogs and collect tissue for genetic analysis was conducted into fall 2014 and continues in summer 2015. The second quarter of 2015 was spent finishing calling surveys and obtaining photographs and tissue of frogs. The remainder of 2015 will see additional sampling to photograph frogs and collect tissue, receipt of genetic analysis on the first 100 samples, a presentation at the Northeast Partners in Amphibian and Reptile Conservation annual meeting, compilation of all project data, and the beginning of data analysis and writing. The project is on schedule for completion in winter 2015-2016.

Were planned goals/objectives achieved last quarter?

Yes, planned goals and objectives were achieved.

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

Calling surveys to fill in gaps in the distributions of leopard frogs wrapped up in May and sampling for photographs and tissue continued into July. Calling surveys in NY confirmed two new locations, while surveys in CT did not reveal new locations. New sites have been identified in coastal NJ, DE, MD, and VA. The frogs continue to be found in VA near the NC border, and frogs from northern NC are suspected to be *R. kauffeldi*. Several sites of sympatry between *R. kauffeldi* and *R. sphenocephala* have been documented.

PCRs for the first 100 frogs are completed. We expect results (species IDs) for these samples in August.

All of the objectives below that appeared in our proposal rely on confirmation of species identity via genetics. Since preliminary genetic results were not available this quarter, our accomplishments to date have involved only sampling to address these objectives eventually. Through calling surveys, project participants identified dozens of locations with each species suspected according to the call. Many of these sites have received follow-up visits to photograph frogs and obtain genetic samples.

- 1) Determine conclusively which leopard frog species occur presently and occurred historically in the nine states (CT, DE, MA, MD, NJ, NY, PA, RI, VA);
- 2) Refine the northeastern distribution of the new species relative to the two other leopard frogs;
- 3) Refine the conservation status in areas where the new species is already known to be of concern;

- 4) Contrast multi-level habitat associations among the three species; and
- 5) Refine the separation of species via field characters (calls, morphology) to facilitate future inventory, monitoring, and status assessments of the new species without reliance on genetic testing.

Project conference calls were held April 14 and May 12. MS and Dennis Quinn led a field trip on April 18 for the Northeast Natural History Conference the two known sites in Connecticut; we were unable to add new locations, however.

Difficulties Encountered:

No additional difficulties were encountered last quarter.

Activities Anticipated Next Quarter:

From July 1 to September 30, 2015, we will continue catching frogs for tissue samples and photography and receive the results of the first 100 genetic samples. MS will present at the NEPARC conference in Rhode Island on August 20. The next whole-team call will be in September.

Expected End Date: March 31, 2016

Costs:

Total life to date expenses (include this quarter): \$74,012

Total Approved Budgeted Funds: \$99,764

Are you within the approved budget plan and categories? Yes

Signature:



Date: August 12, 2015