

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2015 PROGRESS REPORT

Quarter: (circle one)

2016 1st

2016 2nd

2016 3rd

2016 4th

Grant Program, Number and Title:

Priority Science Grant Program, NALCC 2013-03

Conserving Important Habitat for Amphibians and Other Wildlife: Compilation of Vernal Pool Mapping Efforts across the North Atlantic Region.

Organization: Vermont Center for Ecostudies

Project Leader: Steve Faccio

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.

This project has four primary objectives:

- 1) Compile a comprehensive database of vernal pool locations;
- 2) Describe the vernal pool mapping and verification approaches currently being employed in the region;
- 3) Develop a remote sensing method using LiDAR to efficiently identify potential vernal pool locations;
- 4) Prioritize areas for future vernal pool mapping.

During the last quarter we presented results of the project via a USFWS webinar, and a post to the Northeast Partners in Amphibian and Reptile Conservation listserv. This resulted in inquiries from potential cooperators in NY, VA, DE, and RI about submitting data to the Vernal Pool Data Cooperative. In addition, data were solicited from potential cooperators in PA and NH. To date, a state-wide dataset from DE was acquired and incorporated into the database and metadata library.

Were planned goals/objectives achieved last quarter?

Yes (see planned and accomplished goals/objectives in matrix below).

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

Goal/Objective	Planned	Accomplished by 31 Mar.
<i>Goal 1 - Compile a comprehensive dataset of vernal pool locations in the NALCC region, including potential and verified pools.</i>		
Assemble project steering committee and hold first conference call	X	X
Plan and host regional workshop at NE Natural History Conference	X	X
Present oral paper at NEAFWA Conference	X	X
Build database to archive geospatial and associated attribute data	X	X
Build a metadata library	X	X
Host workshop at NEPARC meeting (western NY)	X	X
Receive and archive data into database; proof and complete metadata	X	ongoing
Host regional workshop in mid-Atlantic region	X	X
Provide vernal pool data to NALCC	X	X
<i>Goal 2 – Compile and describe the various mapping and certification approaches currently being employed in the region</i>		
Identify and review all coordinated mapping projects	X	X
Prepare review document	X	X
<i>Goal 3 – Develop a method to identify potential vernal pools using Light Detection and Ranging (LiDAR) technology and object-based image analysis (OBIA)</i>		
Compile vernal pool and LiDAR data for NJ and VT	X	X
Conduct preprocessing of LiDAR and other (NHD) data and imagery	X	X
Define characteristics of vernal pools in LiDAR	X	X
Prototype OBIA expert system	X	X
OBIA system development	X	X
Evaluation and Accuracy Assessment	X	X
Reporting	X	X

Difficulties Encountered:

NA

Activities Anticipated Next Quarter:

Although the grant has been expensed out, any additional vernal pool location data/metadata submitted by cooperators prior to the contract end date will be archived into the database/metadata library.

Expected End Date:

June 15 2016

Costs:

Total life to date expenses (include this quarter): \$100,000

Total Approved Budgeted Funds: \$100,000

Are you within the approved budget plan and categories? Yes.

Signature

A handwritten signature in blue ink, appearing to read "Steven Paul".

Date: April 20, 2016