

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2014 PROGRESS REPORT

Quarter: (circle one)

2014 1st

2014 2nd

2014 3rd

2014 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: Steven 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; and 4) prioritize areas for future vernal pool mapping.

During the second quarter we held a conference call with the project steering committee to discuss outcomes from the April workshop, provide an update on the oral presentation given at the NEAFWA conference, refine database fields, and brainstorm additional stakeholders/partners who may have significant data to contribute to the project. We continued making plans to host a workshop in the mid-Atlantic region, which will take place on Oct 24th in DE. We also began putting together the agenda for that workshop and developed an initial list of invitees. We made initial steps in developing the database and metadata standards, and continued to identify vernal pool data sources and coordinated mapping projects.

Future plans include attending the NEPARC Annual Meeting in Aug. where S. Faccio will give an oral presentation to introduce the project. He will also attend the breakout session of the Vernal Pool Working Group to provide a more detailed project update, solicit feedback, and address concerns/questions. We will also begin to build the database and metadata library that will archive contributed data. At this point we anticipate completing the project by Dec. 2015.

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 15 Jul.
<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	
Build a metadata library	X	
Host workshop at NEPARC meeting (western NY)	X	
Receive and archive data into database; proof and complete metadata	X	
Present a draft of the VPDC framework for review at the fall meeting of the NE Fish and Wildlife Diversity Technical Committee (pending an invitation)	X	
Provide vernal pool data to NALCC	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	
Prepare review document	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	
Prototype OBIA expert system	X	
OBIA system development	X	
Evaluation and Accuracy Assessment	X	
Reporting	X	

Difficulties Encountered:

Nothing of consequence.

Activities Anticipated Next Quarter:

- 1) Incorporate feedback from workshops and meetings into planning and development of VPDC
- 2) Continue to build database and metadata library
- 3) Continue identification and review of all coordinated mapping projects
- 4) Define characteristics of vernal pools in LiDAR
- 5) Update steering committee on progress and seek feedback during conference call

Expected End Date:

December 2015

Costs:

Total life to date expenses (include this quarter): \$23,655.96

Total Approved Budgeted Funds: \$100,000

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

Signature: 

Date: 24 July 2014