NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2013 PROGRESS REPORT

Quarter: (circle one)

2013 1st

 $2013\ 2^{\text{nd}}$

2013 3rd

2013 4th

<u>Grant Number and Title</u>: FWS WMI NALCC 2011-05 Permeable Landscapes for Species of Greatest Conservation Need.

Grant Receipt/Organization: The Nature Conservancy

Grant Project Leader: Dr. Mark Anderson

Were planned goals/objectives achieved last quarter? Partially

<u>NALCC Conservation Need Addressed</u>: Identification of Regional Focal Areas and Corridors for the Conservation of Species of Great Conservation Need in the Northeast

<u>Progress Achieved</u>: (For each Goal/Objective, list Planned and Actual Accomplishments). This quarter we had a bit of a hiatus on the project as the UMASS DSL team and Dave Theobald (U of Northern Colorado) worked out some of issues related to roads in the landcover and habitat data.

<u>Summary of Progress:</u> (Provide a paragraph describing progress, work to come, and timelines)

Goal 1: Re-run resistant kernel analysis for the Northeast: We experimented with re-running the resistant kernel analysis using the 2006 NLCD and 2012 Tiger roads layer in three pilot sites. Although the data is better we discovered unanticipated problems due to the fact that the new NLCD has road coded into the map as "development." This is different from the earlier version.

Goal 2: Experiment with Connectivity Parameters: We began to test the effects of changing the regional connectivity parameters (cell size, tile size, water weighting) to improve the model and test the sensitivity of the model to input parameters

Difficulties Encountered: As described above.

Activities Anticipated Next Quarter:

- 1: Resolve the road issues with input from UMASS team and Theobald, make decisions and finalize our approach.
- 2) Begin downloading and experimenting with traffic volume layers
- 3) Prepare a literature base on permeability and connectivity in the Northeast
- 4) Finalize the species dataset using only occurrences with precise locations.

Expected End Date:

March 30, 2014

Costs:

Cumulative NALCC-funded Expenses: \$9,570.60 Total Approved Budgeted NALCC Funds: \$49,868.00 Are you within the approved budget plan and categories? Yes

Signature:

Mal Andre

Mark Anderson

Director of Conservation Science

The Nature Conservancy, Eastern Division

Date: April 29, 2013