

# NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 ABSTRACT

Quarter: (circle one)      2012 1<sup>st</sup>      2012 2<sup>nd</sup>      2012 3<sup>rd</sup>      2012 4<sup>th</sup>

Grant Number and Title: 2011-05 Permeable Landscapes for Species of Greatest Conservation Need

Grant Receipt/Organization: The Nature Conservancy

Grant Project Leader: Mark Anderson

**Revised Objective:** Landscape permeability is the ability of a heterogeneous land area to provide for passage of animals, equivalent to what some authors call “habitat connectivity.” In this project we will evaluate and map the relative landscape permeability across a region of thirteen states, and determine how permeability coincides with the locations and habitat of species of greatest conservation concern. The analysis will be based new analytical tools (e.g. Circuitscape and Resistant Kernel models) applied to the Northeast Regional Habitat Map, and corroborated with species locations and land cover maps. We aim to identify where the most important regional movement concentrations are, particularly those areas where movements may be funneled due to constriction in the landscape. Using this information, we will measure the amount of flow, permeability and resistance present in the region’s roads and secured-lands network.

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**Revised timeline:**

January- March 2013	Complete data preparation including Canada. Make decisions on the use of Theobald’s human modification data and on traffic volume data.
April – June 2013	Complete literature review, and prepare methods proposal and guidance document.
July – September	Run test analysis, prepare explanatory materials and convene steering committee..
Oct – Dec 2013	Run first region-wide analysis, present results to steering committee via Web ex meetings, harvest feedback and revised methods.
Jan-March 2014	Rerun the region-wide analysis with all the adjustments and improvements requested by the steering committee. Present results for review and finalizations.
April – June 2014	Prepare final deliverables: report, maps, datasets.
June 2014	Submit final deliverables.