

## Northeast Regional Conservation Needs Program: Topic 10

# **Geospatial Condition Analysis of Northeast Habitats Based on the Northeast SGCN Habitat Maps**

### **Project Summary**

We will evaluate and summarize the current condition of terrestrial and aquatic habitats across a region of thirteen states using newly available region-wide habitat maps of streams (Olivero and Anderson 2008) and terrestrial ecosystems (Ferree and Anderson 2011). Each habitat will be described and characterized as to environmental setting and associated species. To evaluate each habitat, we will overlay compatible datasets relative to factors that elucidate the extent, condition and quality of each habitat. The selection of metrics will build on Anderson and Olivero (2011) and Tomajer et. al. (2008). The metrics will be calculated relative to each habitat type, for example, dams, impervious surfaces and toxic release points for stream systems, or road density, patch size, canopy closure and projected housing density for terrestrial forests. The work will be guided by a science steering committee representing the thirteen states. The committee will also review results and help design the format for the final report.

March - May 2012: Prepare data sets

May – June 2012: Establish Team, prepare metric list, Convene steering Committee, Host review call. Begin overlay analysis of terrestrial and freshwater habitats

July –Sept 2012: Develop conceptual framework and agree on metrics with steering committee  
Characterize habitats and continue overlay analysis. Agree on report format

Oct –Dec 2012: Calculate Landscape and Human use metrics. Present to committee

January -March 2013: Calculate biological metrics. Present to committee

May - June 2013: Draft and circulate report. Present to committee. Revise and finalize report.

### **Citations**

Ferree C. and Anderson, M.G. 2011. A Terrestrial Habitat Map for the Northeastern United States. The Nature Conservancy, Eastern Conservation Science.

Anderson M.G. and A. Olivero Sheldon, 2011. Conservation Status of Fish, Wildlife and Natural Habitats in the Northeast Landscape: Implementation of the Northeast Monitoring Framework. The Nature Conservancy. Eastern Conservation Science. 289 pp.

Olivero, A., and M.G. Anderson. 2008. The Northeast Aquatic Habitat Classification. The Nature Conservancy, Eastern Conservation Science. 90 pp. <http://www.rcngrants.org/spatialData>

Tomajer T. et al. 2008. Monitoring the Conservation of Fish and Wildlife in the Northeast: A Report on the Monitoring and Performance Reporting Framework for the Northeast Association of Fish and Wildlife Agencies

# NORTHEAST REGIONAL CONSERVATION NEEDS GRANT QUARTERLY REPORT

Grant Number: 2009-02

Grant Title: Geospatial Condition Analysis of Northeast Habitats based on the Northeast SGCN Habitat Maps

Grant Receipt: The Nature Conservancy

Grant Contact Name: Mark Anderson

Report #- 2 (April 30, 2012 through June 30, 2012)

Were planned goals/objectives achieved last quarter? Yes

Regional Conservation Need Addressed: Priority #10 Geospatial Condition Analysis based on Northeast SGCN Habitat Maps

Progress Achieved:

**Goal 1) Identify and Assemble Steering Committee:** We identified members for the steering committee and sent out invites explaining the project. This resulted in an excellent small team:

Andy Finton	Jeff Wagner
Andrew Milliken	Lesley Sneddon
Chris Urban	Meghan Gilbert
Dan Brauning	Nelson DeBarros
Dave Day	Steve Fuller
Emily Brunkhurst	Steve Walker

**Goal 2) Prepare data sets and lay out methods and ideas:** We organized our datasets and sent requests for new data that we anticipate being used in this project (e.g. FIA, Heritage Programs). Next we assembled a list of metrics that we could calculate for each system, and prepared a PowerPoint and memo for the steering committee. We begin overlays of secured land and the land cover index with the system map. Developed hierarchy for grouping systems.

**Goal 3) Host first committee meeting and review metrics:** We prepared a PowerPoint overviewing the project and a list of metrics that we thought would be appropriate to calculate for each system. Additionally we laid out a format for describing each system. The team was very engaged on the call and brought up a number of key points. They were not quite ready to start discussion metrics but recommended that we take a step back and review some of the projects that the states have done to address the conditions of habitats. We agreed and set up presentations for July to over view several state projects – with the goal of developing a conceptual matrix and list of metrics by August

Difficulties Encountered: None yet.

Activities Anticipated Next Quarter:

- Host State-based presentations and discussion
- Develop conceptual framework and list of specific metrics.
- Compile FIA and Heritage data
- Begin analysis of systems by secured Lands and other simple metrics.
- Host a web meeting on framework and specifics

Costs:

Are you within the approved budget plan? Yes

Are you within approved budget categories? Yes

A handwritten signature in black ink, appearing to read "Mark Anderson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Signature: Mark Anderson, Director of Conservation Science

Date: July 23, 2012