**APPALACHIAN LANDSCAPE**

**CONSERVATION COOPERATIVE GRANT**

**2012 PROGRESS REPORT**

Quarter: (circle one) 2012 1st 2012 2nd 2012 3rd 2012 4th

Grant Program, Number and Title: 2012-04, Support for Understanding Land Use and Climate Change in the Appalachian LCC

Organization: NatureServe

Project Leader: Mary-Beth Young

Abstract: Last quarter, we received comment from Jean Brennan our draft Expert Panel recommendations report. We solicited further engagement from the Expert Panel, integrated additional recommendations, and submitted our final Recommendations report September 18. We approached nine scientists to request participation in selection of species and habitats for additional assessment; four agreed to participate. We developed materials to aid in this conversation, including identification of matrix and large patch habitats, important wetland habitats, and unique habitats found only in the Appalachian LCC region. We then generated lists of associated species for each habitat using criteria developed by the Expert Panel, including keystone species, species of greatest conservation need, important wetland species, species restricted to unique habitats, and species that can function as indicators of climate change already occurring. We then developed a draft list of animal and plant species, using the completed assessments list as a reference.

Were planned goals/objectives achieved last quarter? In part. Jean Brennan made a request for more explicit recommendations, as well as more detailed critique of existing methods. We then had further communications with the Panel, including emails and conference call, to elicit this information. Draft report was revised extensively and was circulated to the Expert Panel July 25. We revised the report and submitted September 18 along with a revision of the existing species and habitat assessments. We approached nine scientists to participate in the species and habitat selections for additional vulnerability analyses, and four agreed to participate: Al Schotz, Alabama Natural Heritage Program; Patricia Butler, and Michigan Technological University, Northern Institute of Applied Climate Science and PI of the Central Appalachians Vulnerability Assessment; Kyle Barrett, Clemson University, and Jon Ambrose, Georgia Natural Heritage Program. A draft list of species and habitats for assessment was circulated to this group.

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

Our goals are to:

1. Provide recommendations to the Appalachian LCC regarding climate change vulnerability methods most appropriately used in the AppLCC region.
2. Apply the recommended methods to conduct climate change vulnerability assessments on selected species and habitats in the AppLCC

We will accomplish this through the following objectives:

1. Assemble Expert Panel

**Planned:** none

**Actual:** previously completed

1. Finalize Expert Panel

**Planned:** none

**Actual:** previously completed

1. Compile existing methods

**Planned:** Addition of more detailed critique of existing methods

**Actual:** Communications with Expert Panel elicited further materials; draft was revised and a final report submitted September 18, 2013.

1. Compile existing vulnerability assessments
2. **Planned:** None

**Actual:** Previously completed

1. Review existing methods and determine best approaches

**Planned:** Submit final Expert Panel report

**Actual:** Final report submitted

1. Select species and habitats to be assessed

**Planned:** Recruit selection team, finalize list of species and habitats to be assessed.

**Actual:** Species and habitat selection delayed to accommodate revision to Expert Panel report. Approached nine scientists to participate in species and habitat selection for additional vulnerability assessments. Four accepted. Draft list of species, organized by habitat, was developed based on criteria provided by the Expert Panel. Draft list, criteria, completed assessments list, and supplemental materials provided to the team and conference call to finalize selection scheduled for November 7.

1. Conduct vulnerability assessments of species and habitats (Target completion date March 31, 2014)

**Planned:** Start of species and habitat vulnerability assessments

**Actual:** We analyzed range data of the 655 species assessed in the LCC and found that 195 species can be considered complete for the entire LCC region. We also assembled species – habitat data for matrix, wetland, and unique habitats to aid in review of the draft species to be assessed.

1. Deliver Draft and Final Report (Target completion date April 30, 2014)

**Planned:** none this quarter

**Actual:** Considerable information exists in the analysis of the completed assessments to date, and this information has been incorporated into a draft of the final project report.

Difficulties Encountered: Delay in species and habitat selection, which is now under way and should be completed by November 8.

# Activities Anticipated Next Quarter: Completion of species and habitat selection and start of first vulnerability assessments.

Expected End Date: 4/30/2014

Costs:

Total life to date expenses (include this quarter):

Total Approved Budgeted Funds: $186,945.45

Are you within the approved budget plan and categories? Yes

Signature:

Date: