

Landscape Conservation Cooperatives Science Priority Projects for FY2010:

Evaluating Representative Species

The Northeast Region of the U.S. Fish and Wildlife Service (Service) has been working with regional partners to develop the North Atlantic Landscape Conservation Cooperative (LCC). The North Atlantic LCC is a science resource and delivery partnership that provides the tools and resources required to plan, design and implement on-the-ground conservation. LCC partnerships consist of federal agencies, states, tribes and non-governmental organizations. The Northeast Region has been working with the North Atlantic LCC partners to synthesize regional science priority needs. In the future, the fully functioning North Atlantic LCC steering committee will provide recommendations to fund the projects that best address identified science priority needs.

In fiscal year 2010, the Northeast Region received \$920,000 to fund three regional science projects. Guided by previously identified regional science priority needs the Service identified an additional project, *Testing the Assumptions of the Representative Species Approach*, that meets some of those needs and will be funded with additional funds in fiscal year 2010.

Lead Investigators:

University of Massachusetts (UMass Amherst); U.S. Fish and Wildlife Service; Northeast States

Amount of funding:

\$120,000 in fiscal year 2010



Wood thrush

Project Description:

Testing the Assumptions of the Representative Species Approach will evaluate how effective a representative species-based process is for determining priority conservation actions for fish and wildlife species and habitats in the North Atlantic LCC. Representative species are a relatively small subset of a larger number of priority species that are chosen to represent groups of these priority species with similar habitats or vulnerabilities in the conservation planning process. The use of representative species for conservation planning is based on the assumption that the results of conservation actions for representative species meet the conservation needs of the larger set of priority species and is an effective and efficient way to do conservation planning at landscape scales.

By looking at conservation planning for both habitats and ecosystems (coarse filter) and how it compares to conservation planning based on the identification and use of representative species (fine filter), this project will provide guidance for the developing the most appropriate

strategies for conservation planning in the North Atlantic LCC. The project will compare the results of a representative species-based approach to species-habitat modeling that uses a coarse-filter, ecological-integrity approach developed by the University of Massachusetts Landscape Ecology Program.

The expected outcomes of this project include maps comparing priority geographic areas based on representative species-habitat models with priority geographic areas based on coarse-filter approaches and a report recommending appropriate strategies for conservation planning using complimentary species and habitat approaches. This evaluation project is expected to be completed within one year.

The use of representative species is a key step for assessing the ability of landscapes to sustain populations of fish and wildlife and prioritizing conservation actions through conservation planning in landscape conservation cooperatives. It is therefore critical that the assumptions



in this process are tested and results of this evaluation used to design future conservation planning.

If you have any questions regarding this project or the North Atlantic LCC, please email northeast_lcc@fws.gov or visit our website at <http://www.fws.gov/northeast/climatechange/lcc>

U.S. Fish & Wildlife Service
1 800/344 WILD
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Bog turtle