North Atlantic Landscape Conservation Cooperative

The North Atlantic LCC

The North Atlantic LCC region is one of the most populous and developed coastal areas in North America. Home to 17 percent of the U.S. population, its natural habitats have long been subject to extreme social and economic pressures. This region's history of agriculture, forestry, industrialization, resource extraction and urbanization has placed severe demands on the environment. Yet, significant areas of undeveloped or sparsely developed land and waters also occur here, particularly further north and further inland. It is also a region with a long history of conservation actions by many conservation agencies, organizations, and existing partnerships.

A forum and common framework for partners and partnerships

The North Atlantic LCC is building on existing partners and partnerships in the Northeast and providing a forum for the conservation community to agree on shared resource outcomes.

- **The North Atlantic LCC includes** 13 state agency partners from Maine to Virginia, Canadian partners, Tribes, Department of the Interior bureaus, other federal agencies, non-governmental organizations, universities and other partners.
- The North Atlantic LCC is working with partners and partnerships in the Northeast to develop **a common framework for landscape-scale conservation in the Northeast**. This conservation framework allows the Northeast conservation community to agree on and prioritize actions needed to effectively define, design, and deliver landscapes to sustain natural and cultural resources in the face of major stressors, including land use change and climate change.
- The North Atlantic LCC is using this framework and **leveraging and building on efforts by the Northeast states** to pool State Wildlife Grant funds to address regional priorities.

Susi von Oettingen/USFWS

Piping plover

- **The New England Governor's Landscape Conservation Initiative** has recognized the vital role of the North Atlantic LCC and identified it as the vehicle to implement their fish and wildlife landscape conservation.

Science and tools to guide conservation decisions

The North Atlantic LCC is developing shared science capacity and supporting initial projects that will provide maps and tools for managers to better understand how landscapes and habitats are likely to be affected by land use change and climate change and to evaluate the effectiveness of alternative conservation actions for sustaining fish, wildlife and plant populations and cultural resources.

The North Atlantic LCC project partners include the Northeast State Fish and Wildlife Agencies, Atlantic Coast Joint Venture, Eastern Brook Trout Joint Venture, The Nature Conservancy, Manomet Center for Conservation Sciences, National Fish and Wildlife Foundation, North Carolina State University, Virginia Tech University, University of Massachusetts, University of Vermont, U.S. Geological Survey, U.S. Forest Service, U.S. Fish and Wildlife Service.

Current North Atlantic LCC projects

- **Designing sustainable landscapes in the North Atlantic**
  This project is developing models and landscape designs that will predict how future terrestrial and wetland habitat conditions are affected by a combination of stressors, including urban growth and climate change, allowing conservation managers to develop the best strategies for sustaining wildlife populations in the North Atlantic LCC geographic area.
- **Forecasting changes in aquatic systems and resilience of aquatic populations**
  This project is developing a set of tools for managers to evaluate how to manage streams for fish and mussels in the face of a changing

climate and existing stressors, such as dams and other barriers for fish passage. The goal is to develop a user-friendly decision support system that will enable managers to make informed decisions about conservation actions regarding brook trout and other stream species and develop comprehensive landscape-scale conservation plans.

- **Forecast effects of accelerating sea-level rise on the habitat of Atlantic Coast piping plovers and identify responsive conservation strategies**
  This project will provide biologists and managers along the Atlantic coast with tools to predict effects of accelerating sea-level rise on the distribution of piping plover breeding habitat and habitat for other beach-dependent species. Results will be used to inform a coast-wide assessment of threats from sea-level rise and related habitat conservation recommendations that can be implemented by land managers and inform recommendations to regulators.
- **Vulnerabilities to climate change of Northeast fish and wildlife and habitats**
  This project builds on an effort begun by the Northeast states to quantify the vulnerabilities of fish and wildlife habitats in the region and how these vary geographically; project how habitats and species will change their status and distributions under climate change; identify potential adaptation options to safeguard vulnerable habitats and species; identify monitoring strategies to track the impacts of climate change and the effectiveness of adaptation actions; and help states to increase their institutional knowledge and capabilities to respond to climate change.

North Atlantic and Northeast LCC Contacts

Ken Elowe, Assistant Regional Director of Science Applications, Northeast Region
413/253 8315
ken_elowe@fws.gov

Andrew Milliken, North Atlantic LCC Coordinator
413/253 8269
andrew_milliken@fws.gov

U.S. Fish & Wildlife Service
1 800/344 WILD
http://www.fws.gov

September 2011

Landscape Conservation Cooperative in the Northeast Region