

Climate change effects, potential mitigation in Northeast forests subject of Forest Service Report

August 15 2012

A new report by U.S. and Canadian scientists analyzes decades of research and concludes that the climate of the Northeast has changed and is likely to change more. The report outlines the effects of climate change on multiple aspects of forests in the northeastern corner of the United States and eastern Canada and concludes with recommendations on adaptive and mitigating strategies for dealing with future effects.

The report, "[Changing Climate](#), Changing Forests: The [impacts of climate change](#) on forests of the northeastern United States and eastern Canada," brings together science on all aspects of forest health, from changes in the [water cycle](#) to changes in [trees](#), wildlife and nuisance species. The report focuses on established science and offers recommendations for decision-makers on steps that will make forests more resilient to the [effects of climate change](#). Published by the U.S. Forest Service as General Technical Report NRS-99, it is available at: <http://nrs.fs.fed.us/pubs/41165>

"Nothing is certain about climate change except that it poses a tremendous challenge to forests," according to Michael T. Rains, Director of the Forest Service's Northern Research Station. "[Forest Service](#) science is developing tools such as this report that will inform decision-making and contribute to making the nation's forests more resilient to changing conditions."

The region covered by the report includes seven states in the United States – Maine, New York, Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island – and the Canadian provinces of Quebec, Labrador, Newfoundland, New Brunswick, and Nova Scotia. The report stems from the work of Northeast Forests 2100 Initiative, a coalition of 38 U.S. and Canadian scientists. Results of Northeast Forests 2100 research were published in a series of papers in the *Canadian Journal of Forest Research* in 2009.

As part of the Northeast Forests 2100 project, scientists examined the influence of climate change on the forests of the Northeast using historic records, experimental studies, and computer models, and found linkages between climate and the basic functioning of the region's forests. Scientists concluded that climate change will have profound effects on Northeast forests with the accelerating rate of climate change and the associated stresses that climate change generates.

"The quantity of information available about climate change sometimes makes it hard to find information that is relevant to a particular region," according to Lindsey Rustad, a team leader and research ecologist with the Northern Research Station. "Our intent was to create a credible go-to source of science on the effects of a changing climate on Northeastern forests." The report concludes with recommended adaptive and mitigating measures that could help sustain [forest](#) health and make forests more resistant to the effects of a changing climate.

Provided by USDA Forest Service

Citation: Climate change effects, potential mitigation in Northeast forests subject of Forest Service Report (2012, August 15) retrieved 26 April 2024 from <https://phys.org/news/2012-08-climate-effects-potential-mitigation-northeast.html>

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