



United States Department of Agriculture

## Tribes and Climate Change Research USDA Forest Service

The same long, close connections to the land that create special vulnerability provide insights for addressing climate change impacts.

### Research Objectives

- Identify research needs and opportunities to support eastern tribes' planning for climate change effects.
- Examine the influence of distinct cultural groups, ecosystems, and legal relationships with the federal government on tribes' options for adaptation to and mitigation of climate change.



Left: Forests provide essential resources for the survival of Native American cultures and economies. Credit: Ferdy Goode

Right: Changes in phenology for cultural practices like basswood bark harvesting may provide early indicators of fine scale climate change effects. Credit: Natasha Duarte

### Accomplishments

- Lynn et al. 2013. **The impact of climate change on tribal traditional foods.** *Climatic Change*. Available at <http://link.springer.com/article/10.1007%2Fs10584-013-0736-1>
- Vogesser et al. 2013. **Cultural impacts to tribes from climate change influences on forests.** *Climatic Change*. Available at <http://link.springer.com/article/10.1007/s10584-013-0733-4>
- Center for First Americans Forest Lands. 2013. **Shifting Seasons: Great Lakes Forest Industry, Products, & Resources Summit Report & Findings.** Available at <http://sustainabledevelopmentinstitute.org/forestry-summit-2012>
- Center for First Americans Forestlands. 2013. **Shifting Seasons: Great Lakes Climate Change Summit.** Available at <http://sustainabledevelopmentinstitute.org/resources/ccsummit-draft2>



Forest Service

Research & Development

Northern Research Station

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### Ongoing Research

- Helping Forests Walk, assessing opportunities for assisted migration of culturally important species in the Haudenosaunee (Iroquois) Confederacy.
- Mobilizing Planning around Climate Change: Developing a Framework for Collaboration among Stakeholders and the Wabanaki Nations of Maine, catalyzing climate change planning and collaboration between tribes and federal, state, and municipal stakeholders.
- Research partnership with the College of Menominee Nation through the co-sponsored Center for First Americans Forestlands.
- Fostering tribal adaptation planning through partnerships with the Northeast Climate Science Center & College of Menominee Nation.



*Left:* Climate change may increase the vulnerability of culturally important species such as black ash. Credit: Marla R. Emery, USDA Forest Service

*Right:* Student developed alternative energy projects at the College of Menominee Nation. Credit: Dean Davis

### Selected Partners and Contact

- Center for Native Peoples and the Environment, State University of New York College of Environmental Science and Forestry
- College of Menominee Nation, Sustainable Development Institute
- Haudenosaunee Environmental Task Force
- Native American Studies Program, University of Maine

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