

Climate Change

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Research: Detecting the Severity and Extent of Wildland Fires and Pre- and Post-Burn Fuel Loads for the Southeastern U.S.

The Eastern Forest Environmental Threat Assessment Center of the Southern Research Station is utilizing remote sensing imagery to determine, evaluate, project, and map wildland pre- and post-burn fuels for the southeastern U.S. The wildland fuels data and mapping products will be validated with ground measurements and derived data products. Existing forest inventory data, climate, soil, and land use datasets from the southeastern U.S. will be used as input parameters to forest process models to predict, validate, and project forest growth and wildland fuels from 2001 to 2050. These projections will assess the impacts of ozone, nitrogen deposition, atmospheric carbon dioxide, and climate change on forests at the local to regional scale for the southeastern U.S. This research will address the needs of fuel managers to: 1) integrate spatial vegetative cover data and other variables into assessments of fire hazard, ecosystem resilience to disturbance, and risks to environmental quality using current research findings and models of ecosystem processes; and 2) predict future disturbance patterns under alternative land management and land use alternatives and under a range of climate change and other disturbance scenarios.

To view this research, visit: <http://www.forestthreats.org/current-projects/project-summaries/current-projects-44>

For more information about this research, visit: http://www.srs.fs.usda.gov/pubs/ja/ja_barton001.pdf

Upcoming Event: 2nd International Conference on Forests and Water in a Changing Environment

Global climate change has resulted in a series of chain reactions in the watershed ecohydrological processes. Growing concerns over watershed degradation, water scarcity, and ecosystem sustainability due to climate change require new approaches to managing forest water resources. This conference will discuss forest-water relations and changing environmental conditions. The goal



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of this symposium is to provide a forum for experts from around the world on eco-hydrology, restoration ecology, forest ecology, watershed management and global change sciences to share knowledge and research experiences, and develop long-term international collaborations on watershed research.

This event will be held in Raleigh, NC from September 14-16, 2009.

For more information visit: <http://www.sgcp.ncsu.edu:8080/>

For more upcoming events visit InterfaceSouth at: <http://www.interfacesouth.org/resources/events.html>

In the News: Climate Change May Be Benefiting Poison Ivy

Researchers believe climate change may actually benefit poison ivy. In two laboratory studies conducted in 2007, poison ivy plants virtually doubled in size and their itchy oil became more potent when the test plants were grown in atmospheres of increased carbon dioxide. If the research findings are correct, carbon dioxide — which is emitted into the air naturally through carbon deterioration and through such human activities as burning fossil fuels — might be the equivalent of growth hormone for the irritating weed. Carbon dioxide levels in the atmosphere are said to have increased about 20 percent since 1970.

To read the full story, visit: http://www.projo.com/news/content/poison_ivy_07-06-09_10EPFEO_v33.3b3e70f.html

For additional current news articles on WUI topics, visit InterfaceSouth at: <http://www.interfacesouth.org/inthenews.html>

Literature: Adapting to Climate Change in United States National Forests

Climate change is already affecting forests and other ecosystems, and additional, potentially more severe impacts are expected. As a result, forest managers are seeking practical guidance on how to adapt their current practices and, if necessary, their goals. Adaptations of forest ecosystems, which in this context refer to adjustments in management (as opposed to “natural” adaptation), ideally would reduce the negative impacts of climate change and help managers take advantage of any positive impacts. This article summarizes key points from a review of climate change adaptation options for United States national forests produced under the auspices of the United States Climate Change Science Program.



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To read the full article, visit: http://www.srs.fs.usda.gov/pubs/ja/ja_blate001.pdf

For more articles on WUI issues visit InterfaceSouth at: <http://www.interfacesouth.org/resources/literature.html>

Website: Climate Change Resource Center

The Climate Change Resource Center (CCRC) is a reference Web site for resource managers and decision-makers who need information and tools to address climate change in planning and project implementation. Changing climates have already catalyzed changes in environments throughout the West, and future effects are expected to be greater. Although future scenarios are daunting, managers can do much to promote adaptation to climate change and encourage reduction of human effects on climate.

The CCRC provides information about basic climate sciences and compiling knowledge resources and support for adaptation and mitigation strategies. The site offers educational information, including basic science modules that explain climate and climate impacts, decision-support models, maps, simulations, case studies, and toolkits. The site is a joint project of the three western Forest Service Research Stations [Pacific Northwest Research Station \(PNW\)](#), [Pacific Southwest Research Station \(PSW\)](#), [Rocky Mountain Research Station \(RMRS\)](#), and the [Western Wildland Environmental Threat Assessment Center](#).

To view this website, please visit: <http://www.fs.fed.us/ccrc/>

For more Web links about interface issues visit <http://www.interfacesouth.org/resources/websites.html>

The USDA Forest Service created Interface South to heighten awareness of and provide information about wildland-urban interface (WUI) issues, serving a diverse audience of natural resource professionals, private forestland and homeowners, planning departments, local policy-makers, and many more.

Contact Us!

If you have any questions or comments please contact Annie Hermansen-Baez, ahermansen@fs.fed.us, 352-376-3271 or the project intern at swuintern@yahoo.com