



United States Department of Agriculture

Annual Report Brief

U.S. FOREST SERVICE SOUTHERN RESEARCH STATION

Science You Can Use

For Decision Makers:



Forests can mitigate the impacts of climate change. While forests are directly impacted by a changing climate, the most significant and near-term impacts will occur from an increase in frequency and severity of insect outbreaks, wildfires, diseases, and invasive species. We have enough information to mitigate impacts and help forest ecosystems adapt. For the comprehensive report by Federal and university scientists:
www.fs.fed.us/pnw/pubs/pnw_gtr870/pnw_gtr870.pdf

For Watershed Managers and Scientists:



Hemlocks are dying. What's next? Eastern hemlocks are facing widespread decline due to the exotic invasive insect, the hemlock woolly adelgid. Changes in local forest hydrology from losses of eastern hemlock will largely depend on which species replace it. For more information:
www.srs.fs.usda.gov/compass/2013/05/21/loss-of-eastern-hemlock-will-affect-forest-water-use/

For Forest Managers:



Web-based tool helps forest managers track changes in the forest. *ForWarn*, a state of-the-art forest change recognition and tracking system, detects disturbances and tracks forest recovery. ForWarn uses NASA satellite imagery to develop near real-time maps that assist forest managers in detecting forest changes, including early or delayed growing seasons, effects of extreme drought, scars from tornados, insect outbreaks and wildfires. Use this threat detection system: <http://forwarn.forestthreats.org/>

For Family Forest Landowners:



Get more value from your forest. The Forest Service has tracked timber production more than 70 years. For the latest timber prices, tax tips, and other useful landowner information:
www.srs.fs.usda.gov/research/value-from-forest/





For Land Managers:



Assisting Americans Adapt to climate variability. One of the seven regional hubs across the country that will deliver science-based knowledge on how farmers, ranchers, and forest landowners can make informed decisions related to weather related impacts is based in Raleigh, N.C. and led by an SRS researcher. This hub along with the other six will provide information that will help land managers lessen the effects of drought, extreme heat, floods, invasive pests and other impacts that can cause loss of revenue. To find the closest Hub to your location visit:

www.usda.gov/oce/climate_change/regional_hubs.htm

For Botanists and Naturalists:



We're getting out in the woods to learn more about important forest plants. Recognizing the importance of non-timber forest products, we recently partnered with four institutions to start tracking plants like American ginseng or other edible plants, valuable medicinal plants, and important indigenous plants. For more information:

www.srs.fs.usda.gov/compass/2013/06/27/tracking-those-other-forest-products/

For Communities in the Wildland-Urban Interface:



Nationwide strategy will aid in decreasing human and ecological losses from wildfires.

The Wildland Fire Strategy is an integrated and comprehensive plan to decrease human and ecological losses from wildfires. Scientists from our agency lead the science and analysis team. For more information:

www.fs.fed.us/restoration/cohesivestrategy.shtml

For Youth and Their Teachers:



Bringing to life our scientists and their work. Through the interactive exhibit "Climate Change in the Southern Appalachians" located at the Cradle of Forestry in the Pisgah National Forest in North Carolina, you can get a hands-on experience on how climate change is impacting southern forest. If you cannot visit the exhibit, see this link:

www.srs.fs.usda.gov/cradle/

Stay Connected:



We're located throughout the South. In small towns, large cities, on university campuses, in experimental forests, our researchers are working on the science needed to sustain and enhance southern forest ecosystems and the benefits they provide. To see where we are, visit: www.srs.fs.usda.gov/locations/