



United States Department of Agriculture

[Home](#) [Publications](#) [Locations](#) [Blog](#) [About Us](#)

Forest Service

Research and Development

Monthly News and Highlights from the World Leader in Forestry Research

#SoundScience

[Twitter](#) [Instagram](#) [Facebook](#) [YouTube](#)

[CLICK HERE TO SUBSCRIBE](#)

U.S. Forest Service R&D Newsletter: December 2019

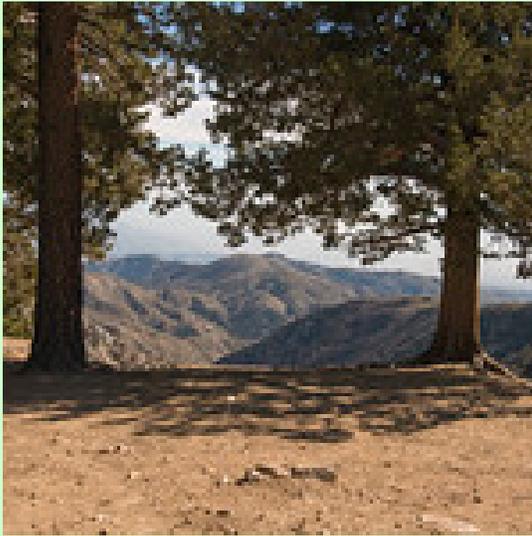
News from the Washington Office and Research Stations



FEATURED NEWS

The Mood Boosting Benefits of Nature

Can exposure to everyday natural outdoor environments affect your mood over time? [Research](#) led by the USDA Forest Service and conducted in four European cities suggests that, in general, the answer to this question is "yes." This research supports mounting evidence of the mental health benefits of exposure to outdoor environments, especially for urban populations such as those included in this research. This research was conducted in: (1) Barcelona, Spain (2) Stoke-on-Trent, United Kingdom (3) Doetinchem, The Netherlands and (4) Kaunas, Lithuania.



SUSTAINABLE FOREST MANAGEMENT

New Report on Drought Management

A new Forest Service [report](#) provides region-specific management options for increasing resilience to drought in the U.S. Coverage includes options such as managing stands at a lower density, favoring species that require less water or tolerate drought, creating refugia for aquatic species, and managing water use.



SUSTAINABLE FOREST MANAGEMENT

Invasive Insects: Identifying the Worst Offenders

From [Inside Science](#): Scientists can now predict which invasive Insects will wipe out forests. Surprisingly, it's the trees, not the bugs, that matter, according to a study that was partially funded by the Forest Service. These results could help regulators prioritize limited resources to protect forests from foreign pests.



DELIVERING BENEFITS TO THE PUBLIC

Cutting Edge Research at the Fire Sciences Laboratory

Take a quick, enlightening [online tour](#) of wildland fire research conducted at the Forest Service's Missoula Fire Sciences Laboratory. Also, read a recent *Scientific American* [article](#) on predicting fire tornadoes--the wildfire season's scariest phenomena--written by a mechanical engineer at the Laboratory who is also a fire fighter.



SUSTAINABLE FOREST MANAGEMENT

Demystifying Ghost Forests

Ghost forests are patches of dead and dying trees that haunt the coastlines of the Carolinas and Virginia where sea level is rising. The Forest Service and partners are mapping these watery graveyards and developing [strategies](#) to maintain the productivity of coastal lands.



FOREST PRODUCTS

Wood Buildings: The Sky is the Limit (Almost)

From [The New York Times](#): More and more organizations, including The Nature Conservancy, are using mass timber for construction of even large-scale buildings. The fire resistance of mass-timber components has been tested by the Forest Service and others. For more on this topic, scroll down to hyperlinked infographic.



SUSTAINABLE FOREST MANAGEMENT

Addressing Poisons from Illegal Pot Grows

From NPR: Insecticides and other chemicals from illegal marijuana grows are poisoning water and wildlife in some national forests. Now, an unlikely coalition of law enforcers, ecologists, industry and politicians in California is addressing the problem. The Forest Service helped develop an algorithm that helps find illegal grows from satellite imagery to support cleanups of toxins and trash.



SUSTAINABLE FOREST MANAGEMENT

Lessons from the Northwest Forest Plan

The Northwest Forest Plan has guided the management of 17 national forests in the Pacific Northwest for 25 years. To help inform future planning, the Forest Service and partners summarized scientific literature published under the Plan. The [summary](#) covers wildfire and climate change, conservation, socioeconomics, ecosystem services, stakeholder collaboration and adaptive management.



PARTNERSHIPS

Science-Based Restoration of Aspens

Aspen trees add color, biodiversity and natural fire breaks to western landscapes--but they are experiencing declines. Guidelines for aspen restoration were collaboratively [applied](#) in a challenging real-world setting. Also, the Forest Service and partners revised aspen restoration guidelines.



SUSTAINABLE FOREST MANAGEMENT

New Inventory of Protected Areas

A new report and map of protected areas in Puerto Rico has been published by the Conservation Action Team and the Forest Service International Institute of Tropical Forestry.



DELIVERING BENEFITS TO THE PUBLIC

Reconciling Woodpeckers with Salvage Logging

Many woodpecker species favor habitats provided by dead and dying trees in post-wildfire landscapes. Therefore, managers of post-fire landscapes must often balance the need to maintain habitat for woodpeckers that are species of concern against the need to conduct revenue-generating salvage logging sales. FIRE-BIRD is a new Forest Service mapping tool that can help managers locate probable woodpecker habitat in post-fire landscapes.



DID YOU KNOW?

Household yards in the U.S. cover more land area than farmed corn--the nation's leading agricultural crop. This fact underscores the significant cumulative ecological impacts of household yards.

Forest Service research covers varied topics that address yard care, including the use of fertilizers and pesticides, the frequency of mowing, managing pollinators, promoting native wildlife, and selecting tree species for planting.

Messages from the Deputy Chief of Research and Development



Research ecologist [Jessica Halofsky](#) received the 2019 "Climate Adaptation Leadership Award for Natural Resources."



Meet [Frank Kanawha Lake](#), a wildland fuels and fire research scientist.

FOREST SERVICE RESEARCH: BY-THE-NUMBERS

A 7" thick floor made from **Cross Laminated Timber (CLT)**
- a new high-strength wood building product -
has a calculated fire resistance of more than **2 hours!**



[Click Here for More About Forest Service Research on Tall Wood Buildings](#)

[Click Here to Visit the Archives of the R&D Monthly Newsletter](#)



Forest Service

STAY CONNECTED



USDA Forest Service | 201 14th Street SW, Washington, DC 20250

Sent by research@fs.fed.us