

## First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service Eastern Forest Environmental Threat Assessment Center September 1, 2017, 11:00 a.m. (ET)



## FFACCTs Highlights – Joel Larson, Acting Director, USDA Southeast Regional Climate Hub

#### Washington Office Update

Karen Dante, Climate Change Adaptation and Policy Specialist, National Forest System, USDA Office of Sustainability & Climate - The "Drought and Invasive Species" webinar is scheduled for September 14 from 2:00 to 3:30 pm EST. Directors Allen Rowley and Cindi West will provide opening remarks followed by several excellent speakers. Continuing education credits are available, and the webinar will be recorded.

#### **Climate Science Center Updates**

#### Toni Lyn Morelli, Research Ecologist, Northeast Climate Science Center (NE CSC) & University of Massachusetts

- "<u>Threats to North American forests from southern pine beetle with warming winters</u>," a new paper coauthored by NE CSC scientists Radley Horton and Tony D'Amato and Fellows Corey Lesk and Ethan Coffel, has been published.
- The NE and SE CSCs are happy to welcome new Northeast and Southeast Tribal Climate Science Liaison Casey C. Thornbrugh.
- The NE CSC is modifying the <u>Climate Project Screening Tool</u> for state use.
- The NE CSC is moving forward on the Northeast Refugia Research Coalition.

#### **Station and Regional Updates**

#### Rachel Steele, National Coordinator, USDA Climate Hubs

- The Hubs are working on end-of-year reports and putting together FY18 work plans.
- The Hubs are upgrading their web pages. The process is ongoing: a committee is reviewing regional and national pages to determine if content is relevant and useful. The goal is to ensure stakeholders can get the information they need easily and efficiently.

# Dave Hollinger, Director, Project Leader (Climate, Fire, and Carbon Cycle Sciences), Northern Research Station (NRS), and Director, USDA Northeast Regional Climate Hub

- NRS scientists, including John Campbell and Lindsey Rustad, are participating in the Northern Forest DroughtNet, and evaluating the impacts of precipitation change on northern forests, using a combination of synthesis of existing data and new large scale forest drought experiments. As part of this effort, two drought experiments were initiated in 2016 by diverting rainfall off plots; a treatment made more severe by a naturally occurring regional drought. Early results showed that the productivity of red oak was more sensitive to drought than white pine at the Thompson Farm, NH experiment, whereas the productivity of red maple was relatively insensitive to drought at the Hubbard Brook, NH experiment. An emerging hypothesis is that current and future changes in precipitation will alter the composition and productivity of northeastern forests.
- The Hub is working with the Natural Resources Conservation Service (NRCS) and the Bureau of Indian Affairs on a Tribal Weather Station Project. The goals are to increase weather and climate awareness, improve weather-related decision making for Tribal Agriculture and Forestry, and assist with STEM (science, technology, engineering and mathematics) educational opportunities for Tribal youth. About 30 automated weather stations will be installed on Tribal lands and join the NRCS SCAN network. Applications will start soon (September). Contact Suzanne Baker (Suzanne.Baker@ny.usda.gov) for more information.
- The recently published summer Hub newsletter focuses on water.

#### Leslie Brandt, Climate Change Specialist (Northern Institute of Applied Climate Science [NIACS]), Eastern Region

- NIACS scientists recently participated in a Climate Adaptation Demonstration tour in New England. They also visited the Culture for Climate Change site in northern New Hampshire.
- NIACS scientists are conducting climate change adaptations program training for Minnesota Department of Natural Resources employees at the forestry center in northern Minnesota.



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- A <u>new paper published in *Climatic Change*</u> is part of a special issue through the USDA Climate Hubs. The paper summarizes the results of an eco-regional vulnerability assessment and discusses some common themes and adaptive capacity factors and vulnerabilities across the Midwest and Northeast.

### Emrys Treasure, Regional Inventory, Monitoring, and Assessment Coordinator, Southern Region

- The region continues to focus its climate change efforts on plan revision forests. The <u>Francis Marion National Forest</u> has released its final plan and Environmental Impact Statement (EIS). The <u>El Yunque National Forest</u> in Puerto Rico has released its draft forest plan and EIS which demonstrate a similarly integrated approach to climate change, but in a very different ecological, social, and economic context. Work continues on the Nantahala-Pisgah forest plan revision, and the National Forests and Grasslands in Texas are working on their forest plan assessment.
- There is lots of work and discussion related to restoration in the region, including longleaf restoration that is clearly aligned with increasing ecosystem resilience to many of the effects expected with climate variability and change. The Southern Region will be applying a similar approach to shortleaf restoration.
- Broader-scale monitoring strategies are a key topic in this area. Sarah Wiener from the Southern Research Station and the Southeast Climate Hub will be helping to design a "monitoring census" for the region that will better define monitoring activities that may be important in informing understanding of climate variability and change.

#### Michael Gavazzi, Biological Scientist, USDA Southeast Regional Climate hub (SERCH)

- The Hub Fellows are presenting findings from their NRCS and Farm Service Agency (FSA) survey to NRCS and FSA leadership next month and have submitted a paper on the study to a special issue of *Renewable Agriculture and Food Systems*.
- The Hubs are supporting and working with the Gulf Coastal Plain & Ozarks Landscape Conservation Cooperative to develop and evaluate adaptive management strategies in the region. This is a partnership among federal, state, university and non-government organizations. They will be reaching out to stakeholders (including R8 National Forest system) to better understand priorities, and collect information about current and potential management strategies.

#### William Gould, Research Ecologist, International Institute of Tropical Forestry, and Director, USDA Caribbean Climate Hub

- Dan Lawson, National Climate Hub Leader, will visit the Hub in September. Committees are forming, including local USDA leaders and non-federal stakeholders, to evaluate focus areas for the next fiscal year.

- A survey from Hub fellows highlighted that agriculture advisors don't use a lot of available climate tools as much as they could, so messaging is being evaluated.

- The first of four adaptation workshops has been completed. Others will be completed before March 2018.

- Efforts are underway to team up with university and non-governmental organizations to host farm workshops that demonstrate good climate adaptation techniques. The Hub is collaborating with a film crew to record workshops and develop products that can be disseminated through agricultural extension or other mechanisms to more broadly communicate these best practices.

#### **Presentation**

"Proof that some, but not all wildland fires increase surface water supply" – Dennis Hallema, Hydrologist, Eastern Forest Environmental Threat Assessment Center

#### The next FFACCTs will take place October 6th.

Please send comments, feedback, and presentation suggestions to Stephanie Worley Firley, Eastern Threat Center, (<u>sworleyfirley@fs.fed.us</u>) and visit the <u>FFACCTs webpage</u> for additional information.