

First Friday All Climate Change Talks (FFACCTs)

Hosted by the USDA Forest Service Eastern Forest Environmental Threat Assessment Center February 6, 2015—11:00 a.m. (ET)



FFACCTs Highlights – Opening remarks by Steve McNulty, Research Ecologist and Team Leader, Eastern Threat Center

Washington Office (Research and Development) Update

Karen Dante, Climate Change Fellow, Climate Change Advisor's Office (CCAO)

- Dave Cleaves (Climate Change Advisor to the Chief) retired last week after 26 years with the Forest Service.
- John Coulston, Dave Wear and Jim Vose published a paper last Friday on forest carbon in the southeastern United States. Paper entitled, "Complex forest dynamics indicate potential for slowing carbon accumulation in the southeastern United States". Link here -<u>http://www.srs.fs.usda.gov/pubs/ja/2015/ja_2015_coulston_001.pdf</u>

USDA Climate Hubs Update

Randy Johnson, National Hub Coordinator, USDA Office of the Chief Economist

- Tools committee met in January to review adaptation and mitigation tools to present online; evaluating usefulness and should have something available online by summer
- Representatives attended RISA annual meeting that provided good collaboration opportunities
- Hub working to develop an adaptation tool after the tool developed by NIACS. A group tried using it on farmland and found it should be easy to modify for use by farmers and ranchers

Northeast Climate Science Center (NECSC) Update

Toni Lyn Morelli, Program Manager, Northeast Climate Science Center

- The NECSC is working with the northeastern and midwestern states to contribute our expertise in climate science and impacts to the development of the State Wildlife Action Plans (SWAPs).
- The spring webinar series has begun, Wednesdays @3:30 ET (<u>http://necsc.umass.edu/news/spring-webinar-series</u>).
- NECSC helped to organize a LCC/CSC Symposium at the 2015 Midwest Fish & Wildlife Conference, being held February 9-10 in Indianapolis.

Southeast Climate Science Center (SECSC) Update

Cari Furiness, NC State University, DOI/USGS

- Developing coordination efforts in the SE with RISA, SE Climate Hub, LCCs; exploring region-wide collaboration
- Initial set of FY15 projects getting underway; looking especially at coastal refuge design but awaiting official announcement
- Nomination and selection process for 2015 Global Change Fellows for upcoming academic year
- Beginning planning for Global Change Symposium

Station Updates

Kier Klepzig, Assistant Director, Southern Research Station (SRS)

- John Coulston, Dave Wear and Jim Vose have a new paper just out in Scientific Reports (from the publishers of Nature): Complex forest dynamics indicate potential for slowing carbon accumulation in the southeastern United States. The key message is that forest cutting, forest aging, and land use changes clearly dominate forest carbon dynamics and highlight the need for careful assessment of policies and programs that affect forest management and land use transitions in rural areas.
- New research by Pete Caldwell, hydrologist at Coweeta, describes a way to use air temperature to estimate stream temp: <u>http://www.srs.fs.usda.gov/compass/2015/01/06/the-future-of-streams-using-air-temperature-to-model-stream-warming/</u>. This allows determination of the level of stream warming even where there isn't



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much long-term stream data available. It is a continental scale model so it can be used anywhere in the US not just the Southeast.

Rich Birdsey, Strategic Foresight and Rapid Response Group, Northern Research Station (NRS)

- Last week in DC the carbon cycle science meeting was well run and attended and hosted prominent speakers. Strong focus on monitoring has shifted towards modeling and outputs relevant to managers and to policy. There has been an evolution to include more social science, more focus on urban ecosystems, and more focus on direct input to policy makers and an emphasis on communication with policy makers and managers. It is a biannual meeting of 13 agencies in three countries with about 250 scientists; it's been going on for 15 to 20 years now and really is the premier event at dealing with carbon cycle science.
 - Rick Duke and Nate Hultman represented the White House and were quite familiar with work by the USFS. They briefed the group on upcoming global climate summit, to take place in December, with hopes for agreement on GHG. Outreach to China and India by US President is optimistically looked upon as hopeful for good start for the summit and successful conference of the parties.
 - Derek Muller, developer of *Veritassium YouTube Channel*, and Randy Olsen, scientist turned filmmaker, presented messages about Climate Change with 'good stories' and what key elements of this kind of presentation would entail. E.g. the story gets lost if there is only expounding on all the uncertainties.
 - Two new areas of research highlighted: methane as GHG with mention of issues of fracking and leaks from pipelines; arctic issues such as thawing of permafrost and changes in boreal forest.

National Forest System Updates

Leslie Brandt, R9/Northern Institute of Applied Climate Science-Eastern Region

working on a web application version of our forest adaptation resources tool; The Institute is looking for testers
and volunteers are asked to contact Leslie

David Meriwether, Ecosystems Management Coordinator, Southern Region

• a conflict prevented David from joining the call.

Presentation

"Reaching Common Ground: Communicating Climate Change Impacts with Managers" -- Steve McNulty, USDA Forest Service, Southern Research Station – Research Ecologist and Director, Southeast Regional Climate Hub

Q&A

Rich Straight: In light of building relationships, what role do you see for national representatives speaking to groups? Do you need more local representation and is a national person addressing a group detrimental or positive... or is it how you follow up?

Steve: To a certain extent it is preaching to the choir; at a national level they're talking to other scientists and other researchers that are developing these kinds of tools and it's expected that they will take them out to the land manager. At this level speakers are really important for motivating and providing national direction. It is natural that, from the standpoint of a land manager working on the district, they trust their buddy at the next desk over much more than they would trust somebody coming out of the Washington office. I think honestly the most influence is going to be from someone that they already trust. That may be at a much more regional or local level, like the state Forester or supervisor or someone that is going to carry much more weight than someone who they have never met before. They're both useful but they're useful for different audiences.



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Ian Reid: I'm a land manager as line officer from Oregon, and the issue is important to me. Many managers have observed change but many landowners do not believe it is human caused. This is such a big issue to cope with on the ground and there's a lot of good technology transfer out there. I think a lot depends on how you deliver that message so you're not drowning people with bad news of what they've already heard, but more kind of a hopeful message of things you can deal with through projects. I think we all agree that there are things we need to do for our landscapes to better prepare. ELFLAND is a nice mnemonic that's going to stick in my brain. I got a lot from your talk and as a land manager, who definitely buys into this; I want to develop some projects that will create resilient landscapes.

Steve: That's great. Thank you very much for tuning in today. You know I think one of the best ways we've seen make a difference is by a farmer with a new practice showing neighbors how they are using it and how it would save money and still maintain yields, reduce soil erosion and all the things associated with that. Then neighbors see, ask about it and decide to use the practice. It gets back to the trust issue. They are more likely to trust the farmer nearby (and try it on their own piece of land) than somebody that just comes in from the blue and tells them here's all the statistics that tell you this is good. It is encouraging to see how the practice then gets spread by word of mouth and observation. You just don't know where it's going to go and how far it will spread, but more likely than not it will actually end up affecting tens or hundreds of times more acreage.

Michelle Schoeneberger: -related to the map of the billion-dollar weather/climate disasters -- how much of that map is really a reflection of shift to riskier but potentially higher return systems? The number one information request across the US in the agriculture sector is for better climate forecasting so they can have greater success in figuring out when the crops go in and when can/should they come out. The conundrum becomes, okay I can supply you with better information for managing risk within your riskier system, but does that really develop a more resilient system? Steve – Perhaps not a more resilient system or that, on the short term, more productive but not necessarily more resilient. The key seems to be like the devil is in the details. You have to look at what specific conditions are at the local level and what is occurring at the specific location to be effective.

Round Robin Discussion

The next FFACCTs will take place *March 6, 2015*. See <u>http://www.forestthreats.org/news/upcoming-events/ffaccts</u> for details.

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.