

Triangle Climate & Landscape Researchers' Doggie Bag

Take-Home Info from the Brown Bag on January 8th, 2015

Main Presentation

"Bioenergy in the South: An Ever-Changing Landscape". Christopher Galik, a Senior Policy Associate with the Nicholas Institute for Environmental Policy Solutions, discussed the impacts and drivers of the emerging Southern bioenergy market. In recent years, Southeast forests have been increasingly looked to as a source of greenhouse gas mitigation and renewable energy potential. At the same time, the use of forest biomass as an energy source is not without controversy. Chris reviewed the potential landscape-level responses we could see from new demands being introduced into Southeast forests, emphasizing emerging policy drivers from both the U.S. and abroad.

Bioenergy has remained an engaging topic to Chris for more than a decade, partly due to the simultaneous interaction of three different changing landscapes: the economic landscape of forest products markets, the policy landscape of renewable energy standards and greenhouse gas accounting, and the actual landscape of forest extent and composition. Chris's research explores the outcomes of various bioenergy demand scenarios using models that are most reliable at telling general stories of the near future. Rather than tracking the life cycle of individual carbons sources and sinks, these models compare the differences in carbon benefits and costs—the delta—between different futures.

Here are some key take-home messages that jumped out from this complex and fascinating talk:

- Biomass energy is overall good for the carbon budget, not only because it displaces fossil fuel use, but because the new market creates increased demand for forest products, which drives up their price. Higher prices incentivize keeping more land forested, which sequesters carbon.
- Pine forestry is very responsive to market signals, but hardwood-dominated forestry (as is often found in the Northeast) does not produce the same carbon benefits.
- The conclusion of your carbon story depends on the scale—you can produce benefits or costs depending on whether you look at landowner, a county, a state, or region. So, how we account for biomass energy matters for policies like the EPA Clean Power Plan Framework.
- Harvesting forests for biomass in biodiverse areas obviously raises conservation concerns. But it's possible to protect critical areas through policy without altering the carbon outcome by concentrating demand on less ecologically sensitive lands.

Next Triangle Climate & Landscape Researchers' Brown Bag Topic

February 12th, 2015: "Searching for Heterogeneity in the Urban Landscape: Urban Ecology in High-Definition" with Scott Beck, doctoral student in the NCSU Dept. of Forestry and Environmental Resources, Urban Ecology & Geospatial Analytics

Time: 12:00-1:30pm

Location: Jordan Hall 1214

News & Events

Chris Moorman giving talk on bioenergy Jan. 28th

- For those interested in learning more about bioenergy, Dr. Chris Moorman will be giving a talk on Jan. 28th about guiding the development of biomass harvesting guidelines to ensure the environmental sustainability of gleaning logging residues for renewable energy. This is part of the [FER seminar series](#) at NCSU and will be held in Jordan 3214.

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Alternating Brown Bag locations this year

- For the foreseeable future, Brown Bags will be held alternately on Centennial Campus in the WRC building and in Jordan Hall. Please be sure to check your reminder emails and the [Brown Bag page](#) on the South Atlantic LCC website to be sure of the location each month.

Attendees & Contacts

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Meet your Brown Bag Hosts

South Atlantic Landscape Conservation Cooperative: Hilary Morris, Blueprint User Support and Communications (hilary_morris@fws.gov)

If you're not a member of the South Atlantic LCC's website, simply click [here](#) to join for regular updates!

Southeast Climate Science Center: Aranzazu Lascurain, Program Coordinator (alascur@ncsu.edu)

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