

The Duke Center for Environmental Solutions

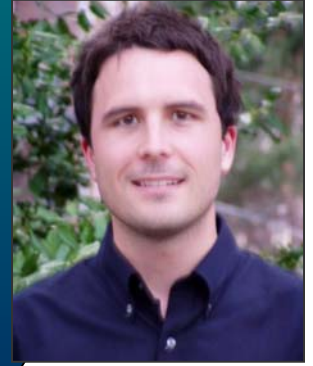
The Environmental Institutions Seminar Series



Presents

CES Grant Recipients
Wednesday, April 2, 2003
12:30pm –2:00pm

Levine Science Research Center, Room A150
Research Drive, Duke University



Jon Eisen-Hecht

Ph.D. Candidate, Nicholas School of
the Environment & Earth Sciences

A Hierarchical Bayes Approach to Modeling Landowner Decision-Making: A Study of Wetland Restoration Programs

Abstract:

In the past two decades, voluntary wetland restoration programs have emerged as part of changing wetland policies that now recognize the various important environmental benefits provided by wetlands. My research examines how the options provided by wetland restoration programs influence the participation decisions of eligible landowners. Utilizing a data set collected from over 500 landowners in North Carolina, this study uses economic modeling techniques (Hierarchical Bayes analysis) to examine the factors that influence individual landowner participation in voluntary wetland restoration programs. These models were used for policy analysis to determine the most efficient configuration of program attributes for wetland restoration programs with various goals and objectives. The study results will help resource conservation agencies in the design and implementation of wetland restoration programs, and will help resource conservation agencies maximize their program objectives while minimizing the required costs.

Speaker Biography:

Jon is currently in his 5th semester in the Nicholas School Ph.D. program at Duke University. His program advisor is Dr. Randy Kramer. His area of concentration is environmental policy analysis. Before pursuing a Ph.D. Jon worked for over 3 years as a research associate for Randy Kramer on various projects. Jon holds a MEM degree from NSOE and an undergraduate degree from the University of California at Berkeley. His areas of interest include decision analysis, cost/benefit analysis, and non-market valuation.

Benjamin Poulter

Ph.D. Candidate, Nicholas School of
the Environment & Earth Sciences

Carbon Credits as an Economic Incentive for Sustainable Forestry on Private Lands in the Little Tennessee Watershed, North Carolina

Abstract:

The Little Tennessee watershed, located in the Southern Appalachians, provides valuable habitat to a number of federally threatened and endangered species. Over the next forty years, forest cover is forecast to decline 15% due to development and population growth. Research is focused on identifying potential economic incentives to encourage private landowners (who own 65% of the land in the watershed) to manage forests for timber and biodiversity rather than development. My research shows that approximately 1-million tons of carbon could be retained in forest structure by implementing sustainable forestry. Significant economic incentives could be passed on to private landowners in the form of carbon credits for each ton of carbon retained on their property. The Southern Appalachians present an attractive carbon investment for power companies looking to offset CO₂ emissions in anticipation of the Kyoto Protocol being ratified. In addition, sustainable forestry offers an alternative to low diversity, pine plantations in the Southeast (which is often considered for offsetting CO₂ emissions).

Speaker Biography:

Ben Poulter is a Ph.D. candidate at the Nicholas School at Duke University. He studied forest ecology and management at the University of Idaho in Moscow. Before coming to Duke University, he worked at the US Forest Service Rocky Mountain Research Station, The New York Botanical Gardens in the Bronx, and the Carnegie Institution of Washington at Stanford. In brief, his dissertation work involves integrating global change ecology with land management and conservation.

Please RSVP by March 31 via email to : leithc@duke.edu

For more information call 613-8131 or visit <http://www.env.duke.edu/solutions/>