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Distinguished Scholar Seminar

[Co-sponsored by the Soil and Water Science Department]

Speaker: **Dr. Eric A. Davidson**
Professor and Director, Appalachian Laboratory
University of Maryland Center for Environmental Science
http://www.umces.edu/al/people/edavidson

Title: **Manure Happens: The Consequences of Feeding Seven Billion Human Carnivores**

Date: **March 7, 2016**
Time: **3:00 PM – 4:30 PM**
Location: **Emerson Alumni Hall – Room 209**

Humans have profoundly altered the global nitrogen cycle in an effort to feed 7 billion people. Food and energy production from agriculture, combined with industrial and energy sources, have more than doubled the amount of reactive nitrogen circulating annually on land. Humanity has disrupted the nitrogen cycle even more than the carbon cycle, leading to widespread effects on ecosystems, biodiversity, human health, and climate. There have been important successes in reducing nitrogen emissions to the atmosphere by industrial and transportation sectors, and this has improved air quality. Effective solutions for reducing nitrogen losses from agriculture to groundwater and surface waters have also been identified, although political and economic impediments to their adoption remain.

Areas of Expertise: Biogeochemistry and nutrient cycling in terrestrial ecosystems, including the effects of management, land use change, and climatic change on soil C and N stocks, trace gas emissions from soils, and leaching of plant nutrients to streams and groundwater. Current study areas include the Brazilian Amazon Basin and Cerrado region and the forests of New England.

For additional details about Dr. Davidson's visit, please contact Carol Lippincott (calippincott@ufl.edu) or K. Ramesh Reddy (krr@ufl.edu).