Livestock and Poultry Environmental (LPE) Learning Center
Educational Webcast Series
http://www.extension.org/animal+manure+management
Sponsored by the: Air Quality Education in Animal Agriculture Project

Ammonia: The Air-Water Interface

June 27, 2008

2:30 pm (eastern), 1:30 pm (central), 12:30 pm (mountain), 11:30 am (pacific)

What is the role of ammonia emissions from livestock farms in the formation of small particulates (PM2.5)? This webcast, the first in a series of air quality presentations sponsored by the Air Quality Education in Animal Agriculture project, will answer this question and highlight why there is so much attention being paid to ammonia. Speakers will share experiences with monitoring ambient concentrations of ammonia within the Cache Valley of northern Utah/southeastern Idaho. They will also discuss the fate of these particles as they deposit on terrestrial and aquatic ecosystems and highlight the multidisciplinary efforts being taken in Colorado to better understand the role of agriculture in increased nitrogen deposition within Rocky Mountain National Park. Lastly, they will talk about the effectiveness of best management practices in reducing the loss of ammonia into the atmosphere. *Continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) have been applied for.*

Dr. Randy Martin is an Associate Professor of Environmental Engineering at Utah State University. His research interests include the measurement and analysis of atmospheric trace species, most notably reactive hydrocarbons and related oxidation products. He has been involved with characterization and behavior of ambient fine particulate and visibility research. Other areas of research include mechanisms of advance oxidation for gas-phase pollutant control and aerosol generation and measurement. He received his Ph.D. at Washington State University. Phone: 435-797-1585; Email: rmartin@cc.usu.edu.

Dr. Jessica Davis, Director of the Institute for Livestock and the Environment at Colorado State University, received her PhD in soil science from Texas A&M. The institute's members solve problems at the interface of livestock production and science-based environmental management. Her research and extension programs emphasize using manure to improve soil properties while protecting air and water quality. Phone: 970-491-1913, E-mail: jessica.davis@colostate.edu.

Dr. Pius Ndegwa is an Assistant Professor and Extension Specialist at Washington State University. His interests are in the development of sustainable livestock manure management systems, air and water quality control engineering, bio-energy or bio-fuels, and livestock odor emission control technologies. He received his Ph.D. from the University of Georgia. Phone: 509 335-8167, Email: ndegwa@wsu.edu

Links for more Information:

--Ammonia Emissions and Animal Agriculture http://www.ext.vt.edu/pubs/bse/442-110/442-110.html
--US EPA Particulate Matter information http://www.epa.gov/air/particlepollution/index.html
--American Society of Agricultural and Biological Engineers (ASABE)
http://asae.frymulti.com/abstract.asp?aid=14109&t=2
--Ammonia: What's All the Fuss? http://www.pnwanc.org/2007_proceedings/**RonSheffield**-Ammonia%20-%20What's%20all%20the%20fuss.pdf
--Rock Mountain Atmospheric Nitrogen and Sulfur Study (RoMANS)
http://vista.cira.colostate.edu/IMPROVE/Publications/GrayLit/022_**ROMANS**brocure/**RoMANS**Brochure.pdf
--www.extension.iastate.edu/Publications/PM1971a.pdf

The LPE Learning Center is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animal systems should have on-demand access to the nation's best science-based resources. See our website at: http://www.extension.org/animal+manure+management.

The Air Quality Education in Animal Agriculture project is collaboration of national experts from across the U.S. working to enhance learning opportunities in air quality issues related to animal agriculture. In addition to educational webcasts, the project will develop an air quality curriculum that will be made available for classroom or extension use and conduct regional workshops.