



## Physical, Chemical and Biological Impacts of Manure on Soil

**October 17, 2008**

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

Application of manure to land can have benefits in addition to its value as a source of nutrients for crops. This webcast will address the additional positive impacts that manure can have on soil quality or soil tilth. Areas to be covered will include: short and long term availability of nitrogen and carbon, water holding capacity and reduction of soil erosion, bulk density, and the effects on the soil microbial community. *An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) has been submitted.*

Mark Risse is a professor who coordinates animal waste management program at the University of Georgia. Mark also serves on the leadership team for the Livestock and Poultry Environmental Learning Center. He will be providing an overview of the science on manure impacts on soils. 706-542-9067, [mrisse@engr.uga.edu](mailto:mrisse@engr.uga.edu).



Craig Cogger is a soil scientist at Washington State University. His current research emphasis is in the area of organic and sustainable cropping systems. He has extensive experience with compost methods and utilization of biosolids. 253-445-4512, [Cogger@wsu.edu](mailto:Cogger@wsu.edu).

Ann-Marie Fortuna is an Assistant Professor of Soil Biology in the Department of Crop and Soil Sciences, Washington State University. Her area of research emphasis is to determine the role of organisms in plant nutrient acquisition and health, and trace the fate of pathogens and beneficial organisms in the environment. (509)335-3644, [afortuna@wsu.edu](mailto:afortuna@wsu.edu).



### Links for more Information:

\*Land Application of Manure for Beneficial Reuse

[http://cop.extension.org/mediawiki/files/3/32/Land\\_Application\\_Paper\\_Final3.pdf](http://cop.extension.org/mediawiki/files/3/32/Land_Application_Paper_Final3.pdf)

\*Environmental Benefits of Manure Application

[http://www.extension.org/pages/Environmental\\_Benefits\\_of\\_Manure\\_Application](http://www.extension.org/pages/Environmental_Benefits_of_Manure_Application)

\*Organic Farming Systems and Nutrient Management <http://www.puyallup.wsu.edu/soilmgmt/Index.htm>

\*Soil Quality, a multi-organization website <http://soilquality.org/>

\*The Minnesota Project

<http://www.mnproject.org/pdf/Part%20A%20Soil-crop%20interatctions-2004%20final.pdf>

\*Animal Manure and Soil Quality, Oklahoma State

<http://www.animalwaste.okstate.edu/Doc/PT98-8%20Manure%20Improves%20SoilQuality.pdf>

\*Agricultural Management Practices & Soil Quality <http://www.ext.vt.edu/pubs/compost/452-400/452-400.html>

\*Field-scale evaluation of the value of manure on soil quality and crop production

<http://www.porkboard.org/PorkScience/Research/Documents/02-216-HATFIELD.10-10-03.pdf>

\*Restoring Eroded Soils with Manure <http://www.ag.ndsu.nodak.edu/dickinso/research/1997/restore.htm>

\*ARS Research "Ecologically Sound Soil, Water, and Pest Management Strategies"

[http://www.ars.usda.gov/research/publications/Publications.htm?seq\\_no\\_115=228451](http://www.ars.usda.gov/research/publications/Publications.htm?seq_no_115=228451)