

# LPE Center News



August 2009

<http://www.extension.org/animal+manure+management>

LPE Learning Center Webcast Series

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**August Webcast**  
 "Evaluating Innovative Manure Treatment Technologies"  
 August 21, 2009, at 2:30 pm (EDT) [More...](#)

**LPELC Home page:**  
<http://www.extension.org>  
 and click on "Animal Manure Management."

**Continuing Education Units**  
 are available through the Certified Crop Adviser program and American Registry of Professional Animal Scientists [More...](#)

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### Looking Forward to the September Webcast:

## Ways to Reduce Air Quality Problems Associated with Land Application of Manure

A growing number of farmers realize the significant potential benefits that manure has for improving soil fertility and health. As good stewards of our land, air, and water resources, those who apply animal manure to farmland must also recognize and manage potential environmental risks. The September webcast will address air quality issues associated with application of manure. Presentations will highlight the important role that equipment plays in reducing air quality concerns, including ammonia nitrogen loss, odor complaints, and potential greenhouse gas emissions; summarize results of field studies comparing the use of various types of currently available manure application equipment; and provide an update on North American equipment research and development for subsurface application of solid manures.

**Speakers:** Dr. Curtis Dell and Robin Brandt, Pennsylvania State University.

**Date/Time:** Friday, September 18, 2009, at 2:30 pm (EST)/1:30 pm (CST)/12:30 pm (MST)/11:30 am (PST).

**How to Participate:** On the day of the webcast, go to [http://www.extension.org/pages/Live\\_Webcast\\_Information](http://www.extension.org/pages/Live_Webcast_Information). First-time viewers should follow the steps at [http://www.extension.org/pages/How\\_Do\\_I\\_Participate\\_in\\_a\\_Webcast?](http://www.extension.org/pages/How_Do_I_Participate_in_a_Webcast?) a few days before the webcast to ensure access to the virtual meeting room.

### What's Going On In the LPE Learning Center?

## New Additions to the LPE Learning Center Website

### Copper Sulfate Foot Baths on Dairies and Crop Toxicities

Copper sulfate is used on dairy farms to control foot diseases in cattle. As this compound is washed out of the barn, it enters the wastewater lagoon and is eventually land applied to nearby crop fields with manure. Is there reason for concern? This page was authored by Jim Ippolito, USDA-ARS and Amber Moore, University of Idaho. [http://www.extension.org/pages/Copper\\_Sulfate\\_Foot\\_Baths\\_on\\_Dairies\\_and\\_Crop\\_Toxicities](http://www.extension.org/pages/Copper_Sulfate_Foot_Baths_on_Dairies_and_Crop_Toxicities)

### Carbon Footprint of Animal Agriculture Webcast is Archived

On July 31, the LPE Learning Center hosted a webcast presentation, by Jude Capper of Washington State University and Roger Cady of Elanco, about the carbon footprint of animal agriculture (specifically dairy production). The presentation is archived and available for viewing. Over the next few weeks individual segments, downloadable videos, and a written summary of the question/answer session will be added. [http://www.extension.org/pages/Carbon\\_Footprint\\_of\\_Animal\\_Agriculture\\_Webcast](http://www.extension.org/pages/Carbon_Footprint_of_Animal_Agriculture_Webcast)

## National Resources

### USGS Conducts Assessments of Nutrient Concentration and Loads in Streams

The U.S. Geological Survey National Water-Quality Assessment program conducted national- and regional-scale trend assessments of nutrient concentrations and loads in streams and how these trends corresponded to changes in streamflow and nutrient sources, such as fertilizer applications, animal manure, population, and atmospheric deposition. Phosphorus and nitrogen concentrations remained relatively stable in about half of the streams assessed nationwide from 1993 to 2003. Full results can be found at

[http://water.usgs.gov/nawqa/pubs/nutrient\\_trends](http://water.usgs.gov/nawqa/pubs/nutrient_trends).

### EPA Releases Literature Review Documents Related to Recreational Water Quality Risks

The U.S. Environmental Protection Agency has conducted two literature reviews to help inform the development of new or revised recreational water quality criteria by 2012:

1. *Review of Published Studies to Characterize Relative Risks from Different Sources of Fecal Contamination in Recreational Waters* describes

the existing information available to characterize the relative risks of human illness from various sources of fecal contamination in recreational waters.

2. *Review of Zoonotic Pathogens in Ambient Water* provides a summary of information on waterborne zoonotic pathogens that come primarily from warm-blooded animals.

Both documents are available at

<http://www.epa.gov/waterscience/criteria/recreation>.

### Smaller Dead Zone in Gulf of Mexico

The size of this year's Gulf of Mexico dead zone is smaller than forecasted, measuring 3,000 square miles. This is believed to be due to unusual weather patterns that re-oxygenated the waters, not a reduction in excessive nutrient runoff. Runoff primarily from agricultural activities stimulates an overgrowth of algae that sinks, decomposes, and consumes most of the oxygen supply in the water. To learn more, go to

[http://www.noaanews.noaa.gov/stories2009/20090727\\_deadzone.html](http://www.noaanews.noaa.gov/stories2009/20090727_deadzone.html).

## Spotlight On...

## Snapshot Assessment of Nutrient Use Efficiency on Dairy Farms

How can nutrient use efficiency be determined and monitored easily on dairy farms? Over the past several years, researchers at the U.S. Dairy Forage Research Center (USDFRC) and the University of Wisconsin-Madison have been developing and using rapid assessment methods to provide snap-shot assessments of feed, fertilizer, and manure use on dairy farms in various settings. The most recent work was a survey of 54 Wisconsin dairy farms known as *On Farmers' Ground*.

Mark Powell of the USDFRC and his collaborators recently gathered all of the materials together and posted them on the USDFRC website in the hopes that others will find them useful in determining and monitoring nutrient use efficiency on dairy farms. Read more at

<http://www.ars.usda.gov/Services/docs.htm?docid=18709>.

The documents are all in PDF form for viewing on the website, but Mark is also willing to send the assessment tools as Word docs for those who want to modify them for their own use. Contact him at [Mark.Powell@ars.usda.gov](mailto:Mark.Powell@ars.usda.gov) for more information.

### "Energy Production from Anaerobic Digestion of Dairy Manure" Short Course

Planning to be in Madison, Wisconsin, on September 28-29, 2009? To be held in conjunction with the World Dairy Expo, this short course has been designed to walk you through dairy manure energy production from fundamental principles to case studies that demonstrate full-scale anaerobic treatment technologies in agricultural settings, and will allow for questions. The course will conclude with an afternoon session on digester economics and a description of available resources to support manure anaerobic digestion projects.

Registration is available at:

<http://www.ucs.iastate.edu/mnet/anaerobiccourse/home.html>. For more information, contact Lara at [lmood@iastate.edu](mailto:lmood@iastate.edu) or 515-294-7355.



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