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### LPE Center News, October 2007

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# LPE Center News



October, 2007

Connecting Experts With Those Advising Producers

<http://lpe.unl.edu>

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## October Webcast "Matching the Manure Treatment to the Environmental Concern"

October 19, 2007 at 2:30 pm (EDT) [More...](#)

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## LPE Learning Center Webcast Series

### November Webcast to Examine Vegetative Treatment Systems for Managing Open Lot or Barnyard Runoff

Are vegetative treatment systems (VTS) a cost-effective option for smaller feeding operations to manage their runoff? Do VTSs have a place on large CAFOs? What considerations go into designing and building a VTS? These questions will be addressed in the LPE Learning Center November webcast "Vegetative Treatment Systems for Managing Barnyard and Open Lot Runoff".



Chris Henry

The speakers for the November 16 presentation include Chris Henry, extension engineer with the University of Nebraska, Lara Moody, Program Specialist with Iowa State University, and Dr. Rick Koelsch Associate Professor with the University of Nebraska. For more information go to: <http://lpe.unl.edu/pdfs/07novflyer.pdf>.



Lara Moody



Rick Koelsch

**Date/time:** Friday, November 16, 2007 at 2:30 pm (eastern); 1:30 pm (central); 12:30 pm (mountain) and 11:30 am (pacific).

**How to participate:** See the steps at <http://lpe.unl.edu/webcast5.html>.

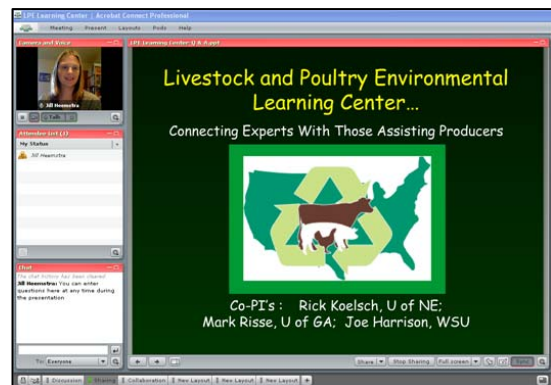
## What's Going On in the LPE Learning Center?

### New Webcast Technology to Debut in October

Thanks to some hard work by several people, the new way to connect to LPE Learning Center webcasts will debut in October instead of November, as previously reported.

The new system will utilize a virtual meeting room that will open via your web browser. This technology utilizes Flash (already installed on 97% of browsers). The first time that some users connect, they may be prompted to install an optional plug in. Doing so will open the presentation in a much larger window, but it is not mandatory. You can test your software and connection settings ahead of time at: [http://connect.extension.iastate.edu/common/help/en/support/meeting\\_test.htm](http://connect.extension.iastate.edu/common/help/en/support/meeting_test.htm)

All archived webcasts from September, 2006 through September, 2007 will still require Real Player for viewing.



## Mid-Atlantic Water Quality Program Website Offers Nutrient Budgets

The goal of most nutrient management plans is to bring a farm into nutrient balance and reduce the potential for excess nutrients to leave the operation and contaminate water. Most experts also agree that we need to remain aware of nutrient balance on a larger scale.

Researchers and extension specialists with the Mid-Atlantic Regional Water Program decided to look at this larger scale by developing nutrient budgets on a county and statewide basis. In short, a nutrient budget compares nutrient inputs versus outputs to cropland in a given area. The difference in inputs and outputs is the nutrient balance. A positive number indicates that more nutrients are being applied than removed by the crop and vice versa.

The nutrient budgets utilize data that is readily available and include some assumptions about production. Currently, only the data for phosphorus is available on the website.

These budgets demonstrate how shifts in animal numbers, fertilizer use and crops grown impact nutrient balances.

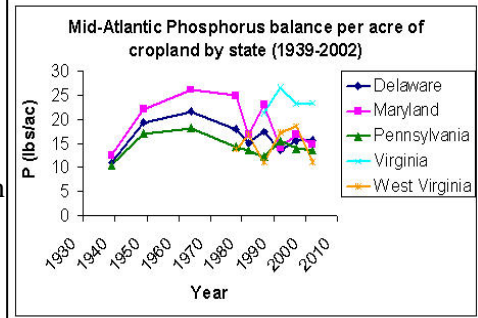
They can

be a useful tool to evaluate the potential effectiveness of strategies being considered to bring a particular area into nutrient balance.

For more information, contact regional liaison, Dapne Pee, [dpee@umd.edu](mailto:dpee@umd.edu) or go to the website at: <http://mawaterquality.agecon.vt.edu/default.html>

### Mid-Atlantic State-Level Historical Trends

Phosphorus balance per acre of cropland:



### Spotlight On...

## Pennsylvania Project Examines Manure Management in No-Till Systems

The benefits of no-till in reducing soil erosion are well established. Incorporating manure also has numerous benefits in reducing ammonia volatilization, soluble phosphorus (P) loss, and odor. However, in nutrient management planning these practices are considered mutually exclusive.

Scientists at Penn State University and USDA-ARS Pasture Systems and Watershed Management Research Unit are looking at how manure can be injected while retaining most of the benefits of no-till. Low-disturbance technologies being evaluated include: shallow disk injectors, high pressure injectors, and aerator injectors.

This is an interdisciplinary project looking at: crop nutrient availability, soil and P loss, nitrate leaching, ammonia volatilization, hormones in runoff and leachate, and odor. The project also includes a whole farm modeling component using the Integrated Farming Systems Model to evaluate impacts on farm operations and economics.

A key preliminary finding is that each of the systems evaluated has a different impact. For

example, the aerator injector, set up to minimize soil disturbance, resulted in dramatically reduced P runoff losses but had little effect on reducing ammonia volatilization from dairy manure.

A major objective of the project is to provide farmers and policy makers with data, so that they can make informed, science based decisions about which system might best address the specific management concerns in their operation. A regional project is currently being developed to do similar work in Maryland, Virginia, and Delaware.

For more information on this project contact: Dr. Douglas Beegle, Penn State University, [dbb@psu.edu](mailto:dbb@psu.edu) or Dr. Peter Kleinman, USDA-ARS, [peter.kleinman@ars.usda.gov](mailto:peter.kleinman@ars.usda.gov).



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