



Mono-Slope Research Project

July 19, 2013

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

There is growing interest in feeding cattle in confinement buildings for a multitude of reasons including (but not limited to): performance advantages, limited space for open lots, and keeping manure dry as well as preventing feedlot run-off and reducing environmental concerns. Oftentimes these confined cattle are housed in naturally-ventilated mono-slope barns. But questions remain regarding the air quality inside these barns, the emissions to the surrounding environment, especially as it relates to manure management decisions. Researchers and university specialists from South Dakota State University, USDA's Meat Animal Research Center (USMARC), and Iowa State University Extension are wrapping up a three-year study looking at concentration and emission measurements in comparison with management techniques for mono-slope and will share the results of their study. *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.*

Beth Doran is the beef program specialist for Iowa State University Extension and Outreach, serving 17 counties in northwest Iowa since 1993. She received her Ph.D. from Oklahoma State University in Animal Nutrition. Her Extension efforts include educational programming for beef producers that manage over one-million head of cattle on feed. Her cooperative research has focused on various cattle feeding issues, including the current multi-state research project measuring gas emissions from four beef deep-bedded mono-slope facilities that use two bedding management techniques. Beth will serve as the moderator.

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Erin Cortus received her Ph.D. from the University of Saskatchewan and Prairie Swine Centre Inc., in Saskatoon, SK. Following graduate school, she spent over two years at Purdue University, working on the National Air Emissions Monitoring Study as the Data Analysis Manager. She joined South Dakota State University as an Assistant Professor and Extension Specialist in June 2009. At SDSU, her extension, research, and teaching responsibilities continue with a focus on air quality and waste management for livestock facilities. Phone: (605) 688-5144. Email: Erin.Cortus@sdstate.edu



Mindy Spiehs is a Research Animal Scientist with the USDA Agricultural Research Service at the Meat Animal Research Center in Clay Center, Nebraska. She received her Ph.D. in Animal Science from the University of Minnesota, and served as a

Regional Extension Educator – Livestock Manure Systems at the University of Minnesota from 2004 - 2007. Her current research is focused on air quality around livestock facilities. She has conducted studies to evaluate ammonia, volatile organic compounds, and greenhouse gases from cattle waste when wet distillers grains with solubles are fed to finishing cattle, and is currently evaluating the effect of multiple feed additives on odor and gas concentrations on the feedlot surface. She has been involved in research to quantify air quality in beef deep-bedded monoslope facilities, with a particular interest in the effect of bedding materials on odor and gas concentration from these facilities. Phone: (402) 762-4271; Email: Mindy.Spiehs@ars.usda.gov



How Do I Participate?

On the day of the webcast, go to www.extension.org/58813 to download the speaker's power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: www.extension.org/8924.

Links For More Information:

- * Mono-Slope Beef Barn Design and Management (May 2013 webcast) <http://www.extension.org/68165>
- * Mono-Slope Beef Barns <http://www.extension.org/67544>
- * Mono-Slope Research Project <http://www.extension.org/67545>
- * Cattle Feeding Buildings in the Midwest <https://www-mwps.sws.iastate.edu/catalog/construction/cattle-feeding-buildings-midwest>

This webinar is produced as a part of the [Monoslope Research project](#) that was funded by Agriculture and Food Research Initiative Competitive Grant no. 2010-85112-20510.

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.