



WASHINGTON STATE
UNIVERSITY
EXTENSION



THE NATIONAL LIVESTOCK AND POULTRY ENVIRONMENTAL LEARNING CENTER

BY THE NUMBERS

- More than 140 experts and collaborating agencies are working on the LPELC.
- The 2015 National Waste to Worth Conference had 280 participants and approximately 160 presentations.
- Attendees of the 2015 Waste to Worth Conference indicated that they were better able to do the following as a result of the conference: Reach out to others for collaboration, recommend positive actions to farmers/ranchers, add new information or topics to programs or curriculum, and communicate controversial topics.

2016

ISSUE

The Environmental Protection Agency has identified agriculture as the leading contributor of pollutants to the nation's rivers, streams, lakes, and reservoirs. These reports often do not separate animal agriculture from other agricultural enterprises, but they do note that pathogens, nutrients, and oxygen-depleting substances associated with manure are three of the top five pollutants. Some emerging issues related to manure management include: endocrine disruptors (hormones), pharmaceuticals (antimicrobials), and antibiotic resistance in bacteria. Adopting farm practices that minimize the environmental impact is important for food safety.

The quality of, and timely accessibility to, science-based information is a significant weakness in current research and outreach infrastructure. There is a need for real time and on-demand access to a national team of technical and outreach experts.

RESPONSE

The National Livestock and Poultry Environmental Learning Center (LPELC) was established in 2005 to connect experts across the U.S. with consultants and advisors who assist producers, and joined the national eXtension system in 2006. The LPELC hosts approximately ten webcasts per year on high-priority issues and publishes a monthly newsletter with more than 1,400 subscribers. The LPELC provides on-demand access to the nation's best science-based resources that is responsive to priority and emerging water quality issues associated with animal agriculture.

The center's [Animal Agriculture and Climate Change online certification course](#) provides an in-depth understanding of the relationship between animal agriculture and climate change, both nationally and regionally. This 12-hour, non-traditional, self-paced course is designed specifically for agriculture educators, advisors, and professionals seeking to understand the relationship between animal agriculture and climate change, and prepares professionals to engage their stakeholders in this new and often controversial issue. The main objectives are to examine the impact climate change is having on farmers and ranchers, provide tools to help adapt to risk and uncertainty, and offer strategies for communicating these topics.

The course covers climate and weather trends of the recent past and examines the scientific basis for climate change projections in the future. Course participants also learn agriculture's role in reducing greenhouse gas emissions and discuss how agriculture might benefit from capture and utilization of these gases. The course qualifies for continuing education credits from Certified Crop Advisor (CCA), the American Registry of Professional Animal Scientists, and many professional engineer licensing programs.



QUOTES

"Best conference I have been to in over 10 years! Excellent tours and sessions. Keep up the great work."

"Really enjoyed the networking and tours."

"This is my favorite conference for nutrient management. It is practical, has a diverse attendance, and great networking and activities. Thanks!!"

The LPELC is supported for strategic planning and grant acquisition by a leadership team represented by faculty in the states of Washington, Nebraska, Texas, Montana, Georgia, Arkansas, and New Jersey. Our web presence, video, and teleconference capabilities are provided by National eXtension.

IMPACTS

Via surveys, subscribers were asked how useful the LPELC resources are to their daily job. Eight items were reported as items where LPELC resources are one of several resources used by the majority of respondents: influencing desirable action on a farm (54.2%), classroom lectures, labs, or activities (52.0%), outreach to farmers (61.1%), policy or regulation development (54.8%), reviewing publications or articles written by others (61.5%), training for employees or colleagues (56.5%), satisfy my own curiosity (62.6%), and research answers to questions from a client or peer (59.8%).

The effects of the LPELC resources are overwhelmingly positive. Well over half of respondents agreed or strongly agreed that they are better able to positively influence the environmental impact of animal operations (16.8% strongly agree, 48.9% agree), are more confident in their ability to locate credible information (12.5% strongly agree, 58.8% agree), and feel updated and aware of trending topics on animal agriculture (18.8% strongly agree, 54.3% agree).

Around two-thirds of NRCS staff (68.8%), regulatory agency staff (70.6%), private consultants or technical service providers (61.1%), and other job descriptions (64.0%) reported that LPELC resources are one of several resources they use to research client and peer questions.

A survey was administered to those who completed the Animal Agriculture and Climate Change online certification course by the Bureau of Sociological Research at the University of Nebraska-Lincoln (2015). Of the 55 people that completed the course and responded, 79% found the course to be very valuable or valuable. Eighty percent of respondents completing the course are using information they acquired through the course. In addition, 66% have recommended the course to others. The course also has earned international interest. Of the total registrations since fall 2013, 17% are from countries other than the United States.

The LPELC has grown from a four-person team to a virtual center with more than 140 experts from land-grant universities and collaborating agencies across the U.S.

Core functions of the LPELC are managed daily by Jill Heemstra, Extension Information Specialist; and Leslie Johnson, Webcast Production Specialist, both located in Nebraska.

