## Livestock and Poultry Environmental Stewardship (LPES) Curriculum:

A National Education Program



For more information, visit our website a **www.lpes.org** 

A collaborative effort of 15 land-grant universities the EPA Ag Center the USDA, and MWPS



MWRS

## Ordering LPES Maicrials

To order LPES materials online, access the MWPS website at http://www.mwpshq.org and visit the catalog section. You can also order materials by calling MWPS at 1-800-562-3618 or e-mailing them at mwps@iastate.edu. Visa and MasterCard are accepted; checks should be made payable to MWPS.

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## IPES Team Members

A national team of more than 30 experts from 15 land-grant universities, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), and the USDA Agricultural Research Service (ARS) prepared, peer reviewed, and pilot tested the LPES curriculum with assistance from MidWest Plan Service (MWPS) and guidance from the U.S. Environmental Protection Agency's (EPA's) National Agriculture Compliance Center (Ag Center). The LPES curriculum development effort was funded by a grant from the EPA's Ag Center with program oversight through the USDA.

**Project Leaders** 

Rick Koelsch Frank Humenik University of Nebraska North Carolina State University

**Project Manager** 

Diane Huntrods

MWPS, Iowa State University

**Author Team** 

**Brent Auvermann** Jose Bicudo Galen Erickson Charles Fulhage Rick Grant Joe Harner John Hoehne Frank Humenik Larry Jacobson Rick Koelsch Jeff Lorimor **Todd Milton** Pat Murphy Paul Patterson David Schmidt Karl Shaffer Andrew Sharpley Ron Sheffield Don Stettler Stanley (Lee) Telega

Texas A&M University University of Kentucky University of Nebraska University of Missouri University of Nebraska Kansas State University University of Missouri North Carolina State University University of Minnesota University of Nebraska Iowa State University University of Nebraska Kansas State University Pennsylvania State University University of Minnesota North Carolina State University **USDA-ARS** University of Idaho **USDA-NRCS** 

Cornell University

Eric van Heugten Theo van Kempen North Carolina State University North Carolina State Univ.

Review/Pilot Team

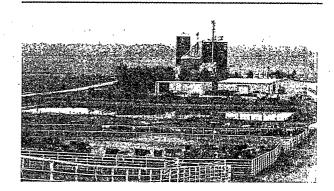
Gary Jackson
Ted Funk
Carol Galloway
Mohammed Ibrahim
Barry Kintzer
Rick Koelsch
Deanne Meyer
Mark Risse
Peter Wright

University of Wisconsin
University of Illinois
EPA Ag Center
North Carolina A&T State Univ.
USDA-NRCS
University of Nebraska
Univ. Of California-Davis
University of Georgia
Cornell University

Access Team

Don Jones Jack Moore Ginah Mortensen Purdue University MWPS, Iowa State University EPA Ag Center

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# LPES Educational Program

## LPES Materials

The LPES program provides producers, industry stakeholders, and educators with access to the latest science-based information.

Producers may find this product valuable as a

- Reference to quickly access the science behind specific issues, technologies, or practices.
- Tool to review the environmental risks associated with their operation.

#### Educators will find that LPES offers

- PowerPoint presentations for teaching workshops, certification programs, or employee training sessions.
- Assessment tools for reviewing an operation's environmental risk and compliance with regulations.
- Reference materials that can be modified and adapted to local needs or individual species.

#### Sample Applications

The LPES curriculum lessons are being used to support

- State-mandated training services for certified livestock managers (Illinois, Georgia, North Carolina).
- Nutrient management planning workbook for producers (Kentucky).
- CNMP continuing education programs for public and private sector advisors (Tennessee, Michigan).
- Development of Agricultural Environmental Management System (Utah).
- Model training program for manure applicators (Indiana).
- Odor management workshops for producers and advisors (Nebraska).

#### What materials were prepared?

The nationally developed and regionally piloted educational materials prepared for the Livestock and Poultry Environmental Stewardship (LPES) curriculum are as follows:

- ✓ 26 independent lessons addressing animal dietary strategies, manure storage and treatment, land application and nutrient management, and outdoor air quality
- ✓ Producer-friendly environmental stewardship and/or regulatory compliance assessment tools
- ✓ PowerPoint presentations with speaker's notes

#### What formats are available?

To meet your educational needs, the LPES curriculum is now available in these formats:

- ✓ A searchable CD containing the 26 lessons in PDF format, the PowerPoint presentations, and the assessment tools as well as Adobe's Acrobat Reader
- ✓ A shrink-wrapped, 3-hole punched printed set of the lessons, including the assessment tools, with a cover suitable for a binder
- ✓ A 2-CD set of PageMaker files that can be adapted to state or regional needs

#### Are curriculum materials online?

To view the individual lessons in PDF format, access the LPES website at **www.lpes.org**. If you have any questions or comments, call MWPS at 1-800-562-3618 or send an e-mail to mwps@iastate.edu.

## Livestock and Poultry Environmental Stewardship (LPES) Curriculum: Lesson Organization

### Module A. Introduction

- 1. Principles of Environmental Stewardship
- 2. Whole Farm Nutrient Planning

#### Module F. Related Issues

50.Emergency Action Plans 51. Mortality Management

#### Module B. Animal Dietary Strategies

- 10. Reducing the Nutrient Excretion and Odor of PigsThrough Nutritional Means
- 11. Using Dietary and Management Strategies to Reduce the Nutrient Excretion of Poultry
- 12. Feeding Dairy Cows to Reduce Nutrient Excretion
- 13. Using Dietary Strategies to Reduce the Nutrient Excretion of Feedlot Cattle

#### Module E. Outdoor Air Quality

- 40.Emission from Animal Production Systems
- 41. Emission Control Strategies for Building Sources
- 42. Controlling Dust and Odor from Open Lot Livestock Facilities
- 43. Emission Control Strategies for Manure Storage Facilities
- 44.Emission Control Strategies for Land Application



#### Module D. Land Application and Nutrient Management

- 30. Soil Utilization of Manure
- 31, Manure Utilization Plans
- 32. Land Application Best Management Practices
- 33. Selecting Land Application Sites
- 34. Phosphorus Management for Agriculture and the Environment
- 35. Land Application Records and Sampling
- 36. Land Application Equipment

#### Module C. Manure Storage and Treatment

- 20. Planning and Evaluation of Manure Storage
- 21. Sizing Manure Storage, Typical Nutrient Characteristics
- 22. Open Lot Runoff Management Options
- 23. Manure Storage Construction and Safety, New Facility Considerations
- 24. Operation and Maintenance of Manure Storage Facilities
- 25. Manure Treatment Options