

# Feed Management Resources and Where to Find them

Glenn Carpenter

Animal Husbandry Specialist (ACES)

East NTSC NRCS

# Many resources exist on feed management

- University publications
- Industry technical and scientific publications
- Government publications from ARS, NRCS, EPA
- Important that all are based on proven science

## NRCS

- Feed Management Tech Notes
- NRCS nutrient management technical notes provide species-specific information for beef, swine, poultry, dairy, and horses and general information on feeding management, feed management for organic production and feed management for GHG reduction.

## NRCS

- Nutrient Management Technical Note No.
  - 190-NM-1; Effects of Diet and Feeding Management on Nutrient Content of Manure
  - 190-NM-2; Feed and Animal Management for Beef Cattle
  - 190-NM-3; Feed and Animal Management for Swine Growing and Finishing Pigs
  - 190-NM-4; Feed and Animal Management for Poultry

## NRCS

- Nutrient Management Technical Note No.
  - 190-NM-5; Feed and Animal Management for Dairy
  - 190-NM-8; Animal Diets and Feed Management
  - 190-NM-10; Feed and Animal Management for Horses
  - 190-NM-11; Feed Management for Small and Organic Operations
  - 190-NM-12; Feed Management for Greenhouse Gas Reduction

## NRCS

- Where can these tech notes be found?
- USDA.gov
  - Topics (Way, way down at the bottom of the page)
  - Animals
    - Animal nutrition and feeding (Way past several other topics)
      - Feed management

# National Feed Management Education Project

- The National Feed Management Education Project was started in 2005 with the goal to increase the understanding of agricultural professionals about the area of Feed Management, with an emphasis on Environmental and Financial Sustainability of Livestock and Poultry Operations.

# National Feed Management Education Project

- The education project was funded by the USDA- Natural Resources Conservation Service (NRCS) Conservation Innovation Grant program.
- About \$500K over several projects
- Coordinated by Dr J.H. Harrison of WSU
- Several cooperators at several universities

## National Feed Management Education Project

- The primary outcome of the project was a process for the implementation of the Natural Resources Conservation Service's Feed Management 592 Practice Standard for beef, dairy, poultry, and swine.
- The primary audiences for the education program were/are:
  - Animal Nutritionists,
  - NRCS staff
  - Conservation District staff
  - private nutrient management planners

# National Feed Management Education Project

- Developed a training program for TSPs for feed management planning
- Resulted in many fact sheets, webinars, training programs and materials
- Materials still available on the web at:  
<https://puyallup.wsu.edu/lnm/> (lnm is “Livestock Nutrient Management”)

## Livestock and Poultry Environmental Learning Community (LPELC.org)

- Many tech notes, recorded webinars, and fact sheets
- Feed Management Planning as a Tool to Reduce Nutrient Excretion
- Why is Feed Management Important to Nutrient Planning?
- Resources Available for Managing Feed Nutrients

## LPELC

- Introduction to Feed Management and Developing a Feed Management Plan -- 5 Fact sheets
- Developing A Dairy-Specific Feed Management Plan -- 3 Fact Sheets
- Managing Feed Nutrients on a Dairy Farm -- 25 Fact Sheets
- Tools and Resources for Developing a Feed Management Plan – 4 Fact Sheets

## LPELC

- Many webinars on a variety of animal/environmental topics
  - Air Quality
  - Regulations
  - Manure Treatment Technologies
  - Manure Nutrient Management
  - Manure Economics
  - Others.

## National Animal Nutrition Program (NANP)

- The NANP provides research-based data on animal nutrient needs, feed ingredients, feeding strategies, and animal performance as well as software, training tools, and educational materials to support research.
- Website <https://animalnutrition.org/>

## NANP

- NANP collected, screened, sorted, and archived over 4 million feed ingredient records and more than 500,000 observations on animal performance and metabolism for beef, dairy, swine, poultry, horses, sheep, goats, and aquaculture species.
- NANP information available to researchers and policy makers worldwide.

## NANP

- NANP is launching a Climate-Smart Feed Management (CSFM) committee to enhance livestock feeding practices.
  - Facilitate science-driven dialogue on climate-smart feed management.
  - Provide accessible and user-friendly feed and animal nutrition information for conservation professionals.
  - Deliver targeted education and training opportunities for various stakeholders.
  - Contribute expertise to enhance NRCS evaluation tools and modeling.
  - Serve as a forward-looking forum to address future needs in climate-smart animal agriculture.

## NANP

- Many peer review publications
- Many presentations and symposia

## Other sources of information on feed management

- Universities
- State and Federal Government
  - FDA
  - USDA
  - EPA
  - Soil and water conservation districts
- NGOs
- Industry
- Grain of salt
- Other??