

**PROJECT NAME:** Livestock Waste Education, Information and Assistance Program

**PRINCIPLE INVESTIGATORS:** Teresa Dvorak, Livestock Nutrient Management Specialist, DREC  
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**REPORTING PERIOD:** Annual report - October 1, 2005 to September 1, 2006

**PROJECT PERIOD:** March 1997 through November 15, 2009

**ANNUAL PROGRESS UPDATE:**

The following tasks were set for the NDSU Livestock Nutrient Management Specialist positions. The tasks were set forth in an EPA 319 grant awarded to NDSU. Under each task is a brief description of the action taken to fulfill the task this year.

*Task 1 Develop and assemble educational programs that focus on the location, design, and management of livestock facilities, focusing on waste management to prevent impacts on water quality.*

- Two new bulletins have been published. The bulletins entitled Nitrogen Behavior in the Environment (NM-1299) and Phosphorous Behavior in the Environment (NM 1298) are targeted to resource managers. These bulletins outline basic information about nitrogen and phosphorous interactions in the environment.

*Task 2 Hold meetings, workshops, and tours to educate producers and those who advise and work with producers about livestock waste management to prevent impacts on water quality. Use mass media and newsletters to inform producers and the public about efforts to reduce impacts on water quality.*

- Presentations have been given at the following locations:
  - i. Composting Mortalities and Butcher Waste, Minot
  - ii. AFO Rules for Zoning Officials, Devils Lake
  - iii. AFO Rules and Their Impact on Livestock Feeding, Carrington
  - iv. Livestock Feeding Operations in ND, Bismarck
  - v. AFO Rules for Cow/Calf Producers, Mohall, Regent, Taylor
  - vi. AFO Rules for Feedlot Producers, Carrington
  - vii. New Technology for Manure Application, Carrington
  - viii. Manure Handling Systems & Composting; Devils Lake, Valley City, Dickinson, and Minot
  - ix. Nutrient Management; Fargo
  - x. Containment versus Water Spreading Systems; Dickinson
  - xi. Nutrient Management and Livestock Biosecurity, Bismarck
  - xii. Composting of Livestock Manure, Carrington
- A press release in statewide papers outlining the relatively low cost of manure nutrients compared to commercial fertilizer.
- Press release on odor management practices.
- A press release in the Dickinson Press included the livestock nutrient management program at the Dickinson Research and Extension Center along with an interview of the specialist.

*Task 3 Develop and deliver educational materials and programs that focus on the utilization of livestock waste nutrients for crop production.*

- Multiple presentations focused specifically on the utilization of livestock waste nutrients for crop production. Those presentations were made at the:
  - i. Manure Utilization Field Day, Lisbon
  - ii. SBARE meeting, Carrington
  - iii. Wells County Ag Expo, Fessenden
  - iv. Mercer County Livestock Day, Beulah
  - v. CGREC Winter Showcase, Streeter
  - vi. CREC Feedlot School, Carrington
  - vii. Soil and Fertility Update Meeting, Fargo
  - viii. Manitoba-Dakota Zero Tillers Conference, Bismarck
  - ix. Northern Plains Sustainable Ag Conference, Fargo
  - x. Hettinger County Crop Improvement Meeting, Regent
  - xi. Taylor Farmers Institute, Taylor
  - xii. Mandan ARS Research Update Conference, Mandan
  - xiii. Sheridan County Spring Forum, McClusky
  - xiv. Manure Utilization in No-till; New Salem (Morton Co.)
  - xv. Manure Utilization in Cropping Systems, Devils Lake, Valley City, Dickinson, Minot
  - xvi. Manure Use in No-Till, Carson, Steele
  - xvii. Manure Utilization in Cropping Systems Poster Presentation, Cincinnati, OH
  - xviii. Composting Manure Field Day, Wells County

*Task 4 Provide technical and education support for 319 funded projects that have livestock waste management components.*

- Presented information on manure utilization in no-till cropping systems at the 319 watershed coordinators annual meeting.
- Various phone calls and communication with 319 watershed coordinators, the ND Dairy Pollution Prevention Program, ND Stockmen's Association Stewardship Support Program and the Livestock Facilities Assistance Program, take place addressing livestock facilities and manure utilization.
- Fifteen on-farm visits have been made with 319 Watershed Coordinators.

*Task 5 Provide one-on-one consultations to producers to evaluate specific options available to the individual for waste storage, handling, and utilization.*

- In the current reporting period, contacts and site visits have been made with fifteen livestock producers. Visits include discussion on the Assessment Tool for New and Existing Animal Feeding Operations, consultation on management practices, containment systems and non point source regulations.