



## Transferring Technology of NYSERDA Manure Management Projects; Spreading the Word

### The Challenge to Extension

How shall the few reach the many? This is the challenge faced by extension programs across the nation. New York, with 34,000 livestock operations, is no exception. Over the past five years, the New York State Energy Research and Development Authority (NYSERDA) has committed over \$10 million to more than 40 projects to improve agricultural waste management on New York farms. To disseminate the results to as wide an audience as possible, NYSERDA has funded a two-year communications project to be conducted by the Cornell Manure Management Program.

### Project Goals

The project goals are to improve the energy efficiency, profitability, and environmental performance of New York State (NYS) agriculture. These goals will be accomplished through a partnership of the major agricultural service and education organizations in the state.

### Data Collection and Analysis

The project team will collect and analyze data from manure treatment and handling systems on farms receiving NYSERDA support. Data collected - and presentation of the results - will help guide producers, operators, designers and advisors as they select and implement the appropriate technology for manure management on other farms. Data collection will include physical, biological and financial parameters. The project team will develop a recommended list of variables to be measured for studying and managing manure treatment systems.

### Case Studies and Fact Sheets

As the body of collected data grows, it will be used to write case studies about key projects. Fact sheets on topics covering various aspects of anaerobic digestion, on-farm composting and manure management will also be written. The case studies and fact sheets will be distributed at various events around the state.

### Popular Press

To reach as wide an audience as possible, information from the case studies and fact sheets will be adapted for the popular press, such as *Northeast DairyBusiness*, *Country Folks* and *Hoards Dairyman*.

### Posters

Posters will be made for major projects for presentation at NYSERDA's Annual Innovations in Agriculture Conferences. The posters will also be displayed at other events around the state.

### Resource Lists

The Cornell team will assemble lists of such topics as equipment manufacturers, product information, sources of financial assistance, and designers and engineers. These lists will be made available in print form as well as posted on the project website.

### Topical Resource Guides

The Cornell team will produce one or more topical resource guides which can be marketed continually through the Natural Resource, Agricultural and Engineering Service (NRAES). These resource guides will offer more in-depth information on topics such as anaerobic digestion and on-farm composting.

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## Regional Workshops

In winter 2004, the lessons learned from the NYSERDA-supported manure projects were presented to farmers and their advisors in workshops in each of the major regions of the state, using the Cornell Cooperative Extension system. These workshops provided feedback on how well the information generated by the project is meeting the needs of the users.

## NRAES Conference

A three-day conference for the Northeastern U.S. will be held in the winter of 2005 to make project results available beyond the borders of the state, as well as to draw upon expertise and the latest technological advances from the wider region. "Dairy Manure: Treatment, Handling, and Community Relations - A Conference for Dairy Producers and Their Advisors" will be planned by the Natural Resource, Agricultural and Engineering Service.

## Cornell Project Team

Staff from the Dept. of Biological & Environmental Engineering (BEE) and the Cornell Waste Management Institute (CWMI) make up the Cornell Project Team. The BEE members are Prof. Norman Scott (principal investigator), Curt Gooch (engineer with PRO-DAIRY), and Brian Aldrich (extension education). Jean Bonhotal of the CWMI brings particular expertise in farm-scale composting. Students will assist with various aspects of the data collection, analysis and technical writing.

## Project Advisory Group

A Project Advisory Group (PAG) was formed in March 2003 to guide the project, help set priorities, review work plans, and provide feedback as the project progresses. Public sector members of the PAG include:

- Empire State Development
- Natural Resources Conservation Service (USDA)
- Northeast Regional Biomass Program.
- NYS Dept. of Agriculture and Markets
- NYS Dept. of Environmental Conservation
- NYS Soil & Water Conservation Committee
- Rural Development (USDA)
- SUNY Cobleskill, SUNY Morrisville

Private sector members of the PAG include:

- Agricultural Consulting Services, Inc.
- Environmental Defense
- First Pioneer Farm Credit
- New York Farm Bureau
- Northeast DairyBusiness magazine
- Northeast Dairy Producers Association
- Rochester Gas & Electric/NYSEG.

## Long-Term Plan

A subcommittee of the Project Advisory Group will seek support to continue the technology transfer work beyond the initial two years funded by NYSERDA.

## Further Information: Project Website

For more details, visit the project website at [www.manuremanagement.cornell.edu](http://www.manuremanagement.cornell.edu).

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