

## SIX Animal Waste Management

*Economies of scale are forcing the livestock industry in New England to increase animal numbers and intensify the application of manure to agricultural lands, which also poses a threat to surface and ground water quality throughout New England. The New England Program's Animal Waste*

*Management focus area and its collective partners are assisting farmers with research-based manure and feed management programs, tools, and technology that minimize impacts to ground and surface waters due to nutrients and pathogens.*

### PARTNERSHIPS

**PARTNERS IN THIS FOCUS AREA INCLUDE NRCS, USDA SARE, STATE AGENCIES, THE NORTHEAST PASTURE CONSORTIUM, AGRICULTURAL SERVICE PROVIDERS AND FARMERS. FUNDING IS MADE POSSIBLE THROUGH U.S. EPA FUNDS, CSREES NIWQP, CSREES NATIONAL RESEARCH INITIATIVE AND OTHER ORGANIZATIONS.**

For example, the University of Massachusetts received a joint Northeast SARE grant for more than \$200,000 with the University of Vermont and USDA ARS Pennsylvania to conduct research on pasture forage varieties and blends. The research also will include on-farm trials in Massachusetts, Connecticut, New Hampshire and Rhode Island.



## SELECTED ACCOMPLISHMENTS

**PLANNING OF THE UNIVERSITY OF MASSACHUSETTS PASTURE RESEARCH AND LEARNING CENTER** for New England and eastern New York spawned the formation of the Southern New England Grazing Network and a group website. Regional pasture walks are coordinated by Extension faculty, NRCS and other organizations. The Center received grants from USDA SARE, University of Massachusetts Extension and the Massachusetts Agricultural Innovations Center totaling more than \$550,000 to support research and education activities.

**WITH A CSREES NIWQP GRANT**, the University of Rhode Island is developing a small-acreage livestock pollution prevention education program with 4-H volunteers.

**RESEARCH-BASED TRAINING AND EDUCATION TO NEW ENGLAND EXTENSION FACULTY AND STAFF, FARMERS AND PARTNERS** highlights regional work on practices and tools for nutrient management, including the use of cover crops for nutrient recovery in field corn production, the fecal phosphorus indicator test, and the refinement of the phosphorus index for local conditions in Massachusetts and Vermont.

**THE UNIVERSITY OF RHODE ISLAND RECEIVED A CONSERVATION INNOVATION GRANT** for \$75,000 from Rhode Island NRCS to adapt and examine low-impact development bioretention filters for treating small-acreage livestock runoff. The university is collaborating with the University of Connecticut's NEMO program.

## ADOPTED PRACTICES

**THE UNIVERSITY OF MAINE'S IN-SERVICE TRAINING PROGRAM FOR AGRICULTURAL SERVICE PROVIDERS AND CERTIFIED CROP ADVISORS** made an impact on the behavior of 93 percent of participants, who said they used knowledge gained from the training in their work. About 85 percent and 78 percent of these participants shared the knowledge with farmers and other professionals, respectively. About 67 percent incorporated their lessons learned into agricultural programs or policy. More than 200 farmers use nine manure management practices on more than 34,000 acres, and more than 400 farmers use 11 nutrient management practices on almost 70,000 acres. Sixty-three percent of the participants assisted farmers to reduce the overall amount of nitrogen applied and 78 percent assisted farmers to reduce the overall amount of phosphorus applied.



## ANIMAL WASTE MANAGEMENT