

Sustaining Farming on the Urban Fringe



Monthly Highlights from Rutgers New Jersey Agricultural Experiment Station

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Animal Waste Management on Small Livestock Farms

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Let's state boldly that when it comes to sustainability, New Jersey may be densely populated, but we believe we need **more livestock** and farm animals, not fewer, on our mixed vibrant suburban and urban fringe farms in order to sustain a diverse and profitable agricultural landscape.

Why? Keeping livestock in our farming system provides increased beneficial recycling and reuse of animal wastes as natural plant food–fertilizer–reducing purchase of costly, energy consuming, fossil fuel fertilizers, while also improving New Jersey's Coastal Plain sandy soils. Proponents of sustainability know livestock are superb at recycling plant nutrients, sequestering carbon in the soil, and improving soils, while providing pleasure, companionship, work, dairy and meats, other products, and even pastoral views for New Jersey's residents to enjoy.

Of course, we aim to keep NJ livestock thriving while assisting livestock managers from the backyard owners - to part-time small livestock owners - to commercial operators in eliminating environmental risks from over-application of manures or runoff of animal wastes toward nearby waterways and to reduce any unintended conflicts with neighbors from odors and flies through better management.

Rutgers NJAES or its agency partners have the skills, technology, advising support, engineering design, and cost-share funding to meet these challenges, and maintain healthy livestock and healthy communities.



A three-day training course slated for March 11 - 13, 2008 on the Rutgers Douglass Campus will provide opportunity for participants to become acquainted with diverse colleagues working on similar animal waste challenges, but working in different localities, agencies, and programs. Through sponsorship, attendance is free. This course is for local municipal and government officials, environmental agency regulators, professional agricultural assistance advisors, State and USEPA members, and other professionals. We can create, train, and deploy methods today to keep animal agriculture a viable part of urban fringe agriculture.

The brochure describing our free 3-day training course, the audience, each day's activities, farm tours, and sponsoring partners can be downloaded from this link: <http://postit.rutgers.edu/uploads/FarmWasteConf.pdf>. **Registration is free** and can be found online at www.tetratex-ffx.com/RutgersEPATraining or by calling Rutgers' Roberta Salinger at (732) 932-9514.

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There is a wide variety of manure handling equipment on the market appropriately sized for small farms. Here, Mike M. and Jason B. are loading and operating a small manure spreader, applying organic poultry litter compost to small fields.

Visits will be made to farm operators already preparing and implementing waste and nutrient management plans with NJ-NRCS USDA Environmental Quality Incentive Program (EQIP) cost share programs. On the final day, the training concludes with templates and approaches to assisting small farms in a process of advisor-assisted self-assessment, plan preparation, and implementation. Rutgers NJAES is in the final stages of deploying our Rutgers Nutrient Management Planner website, partially funded by NJDA, enabling small farm users to self-assess their livestock waste generation, receive estimates of nutrients in their manure, and make optimal manure waste use recommendations.

Ag professionals who may be future trainers and plan preparers need a foundation for writing plans and advising owner operators. Attendees will receive training and skills in basic principals of animal waste management to include manure production and storage, soil fertility, manure spreading management, water quality control, pasture management, and innovative treatment ideas like on-farm composting of animal manures.

A recent New Jersey equine industry survey revealed there are about 42,500 horses on 7,200 horse farms. New Jersey also has about 100 dairies, along with possibly 1,000 cow, sheep, goat, buffalo, or other

diverse livestock operations of all sizes and income levels from backyard owners to full-time operators on 1,000 acres or more. About 124,000 acres in NJ are used to farm hay, grass, or other forages or grains for horses. Better connecting their plant nutrient needs with animal wastes is a natural fit and expected outcome of the project. This free program helps educate participants on animal management and the use of waste nutrients. The basic principals of good animal and crop management are the same, but always more acute in NJ. We have more neighbors.

Future water quality regulation will require facility owners with as few as 8 animals to develop Animal Waste Management Plans (AWMPs). How many horse owners might be affected? The survey revealed 11% of owners have 20 or more horses on almost 800 operations and up to 29% have 8 or more horses. That means about 2,100 owners in NJ have 8 or more animals triggering development of low cost environmentally sound AWMPs. Livestock owners, will be asked to comply with common sense principals and tactics of good animal management like manure storage away from streams, property lines, and neighbors, avoiding barnyard waste runoff, and other methods. Livestock farmers may be asked to manage their access to streams, creeks, and other bodies of water.