Manure Handling To Take Spotlight At August Field Day

LANCASTER (Lancaster Co.) — If you want to learn the latest on manure handling and nutrient management, mark Aug. 7 on your calendar.

That's when Binkley and Hurst Bros. equipment dealership is putting on a field day to demonstrate the best ways and means available for making the most of manure while complying with nutrient management regulations and being a good neighbor.

The all-day event is scheduled to take place Thursday, Aug. 7 at Oregon Dairy, several miles north of Lancaster along Rt. 272.

"The intent is to educate farmers on how to properly handle, store, and apply manures," said Don Hoover, sales manager at Binkley and Hurst.

Binkley and Hurst has been hosting an annual crops day for years at their dealership near Lititz. Ken Ferrie, an agronomist from the Midwest, spoke at last year's crops meeting on methods for producing good crop yields. Afterward, he had a suggestion.

"He came to me after the meeting and said, 'Don, we should have another meeting about manure handling and nutrient management,'" Hoover said.

Hoover agreed that it was a great idea, especially with manure management increasingly in the spotlight as livestock operations grow and as more people move into farming areas. He also said he was astounded by high phosphorus levels found in soil samples taken recently from several local farms.

So, Hoover spoke to several nutrient management experts who said they would be willing to participate in such an event.

Doug Goodlander, director of Pennsylvania's nutrient management program; Don Robinson, head of the Lancaster County Conservation District; Charles Abdalla, ag economics professor from Penn State; and Joel Myers of the Natural Resources and Conservation Service all agreed to speak at the field day. The four will present seminars and join in a panel discussion, focusing on "What's New from the State and Federal Government Concerning Nutrient Management?"

Ken Ferrie also plans to return as a speaker, to address topics such as "Making Manure Smell Like Money."

A wide range of equipment designed to handle various types of manures, including poultry litter, pen-packed, and liquid manure will be running during the day. Guests will have a chance to observe a new orbital spreader, a liquid tanker, an applicator for incorporating manure into the soil, in-vessel bio-digester composters, skid loaders, and high pressure washing systems in action.

Guests can bring water samples in glass jars to have them tested for pH and nitrates. A reverse osmosis water purification system will be on display.

The event offers 3 nutrient management credits and 1.5 soil and water credits for certified crop advisors.

There is no registration fee for the day. A $5 donation is requested for a lunch catered by Oregon Dairy. Lancaster County Dairy Promotion will be on hand to sell milk products, including milkshakes and floats.

The main purpose of the day is to educate — not pressure people to buy equipment, according to Hoover.

"We steer away from commercial hype," Hoover said. "We try to provide an atmosphere where people can learn."

For more information, call Binkley and Hurst at (717) 626-4705 or (800) 414-4705.

Mumma Endowment Brings Renowned Chemical Ecologists To Penn State

UNIVERSITY PARK (Centre Co.) — In a move expected to cement Penn State's College of Agricultural Sciences as an international leader in chemical ecology research, two renowned entomologists will join the college as Mumma Professors, effective July 1.

Tom Baker, former chairman of the department of entomology at Iowa State University, and Jim Tumlinson, research leader with the USDA's Center for Medical, Agricultural, and Veterinary Entomology in Gainesville, Fla., will fill positions created by an endowment that honors Ralph Mumma, distinguished professor emeritus of environmental quality.

Chemical ecology research — described by Dean Robert Steele as among the most exciting and important work being done in the College of Agricultural Sciences — may lead to advances in early warning for terrorist or military attacks from chemical or biological weapons, and improved methods to deal with pests and other environmental stresses in agricultural production.

"The field of chemical ecology holds great promise for understanding how plants and other organisms interact with each other and with their environments," said Steele. "The research already being done in our college could keep us safer from terrorist or military attacks at home and abroad, as well as help to improve the efficiency and profitability of our agriculture. The addition of these two renowned scientists will open new avenues for research and interdisciplinary collaboration within the college, across the university and beyond."

Baker and Tumlinson are accomplished researchers. Baker's work involves developing sex pheromones, host volatiles, and other attractants for use against insect pests in agricultural and urban situations. Part of his research focuses on "neuroethological" studies of insects to understand fundamental processes of olfaction and orientation to odors.

Baker, who is president of the International Chemical Ecology Society and a recipient of the society's 2002 Award for Outstanding Research, also has applied basic knowledge about odor-mediated behavior to create improved controlled-release odor delivery systems for use in applications such as sex pheromone mating disruption, oviposition disruption, and manipulation of beneficial predatory insects.

Tumlinson, who is one of just a handful of entomologists in the National Academy of Sciences, specializes in insect chemical communication — which is the defining of chemical communication systems, including pheromones and other semioichemicals that mediate insect-to-insect and plant-insect interactions. The emphasis of his research is on developing fundamental knowledge and principals that can be applied in environmentally safe pest-management programs.

He has identified volatile compounds emitted by plants in response to infections by pathogens of various types, including bacteria and fungi, and discovered mechanisms by which plants can detect and report pathogens. Tumlinson discovered an attractant for boll weevils in the 1960s that has led to the eradication of these pests in key cotton growing areas of the south.

The Mumma Professorship in Entomology was created in 1997 with an endowment from Penn State graduate and State College businessman Michael Arjmand and his wife, Mitra, who contributed $500,000 to the college in recognition of the work and friendship of Ralph Mumma.

Arjmand, who earned both master's and doctoral degrees in entomology from Penn State, founded Center Analytical Laboratories, a business which performed chemical analyses for a variety of environmental concerns and helped create environmentally friendly pesticides.

Gary Felton, professor and head of entomology, is pleased by the addition of Baker and Tumlinson. "Both of these individuals bring not only a strong, basic research component to the College of Agricultural Sciences, but also a proven ability to apply basic research to agricultural problems, which is especially valuable at a land grant research institution such as Penn State," he said. "Both men are exceptionally well-known in their field."

Baker and Tumlinson join an entomology department that already has been recognized several times recently for chemical ecology research.

Consuelo De Moraes, assistant professor of entomology, earned a 2002 David and Lucile Packard Foundation Fellowship for Science and Engineering for her research on the chemical relationships between plants and insects. She is the first entomologist — and the first faculty member in Penn State's College of Agricultural Sciences — to win the prestigious honor.

De Moraes will receive a personal research grant of $625,000 from the Packard Foundation, to be allocated over a five-year period. Each year, the foundation selects up to 20 of the nation's most promising university professors to receive the award.

Lancaster Farming's Boarder & Trainer *has another fantastic section scheduled Aug. 9. The summer B&T is scheduled to include a feature on Percheron horses, an interview with two "horse dentists," pictorial coverage of a major horse show, and how one horse owner turned her experiences into an inspirational book. Also included: housing and fencing requirements for horses and a special column on draft horses, along with many other goodies. Watch for it!*