

Dairy Leaders Dedicate Penn State Research, Education Center

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of trustees.

Calling the dairy industry "knowledge-technology intensive," Joab Thomas said the new dairy center "fully embraces the land grant mission that includes teaching, research, and service. In my view, these three missions join together in the College of Agricultural Sciences better than anywhere else in the University.

"The Penn State partnership with the dairy industry and the commonwealth continues to be an important focus, and we are delighted to reaffirm this relationship with the new dairy facility. Matching funds from the state made the new dairy research and education center possible. These very important investments by the commonwealth of Pennsylvania reaffirm the leadership role of the land grant university. It underscores the importance that Pennsylvania agriculture continues to have in the development of the economy of the state," Thomas said.

Harry Roth represented the dairy industry. "Historically, the performance of the Pennsylvania dairy industry has been significantly influenced by Penn State and the research and education generated by the dairy science faculty and staff," Roth said. "The influence of the ongoing Penn State dairy programs in research, education and extension may be difficult to measure quantitatively, but it is easy to observe. In the 1930s the efforts of Penn State literally kept the dairy farmers alive. In the 1940s the artificial insemination program was begun.

"Today the Penn State tradition continues. The potential of new technology that this new facility can produce is unlimited. We are at the right place at the right time. Penn State is close to one fourth to one third of the U.S. dairy population. The production practices that brought us through the 1950's and 1960's must continue to change to meet today's and the future's dairy farm economic needs. Likewise, many good young men and women are eager for an education and the many new things to be discovered in agriculture. We know the educators and researchers have served our industry and specifically dairy farmers very well in the past. The awesome challenge is to continue to turn out the answers to the problems we have today and the problems we have tomorrow."

Lamartine Hood said the new state-of-the-art dairy facilities positions Penn State to attract the best faculty and the best students. "The products of these efforts give our cooperative extension system the kind of quality information that has been its hallmark in serving the industry at the grassroots level," Hood said. "Certainly in Pennsylvania and beyond, our College of Agricultural Sciences will continue its roll in contributing to research, extension, and resident education programs to the dairy industry.

"This new facility will allow us to enhance our research and to continue to provide the latest information to Pennsylvania dairy farmers. The profitability of our dairy industry depends on how well we work with industry and government partners to find new and practical solutions and scientific advances in production, distribution, safety, and consumer understanding of our products and processes. One of the ways the land grant university strengthens its commitment to the industries'

competitiveness and the public's health and safety is to maintain facilities that provide the best arena to conduct research and provide learning experiences for our students."

The new Pennsylvania Secretary of Agriculture Charles Brosius said both he and Governor Tom Ridge share the belief that the profitability of farmers and farm families must be increased.

"It is appropriate that these new facilities position the university in the forefront of dairy research and education," Brosius said. "Since we all know Pennsylvania's dairy industry leads the commonwealth's number one industry—farming. The opening of these facilities represents the best in the partnership between the commonwealth and its land grant institution, Penn State. I'm proud, humbled, to be able to participate in this important occasion."

Obie Snider said, "We accept with enthusiasm this tremendous facility. I bring from the trustees sincere thanks to the commonwealth for support of Penn State and the college's dairy research and education. We applaud your generous and discerning investment in the future of Pennsylvania's dairy industry.

"Remarkable progress is being made in breeding, feeding, health and nutrition. Penn State's College of Agricultural Sciences will lead on the cutting edge. These facilities will encourage and challenge teaching and research for many generations.

"These facilities, like facilities of the past, will inspire dreams to come true. This dairy and research center will make giant contributions to an industry that is vital to a healthful economy in Pennsylvania. Indeed, we can only respond with great anticipation and enthusiasm by joining together to say 'we are Penn State.'"

Daniel Hagen said, "The new facilities put Penn State at the cutting edge of modern dairy practices. They will provide us with improved capabilities to conduct research and educational programs. Studies in ruminant nutrition, forage utilization, reproductive physiology and lactation, and young stock management benefit tremendously from these new, flexible facilities."

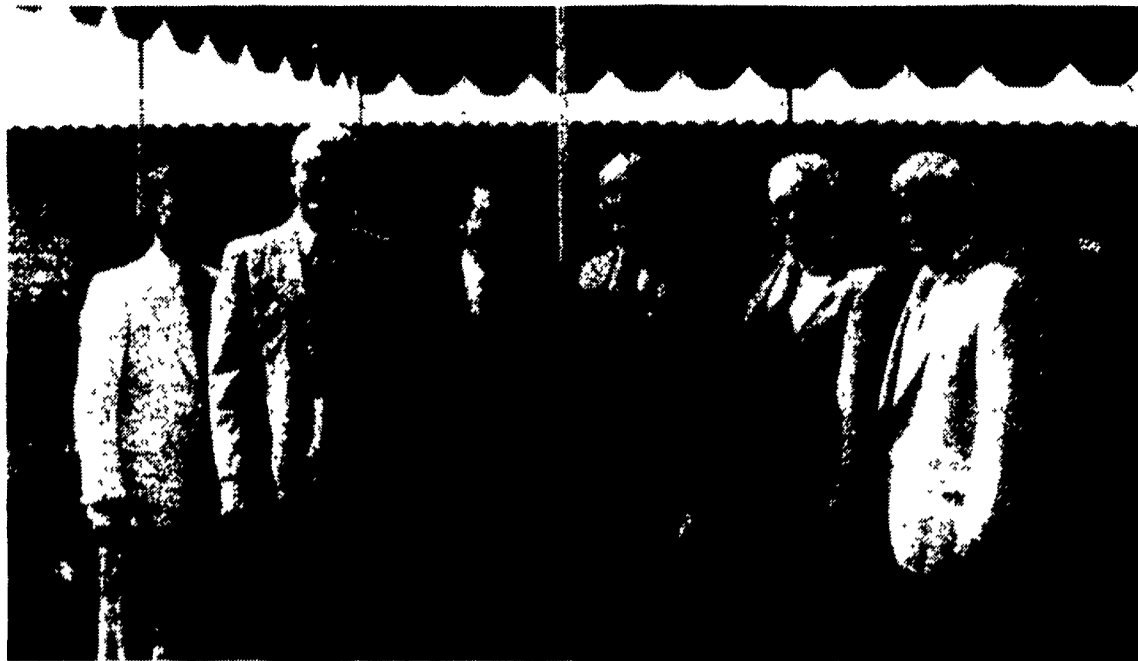
Because the primary functions of the new facility are research and education, it includes some features not found on a typical production farm.

For example, because of the size of the buildings and their public use, they were constructed without wood, and strict building codes required a sizable sprinkler system for fire control.

The feed center provides storage and mixing of feeds for all animals in the dairy operation. The facility has five new upright silos of various capacities for storing forages and grains for research studies. Sixteen overhead bins store ingredients for conventional and experimental feeds. Hay, bedding, and commodities are stored in a new pole barn. The feed center also includes three new horizontal silos.

The 60-cow tiestall barn is designed with wide feed alleys to accommodate equipment to feed each animal individually for nutrition studies. Walls are constructed for maximum natural ventilation in the summer.

The heifer barn can house 160 replacement heifers from three to 24 months of age. The barn has a drive-through design with half freestalls and half bedded pack.



Officials at the dedication of Penn State's new \$5.5 million dairy research and education facility are from left, Daniel Hagen, Lamartine Hood, Joab Thomas, Charles Brosius, Harry Roth, and Obie Snider.

The facility will be equipped for individual feeding.

Steve Spencer, professor of dairy science, helped design the center's computerized milking system, which has a data-acquisition and control system that transfers information from milk-flow measuring devices to computers.

The milking parlor, constructed almost entirely of stainless steel, consists of a double-10 herring-bone stall arrangement with rapid-exit gates. For greater visibility, the stalls are arranged in front of the operators' area instead of at the rear.

Milking parlor gates, indexing rails, and rapid-exit stall fronts are operated by compressed air, furn-

ished by two 7x5-horsepower two-stage compressors, with operator controls in three locations. It also has automatic teat dip sprayer units. The milking system consists of 20 automatic take-off units with arm-type detachers, milk meters, and automatic cow identification. Vacuum is furnished by two 10-horsepower water-ring vacuum pumps, chosen for their low noise levels. Milk is cooled within minutes and stored in a 4,000-gallon tank.

The freestall barn houses 120 adult cows and allows cows to be separated into groups of 20 for research. Equipment will be installed for individual feeding. Twelve-foot-wide outdoor black-top travel lanes permit animals to

be moved from one area to another without disturbing other groups.

An existing barn has been remodeled for intensive nutrition, physiology and biotechnology research with small numbers of cows. The unit can house eight cows and eight replacement heifers.

After the opening ceremony, participants were given a tour of the new facilities. At noon a lunch was served. About 300 stakeholders in the dairy industry attended.

In the afternoon, the first session of the Pennsylvania Dairy Industry Futures Committee's forum began at the Scanticon. The forum was scheduled to continue on Friday.



A nice crowd at the dedication.



One of the stops on the tour of the facilities was this calf area where each individual is limited to its own feed bin.