

Bellwether

University of Pennsylvania

Fall/Winter 1996/1997

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Marshak Dairy Facility

October 18, 1996 was a festive day for the School. The Marshak Dairy Facility was dedicated at New Bolton Center. This 200-head greenhouse style dairy barn, the first such facility in Pennsylvania, is named in honor of Dr. Robert R. Marshak, the ninth dean of the School.



University President Judith Rodin and Dr. Alan M. Kelly, The Gilbert S. Kahn Dean of Veterinary Medicine, welcomed the invitees who included officials of the Commonwealth of Pennsylvania, members of the State House of Representatives and the Senate, representatives of the agricultural communities, members of the University and School community and neighbors of New Bolton Center.

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Marshak Dairy Facility *(continued from cover)*

The ceremony concluded with Dr. Marshak leading the first cow into the brand new barn. Once picture taking was completed and she was tied in a stall, Dr. Kelly demonstrated the automatic flushing system in that section of the barn. Guests toured the 35,000 square foot facility and admired the brightness of the area under the huge plastic roof. It was light and airy inside even though it was a grey, rainy day.

People mingled and received explanations for the many features which include four sections of forty free stalls where cows can lie down on padded mattresses. These were scrutinized by many. There are also 48 comfort stalls or tie stalls where cows can be tied up at specific feed bins, primarily for nutritional studies. Each cow can be fed a different mix and be monitored by computer.

Many questions were asked about the double-ten herringbone milking parlor, the watering tanks, the automated flushing system and the construction system. The barn roof area is covered with plastic and the sides are enclosed by weather block netting. In the summer, solar block netting is installed to block sunlight. There are 18 fans in the building to help with air circulation and the ceiling height in the barn ranges from 18 to 21 feet.

Attached to the barn is a building that houses offices, computers and other equipment, the milking parlor and the 3,000 gallon milk storage tank. The entire barn can be cleaned with the help of a flushing system that utilizes recycled water to wash away manure which is stored in an eight-month holding lagoon. The manure is then used as

fertilizer. A commodity building and bunker silos are also part of the facility.

The Marshak Dairy Facility is an important addition to the School. It serves as a living laboratory and as a research and teaching site in dairy cattle health, productivity and economics. It greatly enhances the School's teaching environment for veterinary and graduate students interested in the veterinary medical and managerial aspects of dairy operations. It is administered by the School's Center for Animal Health and Productivity and enhances that group's programs which are directed toward improvement of production through the



Mr. Richard G. Wood, Wawa, Inc., Dean Kelly, Dr. Marshak, Angela M. Werley, Pennsylvania Dairy Princess.


maintenance of physical and economic health in whole animal populations.

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Donors to the Founding Herd include: Mrs. Patricia Billhardt, Biovance Technologies, Inc., Mr. and Mrs. Charles C. Brosius, Dr. and Mrs. James Buchanan, Dr. J. Clarence Bryer, Dr. William Chalupa, Church and Dwight Co., Inc., CoreStates Agri-Finance Department (Lancaster), Dr. David Detweiler, Mrs. Isabelle Farrington, Mr. Keith Eckel, Flying G Farms Co.,



Dr. Kelly, Mrs. Barbara Hafer, State Treasurer, Dr. Marshak and Dr. Allam

Ms. Henrietta Alexander George, Mr. Raymond C. Gross in memory of Rachel H. Gross, Kreider Farms, Ron and Noah Kreider, Richard and Shelvea Mains, Mr. C. Taylor Marshall, Mr. and Mrs. Ellice McDonald, Jr., Moon Valley Veterinary Hospital for J. Ashby Marshall, New Bolton Center, Pennsylvania Friends of Agriculture Foundation, Pennsylvania Holstein Association, H.W. Rucks and Son Dairy, Inc., Kate Jennings Seeman for Mr. and Mrs. Stephen J. Galipeau, Mr. William Schawbel, Robert Stoltzfus, V.M.D., Mr. W.B. Dixon Stroud, Henry J. Te Velde, D.V.M., Mr. Charles Wolf, and Wawa, Inc. 

Interesting "material" facts:

- 111,600 square feet of 6mm thick semi-transparent polyethylene plastic were installed.
- 5,580 square feet of solar block netting and 22,000 square feet of weather block netting were installed.
- Six miles of structural piping was used to construct the barn.
- 130 truckloads of concrete were needed.
- It takes 16,000 gallons of recycled water to flush the building.
- The manure holding facility has a capacity of 10,000 cubic yards.
- The area under plastic is 29,600 square feet, the area of the building under roof is 5,460 square feet.



Pennsylvania Secretary of Agriculture Charles Brosius addresses the guests, Dean Kelly and University President Judith Rodin in the background.