

Department of Animal Sciences**Dairy Facilities Updates Overview**

The College of Food, Agricultural, and Environmental Sciences (CFAES) and the Department of Animal Sciences have made the decision to move forward with upgrades to our Waterman Dairy Center in Columbus, Ohio. This allows us to: modernize and improve our facilities; reduce the number of milking cows to accommodate additional animal numbers that will come to the property as we build our new Multi-Species Animal Learning Center; focus more on our teaching and outreach mission; gather research data from appropriately equipped group housing; and to allow for additional public interaction and education regarding use of precision animal agriculture via technology.

Additionally, CFAES, the Department, and The Ohio State Agricultural Technical Institute (ATI) have agreed to combine our Krauss Dairy Center and the ATI Dairy Facility in Wooster, Ohio. This transition will occur over the next year and will involve some remodeling and the introduction of new technologies at those facilities. The plans revolve around increasing milking cow numbers at the Krauss Dairy Center and retrofitting the ATI Dairy to focus on raising replacement heifers.

We have solicited comprehensive proposals from the two leading manufacturers of robotic milking technology and their respective dealers. We have vetted their proposals and have chosen Lely Manufacturing and Prenger's Inc. in Lebanon, Ohio (the closest Lely distributor) to remodel and retrofit our facilities over the next year.

The utilization of new technologies at all of our facilities will open up new opportunities for students, faculty and staff. Students will learn to utilize the latest equipment and analyze the data retrieved from them, increasing their career opportunities. Faculty and staff will be able to evaluate more data points on animal health than ever before; these data points will also allow for a more proactive response to animal needs. Most importantly, no jobs will be lost in the technological transition. Some staff will see their job responsibilities reconfigured to meet the new technological demands.

Waterman

Our proposal includes leasing equipment from Lely (on a 7-year lease) to allow us to update technology more frequently. Additionally, we will remodel the Waterman Dairy buildings to: include a viewing room (to observe the robotic milking system and the free stalls); enclose the free stalls to improve winter temperatures; overhaul the manure handling system to likely include a squeeze press unit to separate liquids from solids (solids to be used as bedding – we do this at our Krauss Dairy in Wooster; or to be transported offsite as described below); and make upgrades and improvements to the ventilation system in the free stall barn. We also anticipate bringing our calves inside and housing them in group housing, and potentially utilizing an automated calf feeding system (Lely Calm Calf). We are also looking into a controlled feeding system (something similar to Grow Safe or Smart Feed) to allow for research with the group housed cows.

Plans are also underway to determine a plan for manure handling, which may include transport of solids offsite to either: 1.) A composting facility/company (Price Farm Organics or Nate Andre Farms) or, 2.) Deliver for application at the CFAES Molly Caren Farm Science Review site near London, Ohio.



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Waterman Dairy Proposed Updates

