

*University of Missouri*  
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*The University Dairy Herd*  
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THE DAIRY herd is a necessary part of the Dairy Husbandry Department. It is indispensable in order to teach the care and management of dairy cattle, and sanitary handling of milk. The milk of the dairy herd provides material each year for the use of nearly 600 students in testing, buttermaking, and cheesemaking classes. The dairy products from this department are mostly sold locally. The surplus animals are in good demand for breeding purposes.

The herd numbers between ninety and a hundred head, all registered, and includes the Holsteins, Jerseys, Ayrshires and Dairy Shorthorns.

The policy has been to buy a few foundation cows and breed up a herd from these. The Jersey herd was started in 1887 by the purchase of four cows. The Holsteins are de-

scended from four cows bought in 1902, the Ayrshires from three cows bought in 1907, and the Dairy Shorthorns from three cows purchased in 1907. These are the only females that have been brought into the herd.

For several years, the highest butter record for Missouri for each breed represented in our herd was held by cows in the University herd. Within a few weeks, the state Jersey record has been taken away from the University herd by a Missouri breeder.

In the Holstein herd is the cow Pontiac Lady Josephine with the highest butter record for Missouri. The second, third, and fourth highest records for the Holstein breed in the state are also held by University animals.

Five Holstein cows in one year produced 101,612 pounds of milk and 3,879 pounds of butter, an average of 20,322 pounds of milk and 776 pounds of butter each. Two of these have produced over 900 pounds of butter each in a year, and one has over 20,000 pounds of milk a year to her credit three years in succession. What such a production means may be better understood by stating that each of these five cows produced 9,670 quarts during the year or an average of 27 quarts a day. Had this been sold at eight cents a quart, the income would have been \$773 a cow. The average consumption of milk in the large cities is one-third of a quart daily for each person. At this rate, each of these cows

would have supplied with milk a hotel having eighty-one boarders.

The average cow in Missouri produces about 4,000 pounds of milk yearly. A herd of twenty-five average cows would be required to equal these five Holsteins in milk production. To raise a calf in good condition requires about 2,500 pounds of skim milk. Each of these cows could have raised eight good calves. Milk is not the only important source of income with such animals. One of the five has had six calves. Of these, four were bulls and sold for a total of \$1,100 cash at ages less than 8 months. Their mother has averaged over 15,000 pounds of milk a year.

In 1902, the University purchased four Holstein heifers as a foundation for a herd of that breed at a cost of \$600. Not a single female has been purchased since. One of the four cows had a bull calf and, as the cow was inferior, both cow and calf were sold. The entire University Holstein herd is descended from these three cows. Up to the present, stock has been sold for a total of \$6,218 cash and thirty-eight head of females are now on hand with an inventory value of \$11,075. Offers of \$700 have been made for single animals in this herd. An investment of \$600 thirteen years ago has resulted in an income of over ten times the original cost, and the development of a herd worth over \$10,000.

In the Jersey herd, six have produced over 700 pounds of butter and eleven over 600

pounds of butter apiece in one year. As the average cow milked in Missouri produces 140 pounds of butter yearly, it would require a herd of forty-seven such animals to equal these eleven.

Three Jerseys have recently completed a lifetime of service after producing a total of 318,952 pounds of milk and 17,179 pounds of butter, an average of 5,726 pounds of butter each. Every pound of milk yielded by these animals has been weighed and recorded.

Three Shorthorns have produced 12,000 pounds of milk in one year. One of these, Lula, for some time held the highest milk and butter record for the Shorthorn breed.

One Ayrshire has produced over 500, and several over 450, pounds of butter in one year.

Since 1892, each milking of every cow has been weighed and recorded. Each month a five day sample is taken for each cow and this is tested for butterfat with the Babcock tester. These records are all kept in an easily accessible form and are used in giving instruction to classes.

The entire herd has been given the tuberculin test each spring for ten years. The general plan is to raise all the heifers and keep them until milk records are on hand for at least two years, in order that records may be available from which to study the question of breeding.