Livestock Notes

HOW LONG DOES IT TAKE TO MILK A COW?

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How many times have you read that most cows milk out in 3 to 5 minutes? One widely used textbook indicates that "The average cow when milked correctly requires about 5 minutes to milk." These statements may have been true years ago but they are probably not true for high producing herds. A paper presented by Dr. Graeme Mein (University of Wisconsin) at the 1993 annual meeting of the National Mastitis Council, indicated that the average milking time of 71 cows from 5 herds was 6.4 minutes. And 95% of cows milked out in an average of 6.9 minutes. These cows were in Minnesota and Wisconsin herds with a DHIA rolling herd average of 18,300 to 24,463 pounds.

All herds used low-line parlor milk pipelines. System vacuum settings ranged from 12.5 to 13.5 inches of mercury. Pulsation rates were 52 cycles per minute for four herds and 60 cycles per minute for one herd. Pulsation ratios ranged from 50 to 60% on front, and 55 to 60% on rear quarters.

A linear regression equation was fitted to the data. The regression indicated that the minimum milking time was about 5.4 minutes per milking and that the average predicted milking time depended on the amount of milk produced (Table 1).

milking parlor with no automation and a high producing herd, one would predict that each side of the parlor would take about 7 minutes to milk plus .9 minute per cow (7.2 minutes) for the standard work routine time. When the milking time (7 minutes) and work routine time (7.2 minutes) are added together, this dairy producer spends 14.2 minutes per group, and parlor throughout is 4.2 turns per hour. If the parlor has automatic take-offs and rapid release gates, the work routine time may be reduced to .7 minutes per cow, and the turns per hour would increase to 4.8.

REPRODUCTION AND WOOL PRODUCTION IN INBRED SHEEP

Inbreeding in meat animal species has been used with varying degrees of success to concentrate desirable genes and to improve levels of performance of economically important traits. Inbreeding is beneficial when unrelated inbred lines are mated.

The performance of the resulting progeny is superior to that of the non-inbred population from which the inbred lines were derived. However, widespread use of inbreeding has been limited by a decrease in reproductive fitness or reproductive performance in inbred lines compared with randomly mated populations.

To determine the effects of inbreeding on reproduction and wool production in sheep, scientists in Idaho evaluated 54 inbred, one random-bred control, and three non-inbred control lines of sheep.

For at least nine years, records on 19,438 dams and 23,625 lambs from Rambouillet, Columbia, and Targhee sheep were collected and analyzed. Average inbreeding in the inbred lines during the period was near 25 percent for lambs and 20 percent for ewes. These levels of inbreeding are approximately equal to sire-daughter matings or brother-sister, full-sib matings.

Body weight increased in every line; however, fleece weight tended to decline and the change was most evident in the two lines developed by rapid inbreeding. As inbreeding increased, the trend was downward for total weaning weights of lambs at 120 days of age and number of lambs weaned per ewe exposed to breeding. In all cases except one, lamb production was superior in the non-inbred control group of each breed, compared with the inbred lines.

Not one of the 54 inbred lines evaluated was superior to its respective non-inbred control line for the two most economically important traits, weight of lamb weaned and number of lambs weaned per ewe exposed to breeding.

Table 1. Relationship between pounds of milk produced per milking and predicted average minutes per milking.

Pounds of Milk Produced Per Milking	Avg. Minutes Per Milking
15	5.4
25	6.6
37.5	8.1
50	9.6

Thus, based on this study of 5 high producing commercial dairy herds, milking required 5 to 10 minutes per cow. This helps explain why most milking parlors operate at "4 turns per hour." That is, 4 groups of cows cycle through the parlor per hour. For example, if a dairy producer has a double-8