

Survey shows startling statistics

Dairy cows 'are what they eat'

NEWARK, Del. — People have plenty of opinions about what makes a good dairy operation. Some insist the small farm has the advantage because the farmer can keep better tabs on each animal. Others are just as certain that only the large-scale operation can succeed in today's economy.

In an attempt to find out who is right, University of Delaware Extension dairy specialist George Haenlein examined the Dairy Herd Improvement Association statistics for the northeastern United States.

At present there are 6,414 Holstein herds on official DHIA test in the region, with an average of 69 milking cows per herd. With the help of a computer, Haenlein divided these herds into two groups: those that are larger than the average, and those that are smaller. The smaller herds average 35 cows, while the larger herds average 123.

Perhaps surprisingly, Haenlein found few differences in production averages between the larger and smaller farms. Average milk production per cow and average butterfat content were almost identical in the two groups. It seems, then, that the size of herd didn't make any difference in the individual cow's ability to produce.

There was a difference in the way the herd managers of large versus small herds fed their cows, though. On the average, the larger herds were fed at 120 percent of the cows' requirements, which was heavier than the rate of feeding of the smaller herds.

Cows in larger herds were given less hay but more silage, including haylage, and more grain. Thus the larger farmer may have had lower feed costs and potentially higher profits. Some of these profits might have been offset, however, by slightly less efficient breeding on

larger farms, as judged by conception rates, number of services per conception, and time between pregnancies.

Culling was heavier in the larger herds, so the average age of animals was lower in the larger herds. Large and small herds did an equally good job of bringing in replacements heifers, at an average of 28 months.

The only apparently significant difference, according to Haenlein, was that large farms were using more home-grown feeds. Managers of small dairy herds could increase their profits by adopting this practice.

If the rate of milk production doesn't depend on the size of the herd, then what does make some herds better producers than others?

To answer this question, Haenlein divided the Holstein records for the region into two groups: those with above-average milk production (averaging 18,107 pounds) and those with below-average production (averaging 12,869 pounds).

He found no differences in the fat content of the milk produced by the two groups, but big differences in feeding patterns of high and low-producing herds. Many low-producing herds were being fed too much of an unbalanced ration, thus wasting protein or energy and potential profits.

High-producing herds were fed one-third more energy feeds than the low-producing herds. The high-producing herds were also fed more silage and less hay.

The high milk-producing herds were also more efficient calf producers, the study showed. They had a shorter calving interval. The high-producing herds were also culled more severely and thus tended to have younger animals on average.

Efficiency of breeding was as much a key to profits as was the rate of milk production. To find out what set apart the more efficient breeders from the less efficient, Haenlein sorted the Holstein herds into two groups according to whether they were above or below average in breeding efficiency. The efficient breeders averaged 1.3 services per conception, while the less efficient breeders required 2.2 services per conception.

Haenlein found just as many large herds as small ones among the efficient breeders, which showed that herd size alone did not make a difference in reproductive efficiency. Other factors such as rate of feeding, breed of cows, and management decisions also played a part.

Making further use of the computerized records, Haenlein took a look at the other breeds in the Northeast. There were 175 Ayrshire herds on official DHIA test in the region. When divided into two groups, the high producers averaged 14,600 pounds, and the low producers, 10,000 pounds. Between the high and low-producing Ayrshire herds, Haenlein found no differences in fat content, in size of herd, or in breeding rate. The age of the first calf heifers tended to be older in the lower milking herds, though, indicating less efficiency.

Haenlein also studied the records of the 128 Guernsey herds on test in the region. The low-producing group averaged 9,000 pounds, as compared to 13,200 for the above-average group. Again there were no differences in herd size or butterfat content. Guernseys were next to Jerseys in fat content. But conception rates for Guernseys were lower than for the other breeds, averaging two services per conception.

As with Ayrshires, the average age of first calf heifers was older in the low-producing Guernsey herds than in the higher-producing herds.

Looking at the 370 Jersey herds on test in the region, Haenlein found much the same story. However, Jerseys had the best conception rates of any breed, in both low and high-producing herds. Only red-and-white Holsteins had equally good conception rates, but there were only

five such herds on official test in the entire region.

Looking at the overall picture, Haenlein has concluded that neither large nor small herds are necessarily better. Furthermore, the right feeds and balance can mean higher production and profits, but if the cost is lower rates of reproductive efficiency, the farmer must decide whether or not it's worth it.

USDA grain official visits Japan, China

WASHINGTON, D.C. — U.S. Department of Agriculture grain inspection official Kenneth A. Gilles visited the Far East recently. He addressed a meeting of the Japan Section, American Association of Cereal Chemists and met with Japanese government officials. He visited China to discuss grain inspection and other matters with government and grain trade officials.

Gilles was invited to visit China by that country's import and export commodity inspection agency. Officials of that agency visited the United States last summer and USDA officials escorted them on a tour of grain growing and exporting facilities throughout the country.

"Exports of U.S. grain to China have been growing recently, and there is potential for even greater trade between our two nations," Gilles said. "We must make every effort to ensure understanding of each other's inspection philosophies and methodologies, so that our business dealings will not be jeopardized by unnecessary misunderstandings."

Through April of this year, U.S. grain exports to China totaled 4.6 million tons, compared with 4.2 million tons for all of 1980, and USDA Deputy Secretary Richard Lyng recently estimated this year's total could top 8 million tons. Under a bilateral grain agreement, China has agreed that 6 to 9 million tons of its annual grain imports will be of U.S. origin.

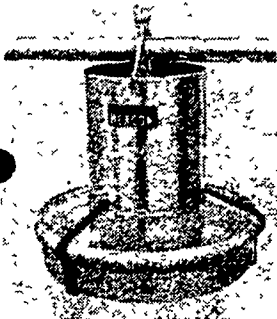
Accompanying Gilles on the trip were USDA officials Robert Zortman, deputy director of the inspection division, and William Shey, chief of the international monitoring staff. In addition to the talks in Beijing, the team visited Dalian, Shanghai and Hangzhou.

In addition to addressing the cereal chemists association, of which he is former president, Gilles, while in Japan, with government and grain trade officials. Among other things, he discussed the results of a soybean sample exchange between the Federal Grain Inspection Service and the Japanese Ministry of Agriculture, Forestry and Fisheries.

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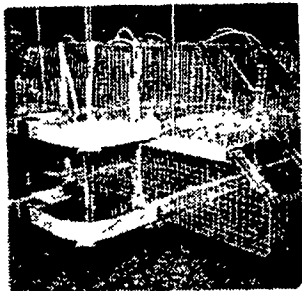


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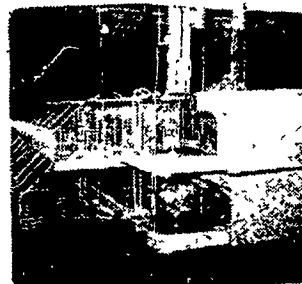


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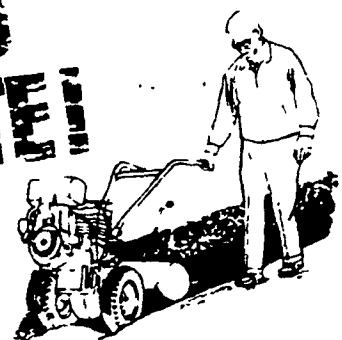
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