The status of dairy grazing in Wisconsin

Pasture use on dairy farms widespread

Surveys from random samples of Wisconsin dairy farmers conducted over the last decade by the UW-Madison Program on Agricultural Technology Studies provide information on how many farms, cows and acres are involved with managed grazing, how much milk and income grazing farms generate and what kinds of technologies they use. This summary is an excerpt from the 2006 report: *Grazing in the dairy state: Pasture use in the Wisconsin dairy industry, 1993-2003*, which was funded by a USDA-CSREES grant to CIAS and by the Wisconsin Milk Marketing Board.

The researchers categorized dairy farms by feeding management. Management intensive grazing (MIG) or managed grazing is a system in which dairy farmers rely on pasture as the primary source of forages for their milk cows during the grazing months and move cows to fresh pastures at least once a week. Stored feed farms do not rely on pasture for any part of their forage ration. Mixed feed farms obtain part of the forage for their milk cows from pasture and also feed significant amounts of stored feed; they rotate cows to fresh pasture less than once a week.

How much managed grazing occurs in Wisconsin?

Managed grazing, is practiced on about 23 percent of Wisconsin dairy farms. Another 21 percent use mixed feed, while 56 percent are stored feed farms. While the number of dairy farms in Wisconsin has dropped steadily from about 30,000 in 1993 to 16,900 in 2003, the proportion of farms using MIG has remained fairly constant since 1999 at 22 to 23 percent.

At an average of 35 acres of pasture for milk cows per farm using pasture, we estimate roughly 136,000 acres being used by graziers (MIG) and another 122,500 acres of pasture grazed on mixed feed farms. These are rough totals and likely underestimate pasture acres, since the number of large grazing operations surveyed was very small. These figures also do not include pasture used for heifers or steers on dairy farms.

Dairy farmers using pasture (MIG plus mixed feed categories) generally operate smaller farms and fewer acres of cropland than stored feed farmers. During the past decade, stored feed farms have increased in size by an average of 75 acres to 426 acres per farm, while managed grazing farms have decreased somewhat to an average of 245 acres operated per farm (see Figure 1). In 2002, farms using pasture were most numerous in the South West, West Central and North Central Crop Reporting Districts in Wisconsin (see Figure 2) with 57 to 68 percent of farms feeding pasture to milk cows.

Figure 1. Average number of acres operated per Wisconsin dairy farm

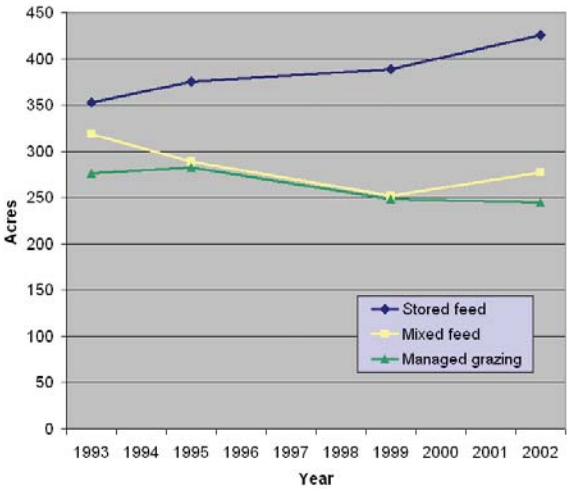
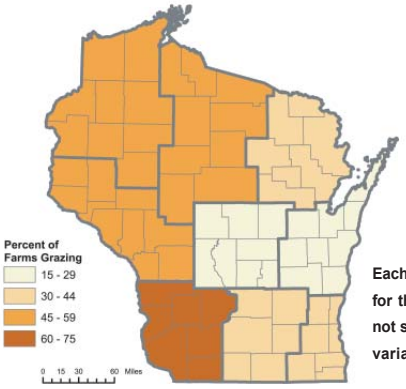


Figure 2. Percent of dairy farms using pasture by Crop Reporting District, 2002 (MIG and mixed feed combined)



Each percentage is an average for the entire district and does not show county by county variation.

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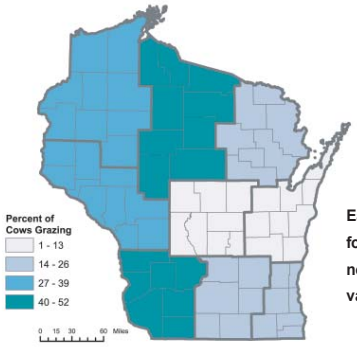
Thirty to thirty-seven percent of the dairy farmers in these three districts managed pastures intensively (MIG).

How many dairy cows graze Wisconsin pastures?

About 26 percent of Wisconsin's 1,265,000 dairy cows used pasture as part of their feed ration in 2002, over half of these by management intensive grazing. The South West is the most heavily grazed, with 50 percent of dairy cows in this region harvesting pasture, while 44 percent of cows in the North Central and 33 percent of cows in the West Central Crop Reporting Districts obtain forage from pasture (see Figure 3). These regions also have the greatest proportion of mature dairy cows on MIG farms, from 21 to 31 percent of the total.

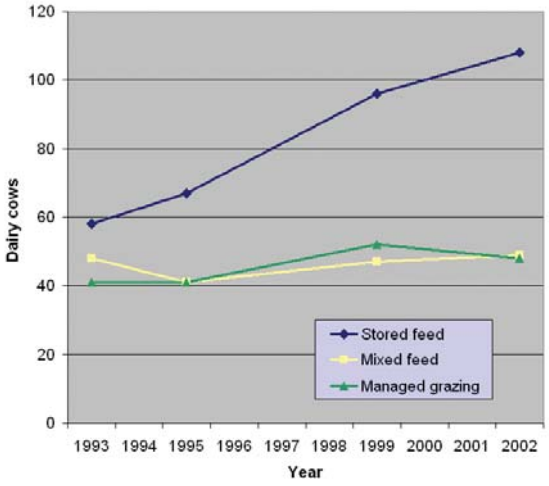
Figure 3. Percent of cows using pasture by Crop Reporting District, 2002 (MIG and mixed feed combined)



Each percentage is an average for the entire district and does not show county by county variation.

Managed grazing farms usually have smaller herd sizes than stored feed farms (see Figure 4). The mean herd size on a grazing farm is 48 cows, up about 7 cows per herd from 1993. A stored feed farm has an average of 108 cows, fifty more per herd than in 1993. Eighty-two percent of Wisconsin dairy herds have less than 100 cows, while only six percent have 200 or more cows. Graziers are most likely to have herds under 50 cows, though 35 percent of them have herd sizes of 50-99 cows and there is a handful of larger grazing herds.

Figure 4. Average number of milk cows per Wisconsin dairy farm



What is the financial performance of Wisconsin grazing dairy farms?

Graziers report the same average total family income range for 2002 as the stored feed and mixed feed farm households: $35,000-$49,000. Total family income includes the family's share of net farm income as well as off-farm wages and any income from other sources. Because managed grazing farms show higher net farm income from operations per cow than stored feed farms (Kriegl and McNair, 2005), they are able to generate approximately the same returns from fewer cows.

Another indicator of financial performance is farm debt load. Twenty-seven percent of graziers report no farm debt in 2003, up from 22 percent in 1993. Of the farmers who do carry debts on their farm enterprises, a third of graziers were in the lowest debt category (less than 10 percent (ratio of debt to the value of farm assets). MIG farmers also appear to have reduced their debt load over the past ten years, with 15 percent fewer graziers having the highest level of debt (over 40 percent of asset values) than in 1993.

How can managed grazing contribute to the future of Wisconsin dairy farming?

With relatively low capital input costs and the potential for earning good returns per cow and per hundredweight of milk, **managed grazing is a business model that can be used as part of a sound strategy to provide a steady milk supply for the state.** Wisconsin dairy farmers have a strong record of environmental stewardship and active participation in school systems and rural communities, as well as increased interest in exploring value-added marketing options for their products. Graziers are particularly optimistic about their future in dairy farming, with 30 percent saying that they would continue farming indefinitely.

Over the past 10 years, grazing dairy farms in Wisconsin have shown they can be profitable and sustainable. The business, policy, educational and research sectors that serve the dairy industry need to recognize the potential of managed grazing and cooperate to develop and promote sustainable dairy systems.