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From the Department of Dairy and Animal Science

This regular column from Penn State's Department of Dairy and Animal Science features the research findings, student opportunities, and reports on other important topics generated in the Department. The back issues of the column are archived on Lancaster Farming's Internet www.lancasterfarming.com home page. Look for them.

Grazing Dairy Cows Requires Close Management Input

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Assistant Professor

are now grazing farmers.

Grazing of dairy cows for six to seven months of the year is becoming a profitable alternative management strategy for some dairy producers in the United States, approximately 15 percent of the producers in Pennsylvania

The management input to manage a grazing-based dairy system successfully is higher than for a confinement fed dairy operation because the manager is balancing two complex biological systems that are both competitive and complementary - the cows

and the available forages and pastures. Managers cannot simply put the cows out to graze.

The impact of the change in diet and nutrition management is huge, and needs to be given serious consideration when moving dairy cow diets from total mixed rations (TMR) to a pasture-based system. Feeding some supplements allows for greater flexibility in managing both the cows and pastures. Supplemental feeding, in most cases, can also increase the profitability of the dairy system.

The "cow" factor in grazing systems is critical. "Cow factor" means the breed of cow, the cow's genetics, and the capacity of the cow to eat sufficient feed to produce milk. Work in Canada and New Zealand has shown that cows of equivalent genetics have vastly different milk production and composition due to the types of feeding and management systems.

For example, the production of cows in New Zealand on a

pasture-based system is approximately 49 per cent lower than Canadian cows under an intensive feeding system. Generally, cows do not consume sufficient pasture of high quality to produce milk to their genetic potential. Quality is measured as the ability of the pasture to provide all essential nutrients required to produce milk.

In making the change to grazing, there is a second biological system to manage - the pastures. The pasture resource will depend on the geographical location and the predominant pasture species of the region. However, since the productivity of most pastures will vary with seasonal weather changes, it is important to consider the availability of forage over the whole grazing season and plan herd management accordingly. Conserving feed in the form of hay or silage, and feeding supplements can reduce the impact of seasonal forage

shortages. It is highly unlikely that a dairy farm can be financially successful on a fully pastured-based feeding regime unless the pastures and forages are well managed, some feed is conserved, and proper supplementation is practiced.

Pasture and forage management require the farm manager or herdsman to observe pasture conditions daily, if possible, since pasture quality and quantity can change rapidly. This is especially important in the spring, and during periods of hot dry weather when pastures dry out quickly. Very wet conditions can also adversely affect pasture growth, so good management is critical in these periods.

Knowing the quality and quantity of the forages available allows the manager to plan how much and what types of additional feed may be required to maintain milk production at a desirable and profitable level. Variability in the quality of forages has been shown to change the composition of milk, at times adversely. Therefore, to maintain consistent milk production and composition, good pasture management is essential.

Finally, the interactions of the cows and the pastures systems need to be considered. These interactions are important, since cows are more selective in their grazing if allowed free choice grazing rather than some type of controlled grazing, such as strip or rotational grazing. Another factor to consider in a grazing system is the intensity of grazing because most forages or pastures require a rest period to regenerate or persist over a long period of time. This is especially important for perennial forages, such as alfalfa.

The use of supplementary feed is encouraged because it allows the dairy farmer more flexibility in the management of both pastures and cows. Supplementary or complementary feeds can also provide essential nutrients that may not be present in sufficient quantities in the pastures. Most dairy producers in the United States feed some type of supplement. Producers do this to enhance the milk production of the cows or improve body condition, while increasing the profitability of the dairy system. Purchasing or conserving some supplemental feed gives the dairy

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PAID ADVERTISEMENT

Trusted Borden® Brand Positions DFA In Booming Cheese Markets

In American retail markets gone mad for cheese (76 percent of all American households consume cheese, according to a USDA study), the Borden® brand and Elsie™ the Cow are household names to millions. To Dairy Farmers of America (DFA) members, they are an impor-

tant entrée to grocery dairy cases and consumer loyalty across the country.

Through the acquisition of the Borden brand in late 1997, DFA demonstrated a strategic commitment to helping dairy farmers capture a larger share in highly competitive food mar-

kets. For nearly 70 years, Borden and Elsie have become icons for great taste, wholesome quality and value to cheese-loving Americans — a market in which milk producers have traditionally struggled to directly compete for profits.

"As we look to the future of our cheese

business, we are excited by the acquisition of the Borden label," says Lonnie Spurgeon, senior vice president and chief operating officer for the DFA Dairy Foods Group. "It gives us access to an established and highly regarded name in the retail market, where we see opportunity for future growth and product expansion."

In light of a 1996 USDA study that shows domestic per capita cheese consumption climbing by 2 percent annually — up a total of 27 percent since 1980 — the acquisition provides an important foothold for DFA in cheese product development and marketing.

"Research has shown that, in the United States, Borden is the most recognized natural dairy brand, with an unaided consumer awareness score of 15 percent," Spurgeon explains. "That's a solid foundation upon which we can continue to build and grow Borden product success and reputation."

"The report also indicates that consumers identify convenience as the No. 1 reason to purchase single-wrapped cheese," Spurgeon adds. "That's where the Borden label comes in. Borden is one of the country's leading manufacturers of cheese singles in regular, low-fat and no-fat choices."

"Our vision is to expand Borden product lines while capitalizing on its brand name identity and product reputation," Spurgeon says. "When consumers buy cheese, we want them to think Borden."

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opportunities and local services that are right for you. You'll hear what DFA membership can mean — better representation, local involvement and the support to be all you can be. Invest in a partnership that pays ... talk to your local DFA representative today.



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