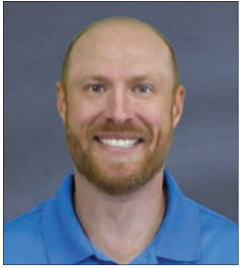


Milking Older Cows - Why Parity Matters



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In the world of dairy farming, the concept of parity—referring to the number of times a cow has calved—can be a crucial tool to optimize herd productivity. As cows age and go through multiple lactations, their productivity trends will shift, impacting their profitability to the dairy operation. Research shows

that older, multiparous cows (cows that have had multiple calves) often have significant productivity advantages. This article discusses why parity matters in dairy herds and how milking older cows can boost overall herd productivity and profitability.

Think About Building a Football Team

Pretend you're a head coach and you're building a professional football team. Do you want a team made up of 11 men in their mid to upper 20's or do you want a team made up of 35% 17-year-old boys (7 adult men and 4 boys)? Seems like an obvious answer, right? The adult men are mature, stronger and more experienced. There's no doubt that they'll hit harder and run faster than the 17-year-old boys. The productivity of the younger boys on the team just cannot match that of the men.

Compare this to our dairy farms. Many dairies are milking 35% of their herd as first lactation heifers. Some herds are even milking up to 50% heifers. These heifers are not even at their mature bodyweight yet and they lack experience in the milking string. Similar to the 17-year-old boys, they are just not

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built to compete with their stronger, more mature counterparts, and we see that in their reduced productivity. If your herd is not in a growth mode and your first calf heifers make up more than 35% of your total herd, it is time to ask yourself why.

Why Older Cows are an Asset

From an economic standpoint, we know that these older cows are generating greater economic returns than younger cows if their daily milk output conforms to typical expectations. Dairy cows typically reach peak milk production after their third or fourth lactation, with older cows often producing more milk than their younger counterparts. Cow longevity is the second most economically important trait in dairy cows, with milk yield being the most important trait.

As an industry, we expect our second lactation animals to produce around 10 lbs. more milk/cow/day than first calf heifers. We also expect our third and greater lactation cows to produce around 10 lbs. more milk/cow/day than second lactation cows.

Multiparous cows, especially those in their fourth or fifth lactation, have more developed udder tissue and better milk letdown, which can translate into higher yields per milking session. Furthermore,



older cows are often better adapted to the specific conditions of the farm, such as milking schedules and environmental stressors, allowing them to maintain their productivity at a more stable rate. Managing this subset of the herd efficiently can lead to better milk yields per cow and reduced replacement costs. While a farm with good cow longevity is not guaranteed to be profitable, a farm with short longevity due to a high involuntary culling is not likely to be profitable.

Older Cows Do Come with Problems

The focus on younger cows often arises because they have fewer health complications early in life and are generally regarded as genetically superior to the older cows.

Although older cows can be more productive, they are also more susceptible to certain diseases. Some older cows are involuntarily lost during the first two months of lactation, with many being lost due to poor transitions, lameness, mastitis and reproductive issues. These diseases can significantly affect milk yield and overall productivity if not managed appropriately. For instance, mastitis can reduce a cow's milk production by hundreds of pounds over the course of a lactation. Subclinical diseases like ketosis can also take a heavy toll on herd productivity, often going unnoticed until milk yields drop significantly.

To keep older cows healthy and productive, a robust herd health management program is essential. Regular monitoring for early signs of disease, effective nutrition management, and

prompt veterinary intervention are crucial. Nutrition is a key component of increased productive life in dairy herds. Dairy rations that focus on energy from forages, as opposed to high starch levels, will promote increased rumen health and lead to improved longevity and performance. It also helps prevent metabolic diseases, reproductive disturbances, and lameness, which are the top three reasons to cull multiparous cows.

Save on Heifer Rearing Costs and Even Sell Some Heifers

By keeping older cows productive, dairy farmers reduce the number of replacements needed, thus saving on rearing costs. It also allows the dairy farm to write the cost of rearing that heifer off over a longer productive lifetime. The cost of raising replacement heifers, which includes feeding, housing, and veterinary care, often exceeds \$2,500 per heifer.

Given the current state of the dairy industry, having heifers on hand to sell is economically advantageous and allows the dairy to create another income stream from the commercialization of these extra heifers.

Little Progress Has Been Made

Research published by the United States National Institute of Health in 2018 found that since 1960, New Zealand was the only country in which the length of productive life of dairy cows has increased

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over time. The United States and most European countries have had no change to the length of the productive life of dairy cows since 1960.

The case for extending the productive lifespan of dairy cows is strong, however, little progress has been made by our industry. Why?

It's likely a complicated, multifactorial issue that involves:

1. Our industry's general obsession with high milk production. This obsession, shared by many producers and bankers alike, leads to an industry that creates lactating diets that are formulated to increase milk production at the expense of cow health.
2. A focus on creating genetically superior heifers with the breeding and genetic testing technologies available today.
 - a. But, one must ask the question "What is the point of making a heifer with amazing production potential, if she never gets to see a fourth or fifth lactation and express all that potential?"
3. A longstanding history of cheap and plentiful replacement heifers within our industry. Perhaps the current heifer shortage and

their high price will help naturally promote increased productive life and longevity.

More Work Still Needs to Be Done

As an industry, we need to continue working on increasing the productive life of our cows. Older cows produce more milk and do so at a lower cost compared to heifers entering their first lactation. By maintaining older cows, dairy farms can spread the fixed costs of raising heifers over a longer productive lifespan, improving overall herd profitability.

Moreover, reducing involuntary culling due to health problems helps to stabilize herd size and milk production levels, offering more consistent returns from milk sales. In the 2018 Crystal Creek® article "*Improving Longevity in Your Dairy Herd*" you can read more about how to increase the parity in your herd. Crystal Creek® can help you establish a nutrition program for your herd to help you extend the productive life of your cows, reduce replacement costs, and ultimately increase your profitability.

References available upon request.