

The Assessment of Dairy Farm Profitability Under a Variety of Management Techniques

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By: Derek Nolan and Jeffrey Bewley, Ph.D.

The main goal for most dairy farms is to be as profitable as possible. Every dairy farm has a different management style; the key is getting the management style that is right for your dairy. This summer at the Joint Annual Meeting in Kansas City, profitability of dairy farms was a topic of discussion. The following paper describes some of the current research related to on management economics.

Efficacy

Researchers in Wisconsin are looking at how increasing milk production through more efficient use of farm inputs will affect not only the profitability of the farm but improve the farm's carbon footprint as well. The researchers concluded that with an increase in milk production and fat corrected milk, farm profitability (per pound of fat corrected milk) increased and the carbon footprint of the farm decreased.

Early Lactation Culling

The transition period can be a very costly time for producers. Researchers in Florida determined the economic impacts of 6% and 12% culling risks before the cow reached 60 DIM. They also compared the differences in two culling prices (\$0.84 vs. \$0.62 per lb live weight). Herd reproductive performance measures were set to be equal. Culling costs included: costs associated with replacement heifers, feeding costs, breeding costs including the cost of drugs, and other costs. Income included: milk sales, cow sales, and calf sales. According to their model, a culling risk of 6% was \$55,480 more profitable per year than a culling risk of 12%. When the cow sale price dropped to \$0.62/lb, the profit was \$80,300 more annually for a culling risk of 6% compared to 12%.

Fresh Cow Mastitis

Mastitis is one of the most costly diseases on dairy farms and it is most prevalent in fresh cows. Researchers in Georgia have developed a tool to help determine the costs of clinical mastitis in the first 30 days of a cow's lactation. They determined that a clinical mastitis case in the first 30 days of milk would cost a producer \$458 with indirect costs making up 71% of the total costs. The indirect and direct cost estimates are depicted in Table 1.

Profit is the driver of many of the day-to-day decisions made on dairy operations. Dairy farming involves many different management pieces and decisions. This paper provides some of the latest research on the profitability of management decisions, but it is important to remember that producers and managers must make the decision that best fits their operation.

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Table 1: Direct and indirect costs associated with the cost of clinical mastitis in the first 30 DIM.

Direct Costs	Price
Diagnostics	\$3
Therapeutics	\$42
Discarded Milk	\$20
Veterinary Services	\$15
Labor	\$30
Death Loss	\$26
Direct Cost Totals	\$135
Indirect Costs	
Future production loss	\$135
Future culling and replacement costs	\$162
Future reproductive loss	\$21
Ongoing monitoring costs	\$5
Indirect Cost Totals	\$323
Overall Total	\$458