



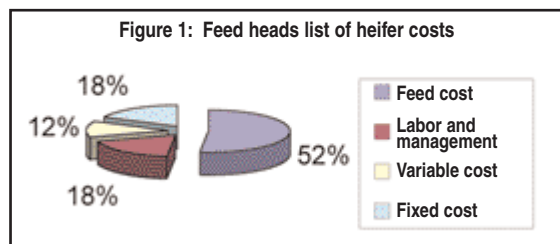
Feed expenses eat heifer-raising budgets

— by Tina Kohlman, Scott Gunderson, Pat Hoffman, and Annette Zwald —

WHERE money goes to raise a dairy replacement certainly changes from calf to heifer. In calves, labor is the main expense, but as they mature, growing appetites cause feed bills to escalate. In our second article in this six-part series, we will look at the 44 of the 49 Wisconsin operations that managed a heifer enterprise. The operations include 14 tie stall herds, 20 free stall operations, and 10 custom growers. In the previous January 10 article, 40 of the 49 operations surveyed were involved in calf raising.

Based on information obtained from these 44 operations, the average cost to raise a heifer was determined to be \$1,323 or \$2.04 per day. Some operations did quite well controlling costs, while others did not do as well. Total heifer enterprise costs ranged from a low of \$851 to a high of \$1,900. When we break these values down to a per-head-per-day basis, the range was \$1.31 to \$2.93 per head.

In this survey, a heifer was considered to be an animal raised in a group setting until she freshened or, in the case of the custom heifer grower, when she is returned to the dairy producer. The



average number of days a heifer was in group housing was 648.3 days for all operations. These animals also spent 67 days being raised as calves for a combined total of 710 days from birth to calving. Please note, in the case of the custom heifer grower, the heifer is returned to the dairy producer approximately two to three months prior to calving.

Heifers raised by custom growers were on feed an average 576.7 days as compared to 667.0 and 671.1 days by tie stall and free stall operations, respectively. Because custom growers fed heifers approximately 100 days less than the other operations, their total cost per head is much lower.

Due to variation from farm to farm, several assumptions were made to standardize certain inputs including: calf value, feed costs, labor and management pay, and building replacement values (Table 1). All other values associated with the calf and heifer enterprises were farm specific.

Please note that our team placed a \$500 value on each calf, compared to \$100 in the 1998 study. Labor and management values rose from \$7 and \$12 per hour, respectively, in 1998 to \$12 and \$20, respectively, in 2007.

Unlike the calf enterprise, feed costs were the number one area contributing to the cost of raising a heifer (Figure 1). Feed made up over half of the expense to raise a heifer, compared to approximately one-third the cost to raise a calf. It cost the operator approximately \$684 per heifer, ranging from \$399 to \$1,251 from farm to farm for

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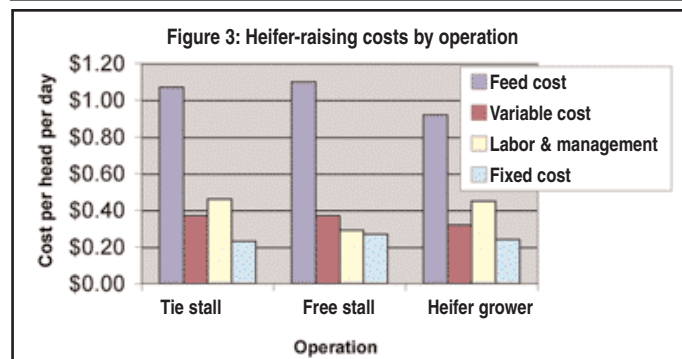
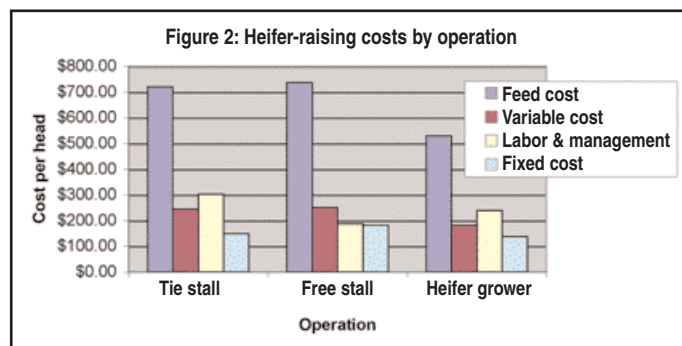
feed. On a daily expense ledger, this translated to an average feed cost of \$1.06, ranging from \$0.62 to \$1.93. Comparing the three types of operations, custom heifer growers fared the best, feeding heifers for an average of \$0.92 per heifer per day. That is \$0.15 to \$0.18 less than tie stall and free stall operators, respectively (Figure 3).

In regards to the heifer raising costs, the other three main categories contributed nearly equally to the remaining costs to raise a heifer. Labor and management (paid and unpaid) contributed over 18 percent of the total costs to raise a heifer or \$244 per heifer (\$0.38 per day). Tie stall operators and custom heifer growers had similar labor and management costs (\$0.46 and \$0.45, respectively). Free stall operators were more efficient when it came to labor costs associated with raising heifers with an average cost of \$0.29 per heifer per day, approximately 35 percent less than the other two types of operations.

Variable costs (excluding feed costs) included bedding, veterinary, breeding, electrical and fuel, interest (assumption of 8 percent interest), and death loss. They accounted for 17.5 percent of the total heifer expenses. This averaged \$233 per heifer or \$0.36 per day.

Fixed costs were quite similar among all operations. All three types of operations paid approximately \$162 per heifer, or \$0.25 per day, in fixed costs. Fixed costs ranged from \$0.23 per heifer per day with tie stall operators to \$0.27 per heifer per day with free stall operators.

When we look at the full dairy replacement enterprise, it cost all operations an average of \$1,649 to raise a heifer from birth to freshening or, in the case of the custom grower, when the heifer was returned to the dairy producer (710 days on average). The range was from a low of \$1,095 to a high of \$2,435. When broken down to a per-head-per-day basis, it costs \$2.32 on average to raise a heifer, ranging from a low of \$1.54 to a



high of \$3.42 per head per day. This daily cost to raise a heifer compares to an average \$1.69 per head per day in the 1998 study, a 21 percent jump over the past nine years — the equivalent of a 2.3 percent rise per year.

These first two articles are designed to highlight the 2007 costs of raising dairy replacements. Future articles will showcase in-depth comparisons found among the three types of dairy operations: tie stall, free stall, and custom calf/heifer grower. Another article will compare 1998 to 2007 costs, and the final feature will give benchmarks for your operation.

- January 10: Calf costs
- January 25: Heifer costs
- February 10: Differences between operations
- February 25: Labor efficiencies
- March 10: Comparing 1998 to 2007
- March 25: How does your operation compare?

Table 1. Key assumptions used in costs associated with raising calves and heifers

Item	Assumption
Heifer enterprise	
Heifer	An animal raised in a group setting until she freshens or, in the case of the custom grower, returned to the dairy producer
Legume silage (100% DM)	\$100 per ton
Corn silage (100% DM)	\$85 per ton
Corn (100% DM)	\$116 per ton
Cow waste (100% DM)	\$100 per ton
Soybean meal (100% DM)	\$200 per ton
Labor (paid and unpaid)	\$12 per hour
Management (paid and unpaid)	\$20 per hour
Interest rate	8 percent
Replacement value of calf and heifer enterprises	
Homemade calf hutch	\$200
Purchased calf hutch	\$300
Self-cleaning floor barn	\$15 per square foot
Greenhouse barn	\$10 per square foot
Postframe calf barn	\$12 per square foot
Bedded pack barn	\$15 per square foot
Free stall barn	\$20 per square foot
Mound system	\$0.09 per square foot
Concrete lot	\$3 per square foot