



# Caring for calves an expensive business

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

**I**T'S a big expense. In fact, the cost of raising calves and replacement heifers is second only to feed costs on dairy farm expense ledgers. While it is a major component in making a dairy operation profitable, it sometimes is neglected as a profit center since no direct income is generated by the replacement herd.

In 1998, members of the UW-Extension Dairy Team surveyed 62 Wisconsin operations to determine the costs and to benchmark labor efficiencies associated with raising calves and heifers. Due to inflation and the changing economic dynamics, county-based extension educators conducted a similar field survey in 2007.

This article is the first in a six-part series designed to highlight:

- calf costs
- heifer costs
- labor efficiencies
- differences between operations
- comparing 1998 to 2007
- how does your operation compare

## Studied 49 farms . . .

During the summer of 2007, feeding, management, housing, and labor information was collected by 21 county-based extension agents on 49 Wisconsin operations. Due to variation from farm to farm, several assumptions were made to standardize certain inputs including: calf value, 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.

The 49 operations were divided into three groups:

- herds which utilize a tie stall barn as the milking center (tie stall)
- herds which utilize a parlor as the milking center (free stall)
- custom calf and/or heifer growers (custom grower)

The groups were then further divided into calf and heifer enterprises. In this first article, we will explain the calf enterprises, while the next article will delve into heifer expenses.

## Nearly 80 percent raise calves . . .

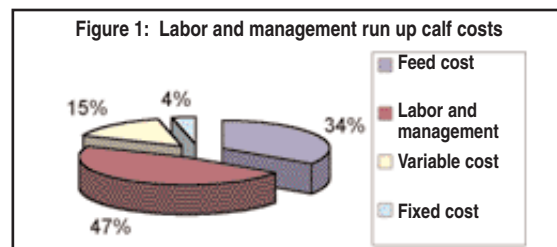
Of the 49 operations surveyed, 40 had a calf enterprise: 15 tie stall operations, 21 free stall operations, and 4 custom calf growers. Information collected indicated the cost of raising a calf from birth to the time she moved to group housing (average of 61.4 days) was \$326 or \$5.31 per calf per day. The operation with the lowest cost could raise a calf for approximately \$76, while the operation with the highest cost raised a calf for \$686.

When comparing calf rearing costs by operations, it was found that custom calf growers could raise a calf for an average of \$3.16 per day. This was determined to be 45.4 percent lower than tie

stall dairy operators at \$5.78 per calf per day and 43.5 percent lower than free stall dairy operators with a cost of \$5.59 per calf per day.

## Four cost centers studied . . .

Calf-rearing costs were broken down into four management areas: labor and management, feed cost, variable cost, and fixed cost (Figure 1). Labor and management accounted for nearly half of the cost. In this study, it cost, on average, approxi-



mately \$153 or \$2.49 per calf per day in labor and management. Both paid and unpaid (labor not directly paid for by the operation) were accounted for in the field study.

Comparing operations, labor and management was most efficient on custom calf grower operations. The labor and management cost was the highest cost center for raising calves with tie stall and free stall operators (\$2.93 and \$2.51 per head per day, respectively). Even though it was the second highest cost in raising a calf for custom calf growers, custom calf growers were three times higher in labor efficiency at \$0.98 per calf per day in labor (Figure 2).

Clearly, labor and management costs have a significant effect on calf-raising costs. A future article in this series will describe the differences between operations.

## Feed costs next big ticket . . .

Not surprisingly, feed cost was the second highest area (except for custom calf growers) in raising calves, contributing over one-third of the total cost. Feed cost which included liquid feed (milk replacer or pasteurized waste milk), starter, and forages averaged \$112 per calf. This equates to \$1.83 per calf per day. Feed cost ranged from \$16 to \$312 per calf or \$0.26 to \$5.08 per calf per day.

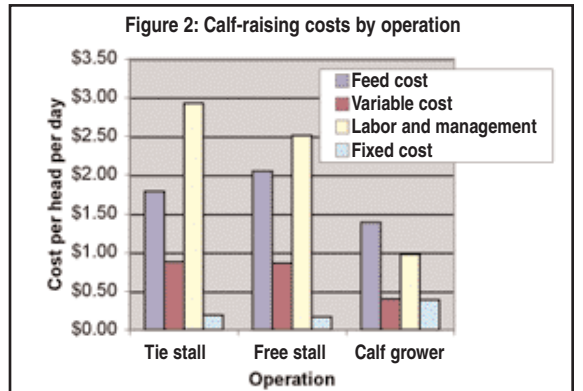
This extreme variation in feed costs can be con-

tributed to the average weaning age, number of days on feed, source of liquid feed (milk replacer versus pasteurized waste milk), and the use of forages in the calf diet.

Comparing feed cost among the three different types of operations, custom calf growers had the lowest feed cost (Figure 2). Even though they were most efficient, feed cost was the highest cost center for the custom calf grower instead of labor and management. Custom calf growers were able to feed a calf for \$1.39 per day as compared to the tie stall and free stall operators at \$1.79 and \$2.05 per calf per day, respectively.

Other variable costs, including bedding, veterinary, death loss, and interest (assumption of 8 percent interest on all operations) averaged nearly \$49 per calf, or \$0.80 per calf per day. Variable costs were similar between the tie stall and free stall operators at \$0.88 and \$0.86 per calf per day. Custom calf growers had less than half the variable costs, averaging \$0.40 per calf per day, as compared to tie stall and free stall operations.

Fixed costs associated with calf raising averaged just over \$12 per calf or \$0.20 per calf per day. Tie stall and free stall operators had similar fixed costs to the overall average at \$0.19 and \$0.17 per calf



per day, respectively (Figure 2). However, based on the field study, custom calf growers appear to have invested more than twice as much on equipment and housing, investing \$0.41 per calf per day.


In the next article, we will detail costs associated with the heifer enterprise. We hope you look forward to the other articles in this real herds, real heifers series. 

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

Item	Assumption
<b>Calf enterprise</b>	
Calf value	\$500 per calf
Calf	an animal raised from birth until she is moved to group housing
Labor (paid and unpaid)	\$12 per hour
Management (paid and unpaid)	\$20 per hour
Interest rate	8 percent
<b>Replacement value of calf and heifer enterprises</b>	
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

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