



Heifer Management Blueprints

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The Cost of Raising Dairy Replacements-2013

Raising dairy replacements continues to be expensive. The cost of raising calves and heifers is often the second highest expenditure on dairy farms after milking herd feed costs. With increases in feed, fuel and fertilizer prices, it's no surprise that dairy replacement rearing expenses have gone up as well. But, just how much does it cost dairy farm owners and custom growers to raise these calves and heifers?

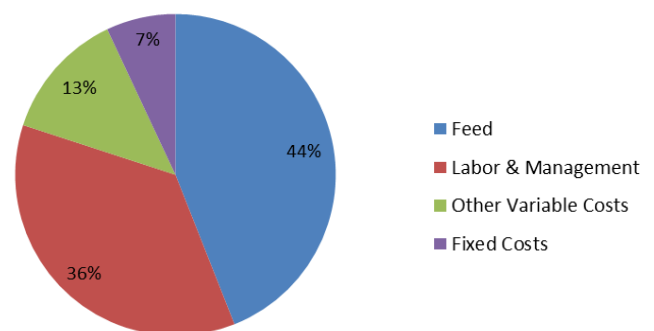
UW-Extension agriculture agents collected data from 36 dairy farms and custom calf and heifer growers from across the state during early spring of 2013. The data was entered into an "Intuitive Cost of Production Analysis" (ICPA) computer model. UW-Extension was then able to determine average calf and heifer raising costs in the areas of feeding, management, housing, and labor. A few assumptions were made to standardize certain input costs. Those assumptions are listed in the chart above. All other numbers used in the study were producer-specific and represent real farm costs.

Key Assumptions - 2013	
Item	Assumption
Calf Value	\$150
Labor (paid and unpaid)	\$13/hour
Management (paid and unpaid)	\$22/hour
Interest Rate	4.5 percent
Housing	
Homemade Calf Hutch	\$200
Purchased Calf Hutch	\$400
Greenhouse Barn	\$10/sq. foot
Post Frame Calf Barn	\$15.50/sq. foot
Bedded Pack Barn	\$18.50/sq. foot
Free Stall Barn	\$20/sq. foot
Mound System	\$0.10/sq. foot
Concrete Lot	\$3/sq. foot
Dirt Lot	\$0.10/sq. foot
Feed	
Legume Silage (100% DM)	\$200/ton
Corn Silage (100% DM)	\$140/ton
Corn (100% DM)	\$250/ton
Soybean Meal (100% DM)	\$375/ton
Cow Refusals (100% DM)	\$150/ton

The Calf Enterprise

In this study, a calf was defined as an animal raised from birth until she was moved into group housing. Three types of operations were interviewed: tie stall, free stall, and custom growers. Calf rearing expenditures were broken into four management areas: feed cost, labor and management, variable costs (veterinary service, bedding, death loss, and interest) and fixed costs (housing and equipment). Feed cost proved to be the most expensive cost associated with raising calves. It cost approximately \$165 per calf (\$2.40 per day) in feed cost. Feed costs included liquid feed (milk replacer or pasteurized milk), starter, and forages. Labor and management costs were the next largest expense at \$134 per calf (\$1.95 per day). Other variable costs were approximately \$41 per calf (\$0.64 per day), while fixed costs averaged \$23 per calf (\$0.35 per day).

Calf Cost Centers

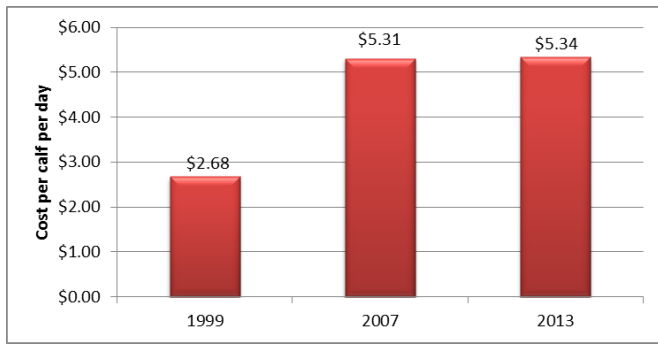


The average total cost to raise a calf was \$363 per calf or \$5.34 per calf per day.

The cost for raising wet calves ranged from \$3.81 to \$5.59 per calf per day with the average being \$5.34 per day over 68 days.

Costs associated with raising wet calves based on the three UW-Extension trials conducted in 1999, 2007 and

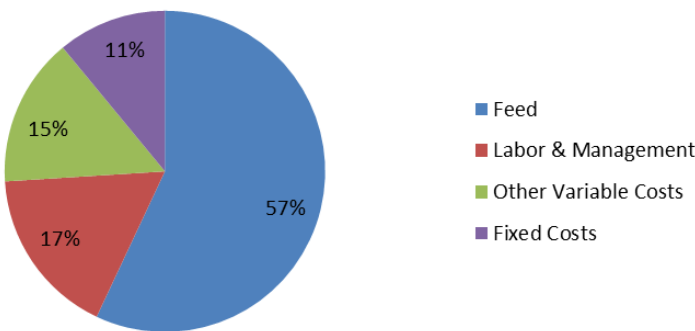
2013 are shown in the graph below.



The Heifer Enterprise

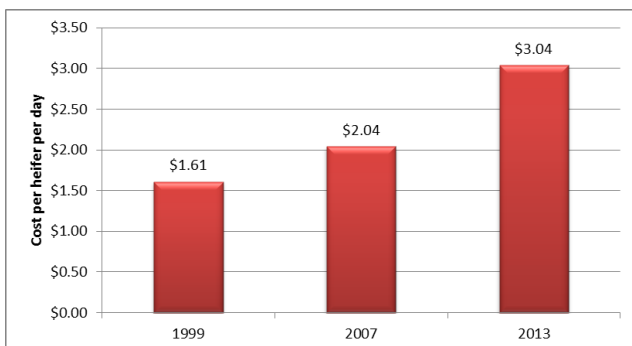
In this portion of the study, a heifer was defined as an animal raised in a group setting until freshening, or in the case of the custom heifer grower, the time the heifer was returned to the producer. Heifer rearing costs were again broken into four management areas. Feed cost proved to be the most expensive cost associated with raising the heifers. Feed costs accounted for approximately \$1,046 per heifer (\$1.71 per day). Labor and management were the next largest expense at \$333 per heifer (\$0.54 per day). Other variable costs were approximately \$274 per heifer (\$0.44 per day), while fixed costs averaged \$210 per heifer (\$0.35 per day).

Heifer Cost Centers



The average cost for raising a dairy heifer from weaning to freshening (or returned to the dairy by custom grower) was \$1,863 per heifer or \$3.04 per day (range was \$2.57 to \$3.20 per heifer per day).

Costs associated with raising heifers from weaning until freshening (or when returned from grower) based on the three UW-Extension trials conducted in 1999, 2007 and 2013 are shown in the graph below.

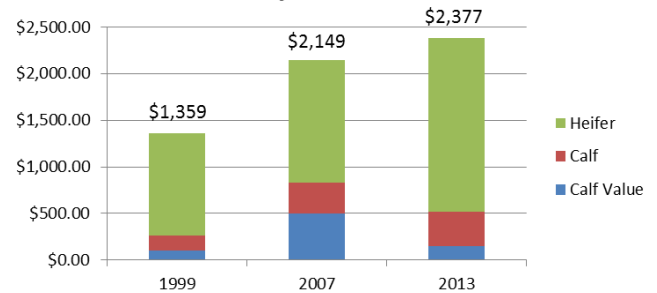


Total Costs – from Birth to Freshening

Since the cost of many farm inputs have increased in the past few years, it is to be expected that dairy replacement rearing costs have increased as well. The *Cost of Raising Dairy Replacements* study was conducted to determine just how much heifer raising costs have been changing. As mentioned earlier, most data collected was producer-specific. Only a few key assumptions were made to help standardize inputs. This was the same approach utilized when the study was performed in 1999 and 2007. **

Based on the 2013 study, the total cost to raise a heifer, from birth to freshening, averaged \$2,377 (including the \$150 value for the calf).

Total Cost to Raise a Dairy Replacement



Calf and heifer raising is an expensive part of a dairy operation, but it is often overlooked since no direct income is derived from the replacement herd. The data collected in this study provides an excellent benchmark on dairy replacement rearing costs for dairy producers and agri-business professionals. However, to truly understand your own costs of production, you need to analyze your actual farm inputs. This information should be used to compare the performance and cost of your own dairy replacement management program. Identifying areas to improve producer efficiency may lead to enhanced profitability.

**** Economic Costs and Labor Efficiencies Associated with Raising Dairy Herd Replacements on Wisconsin Dairy Farms and Custom Heifer Raising Operations Reports are now available.**

To view the *ICPA Research Reports* please visit our website at: <http://eauclaire.uwex.edu/uwex-icpa-project/> or use the inserted scan code.

