Real Herds Real Heifers

Big spread exists on hours needed to raise calves

———— by Steve Huntzicker, Jon Zander, Tina Kohlman, Pat Hoffman, and Annette Zwald————

HOW many of us actually know how much time we spend raising calves and heifers? Time spent between operations can vary greatly. If you compare your operation to the numbers cited here and feel your operation is not doing as well as it should, it is important for you to evaluate your priorities and then determine if change is necessary. There is no substitute for healthy, growing calves and heifers. If feeding calves is something you enjoy doing, the calves are healthy and growing well, and you have the time to spend with them, change may not be recommended.

When collecting information, county agents asked producers and growers to determine the total number of labor and management hours associated with raising replacements. Hours were reported regardless if the operation utilized paid and/or unpaid labor and management. Labor efficiency was determined on the number of heifers managed per hour and per eight-hour workday by one individual. To calculate your own farm's labor efficiency, please see Table 1.

Wide range in costs for calves . . .

Labor and management in this study, as was the case in 1998, was the highest management area in raising calves, accounting for nearly half (47 percent) of the cost across all operations. In this study, the average cost was $153 (average 61.4 days on feed) or $2.49 per calf per day in labor and management. Both paid and unpaid (not directly paid for by the operation) labor and management 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 calf per day, respectively). Even though it was the second highest cost in raising a calf for custom calf growers, custom calf growers had, on average, two-thirds less costs compared to the other operations ($0.98 per calf per day).

As compared to the 1998 study, the cost of labor and management (paid and unpaid) for raising calves has more than doubled from $67.41 to $153.00 per calf (or $1.12 to $2.49 per day). A large portion of this price climb is due to the higher hourly wage rates. Labor and management costs were established at $12 and $20 per hour, respectively, as compared to $7 and $12 in 1998.

It comes as no surprise that, when we look at labor efficiency, custom calf growers managed the most calves per hour (13.4 calves) and per day (107.5 calves) as compared to the other operations. A custom calf grower's income is dependent on the number of calves they raise. The custom calf grower's ability to have higher labor efficiency than the other two operations is likely due to the custom calf growers positioning themselves to maximize the number of calves they can manage.

Free stall operators were able to manage 8.0 calves per hour and 63.7 calves per day. Tie stall operators managed less than half the animals (6.2 calves per hour and 49.6 calves per day) custom calf growers managed. When combined, all operations average 7.9 calves per hour or 62.8 calves per day. The most efficient operation in the survey managed 26.8 calves per hour or 214.6 calves per day, and the least efficient managed 2.3 calves per hour or 18.7 calves per day.

Labor and management costs were the second highest cost center in raising heifers (animals raised in a group setting until freshening, or in the case of the custom heifer grower, until it is returned to the producer). This cost area made up 18 percent of the total cost, a significant reduction compared to calves. If we break down the numbers by operation, we find that labor and management is the second highest percentage of costs for tie stall (21.5 percent) and custom heifer grower (23.3 percent) operations, while ranking third for free stall operations (14.3 percent). Feed costs contributed the highest percentage of costs in all three operations.

Financially, we see less variation in costs. When all operations are combined, on average it is costing $0.39 per heifer per day for labor and management. Broken out by operation, tie stall and custom heifer growers were nearly the same in labor and management costs ($0.46 and $0.45 per heifer per day, respectively). Labor and management costs of free stall operators were about one-third less as compared to the other operations ($0.29 per heifer per day). Costs for raising heifers has nearly doubled since 1998 from $0.21 to $0.39 per heifer per day in 2007.

Looking at labor efficiencies for raising dairy heifers, the study showed free stall operators managed the most heifers at 61.6 heifers per hour and 492.5 heifers per day. Custom heifer growers, followed by tie stall operators, were next at 47.3 and 35.9 heifers per hour, respectively. This equates to 380.4 and 287.0 heifers per day, respectively. When combined, all operations averaged 50.1 heifers per hour or 401.6 heifers per day. The most efficient operation managed 69.7 heifers per hour or 557.6 per day, while the least efficient managed 47.3 heifers per hour or 378.6 heifers per day.

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. Calculate your labor and management efficiency

Labor requirements	Example*	Hours per day	Your farm
Daily chores	3 hours per day x 1 day	= 3.0 hours	
Weekly chores	1 hour per week ÷ 7 days per week	= 0.14 hour	
Monthly chores	2 hours per month ÷ 30 days per month	= 0.07 hour	
Management requirements			
Weekly	1 hour per week ÷ 7 days per week	= 0.14 hour	
Monthly	1 hour per month ÷ 30 days per month	= 0.03 hour	
Yearly	2 hours per year ÷ 365 days per year	= 0.1 hour	
Time to haul heifer manure	5 hours per year ÷ 365 days per year	= 0.01 hour	
Total		= 3.4 hours per day or 1,241 hours per year	

*100-cow dairy with 100 replacements. In this example, it would take 1,241 labor and management hours annually to raise dairy replacements.

To use this chart, keep track of the time spent on chores and management activities for dairy replacements. We suggest identifying those **chores** and **management activities** done on a daily, weekly, and monthly basis, and account for each. Finally, include the time you spend hauling manure from the heifer operation. Follow the example farm and input your numbers.

Table 2. Labor and management costs to raise one heifer on dairy and custom grower operations[1]

Item	Unit	Average	Standard deviation	Tie stall	Free stall	Custom grower
				Operation type[2]		
Calf enterprise						
Number of operations	n	40		15	21	4
Labor and management cost (paid and unpaid)[3]	$/calf	153.00	105.37	202.00	137.08	55.05
Labor and management required	days/year	249.7	626.8	71.30	210.0	1,136.9
Labor and management required	hours/calf	12.3	8.6	16.00	11.1	4.6
Labor efficiency	calves/hour	7.9	5.6	6.20	8.0	13.4
Labor efficiency	calves/day	62.8	44.9	49.60	63.7	107.5
Heifer enterprise						
Number of operations	n	44		14	20	10
Labor and management cost (paid and unpaid)[3]	$/heifer	243.93	89.18	303.15	191.76	265.34
Labor and management required	days/year	228.3	204.8	83.9	179.5	528.1
Labor and management required	hours/heifer	9.0	4.3	11.7	6.6	9.9
Labor efficiency	heifers/hour	50.1	24.0	35.9	61.6	47.3
Labor efficiency	heifers/day	401.6	192.1	287.0	492.5	380.4

[1] A dairy replacement animal was considered to be a calf until moved into a group; then it was considered to be a heifer.
[2] Operation type was determined by how the cows were milked on the farm or if dairy replacements were raised by a custom grower.
[3] Values for labor and management were $12 and $20 per hour, respectively.

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