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Developing Dairy Heifer Rearing Expenses

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This NebGuide discusses the pros and cons to consider as dairy producers evaluate raising their own replacement heifers or contracting with someone else to raise replacements.

Every successful dairy operation can account for most of the expenses that occur on the farm. But how many can actually cash flow each segment of the operation? Do you know how much it costs to raise your dairy heifers or what percentage of your total expenses can be directly attributed to the milking herd? Few producers spend much time attempting to cash flow or estimate costs of the various parts of the dairy enterprise. If producers try to allocate expenses they usually work with the milking herd and then allocate the rest to heifer rearing. This NebGuide proposes that a producer do the opposite. Keep an accurate track of your heifer rearing expenses to see if it would be more profitable for you to have your heifers custom reared. Once you have completed *Table I*, then use this information in Section 2 of this NebGuide to see if you should raise your heifers or have them custom reared.

The usual cost of raising a heifer from birth to 24 months of age ranges from $1,050 to $1,200. If your costs are significantly below this figure and your heifers are freshening at 24 months weighing 1,250 pounds, you are doing an excellent job in your heifer program. By objectively looking at your heifer rearing costs, you'll be able to pinpoint exceptionally high figures you may wish to discuss with your extension educator or extension specialist. They will be able to recommend other materials to help in reducing these costs.

When keeping track of costs for heifer raising, estimate costs for various age categories. The age categories normally used are 0 to 2 months, 3 to 12 months, 13 to 24 months, and over 24 months. Of course, the ultimate aim of every producer should be to have all heifers freshen by 24 months, thereby turning an expense into income. Remember every penny put into a heifer that does not freshen is a total loss. Therefore, every effort should be made to make heifer rearing a top priority. Proper feed formulation, vaccinations, routine herd health programs, maintenance of fences, equipment and facilities should be given top priority. When your heifers are due to be bred, move them closer to the milking herd so they can be observed in heat and bred properly. Many times a producer has an excellent heifer-rearing program, but neglects to check the heifers for heat. The heifers are not bred to freshen at 24 months of age and thereby, do not begin to produce any income until 25 to 30 months of age. Put special emphasis on heifer rearing and your income picture will certainly improve.

Table I is a form to tabulate your expenses in raising a dairy replacement. This is a composite listing adapted from a Washington State University, *Farm Business Management Report EB1319*. This listing shows every major source of expense that a dairy producer might encounter in raising heifers. Spend some time looking at the expense side of the ledger. Can you supply the values listed in *Table I*? If not, can you readily get the information? If the answer is no, then this might be an excellent time to start gathering these data. It may be difficult to fully break out each value for all the age groups. You may want to combine the age groupings until you have a form that suits your herd's management strategy.

The successful dairy producer in the future will keep detailed and accurate records. The dairy industry is becoming more complex. There are many innovations forthcoming that could drastically alter the general structure of the industry, such as the use of BST, declining production in certain regions of the country, excessive manufacturing capacity, etc. These factors will all play a role in your business success or lack thereof. Any producer that needs a loan to expand to take advantage of the changing market situations will be in a much better position to prove his case to the bankers if there are detailed records on the expenses of the operation.

Should You Have Your Heifers Custom Reared?

As Nebraska's dairy farms increase in size, the question is often raised "Should I raise my own heifers or have them custom raised?" To answer this question, a producer must take an objective look at the current operation and answer the following questions:

Table I. Estimated Expense of Raising a Dairy Heifer Replacement.

EXPENSES	Price per Unit	0-2 Months Quantity	0-2 Months $	3-12 Months Quantity	3-12 Months $	12-24 Months Quantity	12-24 Months $	Total Cost 0-24 Months $	Each Month Over 24 Months Quantity	Each Month Over 24 Months $
OPERATING EXPENSES										
Feed:										
Milk substitute										
Calf grain										
Grain										
Hay										
Silage										
Pasture										
Salt & Mineral										
Total Feed Expenses										
Labor										
Vet.-medicine										
Breeding										
Bedding										
Supplies										
Interest on operating expenses										
Initial value of heifer										
Interest in accumulated expenses										
Death loss expenses										
TOTAL OPERATING EXPENSES										
OWNERSHIP EXPENSES										
Buildings:										
Depreciation										
Interest, taxes, insurance & repairs										
Equipment:										
Depreciation										
Interest, taxes, insurance, & repairs										
TOTAL OWNERSHIP EXPENSES										
TOTAL EXPENSES										

Table II. Partial Budget for Custom Raising of Heifers.

POSITIVE IMPACTS	***$/Head***
Added Returns	
None	0
Reduced Costs	
Feed:	
Grain (16%, 600 lb @ $160/ton)	48.00
Grain (14%, 1,050 lb @ $156/ton)	81.90
Hay (1 ½ T @ $120/ton)	180.00
Silage (3.8 T @ $26/ton)	98.80
Pasture (6 mo @ $15/mo)	90.00
Salt/minerals (75 lb @ $12/cwt)	9.00
Labor (9 hr@ $8/hr)	72.00
Supplies/power	10.00
Veterinary medicine	12.00
Bedding	15.00
Repairs (buildings & facilities)	15.00
Interest on above	
($631.70 ÷ 2 x 13% x $\frac{16\text{ mo}}{12\text{ mo}}$)	54.75
Total Reduced Costs	$686.45
Total Positive Impacts	$686.45

NEGATIVE IMPACTS	***$/Head***
Added Costs	
Grower Fees:	
Weight gain (7470 lb @ $65)	81.00
Less feed refund for death loss (370 lb x $.35 x 3% death)	(3.89)
Vaccinations	15.00
AI service	4.00
Pregnancy check	3.00
Transportation	
To grower	10.00
To dairy	20.00
Interest on above	
($529.11 ÷ 2 x 13% x $\frac{16\text{ mo}}{12\text{ mo}}$)	45.86
Total Added Costs	$574.97
Reduced Returns	
None	0
Total Negative Impacts	$574.97

SUMMARY OF ANALYSIS

1. Change in income per heifer over 16 mo from custom raising
   $686.45 - 574.97 = $ 111.48

2. Change in income for farm over 1 year from custom raising

   ($111.48 x $\frac{12\text{ mo}}{16\text{ mo}}$ x 50 heifers) = $4,180.50

1. Do I currently have enough labor to raise my own replacements? If you honestly answer no, you might consider two options — have your heifers custom raised, or consider hiring another employee to do the job for you.
2. Are your facilities adequate to raise heifers? Do you have adequate housing, land and feed resources to do a good job?
3. Under your current system are your heifers freshening at 24 months of age and at 1,250 pounds (for Holsteins)? If your answer is no, then you should consider revamping your heifer rearing operation.
4. Do you have enough capital to pay someone else to raise your heifers? Remember the person custom raising your heifers will want to be paid on time to cash flow his/her operation.
5. How could you use your current facilities that are being used to raise heifers? If no economic use can be made of the existing facilities, then you may not want to have your heifers custom raised. If another economic use can be found for existing facilities that will return a profit to the enterprise over the expenses of custom raising, then alternative uses should be considered.

The cost of raising dairy replacements is often not recognized as a direct cost to the dairy operation. All too often the heifer raising operation is not split out from the total dairy enterprise. It is just considered a cost of doing business. Studies by Gayle Willett at Washington State University show that the cost of raising dairy replacements can account for 15 to 20 percent of the total milk production costs. The costs of raising replacements ranks second only to feed costs.

How should one choose a custom heifer raiser? First, visit the facility, talk to the workers and spend time watching how the heifers are treated. Walk around the facility and make sure the area is sanitary, buildings are in proper repair, there is enough clean, cool water available, feed is not left in the manger to mold, and that hay is top quality. Ask what ration is fed to the younger heifers and how it changes as the heifers mature. What are the procedures for heat detection and who breeds the heifers? Look at the semen inventory and tanks. Are they clean and kept in a secure place with proper inventory and accountability procedures? Are there adequate employees to care for all the animals on the facility? How are heifers identified and how are they commingled? What vaccinations are required and who is the veterinarian? How often are routine health checks made on all the heifers? Any producer considering a custom rearing facility will think of many other questions to raise.

Of course, when you consider any major management change it must cash flow. A simple budget is presented in *Table II* that you can use to see if the change will be cost effective. This chart is taken from Gayle Willett's *Farm Business Management Report EB1537* published by Washington State University. The figures are used as an example only. You will need to substitute your own figures to represent your expected costs. These figures can be taken from the information listed in *Table I*.

Tables I and *II* are in Adobe's Portable Document Format (PDF). To view PDF files, you may use the free Acrobat Reader software. Download the Reader from Adobe's Web site.

Tip: Before printing the worksheets in Acrobat, set your printer to landscape mode.

The custom raising agreement should always be written — never base your agreement on a handshake. Those days are over and you must protect your investment by having it in writing. Be certain to get the fee structure in writing. What recourse do you have if the custom-raiser does not follow all the procedures lined out in the agreement? How long are prices set and how can charges be altered? Who is responsible for transportation, death losses, etc.? The agreement should be so detailed that no major problem that could arise is left to chance or negotiation. The more detail, the better.

The decision to stop raising replacements and going to a custom rearing operation is one change that should not be taken lightly. The entire profit potential of your dairy operation is based upon the foundation of good heifer rearing. There are many questions to be answered before making this decision. It will take time and some effort to be certain you are making the correct decision.

Additional dairy information can be found at: *www.nebraskadairy.unl.edu*.

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