

# **Wisconsin Enterprise Budgets For Parlor / Free-stall Dairy Systems**

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Working Draft – For Review Only



## **Acknowledgments**

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The information about labor requirements and investments in facilities and equipment presented in this report was obtained from a spreadsheet developed by D.J. Reimaman and B.J. Holmes which is entitled Milking Center Advisory: Labor and Capital Analysis of Milking Centers.

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The Wisconsin dairy industry is undergoing a radical change as dairy producers move away from traditional stanchion or tie-stall operations in favor of newer systems where cows are housed in free-stall barns and milked in parlors. Dairy producers are moving to these new types of systems because these set-ups are more labor efficient and require less physical effort to run than the traditional barn systems.

Free-stall/parlor dairy systems are a source of new challenges for producers because they are somewhat costly and they can only be cost competitive if they are used to produce large volumes of milk .

Producers who are thinking about moving to these newer dairy systems have to understand that they will need to expand their herds dramatically in order to produce the quantities of milk that are needed to justify investments in free-stall barns and parlors. This need to expand will discourage some producers from shifting to more modern systems. But over time the majority of dairy producers will likely decide that it is in their interest to expand their herds and move to labor efficient free-stall /parlor systems that have the capacity to handle large numbers of cows.

The purpose of this paper is to provide dairy producers and other interested parties information about the returns and costs one could experience if one were to operate a free-stall/parlor dairy system. This return and cost information is summarized in a series of budgets appearing at the end of this paper. Hopefully these budget data will be useful to dairy producers who are considering a to move free-stall parlor system and want to learn what returns and costs they can expect to incur with this newer dairy system.

The budgets presented here reflect the returns and costs for a dairy system that has the following characteristics: a 400 cow milking herd; a double-8 milking parlor; free-stall housing for all cows; a manure storage system which will handle one year's waste; all inputs, including replacement stock, are

purchased in the market; and all calves are sold at birth. This example dairy system was put together to illustrate what returns and costs a dairy producer could expect to receive from a specific type of dairy enterprise that was dedicated solely to the production of milk.

It is readily recognized that in practice it is rare that a Wisconsin dairy producer will only be engaged in operating and managing a milking herd. Typically a dairy farmer also manages a cropping unit that supplies feed to the dairy operation as well as a heifer unit that produces the young stock that are used to replace cows that are culled from the milking herd. These other components or enterprises of a typical dairy farm have been eliminated from this analysis so that we can focus our attention entirely on the returns and costs that can be directly attributed to the operation of a dairy herd. This should allow us get a better understanding of the returns, costs and profits that come from a dairy herd. Similar analyses can be performed for the cropping and heifer enterprises to see what returns and costs one can expect to experience when operating those other enterprises that typically are a part of a Wisconsin dairy farm.

The fact that the budgets were prepared for a 400 cow dairy with a double-8 parlor and free-stall housing should not be viewed as an endorsement of this type of dairy system. Rather this system was used because it seems to be representative of the type of system that many Wisconsin dairy producers have been moving to in the last few years. The type of system that is “best” for an individual dairy producer depends on the producer’s attitudes about herd size and the technologies that can be used to milk and house cows. The availability of capital, land, and labor also can determine what system is best for an individual producer. The budget information presented here will hopefully give dairy producers some of the information they need to put together plans for the dairy systems that best meet their needs and preferences. This planning activity can only be performed by producers based on their own situations

and preferences.

In order to insure that we can make sense of the budget information shared here, we must first consider some key concepts of budgeting and economic factors that can influence a dairy operation's costs of production. We will do this in the following sections where we will consider the different types of costs a dairy producer will experience when operating a free-stall/parlor dairy system and other factors that can affect the performance of these systems.

## **Costs For Dairy Enterprises**

The key to surviving in a competitive business like dairy is controlling costs such that milk is produced at as low a cost as possible. Achieving this cost minimization objective will not ensure that a dairy producer is always profitable; but it will at least put a producer in the best position possible to earn profits and successfully compete in the marketplace.

The costs of a dairy operation can be categorized as either variable or fixed. Variable costs refer to those expenditures or expenses that vary depending on the level of production on a dairy operation. Fixed costs are those costs that remain constant or fixed regardless of the production level of a dairy operation.

### Variable Costs

Feed costs, milk hauling charges, bedding, supplies, utilities, etc. are all examples of variable costs. Feed costs and milk hauling charges are the best examples of variable costs because they vary in direct proportion with the milk production of a cow such that they rise as a cow's milk production increases

and they fall as milk production declines. The other variable costs mentioned do not vary in proportion to the milk production per cow but they do change as the number of cows in a dairy herd varies. With these variable costs, costs increase (decrease) by some constant amount as each additional cow is added (removed) from the herd.

Labor is another variable cost for dairy operations because it tends to vary depending on herd size. For most dairy operations a specific amount of labor is needed to milk and feed cows, and do all the other things that need to get done to keep a dairy running. The amount of labor a producer will use per cow is, in part, determined by the facilities and equipment that are available to a producer. In highly mechanized operations, labor requirements can be relatively low while labor requirements can be high in those operations where there is little mechanization.

### Fixed Costs

The facilities and equipment of a dairy operation determine how much labor is needed to operate the dairy. In addition these investments also determine the fixed costs of a dairy. Fixed costs differ from variable costs in that they remain constant for a dairy operation regardless of the level of milk production. Dairy producers incur fixed costs on facilities and equipment and they also incur fixed costs on the dairy cows in the milking herd.

#### *Fixed costs on facilities and equipment:*

Depreciation, repairs, taxes, and insurance are the four fixed costs a dairy operation annually incurs on facilities and equipment like milking parlor facilities, a milk house, housing for cows, feed storage structures, manure storage structures, parlor equipment, feed handling equipment, manure handling

equipment, etc. The level of these fixed costs depends on the level of investment that was initially made in facilities and equipment. High levels of investment result in high fixed costs and lower levels of investment result in lower fixed costs.

A key to managing fixed costs is making sure that facilities and equipment are operated as close to full capacity as possible. This means a parlor and free-stall barn capable of handling, say, 600 cows per day should be used to milk and house 600 cows. Making full use of facilities and equipment is crucial to controlling fixed costs because it spreads these costs over more units of milk production such that the average cost of producing milk is held to a minimum. It is critical for dairy producers to do the things that will keep fixed costs to a minimum because failing to control production costs can make them uncompetitive and put their dairy operations at risk over time.

The following table summarizes the depreciation, repairs, taxes, and insurance cost rates that were used in estimating the fixed costs for the budgets that appear here. These cost rates are illustrative of the ownership costs a dairy producer can expect to incur on facilities and equipment; but in practice it is quite possible an individual dairy producer could have different costs. Therefore, producers wanting to accurately estimate ownership costs for their own situations should make appropriate adjustments to these cost rates when they are estimating annual ownership costs on facilities and equipment.

**TABLE 1: COSTS AS A PERCENTAGE OF THE INVESTMENT IN FACILITIES AND EQUIPMENT**

	<u>Facility</u>	<u>Equipment</u>
Depreciation*	3.33%	10.00%
Repairs	5.00%	5.00%
Taxes	1.50%	----
Insurance	.50%	.50%
TOTAL	10.33%	15.50%

\* The depreciation rates presented above reflect useful lives of 30 years and 10 years for facilities and equipment, respectively. These rates were computed by dividing one (1) by the useful life. For facilities the rate of 3.3% is computed by dividing 1 by 30 and the rate of 10% reported for facilities is obtained when 1 is divided by the 10-year life.

*Fixed costs on cows:*

Dairy producers also incur costs on the dairy cows they own. One of these costs pertains to the decline in a cow's value that takes place from the time she initially enters the herd until she is eventually culled and sold for slaughter. The other pertains to the financial loss that a producer incurs when cows die. Both of these costs need to be accounted for when estimating the cost of operating a dairy enterprise over time.

The decline in a cow's value over her productive life is the essentially the same as the depreciation cost a producer experiences when facilities and equipment decrease in value over time. Thus, the cost associated with the decline in a cow's value is calculated the same way depreciation expenses are computed for other depreciable assets. In the case of a dairy cow, this is done by multiplying the total decline in the cow's value ( the difference between the initial value of the cow and her slaughter value) by average culling rate for the herd ( which is equal 1 divided by the average expected life of a dairy cow).

The annual depreciation on a cow varies in direct relation to the culling rate. If for example 33 percent of the herd is culled annually, 33 percent of the decline in a cow's value is incurred each year. Alternatively 40 percent of the cost associated with the decline in a cow's value is incurred annually when 40 percent of a herd is culled each year. This relationship between the culling rate and the useful life of cows holds in all cases and it is the reason the culling rate is used to compute the annual depreciation cost of a cow.

The level of costs a dairy producer experiences as a result of cow deaths depends on what percentage of the entire herd dies each year. In most commercial operations approximately 2 percent of the cows in the herd will die in any given year. Given this death rate in a herd, the annual death loss cost would be \$26 per head when the replacement price for a cow is \$1,300 per head because this is the average expenditure a dairy producer would need to make in order to replace cows that die. This death loss is the product of the 2 percent death rate and the \$1,300 replacement value for a cow. In general, death loss costs will tend to be higher when the death rate in a herd is relatively high. Thus it follows that a producer will want to keep deaths to a minimum so that the losses resulting from cow deaths will be as low as possible.

The depreciation and death loss costs a producer incurs on dairy cows are partially offset by the proceeds received from the sale of calves. These returns are minimal but they do reduce a producer's overall cost of owning a cow. These returns from calf sales are deducted from the costs of owning a cow in the budgets presented here.

## **Management as a Cost**

Management is another cost of operating a dairy enterprise that is analogous to the salary any other business must pay to the person who manages the day to day operations. In the case of a dairy operation, the owner of the dairy usually serves as the manager and earns the return to management.

Intuitively, it may not make sense to charge the dairy operation for the management functions that are performed by the owner of the dairy business. This is appropriate, however, when one considers the fact that the dairy producer could, in concept, earn a salary if he or she managed another dairy or business. Since producers could earn salaries elsewhere, it follows that they should be rewarded for managing their own dairies. If this were not the case producers would be better off leaving the dairy operations because they could earn more money from managing other businesses.

In general, a dairy producer should expect to receive as much compensation for managing their dairy as a professional farm manager gets for managing a farm. These professionals typically charge a fee that is tied to the gross income of the farms they are managing. This fee ranges from 3 to 7 percent of gross farm income and the usual fee is typically 5 percent of gross income.

Since dairy producers perform the same roles as professional farm managers they should expect to earn the same management fees. To ensure that this happens, dairy producers should “charge” their dairy operations a management fee of, say, 5 percent of gross income when they are putting together operating budgets for their dairy operations.

## **Investment in Facilities and Equipment**

Producers have a range of options when they make investments in facilities and equipment. They can invest in highly mechanized systems that are relatively costly in order to reduce their labor needs.

Alternatively, they can invest in more modestly priced facilities and equipment that are less mechanized and require more labor. Each producer has to consider the pros and cons of investing in low and high cost facilities and equipment when they are deciding what level of investment in these capital assets is appropriate for them.

Table 2 contains some values that show how a producer's investment per cow in facilities and equipment might vary depending on the level of mechanization a producer wants to incorporate into the dairy operation. These investment figures were developed based on the judgements and recommendations of agricultural engineers. These investment figures can serve as a guideline for producers who want some idea of what investments they are likely to make if they move to a free-stall/parlor dairy system. But producers should exercise caution when they are using these investment figures because the cost of facilities and equipment depending on local market conditions and the types of equipment and facilities the producers include in their dairy operations.

<b>Table 2: Per Cow Investments in Facilities And Equipment ( in \$)</b>			
	Level of Mechanization and Investment:		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
Facilities Investment:			

Parlor & Milk House*	Low	Medium	High
Double-8	150	360	520
Double-10	200	450	650
Double-12	300	540	780
Housing	1000	1400	1800
Manure Storage	500	850	1200
Equipment Investment:			
Parlor Equipment*			
Double-8	200	460	680
Double-10	250	575	850
Double-12	300	640	1020

\* The investments in parlor facilities and equipment are for a herd size of 400 cows. These investment levels can be computed for other size herds by multiplying the investment value by 400 and then dividing by the number of cows that will be in the herd. Example -- Double-8 parlor & milk house facility investment for a 500 cow herd with medium investment is \$288 (360X400/500)

## Annual Labor Requirements

The amount of labor annually needed to milk, feed, and care for a cow in a free-stall/parlor system is well below the 60 or so hours of labor that are needed in stanchion and tie-stall dairy operations. In general, the per cow labor requirements in a parlor/free-stall system will normally range from 30 to 50 hours. These lower labor requirements, and improvements in milking condition, are two of the major benefits producers gain from moving to parlors and free-stalls.

The following table contains some estimates of the labor requirements a producer could face depending on the level of mechanization for the dairy operation. The labor requirements are higher when there is low mechanization and they are lower when there is a high degree of mechanization. These labor requirements are only guidelines and

producers should understand that the actual labor requirements for their own dairy operation may differ from these guidelines depending on the unique characteristics of their dairies.

**Table 3: Per Cow Annual Labor Requirements ( Hours )**

	Level of Mechanization:		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
Milking in Parlor*			
Double-8	12.59	11.41	10.43
Double-10	10.14	9.13	8.30
Double-12	8.48	7.60	6.89
Feeding	16.00	12.00	8.00
Cow Care & Management	12.00	10.00	8.00
Manure Handling & Overhead	10.00	8.00	6.00

\* The above milking labor requirements are for 2X milking. Labor requirements for 3X milking can be estimated by multiplying the labor requirement by 1.20. Example – Annual labor for 3X milking in a Double-8 parlor with medium mechanization is 13.69 hours (11.41x 1.20)

### **Survival of Dairy Operations in the Short Run and the Long Run**

Over time a dairy enterprise has to produce milk at a cost that is below the average selling price of milk in order to survive. This is the cold reality of economics and unfortunately there are some dairy producers who are unable to do this and they go out of business. This failure of dairy farms has occurred in the past and it probably will

continue in the future as long as milk prices periodically fall to low levels when milk supplies are high relative to demands.

Even though a dairy farm has to produce milk at a cost that is below the price of milk over time, this does not mean a dairy farm will automatically go out of business any time the cost of production is more than the selling price of milk. Rather the dairy farm will continue to operate as long as it is able to cover its cash costs. If dairy producers can do this they have a chance to prosper in the future if milk prices eventually increase to levels that are greater than the producers' total cost of producing milk.

The information in the following table shows how it is possible for a dairy farm to survive in the short run when the price of milk is less than the farm's average cost of producing milk. The values in the first column of the table reflect the example farm's profitability and the values in the other column reflect the cash flows for the example dairy operation.

**Table 4: Profits and Cash Flows of a Hypothetical Dairy Operation**

Profits (\$ per cwt.)	Cash Flow (\$ per cwt.)
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	Returns &	Cash Receipts &
	<u>Costs</u>	<u>Expenditures</u>
Milk Price	12.50	12.50
Feed costs	5.92	5.92
Livestock costs	2.09	2.09
Cow ownership costs	1.00	1.00
Labor and management costs	2.00	2.00
Depreciation on facilities and equipment	1.95	----
Total costs	12.96	11.01
Net	-0.46	1.49

In this particular case the average price of milk is \$12.50 per hundredweight (cwt.) and the cost of producing one hundred pounds of milk is \$12.96. Given this price and cost of production the dairy farm is losing \$.46 (46 cents) per cwt. of milk. Although the total cost of producing milk is \$12.96 per cwt., the cash cost of producing milk is not this high because \$1.95 of the costs are depreciation on facilities and equipment. Depreciation is a cost of doing business but it is not a cash cost that involves an annual outflow of cash. Since depreciation is not a cash cost it can be deducted from total costs to determine the cash costs for the example dairy. In this case the cash cost of producing milk is \$11.01

(\$12.96 - \$1.95) per cwt.

Given a selling price of \$12.50/cwt and a cash cost of production of \$11.01/cwt., the example dairy farm would be able to generate \$1.49 of cash flow on each hundred pounds weight of milk production. Since producing milk results in positive cash flows it makes sense for the producer to keep producing milk in this situation. Losses are still experienced; but at least the producer is still able to generate a cash flow that can be used to cover a portion of the depreciation on facilities and equipment.

The key point of the above example is that it shows how dairy producers can stay in business, in the short run, if they can at least cover their cash costs. Producers should keep this in mind when they are determining what price they need to receive for milk in order to stay in business. In the short run the milk price has to at least equal the cash cost of production but in the long run the milk price has to equal or exceed the total cost of production.

### **The Effect of Milk Production Per Cow on Costs of Production**

Previously it was stated that one of the keys to controlling costs is making sure facilities and equipment are fully utilized and operated as close to capacity as possible. Another thing dairy producers can do to keep their average costs at competitive levels is maintain high levels of production in their dairy herds. Achieving high productivity in dairy herds is beneficial because it drives down production costs by spreading fixed costs across more pounds of milk. This keeps the per pound cost of production as low as possible and hopefully below the selling price of milk.

The budget data presented here show how the per hundredweight (CWT) cost of producing milk declines as production per cow increases. At 20,000 pounds of milk production, the per CWT cost of production is \$14.49 while it is \$13.57 for production of 22,000 pounds of milk. At production levels of 28,000 and 30,000 pounds of milk per CWT costs are \$11.61 and \$11.13, respectively. These lower costs of production for the higher levels of production are evidence that dairy producers can improve their competitive positions by maintaining high levels of production in their herds.

While the budgets presented here show that high milk production per cow results in the

lowest per CWT costs of production, producers should not take this as evidence that they should be attempting to achieve maximum milk production at all times. There will be times when the costs of producing milk at a rate of, say, 28,000 pounds per cow will be higher than the per CWT cost at, say, 24,000 pounds of milk. This situation will exist when the price of milk is relatively low and feed costs and other variable costs are relatively high. Producers need to keep this in mind when they set production goals and understand that high levels of milk production do not always result in lowest costs and highest profits. In general, however, it will typically be advisable for producers to strive for maximum levels of milk production in their herds.

### **Dairy Cow Enterprise Budgets**

The budgets presented in the following pages detail the returns and costs one can expect to experience when the prices of milk and inputs are at the specified levels. Budgets have been prepared under various assumptions about annual milk production per cow so that one can have options for selecting a budget for a cow. Budgets are presented for the following levels of milk production: 20,000 pounds, 22,000 pounds, 24,000 pounds, 26,000 pounds, 28,000 pounds, and 30,000 pounds. These budgets for the various levels

of annual milk production account for the different feed needs that a cow has depending on her level of production.

As one reviews these budgets, one will see returns and costs reported on both a per cow basis and a per hundredweight (CWT) of milk basis. This latter measure is probably the most useful one, because it reflects the performance of the dairy operation per unit of milk production. By looking at this data one can easily determine what price of milk is needed to cover average production costs.

Another useful performance measure reported on the enterprise budgets is the rate of return on average assets. This measure reflects the profits or returns that are earned on each dollar invested in cows, facilities and equipment. The rate of return on assets is an important financial measure that can be used to assess the profitability of a dairy enterprise.

At a minimum, dairy producers should expect to receive a rate of return from a dairy that is at least as high as the return that could have been earned if capital was instead invested in stock, bonds, or other investments. The reasoning behind this statement is that dairy producers should not be willing to accept low rates of return on a dairy when they could instead invest in other assets that would yield higher returns. Thus when it come to

evaluating the financial performance of a dairy enterprise, dairy producers should ensure that they are not costing themselves some potential earnings by investing in dairy and getting returns that are below the returns they could earn on other investments.

The dairy enterprise budgets are organized into three sets. The budgets in the first set are for the case where it is assumed that investments in facility and equipment and labor usage are at medium levels. This first group of budgets is intended to reflect a “normal” situation.

The other two sets of budgets are intended to show what returns and costs one can expect when one makes trade-offs between capital (facilities and equipment) and labor. One set of budgets was developed for the case where less capital investments are made in favor of using higher amounts of labor. The other set of budgets is for the case where higher capital investments are made in order to use less labor. By using these budgets one can get an idea of how production costs might change as the investment in capital assets is increased (decreased) such that less (more) labor is used in the dairy operation.

**Dairy Enterprise Budgets**  
**For a System With**  
**Medium Investment & Medium Labor Requirements**

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>200</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,600.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.81
<i>CORN</i>	104.00	BU.	\$2.25	\$234.00	\$1.17
<i>SOYBEAN MEAL</i>	1400.00	LBS	\$0.11	\$154.00	\$0.77
<i>DICAL</i>	155.00	LBS	\$0.13	\$20.15	\$0.10
<i>T.M. SALT</i>	85.00	LBS	\$0.10	\$8.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,178.65</b>	<b>\$5.89</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.30
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.28
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.45
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.18
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.38
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.43
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$90.00	\$90.00	\$0.45
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$490.00</b>	<b>\$2.45</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,300.00	\$429.00	\$2.15
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.66)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,300.00	\$26.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.42)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$239.00</b>	<b>\$1.20</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	11.41	HRS	\$10.00	\$114.10	\$0.57
<i>LABOR FOR FEEDING</i>	12.00	HRS	\$10.00	\$120.00	\$0.60
<i>LABOR FOR COW CARE</i>	10.00	HRS	\$10.00	\$100.00	\$0.50
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	8.00	HRS	\$10.00	\$80.00	\$0.40
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$2,600.00		5.00%	\$130.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$544.10</b>	<b>\$2.72</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$360.00		10.33%	\$37.20	\$0.19
<i>HOUSING STRUCTURE</i>	\$1,400.00		10.33%	\$144.67	\$0.72
<i>MANURE STORAGE STRUCTURE</i>	\$850.00		10.33%	\$87.83	\$0.44
<i>MILKING EQUIPMENT</i>	\$460.00		15.50%	\$71.30	\$0.36
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.71</b>
<b>TOTAL COSTS</b>				<b>2792.75</b>	<b>\$13.96</b>
<b>NET RETURNS TO ASSETS</b>				<b>(\$192.75)</b>	<b>(\$0.96)</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**-8.82 %**

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>220</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,860.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.46
<i>CORN</i>	114.00	BU.	\$2.25	\$256.50	\$1.17
<i>SOYBEAN MEAL</i>	1700.00	LBS	\$0.11	\$187.00	\$0.85
<i>DICAL</i>	175.00	LBS	\$0.13	\$22.75	\$0.10
<i>T.M. SALT</i>	90.00	LBS	\$0.10	\$9.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,237.25</b>	<b>\$5.62</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.27
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.25
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.41
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.16
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.34
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.39
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$93.00	\$93.00	\$0.42
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$493.00</b>	<b>\$2.24</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,400.00	\$462.00	\$2.10
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.60)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,400.00	\$28.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.38)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$274.00</b>	<b>\$1.25</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	11.41	HRS	\$10.00	\$114.10	\$0.52
<i>LABOR FOR FEEDING</i>	12.00	HRS	\$10.00	\$120.00	\$0.55
<i>LABOR FOR COW CARE</i>	10.00	HRS	\$10.00	\$100.00	\$0.45
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	8.00	HRS	\$10.00	\$80.00	\$0.36
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$2,860.00		5.00%	\$143.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$557.10</b>	<b>\$2.53</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$360.00		10.33%	\$37.20	\$0.17
<i>HOUSING STRUCTURE</i>	\$1,400.00		10.33%	\$144.67	\$0.66
<i>MANURE STORAGE STRUCTURE</i>	\$850.00		10.33%	\$87.83	\$0.40
<i>MILKING EQUIPMENT</i>	\$460.00		15.50%	\$71.30	\$0.32
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.55</b>
<b>TOTAL COSTS</b>				<b>2902.35</b>	<b>\$13.19</b>
<b>NET RETURNS TO ASSETS</b>				<b>(\$42.35)</b>	<b>(\$0.19)</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***-1.89 %***

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>240</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,120.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.18
<i>CORN</i>	124.00	BU.	\$2.25	\$279.00	\$1.16
<i>SOYBEAN MEAL</i>	2000.00	LBS	\$0.11	\$220.00	\$0.92
<i>DICAL</i>	195.00	LBS	\$0.13	\$25.35	\$0.11
<i>T.M. SALT</i>	95.00	LBS	\$0.10	\$9.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,295.85</b>	<b>\$5.40</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.25
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.23
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.38
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.15
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.31
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.35
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$96.00	\$96.00	\$0.40
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$496.00</b>	<b>\$2.07</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,500.00	\$495.00	\$2.06
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.55)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,500.00	\$30.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.35)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$309.00</b>	<b>\$1.29</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	11.41	HRS	\$10.00	\$114.10	\$0.48
<i>LABOR FOR FEEDING</i>	12.00	HRS	\$10.00	\$120.00	\$0.50
<i>LABOR FOR COW CARE</i>	10.00	HRS	\$10.00	\$100.00	\$0.42
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	8.00	HRS	\$10.00	\$80.00	\$0.33
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,120.00		5.00%	\$156.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$570.10</b>	<b>\$2.38</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$360.00		10.33%	\$37.20	\$0.16
<i>HOUSING STRUCTURE</i>	\$1,400.00		10.33%	\$144.67	\$0.60
<i>MANURE STORAGE STRUCTURE</i>	\$850.00		10.33%	\$87.83	\$0.37
<i>MILKING EQUIPMENT</i>	\$460.00		15.50%	\$71.30	\$0.30
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.42</b>
<b>TOTAL COSTS</b>				<b>3011.95</b>	<b>\$12.55</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$108.05</b>	<b>\$0.45</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**4.73 %**

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>260</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,380.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$2.93
CORN	134.00	BU.	\$2.25	\$301.50	\$1.16
SOYBEAN MEAL	2300.00	LBS	\$0.11	\$253.00	\$0.97
DICAL	215.00	LBS	\$0.13	\$27.95	\$0.11
T.M. SALT	100.00	LBS	\$0.10	\$10.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,354.45</b>	<b>\$5.21</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.23
BEDDING		\$	\$55.00	\$55.00	\$0.21
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.35
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.13
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.29
SUPPLIES		\$	\$85.00	\$85.00	\$0.33
MARKETING & OTHER COSTS		\$	\$99.00	\$99.00	\$0.38
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$499.00</b>	<b>\$1.92</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,600.00	\$528.00	\$2.03
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.51)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,600.00	\$32.00	\$0.12
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.32)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$344.00</b>	<b>\$1.32</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	11.41	HRS	\$10.00	\$114.10	\$0.44
LABOR FOR FEEDING	12.00	HRS	\$10.00	\$120.00	\$0.46
LABOR FOR COW CARE	10.00	HRS	\$10.00	\$100.00	\$0.38
LABOR FOR ALL OTHER ACTIVITIES	8.00	HRS	\$10.00	\$80.00	\$0.31
MANAGEMENT FEE ON GROSS INCOME	\$3,380.00		5.00%	\$169.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$583.10</b>	<b>\$2.24</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$360.00		10.33%	\$37.20	\$0.14
HOUSING STRUCTURE	\$1,400.00		10.33%	\$144.67	\$0.56
MANURE STORAGE STRUCTURE	\$850.00		10.33%	\$87.83	\$0.34
MILKING EQUIPMENT	\$460.00		15.50%	\$71.30	\$0.27
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.31</b>
<b>TOTAL COSTS</b>				<b>3121.55</b>	<b>\$12.01</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$258.45</b>	<b>\$0.99</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***11.07 %***

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>280</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,640.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$2.72
CORN	144.00	BU.	\$2.25	\$324.00	\$1.16
SOYBEAN MEAL	2600.00	LBS	\$0.11	\$286.00	\$1.02
DICAL	235.00	LBS	\$0.13	\$30.55	\$0.11
T.M. SALT	105.00	LBS	\$0.10	\$10.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,413.05</b>	<b>\$5.05</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.21
BEDDING		\$	\$55.00	\$55.00	\$0.20
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.32
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.13
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.27
SUPPLIES		\$	\$85.00	\$85.00	\$0.30
MARKETING & OTHER COSTS		\$	\$102.00	\$102.00	\$0.36
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$502.00</b>	<b>\$1.79</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,700.00	\$561.00	\$2.00
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.47)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,700.00	\$34.00	\$0.12
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.30)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$379.00</b>	<b>\$1.35</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	11.41	HRS	\$10.00	\$114.10	\$0.41
LABOR FOR FEEDING	12.00	HRS	\$10.00	\$120.00	\$0.43
LABOR FOR COW CARE	10.00	HRS	\$10.00	\$100.00	\$0.36
LABOR FOR ALL OTHER ACTIVITIES	8.00	HRS	\$10.00	\$80.00	\$0.29
MANAGEMENT FEE ON GROSS INCOME	\$3,640.00		5.00%	\$182.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$596.10</b>	<b>\$2.13</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$360.00		10.33%	\$37.20	\$0.13
HOUSING STRUCTURE	\$1,400.00		10.33%	\$144.67	\$0.52
MANURE STORAGE STRUCTURE	\$850.00		10.33%	\$87.83	\$0.31
MILKING EQUIPMENT	\$460.00		15.50%	\$71.30	\$0.25
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.22</b>
<b>TOTAL COSTS</b>				<b>3231.15</b>	<b>\$11.54</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$408.85</b>	<b>\$1.46</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***17.14 %***

# DAIRY COW ENTERPRISE

## BUDGET

### MEDIUM INVESTMENT / MEDIUM LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>300</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,900.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$2.54
CORN	154.00	BU.	\$2.25	\$346.50	\$1.16
SOYBEAN MEAL	2900.00	LBS	\$0.11	\$319.00	\$1.06
DICAL	255.00	LBS	\$0.13	\$33.15	\$0.11
T.M. SALT	110.00	LBS	\$0.10	\$11.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,471.65</b>	<b>\$4.91</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.20
BEDDING		\$	\$55.00	\$55.00	\$0.18
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.30
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.12
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.25
SUPPLIES		\$	\$85.00	\$85.00	\$0.28
MARKETING & OTHER COSTS		\$	\$105.00	\$105.00	\$0.35
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$505.00</b>	<b>\$1.68</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,800.00	\$594.00	\$1.98
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.44)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,800.00	\$36.00	\$0.12
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.28)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$414.00</b>	<b>\$1.38</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	11.41	HRS	\$10.00	\$114.10	\$0.38
LABOR FOR FEEDING	12.00	HRS	\$10.00	\$120.00	\$0.40
LABOR FOR COW CARE	10.00	HRS	\$10.00	\$100.00	\$0.33
LABOR FOR ALL OTHER ACTIVITIES	8.00	HRS	\$10.00	\$80.00	\$0.27
MANAGEMENT FEE ON GROSS INCOME	\$3,900.00		5.00%	\$195.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$609.10</b>	<b>\$2.03</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$360.00		10.33%	\$37.20	\$0.12
HOUSING STRUCTURE	\$1,400.00		10.33%	\$144.67	\$0.48
MANURE STORAGE STRUCTURE	\$850.00		10.33%	\$87.83	\$0.29
MILKING EQUIPMENT	\$460.00		15.50%	\$71.30	\$0.24
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$341.00</b>	<b>\$1.14</b>
<b>TOTAL COSTS</b>				<b>3340.75</b>	<b>\$11.14</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$559.25</b>	<b>\$1.86</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***22.97 %***

**Dairy Enterprise Budgets**  
**For a System With**  
**High Investment & Low Labor Requirements**

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>200</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,600.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$3.81
CORN	104.00	BU.	\$2.25	\$234.00	\$1.17
SOYBEAN MEAL	1400.00	LBS	\$0.11	\$154.00	\$0.77
DICAL	155.00	LBS	\$0.13	\$20.15	\$0.10
T.M. SALT	85.00	LBS	\$0.10	\$8.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,178.65</b>	<b>\$5.89</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.30
BEDDING		\$	\$55.00	\$55.00	\$0.28
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.45
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.18
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.38
SUPPLIES		\$	\$85.00	\$85.00	\$0.43
MARKETING & OTHER COSTS		\$	\$90.00	\$90.00	\$0.45
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$490.00</b>	<b>\$2.45</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,300.00	\$429.00	\$2.15
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.66)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,300.00	\$26.00	\$0.13
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.42)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$239.00</b>	<b>\$1.20</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	10.43	HRS	\$10.00	\$104.30	\$0.52
LABOR FOR FEEDING	8.00	HRS	\$10.00	\$80.00	\$0.40
LABOR FOR COW CARE	8.00	HRS	\$10.00	\$80.00	\$0.40
LABOR FOR ALL OTHER ACTIVITIES	6.00	HRS	\$10.00	\$60.00	\$0.30
MANAGEMENT FEE ON GROSS INCOME	\$2,600.00		5.00%	\$130.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$454.30</b>	<b>\$2.27</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$520.00		10.33%	\$53.73	\$0.27
HOUSING STRUCTURE	\$1,800.00		10.33%	\$186.00	\$0.93
MANURE STORAGE STRUCTURE	\$1,200.00		10.33%	\$124.00	\$0.62
MILKING EQUIPMENT	\$680.00		15.50%	\$105.40	\$0.53
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$2.35</b>
<b>TOTAL COSTS</b>				<b>2831.08</b>	<b>\$14.16</b>
<b>NET RETURNS TO ASSETS</b>				<b>(\$231.08)</b>	<b>(\$1.16)</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***-8.40 %***

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>220</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,860.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.46
<i>CORN</i>	114.00	BU.	\$2.25	\$256.50	\$1.17
<i>SOYBEAN MEAL</i>	1700.00	LBS	\$0.11	\$187.00	\$0.85
<i>DICAL</i>	175.00	LBS	\$0.13	\$22.75	\$0.10
<i>T.M. SALT</i>	90.00	LBS	\$0.10	\$9.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,237.25</b>	<b>\$5.62</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.27
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.25
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.41
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.16
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.34
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.39
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$93.00	\$93.00	\$0.42
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$493.00</b>	<b>\$2.24</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,400.00	\$462.00	\$2.10
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.60)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,400.00	\$28.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.38)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$274.00</b>	<b>\$1.25</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	10.43	HRS	\$10.00	\$104.30	\$0.47
<i>LABOR FOR FEEDING</i>	8.00	HRS	\$10.00	\$80.00	\$0.36
<i>LABOR FOR COW CARE</i>	8.00	HRS	\$10.00	\$80.00	\$0.36
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	6.00	HRS	\$10.00	\$60.00	\$0.27
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$2,860.00		5.00%	\$143.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$467.30</b>	<b>\$2.12</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$520.00		10.33%	\$53.73	\$0.24
<i>HOUSING STRUCTURE</i>	\$1,800.00		10.33%	\$186.00	\$0.85
<i>MANURE STORAGE STRUCTURE</i>	\$1,200.00		10.33%	\$124.00	\$0.56
<i>MILKING EQUIPMENT</i>	\$680.00		15.50%	\$105.40	\$0.48
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$2.13</b>
<b>TOTAL COSTS</b>				<b>2940.68</b>	<b>\$13.37</b>
<b>NET RETURNS TO ASSETS</b>				<b>(\$80.68)</b>	<b>(\$0.37)</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**-2.88 %**

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>240</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,120.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.18
<i>CORN</i>	124.00	BU.	\$2.25	\$279.00	\$1.16
<i>SOYBEAN MEAL</i>	2000.00	LBS	\$0.11	\$220.00	\$0.92
<i>DICAL</i>	195.00	LBS	\$0.13	\$25.35	\$0.11
<i>T.M. SALT</i>	95.00	LBS	\$0.10	\$9.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,295.85</b>	<b>\$5.40</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.25
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.23
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.38
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.15
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.31
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.35
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$96.00	\$96.00	\$0.40
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$496.00</b>	<b>\$2.07</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,500.00	\$495.00	\$2.06
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.55)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,500.00	\$30.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.35)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$309.00</b>	<b>\$1.29</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	10.43	HRS	\$10.00	\$104.30	\$0.43
<i>LABOR FOR FEEDING</i>	8.00	HRS	\$10.00	\$80.00	\$0.33
<i>LABOR FOR COW CARE</i>	8.00	HRS	\$10.00	\$80.00	\$0.33
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	6.00	HRS	\$10.00	\$60.00	\$0.25
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,120.00		5.00%	\$156.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$480.30</b>	<b>\$2.00</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$520.00		10.33%	\$53.73	\$0.22
<i>HOUSING STRUCTURE</i>	\$1,800.00		10.33%	\$186.00	\$0.78
<i>MANURE STORAGE STRUCTURE</i>	\$1,200.00		10.33%	\$124.00	\$0.52
<i>MILKING EQUIPMENT</i>	\$680.00		15.50%	\$105.40	\$0.44
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$1.95</b>
<b>TOTAL COSTS</b>				<b>3050.28</b>	<b>\$12.71</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$69.72</b>	<b>\$0.29</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**2.45 %**

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>260</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,380.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$2.93
<i>CORN</i>	134.00	BU.	\$2.25	\$301.50	\$1.16
<i>SOYBEAN MEAL</i>	2300.00	LBS	\$0.11	\$253.00	\$0.97
<i>DICAL</i>	215.00	LBS	\$0.13	\$27.95	\$0.11
<i>T.M. SALT</i>	100.00	LBS	\$0.10	\$10.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,354.45</b>	<b>\$5.21</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.23
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.21
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.35
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.13
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.29
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.33
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$99.00	\$99.00	\$0.38
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$499.00</b>	<b>\$1.92</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,600.00	\$528.00	\$2.03
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.51)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,600.00	\$32.00	\$0.12
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.32)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$344.00</b>	<b>\$1.32</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	10.43	HRS	\$10.00	\$104.30	\$0.40
<i>LABOR FOR FEEDING</i>	8.00	HRS	\$10.00	\$80.00	\$0.31
<i>LABOR FOR COW CARE</i>	8.00	HRS	\$10.00	\$80.00	\$0.31
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	6.00	HRS	\$10.00	\$60.00	\$0.23
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,380.00		5.00%	\$169.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$493.30</b>	<b>\$1.90</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$520.00		10.33%	\$53.73	\$0.21
<i>HOUSING STRUCTURE</i>	\$1,800.00		10.33%	\$186.00	\$0.72
<i>MANURE STORAGE STRUCTURE</i>	\$1,200.00		10.33%	\$124.00	\$0.48
<i>MILKING EQUIPMENT</i>	\$680.00		15.50%	\$105.40	\$0.41
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$1.80</b>
<b>TOTAL COSTS</b>				<b>3159.88</b>	<b>\$12.15</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$220.12</b>	<b>\$0.85</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***7.59 %***

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>280</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,640.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$2.72
<i>CORN</i>	144.00	BU.	\$2.25	\$324.00	\$1.16
<i>SOYBEAN MEAL</i>	2600.00	LBS	\$0.11	\$286.00	\$1.02
<i>DICAL</i>	235.00	LBS	\$0.13	\$30.55	\$0.11
<i>T.M. SALT</i>	105.00	LBS	\$0.10	\$10.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,413.05</b>	<b>\$5.05</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.21
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.20
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.32
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.13
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.27
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.30
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$102.00	\$102.00	\$0.36
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$502.00</b>	<b>\$1.79</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,700.00	\$561.00	\$2.00
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.47)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,700.00	\$34.00	\$0.12
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.30)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$379.00</b>	<b>\$1.35</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	10.43	HRS	\$10.00	\$104.30	\$0.37
<i>LABOR FOR FEEDING</i>	8.00	HRS	\$10.00	\$80.00	\$0.29
<i>LABOR FOR COW CARE</i>	8.00	HRS	\$10.00	\$80.00	\$0.29
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	6.00	HRS	\$10.00	\$60.00	\$0.21
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,640.00		5.00%	\$182.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$506.30</b>	<b>\$1.81</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$520.00		10.33%	\$53.73	\$0.19
<i>HOUSING STRUCTURE</i>	\$1,800.00		10.33%	\$186.00	\$0.66
<i>MANURE STORAGE STRUCTURE</i>	\$1,200.00		10.33%	\$124.00	\$0.44
<i>MILKING EQUIPMENT</i>	\$680.00		15.50%	\$105.40	\$0.38
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$1.68</b>
<b>TOTAL COSTS</b>				<b>3269.48</b>	<b>\$11.68</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$370.52</b>	<b>\$1.32</b>

***RATE OF RETURN ON AVERAGE ASSETS***

*12.56 %*

# DAIRY COW ENTERPRISE

## BUDGET

### HIGH INVESTMENT / LOW LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>300</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,900.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$2.54
<i>CORN</i>	154.00	BU.	\$2.25	\$346.50	\$1.16
<i>SOYBEAN MEAL</i>	2900.00	LBS	\$0.11	\$319.00	\$1.06
<i>DICAL</i>	255.00	LBS	\$0.13	\$33.15	\$0.11
<i>T.M. SALT</i>	110.00	LBS	\$0.10	\$11.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,471.65</b>	<b>\$4.91</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.20
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.18
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.30
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.12
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.25
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.28
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$105.00	\$105.00	\$0.35
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$505.00</b>	<b>\$1.68</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,800.00	\$594.00	\$1.98
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.44)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,800.00	\$36.00	\$0.12
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.28)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$414.00</b>	<b>\$1.38</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	10.43	HRS	\$10.00	\$104.30	\$0.35
<i>LABOR FOR FEEDING</i>	8.00	HRS	\$10.00	\$80.00	\$0.27
<i>LABOR FOR COW CARE</i>	8.00	HRS	\$10.00	\$80.00	\$0.27
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	6.00	HRS	\$10.00	\$60.00	\$0.20
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,900.00		5.00%	\$195.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$519.30</b>	<b>\$1.73</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$520.00		10.33%	\$53.73	\$0.18
<i>HOUSING STRUCTURE</i>	\$1,800.00		10.33%	\$186.00	\$0.62
<i>MANURE STORAGE STRUCTURE</i>	\$1,200.00		10.33%	\$124.00	\$0.41
<i>MILKING EQUIPMENT</i>	\$680.00		15.50%	\$105.40	\$0.35
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$469.13</b>	<b>\$1.56</b>
<b>TOTAL COSTS</b>				<b>3379.08</b>	<b>\$11.26</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$520.92</b>	<b>\$1.74</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***17.36 %***

**Dairy Enterprise Budgets**  
**For a System With**  
**Low Investment & High Labor Requirements**

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>200</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,600.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.81
<i>CORN</i>	104.00	BU.	\$2.25	\$234.00	\$1.17
<i>SOYBEAN MEAL</i>	1400.00	LBS	\$0.11	\$154.00	\$0.77
<i>DICAL</i>	155.00	LBS	\$0.13	\$20.15	\$0.10
<i>T.M. SALT</i>	85.00	LBS	\$0.10	\$8.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,178.65</b>	<b>\$5.89</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.30
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.28
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.45
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.18
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.38
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.43
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$90.00	\$90.00	\$0.45
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$490.00</b>	<b>\$2.45</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,300.00	\$429.00	\$2.15
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.66)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,300.00	\$26.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.42)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$239.00</b>	<b>\$1.20</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	12.59	HRS	\$10.00	\$125.90	\$0.63
<i>LABOR FOR FEEDING</i>	16.00	HRS	\$10.00	\$160.00	\$0.80
<i>LABOR FOR COW CARE</i>	12.00	HRS	\$10.00	\$120.00	\$0.60
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	10.00	HRS	\$10.00	\$100.00	\$0.50
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$2,600.00		5.00%	\$130.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$635.90</b>	<b>\$3.18</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$200.00		10.33%	\$20.67	\$0.10
<i>HOUSING STRUCTURE</i>	\$1,000.00		10.33%	\$103.33	\$0.52
<i>MANURE STORAGE STRUCTURE</i>	\$500.00		10.33%	\$51.67	\$0.26
<i>MILKING EQUIPMENT</i>	\$200.00		15.50%	\$31.00	\$0.16
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$1.03</b>
<b>TOTAL COSTS</b>				<b>2750.22</b>	<b>\$13.75</b>
<b>NET RETURNS TO ASSETS</b>				<b>(\$150.22)</b>	<b>(\$0.75)</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***-9.39 %***

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>220</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$2,860.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.46
<i>CORN</i>	114.00	BU.	\$2.25	\$256.50	\$1.17
<i>SOYBEAN MEAL</i>	1700.00	LBS	\$0.11	\$187.00	\$0.85
<i>DICAL</i>	175.00	LBS	\$0.13	\$22.75	\$0.10
<i>T.M. SALT</i>	90.00	LBS	\$0.10	\$9.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,237.25</b>	<b>\$5.62</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.27
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.25
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.41
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.16
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.34
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.39
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$93.00	\$93.00	\$0.42
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$493.00</b>	<b>\$2.24</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,400.00	\$462.00	\$2.10
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.60)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,400.00	\$28.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.38)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$274.00</b>	<b>\$1.25</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	12.59	HRS	\$10.00	\$125.90	\$0.57
<i>LABOR FOR FEEDING</i>	16.00	HRS	\$10.00	\$160.00	\$0.73
<i>LABOR FOR COW CARE</i>	12.00	HRS	\$10.00	\$120.00	\$0.55
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	10.00	HRS	\$10.00	\$100.00	\$0.45
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$2,860.00		5.00%	\$143.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$648.90</b>	<b>\$2.95</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$200.00		10.33%	\$20.67	\$0.09
<i>HOUSING STRUCTURE</i>	\$1,000.00		10.33%	\$103.33	\$0.47
<i>MANURE STORAGE STRUCTURE</i>	\$500.00		10.33%	\$51.67	\$0.23
<i>MILKING EQUIPMENT</i>	\$200.00		15.50%	\$31.00	\$0.14
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$0.94</b>
<b>TOTAL COSTS</b>				<b>2859.82</b>	<b>\$13.00</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$0.18</b>	<b>\$0.00</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***0.01 %***

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>240</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,120.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$3.18
<i>CORN</i>	124.00	BU.	\$2.25	\$279.00	\$1.16
<i>SOYBEAN MEAL</i>	2000.00	LBS	\$0.11	\$220.00	\$0.92
<i>DICAL</i>	195.00	LBS	\$0.13	\$25.35	\$0.11
<i>T.M. SALT</i>	95.00	LBS	\$0.10	\$9.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,295.85</b>	<b>\$5.40</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.25
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.23
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.38
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.15
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.31
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.35
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$96.00	\$96.00	\$0.40
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$496.00</b>	<b>\$2.07</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,500.00	\$495.00	\$2.06
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.55)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,500.00	\$30.00	\$0.13
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.35)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$309.00</b>	<b>\$1.29</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	12.59	HRS	\$10.00	\$125.90	\$0.52
<i>LABOR FOR FEEDING</i>	16.00	HRS	\$10.00	\$160.00	\$0.67
<i>LABOR FOR COW CARE</i>	12.00	HRS	\$10.00	\$120.00	\$0.50
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	10.00	HRS	\$10.00	\$100.00	\$0.42
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,120.00		5.00%	\$156.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$661.90</b>	<b>\$2.76</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$200.00		10.33%	\$20.67	\$0.09
<i>HOUSING STRUCTURE</i>	\$1,000.00		10.33%	\$103.33	\$0.43
<i>MANURE STORAGE STRUCTURE</i>	\$500.00		10.33%	\$51.67	\$0.22
<i>MILKING EQUIPMENT</i>	\$200.00		15.50%	\$31.00	\$0.13
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$0.86</b>
<b>TOTAL COSTS</b>				<b>2969.42</b>	<b>\$12.37</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$150.58</b>	<b>\$0.63</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**8.86 %**

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
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<b>GROSS RETURNS FROM MILK:</b>	<b>260</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,380.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
<i>FORAGE</i>	6.35	TON	\$120.00	\$762.00	\$2.93
<i>CORN</i>	134.00	BU.	\$2.25	\$301.50	\$1.16
<i>SOYBEAN MEAL</i>	2300.00	LBS	\$0.11	\$253.00	\$0.97
<i>DICAL</i>	215.00	LBS	\$0.13	\$27.95	\$0.11
<i>T.M. SALT</i>	100.00	LBS	\$0.10	\$10.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,354.45</b>	<b>\$5.21</b>
<b>LIVESTOCK COSTS:</b>					
<i>MILK HAULING</i>		CWT.	\$0.30	\$60.00	\$0.23
<i>BEDDING</i>		\$	\$55.00	\$55.00	\$0.21
<i>VET &amp; MEDICINE</i>		\$	\$90.00	\$90.00	\$0.35
<i>BREEDING COSTS</i>		\$	\$35.00	\$35.00	\$0.13
<i>UTILITIES, POWER, &amp; FUEL</i>		\$	\$75.00	\$75.00	\$0.29
<i>SUPPLIES</i>		\$	\$85.00	\$85.00	\$0.33
<i>MARKETING &amp; OTHER COSTS</i>		\$	\$99.00	\$99.00	\$0.38
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$499.00</b>	<b>\$1.92</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
<i>PURCH. REPLACEMENT COW</i>	0.33	HD.	\$1,600.00	\$528.00	\$2.03
<i>LESS: SALE OF CULL COW</i>	0.33	HD.	\$400.00	(\$132.00)	(\$0.51)
<i>DEATH LOSS REPLACEMENT</i>	0.02	HD.	\$1,600.00	\$32.00	\$0.12
<i>LESS: SALE OF CALF</i>	0.84	HD.	\$100.00	(\$84.00)	(\$0.32)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$344.00</b>	<b>\$1.32</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
<i>LABOR FOR MILKING</i>	12.59	HRS	\$10.00	\$125.90	\$0.48
<i>LABOR FOR FEEDING</i>	16.00	HRS	\$10.00	\$160.00	\$0.62
<i>LABOR FOR COW CARE</i>	12.00	HRS	\$10.00	\$120.00	\$0.46
<i>LABOR FOR ALL OTHER ACTIVITIES</i>	10.00	HRS	\$10.00	\$100.00	\$0.38
<i>MANAGEMENT FEE ON GROSS INCOME</i>	\$3,380.00		5.00%	\$169.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$674.90</b>	<b>\$2.60</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
<i>MILKING CENTER STRUCTURE</i>	\$200.00		10.33%	\$20.67	\$0.08
<i>HOUSING STRUCTURE</i>	\$1,000.00		10.33%	\$103.33	\$0.40
<i>MANURE STORAGE STRUCTURE</i>	\$500.00		10.33%	\$51.67	\$0.20
<i>MILKING EQUIPMENT</i>	\$200.00		15.50%	\$31.00	\$0.12
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$0.79</b>
<b>TOTAL COSTS</b>				<b>3079.02</b>	<b>\$11.84</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$300.98</b>	<b>\$1.16</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***17.20 %***

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
	-----	-----	-----	-----	-----
<b>GROSS RETURNS FROM MILK:</b>	<b>280</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,640.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$2.72
CORN	144.00	BU.	\$2.25	\$324.00	\$1.16
SOYBEAN MEAL	2600.00	LBS	\$0.11	\$286.00	\$1.02
DICAL	235.00	LBS	\$0.13	\$30.55	\$0.11
T.M. SALT	105.00	LBS	\$0.10	\$10.50	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,413.05</b>	<b>\$5.05</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.21
BEDDING		\$	\$55.00	\$55.00	\$0.20
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.32
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.13
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.27
SUPPLIES		\$	\$85.00	\$85.00	\$0.30
MARKETING & OTHER COSTS		\$	\$102.00	\$102.00	\$0.36
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$502.00</b>	<b>\$1.79</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,700.00	\$561.00	\$2.00
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.47)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,700.00	\$34.00	\$0.12
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.30)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$379.00</b>	<b>\$1.35</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	12.59	HRS	\$10.00	\$125.90	\$0.45
LABOR FOR FEEDING	16.00	HRS	\$10.00	\$160.00	\$0.57
LABOR FOR COW CARE	12.00	HRS	\$10.00	\$120.00	\$0.43
LABOR FOR ALL OTHER ACTIVITIES	10.00	HRS	\$10.00	\$100.00	\$0.36
MANAGEMENT FEE ON GROSS INCOME	\$3,640.00		5.00%	\$182.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$687.90</b>	<b>\$2.46</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$200.00		10.33%	\$20.67	\$0.07
HOUSING STRUCTURE	\$1,000.00		10.33%	\$103.33	\$0.37
MANURE STORAGE STRUCTURE	\$500.00		10.33%	\$51.67	\$0.18
MILKING EQUIPMENT	\$200.00		15.50%	\$31.00	\$0.11
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$0.74</b>
<b>TOTAL COSTS</b>				<b>3188.62</b>	<b>\$11.39</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$451.38</b>	<b>\$1.61</b>

***RATE OF RETURN ON AVERAGE ASSETS***

***25.08 %***

# DAIRY COW ENTERPRISE

## BUDGET

### LOW INVESTMENT / HIGH LABOR

	QUANTITY	UNIT	UNIT VALUE	TOTAL PER COW	TOTAL PER CWT.
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<b>GROSS RETURNS FROM MILK:</b>	<b>300</b>	<b>CWT</b>	<b>\$13.00</b>	<b>\$3,900.00</b>	<b>\$13.00</b>
<b>FEED COSTS:</b>					
FORAGE	6.35	TON	\$120.00	\$762.00	\$2.54
CORN	154.00	BU.	\$2.25	\$346.50	\$1.16
SOYBEAN MEAL	2900.00	LBS	\$0.11	\$319.00	\$1.06
DICAL	255.00	LBS	\$0.13	\$33.15	\$0.11
T.M. SALT	110.00	LBS	\$0.10	\$11.00	\$0.04
<b>TOTAL FEED COSTS</b>				<b>\$1,471.65</b>	<b>\$4.91</b>
<b>LIVESTOCK COSTS:</b>					
MILK HAULING		CWT.	\$0.30	\$60.00	\$0.20
BEDDING		\$	\$55.00	\$55.00	\$0.18
VET & MEDICINE		\$	\$90.00	\$90.00	\$0.30
BREEDING COSTS		\$	\$35.00	\$35.00	\$0.12
UTILITIES, POWER, & FUEL		\$	\$75.00	\$75.00	\$0.25
SUPPLIES		\$	\$85.00	\$85.00	\$0.28
MARKETING & OTHER COSTS		\$	\$105.00	\$105.00	\$0.35
<b>TOTAL LIVESTOCK COSTS</b>				<b>\$505.00</b>	<b>\$1.68</b>
<b>COW OWNERSHIP COSTS (Net of calf sales) :</b>					
PURCH. REPLACEMENT COW	0.33	HD.	\$1,800.00	\$594.00	\$1.98
LESS: SALE OF CULL COW	0.33	HD.	\$400.00	(\$132.00)	(\$0.44)
DEATH LOSS REPLACEMENT	0.02	HD.	\$1,800.00	\$36.00	\$0.12
LESS: SALE OF CALF	0.84	HD.	\$100.00	(\$84.00)	(\$0.28)
<b>TOTAL COW OWNERSHIP COSTS</b>				<b>\$414.00</b>	<b>\$1.38</b>
<b>LABOR &amp; MANAGEMENT COSTS:</b>					
LABOR FOR MILKING	12.59	HRS	\$10.00	\$125.90	\$0.42
LABOR FOR FEEDING	16.00	HRS	\$10.00	\$160.00	\$0.53
LABOR FOR COW CARE	12.00	HRS	\$10.00	\$120.00	\$0.40
LABOR FOR ALL OTHER ACTIVITIES	10.00	HRS	\$10.00	\$100.00	\$0.33
MANAGEMENT FEE ON GROSS INCOME	\$3,900.00		5.00%	\$195.00	\$0.65
<b>TOTAL LABOR &amp; MANAGEMENT COSTS</b>				<b>\$700.90</b>	<b>\$2.34</b>
<b>FACILITIES AND EQUIP. COSTS:</b>					
MILKING CENTER STRUCTURE	\$200.00		10.33%	\$20.67	\$0.07
HOUSING STRUCTURE	\$1,000.00		10.33%	\$103.33	\$0.34
MANURE STORAGE STRUCTURE	\$500.00		10.33%	\$51.67	\$0.17
MILKING EQUIPMENT	\$200.00		15.50%	\$31.00	\$0.10
<b>TOTAL FACILITY AND EQUIPMENT COSTS</b>				<b>\$206.67</b>	<b>\$0.69</b>
<b>TOTAL COSTS</b>				<b>3298.22</b>	<b>\$10.99</b>
<b>NET RETURNS TO ASSETS</b>				<b>\$601.78</b>	<b>\$2.01</b>

***RATE OF RETURN ON AVERAGE ASSETS***

**32.53 %**