Leasing Dairy Cows

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Leasing Dairy Cows

Challenges face young operators to enter the dairy business including large capital investment in livestock, machinery, and facilities. These capital requirements to enter the dairy business have increased substantially in recent years. Often beginning operators must incur large debt loads that can cause cash flow problems and jeopardize the longevity of the operation, especially if the business environment changes. To avoid these problems, an owner and a beginning operator need to develop an agreement; a young operator can enter into a Sharemilk Agreement or a dairy cow leasing agreement. This publication will focus on Dairy Cow Lease Agreements; more information on Sharemilk Agreement is available in ISUEO publication......

Objectives of the lease typically are:

- to gradually transfer control and ownership of the dairy herd to a beginning operator,
- to decrease borrowed capital, initial investment and the associated risks for a beginning operator, and
- to spread the owner's income tax consequences over several tax years.

This publication is designed to help two parties develop a lease agreement for transferring the dairy herd. The lease term is often based on the length of time it takes to replace the original herd. Ownership gradually shifts to the beginning operator as the owner's cows are culled and the operator's replacements enter the herd. Typically, the operator pays all operating costs, receives all milk income, receives all offspring, and provides labor and management. In turn, the owner receives the lease income and the cull cow income from the cows owned. However, a lease can be set-up based on party's contributions and preferences.

Advantages of Leasing

Lease agreements can be advantageous to both the operator and the owner.

The beginning operator:

- can avoid borrowing capital to buy the cows and/or utilize owned assets to pledge as collateral for operating,
- 2. may improve his/her cash flow position,
- 3. shares some of the financial risk with the owner,

- 4. may use the lease period to work with the owner in developing management skills and improving the herd,
- can report lease payments as an ordinary tax expense, rather than depreciating the cost of purchased cows,
- 6. leaves with some livestock assets if it is necessary to terminate the dairy lease.

The owner:

- can liquidate the herd in an orderly fashion over a period of time rather than through an outright dispersal,
- can spread rental income and cull cow income over more tax years than income from an outright sale,
- 3. retains partial ownership of the breeding herd for a longer period of time,
- 4. does not have to provide labor or input costs for the herd.
- 5. continues to receive cull cow income,
- has the capacity and satisfaction of starting a young person in the dairy business,
- 7. and knows that his or her well-bred herd can remain intact as a working unit.

Other Reasons to Lease Cows

A cow lease arrangement could also work, whereby the beginning farmer would like to take on ownership of cows in an existing herd and incur related debt to simplify co-ownership of a herd. The older generation farmer would lease the younger generation farmer's cows and pay a monthly lease payment to the younger party and pay all operating expenses for the leased cows. 4-H Dairy Exhibitors might find a dairy lease as a way to own cows in another's herd.

In this situation, the younger party might either accept a lower payment or purchase back the heifer calves from his/her cows. Then raise those heifers, or have them raised by the older generation farmer under another agreement.

Cow lease agreements can also be used as investments by investors who might see an opportunity to invest in dairy cows or dairy breeding genetics. Dairy producers might also see an opportunity to lease dairy cows when cash flow or a banker does not allow for the outright purchase of dairy cows. However, it is typically more profitable and simpler, to own versus lease dairy cows. As with many arrangements they are easier to get into than get out of; therefore, carefully consider the exit strategy of both parties before entering into it.

Disadvantages of Leasing

Lease agreements also has disadvantages. First, under a lease agreement, it often takes longer for a beginning operator to gain ownership of a cow herd and for an owner to exit the dairy business. Second, the operator receives limited cull cow income during the term of the lease. Third, there is the potential for conflicts between the owner and operator over the management of the cows.

Dairy Cow Lease Considerations

Several points need to be considered and discussed as the lease agreement is developed. Culling decisions made on the leased cows should be made jointly between the owner and operator. Predetermined culling criteria, satisfactory to both parties, need to be agreed upon and included in the lease document. Also, the two parties should decide who is responsible for replacing cows culled beyond the normal culling rate.

Replacement heifers of owner can be handled in different ways, depending on the owner's preferences and capital situation of the operator.

- The owner may accept a lower lease payment and retain title to the replacements and lease them to the operator as they freshen. Costs associated with raising the replacements would then be assumed by the owner.
- An outright purchase of the replacements by the operator may be made at the beginning of the lease. In this case, the operator would pay any remaining costs for developing the replacement heifers.
- The owner, as in the case of a parent, might possibly gift replacements to a son or daughter who is also the operator. The remaining costs for developing the replacements would be assumed by the operator.

Monthly lease payments are calculated based on the number of dry and producing cows inventoried at the beginning of each month. Precise inventory records are required to ensure accurate accounting of who owns which cows.

Finally, if the owner has cows remaining in the herd at the end of the lease, the operator may have the option to either purchase them or extend the lease. The owner may choose to simply sell those remaining at the end of the lease term.

Getting Started

A dairy herd owner planning to lease cows will want to cover the fixed or ownership costs of the cows. However, before an actual rental rate can be calculated, the owner must consider several aspects of the proposed dairy cow lease, including inventory and appraisal of the herd, estimating cow salvage value, selecting the interest rate, and determining the lease terms.

Inventory and Appraisal of the Cow Herd

The owner's first step is taking an inventory of the entire dairy herd. The inventory should include the number of producing cows, replacement heifers, and calves under two years of age, all categorized by related age group. The value of the cow herd may change annually as cows age and/or as cattle prices change. An unbiased appraisal of the herd's value by a third party is recommended even when the lease is between family members. Herd owners may be able to work with individuals who are experienced in valuing dairy cattle.

The purpose of the appraisal is to determine the average fair market value per producing cow (based on average age, condition and production potential) in order to calculate annual ownership costs. An appraised value of the replacements is necessary only if they are to be sold to the operator.

Estimating Cull Value of the Cow

The average value estimation per cull cow also is used to calculate annual ownership costs. The cull or market value of a dairy cow when she leaves the herd depends on the average weight of the cull cow and the price per pound. A historical average of cull cow weights can be determined from previous sales receipts. Price per pound can be based on a long range planning price or recent sales. Cull dairy cow prices tend to be highly variable over a range of years so one can use an average of several years, pick a benchmark to use, or adjust the lease annually.

Selecting the Interest Rate

In a commercial dairy lease, the interest rate selected usually approximates the actual cost of borrowing money for dairy cattle in the commercial money market. The interest rate should at least be equal to the rate that the owner could receive if the cow was sold and the money invested by the owner elsewhere. More typical in two-generation arrangements is using an average of current savings rate and loan rate.

Determining Lease Terms

The length of the lease agreement is determined by the average culling percentage of the herd. For example, if the culling rate is 30 percent, the lease payments would be based on a 3.33 year productive life or 40 months. Length of the lease also would equal 3.33 years, as long as the owner does not retain the replacements. If the replacements are retained by the owner and leased when they freshen, the length of the lease would be extended by average calving interval because it would take approximately that long before the operator's first replacements would enter the herd.

Costs to Consider in Leasing

Consider two broad categories of costs: (1) fixed costs, sometimes called ownership costs, and (2) variable costs, sometimes called operating costs. Fixed costs for breeding livestock include depreciation, interest, insurance, and death loss. These costs do not change in the short run as production changes. The owner of the dairy cows in a lease arrangement should receive at lease payment at least large enough to pay for the livestock ownership costs.

Variable or operating costs are directly related to production, and in a livestock operation include feed, labor, veterinary services and medicines, breeding, trucking, marketing, and utilities. In a cash lease, the operator generally pays all of the operating costs for the producing herd.

Determining Fixed Costs of Dairy Cows

The following discussion and example illustrates how to calculate fixed costs for a dairy cow using herd average values.

1. Depreciation

Depreciation usually is the largest single fixed cost factor. On an annual basis, it represents the amount of the asset value that is used up during the course of a year. Depreciation of a dairy cow depends on:

- 1. purchase price or fair market value of the cow,
- 2. estimated length of productive life, and
- cull or market value of the cow when removed from the herd.

For example, assuming the average fair market value per productive cow is \$1,600, the average cull value is \$700 (1,400 lb. @ \$0.50) and the herd average culling rate is 30 percent, the annual depreciation would be 30 percent of \$900 (\$1,600 — \$700 x 30%), or \$270. Note that this depreciation figure is not the depreciation allowed

for income tax purposes; this is economic or fair market value depreciation, not tax depreciation.

2. Interest

Interest on the investment in the cow herd also is a contribution of the owner. Interest is calculated as the <u>initial</u> market value of the cow multiplied by the current interest rate being paid or the opportunity cost of capital for the owner or an agreed upon rate. For example, for a productive cow valued at \$1,600 with a 5.5% agreed upon interest rate, the interest cost would be \$88 annually.

It is noted that past University Extension publications in Iowa and Wisconsin (Orth, Leuning) recommend the interest cost differently. Interest could be calculated on the <u>average, midlife</u> value of the cow over her productive life. For example, (\$1,600 + \$700) divided by 2 = \$1,150, the average or mid-life value of the cow. Multiplying \$1,150 by a 5.5% interest rate would give an average annual interest charge of \$63.25. However, this author recommends using the initial market value, not the average, mid-life market value, as a more fair return to the owner since that is the value of the investment the owner is seeking a full return on.

3. Insurance and Death Loss

An owner may accept all of the risks of owning livestock, or assume some and insure others. Insurance premiums vary among insurance companies. Premiums for fire, lightning, and wind typically will run about 0.5% of the cow value. In the example, the cost would be (\$1,600 x 0.5%), or \$8.00 annually. A 4% uninsured death loss is typical for lowa dairy herds. For an average cow value of \$1,600, this would amount to (\$1,600 x 4%), or \$64 per year.

4. Summing the Costs Up

In sum, annual fixed costs for a productive cow with an average fair market value of \$1,600 are \$270 depreciation, \$88 interest, \$8 insurance, and \$64 death loss, for a total of \$430. On a monthly basis, a lease payment equal to \$35.83 per cow would be enough to pay these fixed costs. This would equate to a lease of \$1.18 per cow per day. The initial value and the cull value of the cow must be considered carefully as they can significantly impact the overall cost range.

Appendix I, Calculating Ownership Costs for Dairy Cows and Operator's Cost, may help both owner and operator budget cow ownership costs. The example in Appendix I illustrates the computerized spreadsheet output just described on the left side. The right side of the spreadsheet is the operator's cost or a sample dairy cow lease budget. The operator also needs to decide whether leasing is profitable, by comparing the costs and terms of leasing cows. A positive projected return over variable, fixed costs, and lease payment means that leasing would provide the operator a return for labor and management input. Thus, it would be profitable to lease the cows. The operator needs to decide if that is adequate to meet additional cash flow requirements. If it is not, the operator should evaluate budgeted costs, or consider other methods of acquiring assets.

DAIR	COW LE	ASE P	AYMENT WORKSHEET	
	Values are	based	on a per cow basis	
OWNER's Annual Cost			OPERATOR's Annual Cost*	
Annual Pounds Milk Sold			Milk Price per Hundredweight	\$17.00
per cow	22,000		Total Pounds Milk Equivalent	22,012
Value of Cow, Initial	\$1,600.00		INCOME per Cow	
			Milk Sales	\$3,740.00
DEPRECIATION			Bull/Heifer Calf Value or Sales	\$140.00
Cull Value, Expected	\$700.00		Manure Value	\$63.00
Cull Rate, %	30%		Total Income	\$4,012.90
Depreciation Cost	\$270.00			
			EXPENSES per Cow**	
INTEREST			Feed Expense	\$1,366.93
Interest Rate	5.50%		Dairy Supplies	\$200.00
Interest Cost	\$88.00		Freight/Trucking/Hauling	\$33.00
			Veterinary & Medicine	\$121.00
DEATH LOSS			Breeding Fees	\$52.00
Death Loss Percentage	4.00%		DHIA/Accounting/Legal	\$29.00
Operator Cost	100.00%		Marketing	\$66.00
Death Loss Cost	\$64.00		Bedding Costs	\$100.00
			Gas/Fuel/Oil	\$39.00
INSURANCE			Electricity	\$63.79
Insurance Rate	0.50%		Other Variable (int., phone)	\$90.00
Insurance Cost	\$8.00		Facilities & Equipment Costs	\$516.00
			Labor and Mgt Costs	\$535.00
			Cow Lease Cost	\$430.00
Assumes owner (leasor) receive	s cull cow		Total Cost	\$3,641.72
income and operator (leasee) re	ceives milk			
income and offspring.			Operator Return over Lease and	Expenses
Co	ost, Owner		Annual Return per Cow	\$371.18
Annual Cost per Cow	\$430.00		Monthly Return per Cow	\$30.93
Monthly Cost per Cow	\$35.83		Daily Return per Cow	\$1.02
Daily Cost per Cow	\$1.18		Operator Cost per Cwt.Eq.	\$16.54
Owner Cost per Cwt. Eq.	\$1.95		Operator Return per Cwt.Eq.	\$0.46

^{*} values are based on ISU Dairy Budget for 22,000 RHA Conventional System 2016 Projected

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^{**}heifer rearing expenses are not included as typically not part of cow lease contracts.

Appendix II, Leasing vs Purchasing Cows

Using debt capital to purchase dairy cows and replacements may be an option for the operator. If so, compare the net loan payment with the lease payment to determine if owning is better than leasing. Through ownership, the operator would receive total cull cow income. The annual net loan payment is calculated by subtracting expected cull cow income from the scheduled principal and interest payment. For example, assuming 100 percent debt financing, the annual loan payment for a \$1,600 dairy cow amortized over 3.33 (40 months) years at 5.5% interest is \$527. If the expected cull cow income for the year is \$270 per cow, the net loan payment would equal \$257 (\$527 — \$270) per cow.



Comparing the net loan payment of \$257 with the lease payment of \$430 gives owning a significant advantage in this example. Typically, owning will have a greater advantage than leasing cows if the operator has the ability to make a down payment on the purchase of the cows.

Legal and Tax Issues

A written lease is preferred to provide a record of each party's rights and obligations under the lease and minimizes misunderstandings later. It also helps to assure that the important factors are considered in developing the lease.

Before entering into a lease arrangement, both the owner and operator should consult with their tax practitioners and attorneys regarding specific tax consequences and legal issues. For example, it must be clear whether the lease is a true lease or a conditional sales contract for tax reporting of depreciation and ordinary expenses. For the owner, lease payments are ordinary income, and cull cow sales generally produce capital gain. For the operator, lease payments are an ordinary expense. Replacements have a tax basis of zero if raised by the operator, or equal to the purchase cost if purchased from the owner.

Income received from leasing personal property alone may be viewed by the Internal Revenue Service as self-employment income. However, leasing personal property in conjunction with real estate when the owner is a nonmaterial participant in the business does not produce self-employment income. Moreover, one might contend that when an owner leases only personal property in a passive arrangement, not in the course of business, rental payments should be considered as investment income and not subject to self-employment taxes. Owners planning to lease personal property under a passive lease arrangement should consult their tax advisers on this issue.

In cases where dairy cows are leased with the real estate, two separate leases or a single lease could be used. For social security tax purposes, renting dairy cows with the real estate stands a better chance of avoiding social security tax on the income under the lease. If there are two leases, the wording in each lease document should tie the two together. For example, if the operator defaults on cow lease payments, both the cow lease and real estate lease are terminated or vice versa. Consult with your tax preparer on the best way to handle the lease/s for tax reporting.

Conclusion

The dairy lease arrangement described in this publication is often intended to help transfer control and ownership of the dairy herd from the owner to the beginning operator as replacements enter the herd. It might serve better than an outright sale when the beginning operator has limited capital resources and is concerned about debt levels. For the retiring owner, it will spread the income tax consequences over several tax years instead of one.

There are other uses of dairy cow leases as well. Investors and others wanting to acquire partial ownership of a herd for various reasons can successfully use a dairy cow lease.

However, before beginning any farm business arrangement, the parties involved should examine their present situation carefully to make a good judgment of their potential for success, and again, put any agreement in writing for improved future relations and prevention of misunderstanding between the parties.

Appendix III . Worksheet for Calculating Ownership Costs for Dairy Cows¹

	Example*	Your Farm
Depreciation: (Fair market value of cow – salvage value of cow) x expected culling percentage = annual depreciation per cow *Example: (\$1,600 – \$700) X 30% = \$270	\$270.00	
Interest on Investment: Fair market value of cow x interest rate = annual interest charge per cow *Example: \$1,600 x 5.5% = \$88.00	\$88.00	
Insurance and Death Loss: Fair market value of cow x insurance rate/1000= annual insurance cost	\$8.00	
*Example: \$1,600 x.5% = \$8.00	Φ0.00	
Fair market value of cow \$1,600 x 4% = annual death loss value *Example: \$1,600 x 4% = \$64.00	\$64.00	
TOTAL ANNUAL COSTS:	\$430.00	
MONTHLY RENTAL FEE DESIRED (Total Annual Costs/12): ³ Or \$1.18 per cow per day	\$35.83	

¹When calculating ownership costs, use the herd average fair market value per cow, cull value per cow, and expected culling percentage.

²Some owners may want interest on the average value (mid-term) investment in the cow.

³Generally, the monthly rental fee per cow stays constant throughout the lease. Total monthly rental payments are calculated by multiplying the monthly rental fee by the number of dry and producing cows inventoried at the beginning of each month.

Appendix IV. Sample Dairy Budget for Various Types of Iowa Dairy Farms, 2017

Tuput	K Price Average Input I D K Pasture I D K Pasture I D Cow I D C	High Input 18 K Pasture \$16.50 Milk Price Cut Eq. 1 Cou 180.00 2970.00 2.73 45.00 9.60 158.40 3.64 60.00 4.18 69.00 4.19 69.00 \$1.04 \$388 \$0.05 \$190 \$1.07 \$215 \$1.07 \$215 \$0.00 \$0 \$0 \$0.00 \$0 \$0 \$0.00 \$0 \$0 \$0.00 \$0 \$0 \$0.00 \$0 \$0.00 \$0 \$0.00 \$0 \$0.00 \$0 \$0.00 \$0 \$0.00 \$0 \$0.00 \$0	Average Prod 15 K Jersey \$18.00 Mill 24.62 131 4.62 2.67 2.61 161.21 \$0.00 \$1.06 \$1.06 \$1.06 \$0.32 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	Low Production 18 K Conventional \$16.50 Milk Price Cwt Eq. 1 Cow 180.00 2970.00 2.85 4.70 2.85 4.27 70.50 4.27 70.50 4.27 4.27 4.27 4.27 4.27 4.27 4.27 4.27 4.27 4.215 4.00	Average Production (22 K Conventing (23	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 9 8 9 9 9 9 9 9 9 9 9 9	High Production 30 K Conventional \$15.50 Milk Price Cut Eq. 1 Cou 30.00 4650.00 2.90 4550.00 4.06 63.00 5.94 92.00 5.94 92.00 5.94 92.00 5.94 92.00 5.94 \$582 \$0.00 \$0.99 \$1.78 \$582 \$0.99 \$325 \$0.90 \$325 \$0.95 \$325 \$0.96 \$20 \$0.93 \$108 \$0.00 \$50
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Publigge - DM	\$582 \$2.34 \$5.350 \$114 \$5.350 \$114 \$5.350 \$114 \$5.350 \$114 \$5.350 \$5.000	. 14		.	\$2.23 \$0.00 \$1.25 \$1.25 \$1.03 \$0.35 \$0.35 \$0.06 \$0.00 \$0.00 \$0.00		\$544 \$303 \$304 \$129 \$130 \$18 \$53	
Hay/Haylage - DM	\$582 \$234 \$: \$350 \$114 \$ \$0 \$1.30 \$ \$0 \$40.37 \$ \$0 \$60.00 \$0.07 \$ \$11 \$60.07 \$ \$11 \$60.07 \$ \$11 \$60.07 \$ \$11 \$60.07 \$ \$11 \$60.07 \$ \$11 \$60.07 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$60.00 \$ \$11 \$10.00 \$ \$11	₹			\$2.23 \$0.00 \$1.25 \$1.25 \$1.25 \$0.35 \$0.35 \$0.00		\$544 \$0 \$303 \$304 \$129 \$130 \$130 \$130 \$53	
Positure Forage - DM	\$350 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$	 		\$0.00 \$1.25 \$1.03 \$0.35 \$0.35 \$0.00 \$0.00 \$0.00 \$0.00		\$303 \$304 \$304 \$129 \$130 \$18 \$53	
Corn Silage - DM \$0.00 \$0 \$1.30	\$0 \$1.30 \$ \$0.97 \$ \$0.00 \$0.00 \$0.00 \$0.00 \$111 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$			\$1.25 \$1.03 \$1.03 \$0.35 \$0.06 \$0.06 \$0.00 \$0.00 \$5.00 \$5.00		\$303 \$304 \$129 \$130 \$18 \$53	
Corn Equivalent - US No. 2 \$0.00 \$0 \$0.97 \$ By Product Feed \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Protein Supplement \$0.00 \$0 \$0.00 \$0.00 \$0.00 Fat Supplement \$0.00 \$0 \$0.00	\$0 \$0.97 \$ \$0 \$0.00 \$0 \$0.00 \$11 \$0.07 \$0 \$0.00 \$0 \$0.00 \$140 \$0.90 \$140 \$0.90	\$1			\$103 \$0.35 \$0.36 \$0.06 \$0.00 \$0.00 \$5.28		\$304 \$129 \$130 \$18 \$53	
By Product Feed \$0.00 \$0.00 Protein Supplement \$0.00 \$0.00 Salt and Minerals \$0.00 \$0.00 Fat Supplement \$0.00 \$0.00 Milk Replacer/Calf Feed \$0.00 \$0.00 Malk Replacer/Calf Feed \$0.00 \$0.00 Freight/Trucking/Hauling \$0.17 \$0.34 Breading Fees \$0.14 \$0.35 Breading Fees \$0.27 \$3.6 Breading Costs \$0.22 \$2.2 Breading Costs \$0.25 \$3.3 Gas/Fuel/Oil \$0.25 \$3.3 Bedding Costs \$0.24 \$3.1 Gas/Fuel/Oil \$0.04 \$0.43 Malking Cemter/Parlor \$0.46 \$0.30 Manure Storage \$0.30 \$40 Machinery and Equi	\$0 \$000 \$0 \$000 \$11 \$007 \$0 \$000 \$0 \$000 \$140 \$0.90	\$			\$0.35 \$0.06 \$0.00 \$0.00 \$0.00 \$5.28		\$129 \$130 \$18 \$53	
Protein Supplement	\$0 \$0.00 \$11 \$0.07 \$0 \$0.00 \$0 \$0.00 \$140 \$0.90 \$	\$1,0	4	3	\$0.36 \$0.00 \$0.00 \$0.00		\$130 \$18 \$53	
Salt and Minerals \$0.08 \$11 \$0.07 Fat Supplement \$0.00 \$0.00 \$0.00 Milk Replacer / Calf Feed \$0.00 \$0.00 \$0.00 Malk Replacer / Calf Feed \$0.00 \$0.00 \$0.00 British / Trucking/Hauling \$0.14 \$1.06 \$0.90 \$0.14 Veter inary & Medicine \$0.32 \$42 \$0.35 \$0.14 \$0.14 Veter inary & Medicine \$0.27 \$36 \$0.25 \$0.35 \$0.25 \$0.35 \$0.25 \$0.35 \$0.25 \$0.25 \$0.25 \$0.25 \$0.27 \$0.27 \$0.27 \$0.27 \$0.27 \$0.27 \$0.27 \$0.27 \$0.24 \$0.33 \$0.20 \$0.27 \$0.48 \$0.30 \$0.48	\$11 \$0.07 \$0 \$0.00 \$0 \$0.00 \$943 \$5.82 \$6 \$140 \$0.90 \$	\$1,0	4	1	\$0.06 \$0.00 \$0.00		\$18	
Fat Supplement	\$0 \$000 \$0 \$000 \$943 \$5.82 \$6 \$140 \$0.90 \$	\$1,0	1	Į Į	\$0.00 \$0.00 \$5.28		\$53	
Milk Replacer / Calf Feed \$0.00 \$0.00 \$0.00 bairy Supplies \$1.06 \$140 \$0.90 \$140 \$2.82 \$2.82 \$2.82 \$3.82 \$3.84 \$0.14 \$3.94 \$0.14 \$3.94 \$0.14 \$3.94 \$0.14 \$3.94 \$0.14 \$3.94 \$0.14 \$3.94 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 \$0.25 \$0.25 \$0.25 \$0.27 \$0.29 \$0.20 \$0.20 \$0.30 \$0.30 \$0.30 \$0.30 \$0.30 \$0.30 \$0.30 \$0.30	\$0 \$000 \$943 \$5.82 \$ti	\$1,0	1	ā	\$0.00		Ç	
## 57.17 \$943 \$5.82 \$# Dairy Supplies \$1.06 \$1.40 \$0.90 \$# Freight/Trucking/Hauling \$0.14 \$# \$80.14 Veterinary & Medicine \$0.32 \$# 42 \$*0.14 Wetering Fees \$0.27 \$# \$80.25 DHIA/Accounting/Legal \$0.27 \$# \$80.27 Marketing \$0.27 \$# \$# \$0.27 Bedding Costs \$0.27 \$# \$80.29 Gas/Fuel/Oil \$0.27 \$# \$80.29 Gas/Fuel/Oil \$0.24 \$# \$0.33 Other (oper, int., phone) \$0.53 \$# 50.48 Milking Center/Parlor \$\$0.46 \$# 50.48 Manure Storage \$\$0.30 \$# 40.30 Heifer Housing \$\$0.30 \$# 40.30 Heifer Housing \$\$0.30 \$# 40.30 Heifer Housing \$\$0.30 \$# 40.50 ## 60.50 ## 50.50 ## 60.50 ## 50.50 ## 60.50 ## 60.30 ## 60.50 ## 60.50 ##	\$943 \$5.82 \$\$ \$140 \$\$0.90 \$\$	\$1,	ŧ	4	\$5.28		2	
Dairy Supplies	\$140 \$0.90		4	4		\$1,284 \$5.15	\$1,481	
Pairy Supplies	\$140 \$0.90							
Freight/Trucking/Hauling		\$0.80	\$1.05	\$0.90 \$180	\$0.82	\$200 \$0.76	\$220	\$0.67
Veterinary & Medicine \$0.32 \$4.2 \$0.35 Breeding Fees \$0.27 \$36 \$0.25 DHIA/Accounting/Legal \$0.22 \$29 \$0.17 Marketing \$0.27 \$36 \$0.27 Bedding Costs \$0.25 \$33 \$0.20 Bedding Costs \$0.24 \$31 \$0.19 Electricity \$0.24 \$0.33 Other (oper. int., phone) \$0.53 \$0.48 A Equipment Costs \$0.53 \$0.48 Malking Center/Parlor \$0.53 \$0.48 Boiry Housing \$0.76 \$100 \$0.43 Manure Storage \$0.30 \$40 \$0.30 Heifer Housing \$0.68 \$90 \$0.65 \$	\$18 \$0.14	\$0.13 \$27	\$0.14 \$23	\$0.13 \$27	\$0.14	\$33 \$0.14	\$39	\$0.14
Breeding Fees	\$42 \$0.36			\$0.40 \$81	\$0.50	\$121 \$0.59	\$169	\$0.59
DHIA/Accounting/Legal	\$36 \$0.25	\$0.20	\$0.26 \$42	\$0.24 \$48	\$0.21	\$52 \$0.19	\$26	\$0.17
Marketing	\$29 \$0.17	\$0.14 \$29	\$0.18 \$29	\$0.14 \$29	\$0.12	\$29 \$0.10	\$29	\$0.09
Bedding Costs \$0.25 \$3.3 \$0.20 Gas/Fuel/Oil \$0.24 \$3.1 \$0.19 Electricity \$0.41 \$5.4 \$0.33 Other (oper. int., phone) \$0.53 \$7.0 \$0.48 A Equipment Costs \$0.46 \$6.0 \$0.43 Milking Center/Parlor \$0.46 \$6.0 \$0.43 Doiry Housing \$0.76 \$100 \$0.72 Manure Storage \$0.30 \$4.0 \$0.30 Heifer Housing \$0.68 \$9.0 \$0.65	\$36 \$0.27	\$0.27 \$54	\$0.28 \$45	\$0.27 \$54	\$0.27	\$66 \$0.27	\$78	\$0.27
6as/Fuel/Oil \$0.24 \$31 \$0.19 Electricity \$0.41 \$54 \$0.33 Other (oper. int., phone) \$0.53 \$70 \$0.48 & Equipment Costs \$0.46 \$0.48 \$0.48 Milking Center/Parlor \$0.46 \$0.43 \$0.43 Dairy Housing \$0.76 \$100 \$0.72 Manure Storage \$0.30 \$40 \$0.30 Heifer Housing \$0.68 \$90 \$0.65	\$33 \$0.20	\$0.16 \$33	\$0.42 \$68	\$0.50 \$100	\$0.41	\$100 \$0.35	\$100	\$0.31
Electricity \$0.41 \$54 \$0.33 Other (oper. int., phone) \$0.53 \$70 \$0.48 A Equipment Costs Allking Center/Parlor \$0.46 \$60 \$0.43 Dairy Housing \$0.76 \$100 \$0.72 Manure Storage \$0.30 \$40 \$0.30 Heifer Housing \$0.68 \$90 \$0.65 Anachinery and Equipment \$0.68 \$90 \$0.65	\$31 \$0.19	\$0.16 \$31	\$0.24 \$39	\$0.19 \$39	\$0.16	\$39 \$0.14	\$39	\$0.12
& Equipment Costs \$0.53 \$70 \$0.48 Alking Center/Parlor \$0.46 \$6.0 \$0.43 Dairy Housing \$0.76 \$100 \$0.72 Manure Storage \$0.30 \$40 \$0.30 Heifer Housing \$0.68 \$90 \$0.65	\$54 \$0.33	\$0.27 \$54	\$0.37 \$59	\$0.30 \$59	\$0.25	\$61 \$0.22	\$62	\$0.19
& Equipment Costs \$0.46 \$0.43 Milking Center/Parlor \$0.76 \$100 \$0.72 Dairy Housing \$0.30 \$40 \$0.30 Herfer Housing \$0.68 \$0.65	\$70 \$0.48	\$0.45 \$90	\$0.56 \$90	\$0.45 \$90	\$0.37	\$90 \$0.31	\$60	\$0.27
\$0.46 \$60 \$0.43 \$0.76 \$100 \$0.72 \$0.30 \$40 \$0.30 \$0.68 \$90 \$0.65								
\$0.76 \$100 \$0.72 \$0.30 \$40 \$0.30 \$0.68 \$90 \$0.65	\$60 \$0.43	\$0.42 \$84	\$0.52	\$0.48 \$96	\$0.39	\$6,0\$	\$6\$	\$0.29
\$0.30 \$40 \$0.30 \$0.68 \$90 \$0.65	\$100 \$0.72	\$0.70 \$140	\$0.87 \$140	\$0.80 \$160	\$0.74	\$180 \$0.70	\$200	\$0.61
\$0.6\$	\$40 \$0.30	\$0.30 \$60	\$0.31 \$50	\$0.30 \$60	\$0.25	\$60 \$0.21	\$40	\$0.18
\$0.68 \$90								
	\$90 \$0.65	\$0.72 \$144	\$1.00 \$162	\$0.72 \$144	\$0.74	\$180 \$0.69	\$198	\$0.66
Cow Ownership Costs \$0.59 \$78 \$0.50 \$83	\$78 \$0.50	\$0.44 \$88	\$0.48 \$78	\$0.44 \$88	\$0.39	\$95 \$0.36	\$103	\$0.31
Heifer Replacement Costs \$1.76 \$231 \$1.88 \$312	\$231	\$2.02 \$405	\$1.43 \$231	\$2.02 \$405	\$1.97	\$480 \$1.93	\$555	\$1.69
Labor and Mgt Costs \$3.61 \$475 \$3.01 \$500	\$475	\$2.62 \$525	\$3.26 \$525	\$2.62 \$525	\$2.16	\$525 \$1.82	\$525	\$1.60
Total Expenses: \$19.05 \$2,506 \$16.61 \$2,758	\$2,506	\$15.33 \$3,068	\$18.89 \$3,044	\$16.92 \$3,390	0 \$15.18 \$3,691	691 \$14.24	\$4,099	\$13.25 \$4,342
:+ Returns after all Cost including Labor & Assets: -\$1.55 (\$204) -\$0.11 (\$18)	(\$204)	\$1.17 \$235	-\$0.89 (\$143)	-\$0.42 (\$84)	\$1.32	\$322 \$1.26	\$361	\$2.25 \$739
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