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Negotiating Cow Lease Arrangements

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Negotiating Cow Lease Arrangements

Farm Business Management Branch
Alberta Agriculture, Food and Rural Development

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Negotiating Cow Lease Arrangements

Introduction

Leasing can be a viable alternative to debt financing when starting or expanding a beef cow herd. For cow owners wanting to reduce their daily responsibilities, leasing is an option to immediate sale. This book presents four types of beef cow leases and discusses some important issues involved in developing an equitable and long lasting lease. A worksheet is provided for assisting in the calculation of lease rates or calf share percentages. As well, a case study and a sample lease contract are included as examples of how a lease agreement could be structured. This book is intended to be a decision-making tool. It does not attempt to suggest what lease arrangement is best for any situation. The tax implications of a cow lease are also important to consider before entering into an agreement. The reader is encouraged to seek professional advice before finalizing any agreement.

Advantages and Disadvantages of Leasing

Leasing cows has advantages and disadvantages for both the herd owner (the owner) and the renter (the operator).

Advantages of Leasing

For the Owner

- Reducing the herd to a more manageable level without selling immediately.
- Increasing herd size beyond the capacity of currently available labor, management and facilities.
- As a method of transferring herd ownership over time that may offer some tax savings.
- Ownership of productive assets without day-to-day management responsibility.

For the Operator

- Creating income and cash flow.
- An alternative to ownership when entering or expanding a beef cow enterprise.
- An effective way to use surplus feed and idle facilities.
- An opportunity to test a beef cow enterprise when diversifying the farm.
- A way to gain control of assets.

Disadvantages of Leasing

For the Owner

- Not understanding the legal, financial and operational implications of the lease.
- Possible lower returns and loss of herd value due to poor management.
- Limits liquidation options.

For the Operator

- Not understanding the legal, financial and operational implications of the lease.
- Less planning security than ownership of cows.

Defining an Equitable Lease

A lasting lease arrangement should use a balanced, or equitable approach to sharing income. It is probably best to base the division of income on contributions to total costs. For example, if the cow owner pays for 30 per cent of total costs, including a charge for interest and depreciation on his investment, then he would be entitled to 30 per cent of total income from calf sales. The operator could contribute the remaining 70 per cent of costs and receive 70 per cent of calf sale income.

An equitable lease will also distribute income according to the acceptance of risk. The choice of lease type will affect how income is shared relative to risk.

Risk and Returns

Cow-calf producers face two basic types of risk: production risk and market risk. Production risks are comprised of variables such as pregnancy rate and calving percentage, which affect the total number, weight and general health of calves on marketing day. Some production risks can be controlled through effective management; others are generally beyond the control of the manager.

Market risks are the effects that variables like calf type, calf condition, and sale timing and location have on the total price received. Market risk cannot be completely eliminated, but actions such as hedging, contracting and timely marketing may reduce exposure to market risk.

The expected income from an alternate investment is the investor's opportunity cost. For example, a cow owner could consider a term deposit interest rate as an opportunity cost of owning cows. However, adjustments for risk and taxes would need to be considered. Owning cows is certainly more risky than a bank term deposit, so a higher expected return may be justified. The tax payable if the cow herd is sold would reduce the amount available for the term deposit and lower the opportunity cost.

Example of opportunity cost calculation for a cow owner:

Sell 100 cows @ \$1,000 each = \$100,000

Deposit \$100,000 in term deposit @ 8% = \$8,000 annual interest

but

Taxes on \$100,000 @ 30% leaves only \$70,000

The extra risk of cow ownership may justify an additional 2% over the term deposit rate so:

Opportunity cost = \$70,000 @ 10% = \$7,000 annual interest or 7% of the \$100,000 value of the herd

The operator would calculate his opportunity cost in a similar way, except the investment value would reflect the value of his cattle facilities (including the portion of equipment devoted to the cow enterprise). Rates of return on investments are usually relative to the level of risk accepted by the investor. If unmanageable risk (production or market) is high or not controlled by the investor, then he will expect a higher rate of return.

When risk is low, the expected rate of return will also be lower. In this way, markets distribute risk, at the appropriate price, to those individuals who are willing to accept it.

In an equitable lease, returns should be distributed in relation to the acceptance of risk, and risk should be distributed to those who control the underlying production and marketing variables. Production risk is allotted to the individual who controls production variables and is rewarded for increased production or penalized for poor management. Market risk is borne by the individual who controls marketing variables and benefits from effective marketing.

Further consideration should be given to an individual's ability to carry risk. Some owners or operators may prefer a fixed and known return with limited risk. These individuals will prefer that most risk is allocated to the other party, along with a larger share of the revenues. In this way, returns from the cow lease will be shared on the basis of risk acceptance.

Types of Leasing Arrangements

Four common types of cow leasing arrangements will be presented:

- Cash Lease
- Fixed Number of Calves
- Percentage Share
- Flexible Percentage Share

Each arrangement distributes risk and returns differently and is therefore suited to different situations.

In each case, it is assumed:

- that the revenue from sales of cull cows will belong to the cow owner.
- that the care of replacement heifers from weaning until pregnant is the owner's responsibility.

Figure 1 shows the distribution of risk for owner and operator for the leasing arrangements presented.

	Owner	Operator
Cash Lease	Low Risk	High Risk
Fixed Number of Calves	↓	↑
Percentage Share		
Flexible Percentage Share	High Risk	Low Risk

Figure 1. Distribution of risk.

Cash Lease

In the cash lease agreement, the owner receives a rental payment per cow per annum and the operator receives all revenue from the sale of calves. The rent can be negotiated each year or set for the term of the lease. The operator accepts all production and market risk. The operator's returns will vary with weaning percentage, weaning weight, calf price and feed costs, while the owner's return is not affected by production or price.

Although cash rent is simple, it may not always be appropriate for the operator to carry all production and market risk. All changes in market value and operation costs solely affect the operator. The owner's risk is limited to changes in the value of his investment. The operator's higher risk level is offset by not having to share any increases in revenue. The owner's revenue remains constant.

Cash rent is best suited to owners who want limited involvement and for operators who feel comfortable managing a higher degree of risk.

Fixed Number of Calves Lease

In the fixed number of calves lease, the owner receives a predetermined number of calves as rent. This number does not vary according to the number of calves born, weaned or sold. An appropriate number of calves is negotiated using the expected market value. A description of the calves for payment should be specified in the agreement because the size, type and gender of calves will affect the revenue distribution.

The fixed calf arrangement requires that the operator accept almost all production risk and a portion of the market risk. The owner's risks are limited to variations in weaning weight and market price on the number of calves received as lease payment. The operator is

exposed to risk through variations in weaning percentage, weaning weight, market price and feed costs.

A fixed calf agreement is best suited to owners who are willing to accept some market risk with very little production risk and to operators who are comfortable with most of the production and market risk.

Percentage Share Lease

With the percentage share arrangement, each party receives a predetermined percentage of revenues from calf sales. Percentages are determined according to the contributions each party makes to total costs associated with the cow herd.

Each party's share of revenue varies with market price and production, thus both are exposed to market and production risk. The owner may be disadvantaged because he is exposed to production and market risk outside of his control. This arrangement is best suited to owners who are willing to share the risk with limited management involvement.

Flexible Share Lease

The flexible share lease arrangement is similar to the percentage share method because it allocates revenues based on contributions to costs. It recognizes that direct costs, such as feed and vet costs are paid first, followed by fixed costs, such as depreciation and replacement allowance for cows or bulls. Then opportunity costs, such as interest on investment and returns to management are paid. This is accomplished by using different percentage shares for each cost category.

As with any other enterprise, the cow-calf operator cannot continue producing for long if revenue is not covering direct costs. A standard percentage share lease does not protect the operator's direct cost contributions. When revenues are low and the operator cannot recover his direct costs, the agreement may be in jeopardy or the cows may not be properly cared for.

The initial revenue split is based on contributions to direct costs. When all direct costs are covered, the percentage changes to reflect contributions to fixed costs. Once fixed costs are covered, it changes to reflect contributions to opportunity costs.

Once opportunity costs are met, all contributions have been recovered. Sharing of any additional revenue will not be based on costs, but negotiated by the owner and

operator. Table 1 shows an example of a flexible percentage share when total revenues are less than total costs.

	Owner		Operator		Total
Total Revenue per Cow					\$450
Direct Costs					
Contribution to costs	\$ 0	0%	\$300	100%	
Revenue allocation	\$ 0		\$300		\$300
Remaining calf value					\$150
Fixed Costs					
Contribution to costs	\$ 50	50%	\$ 50	50%	
Revenue allocation	\$ 50		\$ 50		\$100
Remaining calf value					\$ 50
Opportunity Costs					
Contribution to costs	\$ 80	80%	\$ 20	20%	
Revenue allocation	\$ 40		\$ 10		\$ 50
Remaining calf value					\$ 0
Total Contribution to Costs	\$130		\$370		\$500
Total Revenue Allocation	\$ 90		\$360		\$450

Table 1. Example of flexible percentage share lease.

With a flexible percentage share lease, the operator will give up profit potential in higher markets for security in lower markets and the owner will give up revenue when prices drop. When revenue exceeds contributions, the owner may receive a larger percentage of the excess revenue than in a typical percentage share, depending on how the surplus revenue is allocated. This arrangement is best suited for situations where the operator has limited risk bearing ability and the owner is willing and able to sacrifice revenue in poor years and recover those losses in good years. If longevity of the lease is important, a flexible percentage share arrangement should be considered.

Designing a Lease Arrangement

Choosing the best type of lease will depend on the preferences and circumstances of the owner and the operator. Careful examination of objectives and expectations at this stage will reduce the chance of difficulties later on. Figure 2 is an example of the decision process.

What is the Best Lease Arrangement For Me?

Figure 2. How to choose the best lease arrangement.

Some Management Issues in Leasing Cows

A properly functioning lease will require that procedures are in place to handle various management decisions that will arise. A written contract will help to avoid misunderstandings during the life of the agreement. Some management issues that may be considered include:

Who are the parties to the agreement and when does it commence?

Description of the Cattle

- date of arrival;
- the type, number and condition of the cattle to be delivered;
- the minimum and maximum number of cattle that will be provided by the owner each year;
- how the cows and calves will be identified for ownership (branding, tattooing, etc.).

Location of the Cattle

- where the cattle will be kept;
- under what circumstances they can be relocated;
- at what times the owner is able to inspect the cattle.

Breeding Policy

- which party will provide the bull(s);
- who has the authority to select breed of bull and the individual bulls;
- the ratio of cows per bull;
- the start and length of the breeding season.

Herd Health Policy

- describe the practices that will be followed in preventing disease and maintaining the health of the herd;
- specify who is responsible for the cost of herd health activities.

Veterinary Expenses

- what constitutes a veterinary expense (for example: antibiotics, veterinary services);
- who is responsible for veterinary expenses;
- which veterinarian will be used.

Feed, Water and Pasture Care

- who will provide feed, water and bedding;
- the average condition in which the cows will be maintained.

Culling and Replacement Policy

- under what circumstances a cow will be culled;
- who receives the proceeds of cull sales;
- how replacements will be provided.

Death Loss and Strays

- who is responsible for cows that die or stray.

Division of Income

- how the revenue from calf sales will be divided between the owner and the operator.

Disputes

- how disputes regarding management practices will be handled.

Termination of the Lease

- when the agreement will expire;
- under what circumstances the agreement can be terminated at an earlier date.

The case study in Appendix I and the sample lease agreement in Appendix II provide examples of how these issues can be handled.

Calculating the Revenue Allocations

Determining how revenues will be allocated between the owner and operator requires a detailed analysis of each party's cost structure. A worksheet has been provided to make this task easier. The example worksheets on pages through include estimates of revenues and expenses. These estimates, which refer to the case study in Appendix I, are for illustration purposes only and may not be representative of actual values. Each beef herd is unique and the real revenue and cost expectations should be used to determine the lease arrangement. **It is important to use your own cost figures.**

A blank copy of the worksheet is contained in Appendix III. This worksheet is also available in Lotus 1-2-3- format for computer-assisted calculation of cow leases.

Using the Worksheet

Production Values (Page 9)

Enter production and market information specific to the herd considered in the lease. These figures will be a combination of the owner's history of herd performance and of the operator's management history. Additional market projections may be obtained from an independent advisor if necessary.

Choosing an appropriate interest rate is important as it will determine the owner's return on his cow herd investment. A long-term bank savings rate can be used as a starting point. If the owner feels that he has additional risk in cow ownership compared to a savings account, a risk premium can be added to the savings rate. Points to consider in setting this rate are:

- the death loss projections for the herd and who is responsible.
- the projected market value of the herd.
- costs that could be incurred in liquidating the herd (taxes and commissions).

Calculating an Interest Rate

Long Term Savings Rate (net of taxes and commissions)	_____ %
+	
Risk Premium (considering death losses and projected market values)	_____ %
	=====
= Interest Rate	_____ %

Formulas (Page 9)

Using the values listed in the production values section, calculate the values of items 1 through 9 with the formulas provided. These amounts will be required for the cost contributions section on page 10.

Contributions (Page 9)

This section requires projections of contributions that each party will make to the operation and maintenance of the herd. To simplify the calculation of each of the four leases, contributions are divided into three cost categories: direct expenses, fixed expenses, and opportunity costs. In most cases, only one party will be contributing to a particular expense item, however, both parties will need to agree that the projection is reasonable, since it can affect the outcome of the lease.

Direct Expenses – Pasture, feed, and bedding should be priced at market value, not at cost of production. In most cases, the operator will provide most or all of these items and market value will give the best measure of his contribution. Care must be taken to not include the cost of producing feed or maintaining pastures in other expense categories on the worksheet. machinery and building operation expense, utilities, and hired labor should only be the portion that is attributed to the feeding and care of the cow herd.

Fixed Expenses – Depreciation and insurance on buildings and equipment must be for feeding and care of the cows only.

The cow and bull replacement allowances are amounts that the owner can set aside each year to compensate for the aging of the herd. These amounts are calculated from formulas 2 and 4 on page 9. The projected amounts for cow and bull death loss are as calculated from formulas 5 and 6. The worksheet makes provision for sharing of cow and bull death loss costs between owner and operator. If this approach is taken, the terms of death loss responsibility should be well documented.

Opportunity Costs – Interest on buildings and equipment and return to labour and management will generally be contributed by the operator and should only be the portion attributed to the feeding and care of the herd.

Interest on cow and bull investment are as determined by formulas 7 and 8 on page 9.

Revenue (Page 11)

Calf revenue is determined from expected market weight (adjusted for shrinkage), price and weaning percentage as determined from formula 9 on page 9.

Lease Payment Calculations

Cash Lease (page 11) – The owner's desired cash rent is the sum of his contributions to fixed expenses and opportunity costs. In this lease, owner's risk is limited to changes in the value of the herd. This variable is addressed through the replacement allowance and death loss categories on page 9 of the worksheet. If the owner wishes an additional return to investment as compensation for risk, the interest rate can be adjusted upward.

Fixed Number of Calves Lease (page 11) – For ease of calculation and flexibility, the payment is expressed as calves per 100 bred cows. The cash rent value for 100 cows is divided by the expected average value of a calf at weaning to determine a minimum number of calves required as payment. Because the owner accepts some additional market risk when taking calves as payment, a market risk adjustment can be added.

Percentage Share Lease (page 11) – Total revenue is divided in the same percentages as total contributions are made.

Flexible Percentage Share Lease (page 12) – The percentage of contributions to each cost category (direct expenses, fixed expenses, and opportunity costs) are calculated and applied to total revenue in sequence until all revenue is allocated. Direct costs are allocated first. If all revenue is not used, a split is made according to contributions to fixed costs. The remainder is then allocated by contributions to opportunity costs. The owner and operator need to decide how surplus revenue, after all costs are recovered, will be split.

Cow Lease Worksheet

SECTION I PRODUCTION VALUES

Replacement Cow Value	\$ <u>1200</u>	Years of Use - Cows	<u>10</u> yrs
Cull Cow Value	\$ <u>750</u>	Years of Use - Bulls	<u>4</u> yrs
Average Cow Value (formula 1)	\$ <u>975</u>	Average Calf Price \$/cwt	\$ <u>1.15</u>
Replacement Bull Value	\$ <u>2000</u>	Average Calf Weight	<u>650</u> lb
Cull Bull Value	\$ <u>1250</u>	Marketing Shrinkage	<u>6</u> %
Average Bull Value (formula 3)	\$ <u>1625</u>	Weaning % (calves/bred cow)	<u>90</u> %
Cows per Bull	<u>25</u>	Death Loss (Breeding Stock)	<u>1</u> %
		Interest Rate (Risk Free Rate + Risk Premium)	<u>10</u> %

SECTION II FORMULAS

1. Average Cow Value (\$)

$$\frac{[1200] + [750]}{2} = 975$$

Replacement Cow Value Cull Cow Value

2. Cow Replacement Allowance (\$ per cow per year)

$$\frac{[1200] - [750]}{10} = 45$$

Replacement Cow Value Cull Cow Value Years of Use (Cows)

3. Average Bull Value (\$)

$$\frac{[2000] + [1250]}{2} = 1625$$

Replacement Bull Value Cull Bull Value

4. Bull Replacement Allowance (\$ per cow per year)

$$\frac{[2000] - [1250]}{4 \times 25} = 7.50$$

Replacement Bull Value Cull Bull Value Years of Use (Bulls) Cows per Bull

5. Cow Death Loss (\$ per cow)

$$\frac{975}{1} \times 1\% = 9.75$$

Average Cow Value (Formula 1) Death Rate

6. Bull Death Loss (\$ per cow)

$$\frac{[1625]}{25} \times 1\% = .65$$

Average Bull Value (Formula 3) Death Rate Cows per Bull

7. Interest on Cow Investment (\$ per cow)

$$\frac{975}{1} \times 10\% = 97.5$$

Average Cow Value (Formula 1) Interest Rate

8. Interest on Bull Investment (\$ per cow)

$$\frac{[1625]}{25} \times 10\% = 6.5$$

Average Bull Value (Formula 3) Cows per Bull Interest Rate

9. Calf Sale Value (\$ per cow)

$$\frac{[650]}{1} \times 94\% \times \frac{1.15}{1} \times \frac{90}{100} = 632$$

Average Calf Sale Wt. Marketing Shrinkage Average Calf Price Weaning %

Cow Lease Worksheet

SECTION III COST CONTRIBUTIONS

(on a cow/year basis)

DIRECT EXPENSES

	---Owner--- \$/cow	---Operator--- \$/cow	---Total--- \$/cow
Pasture @ market value	\$	\$ <u>75</u>	\$ <u>75</u>
Feed and Bedding @ market value	\$	\$ <u>125</u>	\$ <u>125</u>
Salt & Minerals	\$	\$ <u>5</u>	\$ <u>5</u>
Herd Health Expense	\$	\$ <u>10</u>	\$ <u>10</u>
Veterinary Expense	\$	\$ <u>5</u>	\$ <u>5</u>
Marketing & Transportation	\$	\$ <u>15</u>	\$ <u>15</u>
Miscellaneous Cow Herd Costs	\$	\$ <u>5</u>	\$ <u>5</u>
*Machinery & Building Operation Expense	\$	\$ <u>20</u>	\$ <u>20</u>
*Utilities	\$	\$ <u>20</u>	\$ <u>20</u>
*Hired Labour	\$	\$ <u>-</u>	\$ <u>-</u>
	\$	\$	\$

Total Direct Expenses

A1 \$ 0 A2 \$ 280 A3 \$ 280

FIXED EXPENSES

*Depreciation & Insurance on Buildings & Machinery	\$	\$ <u>15</u>	\$ <u>15</u>
Cow Replacement Allowance** (refer to formula 2)	\$ <u>45</u>	\$	\$ <u>45</u>
Bull Replacement Allowance** (refer to formula 4)	\$ <u>750</u>	\$	\$ <u>750</u>
Cow Death Loss** (refer to formula 5)	<u>1</u> %	%	<u>100</u> %
	\$ <u>9.75</u>	\$	\$ <u>9.75</u>
Bull Death Loss** (refer to formula 6)	<u>1</u> %	%	<u>100</u> %
	\$ <u>.65</u>	\$	\$ <u>.65</u>
	\$	\$	\$

Total Fixed Expenses

B1 \$ 62.90 B2 \$ 15 B3 \$ 77.90

Total Expenses

\$ 62.90 \$ 295 \$ 357.90

OPPORTUNITY COSTS

*Interest on Buildings & Equipment	\$	\$ <u>50</u>	\$ <u>50</u>
*Labour & Management	\$	\$ <u>50</u>	\$ <u>50</u>
Interest on Cow Investment** (refer to formula 7)	\$ <u>9750</u>	\$	\$ <u>9750</u>
Interest on Bull Investment** (refer to formula 8)	\$ <u>6.50</u>	\$	\$ <u>6.50</u>
	\$	\$	\$

Total Opportunity Costs

C1 \$ 104 C2 \$ 100 C3 \$ 204

Total Contribution

D1 \$ 166.90 D2 \$ 395 D3 \$ 561.90

- * Ensure that these amounts only include those costs directly related to the beef cow enterprise. When market values for pasture and feed have been used, do not include any ownership or operational costs incurred in developing and maintaining pastures or in the making of feed.
- ** Refer to Section II - Formulas (previous page) for information on calculating amounts.

Cow Lease Worksheet

SECTION IV EXPECTED REVENUE (on a cow/year basis)

	Total \$/cow
Calf Sales (refer to formula 9)	E1 \$ <u>632</u>

SECTION V LEASE PAYMENT CALCULATIONS (on a cow/year basis)

CASH LEASE

---Owner---
\$/cow

	Total Fixed Expenses	B1	\$ <u>62.90</u>
plus:	Total Opportunity Costs	C1	\$ <u>104</u>
equals:	Annual Cash Lease		\$ <u>166.90</u>

FIXED NUMBER OF CALVES

---Owner---
\$/cow

Annual Cash Rent per 100 cows	
= [B1 + C1] x 100	\$ <u>166.90</u>
Minimum Number of Calves per 100 bred cows	
= ([B1 + C1] x 100) ÷ (E1 ÷ Weaning %)	<u>23.8</u> calves
plus:	
Market Risk Adjustment	
additional calves	<u>1.2</u> calves
Total Payment in Calves per 100 Cows	<u>25</u> calves

$$[\underline{25} \times (\underline{632} \div .9)] \div 100 = \$ \underline{175.50} \text{ /cow}$$

$$[\text{Payment in calves per 100 cows} \times (\text{E1} \div \text{Weaning \%})] \div 100$$

PERCENTAGE SHARE

--Owner-- --Operator-- --Total--
\$/cow \$/cow \$/cow

Total Revenue			E1	\$ <u>632</u>
Total Direct Expenses	A1	\$ -	A2	\$ <u>280</u>
Total Fixed Expenses	B1	\$ <u>62.90</u>	B2	\$ <u>15</u>
Total Opportunity Costs	C1	\$ <u>104</u>	B2	\$ <u>100</u>
Total Contribution	D1	\$ <u>166.90</u>	D2	\$ <u>395</u>
Percentage Share (D1 or D2 ÷ D3) x 100		<u>22.7</u> %		<u>70.3</u> %
Allocated Revenues		\$ <u>187.72</u>		\$ <u>444.30</u>

Cow Lease Worksheet

SECTION V (continued)

FLEXIBLE PERCENTAGE SHARE

Level 1 Direct Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Calf Value = E1			E1 = \$ <u>632</u>
Direct Cost Contributions	A1 = \$ <u>0</u>	A2 = \$ <u>280</u>	A3 = \$ <u>280</u>
% Contribution	A1 ÷ A3 x 100 = <u>0</u> %	A2 ÷ A3 x 100 = <u>100</u> %	<u>100</u> %
Revenue Allocation			
Lessor of E1 or A3 x % Contribution	\$ <u>0</u>	\$ <u>280</u>	F1 = \$ <u>280</u>

Level 2 Fixed Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E1 - A3 = E2			E2 = \$ <u>352</u>
Opportunity Cost Contributions	B1 = \$ <u>6290</u>	B2 = \$ <u>15</u>	B3 = \$ <u>7790</u>
% Contribution	B1 ÷ B3 x 100 = <u>81</u> %	B2 ÷ B3 x 100 = <u>19</u> %	<u>100</u> %
Revenue Allocation			
Lessor of E3 or C3 x %	\$ <u>6290</u>	\$ <u>15</u>	F2 = \$ <u>7790</u>

Level 3 Opportunity Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E2 - B3 = E3			E3 = \$ <u>274.10</u>
Opportunity Cost Contributions	C1 = \$ <u>104</u>	C2 = \$ <u>100</u>	C3 = \$ <u>204</u>
% Contribution	C1 ÷ C3 x 100 = <u>51</u> %	C2 ÷ C3 x 100 = <u>49</u> %	<u>100</u> %
Revenue Allocation			
Lessor of E3 or C3 x %	\$ <u>104</u>	\$ <u>100</u>	F3 = \$ <u>204</u>

Level 4 Surplus Over All Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E3 - C3 = E4			E4 = \$ <u>70.10</u>
% Share (negotiated)	<u>50</u> %	<u>50</u> %	<u>100</u> %
Revenue Allocation			
E4 x % share	\$ <u>35.05</u>	\$ <u>35.05</u>	F4 = \$ <u>70.10</u>
Allocated Revenues	\$ <u>201.95</u>	\$ <u>430.05</u>	\$ <u>632</u>

Summary

Cow-calf lease arrangements can be profitable and rewarding for both parties if carefully planned. Each party to the agreement must make clear their objectives and expectations so that future misunderstandings can be minimized. An equitable lease can be achieved if revenues are distributed relative to the acceptance of risk and risk is carried by the party that controls the variables which affect that risk.

The type of lease chosen will depend on the parties' abilities and objectives. A cash lease works well where the operator can accept most of the risk and where simplicity is desired. The fixed number of calves lease places most of the production risk on the operator and primarily limits the owner to market risk on his share of the calves. A percentage share agreement distributes all risk to both parties without regard to management control. Finally, the flexible percentage share is based on the premise that cash costs must be paid before any profit can be split. This approach further protects the operator against higher input costs and/or lower calf prices and is well suited to situations where a long-lasting lease is desired.

These are only four general types of leases which could be used. For each situation, the implications of adopting any one of these approaches must be carefully considered. For further information or assistance in working with this material, contact your local district agriculture office or the Farm Business Management Branch of Alberta Agriculture, Food and Rural Development.

Appendix I Example Case Study

(Refer to example worksheet, pages 9-12)

Ron has a herd of 100 cows and 4 bulls. He wants to retire, but is not ready to sell the herd. He wants to find an operator who is responsible and experienced.

Barney is a young man who would like to enter the cow-calf business but does not want a large debt load. He grew up on a cow-calf ranch that his family still operates. He is cautious about who he is going to lease cattle from because he wants managerial independence and a cooperative owner.

Ned, a farm management specialist, suggested that Ron and Barney meet to discuss a possible deal. After the meeting, Ron seemed satisfied with Barney's abilities and Barney was satisfied with Ron's commitment. Working with Ned, and with the aid of *Cow Calf Leasing Arrangements*, they agreed on the following points:

- a) Ron, the owner, will supply all of the cows and all of the bulls. Both Ron and Barney must agree on the choice of bulls.
- b) The number of cows will not be less than 90 and not more than 110. The maximum number of cows per bull during breeding will not be more than 25.
- c) Barney will supply all facilities, feed, pasture, labor and management.
- d) Cash costs (mineral, salt, trucking, etc.) will be paid by Barney.
- e) Herd health expenses will be shared equally between Ron and Barney. Barney will pay all veterinary costs.
- f) Ron and Barney have agreed that the Body Condition Score of the cows will be maintained between 2.5 and 3.5. In the case of dispute, the herd health veterinarian will determine the cows' condition.
- g) Ron accepts the first 1% of death loss. Barney is responsible for any death loss above 1%.
- h) Ron is responsible for all cow and bull death losses for the period of thirty days immediately following the delivery of the animals.
- i) If Ron wishes to keep cull cows longer than two weeks after culling, or if he wishes to keep any open cows to be bred the following summer, Barney will be compensated for carrying these animals at \$1.25/head/day for the winter feeding period and \$0.75/head/day for the grazing season.
- j) Ron will receive all cull cow and cull bull receipts.
- k) Ron will supply replacement females through whatever means he wishes. If Ron wishes to have Barney raise the replacements from within the herd, the costs will be calculated at \$1.00/head/day for the winter feeding period and \$0.75/head/day for the grazing season from weaning until being confirmed pregnant at approximately 18 months of age.
- l) Bulls will be semen tested prior to the breeding season of each year.
- m) The breeding season will be 60 days, commencing May 15 each year.
- n) Females will be pregnancy checked on or before November 30 of each year.
- o) Barney will cover the cost of pregnancy checking and semen testing.
- p) Ron can inspect his herd at any reasonable time.
- q) Any disputes relating to health, culling or condition of animals shall be settled by the herd health veterinarian and each party shall pay one-half of the inspection fee.
- r) Ron and Barney will analyze available government programs before entering into them. The party or parties which benefit from the program will be responsible for any costs in the ratio in which each party benefits.
- s) This agreement will commence November 1, 1993 and will conclude after three years on October 31, 1996. The cattle will be delivered on November 1, 1993 and must be removed by October 31, 1996.
- t) If one party wishes to terminate, they must give a minimum of three months notice.
- u) Ron can terminate and remove the cows without three months notice if he has the support of the herd health veterinarian that the cattle are not being properly cared for, or if Barney has not lived up to other terms of the contract. In such a case, Barney will be reimbursed at \$1.25/head/day for the winter feeding period and \$0.75/head/day for the grazing season.

- v) In the event of Ron's death, the lease will be terminated on October 31 of the current year. In the event of the death of Barney, the herd will be immediately returned to Ron. Barney's estate will be reimbursed at \$1.25/head/day for the winter feeding period and \$0.75/head/day for the grazing season.
- w) This is not a joint venture or a partnership. It is not the intent to transfer ownership from Ron to Barney.
- x) An annual review will occur within two weeks after calves are sold.
- y) The cows and calves will carry Ron's brand. Ron will sign a brand release for Barney's share of the calves.

After discussing these points, they consulted with Ned who has experience in cattle leasing. Ned explained four lease arrangements that they could consider, cash lease, fixed number of calves, percentage share, or flexible percentage share. With the help of *Negotiating a Cow Leasing Arrangement* and the accompanying computer worksheet they determined the following:

- a) If a cash lease is used, Ron will receive approximately \$167/head. They were reminded that Barney would be accepting all price and production risks.
- b) If they choose a fixed number of calves lease, a number of calves totalling 25% of the bred cows supplied in the fall would be reasonable. In the first year, this would be 25 calves since Ron is supplying 100 bred cows. Ron would be accepting price risk on the calves he receives but little production risk.
- c) If they use a percentage share lease, Ron will receive 30% and Barney will receive 70% of revenues.
- d) If they choose a flexible percentage share lease, Ron will receive 0%, Barney 100% up to \$280 of revenue. Ron will receive 81%, Barney 19% from \$280 - \$356 of revenue. Ron will receive 51%, Barney 49% from \$356 - \$562 of revenue. The sharing of any revenues over \$562 will be negotiated.

Figure 3 compares the net margins of Ron and Barney for each type of lease at high, medium and low market revenues. Net margin is revenue less total costs. A zero net margin indicates a break-even position. The solid portions of the bars show Barney's net margin and the white portions show Ron's margin. Cash lease margins as

represented by the first three columns provide no positive or negative margins for Ron. The cash lease is calculated to only cover Ron's cost contributions. Barney carries all of the risk of low revenues and receives all the benefits of high revenues. Moving across to the right, risk and returns are progressively shifted from Barney to Ron in each type of lease. The fixed number of calves lease provides a positive return to Ron except at the low calf price. This is because a market risk adjustment of one calf was added to the cash lease value, when measured in number of calves. The flexible percentage share lease, represented by the last three columns, reduces Barney's exposure to low markets when compared to the percentage share lease, but also provides Ron with an equal share of any profits.

After discussing these options, Ron and Barney chose a flexible percentage share. They agreed that Ron will receive 50% and Barney will receive 50% of any revenue over \$562. They also agreed to review the cost structure at the end of each period and any major changes in costs would be applied in the following year. Barney was attracted to this option because it reduced his risk and Ron agreed because it would adjust with changing markets and therefore be stable.

Figure 3. A comparison of the net margin of various lease arrangements.

Appendix II Sample Cow Leasing Agreement

Considerations for a Lease Agreement

Initial Matters

- (a) the date;
- (b) the parties;

- (c) agreed statement as to the reason for the Agreement.

Describe the cattle on a separate schedule to clarify the type and condition being leased.

Determine the range of cattle numbers that will be maintained through the lease Agreement.

The Owner of the cattle should indicate the requirement for branding and the brand release policy.

Sample Clause

This Agreement is made in duplicate, the ____ day of _____, 19____. BETWEEN: _____ of _____ (hereinafter referred to as the Owner) and _____ of _____ (hereinafter referred to as the Operator).

Whereas the Owner owns cattle; and Whereas the Owner and the Operator are desirous of entering into an Agreement with respect to the leasing by the Operator of the said cattle.

WITNESS THAT in consideration of the execution of this Agreement and of the mutual covenants and agreements herein contained (which the parties acknowledge as being valuable consideration) the parties covenant and agree with each other as follows:

2. Description of Cattle

- (a) The Owner will deliver ____ bred cows and/or heifers and ____ bulls on or before _____, 19____ as set out in Schedule A of this Agreement, subject always to the title and ownership of the said livestock remaining with the Owner.
- (b) The animals will arrive in good healthy condition. Their condition score will be between ____ and ____ on arrival.
- (c) All females shall be certified to be pregnant by a professional veterinarian by the date indicated in clause 5(c).
- (d) Each following fall, for the period of this lease, the Owner will supply the Operator between ____ and ____ bred females.
- (e) It is understood and agreed that all livestock under this Agreement shall be branded with the Owner's brand by the Operator. A brand release will be signed by the Owner for any cattle that are to be transferred to the Operator as agreed to under this lease Agreement.

Considerations for a Lease Agreement

Describe where the cattle are to be located and the right of the Owner to inspect his cattle.

Determine the type and number of bulls to be used, the breeding period, and which party is responsible for these costs.

Determine what costs will constitute herd health and who is responsible for said costs.

Sample Clause

3. Location of Cattle

- (a) The livestock above mentioned shall be located on the following premises:

Section _____ Township _____ Range _____ West of the ____ Meridian. Any removal to another location by the Operator shall require the approval of the Owner and such approval endorsed accordingly.

- (b) The Owner shall at all times have the right to come upon the premises and inspect the condition of the animals and if he shall be of the opinion that the same are in an unsatisfactory state, he may remove the same subject to the terms contained in the termination section of the Agreement.

4. Breeding of Said Animals

- (a) The Owner shall provide and pay for breeding bull(s) which meet the standards mutually agreed to by both parties. The Owner also agrees to furnish sufficient bulls for the proper breeding of the said livestock. The agreed to maximum cow/bull ratio shall not exceed _____ cows to _____ bulls.
- (b) The Operator agrees that the bulls will be turned in with the cows on _____ 19____, and removed _____ of each contract year.

5. Herd Health

- (a) The Operator will supply and pay ____% of the cost for vitamins and other medicines or vaccinations not administered by a veterinarian to said animals and their offspring that are necessary to prevent disease or malnutrition and to promote growth and well being of said animals. Such health practices shall be carried out by the Operator in accordance with currently accepted and recommended practices in the Province of Alberta.
- (b) Each spring the Owner will ensure that the bulls are fit for breeding as determined by a semen test carried out by a veterinarian. The Owner will pay for this service.
- (c) Each fall the cows will be pregnancy tested on or before _____. The _____ will pay for this service.

Considerations for a Lease Agreement

Costs arising from veterinarian fees, drugs and services should be dealt with separate from herd health.

Feed costs represent approximately 70% of the total costs in a cow-calf operation and therefore must be reviewed carefully by both parties prior to the signing of the Agreement.

It is important to establish the culling procedure and replacement strategy. If replacements are to be from the herd, the Operator should be compensated for the lost revenue and should be paid to raise the heifer replacement to the next pregnancy testing date. Under this strategy, the cull receipts belong to the Owner.

This clause determines the value of any heifer calves retained as replacements by the owner.

This clause will outline the feed and carrying costs to have a replacement heifer enter the herd as a bred female the following fall.

Sample Clause

6. Veterinarian Expenses

- (a) Costs arising from medicines, drugs, and services administered by a professional veterinarian to the said animals and their offspring in the case of treatment of sick animals will be shared on a ____% by the Owner and ____% by the Operator respectively.

7. Feed, Water, Pasture and Care

- (a) The Operator will provide all feed, water, pasture, necessary shelter, and all labour for supervision and care of said animals and their offspring. The cows will be kept in good physical condition as judged by using the condition scoring method. The cows must be kept between a score of ____ and ____.

8. Culls and their Replacements

- (a) On or about _____ of each year during the currency of this Agreement, the Owner and Operator shall mutually agree upon those cattle which are to be culled; should the Owner and the Operator disagree concerning a particular cow, the question of whether it is to be culled shall be submitted to a veterinarian and he/she shall decide on the basis of the cow's past performance and health. Expenses of the veterinarian shall be shared equally by the Owner and the Operator.
- (b) The Owner will receive ____% of the proceeds from the sale of all cull animals and is responsible for all trucking and marketing costs.
- (c) Upon the culling of these animals, the Owner will replace each cull animal with a bred cow acceptable to the Operator by _____ of each contract year.
- (d) If the Owner wishes to raise replacements from the herd, the Operator has no obligation to raise these animals unless mutually agreed to.

Considerations for a Lease Agreement

Sample Clause

9. Replacement Heifer Agreement

- (a) The value of the replacement heifer shall be determined by:
 - i) Actual weight of replacement heifer calf x market price
 - or
 - ii) \$_____ premium plus average value of heifers sold
 - or
 - iii) \$_____ premium plus average value of steer sold.
- (b) The Owner agrees to pay the Operator \$_____ per head for the winter feeding period and \$_____ per month for the pasture season, plus all related costs of raising the heifer until she enters the herd as a bred female the following fall.

10. Death Loss, Strays, Forced Sale and Insurance of Breeding Animals

- (a) The Owner shall accept the loss for said animals which die or are recommended to be sold or destroyed by a professional veterinarian for a period of thirty (30) days immediately following their delivery to the said lands and any losses or strays up to ____% of the mature cow herd.
- (b) Income or compensation from such forced sales accrue to the Owner.
- (c) The Operator, after the thirty (30) day period mentioned above, shall replace said animals which die or are permanently lost that exceed the ____% allowance.
- (d) The Operator or Owner may, at their expense, carry fire and liability insurance on the cattle and are entitled to all insurance proceeds.

Death loss on mature cattle are usually borne by the Owner for a period of thirty days after delivery and losses up to 2 - 5% of the mature cow herd.

Insurance proceeds for fire or liability on non-specified individual animals can be purchased at a reasonable cost.

Considerations for a Lease Agreement

Select the type of income sharing agreement that is to be in force during the lease period.

Cash lease

Fixed calf lease

Percentage share lease

Percentage split to be determined using the worksheets provided in Appendix III.

Flexible share lease

Flexible share split to be determined using the worksheets provided in Appendix III.

As in any Agreement, disputes may arise and must be dealt with in an expedient and agreeable process to both the Owner and Operator. Check with your veterinarian to determine their willingness to act as a mediator under this lease, before contractually agreeing to use their services.

For disagreements that may arise where a veterinarian is unwilling to provide mediation, an arbitration process shall be agreed to.

Sample Clause

11. Division of Income (Select only one)

(a) The Operator agrees to pay to the Owner the sum of \$_____ per cow that are determined to be pregnant as per paragraph 5(c).

or

(b) The Owner agrees to receive ____ calves equating to ____% of the total number of bred females that are determined to be pregnant as per paragraph 5(c). The Operator receives the remainder of the calves.

or

(c) The Owner shall be entitled to ____% and the Operator ____% of the revenue or offspring by the _____ of each year.

or

(d) The Owner shall be entitled to ____% and the Operator ____% of the revenue or offspring by the _____ of each year as prescribed each year by Schedule 1 of this Agreement.

12. Dispute Clause

(a) Any dispute relating to health, feeding, culling or condition of animals shall be settled by a professional veterinarian with each party sharing equally for the cost of this service. Any costs arising from the settling of the dispute shall be borne by the individual responsible for the various duties and obligations contained in this Agreement.

13. Provision for Arbitration

(a) Any disagreement which may arise between the contracting parties with respect to the rights and obligations of the parties as provided under the terms of this Agreement, shall, when a mutually satisfactory settlement cannot otherwise be reached, be submitted to arbitration. The arbitration authority may either be a single person mutually satisfactory to both parties or a board of three, one member to be named by each party and a third party selected by the two so chosen.

The decision of the arbitrator or arbitration board shall be accepted as final.

Considerations for a Lease Agreement

The parties involved enter into such lease agreements based on the confidence and trust in each other. It may be wise to state in the lease that it cannot be assigned.

Early termination in a cow-calf lease is usually due to the health and/or condition of the livestock, and subsequently the Owner will usually reserve the right for immediate termination.

The agreement must contain a clause to specify the course of action to follow upon the death of either the owner or operator.

Sample Clause

14. Terms, Termination and Assignment of this Agreement

- (a) This agreement will commence on _____.
- (b) Each party agrees not to assign their interest of this lease to another person or entity without the written consent of the other party.
- (c) The Owner has the right to immediately terminate this Agreement if the Operator breaches any term of this Agreement subject to the Dispute Clause in 11(a) and/or the arbitration provision in 11(b).
- (d) Either the Owner or the Operator may terminate this Agreement by providing written notice to the other on or before _____ in any year during the currency of this Agreement; said termination shall be effective as of _____ in the year during which it was given.
- (e) Upon termination of this Agreement, the Operator shall deliver to the Owner the original cattle or their replacements at a place as directed by the Owner. The Owner shall pay costs incurred by the Operator in transporting the cattle.
- (f) Upon the death of the Owner, the Agreement will terminate at the end of that current year. Upon the death of the Operator, the Agreement will terminate immediately and the herd will be returned to the Owner. The Operator's estate will be compensated for cash costs plus \$____/head/day for feed costs and labor incurred since the division of income as outlined in Section 10.
- (g) This Agreement will terminate on _____, 19____.

IN WITNESS WHEREOF the parties have set their hands and seals this _____ day of _____, 19____.

SIGNED, SEALED AND DELIVERED

in the presence of: _____
Owner

Witness Operator

Schedule I

FLEXIBLE PERCENTAGE SHARE

Level 1 Direct Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Calf Value = E1			E1 = \$
Direct Cost Contributions	A1 = \$	A2 = \$	A3 = \$
% Contribution	$A1 \div A3 \times 100 = \%$	$A2 \div A3 \times 100 = \%$	100%
Revenue Allocation			
Lessor of E1 or A3 x % Contribution	\$	\$	F1 = \$

Level 2 Fixed Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E1 - A3 = E2			E2 = \$
Opportunity Cost Contributions	B1 = \$	B2 = \$	B3 = \$
% Contribution	$B1 \div B3 \times 100 = \%$	$B2 \div B3 \times 100 = \%$	100%
Revenue Allocation			
Lessor of E3 or C3 x %	\$	\$	F2 = \$

Level 3 Opportunity Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E2 - B3 = E3			E3 = \$
Opportunity Cost Contributions	C1 = \$	C2 = \$	C3 = \$
% Contribution	$C1 \div C3 \times 100 = \%$	$C2 \div C3 \times 100 = \%$	100%
Revenue Allocation			
Lessor of E3 or C3 x %	\$	\$	F3 = \$

Level 4 Surplus Over All Costs

	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E3 - C3 = E4			E4 = \$
% Share (negotiated)	%	%	100%
Revenue Allocation			
E4 x % share	\$	\$	F4 = \$
Allocated Revenues	\$	\$	\$

Appendix III Blank Cow Lease Worksheets

SECTION I PRODUCTION VALUES

Replacement Cow Value	\$ _____	Years of Use - Cows	_____ yrs
Cull Cow Value	\$ _____	Years of Use - Bulls	_____ yrs
Average Cow Value (formula 1)	\$ _____	Average Calf Price \$/cwt	\$ _____
Replacement Bull Value	\$ _____	Average Calf Weight	_____ lb
Cull Bull Value	\$ _____	Marketing Shrinkage	_____ %
Average Bull Value (formula 3)	\$ _____	Weaning % (calves/bred cow)	_____ %
Cows per Bull	_____	Death Loss (Breeding Stock)	_____ %
		Interest Rate (Risk Free Rate + Risk Premium)	_____ %

SECTION II FORMULAS

1. Average Cow Value (\$)

$$\frac{\text{Replacement Cow Value} + \text{Cull Cow Value}}{2} = \text{_____}$$

2. Cow Replacement Allowance (\$ per cow per year)

$$\frac{\text{Replacement Cow Value} - \text{Cull Cow Value}}{\text{Years of Use (Cows)}} = \text{_____}$$

3. Average Bull Value (\$)

$$\frac{\text{Replacement Bull Value} + \text{Cull Bull Value}}{2} = \text{_____}$$

4. Bull Replacement Allowance (\$ per cow per year)

$$\frac{\text{Replacement Bull Value} - \text{Cull Bull Value}}{\text{Years of Use (Bulls)} \times \text{Cows per Bull}} = \text{_____}$$

5. Cow Death Loss (\$ per cow)

$$\text{Average Cow Value (Formula 1)} \times \text{Death Rate} = \text{_____}$$

6. Bull Death Loss (\$ per cow)

$$\frac{\text{Average Bull Value (Formula 3)} \times \text{Death Rate}}{\text{Cows per Bull}} = \text{_____}$$

7. Interest on Cow Investment (\$ per cow)

$$\text{Average Cow Value (Formula 1)} \times \text{Interest Rate} = \text{_____}$$

8. Interest on Bull Investment (\$ per cow)

$$\frac{\text{Average Bull Value (Formula 3)}}{\text{Cows per Bull}} \times \text{Interest Rate} = \text{_____}$$

9. Calf Sale Value (\$ per cow)

$$\frac{\text{Average Calf Sale Wt.} \times \text{Marketing Shrinkage} \times \text{Average Calf Price} \times \text{Weaning \%}}{100} = \text{_____}$$

Cow Lease Worksheet

SECTION III COST CONTRIBUTIONS

(on a cow/year basis)

DIRECT EXPENSES

	---Owner--- \$/cow	---Operator--- \$/cow	---Total--- \$/cow
Pasture @ market value	\$ _____	\$ _____	\$ _____
Feed and Bedding @ market value	\$ _____	\$ _____	\$ _____
Salt & Minerals	\$ _____	\$ _____	\$ _____
Herd Health Expense	\$ _____	\$ _____	\$ _____
Veterinary Expense	\$ _____	\$ _____	\$ _____
Marketing & Transportation	\$ _____	\$ _____	\$ _____
Miscellaneous Cow Herd Costs	\$ _____	\$ _____	\$ _____
*Machinery & Building Operation Expense	\$ _____	\$ _____	\$ _____
*Utilities	\$ _____	\$ _____	\$ _____
*Hired Labour	\$ _____	\$ _____	\$ _____
Total Direct Expenses	A1 \$ _____	A2 \$ _____	A3 \$ _____

FIXED EXPENSES

*Depreciation & Insurance on Buildings & Machinery	\$ _____	\$ _____	\$ _____
Cow Replacement Allowance** (refer to formula 2)	\$ _____	\$ _____	\$ _____
Bull Replacement Allowance** (refer to formula 4)	\$ _____	\$ _____	\$ _____
Cow Death Loss** (refer to formula 5)	_____ %	_____ %	_____ %
	\$ _____	\$ _____	\$ _____
Bull Death Loss** (refer to formula 6)	_____ %	_____ %	_____ %
	\$ _____	\$ _____	\$ _____
Total Fixed Expenses	B1 \$ _____	B2 \$ _____	B3 \$ _____

Total Expenses

\$ _____ \$ _____ \$ _____

OPPORTUNITY COSTS

*Interest on Buildings & Equipment	\$ _____	\$ _____	\$ _____
*Labour & Management	\$ _____	\$ _____	\$ _____
Interest on Cow Investment** (refer to formula 7)	\$ _____	\$ _____	\$ _____
Interest on Bull Investment** (refer to formula 8)	\$ _____	\$ _____	\$ _____
Total Opportunity Costs	C1 \$ _____	C2 \$ _____	C3 \$ _____

Total Contribution

D1 \$ _____ D2 \$ _____ D3 \$ _____

- * Ensure that these amounts only include those costs directly related to the beef cow enterprise. When market values for pasture and feed have been used, do not include any ownership or operational costs incurred in developing and maintaining pastures or in the making of feed.
- ** Refer to Section II - Formulas (previous page) for information on calculating amounts.

Cow Lease Worksheet

SECTION IV EXPECTED REVENUE (on a cow/year basis)

	Total \$/cow
Calf Sales (refer to formula 9)	E1 \$ _____

SECTION V LEASE PAYMENT CALCULATIONS (on a cow/year basis)

CASH LEASE

	---Owner--- \$/cow
Total Fixed Expenses	B1 \$ _____
plus: Total Opportunity Costs	C1 \$ _____
equals: Annual Cash Lease	\$ _____

FIXED NUMBER OF CALVES

	---Owner--- \$/cow	
Annual Cash Rent per 100 cows		
= [B1 + C1] x 100	\$ _____	
Minimum Number of Calves per 100 bred cows		
= ([B1 + C1] x 100) ÷ (E1 ÷ Weaning %)	_____	calves
plus:		
Market Risk Adjustment		
additional calves	_____	calves
	=====	
Total Payment in Calves per 100 Cows	_____	calves
[_____ x (_____)] ÷ 100	= \$ _____	\$/cow
[Payment in calves per 100 cows x (E1 ÷ Weaning %)] ÷ 100		

PERCENTAGE SHARE

	--Owner-- \$/cow	--Operator-- \$/cow	--Total-- \$/cow
Total Revenue			E1 \$ _____
Total Direct Expenses	A1 \$ _____	A2 \$ _____	A3 \$ _____
Total Fixed Expenses	B1 \$ _____	B2 \$ _____	B3 \$ _____
Total Opportunity Costs	C1 \$ _____	B2 \$ _____	C3 \$ _____
Total Contribution	D1 \$ _____	D2 \$ _____	D3 \$ _____
Percentage Share (D1 or D2 ÷ D3) x 100	_____ %	_____ %	_____ %
Allocated Revenues	\$ _____	\$ _____	\$ _____

Cow Lease Worksheet

SECTION V (continued)

FLEXIBLE PERCENTAGE SHARE

Level 1 Direct Costs	Owner \$/cow	Operator \$/cow	Total \$/cow
Calf Value = E1			E1 = \$
Direct Cost Contributions	A1 = \$	A2 = \$	A3 = \$
% Contribution	A1 ÷ A3 x 100 = %	A2 ÷ A3 x 100 = %	100%
Revenue Allocation			
Lessor of E1 or A3 x % Contribution	\$	\$	F1 = \$
Level 2 Fixed Costs	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E1 - A3 = E2			E2 = \$
Opportunity Cost Contributions	B1 = \$	B2 = \$	B3 = \$
% Contribution	B1 ÷ B3 x 100 = %	B2 ÷ B3 x 100 = %	100%
Revenue Allocation			
Lessor of E3 or C3 x %	\$	\$	F2 = \$
Level 3 Opportunity Costs	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E2 - B3 = E3			E3 = \$
Opportunity Cost Contributions	C1 = \$	C2 = \$	C3 = \$
% Contribution	C1 ÷ C3 x 100 = %	C2 ÷ C3 x 100 = %	100%
Revenue Allocation			
Lessor of E3 or C3 x %	\$	\$	F3 = \$
Level 4 Surplus Over All Costs	Owner \$/cow	Operator \$/cow	Total \$/cow
Remaining Calf Value = E3 - C3 = E4			E4 = \$
% Share (negotiated)	%	%	100%
Revenue Allocation			
E4 x % share	\$	\$	F4 = \$
Allocated Revenues	\$	\$	\$

AGRICULTURE, FOOD AND
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