# Breeding Livestock Lease Agreements 

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- How many acres of land and what type of pastures and crops are included? (Include legal descriptions, if possible.)
- What is the expected stocking rate?
- When and how must termination be given? What are grounds for termination?
- When and where will the agreement be annually reviewed?
- Is a partnership intended?
- Which party pays for feed, water, care, veterinary services and medicine, fencing, etc.? Which party provides the feed, water, care, veterinary services and medicine, fencing, etc., and what share does each provide?
- What is the share of the output for each party? How will calves be priced if one party buys calves from the other?
- When and where will the share of output be divided?
- How will culls be disposed of and when will it occur? How will replacements be handled?
- What will determine the amount of death loss for each party? How is death loss proven?
- Who provides bulls, if bulls are to be provided?
- What type and quality of bulls (or semen) will be used?
- Should cows be insured? Who will carry the insurance?
- What facilities will be used?
- Are there special agreements on feeding/handling of cows or calves?
- Will incentives be provided for doing a "good" job? Will disincentives be provided for doing a "poor" job?
- What records will be kept? How will animals be identified?
- How will extenuating circumstances (such as drought, hail, or major health problems) that are not the fault of the caretaker be handled?
- What limits, if any, will be placed on the activities of the caretaker? (For example, can the caretaker add other cattle to the owner's herd?)
- How will disagreements be settled? Is there a way for both parties to get out of the agreement?
- If the owner terminates the agreement prior to weaning (or the agreed-upon end point), how will the caretaker be compensated for expenses up to the date that the cows are removed from the producer's premises?
- What is the agreement for growing replacement heifers?

[^0]- Are production improvements needed? If so, who will pay for them?


## Alternative Share Arrangements

Generally, the percent of profits that parties receive is based on their contributions to the enterprise. Or, the income may be divided in a way that does not match each party's contribution to the enterprise; but it is essential that the owner and caretaker agree upon the terms. Because of the differences in individual farms and items furnished, the contributions in these arrangements may appear similar when, in reality, they may vary a great deal. Some of the differences may include one or more of the following:

1) Quality of cattle furnished. A party who furnishes $\$ 3,000$ cows contributes twice as much per cow as one who furnishes $\$ 1,500$ cows. Selling a 6 -month-old bull calf for $\$ 2,000$ contributes much more to the receipts than selling a steer for \$1,000.
2) Labor. A party who furnishes the labor for growing all the feed and providing the temporary pasture furnishes much more than one who just feeds protein supplements to a cowherd. The labor requirements on timber pasture are higher than open pasture.
3) Pasture. The value per acre of pasture varies widely.
4) Machinery and equipment. The value of the machinery and equipment depends on the acres of temporary pasture produced and the amount of roughage harvested.

An infinite number of possible arrangements for sharing the income from livestock and land and the other resources used to maintain them could be developed. Therefore, it is important that both parties itemize their expected contribution and value. The contribution from each party may vary considerably as outlined in the examples. Individual circumstances may cause the percentages contributed to appear more varied than they actually are. Five alternative arrangements are outlined in Table 1.

Arrangement 1. The ranch owner pays the caretaker for labor and management with a share of the gross receipts. An owner could use this type of arrangement to furnish capital for beef production, while a young farmer has a chance to acquire capital.
Arrangement 2. The caretaker receives 25 percent of the calves for providing labor and management, as well as for machinery and equipment.
Arrangement 3 . Under this arrangement, the ownerfurnishes bred cows, and no replacements are grown. The caretaker may be interested if he or she wants to utilize some available pasture and feed.
Arrangement 4 - An arrangement like this might be used if neither party owns land. Replacements are raised.
Arrangement 5 - This arrangement might be used with registered cattle.

## Expenses and Income

Calculating the expected costs and returns of the herd allows leasing parties to explore different share arrangements. Tables 2 through 5 summarize the details of a cow-calf leasing arrangement - outlining the investment data, fixed costs, operating expenses, and expected income to be shared by the two partners, referred to as caretaker and cow owner. ${ }^{2}$ (A spreadsheet incorporating these worksheets is available at http://www.agecon.okstate.edu/software.) The individual fixed costs, operating expenses, and income are estimated and stated on an annual, per cow basis. The share percentages in the example correspond to arrangement 1 in Table 1.

The first step is to enter the data explaining the investment in land, livestock, buildings, and equipment (Table 2). Fixed costs are incurred with the ownership of a cowherd. The fixed cost section includes land, buildings, breeding livestock (cows and bulls), equipment and machinery, conservation, manage-

[^1]Table 1. Sample Cow-calf Share Arrangements. ${ }^{1}$

| Input | Arrangement 1 |  | Arrangement 2 |  | Arrangement 3 |  | Arrangement 4 |  | Arrangement 5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Caretaker | Owner | Caretaker | Owner | Caretaker | Owner | Caretaker | Owner | Caretaker | Owner |
| Cows, bulls |  | 100\% |  | 100\% |  | 100\% |  | 100\% |  | 100\% |
| Land/Pasture |  | 100\% |  | 100\% | 100\% |  | 50\% | 50\% | 100\% |  |
| Labor | 100\% |  | 100\% |  | 100\% |  | 100\% |  | 100\% |  |
| Management | 50\% | 50\% | 100\% |  | 100\% |  | 100\% |  | 100\% |  |
| Buildings |  | 100\% |  | 100\% | 100\% |  | 50\% | 50\% | 100\% |  |
| Machinery \& equipment | 100\% |  | 100\% |  | 100\% |  | 100\% |  | 100\% |  |
| Feed | 100\% |  | 100\% |  | 100\% |  | 50\% | 50\% | 50\% | 50\% |
| Other cash costs |  | 100\% |  | 100\% | 100\% |  | 50\% | 50\% | 50\% | 50\% |
| Calf crop ${ }^{2}$ |  |  | 25\% | 75\% | 75\% | 25\% |  |  | 50\% | 50\% |
| Receipts ${ }^{3}$ | 10-20\% |  |  |  |  |  | 50\% | 50\% |  |  |

[^2]Table 2. Cow Herd Investment Data.

| 1,200 | Acres in unit |
| ---: | :--- |
| $\$ 1,000$ | Land value per acre |
| 120 | Number of cows in herd |
| $2.0 \%$ | Rate of return on land |
| $0.43 \%$ | Property taxes as a percent of land value |
| 0 | Improvement value |
| 0 | Improvement salvage value |
| $2.0 \%$ | Rate of return on improvements |
| 20 | Average life of improvement |
| $1.6 \%$ | Tax and insurance rate on average value |
|  | of improvements |

\$1,500 Average cow purchase price
\$1,200 Cull cow value
2.0\% Interest or opportunity interest on breeding livestock
6 Average life of herd (years)
1.6\% Tax and insurance rate on average value of cow

2\% Cow death loss \%
\$3,000 Average bull purchase price
\$1,200 Cull bull value
2.0\% Interest or opportunity interest on breeding livestock
4 Ave. life of bull (years) 30 Cows/bull
1.6\% Tax and insurance rate on average value of bull 2\% Bull death loss \%

| $\$ 20,000$ | Average value of machinery \& equipment |
| ---: | :--- |
| $\$ 10,000$ | Machinery salvage value |
| $50 \%$ | Proportion charged to this enterprise |
| $2.0 \%$ | Interest or opportunity interest on machinery |
| 10 | Average life of machinery complement |
| $1.6 \%$ | Tax and Insurance rate on average value |
| $86.5 \%$ | Calf crop \% |
| $3.5 \%$ | Calf death loss \% |
| 20 | Number of heifers kept for replacements. |
|  | Must be greater than or equal to: |
| $2.0 \%$ | Replacement heifer death loss |

ment, and labor. The user of the worksheet or spreadsheet must provide the figures. Other figures are calculated automatically by the spreadsheet program. The data used to calculate the fixed costs associated with the cow-calf operation are shown in Table 3.

Variable costs, referred to as operating expenses (Table 4), are incurred with the day-to-day upkeep of the herd. These costs are directly related to herd size. Operating expenses include feed and pasture, labor, fencing, veterinary and supplies, artificial insemination, insect control, marketing expense, hauling, machinery and equipment, registration, water, and operating interest.

Once the annual costs are estimated, the parties must agree upon the contribution each will make toward meeting those expenses. The percentage to determine the caretaker's portion is entered and multiplied by the annual costs. Subtracting the caretaker's costs from the total annual costs derives the cow owner's costs. The total fixed costs and operating expenses are summed and each party's cost is divided by
the total costs to determine the percentage of fixed costs and operating expenses contributed by each party.

The herd produces income by selling raised steers and heifers, selling cull cows and bulls, adding replacement heifers, or selling yearling heifers (Table 5). If income is shared by a specified percent of the calf crop, the caretaker and owner split the proceeds from the sale of steers and heifers. If the returns are shared using a percentage of gross receipts, the parties may split the proceeds from the sale of steers, heifers, cull cows, cull bulls, and replacement heifers.

## Renting Beef Cows

Under certain conditions, renting cows might be preferable to a share arrangement. For example, a farmer contemplating retirement might be interested in renting out his or her cows. A young farmer, limited on capital, might be interested in renting extra cows to utilize pasture. In either case, neither party may be interested in renting for long periods of time. The same information used to determine the value of contributions to a share arrangement is used to determine a rent desired and an ability to pay rent.

Table 6 shows how an owner might determine the costs for rental purposes. Compensation is expected for a return on investment, depreciation, taxes, and death losses. The prospective renter should estimate the returns from a cow (or herd) in order to determine how much rent could be paid. An example is illustrated in Table 7. (OSU budget templates may be helpful to the renter in estimating potential returns for different systems. See agecon.okstate.edu/budgets)

This method approaches the problem from both the owner and renter's views. The results will yield a range of values within which bargaining can take place between the owner and renter.

## Leasing Bulls

Another way for the cow owner to reduce expenses is to lease, rather than own, a bull. The producer must compare the costs and benefits of leasing a bull with owning a bull. Leasing eliminates the capital expenditure of purchasing a bull. The cost of purchasing a bull depends on the cattle market and quality of the bull. Most bull owners in the leasing business charge $\$ 700$ or more per breeding season.

A leased bull is generally only kept during the breeding season, so operating costs are reduced. For example, the cost of feeding a bull is estimated at $\$ 350$ per year. The costs of veterinary and medicine, marketing, and death loss (1 percent) approximate $\$ 35$. Labor is estimated at about $\$ 45$ per year, making the total cash costs equal $\$ 430$ per bull for one year.

Another cost of owning a bull is depreciation and interest. Table 8 gives an example of the depreciation costs for a bull depreciated for three and four years. Look again at Table 6 for an example of how to calculate depreciation.

The cow owners must also consider how leasing a bull could affect the health of their herd. Leasing virgin bulls is ideal to ensure that a venereal disease such as vibriosis or trichomoniasis is not introduced into the herd. This may not be an option, so owners should consult a veterinarian to ensure that leased bulls are healthy.

If they have adequate capital and a large cowherd over which to spread operating costs, producers may want to own

Table 3. Fixed Cost of Cow Herd (per cow basis).

|  | Annual Costs | Caretaker Share | Caretaker Costs | Cow Owner |
| :---: | :---: | :---: | :---: | :---: |
| Owned Land |  |  |  |  |
| Return on investment | \$200.00 | 0.0\% | \$0.00 | \$200.00 |
| Real estate taxes | \$43.00 | 0.0\% | \$0.00 | \$43.00 |
| Maintenance | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Buildings \& other improvements |  |  |  |  |
| Interest/return on investment | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Depreciation | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Repairs | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Taxes \& insurance | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Breeding livestock: cows |  |  |  |  |
| Interest/return on investment | \$27.00 | 0.0\% | \$0.00 | \$27.00 |
| Depreciation | \$50.00 | 0.0\% | \$0.00 | \$50.00 |
| Taxes \& insurance | \$21.60 | 0.0\% | \$0.00 | \$21.60 |
| Death losses | \$27.00 | 0.0\% | \$0.00 | \$27.00 |
| Breeding livestock: bulls |  |  |  |  |
| Interest/return on investment | \$1.67 | 0.0\% | \$0.00 | \$1.67 |
| Depreciation | \$8.33 | 0.0\% | \$0.00 | \$8.33 |
| Taxes \& insurance | \$1.33 | 0.0\% | \$0.00 | \$1.33 |
| Death losses | \$1.67 | 0.0\% | \$0.00 | \$1.67 |
| Equipment and machinery |  |  |  |  |
| Interest/return on investment | \$1.25 | 100.0\% | \$1.25 | \$0.00 |
| Depreciation | \$4.17 | 100.0\% | \$4.17 | \$0.00 |
| Taxes \& insurance | \$1.00 | 100.0\% | \$1.00 | \$0.00 |
| Conservation measures | \$0.00 |  |  |  |
| Management | \$10.00 | 50.0\% | \$5.00 | \$5.00 |
| Labor |  |  |  |  |
| Cow owner | \$0.00 |  |  |  |
| Caretaker | \$30.00 |  | \$30.00 |  |
| Total Fixed Costs | \$428.02 |  | \$41.42 | \$388.60 |
| \% of Total Fixed Costs | 100\% |  | 10\% | 90\% |

one or more bulls to ensure they have a quality bull for use each season. There is also the benefit of the salvage value when the bull is sold.

## Tax Considerations

If the cow owners lease their cows and receive a base cash rate, they will not be subject to self-employment tax on that income. However, a cow owner who shares a portion of the production risk will be subject to self-employment tax. Production risk occurs if the owner's returns are a portion of the calf crop or if the owner shares a role in the management of the cow herd. The IRS defines the management role as material participation and considers the cow owner to have "materially participated" if:

1) The producer does any three of the following activities:
a) Inspect production activities (for example, calving, or feeding). Inspecting property or improvements does not count.
b) Consult with the caretaker about production of the cow enterprise.
c) Furnish at least half (maybe less under some circumstances) of the tools, equipment, and livestock used in the enterprise.
d) Share at least half (maybe less under come circumstances) of the production expenses.
2) The cow owner regularly and frequently makes decisions that significantly affect the success of the farm operation.
3) The cow owner works at least 100 hours spread over five or more weeks on activities connected to the cow enterprise.
4) Even if the cow owner does not meet 1,2 , or 3 , his or her activities, when considered together, may be enough for a ruling of material participation.

Because material participation is somewhat difficult to define, the cow owner should consult with a tax advisor.

## Conclusion

A cow share lease is a prime way for a cow owner and caretaker to pool their land and livestock resources. If the arrangement is properly laid out ahead of time, the lease can help each party share production risk. The lease should be a written document and cover all parameters of production and possible situations that could arise during the duration of the contract. The parties entering into the arrangement should clearly define their expectations with respect to sharing of costs and receipts. The cow owner and caretaker should choose an arrangement that best matches their resources and desired returns.

Table 4. Operating Expenses and Total Cost Summary for Cattle Herd.

|  | Annual Costs per Cow | Caretaker Share | Caretaker Cost | Owner Cost |
| :---: | :---: | :---: | :---: | :---: |
| Feed and pasture |  |  |  |  |
| Spring, summer grazing | \$6.00 | 0.0\% | \$0.00 | \$6.00 |
| Winter grazing | \$6.00 | 0.0\% | \$0.00 | \$6.00 |
| Hay | \$170.00 | 0.0\% | \$0.00 | \$170.00 |
| Grain | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Supplement | \$65.00 | 0.0\% | \$0.00 | \$65.00 |
| Salt and mineral | \$9.00 | 0.0\% | \$0.00 | \$9.00 |
| Other | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Labor, hired |  |  |  |  |
| General | \$30.00 | 100.0\% | \$30.00 | \$0.00 |
| Calving | \$0.00 | 100.0\% | \$0.00 | \$0.00 |
| Fencing | \$2.00 | 0.0\% | \$0.00 | \$2.00 |
| Veterinary and supplies | \$8.00 | 0.0\% | \$0.00 | \$8.00 |
| AI, semen | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Insect control | \$2.00 | 0.0\% | \$0.00 | \$2.00 |
| Marketing expense | \$8.50 | 0.0\% | \$0.00 | \$8.50 |
| Hauling | \$2.00 | 0.0\% | \$0.00 | \$2.00 |
| Mach., equip.: fuel, lube, repairs | \$28.00 | 0.0\% | \$0.00 | \$28.00 |
| Registration | 0 | 0.0\% | \$0.00 | \$0.00 |
| Water | 0 | 0.0\% | \$0.00 | \$0.00 |
| Operating interest | \$15.00 | 0.0\% | \$0.00 | \$15.00 |
| Other | \$0.00 | 0.0\% | \$0.00 | \$0.00 |
| Total Operating Expense | \$351.50 |  | \$30.00 | \$321.50 |
| Percent of Operating Expenses |  |  | 9\% | 91\% |
| Total Costs | \$779.52 |  | \$71.42 | \$708.10 |
| Percent of Total Costs | 100\% |  | 9\% | 91\% |

Table 5. Summary of Expected Receipts for Herd.


Table 6. Determining Livestock Owner Costs per Beef Cow for Rental Purposes.

1. Interest/return on average investment ${ }^{1}$
$\frac{[(\text { Cost }+ \text { Salvage Value })]}{2} \times$ interest rate
$\frac{(\$ 2,000+\$ 1,300)}{2} \times 6 \% \quad=\$ 99.00$
2. Depreciation
$\frac{\text { Cost }- \text { cull cow value }}{\text { Expected years of herd life }^{2}}$
$\frac{\$ 2,000-\$ 1,300}{5}=\frac{\$ 700}{5}$
3. Taxes $=0$
4. Death loss of $1.5 \%$ on average investment
$=\underline{24.75}$
$\left[\begin{array}{l}\frac{\$ 2,000+\$ 1,300}{2} \\ \text { Total Costs }\end{array}\right] \times 1.5 \%$
$=\$ 263.75$

1 The interest rate used determines the opportunity cost of having funds invested in cows rather than an alternative.
${ }^{2}$ May use 8 year life for young cows. For a group of mixed aged cows, a 5 year life would be more reasonable.

Table 7. Determining Renter Beef Cow Costs.

| Gross Sales |  |  |  |
| :---: | :---: | :---: | :---: |
| 500 lbs. x \$1.75/lb. x 86.5\% calf crop |  | = | \$756.88 |
| Costs |  |  |  |
| Grazing | \$120.00 |  |  |
| Hay | 170.00 |  |  |
| Supplement | 65.00 |  |  |
| Salt \& Minerals | 9.00 |  |  |
| Labor | 30.00 |  |  |
| Fencing | 2.00 |  |  |
| Vet. \& Med. | 8.00 |  |  |
| Insect control | 2.00 |  |  |
| Marketing | 9.00 |  |  |
| Hauling | 2.00 |  |  |
| Fuel, lube, repairs | 28.00 |  |  |
| Operating interest | 15.00 |  |  |
| Total Costs |  | $=$ | \$460.00 |
| Left to pay for cow | and overhead | = | \$296.88 |

Table 8. Annual Depreciation Costs for Bulls Retained 3 or 4 Years.

|  | Purchase Price |  |  |
| :--- | :---: | :---: | :---: |
| Salvage Value | $\$ 3000$ | $\$ 4000$ | $\$ 5000$ |
| Own for 4 years <br> 2,000 | Annual depreciation and interest costs (\$) <br> Own for 3 years <br> 2,000 | 250 | 500 |

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[^3]
[^0]:    1 Adapted from "Leasing cows for a share of the calves," Richard T. Clark, Agricultural Economist, University of Nebraska, Feb. 14, 1995. Updated from an earlier version by Damona Doye, Darrell Kletke, and Nikki Coe.

[^1]:    2 See OSU Fact Sheet AGEC-243, Using Enterprise Budgets in Farm Financial Planning, for additional information on fixed costs and other budget components

[^2]:    1 Column headings are $C$ for caretaker, $O$ for cow owner.
    2 Includes steers and non-replacement heifers.
    3 Includes steers and non-replacement heifers plus replacement heifers, cull bulls, and cows.

[^3]:    Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, gender, age, religion, disability, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

    Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of 42 cents per copy. 0312 Revised GH.

