

## Managing for Today's Cattle Market and Beyond

### *Should I Sell My Cow Herd?*

By

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Low cattle prices are discouraging, and may lead you to consider taking drastic steps to combat this problem. You may even be wondering if you need to sell part or all of your cow herd in order to minimize your losses and survive. This fact sheet can't make that decision for you, but it can help you determine the benefits and costs of a herd liquidation. It will also review your investment alternatives for the proceeds of liquidated breeding stock.

As you consider your herd liquidation options, be sure to go back and review your goals (refer to the "Integrated Management and Goal Setting" fact sheet). Will the sale of some or all of your cows allow you to make progress toward any of the goals you have set? If your goals emphasize non-economic factors (such as enjoying a rural quality of life, raising cattle because you like working with livestock, or bringing up children in a farm environment), then selling your cow herd may not contribute much toward achieving your goals. For goals that are primarily related to economics (such as earning at least \$20,000 annually, increasing equity by \$50,000 over the next five years, or realizing a 10 percent rate of return on your investments), selling your cows may be an alternative worth considering.

Unfortunately, economic realities may force you to abandon, postpone, or revise your goals. Overdue loan payments, unpaid bills, or unmet family living needs may require that significant amounts of capital be raised immediately to fulfill a more

fundamental goal of financial survival over the next few years. The next section of this fact sheet presents a discussion of the benefits and costs of a herd reduction.

#### *Herd Reduction Impacts*

##### *Cost Structure*

Why are you considering selling your cows? It is probably because you are losing money on every calf, and you think that selling fewer calves will reduce your losses. But, it's not as simple as that. Before making a rash decision, you must first analyze your unit production cost and cost structure. If you haven't already done so, work through the fact sheet "Determining the Economic Reality of Your Cow Herd" to estimate your total unit cost of production. If your unit production is larger than the current and short-run expected price of calves, then you are indeed operating at a loss, and should consider your downsizing alternatives.

In addition to considering your total unit production cost, you must also evaluate your cost structure. Determine what portion of your production cost is fixed, and what portion is variable. This ration will have a significant impact on the benefits or costs you will experience by liquidating your herd. Consider the following examples.

Jones and Smith operate two different ranches. Refer to Table 1. Each has 200 cows, with a total unit

cost of production of \$80/cwt. Jones' cost structure includes high variable costs and low fixed costs, while Smith's cost structure has much higher fixed costs and lower variable costs. At their current herd size, assuming each sells about 4 cwt. of calves per cow for \$60 per cwt., they are both losing \$16,000 per year.

Now suppose the ranches reduce their herds by selling 100 cows, and they each net \$35,000 from the sales on an after-tax basis. Refer to Table 2. If they sell their less-productive cows, then average production per cow should increase. This will lower the average variable cost per cwt. of each calf produced. Fixed costs also change. The example assumes that the revenue generated from the cow sales reduces total annual fixed cost by 25 percent of the sale proceeds (or \$8,750 per year). Jones' total fixed cost declines to \$15,250, and Smith's total fixed cost drops to \$31,250. However, each ranch now has fewer cows producing fewer calves to spread their costs around, so average fixed cost per cwt. rises. Because Jones had lower initial fixed costs, the net effect of the herd reduction is a decrease in the ranch's annual loss by \$7,750. The Smith ranch loses more money after reducing the herd, because total unit production cost has increased dramatically. Under the stated assumptions, the herd reduction was only beneficial for the ranch with the high variable/low fixed cost

structure. Therefore, a reduction of the cow herd during low price periods is not beneficial for every farm.

**Cow Sale Prices**

The current market value of cows also influences the results of herd reductions. As calf prices fall, the value of breeding stock and cull animals also declines. The chart below illustrates the sharp decline in utility cow prices which has occurred since early 1995, with prices dropping from about \$50 per cwt. on average during 1990 through 1994, to \$35 per cwt. by the Spring of 1996. Remember the marketing maxim: "Buy low, sell high." Sales of cows over the next couple of years will probably not take place at high prices. In fact, many producers that are reducing their herds bought them at high prices (by retaining heifer calves worth \$100/cwt. or more as replacements) and are being forced to sell them at today's low prices.

**Tax Implications**

A sale of breeding animals can have significant tax consequences for operations already facing tight financial situations. Capital gain realized from the sale of the animals is subject to income tax. Capital gain is the gross sale price of livestock minus the expense of the sale. Federal taxes are paid on capital gains at rates of up to 28 percent, just like ordinary income. This means that in a year when a

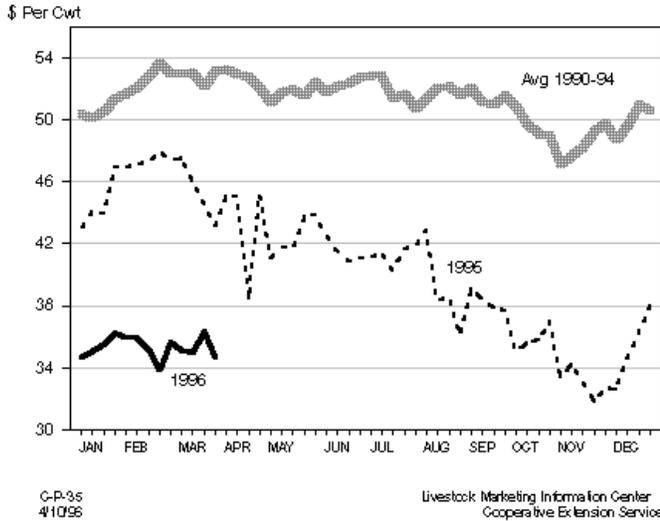
Table 1.

Before Herd Reduction	Jones Ranch	Smith Ranch
Number of Cows	200	200
Variable Production Cost/cwt.	\$50.00	\$30.00
Fixed Production Cost/cwt.	\$30.00	\$50.00
Total Production Cost/cwt.	\$80.00	\$80.00
Production per Cow	4 cwt.	4 cwt.
Market Price/cwt.	\$60.00	\$60.00
Annual Return	(\$16,000)	(\$16,000)
Total Fixed Cost	\$24,000	\$40,000

Table 2.

After Herd Reduction	Jones Ranch	Smith Ranch
Number of Cows	100	100
Variable Production Cost/cwt.	\$44.44	\$26.67
Fixed Production Cost/cwt.	\$33.89	\$69.44
Total Production Cost/cwt.	\$78.33	\$96.11
Production per Cow	4.5 cwt	4.5 cwt.
Market Price/cwt.	\$60.00	\$60.00
Annual Return	(\$8,250)	(\$16,250)
Total Fixed Cost	\$15,250	\$31,250

**BONING UTILITY COWS**  
Weekly Average, Southern Plains



substantial herd reduction occurs, the gain from selling your cows effectively increases your Federal taxable income, and may reduce your proceeds by up to 28 percent. Consult a tax professional to explore the income tax consequences of a herd reduction before you engage in any sales. Remember that state income taxes may also be incurred.

**Investment Alternatives**

Suppose you do sell part or all of your cow herd. Have you developed a plan for what to do with the sale proceeds? From a financial standpoint, you may have many options (or demands) on these funds. To gain the most benefit from the herd sale, funds must be invested wisely.

**Pay Off Cow/Calf - Related Loans**

Your first objective after a herd sale should be to pay off any loans directly related to the cows just sold. This might include loans obtained to purchase the cows or resources which used exclusively in cow/calf production. These loans were essentially made to allow you to operate a cow/calf “factory”. They were structured to be repaid over a period of years because the “factory” was expected to operate over that same time period. If part or all of the “factory” is sold, then loans against it should be immediately repaid to the extent possible.

Loans outstanding which financed resources used in other cattle production enterprises may not be logical candidates for payoff. For example, suppose a land loan was obtained to finance the purchase of 160 acres of land for hay production. This hay land does not have to be used to support the cow/calf enterprise. It could be used for stocker cattle grazing, cash hay

sales, or some other enterprise. Its alternative use suggests that a rule is needed to determine the best use of funds among competing investments. Such a rule is discussed in the section which follows.

**Consider Other Alternatives**

Funds remaining after cow/calf related loans are repaid should be allocated to their most profitable ends. The economic principle of equal marginal returns provides an operating rule which can be used to guide investment decisions. Basically, this principle states that the funds should be allocated among alternatives such that the rates of return in each alternative are maximized and about equal. The following example is used to illustrate this principle.

Suppose you’ve narrowed your investment alternatives to:

1. *Paying off an existing land loan,*
2. *Producing high-quality alfalfa hay for horse owners, and*
3. *Investing in the stock market through mutual funds.*

For up to \$50,000 in investment, each offers the potential for an eight percent average return. The land loan return is in the form of interest saved, the alfalfa enterprise generates revenues that exceed costs, and the stock market offers capital gains and dividends. How should the \$50,000 be invested in these three alternatives? Refer to Table 3 to answer this question.

The first and second \$10,000 should be devoted to hay production, because it provides returns of 20 percent and 12 percent. The third and fourth \$10,000 units should go to the stock market, to earn 10 percent and 9 percent returns. The final \$10,000 should be used to pay down the land loan, as it saves 8 percent interest. The average return earned on these investments is 11.8 percent, considerably higher than investing in any single alternative. Of course, this example assumes that each alternative offers a similar level of risk. For risk levels that differ greatly, rates of return should be adjusted.

Table 3.

	Investment Alternatives		
	Pay Off Loan	Produce Alfalfa Hay	Stock Market Mutual Fund
First \$10,000	8%	20%	10%
Second \$10,000	8%	12%	9%
Third \$10,000	8%	6%	7%
Fourth \$10,000	8%	2%	6%
Fifth \$10,000	8%	0%	8%
Average	8%	8%	8%

## *Summary*

A herd reduction decision is a difficult one to make. This fact sheet has reviewed some of the economic and financial implications of a herd reduction, but there are many other factors to consider as well. Selling a herd that you've built up over 10 or 20 years can create a great deal of emotional stress and feelings of failure. Review your options carefully, and make sure the decisions you make contribute toward your long term goals. Postponing a sale until your equity is gone could lead to insolvency, foreclosure, or other tragic results. selling out now may enable you to buy back in the future.