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How Does the Level of Feeder
Prices Affect Cattle Feeding Profits ?

by

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How Does the Level of Feeder Prices Affect Cattle Feeding Profits?

Many cattle feeders are wondering what effect higher feeder cattle prices this fall will have on their profit prospects during the coming feeding season. The purpose of this report is to show the effect that the level of feeder cattle prices has on the selling price necessary to cover all costs for different types of cattle.

We will not attempt to consider different grades of cattle, variations in feed cost, or how feeder cattle fit into an overall farm plan. While these are important, this report is aimed at the cattle feeder who already has fitted feeder cattle into his operations and is concerned about the rising level of feeder cattle prices this year.

The selling price needed to cover all costs (feed, Int., misc.) and provide a return for labor depends on three main factors. These are 1) the level of feeder cattle prices 2) the cost of putting on the gain and 3) the weight and type of cattle fed.

THE LEVEL OF FEEDER CATTLE PRICES AFFECTS THE SELLING PRICE NEEDED TO COVER COSTS.

When feeder cattle prices are low it usually requires a positive price margin between purchase and selling price to cover costs and show a reasonable return for labor. This is not generally true when feeder cattle prices are high. The following example illustrates this point.

Example:

Long-fed calves Limited feeding on pasture
(Purchased weight - 400#, Sale weight 950#)

	A	B
BUY - 400# @ \$18.00 = \$72		400# @ \$25.00 = \$100
COSTS - feed, misc., and labor <u>1/</u> = <u>113</u>		= <u>113</u>
TOTAL COST <u>185</u>		<u>213</u>
SELL - 950# @ <u>\$19.50</u> <u>185</u>		950# @ <u>\$22.40</u> <u>213</u>
DIFFERENCE 0		0
Selling price necessary to cover all costs and return \$1.50/hour for labor \$19.50		\$22.40

1/ Prices used: corn \$1.15; hay \$15.00; supplement \$4.00; silage \$5.00; labor \$16.50 per head or \$1.50/hr; misc. costs \$20.00 per head.

In A, we see that Pasture-Fed Steer Calves bought at \$18.00/cwt. must be sold for \$19.50 to cover feed and other costs and return \$1.50 per hour for labor. The same steers bought at \$25.00/cwt. would need to sell for only \$22.40 to cover the same costs. Thus, feeder calves purchased at \$18.00 need a plus \$1.40 margin while calves costing \$25.00 can sell for \$2.60 less than purchase price and still show the same returns.

THE EFFECT OF THE LEVEL OF FEEDER CATTLE PRICES ON NEEDED SELLING PRICE IS ALSO DEPENDENT UPON THE TYPE AND WEIGHT OF CATTLE FED.

This effect is shown in Figure 1. This chart shows the selling price necessary to cover feed and other costs and return \$1.50 per hour when the price of feeders ranges between \$15 and \$40/cwt. This has been calculated for three different types of feeder cattle -- pasture-fed calves, dry-lot fed yearlings, and short-fed two-year-olds.

The reason these needed selling prices differ is because the cost of the gain and the amount of gain put on varies with the type of cattle fed. ^{1/}

The level of feeder cattle prices has a greater effect on the necessary selling price for short fed cattle than does the cost of gain. Although the cost of gain is higher for these cattle than for calves, fewer pounds are added compared to the original weight of the cattle. Thus price spread is of utmost importance when handling short-fed heavy cattle.

On the other hand the cost of gain has more effect on the necessary selling price for long-fed calves than does the level of feeder cattle prices. The cost of gain is lower and gains added are larger compared to the original weight. Thus, low feed cost is a very important determinant of profit with lightweight long fed calves.

Cattle feeders are likely to buy choice calves at around \$25 per cwt. this fall. Based on the above discussion, profit prospects look favorable for this type of cattle since fed cattle prices are expected to be above this year's level of \$24. The typical feeder can cover his present feed cost and labor at \$22.40.

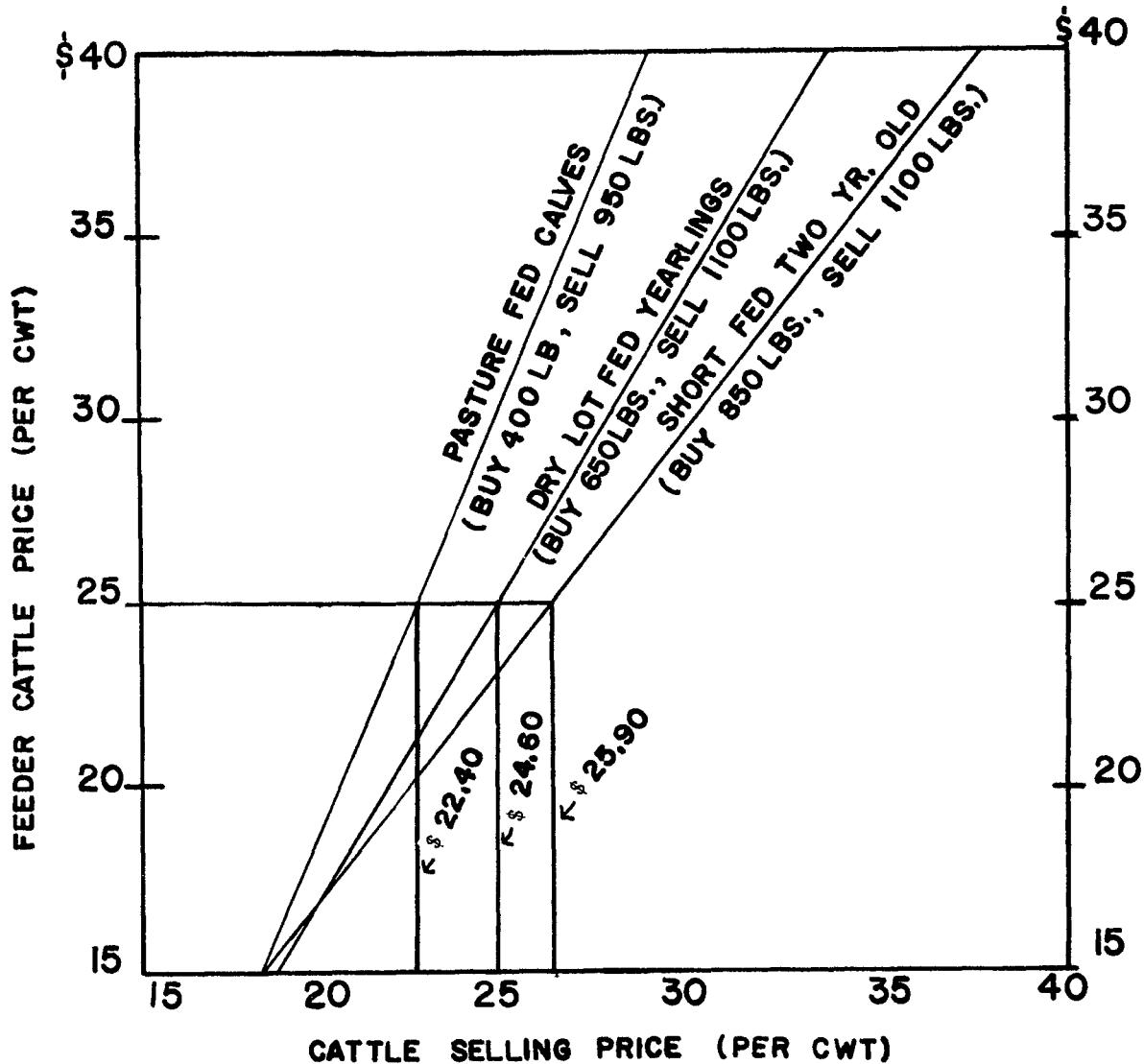
DETERMINING THE NECESSARY SELLING PRICE FOR YOUR OWN CATTLE FEEDING PROBLEM

Up to this point we have used average figures and conditions. You will want to figure the necessary selling price for your own feedlot situation. On page 4 you will find a form which will help you figure your necessary selling price and size up your profit prospects for the coming year.

Two factors are generally known at the beginning of any feeding period: 1) the price of feeders and 2) value of feed to be fed. (This indicates what it will cost to feed out cattle). By following the procedure outlined, you can calculate the selling price you need to cover all costs in the feed lot. By comparing this necessary price with your expectations of future selling price conditions you can estimate profits.

^{1/}The total cost per hundred pounds gain at present prices is about \$21 for calves, \$24 for long-fed yearlings and \$26 for two-year-olds. This difference is largely due to greater feeding efficiency with calves compared to older, heavier cattle. The amount of gain put on is generally about 550# for calves, 500# for yearlings and 330# for two-year-olds.

Figure 1 Selling Price of Cattle Needed to Cover All Costs and Return \$1.50 Per Hour for Labor When the Price of Feeder Cattle Ranges Between \$15 and \$40 Per Cwt.



USE OF THE CHART

The above chart can be used to determine the cattle selling price needed to cover all costs and return 1.50 per hour for labor when feeder cattle prices vary from \$15 to \$40 per cwt.

Example: Start from the left hand side of the chart at a \$25 price for feeder cattle. Following the line across, we find that pasture fed calves need to be sold for \$22.40 per cwt. in order to cover all costs and return \$1.50 per hour for labor. Dry-lot fed yearlings purchased at \$25.00 need a \$24.60 selling price while \$25 short-fed two-year-olds require a \$25.90 selling price to give the same return. This selling price can be read from the bottom line of the chart.

WHAT ARE YOUR PROFIT PROSPECTS?

Note: With this worksheet and your own feeding results from past years you can figure your profit prospects for the coming year. Every cattle feeder needs to do this before buying cattle. If needed, see examples of various feeding programs on next page.

Step 1 -- Determine Cost of Producing Finished Animal.

(a) Original Cost Per Head _____ wt. x \$ _____ Price = _____

(b) Feed and Other Costs per Head:

<u>Feed Cost</u>	<u>Am't Fed</u>	<u>Price</u>	<u>Cost</u>
Corn (Bu.)	_____	_____	_____
Small grain (Bu.)	_____	_____	_____
Supplement (Lbs.)	_____	_____	_____
All hay (Tons)	_____	_____	_____
Silage (Tons)	_____	_____	_____
Pasture (Days)	_____	_____	_____

TOTAL FEED COSTS

Estimated other costs

Labor Cost _____ hrs./head x \$ _____ per hr. = _____

Interest \$ _____ Orig. cost/head x _____ Int. Rate for Mo.
on feed _____

Miscellaneous Costs _____ gain x \$1.10/cwt.

(c) TOTAL COST PER HEAD

Step 2 -- Determine Selling Price you need to cover costs

Divide: Total Cost per Head = _____ =
Sale weight

Step 3 -- Your estimated sale value of steer.

_____ cwt. x \$ _____ YOUR ESTIMATED PRICE _____

PROFIT PER HEAD:

EXAMPLES OF VARIOUS FEEDING PROGRAMS

Long-Fed Calves -- Good to Choice Grade

Step 1 - Determine cost of producing finished animal

(a) Original cost/head = 400# @ \$25.00 cwt.	\$100.00
(b) Feed and other costs per head: (550# gain)	

Feed Cost	Am't Fed	Price	Cost
Corn (Bu.)	48	1.15	55.20
Small grains (Bu.)	5	.55	2.75
Supplement (lbs.)	240	.04	9.60
All hay (Tons)	.75	15.00	11.25
Silage (Tons)	1.0	5.00	5.00
Pasture (Days)	55	.08	4.40

TOTAL FEED COSTS (allowing for death loss) \$88.20

Estimated other costs

Labor cost 11 hrs./head x 1.50 per hr.	\$16.50
Interest <u>\$100</u> Original cost/head x .05 =	<u>5.00</u>
Miscellaneous costs <u>550</u> gain x 1.10/cwt. =	<u>6.05</u>

(c) Total Cost per Head Total \$215.75

Step 2 - Determine Selling Price Farmer Must Receive To Cover All Costs

Total Cost Per Head 215.75 / Sale Weight 950 = 22.71

	<u>Long-Fed Yearlings</u>	<u>Short-Fed 2 yr. olds</u>
Purchase weight (#)	640	730
Gain (#)	490	330
<u>Requirements per head</u>		
Corn (bu.)	46	38
Small Grains (bu.)	2	3
Supplement (#)	250	210
All Hay (Tons)	.75	.5
Silage (Tons)	1.9	1.2
Pasture (Days)	46	20
Labor (Hours)	9	5
Interest	5-6% (10 mo.)	5-6% (6 mo.)
Misc. Costs	1.10/cwt.	1.10/cwt.

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