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EC68-837 Feeding Cattle? How Much Can You Afford to Pay?

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Feeding Cattle?



**HOW MUCH
CAN YOU
AFFORD TO PAY?**

UNIVERSITY OF NEBRASKA COLLEGE OF AGRICULTURE AND HOME ECONOMICS
EXTENSION SERVICE
AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING
E. F. FROLIK, DEAN J. L. ADAMS, DIRECTOR

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FEEDING CATTLE? HOW MUCH CAN YOU AFFORD TO PAY?

By Philip A. Henderson

Extension Agricultural Economist
(Farm Management)

A cattle feeder is a businessman and, like every other businessman, he hopes to get a reasonably good return for the use of his capital, labor and management.

As a cattle feeder planning your next year's business, you need to know as accurately as possible what you can get for your finished product and what it will cost to produce the gain. If you had this information, it would be much easier to determine the maximum price you could afford to pay for the "raw material," the feeder animal.

ESTIMATING INCOME

The \$64 question for most feeders is: "What will fat cattle bring when mine are ready to go?" Unfortunately, no one can give an exact answer to this question.

Forecasting prices is not that exact a procedure. The nature, magnitude and relative importance of factors affecting prices keep changing. Consequently, as a cattle feeder, you can only *estimate* what the price of cattle will be when you're ready to sell.

Estimates of what cattle will bring in weeks or months ahead are based on information concerning factors which affect prices. These factors can be grouped into supply and demand factors.

Supply factors include numbers of cattle on feed, numbers of cows being slaughtered, supplies of competing meats, imports of meats, weights of cattle going to market, etc.

Demand factors include population trends, employment, wage rates, per capita incomes, tax policies, income distribution, trends in consumer preferences, government purchases, exports and several others.

The demand for beef has been good during the past 10 to 15 years and most economists expect a strong demand for beef in years ahead. With stable demand conditions, week-to-week or month-to-month changes in the price of fat cattle are largely a function of changes in supply factors.

How do you interpret all of this information? How important is the number of cattle on feed compared to an increase (or decrease) in the number of hogs headed for market? Or how do imports affect prices of fed cattle?

Proper interpretation calls for a knowledge of how changes in supply or demand factors have affected prices in the past. Since the factors affecting prices are numerous, a statistical analysis is useful in interpreting market developments. This is a job for market analysts.

You may not agree with all that a particular market analyst says or thinks. If you don't, check it against what other analysts are saying and then throw in a liberal amount of your own thinking. Compare with what people in the trade think. This is the only way you can arrive at a considered estimate of what prices are likely to be when your cattle are ready to go.

The only alternatives are to play it blind, rely on hunches or hedge your cattle feeding operations.

Because of the uncertainty of prices in the future, there's a considerable amount of speculation in cattle feeding. People with small amounts of capital and credit may not be able to stand the large losses which sometimes result from unexpected drops in the price of cattle. Because of this, some people prefer to feed calves which involve less risk than feeding bigger cattle. But, there's also another way to get some protection against price variations. It's called hedging.

Hedging a cattle feeding operation involves selling one or more contracts for delivery of either 25,000 pounds (Chicago Mercantile Exchange contracts) or 27,600 pounds (Chicago Board of Trade contracts) of live steers grading choice or better at Chicago.

The Mercantile Exchange contracts call for delivery of:

Steers weighing 1050-1150 pounds with an estimated yield of 61%,
or . . .

Steers weighing 1151-1250 pounds with an estimated yield of 62%.

Board of Trade contract requirements are slightly different. They call for steers weighing 1100 to 1200 pounds with an estimated yield of 61%.

Permitted exceptions to grade, weight and yield specifications are comparatively few and of limited extent in both contracts.

Futures prices quoted in the paper are for Chicago. Omaha delivery prices would be 75¢ per cwt. less.

A hedging operation is usually started by selling one or more contracts at the same time live feeder cattle are purchased. And, although the futures contract provides for the delivery of steers to fulfill the contract, actual delivery seldom takes place. Instead, the cattle feeder simply buys an offsetting contract which has the same maturity date, thus cancelling the contract which he had previously sold.

The purchase of offsetting contracts is usually done when live

cattle are sold and must be done before the close of the last permissible business day specified by the futures contract.

Contracts are terminated in February, April, June, August, October and December. They can be purchased through brokers who are members of the Chicago Mercantile Exchange or Chicago Board of Trade at a cost of \$25. This amount covers both the sale of a contract and the purchase of an offsetting contract.

Those who buy or sell futures contracts must put up several hundred dollars as margin money when they place their first order. If the market moves against them (for the hedger, this means up), additional margin money must be put up to bring the equity in the contract back up to the minimum specified by the broker. At the conclusion of the futures operation, the hedger gets back his margin money plus or minus any profits that may be involved.

An example of how the hedging operation might have worked in 1966-67 follows: A cattle feeder who normally buys 100 yearling steers in October and sells them the following April contemplated his feeding operation for the year ahead. He looked up the price of April ('67) futures as quoted in the paper and found them to be \$27. This would mean \$26.25 at Omaha.

He can buy 700-pound steers for \$24.60 a cwt. and past experience tells him that it costs about \$107 to feed a steer out with the then-current and prospective feed prices. A little pencil pushing indicated that he could probably make about \$9.50 per head if he were assured a selling price of \$26.25. So he decides to buy the cattle and hedge his feeding operation, thinking that the hedge would assure him a selling price of close to \$26.25.¹ Here's how it worked out:

	Actual feeding operation
Sale of cattle, 99 choice steers, average 1120 lbs. @ \$23.65 in April	\$26,223
Costs, including cost of steers, feed, all other out-of-pocket costs, and labor	27,368
Return to management, and fixed resources	----- \$-1,145 (loss)
Obviously, 1966-67 was one of those years when prices went the wrong way from the cattle feeder's viewpoint.	
The transactions on the futures market were as follows:	
Sale of futures contracts (4 contracts for 25,000 lbs. each at \$27.00) in October	\$27,000

¹ If the futures price (adjusted to Omaha basis) is not high enough to indicate an income which would more than offset the probable costs involved, the cattle feeder may logically decide to leave his lots empty. If he puts cattle in the lots despite the income prospects, he is simply betting that the price of cattle will be higher than futures quotations indicate.

Less: Repurchase of contracts in April	
@ \$25.27	\$25,270
Brokerage fee (4 @ \$25)	100
Interest on broker's fee and margin	
@ 7%	46
	<hr/>
Total deductions	25,416
Net gain on futures transaction	\$1,584
Less loss on actual feeding operation	1,145
	<hr/>
Net gain on actual feeding and futures	\$ +439

The anticipated profit of \$950 was not realized but he did realize a small profit which was much better than taking the \$1,145 loss he would have had without the hedging operation.

There are at least three reasons why the hedge did not work as expected:

1. The bases (difference between Chicago and Omaha prices) changed, becoming greater than the 75¢ expected difference.
2. Costs were a little lower than the feeder had budgeted.
3. He was underhedged. His four contracts protected only 100,000 pounds of live steers, while he expected to market about 110,000–112,000 pounds. Had he used a fifth contract, he would have been overhedged. In this particular instance, this would have been to his advantage.

It is important to note that while hedging protects a feeder from the full severity of price drops, *it also prevents him from realizing all the speculative gain if the price of slaughter cattle happens to go up.* You can't have one without the other.

In other words, the cattle feeder who hedges must be willing to settle for a price approximately the same as that indicated in the futures contract he sells (adjusted to his local market) whether the price of cattle actually goes above or below this.

TWO KINDS OF COSTS

Costs of production can be divided into fixed costs and variable costs.

Fixed costs (depreciation, interest, taxes, and insurance on the improvements and equipment) do not vary with the number of cattle fed in any particular year. These costs are largely determined by the size and kind of lots and equipment used for cattle feeding. The annual costs of maintaining these facilities tend to be about the same whether facilities are used to full capacity or not. In fact, these costs would occur even if lots were left empty.

Variable costs are those which vary in proportion to the number of cattle fed. These costs include the cost of the feeder animal, feed, taxes on the animal itself, veterinary and medicine, death loss, interest on the money invested in animals, and other operating expense such as buying and selling costs.

If labor is hired specifically for cattle feeding or if the operator has alternative job opportunities, labor should also be considered as a variable cost.

In the long run, *all* costs of production must be met if the cattle feeder is to stay in business. Fences, bunks, water systems, etc., must be replaced as they wear out. But in the short run (any one bunch of cattle or in any one year), cattle prices may be such that it would be impossible to cover all costs.

There is no economic justification, however, for putting salable feed into an animal or for spending money for protein, medicine or anything else unless it is fairly certain that the income will be more than enough to cover such costs.

A break-even price (as used here) would be the amount a feeder could pay for feeder cattle and still pay all variable costs, including labor.

If a cattle feeder thinks the income from the sale of his cattle will be enough to pay for all variable costs plus a little more (but not enough to cover all fixed costs), he is financially better off to make use of lots, bunks and other facilities than to let them stand idle.

It may be, of course, that other kinds of cattle might return more for the use of these facilities than the particular kind of cattle to which he is accustomed or which he originally had in mind. If so, the use that would return the most money for the facilities and for his labor and management would be the logical choice.

If prices of feeder cattle appear high, does it seem likely that they could be bought at a lower price later on?

Will delayed marketings mean a higher or a lower sale price?

What effect would a delay in buying have on the time of marketing and expected income in relation to costs?

Would savings which might be made from a delayed purchase be offset by inability (either because of time or weather) to make use of cornstalks or other low cost roughages to cheapen gains?

ESTIMATING VARIABLE COSTS

Feed costs make up a large proportion of the total costs of feeding cattle (65-75%). The use of feeds produced on the farm helps to keep costs of gain at a minimum since no costs of hauling to the farm are involved. In addition, costs of gain can sometimes be reduced by using corn stalks, milo stubble or other by-product feeds. The

Table 1.—Guides for estimating comparative feed costs for six different kinds of cattle feeding enterprises.^a

	Corn (equiv. (bu.))	Alfalfa hay (tons)	Corn silage (or equiv.) (tons)	Protein (lbs.)	Pasture- days	Average daily gain (lbs.)
500# growthy steer calves, fed grain, 230 days on farm	63	.4	....	190	40	2.6
425# steer calves fed liberal roughage to 700# then grain; 300 days on farm	40	.3	2.5	285	40	2.1
425# steer calves fed liberal roughage, pastured, then grain; 340 days on farm	36	.25	2.4	160	120	1.8
400# heifer calves fed silage, then grain; 250 days on farm	25	.15	2.2	220	.....	1.9
650# yearling heifers fed grain, 120 days on farm	38	.2	....	100	.....	2.6
700# yearling steers fed grain, 140 days on farm	48	.2	....	140	.....	2.9

^a Provided by Paul Guyer, Extension Livestock Specialist.

alternative use value of these feeds is frequently low compared to the actual feed value.

In estimating the cost of gain during the coming feeding season, use your own figures for feed requirements if they are available. Otherwise the figures in Table 1 can be used as a guide.

Table 2.—Approximate labor requirements for various kinds and sizes of cattle feeding programs.

Kind of feeding enterprise	Number of head in lot		
	40 ¹	120 ¹	1000 ²
	Hours per animal		
500# growthy steer calves, fed grain; 230 days on farm	6⅓	4½	2¼
425# steer calves fed liberal roughage to 700# then grain; 300 days on farm	8¾	5¾	2¾
425# steer calves fed liberal roughage, pastured, then grain; 340 days on farm	9	5½	.....
400# heifer calves fed silage, then grain; 250 days on farm	8	5⅓	2⅓
650# yearling heifers fed grain, 120 days on farm	4	2¾	1¼
700# yearling steers fed grain, 140 days on farm	5	3½	1½

¹ Based on "Labor Used in Cattle Feeding," Station Bulletin 451, March 1960, by R. G. Johnson and T. R. Nodland, University of Minnesota.

² Based on "Improved Methods and Facilities for Commercial Cattle Feedlots," MRR No. 517, Transportation and Facilities Research Division, AMS, USDA, Washington 25, D.C. The 1000-head lot used a self-mixing, self-unloading truck method of feeding.

Similarly, in estimating labor costs, you should use your own figures if you know what they are. If not, the figures in Table 2 can be used as a guide for estimating labor costs.

The amounts of labor required to handle 250 or 500 head under each of these specific kinds of cattle feeding operations are not available. But data obtained in a survey of cattle feeders in eastern Nebraska indicate that most of the potential gain in labor efficiency is achieved by feeders who handle as few as 200 head at a time. Labor requirements were slightly under 1 hour per cwt. of gain for these feeders. Additional labor savings (on a per head basis) were comparatively small as the number of cattle fed increased.

A method for determining the maximum price that could be paid for feeder cattle if all variable costs are to be covered is shown in the example budget which follows. The costs used in this example are not intended to fit any particular feeding operation and must be adjusted to reflect your situation. Space is provided for this purpose.

Income and Credits

Your Figures

Sale of finished animal

1,135 # @ \$27.00 = \$306.45

Value of Manure recovered

2.5 tons² @ 2.40 = 6.00

Total \$312.45

Variable Costs

Feed Costs

48 bu. corn @ 1.10³ = 52.80

140# protein @ 4.50 = 6.30

0.2 T. alfalfa @ \$20 = 4.00

\$63.10

Marketing costs

1,135 # @ 60¢/cwt. 6.81

Cost of buying feeder

Commission 2.00

Vaccination .50

Trucking 1.00

3.50

Labor

5 hours @ \$1.50 7.50

² Assumes that only about 1/3 of manure produced is actually salvaged. No value was included for potash or organic matter content.

³ For purchased feed use the price delivered to the farm. For home produced feed use the cash value at the farm.

Taxes	2.39	_____
Interest on feed		
\$63.10 140 days @ 7%	.85	
_____ x _____		
2 365 days		_____
Miscellaneous variable costs per day		
Veterinary	\$.002	
Salt and Min.	.002	
Rep. and Misc.	.006	
	<u>\$.010 x 140 days = \$1.40</u>	_____
Total variable non-feeder costs other than death loss and interest on animal	\$85.55	_____
Amount left to cover (1) death loss, (2) interest on investment in animal, and (3) cost of animal		
\$312.45 minus \$85.55)	\$226.90	_____
Amount available for purchase of animal ⁴ —	\$218.80	_____
Maximum (break-even) price per cwt., that can be paid if all <i>variable</i> costs (including death loss and interest on animal investment) are to be met		
\$218.80		
	<u>\$31.26 per cwt.</u>	
700 lb. (purchase wt.)		_____
Fixed costs		
\$1-4/cwt. original wt.		
Profit margin \$.70-1.50/cwt. original wt.		
Break-even price, fixed costs and profit margin considered	\$25-29	

In the tables which follow, the maximum prices that could be paid for feeder cattle have been calculated by the method illustrated using the quantities of feed and labor indicated in the preceding tables.

⁴ The 226.90 must be divided between the three items as follows:

Interest for 140 days = $\frac{140}{365} \times 7\% = 2.7\%$	
Death loss	1.0
Cost of feeder	100.0
Total	<u>103.7</u>
\$226.90	
<u>103.7</u> = \$218.80	

To illustrate how the tables can be used, let's assume that your feeding operation is similar to the first (Table 1) and you expect to get \$26.00 a hundred for your finished cattle. Your feed costs are estimated at \$16 per hundred pounds of gain and you will be feeding approximately 120 head.

On the basis of these anticipated costs and returns, the maximum price which you could pay for 500-pound steer calves of good to choice grade would be \$32.72 (Table 1, \$26 slaughter price column, 5th line down). This would permit you to pay variable costs comparable to those shown in the example budget *but it would not allow for anything to cover fixed costs or profits.*

Annual charges for fixed investments may amount to as much as \$1 to \$4 per cwt. of gain. They vary considerably from one situation to another, depending on the kind of feeding facilities and the number of cattle fed. The higher the investment in lots and equipment per steer, the higher the annual fixed costs will be.

Highly mechanized operations have higher fixed costs but smaller labor requirements; in order to keep these fixed costs at a minimum (per hundred pounds of beef produced), it is important that such facilities be fully used.

Allowances for fixed costs (based on an investment of \$60 to \$90 per steer capacity) and profits are shown at the bottom of each chart.

Table 1—Approximate break-even prices for 500# good to choice growthy steer calves fed liberal grain, 230 days on farm, sold at 1100# and choice grade with various slaughter prices, feed costs, and numbers of head per lot when all variable costs (including 2% death loss, interest at 7% per year and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$12.00	\$28.56	\$32.69	\$36.82	\$40.95	\$45.08
	16.00	23.95	28.08	32.21	36.34	40.47
	20.00	19.34	23.47	27.60	31.73	35.86
120	\$12.00	\$29.07	\$33.20	\$37.33	\$41.46	\$45.59
	16.00	24.46	28.59	32.72	36.85	40.98
	20.00	19.85	23.98	28.11	32.24	36.37
1000	\$12.00	\$29.71	\$33.84	\$37.97	\$42.10	\$46.23
	16.00	25.10	29.23	33.36	37.49	41.62
	20.00	20.49	24.62	28.75	32.88	37.01

Fixed costs. In order to allow for fixed costs (assuming a moderate investment of \$60–90 per steer capacity) deduct \$1.10 to \$1.50 from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$2 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$3.10 to \$3.50, i.e., 28.56 = 25.46 or 25.06.

Table 2—Approximate break-even prices for 425# good to choice steer calves fed liberal roughage to 700# then grain; 300 days on farm, sold at 1055# and choice grade with various slaughter prices, feed costs, and numbers of head per lot when all variable costs (including 2% death loss, interest at 7% per year, and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$12.00	\$29.22	\$33.82	\$38.42	\$43.02	\$47.62
	16.00	23.55	28.15	32.75	37.35	41.95
	20.00	17.88	22.48	27.08	31.68	36.28
120	\$12.00	\$30.20	\$34.80	\$39.40	\$44.00	\$48.60
	16.00	24.53	29.13	33.73	38.33	42.93
	20.00	18.86	23.46	28.06	32.66	37.26
1000	\$12.00	\$31.18	\$35.78	\$40.38	\$44.98	\$49.58
	16.00	25.51	30.11	34.71	39.31	43.91
	20.00	19.84	24.44	29.04	33.64	38.24

Fixed costs. In order to allow for fixed costs (assuming a moderate investment of \$60-90 per steer capacity) deduct \$1.90 to \$2.75 from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$2.35 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$4.25 to \$5.10, i.e., $29.22 = 24.97$ or 24.12 .

Table 3—Approximate break-even prices for 425# good to choice steer calves fed liberal roughage, pastured, then grain; 340 days on farm, sold at 1035# and choice grade with various slaughter prices, feed costs, and numbers of head per lot when all variable costs (including 2% death loss, interest at 7% per year, and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$12.00	\$28.39	\$32.88	\$37.37	\$41.86	\$46.35
	16.00	22.93	27.42	31.91	36.40	40.89
	20.00	17.46	21.95	26.44	30.93	35.42
120	\$12.00	\$29.52	\$34.01	\$38.50	\$42.99	\$47.48
	16.00	24.06	28.55	33.04	37.53	42.02
	20.00	18.60	23.09	27.58	32.07	36.56

Fixed costs. In order to allow for fixed costs (assuming a moderate investment of \$60-90 per steer capacity) deduct \$1.90 to \$2.75 from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$2.35 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$4.25 to \$5.10, i.e., $28.39 = 24.14$ or 23.29 .

Table 4—Approximate break-even prices for 400# good to choice heifer calves fed silage, then grain; 250 days on farm, sold at 875# and choice grade with various slaughter prices, feed costs and numbers of head per lot when all variable costs (including 2% death loss, interest at 7% per year, and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$12.00	\$27.25	\$31.34	\$35.43	\$39.52	\$43.61
	16.00	22.70	26.79	30.88	34.97	39.06
	20.00	18.14	22.23	26.32	30.41	34.50
120	\$12.00	\$28.18	\$32.27	\$36.36	\$40.45	\$44.54
	16.00	23.63	27.72	31.81	35.90	39.99
	20.00	19.08	23.17	27.26	31.35	35.44
1000	\$12.00	\$29.24	\$33.33	\$37.42	\$41.51	\$45.60
	16.00	24.68	28.77	32.86	36.95	41.09
	20.00	20.13	24.42	28.31	32.40	36.49

Fixed Costs. In order to allow for fixed costs (assuming a moderate investment of \$60–90 per steer capacity) deduct \$1.50 to \$2.20 from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$2.50 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$4.00 to \$4.70, i.e., 27.25 = 23.25 or 22.55.

Table 5—Approximate break-even prices for 650# good to choice yearling heifers fed grain intensively 120 days on farm, sold at 960# and choice grade with various slaughter prices, feed costs, and numbers of head per lot when all variable costs (including 1% death loss, interest at 7% per year, and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$12.00	\$23.99	\$26.85	\$29.71	\$32.57	\$35.43
	16.00	22.12	24.98	27.84	30.70	33.56
	20.00	20.25	23.11	25.97	28.83	31.69
120	\$12.00	\$24.27	\$27.13	\$29.99	\$32.85	\$35.71
	16.00	22.40	25.26	28.12	30.98	33.84
	20.00	20.53	23.39	26.25	29.11	31.97
1000	\$12.00	\$24.60	\$27.46	\$30.32	\$33.18	\$36.04
	16.00	22.73	25.59	28.45	31.31	34.17
	20.00	20.86	23.72	26.58	29.44	32.30

Fixed costs. In order to allow for fixed costs (assuming a moderate investment of \$60–90 per heifer capacity) deduct 40¢ to 60¢ from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$1.50 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$1.90 to \$2.10, i.e., 23.99 = 22.09 or 21.89.

Table 6—Approximate break-even prices for 700# good to choice yearling steers fed grain intensively 140 days on farm, sold at 1100# and choice grade with various slaughter prices, feed costs, and numbers of head per lot when all variable costs (including 1% death loss, interest at 7% per year and wages at \$1.50 per hour) are covered.

Number of head being fed	Feed cost per cwt. of gain	Slaughter prices per cwt.				
		\$22	\$24	\$26	\$28	\$30
Break-even feeder price per cwt.						
40	\$16.00	\$23.30	\$26.43	\$29.56	\$32.69	\$35.82
	20.00	21.08	24.21	27.34	30.47	33.60
	24.00	18.85	21.98	25.11	28.24	31.37
120	\$16.00	\$23.61	\$26.74	\$29.87	\$33.00	\$36.13
	20.00	21.39	24.52	27.65	30.78	33.91
	24.00	19.16	22.29	25.42	28.55	31.68
1000	\$16.00	\$24.02	\$27.15	\$30.28	\$33.41	\$36.54
	20.00	21.80	24.93	28.06	31.19	34.32
	24.00	19.57	22.70	25.83	28.96	32.09

Fixed costs. In order to allow for fixed costs (assuming a moderate investment of \$60–90 per steer capacity) deduct 45¢ to 65¢ from the above prices.

Profit margin. The above figures allow for a 7% return to capital and \$1.50 an hour for labor. But if you wish to realize an actual profit of approximately \$10 per head, the above prices would need to be reduced by another \$1.50 per cwt.

Fixed costs and profit. Thus if allowances are made for both fixed costs and profits, the figures in the above table should be reduced by \$1.95 to \$2.15, i.e., 23.30 = 21.35 or 21.15.