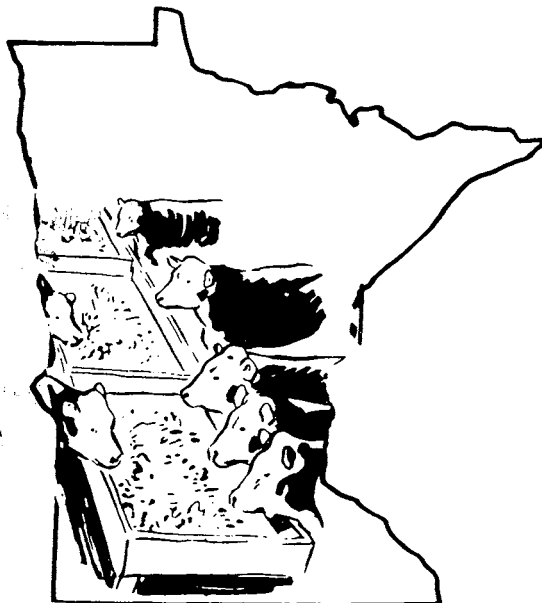


Cattle Feeder's Planning Guide



Should I Feed Cattle

The average Minnesota cattle feeder lost money feeding cattle during the past decade. Many quit feeding--especially after the losses of the 1974-77 period, and again after the losses of 1980 and 1981. Timing of purchases and sales has been a significant factor affecting returns. In general, cattle feeders who marketed most of their cattle in the second or third quarter of the year have survived; while those who normally sold in the lower priced fall-winter period suffered severe losses.

Looking to the future, cattle feeding will likely continue to show very low returns to average or below average feeders (see long-run budgets). Therefore, cattle feeding can't compete with other enterprises for resources on Minnesota farms unless the following location, resource and management conditions are met:

- LOCATION - In areas with surplus feedgrains.
- RESOURCES - Where the farmer is in a strong capital position.
- Where feedgrain supplies are large while labor available for livestock is small.
- MANAGEMENT - Able to limit feed conversion to 650 pounds of dry matter per cwt. of gain on calves and 675 pounds per cwt. of gain on yearlings.
- Have above average marketing ability. Unless the buy-upgrade-sell ability is average or better, as evidenced by the value produced per cwt. of gain, the cattle feeding enterprise could well be a money loser because of continued strong competition from commercial feedlots.

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INSTRUCTIONS

VALUE PRODUCED FOR CWT. OF GAIN is a very important marketing skill measure in cattle feeding. To analyze past performance in buying, upgrading and selling, use tax and production records to determine the average value produced per hundredweight of beef produced. For each feeding year, subtract the cost of the feeders from the total value of sales (see line 4 of schedule F of your farm tax return) plus the value of any butchered animals to determine the total value of beef produced. Then determine the total hundredweight of beef produced from purchase and sale records and divide this into the total value produced to obtain the value produced per cwt. of gain. This margin will vary each year with cattle prices (also, a larger one is needed when production costs are higher, so an individual must compare his figures with those obtained by other cattle feeders in farm record keeping groups--see extension agent, ag instructor or creditor).

With corn at \$2.60 to \$2.75 per bushel, we are suggesting a long run planning value produced figure of \$60 to \$64 for calves and \$65 to \$67 for yearlings. These margins must increase a dollar for each 10¢ increase in corn prices to cover added costs.

VARIABLE CASH COSTS PER HEAD - Use lot records and copies of income tax returns to estimate cash costs incurred by the cattle feeding operation.

RETURN OVER VARIABLE CASH COSTS is a figure that can be useful in financial planning when combined with cash flow projections from other enterprises.

COST OF HOME PRODUCED RESOURCES - Bedding requirements vary greatly by type of housing and management practices. Fertility value of manure will range from 50¢ to \$1 per cwt. of beef produced depending upon manure management systems. The feed requirements below are based on feed--if actually weighed--to the cattle and assume an effective implant (growth promotant) is maintained in the cattle throughout the feeding period and an ionophore (Bovatec or Rumensin) is fed continuously to steers and either an ionophore or MGA fed continuously to heifers. If implants and feed additives are not part of cattle management at least 15 percent more feed would be required per unit of gain.

	Calf 450-1050# (Fed High Forage To 700#)		Steer 700-1100#		Heifer Calf 400-950#	Heifer Yearling 600-1000#
Corn equivalent, bu.	41	56	42	46	36	47
Corn silage, 35% DM/ton	2.3	--	.6	--	2.6	.62
Hay, tons	--	.52	--	.15	--	--
Protein, lbs.	250	250	130	130	280	154
Feed/cwt. of gain, lbs. DM	630	635	640	645	690	710

Note: In calculating the budget costs shown on the next page, a 5 percent wastage-spoilage factor is added to corn and about 15 percent to forage needs.

FEED COSTS PER CWT. OF GAIN is the important production efficiency measure in cattle feeding. Use the market value of home produced feeds plus all purchased feeds when figuring this. This figure can become too high because of poor feed conversion, wastage and spoilage, or high feed prices. An annual comparison should be made with the feed costs of other cattle feeders with similar feeding programs.

RETURN TO LABOR AND FACILITIES over direct operating costs can be used in making cash flow projections. **RETURNS** over the market value of feed show how much farm earnings would decline if cattle feeding is discontinued, the feed is sold at prices used, and facilities and labor are not used for anything else. This is the amount available for facility payments and other overhead costs, including pay to the operator.

COSTS AND RETURNS PER HEAD - LONG RANGE

	<u>STEER CALVES</u>		<u>STEERS</u>	<u>MY ESTIMATES</u>	
	<u>Typical Management</u>	<u>Good Management</u>	<u>Typical</u>	<u>Per Head</u>	<u>Total</u>
GROSS RETURNS PER HEAD BOUGHT					
Buy-sell weights (pounds)	425 - 1,025	450 - 1,050	700 - 1,100		
Sales value	-----variable-----				
Feeder cost	-----variable-----				
Value produced per cwt of gain	\$ 60	\$ 63	\$ 66		
Value produced per head sold	360	378	264		
(line 4, schedule F, from 1040 + head bought)					

VARIABLE CASH COSTS PER HEAD - Number in () is the line number, schedule F, IRS from 1040 (1984)

Labor hired (32, 51, 52)	\$ 8	\$ 8	\$ 5		
Repairs, maintenance (33)	10	10	7		
Interest on cattle (34)	42	42	30		
Interest on operating (34)	8	8	7		
Feed purchased - protein (36)	32	30	20		
- salt & mineral (36)	5	5	4		
Machine hire & supplies (39, 40)	4	4	3		
Veterinary and medicine (42)	7	8	4		
Fuel and oil (43)	6	6	5		
Insurance (46)	4	4	3		
Utilities (47)	7	7	5		
Freight and trucking (48)	15	16	18		
Other (54)	2	2	1		
Total cash costs	150	150	112		
RETURN OVER VARIABLE CASH COSTS	216	228	152		

SALES VALUE OF HOME PRODUCED FEED

Hay (.6 ton & .17 ton @ \$60 per ton)	\$ 36	\$ --	\$ 10		
Grain (59, 43 & 48 bu of corn @ \$2.65/bu)	156	114	127		
Corn silage (2.5 ton @ \$22 per ton)	--	56	--		
Total value of home raised feed	192	170	137		
Feed costs per cwt of gain	38	34	40		
Return over feed costs per cwt of gain	22	29	26		
Cash nonfeed costs per cwt of gain	19	19	22		
RETURN TO LABOR AND FACILITIES PER HEAD					
Over variable livestock costs & sales value of crops	18	58	15		

COMPUTER DECISION AIDS
EXTENSION FARM MANAGEMENT
(c) AGRI. EXTENSION SERVICE
UNIVERSITY OF MINNESOTA

AGRICULTURAL ECONOMICS PROGRAM:
CATTLE FEEDING BUDGET
RESULTS FOR: 1985 Steer Calves
01/10/85

BUDGET FOR STEER CALF
USING STANDARD RATION NUMBER 1

	HEAD	CWT GAIN
PERFORMANCE:		
PURCHASE WEIGHT, LBS	450.	
SELLING WEIGHT, LBS	1050.	
TOTAL GAIN, LBS	600.	
AVERAGE DAILY GAIN, LBS	2.20	
DAYS ON FEED	273.	
VALUE PRODUCED:		
SALE VALUE AT \$ 65.00 /CWT.....	682.50	
PURCHASE COST AT \$ 70.00 /CWT	315.00	
GROSS MARGIN	367.50	61.25
FEED REQUIREMENTS AND COSTS:		
CORN 64.00 BU AT \$ 2.60	166.40	27.73
HAY 0.50 TON AT \$ 66.00	33.00	5.50
PROTSUP 270 LBS AT \$ 10.00/CWT	27.00	4.50
MINERAL 40 LBS AT \$ 12.00/CWT	4.80	0.80
TOTAL FEED COST	231.20	38.53
OPERATING COSTS:		
INTEREST ON ANIMALS (14.0 PERCENT) ..	32.95	5.49
DEATH LOSS (1.8 PERCENT)	6.35	1.06
SELLING AND BUYING COSTS	16.00	2.67
VET. & MEDICINE.....	7.00	1.17
SUPPLIES	4.00	0.67
REPAIRS AND MAINTANENCE	10.00	1.67
UTILITIES, FUEL, HIRED LABOR,INS.....	17.00	2.83
INTEREST ON FEED AND OPERATING COSTS.	8.00	1.33
TOTAL OPERATING COSTS	101.30	16.88
TOTAL FEED & OPERATING COSTS	332.50	55.42
BUDGETED RETURN TO LABOR & FACILITIES..	35.00	5.83

RETURN PER HEAD FOR LABOR & FACILITIES WITH DIFFERENT PRICES

SELLING PRICE/CWT	WHEN PURCHASE COST PER CWT IS:				
	62.00	66.00	70.00	74.00	78.00
61.00	33.48	13.24	-7.00	-27.25	-47.49
63.00	54.48	34.24	14.00	-6.25	-26.49
65.00	75.48	55.24	35.00	14.75	-5.49
67.00	96.48	76.24	56.00	35.75	15.51
69.00	117.48	97.24	77.00	56.75	36.51

BREAK EVEN SELLING PRICES THAT WILL COVER FEED, OPERATING AND \$ 45.00 RETURN FOR LABOR AND FACILITIES

PURCHASE PRICE/CWT	WHEN CORN PRICE PER BU IS:				
	2.08	2.34	2.60	2.86	3.12
62.00	58.93	60.51	62.10	63.68	65.27
66.00	60.86	62.44	64.03	65.61	67.19
70.00	62.78	64.37	65.95	67.54	69.12
74.00	64.71	66.30	67.88	69.47	71.05
78.00	66.64	68.22	69.81	71.39	72.98

NOTE: TO COVER ONLY FEED AND OPERATING COSTS SUBTRACT \$ 4.29

COMPUTER DECISION AIDS
EXTENSION FARM MANAGEMENT
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AGRICULTURAL ECONOMICS PROGRAM:
CATTLE FEEDING BUDGET
RESULTS FOR: 1985 YEARLINGS
01-10-1985 FEEDLOT MINN

BUDGET FOR STEER YEARLING
USING STANDARD RATION NUMBER 3

	HEAD	CWT GAIN
PERFORMANCE:		
PURCHASE WEIGHT, LBS	700.	
SELLING WEIGHT, LBS	1150.	
TOTAL GAIN, LBS	450.	
AVERAGE DAILY GAIN, LBS	2.40	
DAYS ON FEED	188.	
VALUE PRODUCED:		
SALE VALUE AT \$ 67.00 /CWT.....	770.50	
PURCHASE COST AT \$ 65.00 /CWT	455.00	
GROSS MARGIN	315.50	70.11
FEED REQUIREMENTS AND COSTS:		
CORN 60.00 BU AT \$ 2.60	156.00	34.67
HAY 0.30 TON AT \$ 66.00	19.80	4.40
PROTSUP 180 LBS AT \$ 10.00/CWT	18.00	4.00
MINERAL 30 LBS AT \$ 12.00/CWT	3.60	0.80
TOTAL FEED COST	197.40	43.87
OPERATING COSTS:		
INTEREST ON ANIMALS (14.0 PERCENT) ..	32.72	7.27
DEATH LOSS (0.8 PERCENT)	3.96	0.88
SELLING AND BUYING COSTS	19.00	4.22
VET. & MEDICINE.....	4.00	0.89
SUPPLIES	3.00	0.67
REPAIRS AND MAINTANENCE	7.00	1.56
UTILITIES, FUEL, HIRED LABOR,INS.....	13.00	2.89
INTEREST ON FEED AND OPERATING COSTS.	7.00	1.56
TOTAL OPERATING COSTS	89.68	19.93
TOTAL FEED & OPERATING COSTS	287.08	63.80
BUDGETED RETURN TO LABOR & FACILITIES..	28.42	6.32

RETURN PER HEAD FOR LABOR & FACILITIES WITH DIFFERENT PRICES

SELLING PRICE/CWT	WHEN PURCHASE COST PER CWT IS:				
	57.00	61.00	65.00	69.00	73.00
63.00	42.93	12.67	-17.58	-47.83	-78.09
65.00	65.93	35.67	5.42	-24.83	-55.09
67.00	88.93	58.67	28.42	-1.83	-32.09
69.00	111.93	81.67	51.42	21.17	-9.09
71.00	134.93	104.67	74.42	44.17	13.91

BREAK EVEN SELLING PRICES THAT WILL COVER FEED, OPERATING AND \$ 25.00 RETURN FOR LABOR AND FACILITIES

PURCHASE PRICE/CWT	WHEN CORN PRICE PER BU IS:				
	2.08	2.34	2.60	2.86	3.12
57.00	58.73	60.08	61.44	62.80	64.15
61.00	61.36	62.72	64.07	65.43	66.78
65.00	63.99	65.35	66.70	68.06	69.42
69.00	66.62	67.98	69.33	70.69	72.05
73.00	69.25	70.61	71.96	73.32	74.68

NOTE: TO COVER ONLY FEED AND OPERATING COSTS SUBTRACT \$ 2.17

