

EBB-FL1-02

**Idaho Cattle Feedlot
Calf to Slaughter; Concentrate Ration**



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Background and Assumptions

This budget presents both the average costs and returns per head and the total costs and returns for a typical 5,000-head cattle feedlot operation. Steers and heifers come into the program at 500 and 425 pounds, respectively, and are fed through to 1,100 and 1,025 pounds.

Estimates of the percentage of steers to heifers placed on feed were obtained through the Idaho Crop and Livestock Reporting Service. Sixty-five percent of animals on feed are steers and 35 percent are heifers. The capacity of the feedlot is 5,000 head but is used at only 65 percent of capacity. The percentage of capacity used represents the utilization only for the period of time cattle are on feed. Cattle are fed throughout the year. The turnover rate is 1.80, meaning that 1.80 groups of cattle are cycled through the feedlot annually. This translates into about 5,850 animals being fed annually.

The machinery and equipment investments are relatively complete. The operation uses two feed trucks with mixer boxes, two front-end loaders, two 2-ton trucks, and a ½-ton pickup. The farm has 6,000 lineal feet of feed bunk-space, 10,000 feet of fence, a water system (two wells, 6-inch diameter, 100 feet deep with pump), working facilities, feed processing and storage facilities, shop and machinery storage, and office, scale and scale house.

The feed program is implemented in two stages. For the first 120 days, calves are fed a grower ration that is described in the table in the next column.

Steer performance over the 120-day period is 2.5 pounds per day with a consumption of 17.44 pounds of dry matter per day.

Grower Ration

Commodity	Total dry matter (lb)	Total feed (lb)	Daily feed (lb)
Hay	190	214	1.78
Silage	433	1,405	11.71
Alfalfa haylage	359	1,153	9.61
Potato waste	120	857	7.14
Grain	933	1,048	8.73
Protein, min., vit.	58	86	.72
Total	2,093	4,763	39.69

Cost per ton of grower ration = \$49.67¹

In the second stage, cattle are fed a finish ration for 100 days. The steers are started on finish ration at about 800 pounds and are fed through to 1,100 pounds. The finish ration consists of the same ingredients as the grower ration but fed in different quantities. During the finish stage, animals gain an average of 3.0 pounds per day. Average daily gain (ADG) for heifers is approximately 80 percent of ADG by steers, and feed consumed by heifers is approximately 90 percent of feed consumed by steers.

Finish Ration

Commodity	Total dry matter (lb)	Total feed (lb)	Daily feed (lb)
Hay	126	141	1.41
Silage	85	277	2.77
Potato waste	418	2,988	29.88
Grain	1,250	1,404	14.04
Protein, min., vit.	73	109	1.09
Total	1,952	4,919	49.19

Cost per ton of grower ration = \$48.09

Labor for this operation is provided by three full-time and three part-time employees, and valued at \$11.50 and \$8.50 per hour, respectively. Labor is also provided by the owner and valued at \$8.50 per hour. Veterinary supplies and services include the cost of implants to promote cattle growth.

¹ Prices on all ration ingredients are estimates for the 2002 crop year. The price estimates reflect the feed purchase price plus transportation costs

**Table1: Feedlot Budget - 5000 Head
Calf to Slaughter
Concentrate Ration**

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	Weight Each	Unit	Total Number of Head or Units	Price or Cost/Unit	Total Value	Value or Cost/Head	Your Value
1. Gross Receipts							
Steers	11.00	cwt	3764	69.00	2,856,876.00	488.35	_____
Heifers	10.25	cwt	2027	66.00	1,371,265.50	234.40	_____
Total Receipts					\$4,228,141.50	\$722.76	_____
2. Operating Costs							
Grower ration		ton	13,444.94	49.67	667,809.97	114.16	_____
Finish ration		ton	13,884.06	48.09	667,684.55	114.13	_____
Steers		head	3802.00	430.00	1,634,860.00	279.46	_____
Heifers		head	2048.00	344.00	704,512.00	120.43	_____
Marketing		head	5791.00	14.45	83,679.95	14.30	_____
Veterinary Medicine		\$	61,029.06	1.00	61,029.06	10.43	_____
Machinery (fuel, lubrication, repair)		\$	8284.42	1.00	8284.42	1.42	_____
Vehicles (fuel, repair)		\$	25,726.00	1.00	25,726.00	4.40	_____
Equipment (repair)		\$	0.00	1.00	0.00	0.00	_____
Housing and Improvements (repair)		\$	53,816.70	1.00	53,816.70	9.20	_____
Hired Labor		hour	10,080.00	10.43	105,120.00	17.97	_____
Owner Labor		hour	1920.00	8.50	16,320.00	2.79	_____
Interest on Operating Capital		\$	2,132,632.66	0.06	133,289.54	22.78	_____
Total Operating Costs					\$4,162,132.19	\$711.48	_____
3. Income Above Operating Costs					\$66,009.31	\$11.28	_____
4. Ownership Costs							
Capital Recovery:							
Purchased Livestock		\$	0.00	1.00	0.00	0.00	_____
Housing and Improvements		\$	81,047.95	1.00	81,047.95	13.85	_____
Machinery		\$	12,305.03	1.00	12,305.03	2.10	_____
Equipment		\$	4410.05	1.00	4410.05	0.75	_____
Vehicles		\$	35,955.13	1.00	35,955.13	6.15	_____
Interest on Retained Livestock		\$	0.00	0.07	0.00	0.00	_____
Taxes and Insurance		\$	5522.52	1.00	5522.52	0.94	_____
Overhead		\$	98,500.00	1.00	98,500.00	16.84	_____
Total Ownership Costs					\$237,740.68	\$40.64	_____
5. Total Costs					\$4,399,872.87	\$752.12	_____
6. Returns to Risk and Management					-\$171,731.37	-\$29.36	_____

Table 2: Monthly Summary of Returns and Expenses.**EBB-FL1-02**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Value
Production:													
Steers									2856876				2856876
Heifers									1371266				1371266
Total Receipts	0	0	0	0	0	0	0	0	4228142	0	0	0	4228142
Operating Inputs:													
Grower ration		166952	166952	166952	166952								667810
Finish ration						190764	190764	190764	95391				667685
Steers	1634860												1634860
Heifers	704512												704512
Marketing	83680												83680
Veterinary Medicine	21600	8541		12146	14296	4446							61029
Machinery (Fuel,Lube,Repair)	690	690	693	690	690	690	690	690	690	690	690	690	8284
Vehicles (Fuel and Repair)	2143	2143	2153	2143	2143	2143	2143	2143	2143	2143	2143	2143	25726
Equipment (Repair)													0
Housing, Improvements (Repair)	4483	4483	4504	4483	4483	4483	4483	4483	4483	4483	4483	4483	53817
Taxes and Insurance				5523									5523
Hired Labor	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	105120
Total Costs	2460728	191569	183064	200697	197324	211286	206840	206840	111467	16076	16076	16076	4018045
Net Returns	-2460728	-191569	-183064	-200697	-197324	-211286	-206840	-206840	4116674	-16076	-16076	-16076	210096

Table 3: Monthly Feed Requirements.

Feed	Units	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Grower ration													
Steers	ton	0	2264	2264	2264	2264	0	0	0	0	0	0	0
Heifers	ton	0	1098	1098	1098	1098	0	0	0	0	0	0	0
Finish ration													
Steers	ton	0	0	0	0	0	2672	2672	2672	1336	0	0	0
Heifers	ton	0	0	0	0	0	1295	1295	1295	648	0	0	0

Table 4: Investment Summary.**EBB-FL1-02**

	Purchase Price	Salvage/Cull Value	Livestock Share	Useful Life	Annual Taxes and Insurance	Annual Capital Recovery ¹
Buildings, Improvements and Equipment						
Pens and lots	\$252,000.00	\$25,200.00	100	15	\$831.60	\$26,210.66
Working facilities	\$13,000.00	\$1300.00	100	15	\$42.90	\$1352.14
Buildings	\$96,000.00	\$9600.00	100	25	\$316.80	\$7895.83
Feed processing/storage	\$433,000.00	\$43,300.00	100	20	\$1428.90	\$38,995.99
Water system	\$13,000.00	\$1300.00	100	20	\$42.90	\$1170.78
Truck and Livestock Scales	\$70,000.00	\$7000.00	100	30	\$231.00	\$5422.55
Misc. tools and equip.	\$42,400.00	\$4240.00	100	15	\$139.92	\$4410.05
Total	\$919,400.00				\$3034.02	\$85,457.99
Purchased Livestock						
Total	\$0.00					\$0.00
Retained Livestock						
Total	\$0.00					\$0.00²
Machinery and Vehicles						
Frontend loader	\$124,000.00	\$27,000.00	100	15	\$453.00	\$12,305.03
Feed truck	\$54,000.00	\$10,800.00	100	8	\$486.00	\$8257.86
Feed truck	\$54,000.00	\$10,800.00	100	8	\$486.00	\$8257.86
Truck 2 ton	\$46,600.00	\$9300.00	100	8	\$419.25	\$7128.36
Truck 2 ton	\$46,600.00	\$9300.00	100	8	\$419.25	\$7128.36
Pickup 1/2 ton	\$25,000.00	\$5000.00	100	5	\$225.00	\$5182.71
Total	\$350,200.00				\$2488.50	\$48,260.16

¹ Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

² Interest on average investment.

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