

**Idaho Cattle Feedlot
Yearling 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 5,000-head cattle feedlot operation. Yearling steers come into the program at 800 pounds and are fed through to 1,200 pounds finish weight. Heifers are placed on feed at 680 pounds and fed through to 1,075 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 2.50, meaning that 2.50 groups of cattle are cycled through the feedlot annually. This translates into about 8,125 animals being fed annually.

Typically, most feedlot operations buy and sell cattle on a regular basis throughout the year. However, to simplify matters, it was assumed in this budget that feeder cattle are purchased in April and August, then fattened and sold in September and January, respectively.

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 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, scales and scale house.

During the feeding program, steers are fed for 130 days and gain an average of 3.08 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. Cattle are fed a ration consisting of the following ingredients:

Finish Ration

Commodity	Total dry matter (lb)	Total feed (lb)	Daily feed (lb)
Hay	163	183	1.41
Silage	110	360	2.77
Potato waste	543	3,884	29.88
Grain	1,625	1,825	14.04
Protein, min., vit.	18	26	0.20
Total	2,459	6,278	48.30
Cost per ton of grower ration = \$48.09 ¹			

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 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
Yearling to Slaughter
Concentrate Ration**

EBB-FL2-02

	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	12.00	cwt	5254	69.00	4,350,312.00	535.42	_____
Heifers	10.75	cwt	2830	66.00	<u>2,007,885.00</u>	<u>247.12</u>	_____
Total Receipts					\$6,358,197.00	\$782.55	_____
2. Operating Costs							
Finish ration		ton	25,704.17	48.09	1,236,113.44	152.14	_____
Steers		head	5281.00	576.00	3,041,856.00	374.38	_____
Heifers		head	2844.00	456.00	1,296,864.00	159.61	_____
Marketing		head	8084.00	15.65	126,514.60	15.57	_____
Veterinary Medicine		\$	12,350.00	1.00	12,350.00	1.52	_____
Machinery (fuel, lubrication, repair)		\$	8284.42	1.00	8284.42	1.02	_____
Vehicles (fuel, repair)		\$	25,726.00	1.00	25,726.00	3.17	_____
Equipment (repair)		\$	0.00	1.00	0.00	0.00	_____
Housing and Improvements (repair)		\$	56,149.80	1.00	56,149.80	6.91	_____
Hired Labor		hour	10,080.00	10.43	105,120.00	12.94	_____
Owner Labor		hour	1920.00	8.50	16,320.00	2.01	_____
Interest on Operating Capital		\$	2,075,423.64	0.06	<u>129,713.98</u>	<u>15.96</u>	_____
Total Operating Costs					\$6,055,012.24	\$745.23	_____
3. Income Above Operating Costs					\$303,184.76	\$37.32	_____
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	9.98	_____
Machinery		\$	12,305.03	1.00	12,305.03	1.51	_____
Equipment		\$	4410.05	1.00	4410.05	0.54	_____
Vehicles		\$	35,955.13	1.00	35,955.13	4.43	_____
Interest on Retained Livestock		\$	0.00	0.07	0.00	0.00	_____
Taxes and Insurance		\$	5522.52	1.00	5522.52	0.68	_____
Overhead		\$	145,947.00	1.00	<u>145,947.00</u>	<u>17.96</u>	_____
Total Ownership Costs					\$285,187.68	\$35.10	_____
5. Total Costs					\$6,340,199.91	\$780.33	_____
6. Returns to Risk and Management					\$17,997.09	\$2.22	_____

Table 2: Monthly Summary of Returns and Expenses.**EBB-FL2-02**

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Value
Production:													
Steers						2175156				2175156			4350312
Heifers						1003943				1003943			2007885
Total Receipts	0	0	0	0	0	3179099	0	0	0	3179099	0	0	6358197
Operating Inputs:													
Finish ration		154514	154514	154514	154514	154514	154514	154514	154514				1236113
Steers	1521216					1520640							3041856
Heifers	648432					648432							1296864
Marketing							126515						126515
Veterinary Medicine		6175					6175						12350
Machinery (Fuel,Lube,Repair)	690	690	690	690	690	690	690	690	693	690	690	690	8284
Vehicles (Fuel and Repair)	2143	2143	2143	2143	2143	2143	2143	2143	2153	2143	2143	2143	25726
Equipment (Repair)													0
Housing, Improvements (Repair)	4679	4679	4679	4679	4679	4679	4679	4679	4679	4679	4679	4679	56150
Taxes and Insurance										5523			5523
Hired Labor	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760	105120
Total Costs	2185920	176961	170786	170786	2339858	170786	303476	170786	170800	21795	16272	16272	5914501
Net Returns	-2185920	-176961	-170786	-170786	-2339858	3008312	-303476	-170786	-170800	3157304	-16272	-16272	443696

Table 3: Monthly Feed Requirements.

Feed	Units	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Finish ration													
Steers	ton	0	2164	2164	2164	2164	2164	2164	2164	2164	0	0	0
Heifers	ton	0	1049	1049	1049	1049	1049	1049	1049	1049	0	0	0

Table 4: Investment Summary.**EBB-FL2-02**

	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
Miscellaneous	\$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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