Feedlot Budget: 5000-head

Idaho Cattle Feedlot Calf to Slaughter Ben Eborn, Meranda Small, and Les Nunn

Background and Assumptions

Economic costs are used in the University of Idaho costs and returns estimates. All resources are valued based on market price or opportunity cost. This budget presents both the typical costs and returns per head and the total costs and returns for a 5,000-head cattle feedlot operation.

Livestock Investment

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 cattle are on feed. Cattle are fed throughout the year. The turnover rate is 1.8, meaning that

1.8 groups of cattle are cycled through the feedlot annually, or about 5,850 animals. Death loss is approximately 1 percent.

Steer calves come into the program at 500 pounds and are fed through to 1,350 pounds finish weight. Heifer calves are placed on feed at 425 pounds and fed through to 1,275 pounds. Sixty-five percent of animals on feed are steers and 35% are heifers.

Most feedlot operations buy and sell cattle on a regular basis throughout the year. To simplify calculations, we assumed in this budget that calves are purchased in October, then fattened and sold in June.

Machinery, Equipment, and Facilities

Machinery and equipment investments include two feed trucks with mixer boxes, two front-end loaders, two 2-ton trucks, and a ¹/₂-ton pickup. The feedlot has 6,000 feet of feed bunk-space, 10,000 feet of fence, a water

system, working facilities, feed processing and storage facilities, shop and machinery storage, and office, scales and scale house.

Feeding

Feed rations typically consist of alfalfa hay, corn silage, grain (corn, barley, or wheat), salt/minerals, and often one or more byproducts including potato waste, dairy waste, sugarbeet waste, dried distillers grain, straw and others.

The feed program is implemented in two stages. For the first 60 days, calves are fed a starter ration. Steer performance over the first 60-day period is estimated at 2.7 pounds average daily gain (ADG).

The finish ration is fed for approximately 200 days. Prices on all ration ingredients include transportation costs. Steer performance over this period is about 3.5 pounds ADG. Calves are started on the finish ration at about 660 pounds and steers are fed through to 1,350 pounds. Heifers are fed to about 1,275 pounds

Veterinary supplies and services include the cost of vaccine, wormer, antibiotics, and implants to promote cattle growth.

Labor

Labor for this operation is provided by three full-time and three part-time employees and valued

hired labor rate includes payroll taxes and

EBB-FL1-18

No. of Head: 5000

GROSS RETURNS	Weight Each	Unit	Total Number of Head or Units	Price or Cost/Unit	Total Value	Value or Cost/Head	Your Value
Fed Steers	1,350	lbs	3,764	1.15	5,843,610	1,168.72	
Fed Heifers	1,275	lbs	2,027	1.14	2,946,245	589.25	
TOTAL GROSS RETURNS	1,210		2,021		\$8,789,855	\$1,757.91 0 0	1 384.25 781.08 T

Table 4: Investment Summary.						EBB-FL1-18
	Purchase Price	Salvage/Cull Value	Livestock Share	Useful Life	Annual Taxes & Insurance	Annual Capital ¹ Recovery
Buildings, Improvements						
and Equipment						
Land for Feedlot	100,000	100,000	100	100	350.00	\$5,500.00
Pens & Lots	340,000	34,000	100	15	1,190.00	\$32,355.43
Working Facilities	20,000	2,000	100	15	70.00	\$1,903.26
Buildings	130,000	13,000	100	25	455.00	\$9,437.27
Feed Processing/Storage	630,000	63,000	100	20	2,205.00	\$50,911.18
Water System	20,000	2,000	100	20	70.00	\$1,616.23
Truck & Livestock Scales	100,000	10,000	100	30	350.00	\$6,742.49
Misc. Tools & Equipment	75,000	7,500	100	15	262.50	\$7,137.23
Total	\$1,415,000				\$4,952.50	\$115,603.09
Machinery and Vehicles						
Frontend Loader	170,000	30,000	100	15	595.00	\$15,597.58
Feed Truck	35,000	7,000	100	8	122.50	\$4,805.19
Feed Truck	35,000	7,000	100	8	122.50	\$4,805.19
Truck 2 ton	25,000	5,000	100	6	87.50	\$4,278.58
Truck 2 ton	25,000	5,000	100	8	87.50	\$3,432.28
Pickup 1/2 ton 4x4	15,000	4,000	100	6	52.50	\$2,421.97
Total	\$305,000				\$1,067.50	\$35,340.80

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.

The Authors Ben Eborn is an Extension Ag Economist. Meranda Small is an Extension Educator in Bingham County, Blackfoot. Les Nunn is an Extension Educator in Bear Lake County, Montpelier.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Barbara Petty, Director of University of Idaho Extension, University of Idaho, Moscow, Idaho 83843. The University of Idaho provides equal opportunity in education and employment on the basis of race, color, religion, national origin, gender, age, disability, or status as a Vietnam-era veteran, as required by state and federal laws.

www.uidaho.edu/cals/idaho-agbiz