BF-IR-71-4

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10/28/71

EXAMPLE OF INVESTMENT AND RETURN IN THE CATTLE BUSINESS

COW-CALF RANCH, SISKIYOU COUNTY, 1971

GROSS RETURN PER COW - SELLING WEANER CALVES

It is assumed that the sale of old cull cows will be about equal to the value of replacement heifers saved, so the entire calf crop is considered as the source of income

Average weight 475 lbs steers, 450 lb heifers	465 lbs
Price per lb 36¢ steers, 32¢ heifers	x34¢
Average value of calf	$158
90% calf crop at weaning time	x.90
Gross return per cow	$142

CASH EXPENSES

Cost studies in many northern counties as well as Siskiyou come up with a wide range in expenses, $80 to $150 for feed, labor, vet, taxes, equipment, depreciation, etc.

A suggested conservative figure per cow	$100
Income per cow not counting interest, profit, or management	$ 42

INVESTMENT IN A CATTLE RANCH

The investment per cow often runs between $1000 and $2000. In this example we will use $1500.

RETURN ON INVESTMENT

Capital return of $42 on $1500	2.8%

Working backward, if we want 7% on our money what would the investment have to be per cow?

$42 ÷ .07	$600

Actually the investment is $1500 and at 7% the capital return per cow should be	$105

PROFIT PER COW

It is obvious that it is impossible to make any profit if you consider interest on investment as an expense

$142 income - $105 interest leaves only $37 to pay the other expenses which come to $100 or more.

One way to juggle figures is to come up with this compromise:

Gross income per cow	$142
Less Cash expenses	-100
Less Interest (7% on $457)	- 32
Profit per cow	$ 10

Alternative 2

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EXAMPLE OF COSTS AND RETURNS IN CARRYING WEANER CALVES OVER THE WINTER, SISKIYOU COUNTY, 1971

There are many methods of wintering weaner calves besides this example which uses pelleted hay. Others include long hay; hammered hay with water; chopped hay with grain supplement; etc. The purpose is to show procedures in comparing economic alternatives rather than nutritional information. However, this same procedure can be used in comparing rations for least cost gains.

PRELIMINARY DATA AND VARIABLES

Weight at start (use off mother weight)	465 lbs
Feed used (3/8" mixed alfalfa & wheat hay pellet)	$ 37 Ton
Feeding period (Nov 1 to March 1)	120 days
Expected daily gain (varies from 1.6 to 2.0 lbs)	1.8 lbs
Calculated gain (120 x 1.8)	216 lbs
Average weight during period (216 ÷ 2 + 465)	573 lbs
Estimated daily feed consumption (3.3% of average weight 573 lbs)	19 lbs
Estimated final weight (465 + 216)	681 lbs

COSTS AND RETURNS

Value of calf at start (465 lbs @ 34¢)		$158
Overhead costs to rancher:		
Death loss (1% x average value $190)	$ 1.90	
Depreciation on equipment and yard ($10/head for 10 years)	1.00	
Interest @ 8%, ½ yr. on average value $190)	3.80	
Vet, medicine, implants	2.00	
Taxes, freight, commission, miscellaneous	1.30	
	$10.00	$ 10
Feed costs (19 lbs x 120 days = 2280 lbs @ $37/ton)		$ 42
Money in animal		$210
Income (Estimated final weight 681 lbs @ estimate price 32¢)		$218
Return per head		$ 8
Cost per pound gain ($52 ÷ 216 lbs)		$24.07 cwt
Necessary Selling Price to break even ($210 ÷ 681 lbs)		$30.80 cwt

Alternative 3

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EXAMPLE OF COSTS AND RETURNS IN FINISHING BEEF AT A CUSTOM LOT, 1971

This example is hypothetical but realistic, and covers most of the costs that a Siskiyou rancher would encounter if he finished yearling feeders at a custom lot somewhere near the center of the state.

This is a continuation of alternatives, showing the economics of various steps in producing beef. It is only one method. Feedlots will make any type of deal desired such as partnership, gain basis, etc.

PRELIMINARY DATA AND VARIABLES

Weight in (Ranch weight not including shipping shrink)	681 lbs
Estimated weight out (usually between 1000 & 1100 lbs)	1050 lbs
Estimated gain in lot	369 lbs
Expected daily gain in lot (varies from 2.5 to 3.0)	2.7 lbs
Calculated feeding period (369 ÷ 2.7)	137 days
Expected feed conversion (varies from 6.0 to 8.0 lbs feed per pound gain)	7.5 lbs
Cost of feed (feed itself is listed here, but yardage costs are usually added to it)	$ 50 Ton
Yardage costs (varies from $8 to $12 per ton feed fed. Some lots charge 4¢ or more per head day. Implants and medicine may be extra)	$ 10 Ton

COSTS AND RETURNS

Value of Animal at Start (681 lbs @ 32¢)		$218
Overhead costs to rancher		
Death loss (varies from 3/4 to 2%)	$ 2.00	
8% interest, ¼ yr. x $218 feeder value	4.36	
8% interest, ¼ yr. x $50 feed	1.00	
Taxes ½¢ per day x 137 days	.69	
Freight 85¢ cwt x 681 lbs	5.79	
Miscellaneous	1.16	
	$15.00	$ 15
Feed costs (369 lbs gain x 7.5 conversion = 2768 lbs @ $60/T)		$ 83
Implant and medicine		$ 2
Money in animal		$318
Income (estimated final weight 1050 lbs @ estimated price 32¢ and 80% go choice)		$336
Return per head		$ 18
Cost per pound gain ($100 costs ÷ 369 lbs)		$27.10 cwt
Necessary Selling Price to break even ($318 ÷ 1050 lbs)		$30.29 cwt