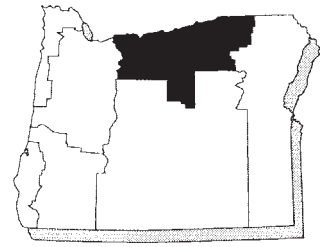


Enterprise Budget

Cow-Calf, North Central Region

Clark F. Seavert, Extension agent, Hood River and Wasco Counties
Sandy Macnab, Extension agent, Wasco County,
Brian Tuck, Extension agent, Sherman County, and
Phil Nesse, Extension agent, Gilliam County
Oregon State University



EM 8529, October 1992

This enterprise budget estimates the typical costs associated with producing calves in the Mid-Columbia area of north-central Oregon. It should be used as a guide to estimate actual costs and is not representative of any particular ranch. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated.

This budget is based on a 4,000-acre farm with 2,500 tillable acres and 1,500 acres of pasture land. There are 1,250 acres in small grain production each year following 1,250 acres of summer fallow and 100 head of cows.

Livestock

The herd consists of 100 cows and four bulls. This study assumes 90% of the cows exposed to bulls will give birth to a calf in the spring. Calf death loss is 2%, while a 1% death loss is assumed for the cows and bulls. Mature cows are culled at the rate of 15% annually, and all replacement heifers are raised. A livestock production flowchart is shown on page 3.

All non-breeding calves are implanted in the spring. Calves and cows are treated for internal and external parasites with an injectable insecticide. All cows and replacement heifers are pregnancy tested. All cows and calves are vaccinated when they are worked in the spring.

Current market values and years of useful and remaining life for all livestock are shown in the bottom portion of Table 1. The calculations for livestock fixed costs are shown in Table 2.

Feed

Feed is supplied in the form of private pasture, wheat stubble, protein supplement, and wheat chaff. Six AUM's of private pasture are grazed from March to August, while the wheat stubble provides 7 AUM's of grazing from August to February. The stubble pasture is supplemented with 10#/hd/day of wheat chaff for November to December and 20#/hd/day of protein supplement (typically alfalfa hay) is provided for 3 months coinciding with cold weather and/or calving.

Chaff is valued at \$30/ton, protein supplements at \$.05/lb. These numbers are overstated on a per cow basis to reflect the feed requirements of bulls, calves and replacement heifers.

Salt and mineral costs are estimated to be \$.02/hd/day for the entire year.

Labor

One-half of the labor is provided by the operator and is included as a non-cash cost of \$10 per hour. The other half of the labor is hired at a value of \$7.50 per hour which includes worker's compensation, unemployment insurance, and other labor overhead expenses. A charge of \$340 is included in variable costs to cover branding labor in the fall and other miscellaneous labor costs.

Capital

Interest on operating capital is 10%, treated as a cash expense, and borrowed for a 6-month period. Interest for intermediate and long-term capital is 11%. Interest charges for intermediate and long-term capital are treated as non-cash opportunity costs.

Machinery and Equipment

Machinery and equipment values are based on November 1991 replacement costs, assuming the assets are half depreciated. The upper portion of Table 1 summarizes the values assumed for machinery and equipment, as well as the hours, fuel use and years associated with their use.

Machinery and equipment costs are calculated in Table 2 for variable and fixed cost components. The fixed costs per cow correspond to the machinery and equipment insurance plus the non-cash machinery and equipment costs when in the budget. Only 10% of the variable and fixed costs of the truck and pickup are allocated to the cow/calf enterprise. The remaining 90% of these annual costs is allocated to small grain production activities on the farm.

Other

Fifteen hundred acres of private pasture is owned and valued at \$50 per acre. Property taxes are \$1.25 per acre. Annual fence repair is \$1,600 for materials.



OREGON STATE UNIVERSITY EXTENSION SERVICE

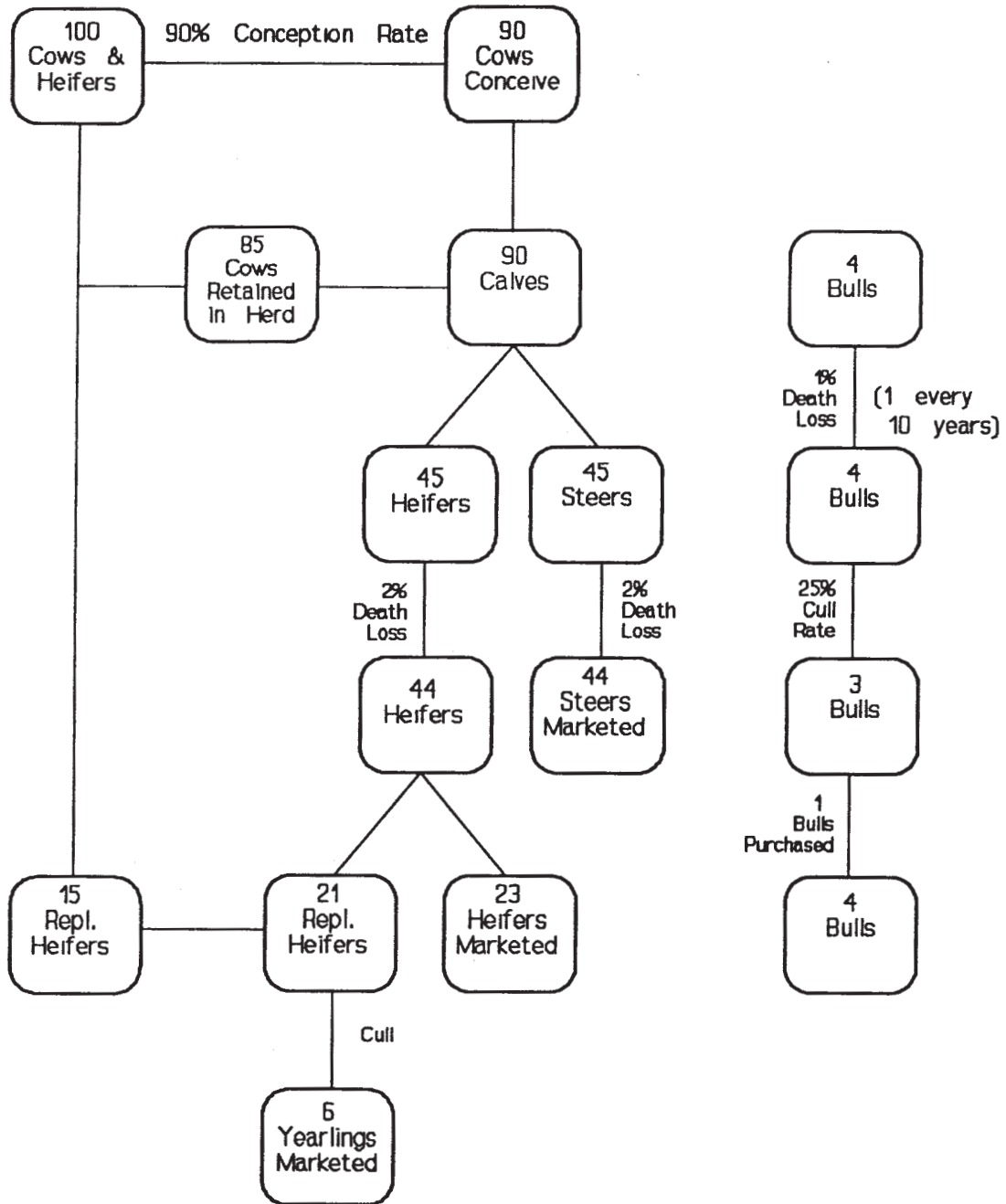


EM 8529 Enterprise Budget

WHOLE RANCH COSTS AND RETURNS MID-COLUMBIA AREA 100 COW HERD

GROSS INCOME Description	Quantity	Unit	\$/Unit	Total	Per Cow	Your Returns
CASH Income						
Market Steers	44 hd	550	lbs	0.80	19360.00	\$193.60
Market Heifers	23 hd	500	lbs	0.77	8855.00	88.55
Cull Cows	15 hd	1100	lbs	0.48	7920.00	79.20
Cull Bulls	1 hd	1500	lbs	0.60	900.00	9.00
Open 1st Yr Heifers	6 hd	900	lbs	0.61	3294.00	32.94
Total GROSS Income				40329.00	403.29	
VARIABLE COST Description	Quantity	Unit	\$/Unit	Total	Per Cow	Your Cost
CASH Cost						
Feed Expenses						
Wheat Stubble	700	aum	5.00	3500.00	35.00	
Protein Supplement	90	ton	100.00	9000.00	90.00	
Chaff	30	ton	30.00	900.00	9.00	
Salt and Minerals	100	hd	7.30	730.00	7.30	
Vet & Medicine Expenses						
Implants (non-breeding only)	45	hd	0.90	40.50	0.41	
Vaccine Spring - Cows	100	hd	3.00	300.00	3.00	
Vaccine - Calves	90	hd	2.00	180.00	1.80	
Parasite Control - Cows	100	hd	5.00	500.00	5.00	
Parasite Control - Calves	90	hd	2.50	225.00	2.25	
Pregnancy Testing	106	hd	4.00	424.00	4.24	
Other Expenses						
Fence Repairs & Materials	100	dol	10.00	1000.00	10.00	
General Hired Labor	400	hour	7.50	3000.00	30.00	
Branding Labor	100	hd	3.40	340.00	3.40	
Machinery Repairs, Fuel & Lube	100	hd	14.08	1408.10	14.08	
Misc. Repairs, Fuel & Lube	100	hd	5.00	500.00	5.00	
Repairs & Maint. (Equip & Bldg)	100	hd	5.00	500.00	5.00	
Miscellaneous	100	hd	1.00	100.00	1.00	
Interest - Operating Capital				1132.38	11.32	
Total VARIABLE COST				23779.98	237.80	
GROSS INCOME minus VARIABLE COST				16549.02	165.49	
FIXED COST Description				Total	Per Cow	Your Cost
CASH Cost						
Machinery & Equipment Insurance				99.27	0.99	
Livestock Insurance				857.00	8.57	
Property Insurance				500.00	5.00	
Property Taxes				1875.00	18.75	
Total CASH Cost				3331.27	33.31	
NONCASH Cost						
Machinery & Equipment-Depreciation & Interest				2270.44	22.70	
Livestock - Depreciation & Interest				4867.25	48.67	
Land Interest Charge (1500 ac. @ \$50 @ 11%)				8250.00	82.50	
Owner Labor				4000.00	40.00	
Total NONCASH Cost				19387.69	193.88	
Total FIXED Cost				22718.96	227.19	
Total of ALL Costs				46498.94	464.99	
NET PROJECTED RETURNS				-6169.94	-61.70	

EM 8529 Enterprise Budget



EM 8529 Enterprise Budget

Table 1. Machinery and Livestock Cost Assumptions

Item	Size	Current Market Value	Salvage Value	Hours of Annual Use	Fuel Use Gal/Hour	Expected Life (yrs)	Remaining Life (yrs)
Loader Tractor		\$7,700	\$ 1,400	100.0	5.0	10.0	5.0
Truck	2 ton	10,500	5,250	112.5	5.0	20.0	10.0
Pickup	.75 ton	12,500	6,250	342.9	3.5	10.0	5.0
Hay Wagon		2,013	350	180.0	n/a	20.0	5.0
Branding Iron		110	20	12.0	n/a	10.0	n/a
Racks		1,000	500	100.0	n/a	10.0	n/a
Squeeze Chute		2,200	400	100.0	n/a	10.0	n/a
Barn		8,800	2,000	1,000.0	n/a	40.0	n/a
Bulls		1,500	900	n/a	n/a	6.0	n/a
Cows		650	528	n/a	n/a	6.0	n/a
Replacement Heifers		700	550	n/a	n/a	7.0	n/a

Table 2. Machinery and Equipment Cost Calculations

Machine	Costs per Hour					Hours per head	Cost per Cow			Percent Cow-Calf Use	
	Fuel/Lube	Repair	Interest	Depreciation	Insurance		Variable	Cash Fixed	Non-Cash Fixed		Total
Loader Tractor	\$6.67	\$0.09	\$5.48	\$5.43	\$0.50	1.00	\$6.76	\$0.50	\$10.91	\$18.17	100%
Truck	4.40	3.33	6.65	2.90	0.60	1.13	8.70	0.68	10.74	20.12	10%
Pickup	4.67	4.70	2.60	2.27	0.24	3.43	32.11	0.81	16.68	49.60	10%
Hay Wagon	0.00	1.01	0.80	0.46	0.07	1.80	1.82	0.13	2.26	4.21	100%
Branding Iron, etc	0.00	0.00	0.65	0.75	0.06	0.12	0.00	0.01	0.17	0.18	100%
Racks	0.00	1.20	0.71	0.82	0.06	1.00	1.20	0.06	1.54	2.80	100%
Squeeze Chute	0.00	0.22	1.57	1.81	0.14	1.00	0.22	0.14	3.38	3.74	100%
Barn	0.00	0.00	0.59	170.00	0.05	0.00	0.00	0.00	1.71	1.71	100%

Table 3. Livestock Fixed Cost Calculations

Livestock	Cost per Head			# of Head	Cost per Cow			Total
	Depreciation	Interest	Insurance		Depreciation	Interest	Insurance	
Bulls	200.00	\$132.00	\$ 15.00	4	\$8.00	\$ 5.28	\$0.60	\$ 13.88
Cows	0.00	29.04	6.50	100	0.00	29.04	6.50	35.54
Replacement Heifers	0.00	30.25	7.00	21	0.00	6.35	1.47	7.82
TOTAL					\$8.00	\$40.67	\$8.57	\$57.24

Extension Service, Oregon State University, Corvallis, O.E. Smith, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.



Oregon State University Extension Service offers educational programs, activities, and materials—without regard to race, color, national origin, sex, age, or disability as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University is an Equal Opportunity Employer.