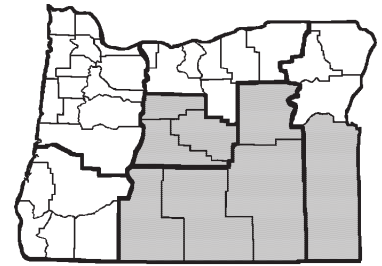


Enterprise Budget

350 Cow/Yearling, High Desert Area

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EM 8335, Revised November 1997

This livestock enterprise budget estimates the typical costs and returns of producing yearlings in the high desert area of southeast 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. For costs and returns associated with cow/calf production in the high desert area, see EM 8653, EM 8654, EM 8656, and EM 8470. For native hay production, refer to EM 8652.

Livestock

The enterprise consists of 350 cows, 18 bulls, and 5 horses. A 90 percent conception rate is used, and 95 percent of the pregnant cows give birth. Cow death loss is 2 percent, while a 1 percent death loss is assumed for the bulls, 4 percent for calves, and 1.5 percent for yearlings. Mature cows are culled at the rate of 13 percent annually and all replacement heifers are raised. (See figure on page 3.)

Calves are worked in April, including branding, vaccination, and implanting. Cows are vaccinated in April and treated for external parasites. Cows and replacement heifers are vaccinated and pregnancy tested in the fall as the cattle are gathered. Weaned calves are vaccinated and treated for external parasites in the fall, then receive implants and fly tags in the spring. Cull cows are sold November 1. Culled replacement heifers and yearling steers are sold October 1.

Current market values and years of useful life for all livestock are shown in the bottom portion of Table 1. The calculations for livestock noncash fixed costs are shown in Table 2. No depreciation costs are included for cows or replacement heifers since they are raised on the ranch. For bulls and horses, which are purchased in this budget, the cost of depreciation has been included implicitly by reporting replacement purchases as costs and cull sales as revenues. The difference between these two values is the annual cost of capital replacement.

Livestock selling prices are a 3-year average (1993-1995) of farmgate prices for the Southeast region including Crook, Deschutes, Harney, Klamath, Lake, and Malheur counties. Livestock weights are assumed typical for the high desert area.

Feed

Feed is supplied in the form of native and alfalfa hay, pasture, and public range. Native hay is fed for 120 days to cows. Yearlings receive native hay and alfalfa hay for 150 days, then graze flood-irrigated pasture. Other cattle graze public range for 4 months and private land for 4 months. Replacement heifers are assumed to require 0.75 AUM per head and are grazed on flood-irrigated pasture at \$7 per AUM. This charge covers fertilizer and irrigation expenses.

Salt and minerals are fed at the rate of 48 pounds per cow and 18 pounds per yearling annually. Approximately one-third is assumed to be consumed by wildlife.

Labor

Labor provided by the family is included as a variable cost of \$12,000 per year assuming 8 months are dedicated to the cow/calf operation. A charge of \$8,000 is included to cover the cost of additional hired labor.

Capital

Opportunity costs of operating capital are charged at a rate of 10 percent for the duration of the grazing season, and 2.5 percent per year for the current market value of the ranch unit including land and livestock.

Budget

In the enterprise budget, implants, pour-on, vaccine, pregnancy testing, fly tags, wormer, etc. are included under the line item "Vet & Medicine." Brand inspection is \$1.75 per animal sold plus a \$10 per trip charge (three trips assumed). Materials for annual fence repairs cost \$1,000. "Supplies" include saddle, tack, and branding equipment. "Marketing Fees" are a flat 3 percent charge of the gross value of the livestock that are sold to cover the costs to sell via satellite or through the auction yard, etc. "Utilities" include electricity, telephone, etc. "Legal and relative expenses" include costs associated with litigation regarding policy issues. All items not included in the other budget line items, such as association dues, are accounted for under "Miscellaneous."

Machinery and Equipment

A loader tractor and feed wagon are used to feed hay. A 3/4-ton pickup is used to pull a stock trailer and for general travel. A 1/2-ton pickup is used for general ranch work. Corrals are used in the spring and fall to work cattle.

Machinery and equipment values are based on spring 1996 replacement costs, assuming the assets are half depreciated. The upper portion of Table 1 summarizes the values assumed for machinery, equipment, and buildings as well as the hours, miles, or years associated with their use. In Table 1, "Tractor Implements" include a 3-point blade, post-hole auger, pasture harrow, ditcher, etc. "Working Facilities" include a squeeze chute, corrals, and scales.

Machinery and equipment costs are calculated in Table 3 for variable and fixed cost components.

Other

The commercial value of land and improvements of a whole ranch unit ranges from \$1,000 to \$2,500 per cow unit (animal unit) depending upon productivities and extent of federal land dependency. This budget assumes that the ranch as a whole is valued at \$1,750 per cow unit. Two thousand acres of private pasture are owned and provide 1,789 AUMs over 4 months. In addition, 200 acres of owned flood-irrigated pasture provide 1,420 AUMs over 8 months (1,365 yearling and 50 horse AUMs). Native hay is produced on additional acreage. The cost of land ownership and hay production costs are all included in the \$60 per ton hay charge. Property taxes total \$2,500 for the 2,200 acres of pasture. Actual property taxes will vary with assessed value.



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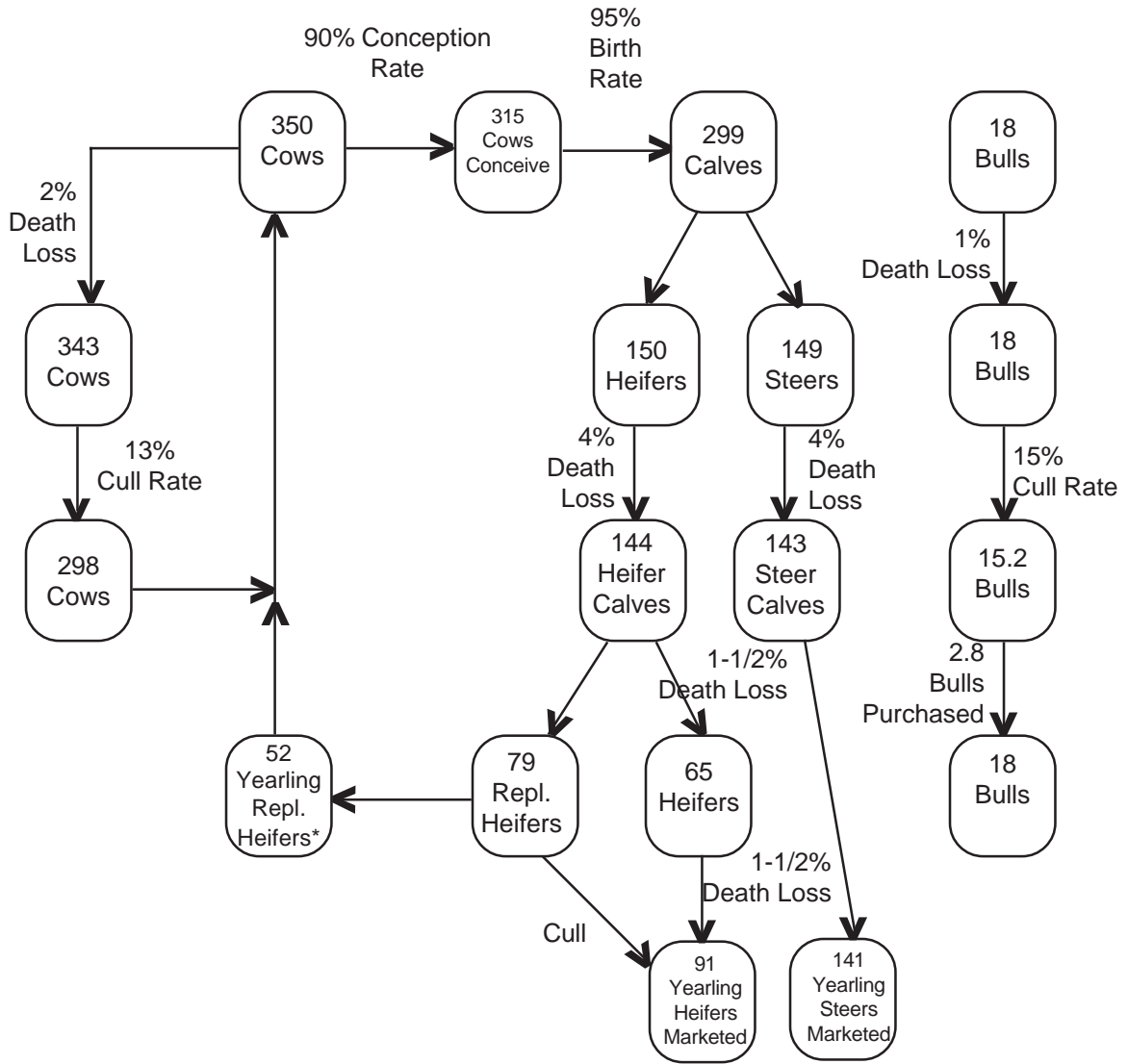
EM 8335 Enterprise Budget

COW/YEARLING COSTS and RETURNS High Desert Area 350-Cow Herd

<u>GROSS REVENUE by Type</u>	<u>Quantity/Unit</u>	<u>\$/Unit</u>	<u>Total</u>	<u>Per Cow</u>	<u>Your Cost</u>	
Cull Bulls	2.8 hd @ 15.0 cwt	51.00	2,142.00	6.12	_____	
Cull Cows	45 hd @ 9.5 cwt	42.00	17,955.00	51.30	_____	
Cull Horse	.50 hd @ 1.0 hd	600.00	300.00	0.86	_____	
Yearling Heifers	91 hd @ 8.5 cwt	67.00	51,824.50	148.07	_____	
Yearling Steers	141 hd @ 9.0 cwt	72.00	91,368.00	261.05	_____	
Total GROSS Revenue			\$163,589.50	\$467.40	_____	
<u>CASH COST by Type</u>	<u>Quantity</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>	<u>Per Cow</u>	<u>Your Cost</u>
Pasture Irrigation and Fertilizer	1,420.00	aum	7.00	9,940.00	28.40	_____
Native Hay	600.00	tn	60.00	36,000.00	102.86	_____
Alfalfa Hay	300.00	tn	85.00	25,500.00	72.86	_____
Public Land Grazing Fee	1,450.00	aum	1.83	2,653.50	7.58	_____
Salt	7.00	tn	160.00	1,120.00	3.20	_____
Minerals (custom mix)	1.47	tn	600.00	882.00	2.52	_____
Fuel & Lube, Machinery & Equipment				3,621.50	10.35	_____
Interest - Operating Capital (10% for 6 mo.)				3,740.61	10.69	_____
Hired Labor	8.00	mo	1,000.00	8,000.00	22.86	_____
Repairs, Machinery & Equipment				4,854.87	13.87	_____
Fence Repair Materials				1,000.00	2.86	_____
Supplies				1,050.00	3.00	_____
Utilities				900.00	2.57	_____
Vet & Medicine				4,300.00	12.29	_____
Brand Inspection				519.65	1.48	_____
Bull Purchase	2.80	hd	2,000.00	5,600.00	16.00	_____
Horse Purchase	0.50	hd	2,000.00	1,000.00	2.86	_____
Marketing Fees				4,907.69	14.02	_____
Accounting				1,200.00	3.43	_____
Legal & Related Costs				1,000.00	2.86	_____
Family Labor				12,000.00	34.29	_____
Miscellaneous				1,500.00	4.29	_____
Total VARIABLE Cost				\$131,289.82	\$375.11	_____
GROSS REVENUE minus VARIABLE Cost				\$32,299.68	\$92.28	_____
CASH FIXED Cost						_____
Machinery & Equipment Insurance & Taxes (Tables 1 & 3)				2,367.12	6.76	_____
Property Taxes				2,500.00	7.14	_____
Total CASH FIXED Cost				\$4,867.12	\$13.91	_____
Total VARIABLE and CASH FIXED Costs				\$136,156.94	\$389.02	_____
<u>OTHER COSTS and RETURNS</u>			<u>Total</u>	<u>Per Cow</u>	<u>Your Cost</u>	
NET PROJECTED RETURNS OVER VARIABLE and CASH FIXED Costs			\$27,432.56	\$78.38	_____	
Noncash Fixed Cost of Depr. & Interest (10%) on Machinery & Equip. (Tables 1 & 3)			\$13,468.30	\$38.48	_____	
NET PROJECTED RETURNS TO LAND & LIVESTOCK OWNERSHIP			\$13,964.26	\$39.90	_____	
Opportunity Cost of Land Ownership (\$1,750/cow-unit x 350 units@2.5%)			\$15,312.50	\$43.75	_____	
Opportunity Cost of Livestock Ownership (Table 2)			\$5,768.58	\$16.48	_____	
PROJECTED RETURNS NET OF ALL ECONOMIC COSTS			-\$7,116.82	-\$20.33	_____	
PROJECTED RETURNS TO LAND & LIVESTK OWNERSHP, & FAM LAB			\$25,964.26	\$74.18	_____	

EM 8335 Enterprise Budget

COW/YEARLING PRODUCTION FLOWCHART
 High Desert Area
 350-Cow Herd



* All 52 replacement heifers have been pregnancy tested and are pregnant. The conception rate of the remaining 298 cows in the brood cow herd is 88 percent.

EM 8335 Enterprise Budget

Table 1. Machinery and Livestock Cost Assumptions

Item	Size	List Price	Current Market Value	Salvage Value	Useful Life	Remaining Life	Annual Use For Ranch	Annual Use For Enterprise
MACH. & EQUIPMENT								
Tractor & Loader	50 hp	\$13,500	\$8,100	\$2,700	10,000	6,000	1,000	800 hr
Tractor Implements		6,000	3,600	1,200	15	9	1	1 yr
ATV		4,000	2,400	800	3,750	2,250	500	250 hr
Feed Wagon		3,500	2,100	700	12,000	7,200	750	315 mi
Stock Trailer		10,000	6,000	2,000	10	6	1	1 yr
Pickup	1/2 ton	12,000	7,200	2,400	100,000	60,000	10,000	5,000 mi
Pickup	3/4 ton	20,000	12,000	4,000	100,000	60,000	10,000	5,000 mi
Hay Bunks		5,000	3,000	1,000	20	12	1	1 yr
Working Facilities		15,000	9,000	3,000	30	18	1	1 yr
Buildings		100,000	60,000	20,000	30	18	1	1 yr
LIVESTOCK								
Bulls		2,000	1,383	765	6	3 yr		
Cows			570	400	7	3.5 yr		
Horses		2,000	1,300	600	15	7.5 yr		
Replacement Heifers			570	570	7	5 yr		

Table 2. Livestock Opportunity Cost Calculations

Livestock	Opportunity Cost per Head	# Head	Opportunity Cost by Class of Livestock	Opportunity Cost per Cow
Bulls	34.56	18	622.08	1.78
Cows	14.24	298	4,243.52	12.12
Horses	32.50	5	162.50	0.46
Replacement Heifers	14.24	52	740.48	2.12
Total			5,768.58	\$16.48

Table 3. Machinery and Equipment Cost Calculations

Machine & Equipment	Size	Costs per Hour, Year, or Mile				Total Cost	Hours, Miles, or Years per Head	Cost per Cow		
		Variable		Fixed				Variable	Fixed	Total
		Fuel & Lube	Repair & Maint.	Depr. & Interest	Insurance & Taxes					
Tractor & Loader	50 hp	\$3.45	\$3.65	\$1.62	\$0.08	\$8.59	2.286 hr	\$16.23	\$3.89	\$20.12
Tractor Implements		0.00	75.00	560.00	36.00	671.00	0.003 yr	0.21	1.70	1.92
ATV		0.69	0.01	1.17	0.05	1.92	0.714 hr	0.50	0.87	1.37
Feed Wagon		0.00	0.65	0.42	0.03	1.10	0.900 mi	0.58	0.40	0.98
Stock Trailer		0.00	100.00	1,200.00	60.00	1,360.00	0.003 yr	0.29	3.60	3.89
Pickup	1/2 ton	0.07	0.02	0.14	0.04	0.27	14.286 mi	1.23	2.63	3.86
Pickup	3/4 ton	0.07	0.03	0.24	0.05	0.39	14.286 mi	1.34	4.16	5.50
Hay Bunks		0.00	140.00	400.00	72.00	612.00	0.003 yr	0.40	1.35	1.75
Working Facilities		0.00	200.00	1,000.00	216.00	1,416.00	0.003 yr	0.57	3.47	4.05
Buildings		0.00	1,000.00	6,666.67	1,440.00	9,106.67	0.003 yr	2.86	23.16	26.02
TOTAL								\$24.22	\$45.24	\$69.46

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