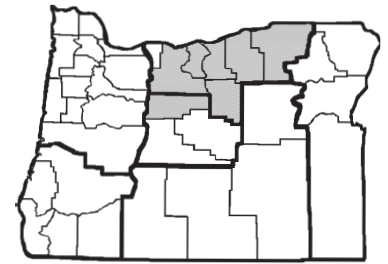


# Enterprise Budget

## 50 Cow/Calf, North Central Plateau Region

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This livestock enterprise budget estimates the typical costs and returns of producing calves in the plateau 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. For costs and returns associated with alternate herd sizes in the plateau region, see EM 8682 and EM 8683.

### Livestock

The enterprise consists of 50 cows, 2 bulls, and 2 horses. A 92-percent conception rate is used, and 95 percent of the pregnant cows give birth. Cow death loss is 2 percent, while an 0.5 percent death loss is assumed for the bulls and 3 percent for calves. Mature cows are culled at the rate of 15 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. Cull cows and cull replacement heifers are sold November 1. Calves are sold November 15.

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 north central region including Gilliam, Jefferson, Morrow, Sherman, Umatilla, Wasco, and Wheeler counties. Livestock weights are assumed typical for the plateau area.

### Feed

Feeder-quality alfalfa hay is fed at the rate of 1.2 tons per cow, bull, and replacement heifer from December 15 through March 15. This accounts for supplemental feed from winter grazing. Cattle are grazed on owned range from mid-March through mid-December.

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

### Labor

Labor provided by the family is included as a variable cost of \$5,000 per year. A charge of \$1,800 is included to cover the cost of irrigation labor.

### Capital

Opportunity costs of 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, vaccines, pregnancy testing, fly tags, dewormer, 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 fence repairs cost \$100. "Supplies" include saddle, tack, and branding equipment. "Marketing Fees" are a flat 3 percent of the gross value of the livestock that are sold to cover marketing costs via satellite or through the auction yard, etc. "Utilities" include electricity, telephone, etc. "Legal and related expenses" cover costs associated with litigation regarding policy issues and other legal expenses. All items not included in the other budget line items, such as association dues, are accounted for under "Miscellaneous."

### Machinery and Equipment

A 3/4-ton pickup is used to feed hay, to pull a stock trailer, for general travel, and for general ranch work.

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. "Working Facilities" include a squeeze chute, corrals, and scales. "Buildings" include a barn, shed, shop, and house.

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 land is valued and sold at market value. Forty acres of flood irrigated pasture are owned and valued at \$2,000 per acre, and provides 659 AUMs over 9 months. Buildings and corrals are situated on an additional 10 acres. Opportunity cost of land ownership is 2.5 percent per year. Property taxes are charged at \$10 per \$1,000 of value and total \$215. Actual property taxes will vary with assessed value.



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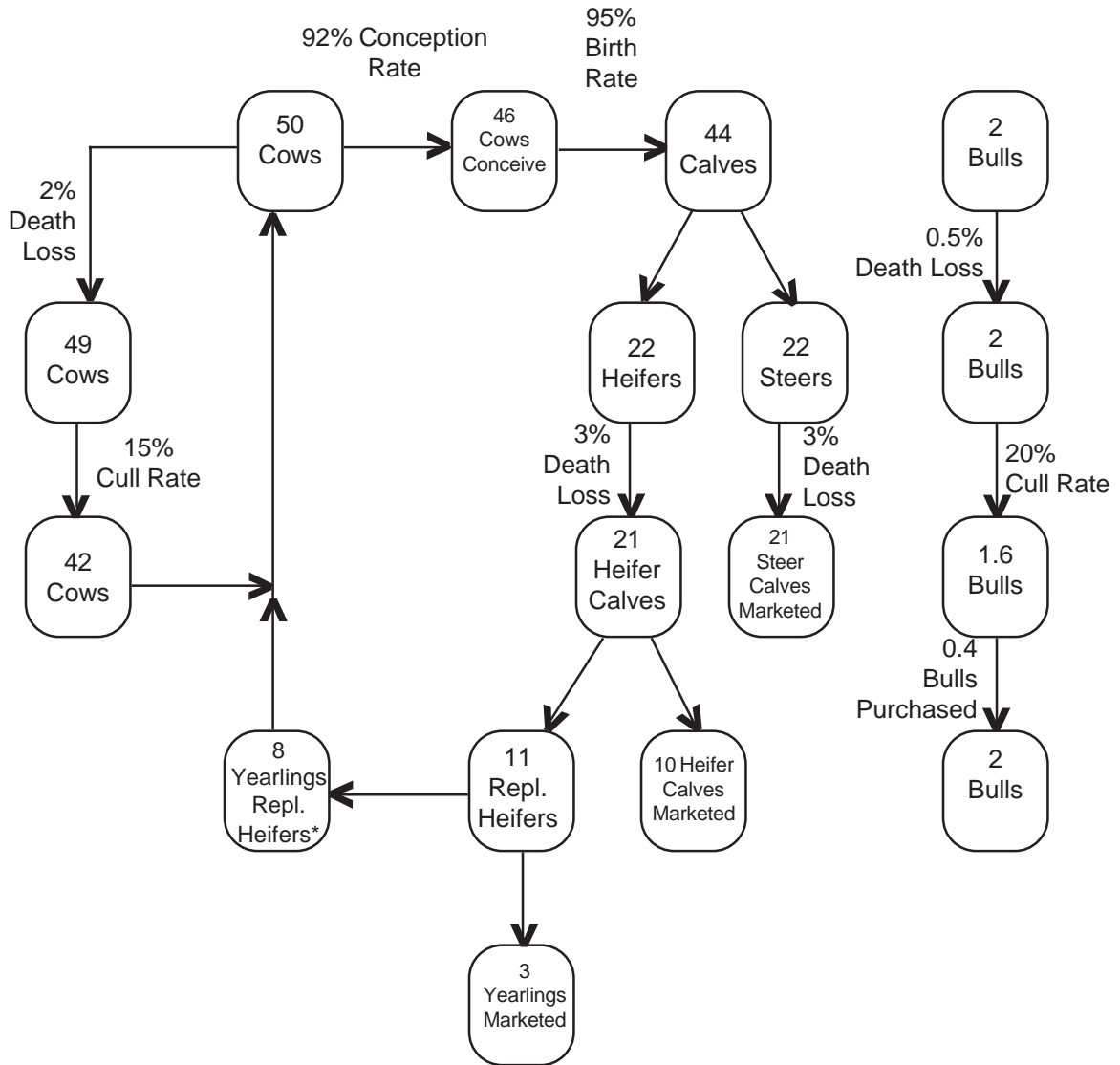
## EM 8681 Enterprise Budget

### COW/CALF COSTS and RETURNS North Central Plateau Region 50-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  | 0.40 hd @ 16.25 cwt  | 50.00          | 325.00             | 6.50                | _____            |                  |
| Cull Cows   | 7 hd @ 10.75 cwt     | 41.00          | 3,085.25           | 61.71               | _____            |                  |
| Cull Horse  | 0.50 hd @ 1.0 hd     | 300.00         | 150.00             | 3.00                | _____            |                  |
| Heifer Calves   | 10 hd @ 5.0 cwt      | 72.00          | 3,600.00           | 72.00               | _____            |                  |
| Open Heifers  | 3 hd @ 7.25 cwt      | 67.00          | 1,457.25           | 29.15               | _____            |                  |
| Steer Calves  | 21 hd @ 5.45 cwt     | 79.00          | 9,041.55           | 180.83              | _____            |                  |
| <b>Total GROSS Revenue</b>  |                      |                | <b>\$17,659.05</b> | <b>\$353.19</b>     | _____            |                  |
| <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> |
| Alfalfa Hay   | 85.00                | tn             | 75.00              | 6,375.00            | 127.50           | _____            |
| Salt  | 1.00                 | tn             | 160.00             | 160.00              | 3.20             | _____            |
| Minerals (custom mix)   | 0.20                 | tn             | 600.00             | 120.00              | 2.40             | _____            |
| Fuel & Lube, Machinery & Equipment  |                      |                |                    | 1,849.00            | 36.98            | _____            |
| Interest - Operating Capital (10% for 9 mo)                                       |                      |                |                    | 1,038.28            | 20.77            | _____            |
| Irrigation Labor  |                      |                |                    | 1,800.00            | 36.00            | _____            |
| Repairs, Machinery & Equipment  |                      |                |                    | 2,312.50            | 46.25            | _____            |
| Fence Repair Materials  |                      |                |                    | 100.00              | 2.00             | _____            |
| Utilities   |                      |                |                    | 2,200.00            | 44.00            | _____            |
| Supplies  |                      |                |                    | 600.00              | 12.00            | _____            |
| Vet & Medicine  |                      |                |                    | 1,000.00            | 20.00            | _____            |
| Brand Inspection  |                      |                |                    | 102.45              | 2.05             | _____            |
| Horse Purchase  | 0.50                 | hd             | 1,500.00           | 750.00              | 15.00            | _____            |
| Bull Purchase   | 0.40                 | hd             | 1,800.00           | 720.00              | 14.40            | _____            |
| Marketing Fees  |                      |                |                    | 529.77              | 10.60            | _____            |
| Accounting  |                      |                |                    | 400.00              | 8.00             | _____            |
| Legal and Related Expenses  |                      |                |                    | 200.00              | 4.00             | _____            |
| Family Labor  |                      |                |                    | 5,000.00            | 100.00           | _____            |
| Irrigation District Water Charge  |                      |                |                    | 1,250.00            | 25.00            | _____            |
| Miscellaneous   |                      |                |                    | 1,000.00            | 20.00            | _____            |
| <b>Total VARIABLE Cost</b>  |                      |                |                    | <b>\$26,507.00</b>  | <b>\$530.14</b>  | _____            |
| <b>GROSS REVENUE minus VARIABLE Cost</b>  |                      |                |                    | <b>-\$8,847.95</b>  | <b>-\$176.96</b> | _____            |
| <b>CASH FIXED Cost</b>  |                      |                |                    |                     |                  | _____            |
| Machinery & Equipment Insurance & Taxes (Tables 1 & 3)                            |                      |                |                    | 1,587.25            | 31.75            | _____            |
| Property Taxes  |                      |                |                    | 215.00              | 4.30             | _____            |
| <b>Total CASH FIXED Cost</b>  |                      |                |                    | <b>\$1,802.25</b>   | <b>\$36.05</b>   | _____            |
| <b>Total VARIABLE and CASH FIXED Costs</b>  |                      |                |                    | <b>\$28,309.25</b>  | <b>\$566.19</b>  | _____            |
| <u>OTHER COSTS and RETURNS</u>  |                      |                |                    | <u>Total</u>        | <u>Per Cow</u>   | <u>Your Cost</u> |
| <b>NET PROJECTED RETURNS OVER VARIABLE and CASH FIXED Costs</b>                   |                      |                |                    | <b>-\$10,650.20</b> | <b>-\$213.00</b> | _____            |
| Noncash Fixed Cost of Depr. & Interest (10%) on Machinery & Equip. (Tables 1 & 3) |                      |                |                    | \$9,697.76          | \$193.96         | _____            |
| <b>NET PROJECTED RETURNS TO LAND &amp; LIVESTOCK OWNERSHIP</b>                    |                      |                |                    | <b>-\$20,347.96</b> | <b>-\$406.96</b> | _____            |
| Opportunity Cost of Land Ownership (\$1,750/cow-unit x 50 units@2.5%)             |                      |                |                    | \$3,375.00          | \$67.50          | _____            |
| Opportunity Cost of Livestock Ownership (Table 2)                                 |                      |                |                    | \$717.37            | \$14.35          | _____            |
| <b>PROJECTED RETURNS NET OF ALL ECONOMIC COSTS</b>                                |                      |                |                    | <b>-\$24,440.53</b> | <b>-\$488.81</b> | _____            |
| <b>PROJECTED RETURNS TO LAND &amp; LIVESTK OWNERSHP, &amp; FAM LAB</b>            |                      |                |                    | <b>-\$15,347.96</b> | <b>-\$306.96</b> | _____            |

# EM 8681 Enterprise Budget

## COW/CALF PRODUCTION FLOWCHART North Central Plateau Region 50-Cow Herd



\* All eight replacement heifers have been pregnancy tested and are pregnant. The conception rate of the remaining 42 cows in the brood cow herd is 90 percent.

## EM 8681 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 |
|------------------------------|---------|------------|----------------------|---------------|-------------|----------------|----------------------|---------------------------|
| <b>MACH. &amp; EQUIPMENT</b> |         |            |                      |               |             |                |                      |                           |
| Loader Tractor               | 35 hp   | \$13,000   | \$7,800              | \$2,600       | 10,000      | 6,000          | 230                  | 230 hr                    |
| Stock Trailer                |         | 8,000      | 4,400                | 800           | 10          | 6              | 1                    | 1 yr                      |
| Pickup (4wd)                 | 3/4 ton | 24,000     | 13,200               | 2,400         | 100,000     | 60,000         | 20,000               | 6,700 mi                  |
| 4-Wheeler                    |         | 4,500      | 2,475                | 450           | 5,000       | 3,000          | 1,000                | 1,000 hr                  |
| Buildings                    |         | 85,000     | 46,750               | 8,500         | 30          | 18             | 1                    | 1 yr                      |
| Working Facilities           |         | 13,000     | 7,150                | 1,300         | 30          | 18             | 1                    | 1 yr                      |
| Mineral Feeders              |         | 500        | 275                  | 50            | 10          | 6              | 1                    | 1 yr                      |
| Feed Bunks                   |         | 2,000      | 1,100                | 200           | 10          | 6              | 1                    | 1 yr                      |
| <b>LIVESTOCK</b>             |         |            |                      |               |             |                |                      |                           |
| Cows                         |         |            | 486                  | 441           | 6           | 3 yr           |                      |                           |
| Replacement Heifers          |         |            | 486                  | 486           | 7           | 5 yr           |                      |                           |
| Horses                       |         | 1,500      | 900                  | 300           | 10          | 5 yr           |                      |                           |
| Bulls                        |         | 1,800      | 1,306                | 813           | 6           | 3 yr           |                      |                           |

**Table 2. Livestock Opportunity Cost Calculations**

| Livestock           | Opportunity Cost per Head | # Head | Opportunity Cost by Class of Livestock | Opportunity Cost per Cow |
|---------------------|---------------------------|--------|--|--------------------------|
| Bulls               | 32.66                     | 2      | 65.32                                  | 1.31                     |
| Cows                | 12.15                     | 42     | 510.09                                 | 10.20                    |
| Horses              | 22.50                     | 2      | 45.00                                  | 0.90                     |
| Replacement Heifers | 12.15                     | 8      | 97.16                                  | 1.94                     |
| Total               |                           |        | 717.57                                 | \$14.35                  |

**Table 3. Machinery and Equipment Cost Calculations**

| Machine & Equipment | Size    | Costs per Hour, Year or Mile |                 |                        |                   | Total Cost | Hours, Years, or Miles per Head | Cost per Cow   |                 |                 |
|---------------------|---------|------------------------------|-----------------|------------------------|-------------------|------------|---------------------------------|----------------|-----------------|-----------------|
|                     |         | Variable Fuel & Lube         | Repair & Maint. | Fixed Depr. & Interest | Insurance & Taxes |            |                                 | Variable       | Fixed           | Total           |
| Loader Tractor      | 35 hp   | 3.00                         | 3.25            | 3.30                   | 0.34              | 9.89       | 4.60 hr                         | \$28.75        | \$16.74         | \$45.49         |
| Stock Trailer       |         | 0.00                         | 80.00           | 846.67                 | 44.00             | 970.67     | 0.02 yr                         | 1.60           | 17.81           | 19.41           |
| Pickup (4wd)        | 3/4 ton | 0.07                         | 0.05            | 0.22                   | 0.05              | 0.39       | 134.00 mi                       | 16.08          | 35.51           | 51.59           |
| 4-Wheeler           |         | 0.69                         | 0.01            | 0.81                   | 0.02              | 1.53       | 20.00 hr                        | 14.00          | 16.62           | 30.62           |
| Buildings           |         | 0.00                         | 850.00          | 4,840.28               | 935.00            | 6,625.28   | 0.02 yr                         | 17.00          | 115.51          | 132.51          |
| Working Facilities  |         | 0.00                         | 200.00          | 740.28                 | 143.00            | 1,083.28   | 0.02 yr                         | 4.00           | 17.67           | 21.67           |
| Mineral Feeders     |         | 0.00                         | 40.00           | 52.92                  | 5.50              | 98.42      | 0.02 yr                         | 0.80           | 1.17            | 1.97            |
| Feed Bunks          |         | 0.00                         | 50.00           | 211.67                 | 22.00             | 283.67     | 0.02 yr                         | 1.00           | 4.67            | 5.67            |
| <b>TOTAL</b>        |         |                              |                 |                        |                   |            |                                 | <b>\$83.23</b> | <b>\$225.70</b> | <b>\$308.93</b> |

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