

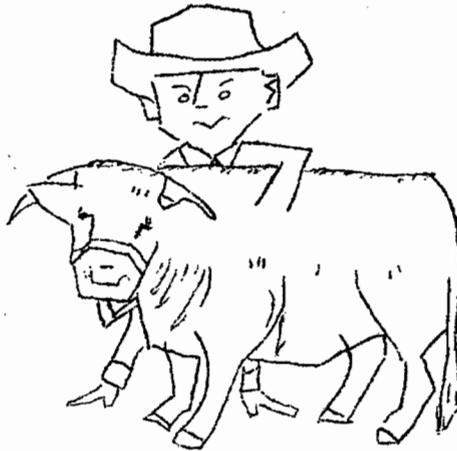
ENTERPRISE ANALYSIS FOR A BEEF RANCH PLUMAS-SIERRA COUNTIES

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INTRODUCTION

ENTERPRISE ANALYSIS FOR A BEEF RANCH

Adequate decision making to manage a ranch is dependent on having records which adequately let you know what is happening in the various segments of the ranch. Most accounting systems lump the entire ranch operation together and this is all that is required in accurately reporting your income tax. Additional analysis at various parts of the business is necessary for making management decisions.

This publication illustrates a simplified technique for enterprise analysis which you may find valuable for your situation. This analysis is simple compared to most at your operations but the principles involved would still remain the same.

We have assumed a 500 cow breeding herd with 5,000 acres at Sacramento Valley Foothill range for winter feed and 800 acres at mountain meadow in Plumas-Sierra Counties.

We have started out with the income and expense for the entire ranch. This can come from your income tax record. We have included all labor as a cash cost and have calculated an interest charge on the total investment and a management charge. You will probably not want to consider these non-cash costs on your analysis.

The total income and expenses are then divided among the appropriate enterprise, in this case:

- Valley Range
- Mountain Meadow
- Equipment
- Horse
- Beef

The beef income and costs are further divided among breeding cows, breeding bulls and replacement heifers. You may need more or less than this number of breakdowns to adequately analyze your business.

The equipment, horse, and miscellaneous categories are what we call "service accounts". Cost items which are not chargeable directly to one of the income producing enterprises are accumulated in these accounts and then distributed to the appropriate accounts. Our experience has indicated that these three accounts are desirable for a beef operation plus a labor account where wages, social security, compensation insurance, and other labor costs can be combined and then the total cost of labor charged to the other accounts.

You may prefer to charge horse expense directly to the beef rather than through a separate account. The final cost of beef will remain the same but you won't know what the horses are costing you.

In our example, we have transferred the actual cost of equipment, horses, and miscellaneous to the other enterprises. This is a simple method and gives a final zero net income in those accounts. In some cases, it is more appropriate to charge to the other accounts on the basis of what it would cost to buy these services. For example machinery can be charged to the other enterprises at the local custom rate.

CATTLE COUNTS

PLUMAS-SIERRA COUNTIES - 1967

| Description | Total | Month | | | | | | | | | | | |
|-----------------------------|-------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|
| | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Bulls | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Cows | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 425 | 425 |
| Calves 90% Calf Crop Weaned | 450 | | | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | | |
| Heifers, Weaners | 76 | | | | | | | | | | | 76 | 76 |
| Heifers, Yearlings | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Total | 1126 | 600 | 600 | 1050 | 601 | 601 |

INCOME AND EXPENSE BY ENTERPRISE

| | Total Ranch | Valley Range | Mountain Meadow | Equipment | Horse | Miscellaneous | Beef |
|---------------------------------------|-----------------|-----------------|-----------------|----------------|--------------|----------------|-----------------|
| Income | | | | | | | |
| Steers 225 @ 425# @ 26¢ | \$24,862 | | | | | | \$24,862 |
| Heifers 139 @ 400# @ 23¢ | 13,708 | | | | | | 13,708 |
| Cull Cows 70 @ 1,000# @ 15¢ | 10,500 | | | | | | 10,500 |
| Cull Bulls 5 @ 1500# @ 19¢ less 1% | 1,411 | | | | | | 1,411 |
| Transfers: | | | | | | | |
| Valley Range | | \$12,898 | | | | | |
| Mountain Meadow | | | \$19,041 | | | | |
| Equipment | | | | \$7,513 | | | |
| Horse | | | | | \$960 | | |
| Miscellaneous Overhead | | | | | | \$1,851 | |
| Total Income Cost | \$50,481 | | | | | | \$50,481 |
| Transfers | | \$12,898 | \$19,041 | \$7,513 | \$960 | \$1,851 | |
| Expenses | | | | | | | |
| Replacement Bulls | \$ 2,250 | | | | | | \$ 2,250 |
| Cottonseed Meal | 246 | | | | | | 246 |
| Salt | 374 | | | | | | 374 |
| Labor - Family and Hired | 11,050 | \$ 2,000 | \$ 300 | | | | 8,750 |
| Irrigation Labor | 1,760 | | 1,760 | | | | |
| Shipping | 2,643 | | | | | | 2,643 |
| Veterinary | 637 | | | | | | 637 |
| Taxes | 10,817 | 8,750 | 800 | \$ 80 | | | 1,187 |
| Repairs, Fence | 600 | 500 | 100 | | | | |
| Water | 2,000 | | 2,000 | | | | |
| Fuel & Repairs | 3,000 | | | 3,000 | | | |
| License | 300 | | | 300 | | | |
| Insurance | 1,200 | | | 400 | | \$ 800 | |
| Miscellaneous | 1,051 | | | | | 1,051 | |
| Depreciation | 5,693 | 1,540 | 890 | 2,983 | \$280 | | |
| Interest | 49,517 | 30,924 | \$10,534 | 750 | 84 | | 7,225 |
| Management | 2,524 | | | | | | 2,524 |
| Transfers | | | | | | | |
| Equipment | | 1,813 | 2,000 | | | | 3,700 |
| Horse | | | | | | | 960 |
| Miscellaneous | | | | | 51 | | 1,800 |
| Winter Pasture | | | | | 220 | | 12,678 |
| Summer Pasture | | | | | 325 | | 18,716 |
| Total Expense | \$95,662 | \$45,527 | \$18,384 | \$7,513 | \$960 | \$1,851 | \$63,690 |
| Net Income | -45,181 | -32,629 | + 657 | -0- | -0- | -0- | -13,209 |

BREAKDOWN OF BEEF INCOME AND EXPENSE

| | Total Beef | Breeding Cows | Breeding Bulls | Replacement Heifers |
|--------------------------------|-----------------|-----------------|----------------|---------------------|
| Income - | | | | |
| Steers 225 @ 425# @ 26¢ | \$24,862 | \$24,862 | | |
| Heifers 149 @ 400# @ 23¢ | 13,708 | 13,708 | | |
| Cull Cows 70 @ 1,000# @ 15¢ | 10,500 | 10,500 | | |
| Cull Bulls 5 @ 1500# @ 19¢ -1% | 1,411 | | \$1,411 | |
| Transfers: | | | | |
| Heifer calves for replacement | | 7,429 | | |
| 76 @ \$97.75 | | | | |
| Breeding Fees | | | 3,910 | |
| Replacement Heifers | | | | \$15,000 |
| Total Income | \$50,481 | \$56,499 | \$5,321 | \$15,000 |

| | | | | |
|--|-----------------|-----------------|----------------|-----------------|
| Expenses - | | | | |
| Replacements: | | | | |
| Purchased Bulls (5) | \$ 2,250 | | \$2,250 | |
| Transfer Heifers | | \$15,000 | | \$ 7,866 |
| Feed: | | | | |
| Winter Range | 12,678 | 10,548 | 552 | 1,578 |
| Summer Range | 18,716 | 16,065 | 810 | 1,841 |
| Cottonseed Meal | 246 | | | 246 |
| Salt | 374 | 250 | 12 | 112 |
| Total Feed | \$32,014 | \$26,863 | \$1,374 | \$3,777 |
| Labor | 8,750 | 7,500 | 500 | 750 |
| Shipping (Costs considered in \$92 replacements) | 2,643 | 2,128 | 172 | 343 |
| Veterinary | 637 | 500 | 25 | 112 |
| Breeding | | 3,400 | | 510 |
| Taxes | 1,187 | 1,000 | 75 | 112 |
| Horse | 960 | 872 | 50 | 38 |
| Equipment | 3,700 | 3,425 | 125 | 150 |
| Miscellaneous Overhead | 1,800 | 1,500 | 75 | 225 |
| Interest | 7,225 | 6,000 | 675 | 550 |
| Management | 2,524 | 2,524 | | |
| Total Expenses | \$63,690 | \$70,712 | \$5,321 | \$14,433 |
| Net Income | -13,209 | -14,213 | -0- | 567 |

SACRAMENTO VALLEY FOOTHILL RANGE

5,000 Acres

| | | <u>Total</u> | <u>Per Acre</u> |
|---------------------|-------------------------|-----------------|-----------------|
| <u>Income -</u> | | | |
| Replacement Heifers | 526 head months @ \$3 | \$1,578 | |
| Bulls | 138 head months @ \$4 | 552 | |
| Cows | 2637 head months @ \$4 | 10,548 | |
| Horses | 55 head months @ \$4 | 220 | |
| Total | 3356 head months | \$12,898 | \$2.68 |

| | | | |
|--------------------------|--|----------|--------|
| <u>Expenses -</u> | | | |
| Taxes | | \$ 8,750 | \$1.75 |
| Equipment | | 1,813 | .36 |
| Fence Repairs - Material | | 500 | .10 |
| - Labor | | 2,000 | .40 |

| | | <u>Depreciation</u> | <u>Interest</u> | | |
|-----------------|------------------|---------------------|-----------------|---------------|-------------|
| Investment: | | | | | |
| Land | \$500,000 | | \$30,000 | | |
| Fences | 20,000 | \$1,000 | 600 | | |
| Corrals | 3,000 | 150 | 90 | | |
| Scales | 2,800 | 140 | 84 | | |
| Barn | 5,000 | 250 | 150 | | |
| Total | \$530,800 | \$1,540 | \$30,924 | 32,464 | |
| Per Acre | \$1,061 | .32 | 6.18 | | 6.50 |

| | | | | | |
|----------------------|--|--|--|-----------------|---------------|
| Total Expense | | | | \$45,527 | \$9.11 |
| Net | | | | -32,629 | -6.43 |

MOUNTAIN MEADOW PASTURE

• 800 Acres

| | | | <u>Total</u> | <u>Per Acre</u> |
|-------------------------|----------------------------|-------------|-----------------|-----------------|
| Income: | | | | |
| Replacement Heifers | 526 head months @ \$3.50 | | \$1,841 | |
| Bulls | 162 head months @ \$5.00 | | 810 | |
| Cows | 3,213 head months @ \$5.00 | | 16,065 | |
| Horses | 65 head months @ \$5.00 | | 325 | |
| Total | 3,966 | | \$19,041 | \$23.80 |
| Expense: | | | | |
| Taxes | | | \$ 800 | \$ 1.00 |
| Irrigation labor | 4 months @ \$400 plus 10% | | 1,760 | 2.20 |
| Water | | | 2,000 | 2.50 |
| Equipment | | | 2,000 | 2.50 |
| Fence Repair - Material | | | 100 | .12 |
| - Labor | | | 300 | .38 |
| Investment | | | | |
| Land | \$160,000 | | | |
| Irrigation System | 4,000 | \$ 200 | 120 | |
| Fences | 3,000 | 150 | 90 | |
| Corrals | 3,000 | 150 | 90 | |
| Scales | 2,800 | 140 | 84 | |
| Barn | 5,000 | 250 | 150 | |
| Total | \$177,800 | 890 | \$10,534 | 11,424 |
| Per Acre | 272 | 1.15 | 13.17 | 14.32 |
| Total Expense | | | 18,384 | 23.02 |
| Net Income | | | 657 | .78 |

EQUIPMENT

Income -

| | |
|-----------------|--------------|
| Valley Range | \$1,813 |
| Mountain Meadow | 2,000 |
| Beef | <u>3,700</u> |
| Total Income | \$7,513 |

Expense -

| | |
|-----------------------|---------|
| Fuel, Oil and Repairs | \$3,000 |
| License | 300 |
| Insurance | 400 |
| Taxes | 80 |

| Investment | <u>Total</u> | <u>Depreciation</u> | <u>Interest</u> | |
|-----------------|--------------|---------------------|-----------------|--------------|
| Crawler Tractor | \$ 8,000 | \$ 533 | \$ 240 | |
| Wheel Tractor | 2,600 | 260 | 78 | |
| Truck | 5,000 | 500 | 150 | |
| Pickup - 3 | 7,500 | 1,500 | 225 | |
| Miscellaneous | <u>1,900</u> | <u>190</u> | <u>57</u> | |
| Total | \$25,000 | \$2,983 | \$750 | <u>3,733</u> |
| Total | | | | \$7,513 |
| Net | | | | -0- |

HORSE EXPENSE

10 Head

| | | | | |
|-------------------|---------------|----------------------|--------------|---------------------|
| Feed: | Winter Range | 55 head months @ \$4 | | \$ 220 |
| | Summer Range | 65 head months @ \$5 | | 325 |
| | Miscellaneous | | | 51 |
| Investment | | | <u>Total</u> | <u>Depreciation</u> |
| | Horses | | \$2,500 | \$ 250 |
| | Saddles | | <u>300</u> | <u>30</u> |
| | Total | | \$2,800 | \$ 280 |

| | | |
|--|-----------------|--|
| | <u>Interest</u> | |
| | \$ 75 | |
| | <u>9</u> | |
| | \$ 84 | |
| | <u>364</u> | |

Total Cost \$960

BREEDING HERD

| | | <u>Total</u> | <u>Per Cow</u> |
|---------------------------------------|----------------------------|-----------------|-----------------|
| <u>Income -</u> | | | |
| Steers | 225 @ 425# - 95,625# @ 26¢ | \$24,862 | \$49.72 |
| Heifers | 149 @ 400# - 59,600# @ 23¢ | 13,708 | 27.42 |
| Cull Cows | 70 @ 1000# - 70,000# @ 15¢ | 10,500 | 21.00 |
| Transfers | | | |
| Heifer calves to replacement heifers | 76 @ 450# - 34,200 @ 23¢ | 7,866 | 15.73 |
| Total Income | | \$56,936 | \$113.87 |
| <u>Expense -</u> | | | |
| Replacement Heifers | | \$15,000 | \$ 30.00 |
| Feed: Winter range - 2637 head months | | | |
| | @ \$4 10,548 | | 21.10 |
| Summer range - 3213 head months | | | |
| | @ \$5 16,065 | | 32.13 |
| Salt | <u>250</u> | | <u>.50</u> |
| Total Feed | | 26,863 | 53.73 |
| Labor | | 7,500 | 15.00 |
| Shipping - 2 times 925,000# @ 23¢ | | 2,128 | 4.26 |
| Veterinary | | 500 | 1.00 |
| Breeding 500 head @ 6.80 | | 3,400 | 6.80 |
| Taxes | | 1,000 | 2.00 |
| Horse | | 872 | 1.74 |
| Equipment | | 3,425 | 6.85 |
| Miscellaneous Overhead | | 1,500 | 3.00 |
| Interest \$100,000 @ 6% | | 6,000 | 12.00 |
| Management 5% of \$50,481 | | <u>2,524</u> | <u>5.05</u> |
| Total Cost | | \$70,712 | \$141.43 |
| Net Income | | -13,776 | -27.56 |

BREEDING BULLS

| | <u>Total</u> | <u>Per Bull</u> |
|--|--------------|-----------------|
| <u>Income -</u> | | |
| Cull Bulls sold 5 @ 1,500# @ 19¢ = 1,425 -1% | \$ 1,411 | \$56.50 |
| Breeding 500 Cows | <u>3,910</u> | <u>156.40</u> |
| Total Income | \$ 5,321 | \$212.90 |
| <u>Expense -</u> | | |
| Replacement Bulls 5 @ \$450 | \$ 2,250 | \$ 90.00 |
| Feed: Winter Range - | | |
| 138 head months @ \$4 | \$552 | 22.10 |
| Summer Range - | | |
| 162 head months @ \$5 | 810 | 32.40 |
| Salt | <u>12</u> | <u>.50</u> |
| Total Feed | \$1,374 | 55.00 |
| Labor | 500 | 20.00 |
| Shipping 2 times 75,000# @ 23¢ | 172 | 6.90 |
| Veterinary | 25 | 1.00 |
| Taxes | 75 | 3.00 |
| Horse | 50 | 2.00 |
| Equipment | 125 | 5.00 |
| Miscellaneous Overhead | 75 | 3.00 |
| Interest \$11,250 6% | <u>675</u> | <u>27.00</u> |
| Total Expense | \$5,321 | \$212.90 |
| Net Cost | \$3,910 | \$156.40 |
| Per Cow & Heifer (575) | 6.80 | 6.80 |

REPLACEMENT HEIFERS

| | <u>Total</u> | <u>Per Heifer</u> |
|--|--------------------|-------------------|
| <u>Income -</u> | | |
| Transfer to Breeding Herd 75 @ \$200 | \$15,000 | \$200.00 |
| <u>Expense -</u> | | |
| Weaner Heifers 76 @ 450# - 34,200# @ 23¢ | \$ 7,866 | \$104.88 |
| Feed: Winter Range | | |
| 526 head months @ \$3 | 1,578 | 21.00 |
| Summer Range | | |
| 526 head months @ \$3.50 | 1,841 | 24.55 |
| Cottonseed Cake 3 ton @ \$82 | 246 | 3.30 |
| Salt | <u>112</u> | <u>1.50</u> |
| Total Feed | 3,777 | 50.35 |
| Labor | 750 | 10.00 |
| Shipping - Fall: 76 Calves @ 450# | 34,200# | |
| 75 Long Yearlings @ 880# | 66,000# | |
| Spring: 75 Yearlings @ 650# | <u>48,750#</u> | |
| Total | 148,950# @ 23¢ 343 | 4.57 |
| Veterinary | 112 | 1.50 |
| Breeding 75 Heifers @ \$6.80 | 510 | 6.80 |
| Taxes | 112 | 1.50 |
| Horse | 38 | .50 |
| Equipment | 150 | 2.00 |
| Miscellaneous Overhead | 225 | 3.00 |
| Interest \$6,992 for 15 months @ 6% | <u>550</u> | <u>7.25</u> |
| Total Expense | \$14,433 | \$192.35 |
| Net Income | \$ 567 | \$ 7.65 |