



COOPERATIVE EXTENSION

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Fact Sheet FS-01-19

Cow-Calf Costs and Returns for Elko County, Nevada Northeastern Nevada Production Area, 2000 600 Cow Operation

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This budget represents typical costs and returns for a 600-head cow-calf operation in Northeastern Nevada as established by a producer panel. The forage base for the ranch consist of summer grazing on federal allotments, aftermath grazing on meadows, private pasture and winter feeding of hay.

Livestock

Livestock inventory consist of 600 cows, 30 bulls and 12 horses. Six replacement bulls are bought annually and all bulls have a useful life of 5 years. Cow replacement is at 16% with a death loss of 2%. The weaned calf crop of over wintered cows and replacement heifers is 85%. Replacement heifers are selected at weaning and number 120 head. At fall evaluation 108 are brought into the herd as replacements and the remaining 12 sold as open or bred yearling heifers. Steer calves, non-selected replacement heifers, cull bulls and cull cows are marketed for delivery in November.

Cows and replacement heifers are pregnancy checked in November and provided Warbex, 7 or 8 Way, and an oral de-wormer. Bulls are also worked in November and given Warbex and 7 or 8 Way. Weaned replacement heifers are provided IBR, BVD, PI3, BRSV, 7 or 8 Way, Warbex, Oral de-wormer, Naselgen and Bangs vaccinated. Steer and heifer calves are branded, earmarked, and de-horned in May and vaccinated with 7 or 8 Way and Naselgen. Steers are also given implants and castrated during the May work. Calves are marketed through Video Marketing Sales through the summer with a

November delivery. Cull animals are marketed through local auction markets. Prices in this budget reflect current situations within a cattle cycle and do not include risk management opportunities.

Returns and expenses for the ranch are summarized by month in Table 2 while monthly feed requirements are shown in table 3.

Labor

Labor involves one hired employee, one owner/manager, and summer help from kids. Labor costs include an annual salary of \$18,500 per labor unit with seventy two percent of the hired labor time contributed to the livestock enterprise and twenty eight percent contributed to the haying enterprise. The owner/manager receives \$1000 per month as a family draw to compute a return to management.

Machinery and Equipment

Equipment available on the ranch includes: 3 tractors, (130, 80, and 40 horse powers), crawler tractor, used dump truck, gooseneck trailer, ½ ton 2-wheel drive truck, ½ ton 4x4 truck, ¾ ton 4x4 truck, 4x4 ATV, feed wagon, chopper/grinder, flatbed trailer, horse tack, and miscellaneous implements (small disk, blade, post hole auger, brush beater, harrows, ditcher, etc.). Equipment costs are allocated to the enterprise. In Table 1 part of the costs are assigned to the livestock enterprise and part to the production of hay (not shown). Table 4 provides an investment summary of all machinery, equipment and improvements.

Table1: Cow-Calf Costs and Returns for Elko County, Nevada, 2000 Spring and Summer on Federal Range.

| | Weight Each | Total Number of Head Unit Or Units | Price or Cost/Unit | Total Value | Value or Cost/Head | Your Value |
|--|----------------|--|-----------------------|----------------------------|------------------------|------------|
| 1. Gross Receipts | | | | | | |
| Steer Calves | 4.75 | cwt | 249 | 91.25 | 107,925.94 | 179.88 |
| Heifer Calves | 4.35 | cwt | 129 | 83.65 | 46,940.20 | 78.23 |
| Cull Cows | 9.50 | cwt | 108 | 36.85 | 37,808.10 | 63.01 |
| Cull Bulls | 14.50 | cwt | 6 | 43.09 | 3748.83 | 6.25 |
| Yearling Heifers | 7.50 | cwt | 12 | 70.00 | 6300.00 | 10.50 |
| Total Receipts | | | | <u>\$202,723.07</u> | <u>\$337.87</u> | |
| 2. Operating Costs | | | | | | |
| Grass Hay | | Ton | 1149.24 | 50.00 | 57,462.00 | 95.77 |
| Grain | | Ton | 25.48 | 130.00 | 3311.88 | 5.52 |
| Alfalfa Hay | | Ton | 76.38 | 85.00 | 6492.30 | 10.82 |
| BLM Range | | AUM | 4147.50 | 1.35 | 5599.13 | 9.33 |
| Meadow Aftermath | | AUM | 1320.00 | 8.50 | 11,220.00 | 18.70 |
| Private Pasture | | AUM | 162.00 | 12.00 | 1944.00 | 3.24 |
| Dog Food | | Lbs. | 1610.40 | 0.19 | 305.98 | 0.51 |
| Minerals | | Ton | 17.58 | 400.00 | 7030.80 | 11.72 |
| Salt | | Ton | 30.25 | 122.00 | 3690.74 | 6.15 |
| Checkoff | | HD | 504.00 | 1.00 | 504.00 | 0.84 |
| Brand Inspection | | HD | 504.00 | 0.75 | 378.00 | 0.63 |
| Marketing Commission | | HD | 504.00 | 1.00 | 504.00 | 0.84 |
| Marketing Video | | HD | 504.00 | 5.00 | 2520.00 | 4.20 |
| Miscellaneous | | HD | 600.00 | 5.00 | 3000.00 | 5.00 |
| Livestock Taxes | | HD | 750.00 | 0.28 | 210.00 | 0.35 |
| Livestock Taxes-Horse | | HD | 12.00 | 0.75 | 9.00 | 0.01 |
| Veterinary Medicine | \$ | | 11,357.22 | 1.00 | 11,357.22 | 18.93 |
| Machinery (fuel, lubrication, repair) | \$ | | 6064.53 | 1.00 | 6064.53 | 10.11 |
| Vehicles (fuel, repair) | \$ | | 8044.50 | 1.00 | 8044.50 | 13.41 |
| Equipment (repair) | \$ | | 3340.63 | 1.00 | 3340.63 | 5.57 |
| Housing and Improvements (repair) | \$ | | 3972.35 | 1.00 | 3972.35 | 6.62 |
| Hired Labor | | Annual | 0.72 | 18,500.00 | 13,329.25 | 22.22 |
| Owner Labor | | Months | 12 | 1,000.00 | 12,000.00 | 20.00 |
| Interest on Operating Capital | \$ | | 64,829.20 | 0.10 | 6158.77 | 10.26 |
| Total Operating Costs | | | | <u>\$168,449.08</u> | <u>\$280.75</u> | |
| 3. Income Above Operating Costs | | | | <u>\$34,273.99</u> | <u>\$57.12</u> | |
| 4. Ownership Costs | | | | | | |
| Capital Recovery: | | | | | | |
| Purchased Livestock | \$ | | 4,540.80 | 1.00 | 4,540.80 | 7.57 |
| Buildings, Improvements and Equipment | \$ | | 11,306.67 | 1.00 | 11,306.67 | 18.84 |
| Machinery and Vehicles | \$ | | 6,274.85 | 1.00 | 6,274.85 | 10.46 |
| Interest on Retained Livestock | \$ | | 229,200.00 | 0.08 | 18,336.00 | 30.56 |
| Taxes and Insurance | \$ | | 3,848.72 | 1.00 | 3,848.72 | 6.42 |
| Overhead | \$ | | 12,380.00 | 1.00 | 12,380.00 | 20.63 |
| Total Ownership Costs | | | | <u>\$56,687.04</u> | <u>\$94.48</u> | |
| 5. Total Costs | | | | <u>\$225,136.12</u> | <u>\$375.23</u> | |
| 6. Returns to Land, Risk and Management | | | | <u>-\$22,413.05</u> | <u>-\$37.35</u> | |

Table 2: Monthly Summary of Returns and Expenses.

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Value |
|----------------------------|---------|---------|---------|---------|--------|--------|--------|--------|--------|---------|---------|--------|---------|
| Production: | | | | | | | | | | | | | |
| Steer Calves | | | | | | | | | | | 107,926 | | 107,926 |
| Heifer Calves | | | | | | | | | | 46,940 | | 46,940 | 46,940 |
| Cull Cows | | | | | | | | | | | 37,808 | 37,808 | 37,808 |
| Cull Bulls | | | | | | | | | | | 3,749 | 3,749 | 3,749 |
| Yearling Heifers | | | | | | | | | | 6,300 | | 6,300 | 6,300 |
| Total Receipts | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 161,166 | 41,557 | 202,723 |
| Operating Inputs: | | | | | | | | | | | | | |
| Grass Hay | 13,185 | 12,537 | 2,942 | | | | | | | 3,077 | 13,185 | 57,462 | 57,462 |
| Grain | 491 | 913 | 231 | 23 | 23 | 23 | 23 | 23 | 23 | 133 | 491 | 3,312 | 3,312 |
| Alfalfa Hay | 1,454 | 1,454 | 339 | | | | | | | 339 | 1,454 | 6,492 | 6,492 |
| BLM Range | | | 699 | 980 | 980 | 980 | 980 | 980 | | | | 5,599 | 5,599 |
| Meadow Aftermath | | | | | | | | | 6,171 | 5,049 | | 11,220 | 11,220 |
| Private Pasture | | | 194 | 259 | 259 | 259 | 259 | 259 | 259 | 194 | | 1,944 | 1,944 |
| Dog Food | 26 | 26 | 25 | 26 | 25 | 26 | 26 | 25 | 26 | 25 | 26 | 306 | 306 |
| Minerals | 1,026 | 1,026 | 996 | | | | | | 1,026 | 996 | 1,026 | 7,031 | 7,031 |
| Salt | 313 | 313 | 304 | 313 | 304 | 313 | 313 | 304 | 313 | 304 | 313 | 3,691 | 3,691 |
| Checkoff | | | | | | | | | | 390 | 114 | 504 | 504 |
| Brand Inspection | | | | | | | | | | 293 | 86 | 378 | 378 |
| Marketing Commission | | | | | | | | | | 390 | 114 | 504 | 504 |
| Marketing Video | | | | | | | | | | 1,950 | 570 | 2,520 | 2,520 |
| Miscellaneous | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 3,000 | 3,000 |
| Livestock Taxes | | | | | | | | | | | | 210 | 210 |
| Livestock Taxes-Horse | | | | | | | 9 | | | | | | 9 |
| Veterinary Medicine | | 322 | 2,418 | 4,597 | | | | | | 4,021 | | 11,357 | 11,357 |
| Machinery | | | | | | | | | | | | | |
| (Fuel,Lube,Repair) | 505 | 505 | 505 | 505 | 505 | 505 | 505 | 505 | 505 | 505 | 505 | 6,065 | 6,065 |
| Vehicles (Fuel and Repair) | 670 | 670 | 670 | 670 | 670 | 670 | 670 | 670 | 670 | 670 | 670 | 8,045 | 8,045 |
| Equipment (Repair) | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 278 | 3,341 | 3,341 |
| Housing, Impr. (Repair) | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 3,972 | 3,972 |
| Taxes and Insurance | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 3,849 | 3,849 |
| Hired Labor | 1,536 | 1,536 | 812 | 257 | 257 | 257 | 997 | 1,536 | 1,536 | 1,536 | 1,536 | 13,329 | 13,329 |
| Total Costs | 20,386 | 20,386 | 20,481 | 11,315 | 8,811 | 4,205 | 4,434 | 4,955 | 5,483 | 11,710 | 21,051 | 21,270 | 168,449 |
| Net Returns | -20,386 | -20,386 | -20,481 | -11,315 | -8,811 | -4,205 | -4,434 | -4,955 | -5,483 | -11,710 | 14,011 | 20,287 | 34,274 |

Table 3: Monthly Feed Requirements.

| Feed | Units | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Grass Hay | | | | | | | | | | | | | |
| Cows | Ton | 184.50 | 184.50 | 184.50 | 43.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 43.05 | 184.50 |
| Bulls | Ton | 13.50 | 13.50 | 13.50 | 3.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.15 | 13.50 |
| Pregnant Repl. Heifers | Ton | 32.40 | 19.44 | 19.44 | 4.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.56 | 32.40 |
| Weaned Repl. Heifers | Ton | 27.00 | 27.00 | 27.00 | 6.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.30 | 27.00 |
| Horses | Ton | 6.30 | 6.30 | 6.30 | 1.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.47 | 6.30 |
| Grain | | | | | | | | | | | | | |
| Pregnant Repl. Heifers | Ton | 0.00 | 3.24 | 3.24 | 0.76 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weaned Repl. Heifers | Ton | 3.60 | 3.60 | 3.60 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.84 | 3.60 |
| Horses | Ton | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 |
| Alfalfa Hay | | | | | | | | | | | | | |
| Pregnant Repl. Heifers | Ton | 8.10 | 8.10 | 8.10 | 1.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.89 | 8.10 |
| Weaned Repl. Heifers | Ton | 9.00 | 9.00 | 9.00 | 2.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.10 | 9.00 |
| BLM Range | | | | | | | | | | | | | |
| Cows | AUM | 0.00 | 0.00 | 0.00 | 369.00 | 492.00 | 492.00 | 492.00 | 492.00 | 492.00 | 0.00 | 0.00 | 0.00 |
| Bulls | AUM | 0.00 | 0.00 | 0.00 | 0.00 | 36.00 | 36.00 | 36.00 | 36.00 | 36.00 | 0.00 | 0.00 | 0.00 |
| Pregnant Repl. Heifers | AUM | 0.00 | 0.00 | 0.00 | 81.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 0.00 | 0.00 | 0.00 |
| Weaned Repl. Heifers | AUM | 0.00 | 0.00 | 0.00 | 67.50 | 90.00 | 90.00 | 90.00 | 90.00 | 90.00 | 0.00 | 0.00 | 0.00 |
| Meadow Aftermath | | | | | | | | | | | | | |
| Cows | AUM | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 492.00 | 369.00 | 0.00 |
| Bulls | AUM | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 36.00 | 27.00 | 0.00 |
| Pregnant Repl. Heifers | AUM | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 108.00 | 108.00 | 0.00 |
| Weaned Repl. Heifers | AUM | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 90.00 | 90.00 | 0.00 |
| Private Pasture | | | | | | | | | | | | | |
| Horses | AUM | 0.00 | 0.00 | 0.00 | 16.20 | 21.60 | 21.60 | 21.60 | 21.60 | 21.60 | 21.60 | 16.20 | 0.00 |
| Dog Food | | | | | | | | | | | | | |
| Dogs | Lbs. | 136.40 | 127.60 | 136.40 | 132.00 | 136.40 | 132.00 | 136.40 | 136.40 | 132.00 | 136.40 | 132.00 | 136.40 |
| Minerals | | | | | | | | | | | | | |
| Cows | Ton | 1.67 | 1.53 | 1.67 | 1.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.67 | 1.62 | 1.67 |
| Bulls | Ton | 0.12 | 0.11 | 0.12 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.11 | 0.12 |
| Pregnant Repl. Heifers | Ton | 0.37 | 0.33 | 0.37 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.36 | 0.37 |
| Weaned Repl. Heifers | Ton | 0.41 | 0.37 | 0.41 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 0.40 | 0.41 |
| Salt | | | | | | | | | | | | | |
| Cows | Ton | 1.67 | 1.53 | 1.67 | 1.62 | 1.67 | 1.62 | 1.67 | 1.67 | 1.62 | 1.67 | 1.62 | 1.67 |
| Bulls | Ton | 0.12 | 0.11 | 0.12 | 0.11 | 0.12 | 0.11 | 0.12 | 0.12 | 0.11 | 0.12 | 0.11 | 0.12 |
| Pregnant Repl. Heifers | Ton | 0.37 | 0.33 | 0.37 | 0.36 | 0.37 | 0.36 | 0.37 | 0.37 | 0.36 | 0.37 | 0.36 | 0.37 |
| Weaned Repl. Heifers | Ton | 0.41 | 0.37 | 0.41 | 0.40 | 0.41 | 0.40 | 0.41 | 0.41 | 0.40 | 0.41 | 0.40 | 0.41 |

Table 4: Investment Summary.

| | Purchase Price | Salvage/Cull Value | Livestock Share | Useful Life (yrs) | Annual Taxes and Insurance | Annual Capital ¹ Recovery |
|--|---------------------|--------------------|-----------------|-------------------|----------------------------|--------------------------------------|
| Buildings, Improvements and Equipment | | | | | | |
| Barn | \$22,500.00 | \$2250.00 | 100 | 20 | \$204.19 | \$1,030.50 |
| Fencing | \$122,500.00 | \$0.00 | 100 | 25 | \$1010.63 | \$5,096.00 |
| Corrals | \$15,500.00 | \$1550.00 | 100 | 30 | \$140.66 | \$700.60 |
| Portable Corrals | \$2000.00 | \$200.00 | 100 | 12 | \$18.15 | \$94.00 |
| Water Developments | \$3000.00 | \$300.00 | 100 | 25 | \$27.23 | \$136.32 |
| Machine, Shop and tools | \$30,000.00 | \$3000.00 | 60 | 25 | \$163.35 | \$817.92 |
| Range Improvements | \$10,000.00 | \$1000.00 | 100 | 25 | \$90.75 | \$454.40 |
| Electric Fence | \$5000.00 | \$0.00 | 100 | 15 | \$41.25 | \$213.33 |
| Implements | \$25,000.00 | \$1000.00 | 75 | 20 | \$160.88 | \$816.00 |
| Flatbed Trailer | \$8000.00 | \$750.00 | 100 | 20 | \$72.19 | \$364.50 |
| Chopper/Grinder | \$12,000.00 | \$1200.00 | 100 | 20 | \$108.90 | \$549.60 |
| Feed Wagon | \$5000.00 | \$500.00 | 100 | 20 | \$45.38 | \$229.00 |
| Tack | \$10,000.00 | \$0.00 | 100 | 10 | \$82.50 | \$440.00 |
| Gooseneck | \$8000.00 | \$750.00 | 100 | 20 | \$72.19 | \$364.50 |
| Total | \$278,500.00 | | | | \$2238.22 | \$11,306.67 |
| Purchased Livestock | | | | | | |
| Bulls | \$60,000.00 | \$17,400.00 | 100 | 5 | | \$3,436.80 |
| Horses | \$19,200.00 | \$7200.00 | 100 | 10 | | \$1,104.00 |
| Total | \$79,200.00 | | | | | \$4,540.80 |
| Retained Livestock | | | | | | |
| Cows | \$246,000.00 | \$172,200.00 | 100 | | | \$13,776.00 ² |
| Replacement Heifers | \$57,000.00 | \$57,000.00 | 100 | | | \$4,560.00 ² |
| Total | \$303,000.00 | | | | | \$18,336.00² |
| Machinery and Vehicles | | | | | | |
| 130 HP Tractor | \$34,389.00 | \$3400.00 | 60 | 25 | \$187.06 | \$936.68 |
| 80 HP Tractor | \$23,457.00 | \$2200.00 | 60 | 25 | \$127.00 | \$636.17 |
| 40 HP Tractor | \$6373.00 | \$650.00 | 60 | 25 | \$34.76 | \$174.04 |
| Tractor - Crawler | \$21,000.00 | \$2100.00 | 80 | 30 | \$152.46 | \$759.36 |
| Dump Truck | \$5500.00 | \$500.00 | 65 | 30 | \$32.17 | \$160.34 |
| 3/4 Ton 4X4 | \$36,000.00 | \$3600.00 | 90 | 4 | \$490.05 | \$1,717.20 |
| 4-Wheeler | \$6000.00 | \$500.00 | 60 | 5 | \$53.63 | \$182.40 |
| 1/2 Ton 4X4 | \$21,000.00 | \$3600.00 | 90 | 8 | \$304.43 | \$963.90 |
| 1/2 Ton Truck | \$18,000.00 | \$500.00 | 90 | 8 | \$228.94 | \$744.85 |
| Total | \$171,719.00 | | | | \$1610.49 | \$6,274.85 |

¹Annual Capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Cost and Returns Measurements Methods.

² Interest on average investment.

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