

**NORTHEAST REGION
LARGE COW/CALF BUDGET 2016**

BREED HERD SIZE 315 COW to BULL 20 CALF CROP PERCENT¹ 85%
CULL RATE 20% REPLACEMENT HEIFER'S KEPT 63

VALUE OF PRODUCTION

| | QUANTITY | WEIGHT | PRICE ² | VALUE | VALUE PER COW | NEW VALUE |
|---------------|------------|--------|--------------------|------------------|-----------------|-----------|
| STEER CALVES | 134 | 550 | \$2.15 | \$158,307 | \$502.56 | _____ |
| HEIFER CALVES | 71 | 515 | \$2.08 | \$75,921 | \$241.02 | _____ |
| CULL COWS | 63 | 1000 | \$0.81 | \$51,030 | \$162.00 | _____ |
| CULL BULLS | 1 | 1400 | \$0.92 | \$1,288 | \$4.09 | _____ |
| FEE HUNTING | 1 | | | \$7,500 | \$23.81 | _____ |
| TOTAL | 269 | | | \$294,046 | \$933.48 | _____ |

VARIABLE COSTS

| 1. FEED COSTS | UNITS | QUANTITY/PERCENT | PRICE | COST | VALUE PER COW | NEW VALUE |
|-------------------------|-------|------------------|---------|-----------------|-----------------|-----------|
| HAY | TON | 16.00 | \$155 | \$2,480 | \$7.87 | _____ |
| STATE | AUY | 20.0% | \$38.04 | \$2,397 | \$7.61 | _____ |
| FEDERAL LEASE | AUY | 40.0% | \$20.88 | \$6,577 | \$20.88 | _____ |
| PRIVATE(Owned) | AUY | 40.0% | \$0.00 | \$0 | \$0.00 | _____ |
| PRIVATE(Leased Grazing) | AUY | 0.0% | \$0.00 | \$0 | \$0.00 | _____ |
| SALT & MINERAL | TON | 11 | \$710 | \$8,163 | \$25.92 | _____ |
| PROTEIN SUPP | TON | 65 | \$315 | \$20,465 | \$64.97 | _____ |
| TOTAL | | | | \$40,082 | \$127.24 | _____ |

2. OTHER VARIABLE COSTS

| | COST | VALUE PER COW | NEW VALUE |
|------------------------------|-----------------|-----------------|-----------|
| VET AND MEDICINE | \$5,241 | \$16.64 | _____ |
| LIVESTOCK HAULING | \$1,463 | \$4.65 | _____ |
| HIRED LABOR | \$25,000 | \$79.37 | _____ |
| OPERATING COSTS-EQUIP & MACH | \$4,500 | \$14.29 | _____ |
| OPERATING COSTS-VEHICLE | \$7,000 | \$22.22 | _____ |
| RANCH MAINTENANCE | \$13,000 | \$41.27 | _____ |
| BEEF CHECKOFF | \$205 | \$0.65 | _____ |
| PURCHASED LIVESTOCK | \$22,000 | \$69.84 | _____ |
| TOTAL | \$78,409 | \$248.92 | _____ |

3. INTEREST ON VARIABLE COSTS

| | | |
|---|-------|---------------|
| SUM OF VARIABLE COSTS X MONTHS BORROWED | | |
| X INTEREST RATE PER MONTH | | |
| ANNUAL INTEREST RATE | 7.00% | |
| NUMBER OF MONTHS BORROWED | 6 | VALUE PER COW |

| | | | |
|------------------------------------|------------------|-----------------|-------|
| INTEREST COSTS | \$4,147 | \$13.17 | _____ |
| TOTAL VARIABLE COSTS | \$122,638 | \$389.33 | _____ |
| RETURN ABOVE VARIABLE COSTS | \$171,408 | \$544.15 | _____ |

OWNERSHIP COSTS

| | Annual Capital Recovery ⁴ (At Replacement Value): | Represents 65% Asset Ownership | VALUE PER COW | NEW VALUE |
|--|--|--------------------------------|-----------------|-----------|
| CASH COSTS | | TOTAL | | |
| Taxes & Insurance | | \$9,598 | \$30.47 | _____ |
| Overhead | | \$2,163 | \$6.87 | _____ |
| Total | | \$11,761 | \$37.34 | _____ |
| NON CASH COSTS | | | | |
| Purchased Livestock | | \$12,708 | \$40.34 | _____ |
| Machinery & Equipment | | \$9,598 | \$30.47 | _____ |
| Housing & Improvements | | \$26,021 | \$82.61 | _____ |
| Interest on Retained Livestock ⁶ | | \$29,411 | \$93.37 | _____ |
| Management & Operation Labor (6% of gross returns) | | \$17,643 | \$56.01 | _____ |
| TOTAL NON CASH COSTS | | \$95,380 | \$302.80 | _____ |
| TOTAL FIXED COSTS | | \$107,142 | \$340.13 | _____ |
| TOTAL CASH AND VARIABLE COSTS | | \$134,399 | \$426.66 | _____ |
| TOTAL COSTS | | \$229,780 | \$729.46 | _____ |
| RETURN ABOVE TOTAL CASH COSTS | | \$159,647 | \$506.82 | _____ |
| RETURN ABOVE TOTAL COSTS | | \$64,267 | \$204.02 | _____ |

BREAKEVEN CALCULATIONS

| | VARIABLE COSTS | TOTAL COSTS |
|--|----------------|-------------|
| REQUIRED AVG. CALF PRICES CASH COST (cwt) | \$86.02 | \$94.26 |
| REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt) | \$86.02 | \$161.16 |

1) Calf crop is defined as the actual number of calves sold divided, by the total number of cows (assuming all cows were exposed).

2) Prices represent 2016 price projections from Cattle Fax, Doanes reports for New Mexico feeder cattle cash prices.

3) Market prices include commissions, brand inspections, beef council, yardage, feed, and insurance

4) Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

5) The 35% reduction in asset values which represent a mix of new and used machinery.

6) Interest on average investment.

**NORTHEAST REGION
LARGE RANCH INVESTMENTS**

| Number | Land Values | Price Per Unit | 10 Yr Avg Rate of Return | Purchase Price | Salvage/Cull Value | Useful Life | Livestock Share | Annual Capital Recovery |
|-------------------|---------------------------------|-----------------------|-------------------------------------|---------------------------|-------------------------------|------------------------|-------------------------------|------------------------------------|
| 12000 | Acres of private land | \$85 | 3.9% | \$1,020,000 | \$1,020,000 | | | |
| 350 | AU Values ¹ | \$2,500 | 3.9% | \$875,000 | \$875,000 | | | |
| Sub Totals | | | | \$1,895,000 | | | | |
| Number | Buildings, Improvements | Price Per Unit | | | | | | |
| 12 | Miles of pipeline | \$2,000 | 3.9% | \$24,000 | \$2,400 | 25 | 100 | \$1,462 |
| 8 | Wells | \$12,000 | 3.9% | \$96,000 | \$9,600 | 25 | 100 | \$5,847 |
| 70 | Miles of Fence | \$4,000 | 3.9% | \$280,000 | \$28,000 | 25 | 100 | \$17,053 |
| 1 | Corrals/Working Facilities | \$12,000 | 3.9% | \$12,000 | \$1,200 | 30 | 100 | \$664 |
| 1 | Barns & Shop | \$18,000 | 3.9% | \$18,000 | \$1,800 | 30 | 100 | \$996 |
| Sub Totals | | | | \$430,000 | | | | \$26,021 |
| Number | Machinery & Vehicles | Price Per Unit | Interest Rate³ | Price | Salvage/Cull | | | |
| 1 | 3/4 ton pickup 4WD | \$42,000 | 4.0% | \$42,000 | \$8,400 | 7 | 50 | \$2,967 |
| 1 | 1ton pickup 4WD | \$45,000 | 4.0% | \$45,000 | \$9,000 | 7 | 50 | \$3,179 |
| 0 | Tractor | \$7,000 | 4.0% | \$0 | \$0 | 7 | 100 | \$0 |
| 2 | Gooseneck trailer | \$7,500 | 4.0% | \$15,000 | \$3,000 | 7 | 100 | \$2,119 |
| 1 | Horse tack | \$5,000 | 4.0% | \$5,000 | \$1,000 | 10 | 100 | \$533 |
| 1 | Misc. equipment | \$7,500 | 4.0% | \$7,500 | \$1,500 | 10 | 100 | \$800 |
| Sub Total | | | | \$114,500 | | | | \$9,598 |
| Head | Purchased Livestock | Price Per Unit | Interest Rate³ | Price | Salvage/Cull | | | |
| 9 | Horses | \$1,200 | 4.0% | \$10,800 | \$4,104 | 10 | 100 | \$990 |
| 16 | Bulls | \$4,000 | 4.0% | \$63,000 | \$23,940 | 4 | 100 | \$11,718 |
| 70 | Cows | \$2,500 | 4.0% | \$175,000 | \$66,500 | 8 | 100 | \$18,775 |
| 118 | Total AUYS | | | | | | | |
| Sub Total | | | | \$73,800 | | | | \$12,708 |
| Head | Retained Livestock | Price Per Unit | Interest Rate | Price | Salvage/Cull | | Interest on Investment | |
| 315 | Cows | \$2,500 | 4.0% | \$787,500 | \$299,250 | | | \$24,840 |
| 63 | Replacement Heifers | \$2,300 | 4.0% | \$144,900 | \$55,062 | | | \$4,571 |
| 362 | Total AUYS | | | | | | | |
| Sub Total | | | | \$932,400 | \$354,312 | | | \$29,411 |
| Total | | | | <u>\$3,445,700</u> | | | | <u>\$65,030</u> |

1) The interest rate of 3.9% used to calculate the capital recovery cost is the USDA-ERS's ten year average long-run rate of return to production assets for New Mexico.