



Range Improvement Task Force • Report 72

Range Livestock Costs and Returns for New Mexico 1999



Range Improvement Task Force
Cooperative Extension Service / Agricultural Experiment Station
College of Agriculture and Home Economics

Range Livestock Costs and Returns for New Mexico, 1999

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INTRODUCTION

Range livestock producers in New Mexico are influenced by many factors during a production year. These include financial and economic considerations vital to the success of the livestock operation. Access to this information gives producers, lending institutions, rangeland appraisers, and other interested parties a better understanding of cash flow, debt structure and aggregate profitability of the entity. Cost and return estimates take into account external factors that directly impact the ranching operation, such as land use policy development, property taxes, and credit analysis for current and future financial decisions.

This study presents 15 individual cost and return estimates considering representative model cow-calf ranches of different sizes in five regions throughout New Mexico. The regions are county-specific (each county is wholly contained in one region) and are classified as: Central Mountain, Northeast, Northwest, Southeast, and Southwest. Within each region, individual budgets were developed for three ranches of differing size, ranging from extra-small in the Central Mountain region to extra-large in the Northeast, Northwest and Southeast regions. Throughout the analysis, number of mother cows is reported and a one-to-twenty bull ratio assumed.

RANCHING REGIONS

Ranching regions were established based on commonality in rangeland type, historical use, topography and climatic conditions. New Mexico State University has an extended history of developing range livestock cost and return estimates, and the regional-basis budget development undertaken in this study has historical precedent.

Central Mountain

This region comprises Taos, Rio Arriba, Sandoval, Santa Fe, San Miguel, Bernalillo, Torrance, Lincoln and Otero counties. Representative ranches modeled for the Central Mountain region were small, medium, and large in size.

Rangelands in the Central Mountain region range from high alpine meadows to lower valleys. Higher elevations may accumulate heavy snow pack throughout the winter months and may receive heavy rains in the summer months. Because of the varying topography of this region, annual precipitation levels within it vary from 8 to 30 inches (Palmer Drought Index). Both warm and cool season grasses are prevalent and are coupled with coniferous forest and browse species.

Small Ranch

The small representative ranch had 45 mature cows. A 15% culling rate was applied, and an 83% calf crop percentage was assumed. Gross

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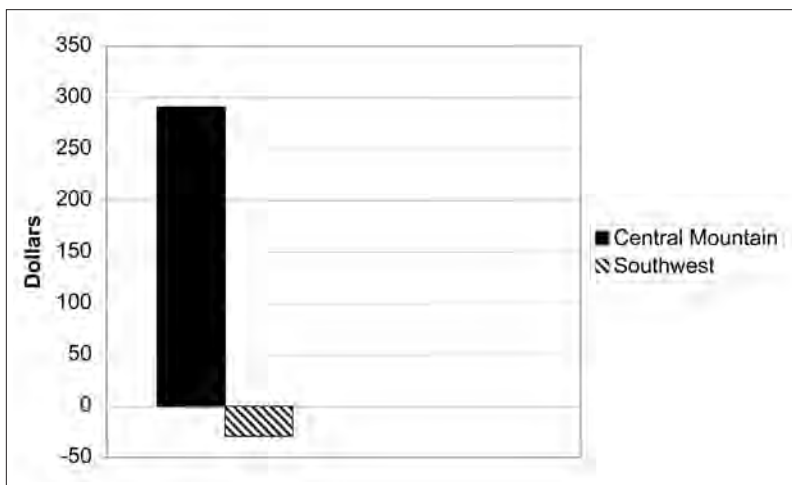


Figure 1. Economic returns for small New Mexico ranches, 1999

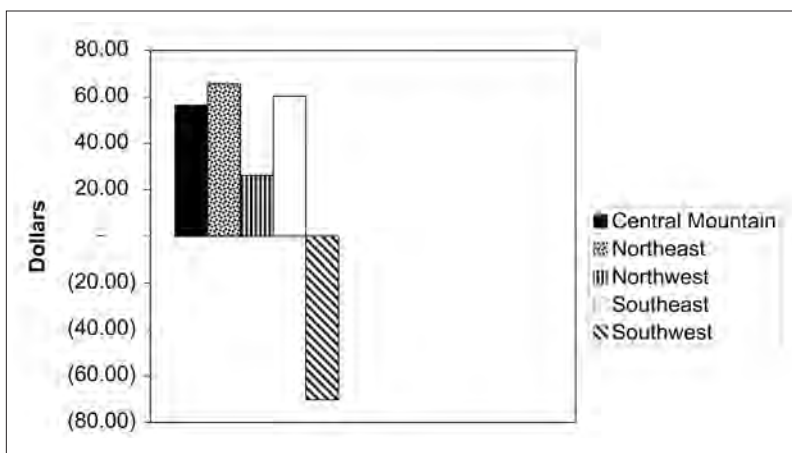


Figure 2. Economic returns for medium-sized New Mexico ranches, 1999

returns per cow were approximately \$353 with total costs approaching \$644 per cow, resulting in a profit of \$291 per cow (Figure 1). The combination of increasing costs with stagnant cattle prices resulted in significant economic and financial losses.

Medium Ranch

The medium representative ranch had 180 mature cows. A 15% culling rate was applied, and an 84% calf crop percentage was assumed. Gross returns per cow were approximately \$350 with total costs approaching \$295 per cow, resulting in a profit of \$56 per cow (Figure 2). Break-even calf prices were \$69 per hundred weight (cwt) with 1999 prices averaging \$83/cwt.

Large Ranch

The large representative ranch had 315 mature cows. A 15% culling rate was applied, and an 84% calf crop percentage was assumed. Gross returns per cow were approximately \$348 with total costs approaching \$293 per cow, resulting in a profit of \$55 per cow (Figure 3). Break-even calf prices were \$96 per hundred weight (cwt) with 1999 prices averaging \$69/cwt.

Northeast Region

This region comprises Colfax, Curry, De Baca, Guadalupe, Harding, Quay, and Mora counties. Representative ranches modeled for the Northeast region were medium, large and extra-large in size.

Rangelands in the Northeast region are primarily prairie plains vegetated by perennial grasses. Precipitation in the region varies from 12 to 20 inches (Palmer Drought Index). Stuckey and Henderson (1969) estimate carrying capacities ranging from 15 to 24 animal units yearlong (AUy)..

Medium Ranch

The medium representative ranch had 180 mature cows. A 15% culling rate was applied and an 83% calf crop percentage was assumed. Gross returns per cow were approximately \$410 with total costs approaching \$345 per cow, resulting in a profit of greater than \$65 per cow (Figure 2). Break-even calf prices were \$78 per hundred weight (cwt) with 1999 prices averaging \$87/cwt for this region.

Large Ranch

The large representative ranch had 315 mature cows. A 15% culling rate was applied, and an 83% calf crop percentage was assumed. Gross returns per cow were approximately \$380 with total costs approaching \$295 per cow, resulting in a profit of \$86 per cow. Break-even calf prices were \$66

per hundred weight (cwt) with 1999 prices averaging \$87/cwt (Figure 3).

Extra-Large Ranch

The extra-large representative ranch had 495 mature cows. A 15% culling rate was applied, and an 84% calf crop percentage was assumed. Gross returns per cow were approximately \$365 with total costs approaching \$288 per cow, resulting in a profit of \$76 per cow (Figure 4). Break-even calf prices were \$64 per hundred weight (cwt) with 1999 prices averaging \$87/cwt.

Northwest Region

This region comprises Bernalillo, Catron, McKinley, Rio Arriba, Sandoval, and San Juan counties. Representative ranches modeled for the Northeast region were medium, large and extra-large in size. Drought conditions persisted throughout 2000, reducing cow numbers again from 1999 levels. Supplemental feeding rates increased for each of the representative ranches modeled in this region.

Both warm and cool season grasses are found in this region, as are piñon, juniper, oak brush, ponderosa pine and sagebrush. Precipitation ranges between 12 and 20 inches annually, with most precipitation falling in the summer months. Stocking rates reported by Stuckey and Henderson (1969) are between 5 and 14 AUY per section. This variance is due to terrain, precipitation and forage availability across the region.

Medium Ranch

The medium representative ranch had 180 mature cows. A 15% culling rate was applied and an 83% calf crop percentage was assumed. Gross returns per cow were approximately \$365 with total costs approaching \$340 per cow, resulting in a profit of greater than \$26 per cow (Figure 2). Break-even calf prices were \$82 per hundred

weight (cwt) with 1999 prices averaging \$83/cwt for this region.

Large Ranch

The large representative ranch had 315 mature cows. A 15% culling rate was applied and an 82% calf crop percentage was assumed. Gross returns per cow were approximately \$325 with total costs approaching \$270 per cow, resulting in a profit of \$56 per cow (Figure 3). Break-even calf prices were \$66 per hundred weight (cwt) with 1999 prices averaging \$83/cwt.

Extra-Large Ranch

The extra-large representative ranch had 450 mature cows. A 15% culling rate was applied and an 85% calf crop percentage was assumed. Gross returns per cow were approximately \$325 with total costs approaching \$281 per cow, resulting in a profit of \$45 per cow (Figure 4). Break-even calf prices were \$66 per hundred weight (cwt) with 1999 prices averaging \$83/cwt.

Southeast Region

The cost and return estimates in this region were based on data gathered in Chaves, Eddy, Lea, Lincoln, Otero, and Roosevelt counties. Representative ranches modeled

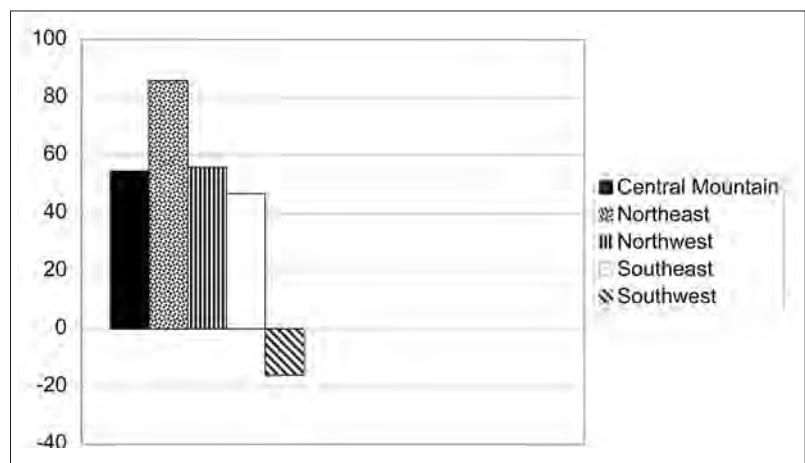


Figure 3. Economic returns for large New Mexico ranches, 1999

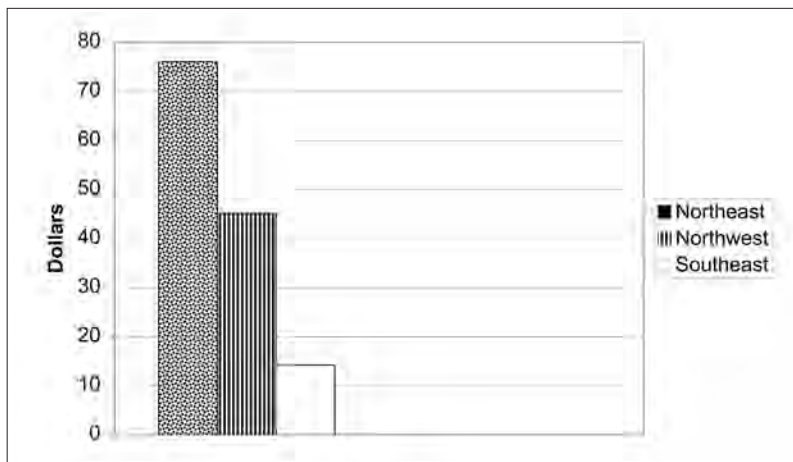


Figure 4. Economic returns for extra-large New Mexico ranches, 1999

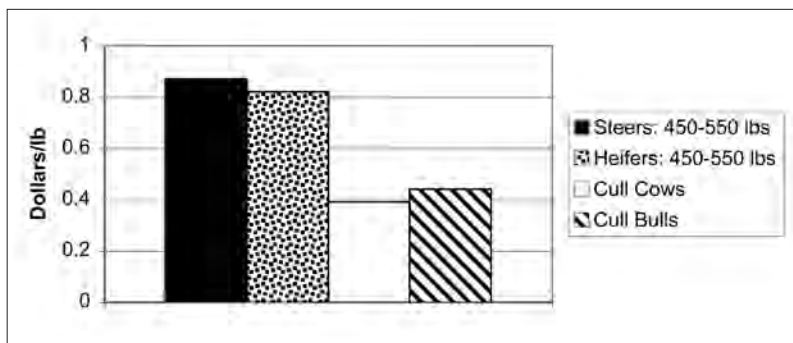


Figure 5. Beef Cattle Prices for New Mexico, 1999

for the Southeast region were medium, large and extra-large in size. Drought conditions worsened throughout 2000 resulting in further reductions in cow numbers for the Southeast region of New Mexico. These continuing drought conditions resulted in greater supplemental feeding rates.

Terrain in this region ranges from prairies to rough areas. Elevations vary from 3,000 to over 6,000 feet, with precipitation between 12 and 20 inches annually. Primary grass species are grama, tobosa, and galleta. Prevalent shrubs and trees are piñon, juniper, and oak brush. Stuckey and Henderson (1969) estimate that due to the huge variability of soil type, forage and precipitation levels stocking rates will range from 3 to 17 AUY per section.

Medium Ranch

The medium representative ranch had 180 mature cows. A 15% culling rate was applied and an 83% calf crop percentage was assumed. Gross returns per cow were approximately \$360 with total costs approaching \$300 per cow, resulting in a profit of greater than \$60 per cow (Figure 2). Break-even calf prices were \$72 per hundred weight (cwt) with 1999 prices averaging \$82/cwt for this region.

Large Ranch

The large representative ranch had 360 mature cows. A 15% culling rate was applied and an 83% calf crop percentage was assumed. Gross returns per cow were approximately \$317 with total costs approaching \$270 per cow, resulting in a profit of \$47 per cow (Figure 3). Break-even calf prices were \$65 per hundred weight (cwt) with 1998 prices averaging \$82/cwt.

Extra-Large Ranch

The extra-large representative ranch had 495 mature cows. A 15% culling rate was applied and an 81% calf crop percentage was assumed. Gross returns per cow were approximately \$300 with total costs approaching \$286 per cow, resulting in a profit of \$14 per cow. Break-even calf prices were \$71 per hundred weight (cwt) with 1998 prices averaging \$82/cwt (Figure 4).

Southwest Region

The cost and return estimates in this region were based on data gathered in Doña Ana, Grant, Hidalgo, Luna, and Sierra counties. Representative ranches modeled for the Southwest region were small, medium and large in size.

Terrain in this region ranges from prairies to rough areas. Elevations vary from 4,000 to over 8,000 with precipitation between 9

and 16 inches annually. Black grama is the primary grass plant in this region, while creosote and mesquite make up the majority of brush. Stuckey and Henderson (1969) estimate that due to the huge variability in soil type, forage and precipitation levels in this region stocking rates will range from 5 to 14 AUY per section.

Small Ranch

The small representative ranch had 36 mature cows. A 15% culling rate was applied and an 80% calf crop percentage was assumed. Gross returns per cow were approximately \$437 with total costs approaching \$466 per cow, resulting in a loss of \$29 per cow (Figure 1). Break-even calf prices were \$120 per hundred weight (cwt) with 1999 prices averaging \$80/cwt. The combination of increasing costs with stagnant cattle prices resulted in significant economic and financial losses.

Medium Ranch

The medium representative ranch had 180 mature cows. A 15% culling rate was applied and an 82% calf crop percentage was assumed. Gross returns per cow were approximately \$340 with total costs approaching \$410 per cow, resulting in a loss of \$70 per cow (Figure 2). Break-even calf prices were \$102 per hundred weight (cwt) with 1999 prices averaging \$80/cwt. The combination of increasing costs with stagnant cattle prices resulted in significant economic and financial losses.

Large Ranch

The large representative ranch had 360 mature cows. A 15% culling rate was applied and an 81% calf crop percentage was assumed. Gross returns per cow were approximately \$300 with total costs approaching \$315 per cow, resulting in a loss of \$16 per cow. Break-even calf prices were \$80 per hundred weight (cwt) with 1999 prices averaging \$80/cwt

(Figure 3). The combination of increasing costs with stagnant cattle prices resulted in a significant economic and financial losses.

SUMMARY

Range livestock production throughout New Mexico in 1999 resulted in mostly positive returns. Our model suggested that medium, large and extra-large ranching operations in each region of New Mexico other than the Southwest made a profit. Figure 5 provides aggregate beef cattle prices for New Mexico for 1998. These values are representative of all classes of beef cattle throughout the state. Precipitation levels were below normal in much of the state, forcing livestock producers to decide whether to increase supplemental feeding rates or to reduce the herd size. The majority of producers chose to reduce herd size by approximately 10% and to increase feeding rates during the time period when the bulls were with the cows. These factors created a mix of economic results for producers.

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APPENDIX A

**CENTRAL MOUNTAIN REGION
SMALL RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
100	Acres of private land	\$925	3.9%	\$92,500	\$92,500			
34	AU Values ¹	\$2,825	3.9%	\$95,344	\$95,344			
Subtotal				\$187,844				
Number	Buildings, Improvements	Price Per Unit						
0.5	Miles of pipeline	\$1,825	3.9%	\$913	\$91	25	100	\$56
1	Wells	\$9,000	3.9%	\$9,000	\$900	25	100	\$548
10	Miles of Fence	\$2,600	3.9%	\$26,000	\$2,600	25	100	\$1,583
1	Corrals/Working Facilities	\$4,600	3.9%	\$4,600	\$460	30	100	\$254
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$48,713				\$2,895
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	3/4 ton pickup 4WD	\$17,000	7.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$24,500				\$2,451
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
3	Horses	\$1,600	7.0%	\$4,800	\$1,824	10	100	\$551
1	Bulls	\$2,000	7.0%	\$2,500	\$950	4	100	\$524
5	Total AUUs							
Subtotal				\$7,300				\$1,075
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
25	Cows	\$1,100	7.0%	\$27,500	\$10,450			\$1,518
4	Replacement Heifers	\$1,000	7.0%	\$3,750	\$1,425			\$207
28	Total AUUs							
Subtotal				\$31,250	\$11,875			\$1,725
Total				\$299,606				\$7,071

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.

2) For intermediate assets an interest rate of 6.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**CENTRAL REGION
SMALL COW/CALF BUDGET 1999**

BREED HERD SIZE	45	COW to BULL	20	CALF CROP PERCENT ¹	83%
CULL RATE	15%			REPLACEMENT HEIFERS KEPT	6.75

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	19	515	\$0.87	\$8,367	\$185.94
HEIFER CALVES	12	495	\$0.80	\$4,722	\$104.94
CULL COWS	7	900	\$0.38	\$2,309	\$51.30
CULL BULLS	1	1200	\$0.40	\$480	\$10.67
TOTAL	38			\$15,878	\$352.85

VARIABLE COSTS

1. FEED COSTS					VALUE PER COW
	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	8.00	\$130	\$1,040	\$23.11
STATE	AUY	0.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	50.0%	\$16.20	\$729	\$16.20
PRIVATE(Owned)	AUY	50.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	2.00	\$135	\$270	\$6.00
PROTEIN SUPP	TON	5.00	\$325	\$1,625	\$36.11
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$3,664	\$81.42

2. OTHER VARIABLE COSTS					VALUE PER COW
				COST	
VET AND MEDICINE				\$405	\$9.00
LIVESTOCK HAULING				\$96	\$2.13
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$438	\$9.73
OPERATING COSTS-VEHICLE				\$876	\$19.46
RANCH MAINTENANCE				\$876	\$19.46
BEEF CHECKOFF				\$31	\$0.68
PURCHASED LIVESTOCK				\$1,200	\$26.67
TOTAL				\$3,920	\$87.12

3. INTEREST ON VARIABLE COSTS					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE					
NUMBER OF MONTHS BORROWED					
				7.0%	
				6	
					\$265
					\$5.90

TOTAL				\$7,850	\$174.44
				\$8,028	\$178.41

OWNERSHIP COSTS

Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS			
Taxes & Insurance		\$2,451	\$54.46
Overhead		\$2,100	\$46.67
		\$4,551	\$101.12
NON CASH COSTS			
Purchased Livestock		\$1,518	\$33.73
Machinery & Equipment		\$2,451	\$54.46
Housing & Improvements		\$2,895	\$64.34
Interest on Retained Livestock ⁶		\$1,725	\$38.33
Management & Operation Labor (6% of gross returns)		\$8,028	\$178.41
		\$16,617	\$369.27
TOTAL FIXED COSTS		\$21,168	\$470.40
TOTAL CASH AND VARIABLE COSTS		\$12,400	\$275.56
TOTAL COSTS		\$29,017	\$644.83
RETURN ABOVE TOTAL CASH COSTS		\$3,478	\$77.29

BREAKEVEN CALCULATIONS

	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$41.62	\$65.74
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$41.62	\$153.84

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 1999 price projections from Cattle Fax, Doane's 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.

**CENTRAL MOUNTAIN REGION
MEDIUM RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
750	Acres of private land	\$185	3.9%	\$138,750	\$138,750			\$116.25
243	AU Values ¹	\$2,825	3.9%	\$686,475	\$686,475			
Subtotal				\$825,225				
Number	Buildings, Improvements	Price Per Unit						
2	Miles of pipeline	\$1,825	3.9%	\$3,650	\$365	25	100	\$222
1	Wells	\$9,000	3.9%	\$9,000	\$900	25	100	\$548
18	Miles of Fence	\$2,600	3.9%	\$46,800	\$4,680	25	100	\$2,850
1	Corrals/Working Facilities	\$4,600	3.9%	\$4,600	\$460	30	100	\$254
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$72,250				\$4,445
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	3/4 ton pickup 4WD	\$17,000	7.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$24,500				\$2,567
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
6	Horses	\$1,600	7.0%	\$9,600	\$3,648	10	100	\$1,103
9	Bulls	\$2,000	7.0%	\$18,000	\$6,840	4	100	\$3,774
30	Cows	\$1,100.00	7.0%	\$33,000	\$12,540	8	100	\$4,304
56	Total AUUs							
Subtotal				\$27,600				\$4,876
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
180	Cows	\$1,100	7.0%	\$198,000	\$75,240			\$10,930
27	Replacement Heifers	\$1,000	7.0%	\$27,000	\$10,260			\$1,490
200	Total AUUs							
Subtotal				\$225,000	\$85,500			\$12,420
Total				<u>\$1,174,575</u>				<u>\$19,432</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**CENTRAL REGION
MEDIUM COW/CALF BUDGET 1999**

BREED HERD SIZE **180** COW to BULL **20** CALF CROP PERCENT¹ **84%**
 CULL RATE **15%** REPLACEMENT HEIFERS KEPT **27**

VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	76	515	\$0.87	\$33,873	\$188.18
HEIFER CALVES	49	495	\$0.80	\$19,246	\$106.92
CULL COWS	27	900	\$0.38	\$9,234	\$51.30
CULL BULLS	1	1200	\$0.40	\$480	\$2.67
TOTAL	152			\$62,832	\$349.07

VARIABLE COSTS

1. FEED COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	32.00	\$130	\$4,160	\$23.11
STATE	AUY	30.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	40.0%	\$16.20	\$2,916	\$16.20
PRIVATE(Owned)	AUY	30.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	4.00	\$135	\$540	\$3.00
PROTEIN SUPP	TON	8.00	\$325	\$2,600	\$14.44
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$10,216	\$56.76

2. OTHER VARIABLE COSTS					
				COST	VALUE PER COW
VET AND MEDICINE				\$1,620	\$9.00
LIVESTOCK HAULING				\$381	\$2.11
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$876	\$4.86
OPERATING COSTS-VEHICLE				\$1,313	\$7.30
RANCH MAINTENANCE				\$1,530	\$8.50
BEEF CHECKOFF				\$124	\$0.69
PURCHASED LIVESTOCK				\$3,000	\$16.67
TOTAL				\$8,843	\$49.13

3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.0%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
				\$667	\$3.71
TOTAL				\$19,727	\$109.59
TOTAL				\$43,106	\$239.48

OWNERSHIP COSTS

Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS			
Taxes & Insurance		\$2,786	\$15.48
Overhead		\$2,100	\$11.67
Total		\$4,886	\$27.14
NON CASH COSTS			
Purchased Livestock		\$4,876	\$27.09
Machinery & Equipment		\$2,567	\$14.26
Housing & Improvements		\$4,445	\$24.69
Interest on Retained Livestock ⁶		\$12,420	\$69.00
Management & Operation Labor (6% of gross returns)		\$3,770	\$20.94
Total		\$28,078	\$155.99
TOTAL FIXED COSTS		\$32,964	\$183.13
TOTAL CASH AND VARIABLE COSTS		\$24,612	\$136.73
TOTAL COSTS		\$52,690	\$292.72
RETURN ABOVE TOTAL CASH COSTS		\$38,220	\$212.33
RETURN ABOVE TOTAL COSTS		\$10,142	\$56.34

BREAKEVEN CALCULATIONS			
	VARIABLE COSTS	TOTAL COSTS	
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$25.83	\$32.23	
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$25.83	\$69.01	

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 1999 price projections from Cattle Fax, Doane's 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.

**CENTRAL MOUNTAIN REGION
LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
10000	Acres of private land	\$185	3.9%	\$1,850,000	\$1,850,000			\$1,550.00
425	AU Values ¹	\$2,825	3.9%	\$1,201,331	\$1,201,331			
Subtotal				\$3,051,331				
Number	Buildings, Improvements	Price Per Unit						
4	Miles of pipeline	\$1,825	3.9%	\$7,300	\$730	25	100	\$445
2	Wells	\$9,000	3.9%	\$18,000	\$1,800	25	100	\$1,096
40	Miles of Fence	\$2,600	3.9%	\$104,000	\$10,400	25	100	\$6,334
1	Corrals/Working Facilities	\$4,600	3.9%	\$4,600	\$460	30	100	\$254
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$142,100				\$10,133
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	1 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	Tractor	\$5,000	7.0%	\$5,000	\$1,000	7	100	\$812
2	Gooseneck trailer	\$3,200	7.0%	\$6,400	\$1,280	7	100	\$1,040
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$49,700				\$6,713
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$1,500	7.0%	\$15,000	\$5,700	10	100	\$1,723
16	Bulls	\$2,000	7.0%	\$31,500	\$11,970	4	100	\$6,604
53	Cows	\$1,100.00	7.0%	\$58,300	\$22,154	8	100	\$7,604
98	Total AUYS							
Subtotal				\$46,500				\$8,327
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
315	Cows	\$1,100	7.0%	\$346,500	\$131,670			\$19,127
47	Replacement Heifers	\$1,000	7.0%	\$47,250	\$17,955			\$2,608
350	Total AUYS							
Subtotal				\$393,750	\$149,625			\$21,735
Total				<u>\$3,683,381</u>				<u>\$38,581</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**CENTRAL REGION
LARGE COW/CALF BUDGET 1999**

	BREED HERD SIZE 315	COW to BULL 20	CALF CROP PERCENT ¹ 84%	REPLACEMENT HEIFERS KEPT 47	
VALUE OF PRODUCTION					
	<u>QUANTITY</u>	<u>WEIGHT/LBS.</u>	<u>PRICE²</u>	<u>VALUE</u>	<u>VALUE PER COW</u>
STEER CALVES	132	515	\$0.87	\$59,277	\$188.18
HEIFER CALVES	85	495	\$0.80	\$33,680	\$106.92
CULL COWS	47	900	\$0.38	\$16,160	\$51.30
CULL BULLS	1	1200	\$0.40	\$480	\$1.52
TOTAL	266			\$109,596	\$347.92
VARIABLE COSTS					
	<u>UNITS</u>	<u>QUANTITY/PERCENT</u>	<u>PRICE</u>	<u>COST</u>	<u>VALUE PER COW</u>
1. FEED COSTS	HAY	TON	40.00	\$130	\$5,200
	STATE	AUY	20.0%	\$25.08	\$0
	FEDERAL LEASE	AUY	40.0%	\$16.20	\$5,103
	PRIVATE(Owned)	AUY	40.0%	\$0.00	\$0
	PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0
	SALT & MINERAL	TON	6.00	\$135	\$810
	PROTEIN SUPP	TON	15.00	\$325	\$4,875
	OTHER		0.00	\$0	\$0
TOTAL				\$15,988	\$50.76
2. OTHER VARIABLE COSTS				<u>COST</u>	<u>VALUE PER COW</u>
	VET AND MEDICINE			\$2,835	\$9.00
	LIVESTOCK HAULING			\$664	\$2.11
	HIRED LABOR			\$0	\$0.00
	OPERATING COSTS-EQUIP & MACH			\$1,360	\$4.32
	OPERATING COSTS-VEHICLE			\$1,764	\$5.50
	RANCH MAINTENANCE			\$2,295	\$7.29
	BEEF CHECKOFF			\$217	\$0.69
	PURCHASED LIVESTOCK			\$3,500	\$11.11
TOTAL				\$12,635	\$40.11
3. INTEREST ON VARIABLE COSTS					
	SUM OF VARIABLE COSTS X MONTHS BORROWED				
	X INTEREST RATE PER MONTH				
	ANNUAL INTEREST RATE			7.0%	
	NUMBER OF MONTHS BORROWED			6	<u>VALUE PER COW</u>
				\$1,002	\$3.18
TOTAL				\$29,625	\$94.05
TOTAL				\$79,971	\$253.88
OWNERSHIP COSTS					
	Annual Capital Recovery ⁴ (At Replacement Value):			Represents 65% Asset Ownership ⁵	<u>VALUE PER COW</u>
CASH COSTS					
	Taxes & Insurance			\$7,108	\$22.57
	Overhead			\$2,200	\$6.98
	Total			\$9,308	\$29.55
NON CASH COSTS					
	Purchased Livestock			\$8,327	\$26.43
	Machinery & Equipment			\$6,713	\$21.31
	Housing & Improvements			\$10,133	\$32.17
	Interest on Retained Livestock ⁶			\$21,735	\$69.00
	Management & Operation Labor (6% of gross returns)			\$6,576	\$20.88
	Total			\$53,484	\$169.79
TOTAL FIXED COSTS				\$62,792	\$199.34
TOTAL CASH AND VARIABLE COSTS				\$38,933	\$123.60
TOTAL COSTS				\$92,417	\$293.39
RETURN ABOVE TOTAL CASH COSTS				\$70,663	\$224.33
RETURN ABOVE TOTAL COSTS				\$17,179	\$54.54
BREAKEVEN CALCULATIONS					
	<u>VARIABLE COSTS</u>	<u>TOTAL COSTS</u>			
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$22.17	\$29.14			
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$22.17	\$69.16			

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 1999 price projections from Cattle Fax, Doane's 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
MEDIUM RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
7000	Acres of private land	\$80	3.9%	\$560,000	\$560,000			
200	AU Values ¹	\$2,400	3.9%	\$480,000	\$480,000			
Subtotal				\$1,040,000				
Number	Buildings, Improvements	Price Per Unit						
10	Miles of pipeline	\$1,825	3.9%	\$18,250	\$1,825	25	100	\$1,111
6	Wells	\$10,000	3.9%	\$60,000	\$6,000	25	100	\$3,654
50	Miles of Fence	\$2,600	3.9%	\$130,000	\$13,000	25	100	\$7,917
1	Corrals/Working Facilities	\$4,600	3.9%	\$4,600	\$460	30	100	\$254
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$221,050				\$13,391
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	1 ton pickup 4WD	\$17,000	7.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$24,500				\$2,451
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
6	Horses	\$1,600	7.0%	\$9,600	\$3,648	10	100	\$1,103
9	Bulls	\$2,000	7.0%	\$18,000	\$6,840	4	100	\$3,774
40	Cows	\$1,100.00	7.0%	\$44,000	\$16,720	8	100	\$5,739
69	Total AUy's							
Subtotal				\$27,600				\$4,876
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
180	Cows	\$1,100	7.0%	\$198,000	\$75,240			\$10,930
27	Replacement Heifers	\$1,000	7.0%	\$27,000	\$10,260			\$1,490
200	Total AUy's							
Subtotal				\$225,000	\$85,500			\$12,420
Total				<u>\$1,538,150</u>				<u>\$28,262</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHEAST REGION
MEDIUM COW/CALF BUDGET 1999**

BREED HERD SIZE **180** COW to BULL **20** CALF CROP PERCENT¹ **83%**
CULL RATE **15%** REPLACEMENT HEIFERS KEPT **27**

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	75	550	\$0.92	\$37,798	\$209.99
HEIFER CALVES	48	515	\$0.85	\$20,881	\$116.00
CULL COWS	37	900	\$0.43	\$14,319	\$79.55
CULL BULLS	1	1200	\$0.45	\$540	\$3.00
TOTAL	160			\$73,538	\$408.54

VARIABLE COSTS					VALUE PER COW
1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	16.00	\$130	\$2,080	\$11.56
BLM	AUY	0.0%	\$16.20	\$0	\$0.00
STATE	AUY	17.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	30.0%	\$16.20	\$2,916	\$16.20
PRIVATE(Owned)	AUY	53.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	3.00	\$135	\$405	\$2.25
PROTEIN SUPP	TON	6.00	\$325	\$1,950	\$10.83
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$7,351	\$40.84

2. OTHER VARIABLE COSTS					VALUE PER COW
				COST	
VET AND MEDICINE				\$1,620	\$9.00
LIVESTOCK HAULING				\$401	\$2.23
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$1,148	\$6.38
OPERATING COSTS-VEHICLE				\$2,550	\$14.17
RANCH MAINTENANCE				\$1,785	\$9.92
BEEF CHECKOFF				\$122	\$0.68
PURCHASED LIVESTOCK				\$4,000	\$22.22
TOTAL				\$11,626	\$64.59

3. INTEREST ON VARIABLE COSTS					VALUE PER COW
				COST	
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE			7.0%		
NUMBER OF MONTHS BORROWED			6		
				\$664	\$3.69
TOTAL				\$19,641	\$109.12
TOTAL				\$53,897	\$299.43

OWNERSHIP COSTS					VALUE PER COW
Annual Capital Recovery ⁴ (At Replacement Value):				Represents 65% Asset Ownership	VALUE PER COW
				TOTAL	VALUE PER COW
CASH COSTS					
Taxes & Insurance				\$2,451	\$13.61
Overhead				\$2,100	\$11.67
Total				\$4,551	\$25.28
NON CASH COSTS					
Purchased Livestock				\$4,876	\$27.09
Machinery & Equipment				\$2,451	\$13.61
Housing & Improvements				\$13,391	\$74.40
Interest on Retained Livestock				\$12,420	\$69.00
Management & Operation Labor (6% of gross returns)				\$4,412	\$24.51
Total				\$37,550	\$208.61
TOTAL FIXED COSTS				\$42,101	\$233.89
TOTAL CASH AND VARIABLE COSTS				\$24,192	\$134.40
TOTAL COSTS				\$61,742	\$343.01
RETURN ABOVE TOTAL CASH COSTS				\$49,346	\$274.15
RETURN ABOVE TOTAL COSTS				\$11,796	\$65.53

BREAKEYEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$24.69	\$30.41
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$24.69	\$77.61

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 1999 price projections from Cattle Fax, Doane's 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 1999**

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	\$80	3.9%	\$960,000	\$960,000			
350	AU Values ¹	\$2,400	3.9%	\$840,000	\$840,000			
Subtotal				\$1,800,000				
Number	Buildings, Improvements	Price Per Unit						
12	Miles of pipeline	\$1,900	3.9%	\$22,800	\$2,280	25	100	\$1,389
8	Wells	\$10,000	3.9%	\$80,000	\$8,000	25	100	\$4,872
70	Miles of Fence	\$2,600	3.9%	\$182,000	\$18,200	25	100	\$11,084
1	Corrals/Working Facilities	\$4,600	3.9%	\$4,600	\$460	30	100	\$254
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$297,600				\$18,053
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	1ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$3,200	7.0%	\$6,400	\$1,280	7	100	\$1,040
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$44,700				\$4,351
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
9	Horses	\$1,600	7.0%	\$14,400	\$5,472	10	100	\$1,654
16	Bulls	\$2,000	7.0%	\$31,500	\$11,970	4	100	\$6,604
70	Cows	\$1,100.00	7.0%	\$77,000	\$29,260	8	100	\$10,043
118	Total AUys							
Subtotal				\$45,900				\$8,258
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
315	Cows	\$1,100	7.0%	\$346,500	\$131,670			\$19,127
47	Replacement Heifers	\$1,000	7.0%	\$47,250	\$17,955			\$2,608
350	Total AUys							
Subtotal				\$393,750	\$149,625			\$21,735
Total				<u>\$2,581,950</u>				<u>\$44,139</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.

2) For intermediate assets an interest rate of 6.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHEAST REGION
LARGE COW/CALF BUDGET 1999**

BREED HERD SIZE **315** COW to BULL **20** CALF CROP PERCENT¹ **83%**
 CULL RATE **15%** REPLACEMENT HEIFERS KEPT **47.25**

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	131	550	\$0.92	\$66,147	\$209.99
HEIFER CALVES	83	515	\$0.85	\$36,541	\$116.00
CULL COWS	37	1000	\$0.43	\$15,910	\$50.51
CULL BULLS	1	1400	\$0.45	\$630	\$2.00
TOTAL	252			\$119,228	\$378.50

VARIABLE COSTS

					VALUE PER COW
1. FEED COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	23.00	\$130	\$2,990	\$9.49
STATE	AUY	20.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	40.0%	\$16.20	\$5,103	\$16.20
PRIVATE(Owned)	AUY	40.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	4.00	\$135	\$540	\$1.71
PROTEIN SUPP	TON	11.00	\$325	\$3,575	\$11.35
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$12,208	\$38.76

2. OTHER VARIABLE COSTS					VALUE PER COW
				COST	
VET AND MEDICINE				\$2,835	\$9.00
LIVESTOCK HAULING				\$631	\$2.00
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$1,870	\$5.94
OPERATING COSTS-VEHICLE				\$2,465	\$7.83
RANCH MAINTENANCE				\$2,083	\$6.61
BEEF CHECKOFF				\$214	\$0.68
PURCHASED LIVESTOCK				\$3,000	\$9.52
TOTAL				\$13,097	\$41.58

3. INTEREST ON VARIABLE COSTS					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE					7.0%
NUMBER OF MONTHS BORROWED					6

INTEREST COSTS	\$886	\$2.81
TOTAL VARIABLE COSTS	\$26,191	\$83.15
RETURN ABOVE VARIABLE COSTS	\$93,037	\$295.36

OWNERSHIP COSTS

		Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership	VALUE PER COW
CASH COSTS				
Taxes & Insurance			\$4,351	\$13.81
Overhead			\$2,100	\$6.67
Total			\$6,451	\$20.48
NON CASH COSTS				
Purchased Livestock			\$8,258	\$26.22
Machinery & Equipment			\$4,351	\$13.81
Housing & Improvements			\$18,053	\$57.31
Interest on Retained Livestock ⁵			\$21,735	\$69.00
Management & Operation Labor (6% of gross returns)			\$7,154	\$22.71
TOTAL NON CASH COSTS			\$59,551	\$189.05
TOTAL FIXED COSTS			\$66,002	\$209.53
TOTAL CASH AND VARIABLE COSTS			\$32,642	\$103.63
TOTAL COSTS			\$92,193	\$292.68
RETURN ABOVE TOTAL CASH COSTS			\$86,586	\$274.88
RETURN ABOVE TOTAL COSTS			\$27,035	\$85.83

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$18.81	\$23.45
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$18.81	\$66.22

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 1999 price projections from Cattle Fax, Doane's 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
EXTRA-LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
15000	Acres of private land	\$80	3.9%	\$1,200,000	\$1,200,000			
500	AU Values ¹	\$2,400	3.9%	\$1,200,000	\$1,200,000			
Subtotal				\$2,400,000				
Number	Buildings, Improvements	Price Per Unit						
16	Miles of pipeline	\$1,825	3.9%	\$29,200	\$2,920	25	100	\$1,778
10	Wells	\$9,000	3.9%	\$90,000	\$9,000	25	100	\$5,481
95	Miles of Fence	\$2,600	3.9%	\$247,000	\$24,700	25	100	\$15,043
2	Corrals/Working Facilities	\$4,600	3.9%	\$9,200	\$920	30	100	\$509
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$383,600				\$23,265
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$17,000	7.0%	\$34,000	\$6,800	7	50	\$2,762
1	1 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	Tractor	\$4,000	7.0%	\$4,000	\$800	7	100	\$650
3	Gooseneck trailer	\$3,200	7.0%	\$9,600	\$1,920	7	100	\$1,559
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$68,900				\$6,901
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
13	Horses	\$1,600	7.0%	\$20,800	\$7,904	10	100	\$2,389
25	Bulls	\$2,000	7.0%	\$49,500	\$18,810	4	100	\$10,377
90	Cows	\$1,100.00	7.0%	\$99,000	\$37,620	8	100	\$12,913
160	Total AUUs							
Subtotal				\$70,300				\$12,767
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
495	Cows	\$1,100	7.0%	\$544,500	\$206,910			\$30,056
74	Replacement Heifers	\$1,000	7.0%	\$74,250	\$28,215			\$4,099
551	Total AUUs							
Subtotal				\$618,750	\$235,125			\$34,155
Total				<u>\$3,541,550</u>				<u>\$64,322</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHEAST REGION
EX-LARGE COW/CALF BUDGET 1999**

	BREED HERD SIZE 495	CULL RATE 15%	COW to BULL 20	CALF CROP PERCENT ¹ 84%	REPLACEMENT HEIFERS KEPT 74.25
VALUE OF PRODUCTION					
	<u>QUANTITY</u>	<u>WEIGHT/LBS.</u>	<u>PRICE²</u>	<u>VALUE</u>	<u>VALUE PER COW</u>
STEER CALVES	208	550	\$0.92	\$105,197	\$212.52
HEIFER CALVES	134	515	\$0.85	\$58,505	\$118.19
CULL COWS	37	1000	\$0.43	\$15,910	\$32.14
CULL BULLS	1	1200	\$0.45	\$540	\$1.09
TOTAL	380			\$180,153	\$363.94
VARIABLE COSTS					
1. FEED COSTS					
	<u>UNITS</u>	<u>QUANTITY/PERCENT</u>	<u>PRICE</u>	<u>COST</u>	<u>VALUE PER COW</u>
HAY	TON	102.00	\$130	\$13,260	\$26.79
STATE	AUY	30.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	7.0%	\$16.20	\$8,019	\$16.20
PRIVATE(Owned)	AUY	55.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	7.00	\$135	\$945	\$1.91
PROTEIN SUPP	TON	22.00	\$325	\$7,150	\$14.44
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$29,374	\$59.34
2. OTHER VARIABLE COSTS					
				<u>COST</u>	<u>VALUE PER COW</u>
VET AND MEDICINE				\$4,455	\$9.00
LIVESTOCK HAULING				\$949	\$1.92
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$2,975	\$6.01
OPERATING COSTS-VEHICLE				\$3,400	\$6.87
RANCH MAINTENANCE				\$2,848	\$5.75
BEEF CHECKOFF				\$342	\$0.69
LIVESTOCK PURCHASES				\$2,500	\$5.05
TOTAL				\$17,468	\$35.29
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.0%	
NUMBER OF MONTHS BORROWED				6	<u>VALUE PER COW</u>
				\$1,639	\$3.31
TOTAL				\$48,481	\$97.94
TOTAL				\$131,671	\$266.00
OWNERSHIP COSTS					
Annual Capital Recovery ⁴ (At Replacement Value):				Represents 65% Asset Ownership ⁵ <u>VALUE PER COW</u>	
CASH COSTS					
Taxes & Insurance				\$6,901	\$13.94
Overhead				\$2,100	\$4.24
Total				\$9,001	\$18.18
NON CASH COSTS					
Purchased Livestock				\$12,767	\$25.79
Machinery & Equipment				\$6,901	\$13.94
Housing & Improvements				\$23,265	\$47.00
Interest on Retained Livestock ⁶				\$34,155	\$69.00
Management & Operation Labor (6% of gross returns)				\$7,900	\$15.96
Total				\$84,989	\$171.69
TOTAL FIXED COSTS				\$93,990	\$189.88
TOTAL CASH AND VARIABLE COSTS				\$57,483	\$116.13
TOTAL COSTS				\$142,472	\$287.82
RETURN ABOVE TOTAL CASH COSTS				\$122,670	\$247.82
RETURN ABOVE TOTAL COSTS				\$37,681	\$76.12
BREAKEVEN CALCULATIONS					
	<u>VARIABLE COSTS</u>	<u>TOTAL COSTS</u>			
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$21.90	\$25.96			
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$21.90	\$64.35			

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 1999 price projections from Cattle Fax, Doane's 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.

**NORTHWEST REGION
MEDIUM RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
4000	Acres of private land	\$75	3.9%	\$300,000	\$300,000			
200	AU Values ¹	\$2,400	3.9%	\$480,000	\$480,000			
Subtotal				\$780,000				
Number	Buildings, Improvements	Price Per Unit						
10	Miles of pipeline	\$1,900	3.9%	\$19,000	\$1,900	25	100	\$1,157
3	Wells	\$9,300	3.9%	\$27,900	\$2,790	25	100	\$1,699
40	Miles of Fence	\$2,600	3.9%	\$104,000	\$10,400	25	100	\$6,334
1	Corrals/Working Facilities	\$4,700	3.9%	\$4,700	\$470	30	100	\$260
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$163,800				\$9,904
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	3/4 ton pickup 4WD	\$17,000	7.0%	\$0	\$0	7	50	\$0
1	Tractor	\$5,000	7.0%	\$5,000	\$1,000	7	100	\$812
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$29,500				\$3,263
Head	Purchased Livestock	Price Per Unit	Interest Rate ⁴	Price	Salvage/Cull			
8	Horses	\$1,600	7.0%	\$12,800	\$4,864	10	100	\$1,470
9	Bulls	\$2,000	7.0%	\$18,000	\$6,840	4	100	\$3,774
40	Cows	\$1,100.00	7.0%	\$44,000	\$16,720	8	100	\$5,739
71	Total AUUs							
Subtotal				\$30,800				\$5,244
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
180	Cows	\$1,100	7.0%	\$198,000	\$75,240			\$10,930
27	Replacement Heifers	\$1,000	7.0%	\$27,000	\$10,260			\$1,490
200	Total AUUs							
Subtotal				\$225,000	\$85,500			\$12,420
Total				<u>\$1,229,100</u>				<u>\$25,587</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.

2) For intermediate assets an interest rate of 6.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHWEST REGION
MEDIUM COW/CALF BUDGET 1999**

BREED HERD SIZE 180 COW to BULL 20 CALF CROP PERCENT¹ 83%
 CULL RATE 15% REPLACEMENT HEIFERS KEPT 27

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	75	510	\$0.87	\$33,144	\$184.14
HEIFER CALVES	48	485	\$0.80	\$18,508	\$102.82
CULL COWS	37	900	\$0.40	\$13,320	\$74.00
CULL BULLS	1	1200	\$0.42	\$504	\$2.80
TOTAL	160			\$65,476	\$363.76

VARIABLE COSTS							VALUE PER COW
		UNITS	QUANTITY/PERCENT	PRICE	COST		
1. FEED COSTS							
	HAY	TON	27.00	\$135.00	\$3,645		\$20.25
	STATE	AUY	45.0%	\$25.08	\$0		\$0.00
	FEDERAL LEASE	AUY	35.0%	\$16.20	\$2,916		\$16.20
	PRIVATE(Owned)	AUY	20.0%	\$0.00	\$0		\$0.00
	PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0		\$0.00
	SALT & MINERAL	TON	2.50	\$128.00	\$320		\$1.78
	PROTEIN SUPP	TON	6.00	\$328.00	\$1,968		\$10.93
	OTHER		0.00	\$0.00	\$0		\$0.00
	TOTAL				\$8,849		\$49.16
2. OTHER VARIABLE COSTS							
	VET AND MEDICINE				\$1,620		\$9.00
	LIVESTOCK HAULING				\$401		\$2.23
	HIRED LABOR				\$0		\$0.00
	OPERATING COSTS-EQUIP & MACH				\$2,125		\$11.81
	OPERATING COSTS-VEHICLE				\$2,635		\$14.64
	RANCH MAINTENANCE				\$2,201		\$12.23
	BEEF CHECKOFF				\$122		\$0.68
	OTHER				\$2,000		\$11.11
	TOTAL				\$11,104		\$61.69
3. INTEREST ON VARIABLE COSTS							
	SUM OF VARIABLE COSTS X MONTHS BORROWED						
	X INTEREST RATE PER MONTH						
	ANNUAL INTEREST RATE				7.0%		
	NUMBER OF MONTHS BORROWED				6		
							VALUE PER COW
							HIGH
							\$3.88
	TOTAL				\$20,652		\$114.73
					\$44,824		\$249.02

OWNERSHIP COSTS				VALUE PER COW
		Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	
CASH COSTS				
	Taxes & Insurance		\$3,263	\$18.13
	Overhead		\$2,100	\$11.67
	Total		\$5,363	\$29.79
NON CASH COSTS				
	Purchased Livestock		\$5,244	\$29.13
	Machinery & Equipment		\$3,263	\$18.13
	Housing & Improvements		\$9,904	\$55.02
	Interest on Retained Livestock ⁶		\$12,420	\$69.00
	Management & Operation Labor (6% of gross returns)		\$3,929	\$21.83
	Total		\$34,759	\$193.11
	TOTAL FIXED COSTS		\$40,122	\$222.90
	TOTAL CASH AND VARIABLE COSTS		\$26,014	\$144.52
	TOTAL COSTS		\$60,774	\$337.63
	RETURN ABOVE TOTAL CASH COSTS		\$39,462	\$219.23
	RETURN ABOVE TOTAL COSTS		\$4,702	\$26.12

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$27.78	\$35.00
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$27.78	\$81.77

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 2005 price projections from Cattle Fax, Doane's 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.

**NORTHWEST REGION
LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
6000	Acres of private land	\$75	3.9%	\$450,000	\$450,000			
350	AU Values ¹	\$2,400	3.9%	\$840,000	\$840,000			
Subtotal				\$1,290,000				
Number	Buildings, Improvements	Price Per Unit						
13	Miles of pipeline	\$1,900	3.9%	\$24,700	\$2,470	25	100	\$1,504
5	Wells	\$9,300	3.9%	\$46,500	\$4,650	25	100	\$2,832
65	Miles of Fence	\$2,600	3.9%	\$169,000	\$16,900	25	100	\$10,293
1	Corrals/Working Facilities	\$4,700	3.9%	\$4,700	\$470	30	100	\$260
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$253,100				\$15,343
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	3/4 ton pickup 4WD	\$17,000	7.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$3,200	7.0%	\$6,400	\$1,280	7	100	\$1,040
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$27,700				\$2,970
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$1,600	7.0%	\$16,000	\$6,080	10	100	\$1,838
16	Bulls	\$2,000	7.0%	\$31,500	\$11,970	4	100	\$6,604
90	Cows	\$1,100.00	7.0%	\$99,000	\$37,620	8	100	\$12,913
145	Total AUys							
Subtotal				\$47,500				\$8,442
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
315	Cows	\$1,100	7.0%	\$346,500	\$131,670			\$19,127
47	Replacement Heifers	\$1,000	7.0%	\$47,250	\$17,955			\$2,608
350	Total AUys							
Subtotal				\$393,750	\$149,625			\$21,735
Total				<u>\$2,012,050</u>				<u>\$40,048</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHWEST REGION
LARGE COW/CALF BUDGET 1999**

BREED HERD SIZE		315	COW to BULL		20	CALF CROP PERCENT ¹		82%
CULL RATE		15%				REPLACEMENT HEIFERS KEPT		47
VALUE OF PRODUCTION								
		<u>QUANTITY</u>	<u>WEIGHT/LBS.</u>	<u>PRICE²</u>	<u>VALUE</u>	<u>VALUE PER COW</u>		
STEER CALVES		129	510	\$0.87	\$57,304	\$181.92		
HEIFER CALVES		82	485	\$0.80	\$31,777	\$100.88		
CULL COWS		37	900	\$0.40	\$13,320	\$42.29		
CULL BULLS		1	1200	\$0.42	\$504	\$1.60		
TOTAL		249			\$102,905	\$326.68		
VARIABLE COSTS								
1. FEED COSTS		<u>UNITS</u>	<u>QUANTITY/PERCENT</u>	<u>PRICE</u>	<u>COST</u>	<u>VALUE PER COW</u>		
	HAY	TON	32.00	\$135.00	\$4,320	\$13.71		
	STATE	AUY	45.0%	\$25.08	\$0	\$0.00		
	FEDERAL LEASE	AUY	35.0%	\$16.20	\$5,103	\$16.20		
	PRIVATE(Owned)	AUY	20.0%	\$0.00	\$0	\$0.00		
	PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00		
	SALT & MINERAL	TON	4.00	\$128.00	\$512	\$1.63		
	PROTEIN SUPP	TON	6.00	\$328.00	\$1,968	\$6.25		
	OTHER		0.00	\$0.00	\$0	\$0.00		
					\$11,903	\$37.79		
2. OTHER VARIABLE COSTS					<u>COST</u>			
	VET AND MEDICINE				\$2,835	\$9.00		
	LIVESTOCK HAULING				\$623	\$1.98		
	HIRED LABOR				\$0	\$0.00		
	OPERATING COSTS-EQUIP & MACH				\$2,550	\$8.10		
	OPERATING COSTS-VEHICLE				\$3,400	\$10.79		
	RANCH MAINTENANCE				\$2,253	\$7.15		
	BEEF CHECKOFF				\$211	\$0.67		
	OTHER				\$2,500	\$7.94		
TOTAL					\$14,371	\$45.62		
3. INTEREST ON VARIABLE COSTS								
	SUM OF VARIABLE COSTS X MONTHS BORROWED							
	X INTEREST RATE PER MONTH							
	ANNUAL INTEREST RATE				7.0%			
	NUMBER OF MONTHS BORROWED				6			
						<u>VALUE PER COW</u>		
					\$920	\$2.92		
TOTAL					\$27,194	\$86.33		
					\$75,711	\$240.35		
OWNERSHIP COSTS								
CASH COSTS		Annual Capital Recovery ⁴ (At Replacement Value):			Represents 65% Asset Ownership ⁵		VALUE PER COW	
	Taxes & Insurance				\$2,970	\$9.43		
	Overhead				\$2,100	\$6.67		
	Total				\$5,070	\$16.10		
NON CASH COSTS								
	Purchased Livestock				\$8,442	\$26.80		
	Machinery & Equipment				\$2,970	\$9.43		
	Housing & Improvements				\$15,343	\$48.71		
	Interest on Retained Livestock ⁶				\$21,735	\$69.00		
	Management & Operation Labor (6% of gross returns)				\$4,543	\$14.42		
	Total				\$53,032	\$168.36		
TOTAL FIXED COSTS					\$58,103	\$184.45		
TOTAL CASH AND VARIABLE COSTS					\$32,264	\$102.43		
TOTAL COSTS					\$85,296	\$270.78		
RETURN ABOVE TOTAL CASH COSTS					\$70,641	\$224.26		
RETURN ABOVE TOTAL COSTS					\$17,609	\$55.90		

	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$21.16	\$25.11
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$21.16	\$66.38

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 1999 price projections from Cattle Fax, Doane's 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.

**NORTHWEST MOUNTAIN REGION
EXTRA-LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
8000	Acres of private land	\$75	3.9%	\$600,000	\$600,000			
500	AU Values ¹	\$2,400	3.9%	\$1,200,000	\$1,200,000			
Subtotal				\$1,800,000				
Number	Buildings, Improvements	Price Per Unit						
18	Miles of pipeline	\$1,900	3.9%	\$34,200	\$3,420	25	100	\$2,083
7	Wells	\$9,300	3.9%	\$65,100	\$6,510	25	100	\$3,965
100	Miles of Fence	\$2,600	3.9%	\$260,000	\$26,000	25	100	\$15,835
2	Corrals/Working Facilities	\$4,700	3.9%	\$9,400	\$940	30	100	\$520
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$376,900				\$22,856
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$17,000	7.0%	\$34,000	\$6,800	7	50	\$2,762
1	1 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	Tractor	\$5,000	7.0%	\$5,000	\$1,000	7	100	\$812
3	Gooseneck trailer	\$3,200	7.0%	\$9,600	\$1,920	7	100	\$1,559
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$69,900				\$7,064
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
13	Horses	\$1,600	7.0%	\$20,800	\$7,904	10	100	\$2,389
23	Bulls	\$2,000	7.0%	\$45,000	\$17,100	4	100	\$9,434
100	Cows	\$1,100.00	7.0%	\$110,000	\$41,800	8	100	\$14,347
169	Total AUys							
Subtotal				\$65,800				\$11,823
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
450	Cows	\$1,100	7.0%	\$495,000	\$188,100			\$27,324
68	Replacement Heifers	\$1,000	7.0%	\$67,500	\$25,650			\$3,726
501	Total AUys							
Subtotal				\$562,500	\$213,750			\$31,050
Total				<u>\$2,875,100</u>				<u>\$60,970</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**NORTHWEST REGION
EX-LARGE COW/CALF BUDGET 1999**

BREED HERD SIZE	450	COW TO BULL	20	CALF CROP PERCENT ¹	85%
CULL RATE	15%			REPLACEMENT HEIFERS KEPT	67.5

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	191	510	\$0.87	\$84,858	\$188.57
HEIFER CALVES	124	485	\$0.80	\$48,015	\$106.70
CULL COWS	37	900	\$0.40	\$13,320	\$29.60
CULL BULLS	1	1200	\$0.42	\$504	\$1.12
TOTAL	353			\$146,697	\$325.99

VARIABLE COSTS						VALUE PER COW
						VALUE PER COW
1. FEED COSTS						
	UNITS	QUANTITY/PERCENT	PRICE	COST		
HAY	TON	35.00	\$135	\$4,725		\$10.50
STATE	AUY	45.0%	\$25.08	\$0		\$0.00
FEDERAL LEASE	AUY	35.0%	\$16.20	\$7,290		\$16.20
PRIVATE(Owned)	AUY	20.0%	\$0.00	\$0		\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0		\$0.00
SALT & MINERAL	TON	6.00	\$128	\$768		\$1.71
PROTEIN SUPP	TON	7.00	\$328	\$2,296		\$5.10
OTHER		0.00	\$0	\$0		\$0.00
TOTAL				\$15,079		\$33.51
2. OTHER VARIABLE COSTS						
				COST		
VET AND MEDICINE				\$4,050		\$9.00
LIVESTOCK HAULING				\$883		\$1.96
HIRED LABOR				\$0		\$0.00
OPERATING COSTS-EQUIP & MACH				\$3,188		\$7.08
OPERATING COSTS-VEHICLE				\$4,109		\$9.13
RANCH MAINTENANCE				\$2,805		\$6.23
BEEF CHECKOFF				\$315		\$0.70
OTHER				\$4,000		\$8.89
TOTAL				\$19,349		\$43.00
3. INTEREST ON VARIABLE COSTS						
SUM OF VARIABLE COSTS X MONTHS BORROWED						
X INTEREST RATE PER MONTH						
ANNUAL INTEREST RATE				7.0%		
NUMBER OF MONTHS BORROWED				6		VALUE PER COW
						\$1,205
						\$2.68
TOTAL				\$35,633		\$79.18
TOTAL				\$111,064		\$246.81

OWNERSHIP COSTS				VALUE PER COW
		Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	
CASH COSTS				
Taxes & Insurance			\$7,064	\$15.70
Overhead			\$2,100	\$4.67
Total			\$9,164	\$20.36
NON CASH COSTS				
Purchased Livestock			\$11,823	\$26.27
Machinery & Equipment			\$7,064	\$15.70
Housing & Improvements			\$22,856	\$50.79
Interest on Retained Livestock ⁶			\$31,050	\$69.00
Management & Operation Labor (6% of gross returns)			\$8,802	\$19.56
Total			\$81,595	\$181.32
TOTAL FIXED COSTS			\$90,759	\$201.69
TOTAL CASH AND VARIABLE COSTS			\$44,797	\$99.55
TOTAL COSTS			\$126,392	\$280.87
RETURN ABOVE TOTAL CASH COSTS			\$101,900	\$226.44
RETURN ABOVE TOTAL COSTS			\$20,305	\$45.12

BREAK-EVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$18.73	\$23.54
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$18.73	\$66.42

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHEAST REGION
MEDIUM RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
4000	Acres of private land	\$65	3.9%	\$260,000	\$260,000			
200	AU Values ¹	\$2,250	3.9%	\$450,000	\$450,000			
Subtotal				\$710,000				
Number	Buildings, Improvements	Price Per Unit						
5	Miles of pipeline	\$1,800	3.9%	\$9,000	\$900	25	100	\$548
4	Wells	\$8,900	3.9%	\$35,600	\$3,560	25	100	\$2,168
22	Miles of Fence	\$2,500	3.9%	\$55,000	\$5,500	25	100	\$3,350
1	Corrals/Working Facilities	\$4,500	3.9%	\$4,500	\$450	30	100	\$249
1	Barns & Shop	\$8,000	3.9%	\$8,000	\$800	30	100	\$443
Subtotal				\$112,100				\$6,757
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	1 ton pickup 4WD	\$18,000	7.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,600	7.0%	\$2,600	\$520	10	100	\$333
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$24,400				\$2,438
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
4	Horses	\$1,600	7.0%	\$6,400	\$2,432	10	100	\$735
9	Bulls	\$2,000	7.0%	\$18,000	\$6,840	4	100	\$3,774
40	Cows	\$1,100.00	7.0%	\$44,000	\$16,720	8	100	\$5,739
66	Total AUYS							
Subtotal				\$24,400				\$4,509
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
180	Cows	\$1,100	7.0%	\$198,000	\$75,240			\$10,930
27	Replacement Heifers	\$1,000	7.0%	\$27,000	\$10,260			\$1,490
200	Total AUYS							
Subtotal				\$225,000	\$85,500			\$12,420
Total				<u>\$1,095,900</u>				<u>\$21,615</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**SOUTHEAST REGION
MEDIUM COW/CALF BUDGET 1999**

BREED HERD SIZE	180	COW to BULL	20	CALF CROP PERCENT ¹	83%
CULL RATE	15%			REPLACEMENT HEIFERS KEPT	27

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	75	510	\$0.85	\$32,382	\$179.90
HEIFER CALVES	48	485	\$0.80	\$18,508	\$102.82
CULL COWS	37	900	\$0.40	\$13,320	\$74.00
CULL BULLS	1	1200	\$0.42	\$504	\$2.80
TOTAL	160			\$64,714	\$359.52

VARIABLE COSTS

1. FEED COSTS					VALUE PER COW
	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	17.00	\$135	\$2,295	\$12.75
STATE	AUY	45.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	25.0%	\$16.20	\$2,916	\$16.20
PRIVATE(Owned)	AUY	30.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	2.50	\$135	\$338	\$1.88
PROTEIN SUPP	TON	9.00	\$325	\$2,925	\$16.25
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$8,474	\$47.08

2. OTHER VARIABLE COSTS					VALUE PER COW
				COST	
VET AND MEDICINE				\$1,620	\$9.00
LIVESTOCK HAULING				\$401	\$2.23
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$1,403	\$7.79
OPERATING COSTS-VEHICLE				\$2,933	\$16.29
RANCH MAINTENANCE				\$1,700	\$9.44
BEEF CHECKOFF				\$122	\$0.68
PURCHASED LIVESTOCK				\$2,000	\$11.11
TOTAL				\$10,178	\$56.55

3. INTEREST ON VARIABLE COSTS					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE					
NUMBER OF MONTHS BORROWED					
				7.0%	
				6	
					\$653
					\$3.63
TOTAL					\$19,305
					\$107.25
TOTAL					\$45,409
					\$252.27

OWNERSHIP COSTS

Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS			
Taxes & Insurance		\$2,438	\$13.54
Overhead		\$2,100	\$11.67
Total		\$4,538	\$25.21
NON CASH COSTS			
Purchased Livestock		\$4,509	\$25.05
Machinery & Equipment		\$2,438	\$13.54
Housing & Improvements		\$6,757	\$37.54
Interest on Retained Livestock ⁶		\$12,420	\$69.00
Management & Operation Labor (6% of gross returns)		\$3,883	\$21.57
Total		\$30,007	\$166.70
TOTAL FIXED COSTS		\$34,545	\$191.91
TOTAL CASH AND VARIABLE COSTS		\$23,842	\$132.46
TOTAL COSTS		\$58,387	\$299.16
RETURN ABOVE TOTAL CASH COSTS		\$40,872	\$227.06
RETURN ABOVE TOTAL COSTS		\$10,865	\$60.36

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$25.97	\$32.08
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$25.97	\$72.45

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHEAST REGION
LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
6000	Acres of private land	\$65	3.9%	\$390,000	\$390,000			
400	AU Values ¹	\$2,250	3.9%	\$900,000	\$900,000			
Subtotal				\$1,290,000				
Number	Buildings, Improvements	Price Per Unit						
12	Miles of pipeline	\$1,800	3.9%	\$21,600	\$2,160	25	100	\$1,316
6	Wells	\$8,900	3.9%	\$53,400	\$5,340	25	100	\$3,252
75	Miles of Fence	\$2,500	3.9%	\$187,500	\$18,750	25	100	\$11,419
1	Corrals/Working Facilities	\$4,500	3.9%	\$4,500	\$450	30	100	\$249
1	Barns & Shop	\$8,000	3.9%	\$8,000	\$800	30	100	\$443
Subtotal				\$275,000				\$16,679
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	1 ton pickup 4WD	\$18,000	7.0%	\$18,000	\$3,600	7	50	\$1,462
0	Dozer/Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$3,200	7.0%	\$6,400	\$1,280	7	100	\$1,040
1	Horse tack	\$2,600	7.0%	\$2,600	\$520	10	100	\$333
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$45,600				\$4,420
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
8	Horses	\$1,600	7.0%	\$12,800	\$4,864	10	100	\$1,470
18	Bulls	\$1,500	7.0%	\$27,000	\$10,260	4	100	\$5,660
80	Cows	\$1,100.00	7.0%	\$88,000	\$33,440	8	100	\$11,478
133	Total AUys							
Subtotal				\$39,800				\$7,131
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
360	Cows	\$1,100	7.0%	\$396,000	\$150,480			\$21,859
54	Replacement Heifers	\$1,000	7.0%	\$54,000	\$20,520			\$2,981
401	Total AUys							
Subtotal				\$450,000	\$171,000			\$24,840
Total				\$2,100,400				\$45,938

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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**SOUTHEAST REGION
LARGE COW/CALF BUDGET 1999**

BREED HERD SIZE	360	COW to BULL	20	CALF CROP PERCENT ¹	83%
CULL RATE	15%			REPLACEMENT HEIFERS KEPT	54

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	149	510	\$0.85	\$64,765	\$179.90
HEIFER CALVES	95	485	\$0.78	\$36,090	\$100.25
CULL COWS	37	900	\$0.38	\$12,654	\$35.15
CULL BULLS	1	1200	\$0.40	\$480	\$1.33
TOTAL	283			\$113,989	\$316.64

VARIABLE COSTS

					VALUE PER COW	
		UNITS	QUANTITY/PERCENT	PRICE	COST	
1. FEED COSTS						
	HAY	TON	33.00	\$135	\$4,455	\$12.38
	STATE	AUY	45.0%	\$25.08	\$0	\$0.00
	FEDERAL LEASE	AUY	25.0%	\$16.20	\$5,832	\$16.20
	PRIVATE(Owned)	AUY	30.0%	\$0.00	\$0	\$0.00
	PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
	SALT & MINERAL	TON	5.00	\$135	\$675	\$1.88
	PROTEIN SUPP	TON	16.00	\$325	\$5,200	\$14.44
	OTHER		0.00	\$0	\$0	\$0.00
	TOTAL				\$16,162	\$44.89

2. OTHER VARIABLE COSTS					COST	
	VET AND MEDICINE				\$3,240	\$9.00
	LIVESTOCK HAULING				\$707	\$1.96
	HIRED LABOR				\$0	\$0.00
	OPERATING COSTS-EQUIP & MACH				\$1,955	\$5.43
	OPERATING COSTS-VEHICLE				\$3,400	\$9.44
	RANCH MAINTENANCE				\$1,998	\$5.55
	BEEF CHECKOFF				\$245	\$0.68
	LIVESTOCK PURCHASES				\$2,000	\$5.56
	TOTAL				\$13,544	\$37.62

3. INTEREST ON VARIABLE COSTS						
	SUM OF VARIABLE COSTS X MONTHS BORROWED					
	X INTEREST RATE PER MONTH					
	ANNUAL INTEREST RATE				7.0%	
	NUMBER OF MONTHS BORROWED				6	VALUE PER COW
						\$1,040
						\$2.89
	TOTAL				\$30,746	\$85.41
	TOTAL				\$83,243	\$231.23

OWNERSHIP COSTS		Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS				
	Taxes & Insurance		\$4,420	\$12.28
	Overhead		\$2,100	\$5.83
	Total		\$6,520	\$18.11
NON CASH COSTS				
	Purchased Livestock		\$7,131	\$19.81
	Machinery & Equipment		\$4,420	\$12.28
	Housing & Improvements		\$16,679	\$46.33
	Interest on Retained Livestock ⁶		\$24,840	\$69.00
	Management & Operation Labor (6% of gross returns)		\$6,839	\$19.00
	Total		\$59,908	\$166.41
TOTAL FIXED COSTS			\$66,428	\$184.52
TOTAL CASH AND VARIABLE COSTS			\$37,266	\$103.52
TOTAL COSTS			\$97,174	\$269.93
RETURN ABOVE TOTAL CASH COSTS			\$76,723	\$213.12
RETURN ABOVE TOTAL COSTS			\$16,815	\$46.71

BREAK-EVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$20.68	\$25.07
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$20.68	\$65.37

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHEAST REGION
EXTRA-LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
10000	Acres of private land	\$65	3.9%	\$650,000	\$650,000			
550	AU Values ¹	\$2,250	3.9%	\$1,237,500	\$1,237,500			
Subtotal				\$1,887,500				
Number	Buildings, Improvements	Price Per Unit						
15	Miles of pipeline	\$1,800	3.9%	\$27,000	\$2,700	25	100	\$1,644
8	Wells	\$8,900	3.9%	\$71,200	\$7,120	25	100	\$4,336
110	Miles of Fence	\$2,500	3.9%	\$275,000	\$27,500	25	100	\$16,748
2	Corrals/Working Facilities	\$4,500	3.9%	\$9,000	\$900	30	100	\$498
1	Barns & Shop	\$8,000	3.9%	\$8,000	\$800	30	100	\$443
Subtotal				\$390,200				\$23,670
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$17,000	7.0%	\$34,000	\$6,800	7	50	\$2,762
1	1 ton pickup 4WD	\$18,000	7.0%	\$18,000	\$3,600	7	50	\$1,462
1	Tractor	\$5,000	7.0%	\$5,000	\$1,000	7	100	\$812
3	Gooseneck trailer	\$3,200	7.0%	\$9,600	\$1,920	7	100	\$1,559
1	Horse tack	\$2,600	7.0%	\$2,600	\$520	10	100	\$333
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$70,800				\$7,132
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
12	Horses	\$1,600	7.0%	\$19,200	\$7,296	10	100	\$2,206
25	Bulls	\$2,000	7.0%	\$49,500	\$18,810	4	100	\$10,377
110	Cows	\$1,100.00	7.0%	\$121,000	\$45,980	8	100	\$15,782
183	Total AUys							
Subtotal				\$68,700				\$12,583
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
495	Cows	\$1,100	7.0%	\$544,500	\$206,910			\$30,056
74	Replacement Heifers	\$1,000	7.0%	\$74,250	\$28,215			\$4,099
551	Total AUys							
Subtotal				\$618,750	\$235,125			\$34,155
Total				\$3,035,950				\$64,957

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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**SOUTHEAST REGION
EX-LARGE COW/CALF BUDGET 1999**

BREED HERD SIZE 495 COW to BULL 20 CALF CROP PERCENT¹ 81%
 CULL RATE 15% REPLACEMENT HEIFERS KEPT 74.25

VALUE OF PRODUCTION

	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	200	510	\$0.85	\$86,906	\$175.57
HEIFER CALVES	126	485	\$0.78	\$47,751	\$96.47
CULL COWS	37	900	\$0.40	\$13,320	\$26.91
CULL BULLS	1	1200	\$0.42	\$504	\$1.02
TOTAL	365			\$148,481	\$299.96

VARIABLE COSTS

1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	41.00	\$135	\$5,535	\$11.18
STATE	AUY	45.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	25.0%	\$16.20	\$8,019	\$16.20
PRIVATE(Owned)	AUY	30.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	8.00	\$135	\$1,080	\$2.18
PROTEIN SUPP	TON	22.00	\$325	\$7,150	\$14.44
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$21,784	\$44.01

2. OTHER VARIABLE COSTS

	COST	VALUE PER COW
VET AND MEDICINE	\$4,455	\$9.00
LIVESTOCK HAULING	\$912	\$1.84
HIRED LABOR	\$0	\$0.00
OPERATING COSTS-EQUIP & MACH	\$2,975	\$6.01
OPERATING COSTS-VEHICLE	\$3,060	\$6.18
RANCH MAINTENANCE	\$2,720	\$5.49
BEEF CHECKOFF	\$327	\$0.66
OTHER	\$8,000	\$16.16
TOTAL	\$22,448	\$45.35

3. INTEREST ON VARIABLE COSTS

SUM OF VARIABLE COSTS X MONTHS BORROWED		
X INTEREST RATE PER MONTH		
ANNUAL INTEREST RATE	7.0%	
NUMBER OF MONTHS BORROWED	6	VALUE PER COW
		\$1,548
		\$3.13
TOTAL		\$45,781
		\$92.49
TOTAL		\$102,700
		\$207.48

OWNERSHIP COSTS

	Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS			
Taxes & Insurance		\$7,132	\$14.41
Overhead		\$2,100	\$4.24
Total		\$9,232	\$18.65
NON CASH COSTS			
Purchased Livestock		\$12,583	\$25.42
Machinery & Equipment		\$7,132	\$14.41
Housing & Improvements		\$23,670	\$47.82
Interest on Retained Livestock ⁶		\$34,155	\$69.00
Management & Operation Labor (6% of gross returns)		\$8,909	\$18.00
Total		\$86,449	\$174.64
TOTAL FIXED COSTS		\$95,681	\$193.29
TOTAL CASH AND VARIABLE COSTS		\$55,013	\$111.14
TOTAL COSTS		\$141,462	\$285.78
RETURN ABOVE TOTAL CASH COSTS		\$93,468	\$188.82
RETURN ABOVE TOTAL COSTS		\$7,019	\$14.18

BREAKEVEN CALCULATIONS

	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$22.95	\$27.58
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$22.95	\$70.92

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHWEST REGION
SMALL RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return ¹	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
1500	Acres of private land	\$60	3.9%	\$90,000	\$90,000			
72	AU Values	\$2,100	3.9%	\$151,200	\$151,200			
Subtotal				\$241,200				
Number	Buildings, Improvements	Price Per Unit						
5	Miles of pipeline	\$2,000	3.9%	\$10,000	\$1,000	25	100	\$609
2	Wells	\$8,200	3.9%	\$16,400	\$1,640	25	100	\$999
25	Miles of Fence	\$2,700	3.9%	\$67,500	\$6,750	25	100	\$4,111
1	Corrals/Working Facilities	\$4,700	3.9%	\$4,700	\$470	30	100	\$260
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$106,800				\$6,432
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ²	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
0	3/4 ton pickup 4WD	\$18,000	7.0%	\$0	\$0	7	50	\$0
0	Dozer/Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$3,200	7.0%	\$3,200	\$640	7	100	\$520
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$24,500				\$2,451
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
4	Horses	\$1,600	7.0%	\$6,400	\$2,432	10	100	\$735
5	Bulls	\$2,000	7.0%	\$9,600	\$3,648	4	100	\$2,013
12	Cows	\$1,100.00	7.0%	\$13,200	\$5,016	8	100	\$1,722
26	Total AUys							
Subtotal				\$16,000				\$2,748
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
72	Cows	\$1,100	7.0%	\$79,200	\$30,096			\$4,372
11	Replacement Heifers	\$1,000	7.0%	\$10,800	\$4,104			\$596
80	Total AUys							
Subtotal				\$90,000	\$34,200			\$4,968
Total				\$478,500				\$13,851

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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**SOUTHWEST REGION
SMALL COW/CALF BUDGET 1999**

BREED HERD SIZE **72** COW to BULL **15** CALF CROP PERCENT¹ **80%**
 CULL RATE **15%** REPLACEMENT HEIFERS KEPT **10.8**

VALUE OF PRODUCTION

ANIMALS SOLD	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	29	500	\$0.84	\$12,096	\$168.00
HEIFER CALVES	18	475	\$0.77	\$6,584	\$91.44
CULL COWS	37	900	\$0.37	\$12,321	\$171.13
CULL BULLS	1	1200	\$0.39	\$468	\$6.50
TOTAL	85			\$31,469	\$437.06

VARIABLE COSTS

					VALUE PER COW
1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	20.00	\$130	\$2,600	\$36.11
STATE	AUY	25.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	65.0%	\$16.20	\$1,166	\$16.20
PRIVATE(Owned)	AUY	20.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	1.00	\$125	\$125	\$1.74
PROTEIN SUPP	TON	3.00	\$325	\$975	\$13.54
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$4,866	\$67.59
2. OTHER VARIABLE COSTS					
VET AND MEDICINE				\$648	\$9.00
LIVESTOCK HAULING				\$212	\$2.94
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$300	\$4.17
OPERATING COSTS-VEHICLE				\$2,000	\$27.78
RANCH MAINTENANCE				\$1,148	\$15.94
BEEF CHECKOFF				\$47	\$0.65
OTHER				\$1,000	\$13.89
TOTAL				\$5,354	\$74.37
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.0%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
					\$358
					\$4.97
TOTAL				\$10,578	\$146.92
				\$20,890	\$290.14

OWNERSHIP COSTS

Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS			
Taxes & Insurance		\$2,451	\$34.04
Overhead		\$2,100	\$29.17
Total		\$4,551	\$63.20
NON CASH COSTS			
Purchased Livestock		\$2,748	\$38.16
Machinery & Equipment		\$2,451	\$34.04
Housing & Improvements		\$6,432	\$89.34
Interest on Retained Livestock ⁶		\$4,968	\$69.00
Management & Operation Labor (6% of gross returns)		\$1,888	\$26.22
Total		\$18,487	\$256.76
TOTAL FIXED COSTS		\$23,037	\$319.96
TOTAL CASH AND VARIABLE COSTS		\$15,129	\$210.12
TOTAL COSTS		\$33,616	\$466.89
RETURN ABOVE TOTAL CASH COSTS		\$16,340	\$226.94
RETURN ABOVE TOTAL COSTS		(\$2,147)	(\$29.82)

BREAKEVEN CALCULATIONS

	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$37.67	\$53.88
REQUIRED AVERAGE CALF PRICES TOTAL COSTS(cwt)	\$37.67	\$119.71

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHWEST REGION
MEDIUM RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
3500	Acres of private land	\$65	3.9%	\$227,500	\$227,500			
180	AU Values ¹	\$2,100	3.9%	\$378,000	\$378,000			
Subtotal				\$605,500				
Number	Buildings, Improvements	Price Per Unit						
10	Miles of pipeline	\$2,000	3.9%	\$20,000	\$2,000	25	100	\$1,218
2	Wells	\$92,000	3.9%	\$184,000	\$18,400	25	100	\$11,206
45	Miles of Fence	\$2,700	3.9%	\$121,500	\$12,150	25	100	\$7,400
1	Corrals/Working Facilities	\$4,700	3.9%	\$4,700	\$470	30	100	\$260
1	Barns & Shop	\$82,000	3.9%	\$82,000	\$8,200	30	100	\$4,536
Subtotal				\$412,200				\$24,620
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$17,000	7.0%	\$17,000	\$3,400	7	50	\$1,381
1	1 ton pickup 4WD	\$18,000	7.0%	\$18,000	\$3,600	7	50	\$1,462
0	Dozer/Tractor	\$5,000	7.0%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$3,200	7.0%	\$6,400	\$1,280	7	100	\$1,040
1	Horse tack	\$2,700	7.0%	\$2,700	\$540	10	100	\$345
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$45,700				\$4,432
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
8	Horses	\$1,600	7.0%	\$12,800	\$4,864	10	100	\$1,470
12	Bulls	\$2,000	7.0%	\$24,000	\$9,120	4	100	\$5,031
30	Cows	\$1,100.00	7.0%	\$33,000	\$12,540	8	100	\$4,304
63	Total AUYS							
Subtotal				\$36,800				\$6,502
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
180	Cows	\$1,100	7.0%	\$198,000	\$75,240			\$10,930
27	Replacement Heifers	\$1,000	7.0%	\$27,000	\$10,260			\$1,490
200	Total AUYS							
Subtotal				\$225,000	\$85,500			\$12,420
Total				<u>\$1,325,200</u>				<u>\$41,472</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

**SOUTHWEST REGION
MEDIUM COW/CALF BUDGET 1999**

	BREED HERD SIZE 180	CULL RATE 15%	COW to BULL 15	CALF CROP PERCENT ¹ 82%	REPLACEMENT HEIFERS KEPT 27
VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE²	VALUE	VALUE PER COW
STEER CALVES	74	500	\$0.84	\$30,996	\$172.20
HEIFER CALVES	47	475	\$0.77	\$17,117	\$95.10
CULL COWS	37	900	\$0.37	\$12,321	\$68.45
CULL BULLS	1	1200	\$0.39	\$468	\$2.60
TOTAL				\$60,902	\$338.35
VARIABLE COSTS					
1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	22.00	\$130	\$2,860	\$15.89
STATE	AUY	30.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	60.0%	\$16.20	\$2,916	\$16.20
PRIVATE(Owned)	AUY	10.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00
SALT & MINERAL	TON	2.00	\$125	\$250	\$1.39
PROTEIN SUPP	TON	4.00	\$325	\$1,300	\$7.22
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$7,326	\$40.70
2. OTHER VARIABLE COSTS				COST	
VET AND MEDICINE				\$1,620	\$9.00
LIVESTOCK HAULING				\$397	\$2.20
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$500	\$2.78
OPERATING COSTS-VEHICLE				\$2,000	\$11.11
RANCH MAINTENANCE				\$1,870	\$10.39
BEEF CHECKOFF				\$121	\$0.67
PURCHASED LIVESTOCK				\$1,000	\$5.56
TOTAL				\$7,507	\$41.71
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.0%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
				\$519	\$2.88
TOTAL				\$15,352	\$85.29
OWNERSHIP COSTS					
Annual Capital Recovery ³ (At Replacement Value):				Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS					
Taxes & Insurance				\$4,432	\$24.62
Overhead				\$2,100	\$11.67
Total				\$6,532	\$36.29
NON CASH COSTS					
Purchased Livestock				\$6,502	\$36.12
Machinery & Equipment				\$4,432	\$24.62
Housing & Improvements				\$24,620	\$136.78
Interest on Retained Livestock ⁶				\$12,420	\$69.00
Management & Operation Labor (6% of gross returns)				\$3,654	\$20.30
Total				\$51,628	\$286.82
TOTAL FIXED COSTS				\$58,161	\$323.11
TOTAL CASH AND VARIABLE COSTS				\$21,885	\$121.58
TOTAL COSTS				\$73,513	\$408.41
RETURN ABOVE TOTAL CASH COSTS				\$39,017	\$216.76
RETURN ABOVE TOTAL COSTS				(\$12,611)	(\$70.06)
BREAKEVEN CALCULATIONS					
	VARIABLE COSTS	TOTAL COSTS			
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$21.34	\$30.41			
REQUIRED AVERAGE CALF PRICES TOTAL COSTS(cwt)	\$21.34	\$102.17			

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 1999 price projections from Cattle Fax, Doane's 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.

**SOUTHWEST REGION
LARGE RANCH INVESTMENTS 1999**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
6000	Acres of private land	\$60	3.9%	\$360,000	\$360,000			
360	AU Values ¹	\$2,100	3.9%	\$756,000	\$756,000			
Subtotal				\$1,116,000				
Number	Buildings, Improvements	Price Per Unit						
18	Miles of pipeline	\$2,000	3.9%	\$36,000	\$3,600	25	100	\$2,193
12	Wells	\$9,200	3.9%	\$110,400	\$11,040	25	100	\$6,724
100	Miles of Fence	\$2,700	3.9%	\$270,000	\$27,000	25	100	\$16,444
1	Corrals/Working Facilities	\$4,700	3.9%	\$4,700	\$470	30	100	\$260
1	Barns & Shop	\$8,200	3.9%	\$8,200	\$820	30	100	\$454
Subtotal				\$429,300				\$26,074
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$17,000	7.0%	\$34,000	\$6,800	7	50	\$2,762
1	1 ton pickup 4WD	\$18,000	7.0%	\$18,000	\$3,600	7	50	\$1,462
1	Tractor	\$5,000	7.0%	\$5,000	\$1,000	7	100	\$812
3	Gooseneck trailer	\$3,200	7.0%	\$9,600	\$1,920	7	100	\$1,559
1	Horse tack	\$2,600	7.0%	\$2,600	\$520	10	100	\$333
1	Misc. equipment	\$1,600	7.0%	\$1,600	\$320	10	100	\$205
Subtotal				\$70,800				\$7,132
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$1,600	7.0%	\$16,000	\$6,080	10	100	\$1,838
24	Bulls	\$2,000	7.0%	\$48,000	\$18,240	4	100	\$10,063
34	Cows	\$1,100.00	7.0%	\$37,400	\$14,212	8	100	\$4,878
85	Total AUYS							
Subtotal				\$64,000				\$11,901
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
360	Cows	\$1,100	7.0%	\$396,000	\$150,480			\$21,859
54	Replacement Heifers	\$1,000	7.0%	\$54,000	\$20,520			\$2,981
401	Total AUYS							
Subtotal				\$450,000	\$171,000			\$24,840
Total				<u>\$2,130,100</u>				<u>\$58,046</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.

2) For intermediate assets an interest rate of 7.50% was used.

3) A rate of 6.50% reflects a typical return on a low risk investment (30 yr. Treasury Bond)

NOTES

Printed May 2008

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