



Range Livestock Costs and Returns for New Mexico, 2002



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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.

Drought conditions persisted throughout New Mexico during 2002, resulting in an increase in culling rates. Cull cows provide income for the year in which they are sold but reduce current and future calf sales due to the reduction in the breeding herd. Cash flow in a year in which cull sales increased will increase the bottom line for that year, as occurred in 2002 in New Mexico. These are not long-term projected gains but rather influxes to cash flow for the year. Prices for all classes of beef cattle fell in 2002. This coupled with drought conditions continued to reduce profitability levels for New Mexico ranches.

This study considers 15 individual cost and return estimates for representative model cow-calf ranches distributed among five New Mexico regions. The five regions are county-specific (each county is wholly contained in one region). They are: Central Mountain, Northeast, Northwest, Southeast, and Southwest. Three individual budgets, for three ranches of differing size, were

developed for each region. Sizes of the model ranches reflect common ranch sizes within each region and range 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 in 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 forests and browse species.

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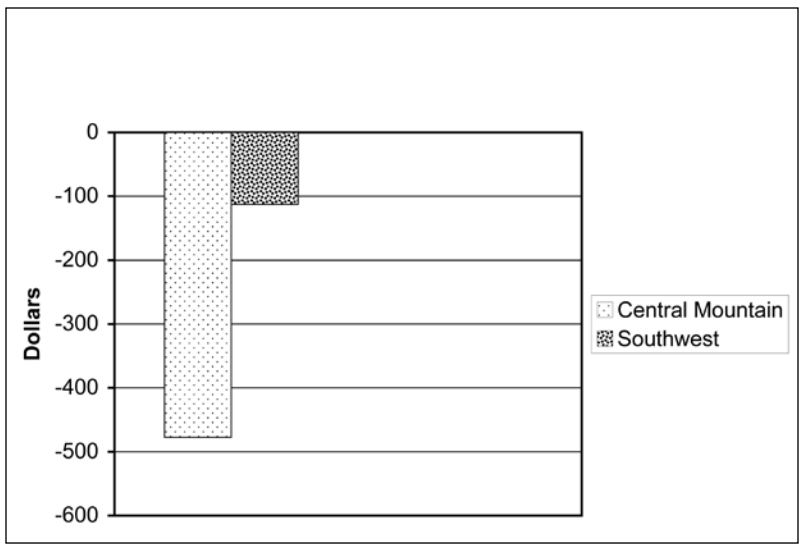


Figure 1. Economic returns for small New Mexico ranches, 2002

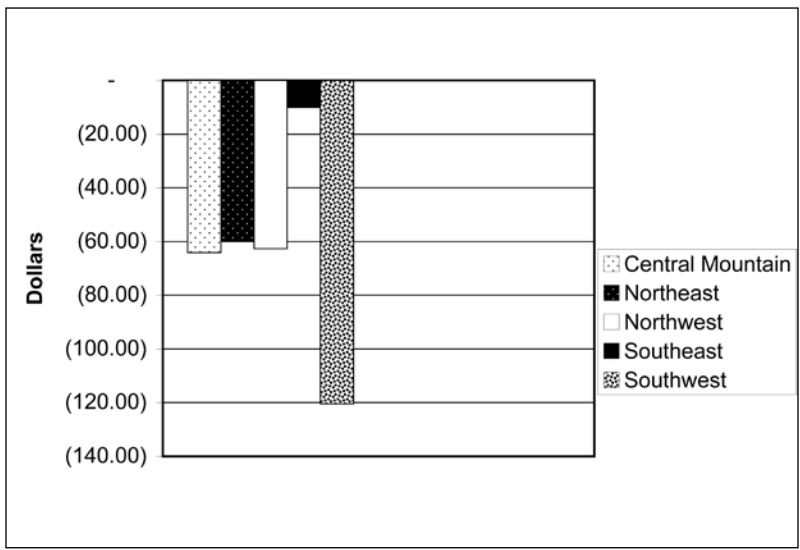


Figure 2. Economic returns for medium-sized New Mexico ranches, 2002

Small Ranch

The small representative ranch had 33 mature cows. A 25% culling rate was applied in 2002 due to drought conditions. Calf crop percentage was 80%. Gross returns per cow were approximately \$363 with total costs approaching \$840 per cow, resulting in a loss of \$477 per cow (Figure 1). An intensifying drought in this portion of New Mexico has caused a continued reduction in cattle numbers, thus impacting the economic profile of this representative ranch.

Medium Ranch

The medium representative ranch had 130 mature cows. A 25% culling rate was applied due to drought. Calf crop percentage was 83%. Gross returns per cow were approximately \$365 with total costs approaching \$430 per cow, resulting in a loss of \$64 per cow (Figure 2). Break-even calf prices were \$102 per hundred weight (cwt).

Large Ranch

The large representative ranch had 228 mature cows. A 25% culling rate and an 85% calf crop percentage were used in the representative ranch model. Gross returns per cow were approximately \$372 with total costs approaching \$412 per cow, resulting in a loss of \$48 per cow (Figure 3). Continued drought conditions forced mother cow numbers to be reduced, thus negatively impacting economic return.

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 varies from 12 to 20 inches throughout the region (Palmer Drought Index). Stuckey and Henderson (1969) estimate carrying capacities ranging from 15 to 24 animal units yearlong (AUY). Prevailing drought conditions for this portion of New Mexico resulted in continued downsizing of mother cow herds.

Medium Ranch

The medium representative ranch has 130 mature cows. A 25% culling rate was applied. Calf crop percentage was 85%. Gross returns per cow were approximately \$455 with total costs approaching \$515 per cow, resulting in a loss of \$60 per cow (Figure 2). Despite increased market prices, returns per cow fell greatly due to costs of supplemental feeding. More than normal culling rates resulting in fewer calves being marketed.

Large Ranch

The large representative ranch has 228 mature cows. A 25% culling rate was applied. Calf crop percentage was 84%. Gross returns per cow were approximately \$402 with total costs approaching \$440 per cow, resulting in a loss of \$38 per cow (Figure 3). Despite increased market prices, returns per cow fell greatly due to supplemental feeding costs and a reduction in the overall number of calves sold.

Extra-Large Ranch

The extra-large representative ranch has 358 mature cows. A 25% culling rate was applied. Calf crop percentage was 84%. Gross returns per cow were approximately \$375 with total costs approaching \$395 per cow, resulting in a loss of \$19 per cow (Figure 4).

Northwest Region

This region comprises Bernalillo, Catron, McKinley, Rio Arriba, Sandoval, and San Juan. Representative ranches modeled for the Northeast region were medium, large and extra-large in size. Drought conditions persisted throughout 2000, reducing cow numbers again over the 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 has 130 mature cows. A 25% culling rate was applied. Calf crop percentage was 83%. Gross returns per cow were approximately \$428 with total costs approaching \$490 per cow, resulting in a loss of greater than \$62 per cow (Figure 2). This economic return is \$40 less than in 2001. The difference is due to two primary factors: reduced number of calves sold and high feeding costs.

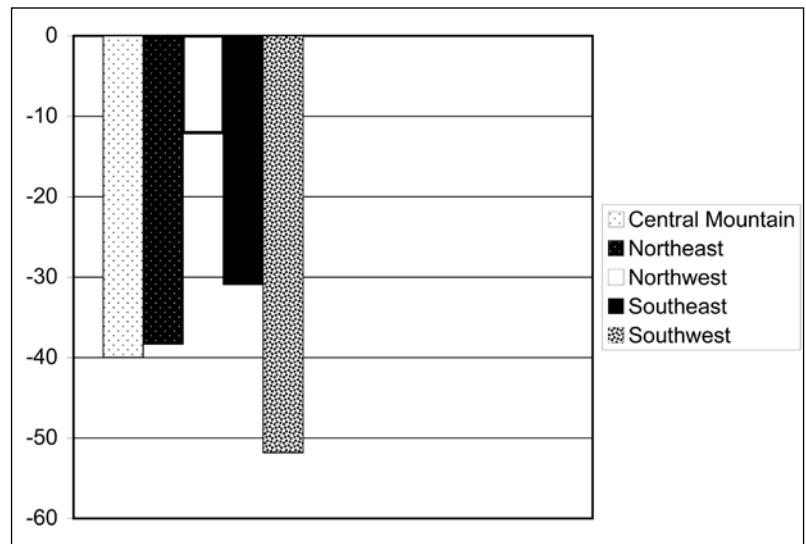


Figure 3. Economic returns for large New Mexico ranches, 2002

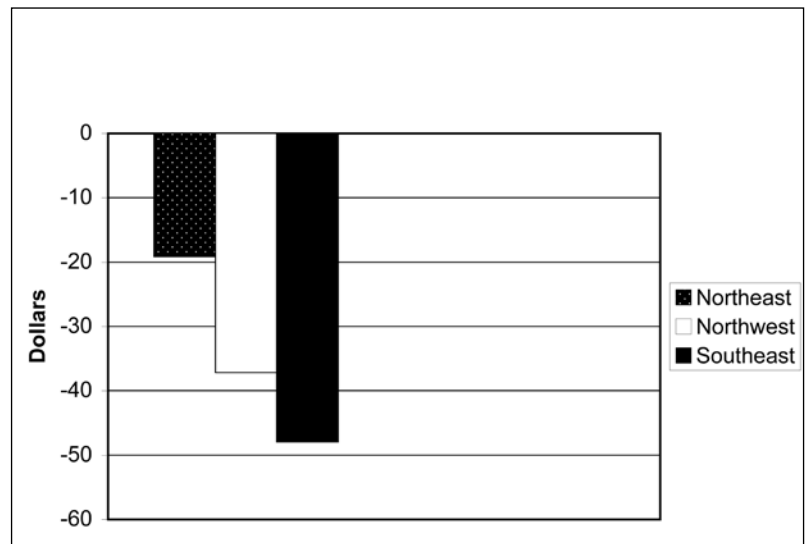


Figure 4. Economic returns for extra-large New Mexico ranches, 2002

Large Ranch

The large representative ranch has 228 mature cows. A 25% culling rate was applied. Calf crop percentage was 83%. Gross returns per cow were approximately \$400 with total costs approximately \$390 per cow, resulting in a loss of \$12 per cow (Figure 3). A significant reduction in economic viability for this representative model was apparent when compared to the values established in 2001.

Extra-Large Ranch

The extra-large representative ranch has 325 mature cows. A 25% culling rate was applied. Calf crop percentage was 83%. Gross returns per cow were approximately \$372 with total costs approaching \$410 per cow, resulting in a loss of \$37 per cow (Figure 4). Break-even calf prices were \$99 per hundred weight (cwt) with 2002 prices averaging \$90 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 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. Continuing drought conditions resulted in more supplemental feeding.

Terrain in this region ranges from prairies to rough areas. Elevations vary from 3,000 to over 6,000, 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 has 130 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$406 with total costs approaching \$416 per cow, resulting in a loss of about \$10 per cow (Figure 2).

Large Ranch

The large representative ranch has 260 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$360 with total costs of \$390 per cow, resulting in a loss of \$31 per cow (Figure 3). Increasing costs coupled with reduction in number of calves

marketed resulted in a decrease in profit of approximately \$35 per cow relative to 2001.

Extra-Large Ranch

The extra-large representative ranch has 385 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$347 with total costs approaching \$396 per cow, resulting in a loss of \$48 per cow (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 from three size classes were modeled for the Southwest region; a small, a medium and a large ranch.

Terrain in this region ranges from prairies to rough areas. Elevations vary from 4,000 to over 8,000 ft. with precipitation between 9 and 16 inches annually. Black grama is the primary grass plant in this region, while creosote and mesquite compose the majority of brush species. Stuckey and Henderson (1969) estimate that due to the huge variability of soil type, forage and precipitation levels stocking rates will range from 5 to 14 AUY per section.

Small Ranch

The small representative ranch has 52 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$517 with total costs approaching \$630 per cow, resulting in a loss of \$112 per cow (Figure 1). The combination of increasing costs coupled with a reduction in the number of calves marketed resulted in significant economic and financial losses.

Medium Ranch

The medium representative ranch has 140 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$406 with total costs approaching \$527 per cow, resulting in a loss of \$120 per cow (Figure 2). As in the small representative ranch, the combination

of increasing costs coupled with a reduction in the number of calves marketed resulted in significant economic and financial losses.

Large Ranch

The large representative ranch has 325 mature cows. A 25% culling rate was applied. Calf crop percentage was 82%. Gross returns per cow were approximately \$340 with total costs approaching \$395 per cow, resulting in a loss of \$52 per cow (Figure 3).

SUMMARY

Livestock production throughout New Mexico in 2002 resulted in negative returns for all representative models regardless of their location or size. Each representative ranch showed reduced profitability levels relative to in 2001. Precipitation levels were below normal for much of the state, forcing livestock producers to make a decision between increasing supplemental feeding rates and reducing herd size. The majority of producers chose to reduce herd size by 10% from the previous year's numbers. Supplemental feeding rates were also higher than normal, that is, they were higher than in years when precipitation levels are closer to average. These factors created a difficult year for livestock producers throughout New Mexico as costs of doing business increased, grass supplies were reduced and calf crop sales fell due to the aggregate reduction in cow numbers. Livestock prices fell from the 2001 levels, primarily due to the increased number of cattle being sold prematurely due to continued drought conditions. Figure 5 provides aggregate beef cattle prices for New Mexico for 2002. These values are representative of all classes of beef cattle throughout the state.

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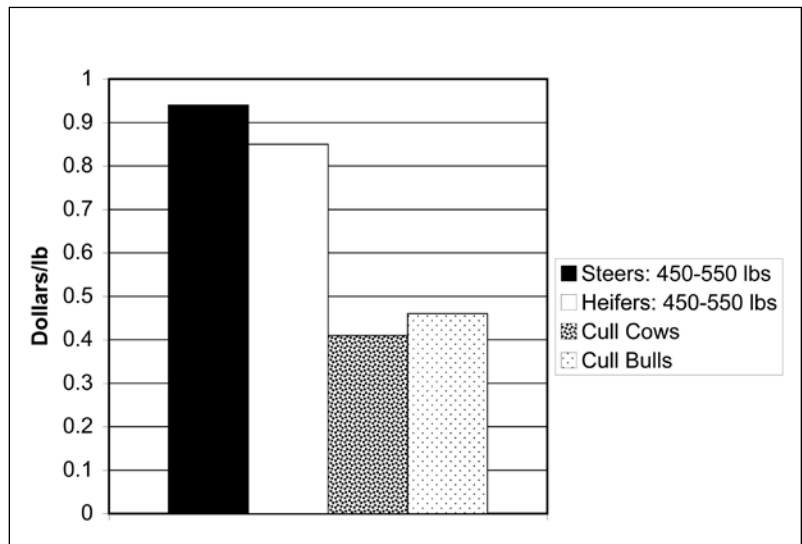


Figure 5. Cattle prices in New Mexico, 2002

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APPENDIX A

**CENTRAL MOUNTAIN REGION
SMALL RANCH INVESTMENTS 2002**

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	\$900	3.9%	\$90,000	\$90,000			
34	AU Values ¹	\$3,000	3.9%	\$101,250	\$101,250			
Subtotal				\$191,250				
Number	Buildings, Improvements	Price Per Unit						
0.5	Miles of pipeline	\$2,000	3.9%	\$1,000	\$100	25	100	\$61
1	Wells	\$13,000	3.9%	\$13,000	\$1,300	25	100	\$792
10	Miles of Fence	\$2,500	3.9%	\$25,000	\$2,500	25	100	\$1,523
1	Corrals/Working Facilities	\$5,000	3.9%	\$5,000	\$500	30	100	\$277
1	Barns & Shop	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
Subtotal				\$54,000				\$3,205
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$28,000	6.5%	\$28,000	\$5,600	7	50	\$2,224
0	3/4 ton pickup 4WD	\$30,000	6.5%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	6.5%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$4,500	6.5%	\$4,500	\$900	7	100	\$715
1	Horse tack	\$3,500	6.5%	\$3,500	\$700	10	100	\$435
1	Misc. equipment	\$1,500	6.5%	\$1,500	\$300	10	100	\$186
Subtotal				\$37,500				\$3,560
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
3	Horses	\$1,500	6.5%	\$4,500	\$1,710	10	100	\$499
1	Bulls	\$2,000	6.5%	\$2,500	\$950	4	100	\$514
5	Total AUYS							
Subtotal				\$7,000				\$1,013
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
25	Cows	\$1,100	6.5%	\$27,500	\$10,450			\$1,410
4	Replacement Heifers	\$1,000	6.5%	\$3,750	\$1,425			\$192
28	Total AUYS							
Subtotal				\$31,250	\$11,875			\$1,602
Total				<u>\$321,000</u>				<u>\$8,367</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)

**CENTRAL REGION
SMALL COW/CALF BUDGET 2002**

BREED HERD SIZE	33	COW to BULL	20	CALF CROP PERCENT ¹	80%
CULL RATE	25%			REPLACEMENT HEIFERS KEPT	8.125

VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	13	515	\$0.94	\$6,293	\$193.64
HEIFER CALVES	5	495	\$0.88	\$2,124	\$65.34
CULL COWS	8	900	\$0.39	\$2,852	\$87.75
CULL BULLS	1	1200	\$0.44	\$528	\$16.25
TOTAL	27			\$11,797	\$362.98

VARIABLE COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
1. FEED COSTS					
HAY	TON	13.00	\$150	\$1,950	\$60.00
STATE	AUY	0.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	50.0%	\$16.20	\$527	\$16.20
PRIVATE(Owned)	AUY	50.0%	\$0.00	\$0	\$0.00
PRIVATE(Leased Grazing)	AUY	0.0%	\$96.00	\$0	\$0.00
SALT & MINERAL	TON	2.00	\$245	\$490	\$15.08
PROTEIN SUPP	TON	8.00	\$310	\$2,480	\$76.31
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$5,447	\$167.58

2. OTHER VARIABLE COSTS					
				COST	VALUE PER COW
VET AND MEDICINE				\$390	\$12.00
LIVESTOCK HAULING				\$142	\$4.36
HIRED LABOK				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$515	\$15.85
OPERATING COSTS-VEHICLE				\$1,030	\$31.69
RANCH MAINTENANCE				\$200	\$6.15
BEEF CHECKOFF				\$18	\$0.55
PURCHASED LIVESTOCK				\$100	\$3.08
TOTAL				\$2,395	\$73.68

3. INTEREST ON VARIABLE COSTS					
					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				6.5%	
NUMBER OF MONTHS BORROWED				6	
				\$255	\$7.84

TOTAL				\$8,096	\$249.11
				\$3,701	\$113.87

OWNERSHIP COSTS					
	Annual Capital Recovery ⁴ (At Replacement Value):			Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS					
Taxes & Insurance				\$3,560	\$109.55
Overhead				\$2,100	\$64.62
				\$5,660	\$174.17
NON CASH COSTS					
Purchased Livestock				\$1,410	\$43.37
Machinery & Equipment				\$3,560	\$109.55
Housing & Improvements				\$3,205	\$98.62
Interest on Retained Livestock ⁴				\$1,602	\$49.29
Management & Operation Labor (6% of gross returns)				\$3,701	\$113.87
				\$13,478	\$414.69
TOTAL FIXED COSTS				\$19,138	\$588.86
TOTAL CASH AND VARIABLE COSTS				\$13,756	\$423.27
TOTAL COSTS				\$27,234	\$837.97
RETURN ABOVE TOTAL CASH COSTS				(\$1,960)	(\$60.30)

BREAKEVEN CALCULATIONS			
	VARIABLE COSTS	TOTAL COSTS	
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$61.66	\$104.77	
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$61.66	\$207.42	

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 2002 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.

**CENTRAL MOUNTAIN REGION
MEDIUM RANCH INVESTMENTS 2002**

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	\$200	3.9%	\$150,000	\$150,000			\$116.25
176	AU Values ¹	\$3,000	3.9%	\$526,500	\$526,500			
Subtotal				\$676,500				
Number	Buildings, Improvements	Price Per Unit						
2	Miles of pipeline	\$2,000	3.9%	\$4,000	\$400	25	100	\$244
1	Wells	\$13,000	3.9%	\$13,000	\$1,300	25	100	\$792
18	Miles of Fence	\$4,000	3.9%	\$72,000	\$7,200	25	100	\$4,385
1	Corrals/Working Facilities	\$5,000	3.9%	\$5,000	\$500	30	100	\$277
1	Barns & Shop	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
Subtotal				\$104,000				\$6,366
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	3/4 ton pickup 4WD	\$30,000	7.5%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$6,500	7.5%	\$6,500	\$1,300	7	100	\$1,079
1	Horse tack	\$5,000	7.5%	\$5,000	\$1,000	10	100	\$658
1	Misc. equipment	\$2,500	7.5%	\$2,500	\$500	10	100	\$329
Subtotal				\$44,000				\$4,673
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
6	Horses	\$2,500	6.5%	\$15,000	\$5,700	10	100	\$1,664
7	Bulls	\$2,000	6.5%	\$13,000	\$4,940	4	100	\$2,674
30	Cows	\$1,100.00	6.5%	\$33,000	\$12,540	8	100	\$4,175
53	Total AUYS							
Subtotal				\$28,000				\$4,338
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
130	Cows	\$1,100	6.5%	\$143,000	\$54,340			\$7,330
33	Replacement Heifers	\$1,000	6.5%	\$32,500	\$12,350			\$1,666
154	Total AUYS							
Subtotal				\$175,500	\$66,690			\$8,996
Total				<u>\$1,028,000</u>				<u>\$20,035</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 2002**

		BREED HERD SIZE 130	COW to BULL 20	CALF CROP PERCENT ¹ 83%	REPLACEMENT HEIFERS KEPT 32.5	
VALUE OF PRODUCTION						
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW	
STEER CALVES	54	515	\$0.94	\$26,117	\$200.90	
HEIFER CALVES	21	495	\$0.88	\$9,344	\$71.87	
CULL COWS	33	900	\$0.39	\$11,408	\$87.75	
CULL BULLS	1	1200	\$0.44	\$528	\$4.06	
TOTAL	109			\$47,396	\$364.59	
VARIABLE COSTS						
		UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
1. FEED COSTS						
	HAY	TON	39.00	\$150	\$5,850	\$45.00
	STATE	AUY	30.0%	\$25.08	\$0	\$0.00
	FEDERAL LEASE	AUY	40.0%	\$16.20	\$2,106	\$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	\$230	\$920	\$7.08
	PROTEIN SUPP	TON	11.00	\$350	\$3,850	\$29.62
	OTHER		0.00	\$0	\$0	\$0.00
	TOTAL				\$12,726	\$97.89
2. OTHER VARIABLE COSTS					COST	
	VET AND MEDICINE				\$1,560	\$12.00
	LIVESTOCK HAULING				\$572	\$4.40
	HIRED LABOR				\$0	\$0.00
	OPERATING COSTS-EQUIP & MACH				\$800	\$6.15
	OPERATING COSTS-VEHICLE				\$1,600	\$12.31
	RANCH MAINTENANCE				\$500	\$3.85
	BEEF CHECKOFF				\$75	\$0.58
	PURCHASED LIVESTOCK				\$3,000	\$23.08
	TOTAL				\$8,107	\$62.36
3. INTEREST ON VARIABLE COSTS						
	SUM OF VARIABLE COSTS X MONTHS BORROWED					
	X INTEREST RATE PER MONTH					
	ANNUAL INTEREST RATE			7.5%		
	NUMBER OF MONTHS BORROWED			6		VALUE PER COW
					\$781	\$6.01
	TOTAL				\$21,614	\$166.26
	TOTAL				\$25,782	\$198.32
OWNERSHIP COSTS						
		Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵ VALUE PER COW		
CASH COSTS						
	Taxes & Insurance			\$4,837	\$37.21	
	Overhead			\$2,100	\$16.15	
	Total			\$6,937	\$53.36	
NON CASH COSTS						
	Purchased Livestock			\$4,338	\$33.37	
	Machinery & Equipment			\$4,673	\$35.94	
	Housing & Improvements			\$6,366	\$48.97	
	Interest on Retained Livestock ⁶			\$8,996	\$69.20	
	Management & Operation Labor (6% of gross returns)			\$2,844	\$21.88	
	Total			\$27,217	\$209.36	
TOTAL FIXED COSTS				\$34,153	\$262.72	
TOTAL CASH AND VARIABLE COSTS				\$28,551	\$219.62	
TOTAL COSTS				\$55,788	\$428.98	
RETURN ABOVE TOTAL CASH COSTS				\$18,845	\$144.96	
RETURN ABOVE TOTAL COSTS				(\$8,371)	(\$64.40)	
BREAKEVEN CALCULATIONS						
		VARIABLE COSTS	TOTAL COSTS			
	REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$39.67	\$52.40			
	REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$39.67	\$102.35			

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 2002 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 2002**

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	\$200	3.9%	\$2,000,000	\$2,000,000			\$1,550.00
307	AU Values ¹	\$3,000	3.9%	\$921,375	\$921,375			
Subtotal				\$2,921,375				
Number	Buildings, Improvements	Price Per Unit						
4	Miles of pipeline	\$2,000	3.9%	\$8,000	\$800	25	100	\$487
2	Wells	\$13,000	3.9%	\$26,000	\$2,600	25	100	\$1,583
40	Miles of Fence	\$4,000	3.9%	\$160,000	\$16,000	25	100	\$9,745
1	Corrals/Working Facilities	\$5,000	3.9%	\$5,000	\$500	30	100	\$277
1	Barns & Shop	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
Subtotal				\$209,000				\$14,195
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
1	Tractor	\$5,000	7.5%	\$5,000	\$1,000	7	100	\$830
2	Gooseneck trailer	\$6,500	7.5%	\$13,000	\$2,600	7	100	\$2,159
1	Horse tack	\$6,500	7.5%	\$6,500	\$1,300	10	100	\$855
1	Misc. equipment	\$3,500	7.5%	\$3,500	\$700	10	100	\$460
Subtotal				\$90,000				\$11,001
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$2,500	6.5%	\$25,000	\$9,500	10	100	\$2,774
11	Bulls	\$2,000	6.5%	\$22,750	\$8,645	4	100	\$4,679
53	Cows	\$1,100.00	6.5%	\$58,300	\$22,154	8	100	\$7,377
93	Total AUUs							
Subtotal				\$47,750				\$7,453
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
228	Cows	\$1,100	6.5%	\$250,250	\$95,095			\$12,827
57	Replacement Heifers	\$1,000	6.5%	\$56,875	\$21,613			\$2,915
270	Total AUUs							
Subtotal				\$307,125	\$116,708			\$15,742
Total				\$3,575,250				\$40,939

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 2002**

BREED HERD SIZE		228	COW to BULL		20	CALF CROP PERCENT ¹		85%
CULL RATE		25%			REPLACEMENT HEIFERS KEPT		57	
VALUE OF PRODUCTION								
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW			
STEER CALVES	97	515	\$0.94	\$46,806	\$205.74			
HEIFER CALVES	40	495	\$0.88	\$17,342	\$76.23			
CULL COWS	57	900	\$0.39	\$19,963	\$87.75			
CULL BULLS	1	1200	\$0.44	\$528	\$2.32			
TOTAL				\$84,640	\$372.04			
VARIABLE COSTS								
1. FEED COSTS								
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW			
HAY	TON	39.00	\$150	\$5,850	\$25.71			
STATE	AUY	20.0%	\$25.08	\$0	\$0.00			
FEDERAL LEASE	AUY	40.0%	\$16.20	\$3,686	\$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	6.00	\$230	\$1,380	\$6.07			
PROTEIN SUPP	TON	12.00	\$350	\$4,200	\$18.46			
OTHER		0.00	\$0	\$0	\$0.00			
TOTAL				\$15,116	\$66.44			
2. OTHER VARIABLE COSTS								
				COST	VALUE PER COW			
VET AND MEDICINE				\$2,844	\$12.50			
LIVESTOCK HAULING				\$1,020	\$4.49			
HIRED LABOR				\$0	\$0.00			
OPERATING COSTS-EQUIP & MACH				\$1,600	\$7.03			
OPERATING COSTS-VEHICLE				\$2,075	\$9.12			
RANCH MAINTENANCE				\$1,000	\$4.40			
BEEF CHECKOFF				\$137	\$0.60			
PURCHASED LIVESTOCK				\$2,000	\$8.79			
TOTAL				\$10,676	\$46.93			
3. INTEREST ON VARIABLE COSTS								
SUM OF VARIABLE COSTS X MONTHS BORROWED								
X INTEREST RATE PER MONTH								
ANNUAL INTEREST RATE					7.5%			
NUMBER OF MONTHS BORROWED					6			VALUE PER COW
				\$967	\$4.25			
TOTAL				\$26,758	\$117.62			
TOTAL				\$57,881	\$254.42			
OWNERSHIP COSTS								
Annual Capital Recovery ⁴ (At Replacement Value):					Represents 65% Asset Ownership ⁵		VALUE PER COW	
CASH COSTS								
Taxes & Insurance				\$11,298	\$49.66			
Overhead				\$2,200	\$9.67			
Total				\$13,498	\$59.33			
NON CASH COSTS								
Purchased Livestock				\$7,453	\$32.76			
Machinery & Equipment				\$11,001	\$48.36			
Housing & Improvements				\$14,195	\$62.40			
Interest on Retained Livestock ⁶				\$15,742	\$69.20			
Management & Operation Labor (6% of gross returns)				\$5,078	\$22.32			
Total				\$53,470	\$235.03			
TOTAL FIXED COSTS				\$66,968	\$294.37			
TOTAL CASH AND VARIABLE COSTS				\$40,257	\$176.95			
TOTAL COSTS				\$93,727	\$411.99			
RETURN ABOVE TOTAL CASH COSTS				\$44,383	\$195.09			
RETURN ABOVE TOTAL COSTS				(\$9,087)	(\$39.94)			
BREAK-EVEN CALCULATIONS								
		VARIABLE COSTS	TOTAL COSTS					
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$27.40	\$41.22						
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$27.40	\$95.98						

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 2002 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 2002**

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	\$85	3.9%	\$595,000	\$595,000			
200	AU Values ¹	\$2,500	3.9%	\$500,000	\$500,000			
Subtotal				\$1,095,000				
Number	Buildings, Improvements	Price Per Unit						
10	Miles of pipeline	\$2,000	3.9%	\$20,000	\$2,000	25	100	\$1,218
6	Wells	\$12,000	3.9%	\$72,000	\$7,200	25	100	\$4,385
50	Miles of Fence	\$4,000	3.9%	\$200,000	\$20,000	25	100	\$12,181
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
Subtotal				\$322,000				\$19,443
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	1 ton pickup 4WD	\$32,000	7.5%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$6,500	7.5%	\$6,500	\$1,300	7	100	\$1,079
1	Horse tack	\$3,500	7.5%	\$3,500	\$700	10	100	\$460
1	Misc. equipment	\$5,000	7.5%	\$5,000	\$1,000	10	100	\$658
Subtotal				\$45,000				\$4,688
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
6	Horses	\$2,500	6.5%	\$15,000	\$5,700	10	100	\$1,664
7	Bulls	\$2,000	6.5%	\$13,000	\$4,940	4	100	\$2,674
40	Cows	\$1,100.00	6.5%	\$44,000	\$16,720	8	100	\$5,567
66	Total AUys							
Subtotal				\$28,000				\$4,338
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
130	Cows	\$1,100	6.5%	\$143,000	\$54,340			\$7,330
33	Replacement Heifers	\$1,000	6.5%	\$32,500	\$12,350			\$1,666
154	Total AUys							
Subtotal				\$175,500	\$66,690			\$8,996
Total				<u>\$1,665,500</u>				<u>\$33,127</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 2002**

BREED HERD SIZE	130	COW to BULL	20	CALF CROP PERCENT ¹	85%
CULL RATE	25%			REPLACEMENT HEIFERS KEPT	32.5
VALUE OF PRODUCTION					
	<u>QUANTITY</u>	<u>WEIGHT/LBS.</u>	<u>PRICE²</u>	<u>VALUE</u>	<u>VALUE PER COW</u>
STEER CALVES	55	550	\$0.99	\$30,084	\$231.41
HEIFER CALVES	23	515	\$0.91	\$10,662	\$82.01
CULL COWS	45	900	\$0.44	\$17,820	\$137.08
CULL BULLS	1	1200	\$0.49	\$588	\$4.52
TOTAL	124			\$59,153	\$455.03

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	24.00	\$150	\$3,600	\$27.69
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	\$2,106	\$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	\$230	\$690	\$5.31
PROTEIN SUPP	TON	10.00	\$350	\$3,500	\$26.92
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$9,896	\$76.12
2. OTHER VARIABLE COSTS					
				<u>COST</u>	<u>VALUE PER COW</u>
VET AND MEDICINE				\$1,625	\$12.50
LIVESTOCK HAULING				\$620	\$4.77
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$500	\$3.85
OPERATING COSTS-VEHICLE				\$3,200	\$24.62
RANCH MAINTENANCE				\$500	\$3.85
BEEF CHECKOFF				\$78	\$0.60
PURCHASED LIVESTOCK				\$2,000	\$15.38
TOTAL				\$8,523	\$65.56
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
					HIGH
				\$691	\$5.31
TOTAL				\$19,110	\$147.00
TOTAL				\$40,044	\$308.03

OWNERSHIP COSTS					
	Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership	TOTAL	VALUE PER COW
CASH COSTS				TOTAL	VALUE PER COW
Taxes & Insurance				\$4,688	\$36.06
Overhead				\$2,100	\$16.15
Total				\$6,788	\$52.22
NON CASH COSTS					
Purchased Livestock				\$4,338	\$33.37
Machinery & Equipment				\$4,688	\$36.06
Housing & Improvements				\$19,443	\$149.56
Interest on Retained Livestock				\$8,996	\$69.20
Management & Operation Labor (6% of gross returns)				\$3,549	\$27.30
Total				\$41,014	\$315.49
TOTAL FIXED COSTS				\$47,802	\$367.71
TOTAL CASH AND VARIABLE COSTS				\$25,898	\$199.21
TOTAL COSTS				\$66,912	\$514.71
RETURN ABOVE TOTAL CASH COSTS				\$33,256	\$255.81
RETURN ABOVE TOTAL COSTS				(\$7,759)	(\$59.68)

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$32.48	\$44.01
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$32.48	\$113.72

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 2002 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 2002**

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			
Subtotal				\$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
Subtotal				\$430,000				\$26,021
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
1	1ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
0	Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$6,500	7.5%	\$13,000	\$2,600	7	100	\$2,159
1	Horse tack	\$5,000	7.5%	\$5,000	\$1,000	10	100	\$658
1	Misc. equipment	\$6,000	7.5%	\$6,000	\$1,200	10	100	\$789
Subtotal				\$86,000				\$8,753
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
9	Horses	\$2,500	6.5%	\$22,500	\$8,550	10	100	\$2,496
11	Bulls	\$2,000	6.5%	\$22,800	\$8,664	4	100	\$4,689
70	Cows	\$1,100.00	6.5%	\$77,000	\$29,260	8	100	\$9,743
113	Total AUYS							
Subtotal				\$45,300				\$7,186
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
228	Cows	\$1,100	6.5%	\$250,800	\$95,304			\$12,855
57	Replacement Heifers	\$1,000	6.5%	\$57,000	\$21,660			\$2,922
271	Total AUYS							
Subtotal				\$307,800	\$116,964			\$15,777
Total				<u>\$2,764,100</u>				<u>\$50,551</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 2002**

BREED HERD SIZE 228 COW to BULL 20 CALF CROP PERCENT¹ 84%
 CULL RATE 25% REPLACEMENT HEIFERS KEPT 57

VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	96	550	\$0.99	\$52,141	\$228.69
HEIFER CALVES	39	515	\$0.91	\$18,165	\$79.67
CULL COWS	47	1000	\$0.44	\$20,680	\$90.70
CULL BULLS	1	1400	\$0.49	\$688	\$3.01
TOTAL	183			\$91,672	\$402.07

VARIABLE COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
1. FEED COSTS					
HAY	TON	30.00	\$150	\$4,500	\$19.74
STATE	AUY	20.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	40.0%	\$16.20	\$3,694	\$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	\$230	\$920	\$4.04
PROTEIN SUPP	TON	12.00	\$350	\$4,200	\$18.42
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$13,314	\$58.39

2. OTHER VARIABLE COSTS					
				COST	VALUE PER COW
VET AND MEDICINE				\$2,850	\$12.50
LIVESTOCK HAULING				\$958	\$4.20
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$2,200	\$9.65
OPERATING COSTS-VEHICLE				\$3,400	\$14.91
RANCH MAINTENANCE				\$500	\$2.19
BEEF CHECKOFF				\$135	\$0.59
PURCHASED LIVESTOCK				\$2,000	\$8.77
TOTAL				\$12,043	\$52.82

3. INTEREST ON VARIABLE COSTS					
					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	
INTEREST COSTS				\$951	\$4.17

TOTAL VARIABLE COSTS	\$26,307	\$115.38
RETURN ABOVE VARIABLE COSTS	\$65,365	\$286.69

OWNERSHIP COSTS			
	Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership	VALUE PER COW
CASH COSTS			
Taxes & Insurance			\$38.39
Overhead			\$9.21
Total			\$47.60
NON CASH COSTS			
Purchased Livestock			\$31.52
Machinery & Equipment			\$38.39
Housing & Improvements			\$114.13
Interest on Retained Livestock ⁵			\$69.20
Management & Operation Labor (6% of gross returns)			\$24.12
TOTAL NON CASH COSTS			\$277.35
TOTAL FIXED COSTS			\$74,090
TOTAL CASH AND VARIABLE COSTS			\$162.98
TOTAL COSTS			\$440.34
RETURN ABOVE TOTAL CASH COSTS			\$239.09
RETURN ABOVE TOTAL COSTS			(\$38.27)

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$25.80	\$36.44
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$25.80	\$98.44

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 2002 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 2002**

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	\$85	3.9%	\$1,275,000	\$1,275,000			
500	AU Values ¹	\$2,500	3.9%	\$1,250,000	\$1,250,000			
Subtotal				\$2,525,000				
Number	Buildings, Improvements	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
16	Miles of pipeline	\$2,000	3.9%	\$32,000	\$3,200	25	100	\$1,949
10	Wells	\$12,000	3.9%	\$120,000	\$12,000	25	100	\$7,308
95	Miles of Fence	\$4,000	3.9%	\$380,000	\$38,000	25	100	\$23,143
2	Corrals/Working Facilities	\$12,000	3.9%	\$24,000	\$2,400	30	100	\$1,328
1	Barns & Shop	\$18,000	3.9%	\$18,000	\$1,800	30	100	\$996
Subtotal				\$574,000				\$34,724
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
2	3/4 ton pickup 4WD	\$30,000	7.5%	\$60,000	\$12,000	7	50	\$4,981
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
1	Tractor	\$5,000	7.5%	\$5,000	\$1,000	7	100	\$830
3	Gooseneck trailer	\$6,500	7.5%	\$19,500	\$3,900	7	100	\$3,238
1	Horse tack	\$6,000	7.5%	\$6,000	\$1,200	10	100	\$789
1	Misc. equipment	\$7,000	7.5%	\$7,000	\$1,400	10	100	\$921
Subtotal				\$129,500				\$13,416
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
13	Horses	\$2,500	6.5%	\$32,500	\$12,350	10	100	\$3,606
18	Bulls	\$2,000	6.5%	\$35,800	\$13,604	4	100	\$7,363
90	Cows	\$1,100.00	6.5%	\$99,000	\$37,620	8	100	\$12,526
151	Total AUYS							
Subtotal				\$68,300				\$10,969
Head	Retained Livestock	Price Per Unit	Interest Rate	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Interest on Investment
358	Cows	\$1,100	6.5%	\$393,800	\$149,644			\$20,185
90	Replacement Heifers	\$1,000	6.5%	\$89,500	\$34,010			\$4,588
425	Total AUYS							
Subtotal				\$483,300	\$183,654			\$24,773
Total				\$3,780,100				\$72,912

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 2002**

BREED HERD SIZE		358	COW to BULL		20	CALF CROP PERCENT ¹		84%
CULL RATE		25%				REPLACEMENT HEIFERS KEPT		89.5
VALUE OF PRODUCTION								
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW			
STEER CALVES	150	550	\$0.99	\$81,871	\$228.69			
HEIFER CALVES	61	515	\$0.91	\$28,522	\$79.67			
CULL COWS	53	1000	\$0.44	\$23,320	\$65.14			
CULL BULLS	1	1200	\$0.49	\$588	\$1.64			
TOTAL	265			\$134,301	\$375.14			
VARIABLE COSTS								
1. FEED COSTS								
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW			
HAY	TON	40.00	\$150	\$6,000	\$16.76			
STATE	AUJ	30.0%	\$25.08	\$0	\$0.00			
FEDERAL LEASE	AUJ	7.0%	\$16.20	\$5,800	\$16.20			
PRIVATE(Owned)	AUJ	55.0%	\$0.00	\$0	\$0.00			
PRIVATE(Leased Grazing)	AUJ	0.0%	\$0.00	\$0	\$0.00			
SALT & MINERAL	TON	7.00	\$230	\$1,610	\$4.50			
PROTEIN SUPP	TON	13.00	\$350	\$4,550	\$12.71			
OTHER		0.00	\$0	\$0	\$0.00			
TOTAL				\$17,960	\$50.17			
2. OTHER VARIABLE COSTS								
				COST	VALUE PER COW			
VET AND MEDICINE				\$4,475	\$12.50			
LIVESTOCK HAULING				\$1,392	\$3.89			
HIRED LABOR				\$0	\$0.00			
OPERATING COSTS-EQUIP & MACH				\$2,000	\$5.59			
OPERATING COSTS-VEHICLE				\$4,500	\$12.57			
RANCH MAINTENANCE				\$1,000	\$2.79			
BEEF CHECKOFF				\$211	\$0.59			
LIVESTOCK PURCHASES				\$3,000	\$8.38			
TOTAL				\$16,579	\$46.31			
3. INTEREST ON VARIABLE COSTS								
					VALUE PER COW			
SUM OF VARIABLE COSTS X MONTHS BORROWED								
X INTEREST RATE PER MONTH								
ANNUAL INTEREST RATE				7.5%				
NUMBER OF MONTHS BORROWED				6				
				\$1,295	\$3.62			
TOTAL				\$35,833	\$100.09			
				\$98,468	\$275.05			
OWNERSHIP COSTS								
					VALUE PER COW			
Annual Capital Recovery ⁴ (At Replacement Value):								
Represents 65% Asset Ownership ⁵								
CASH COSTS								
Taxes & Insurance				\$13,416	\$37.47			
Overhead				\$2,100	\$5.87			
Total				\$15,516	\$43.34			
NON CASH COSTS								
Purchased Livestock				\$10,969	\$30.64			
Machinery & Equipment				\$13,416	\$37.47			
Housing & Improvements				\$34,724	\$96.99			
Interest on Retained Livestock ⁶				\$24,773	\$69.20			
Management & Operation Labor (6% of gross returns)				\$5,908	\$16.50			
Total				\$89,790	\$250.81			
TOTAL FIXED COSTS				\$105,306	\$294.15			
TOTAL CASH AND VARIABLE COSTS				\$51,349	\$143.43			
TOTAL COSTS				\$141,139	\$394.24			
RETURN ABOVE TOTAL CASH COSTS				\$82,952	\$231.71			
RETURN ABOVE TOTAL COSTS				(\$6,838)	(\$19.10)			
BREAKEVEN CALCULATIONS								
	VARIABLE COSTS	TOTAL COSTS						
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$22.38	\$32.07						
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$22.38	\$88.14						

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 2002 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 2002**

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	\$80	3.9%	\$320,000	\$320,000			
200	AU Values ¹	\$2,400	3.9%	\$480,000	\$480,000			
Subtotal				\$800,000				
Number	Buildings, Improvements	Price Per Unit						
10	Miles of pipeline	\$2,000	3.9%	\$20,000	\$2,000	25	100	\$1,218
3	Wells	\$11,000	3.9%	\$33,000	\$3,300	25	100	\$2,010
40	Miles of Fence	\$4,000	3.9%	\$160,000	\$16,000	25	100	\$9,745
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$238,000				\$14,355
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	3/4 ton pickup 4WD	\$32,000	7.5%	\$0	\$0	7	50	\$0
1	Tractor	\$5,000	7.5%	\$5,000	\$1,000	7	100	\$830
1	Gooseneck trailer	\$6,500	7.5%	\$6,500	\$1,300	7	100	\$1,079
1	Horse tack	\$4,000	7.5%	\$4,000	\$800	10	100	\$526
1	Misc. equipment	\$4,500	7.5%	\$4,500	\$900	10	100	\$592
Subtotal				\$50,000				\$5,518
Head	Purchased Livestock	Price Per Unit	Interest Rate ⁴	Price	Salvage/Cull			
8	Horses	\$2,500	6.5%	\$20,000	\$7,600	10	100	\$2,219
7	Bulls	\$2,000	6.5%	\$13,000	\$4,940	4	100	\$2,674
40	Cows	\$1,100.00	6.5%	\$44,000	\$16,720	8	100	\$5,567
68	Total AUYS							
Subtotal				\$33,000				\$4,893
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
130	Cows	\$1,100	6.5%	\$143,000	\$54,340			\$7,330
20	Replacement Heifers	\$1,000	6.5%	\$19,500	\$7,410			\$1,000
145	Total AUYS							
Subtotal				\$162,500	\$61,750			\$8,329
Total				<u>\$1,283,500</u>				<u>\$28,203</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 2002**

BREED HERD SIZE **130** COW to BULL **20** CALF CROP PERCENT¹ **83%**
CULL RATE **25%** REPLACEMENT HEIFERS KEPT **19.5**

VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	54	510	\$0.94	\$25,864	\$198.95
HEIFER CALVES	34	485	\$0.87	\$14,536	\$111.82
CULL COWS	42	900	\$0.39	\$14,742	\$113.40
CULL BULLS	1	1200	\$0.44	\$528	\$4.06
TOTAL	131			\$55,670	\$428.23

VARIABLE COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
1. FEED COSTS					
HAY	TON	30.00	\$150.00	\$4,500	\$34.62
STATE	AUY	45.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	35.0%	\$16.20	\$2,106	\$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	\$230.00	\$575	\$4.42
PROTEIN SUPP	TON	9.00	\$350.00	\$3,150	\$24.23
OTHER		0.00	\$0.00	\$0	\$0.00
TOTAL				\$10,331	\$79.47
2. OTHER VARIABLE COSTS					
VET AND MEDICINE				\$1,625	\$12.50
LIVESTOCK HAULING				\$690	\$5.31
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$800	\$6.15
OPERATING COSTS-VEHICLE				\$3,300	\$25.38
RANCH MAINTENANCE				\$200	\$1.54
BEEF CHECKOFF				\$88	\$0.68
OTHER				\$2,000	\$15.38
TOTAL				\$8,703	\$66.95
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	
				\$714	\$5.49
TOTAL				\$19,748	\$151.91
				\$35,922	\$276.32

OWNERSHIP COSTS					
	Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	VALUE PER COW		
CASH COSTS					
Taxes & Insurance			\$5,518		\$42.45
Overhead			\$2,100		\$16.15
Total			\$7,618		\$58.60
NON CASH COSTS					
Purchased Livestock			\$4,893		\$37.64
Machinery & Equipment			\$5,518		\$42.45
Housing & Improvements			\$14,355		\$110.43
Interest on Retained Livestock ⁶			\$8,329		\$64.07
Management & Operation Labor (6% of gross returns)			\$3,340		\$25.69
Total			\$36,436		\$280.28
TOTAL FIXED COSTS			\$44,054		\$338.88
TOTAL CASH AND VARIABLE COSTS			\$27,366		\$210.51
TOTAL COSTS			\$63,802		\$490.79
RETURN ABOVE TOTAL CASH COSTS			\$28,304		\$217.72
RETURN ABOVE TOTAL COSTS			(\$8,132)		(\$62.56)

BREAKEVEN CALCULATIONS			
	VARIABLE COSTS	TOTAL COSTS	
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$36.79	\$50.98	
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$36.79	\$118.86	

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 2002 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 2002**

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	\$80	3.9%	\$480,000	\$480,000			
350	AU Values ¹	\$2,400	3.9%	\$840,000	\$840,000			
Subtotal				\$1,320,000				
Number	Buildings, Improvements	Price Per Unit						
13	Miles of pipeline	\$2,000	3.9%	\$26,000	\$2,600	25	100	\$1,583
5	Wells	\$11,000	3.9%	\$55,000	\$5,500	25	100	\$3,350
65	Miles of Fence	\$4,000	3.9%	\$260,000	\$26,000	25	100	\$15,835
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$366,000				\$22,151
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	3/4 ton pickup 4WD	\$32,000	7.5%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$6,500	7.5%	\$13,000	\$2,600	7	100	\$2,159
1	Horse tack	\$5,000	7.5%	\$5,000	\$1,000	10	100	\$658
1	Misc. equipment	\$6,000	7.5%	\$6,000	\$1,200	10	100	\$789
Subtotal				\$54,000				\$6,096
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$2,500	6.5%	\$25,000	\$9,500	10	100	\$2,774
11	Bulls	\$2,000	6.5%	\$22,800	\$8,664	4	100	\$4,689
90	Cows	\$1,100.00	6.5%	\$99,000	\$37,620	8	100	\$12,526
139	Total AUUs							
Subtotal				\$47,800				\$7,463
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
228	Cows	\$1,100	6.5%	\$250,800	\$95,304			\$12,855
34	Replacement Heifers	\$1,000	6.5%	\$34,200	\$12,996			\$1,753
254	Total AUUs							
Subtotal				\$285,000	\$108,300			\$14,608
Total				<u>\$2,072,800</u>				<u>\$42,855</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 2002**

	BREED HERD SIZE	228	COW to BULL	20	CALF CROP PERCENT ¹	83%
	CULL RATE	25%			REPLACEMENT HEIFERS KEPT	34
VALUE OF PRODUCTION						
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW	
STEER CALVES	95	510	\$0.94	\$45,361	\$198.95	
HEIFER CALVES	60	485	\$0.87	\$25,494	\$111.82	
CULL COWS	50	900	\$0.44	\$19,800	\$86.84	
CULL BULLS	1	1200	\$0.49	\$588	\$2.58	
TOTAL	206			\$91,243	\$400.19	
VARIABLE COSTS						
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW	
1. FEED COSTS						
HAY	TON	35.00	\$150.00	\$5,250	\$23.03	
STATE	AUY	45.0%	\$25.08	\$0	\$0.00	
FEDERAL LEASE	AUY	35.0%	\$16.20	\$3,694	\$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	\$230.00	\$920	\$4.04	
PROTEIN SUPP	TON	10.00	\$350.00	\$3,500	\$15.35	
OTHER		0.00	\$0.00	\$0	\$0.00	
				\$13,364	\$58.61	
2. OTHER VARIABLE COSTS						
VET AND MEDICINE				\$2,850	\$12.50	
LIVESTOCK HAULING				\$1,082	\$4.74	
HIRED LABOR				\$0	\$0.00	
OPERATING COSTS-EQUIP & MACH				\$900	\$3.95	
OPERATING COSTS-VEHICLE				\$4,200	\$18.42	
RANCH MAINTENANCE				\$400	\$1.75	
BEEF CHECKOFF				\$155	\$0.68	
OTHER				\$2,200	\$9.65	
TOTAL				\$11,787	\$51.70	
3. INTEREST ON VARIABLE COSTS						
SUM OF VARIABLE COSTS X MONTHS BORROWED						
X INTEREST RATE PER MONTH						
ANNUAL INTEREST RATE				7.5%		
NUMBER OF MONTHS BORROWED				6		VALUE PER COW
						\$943
						\$4.14
TOTAL				\$26,093	\$114.45	
				\$65,150	\$285.74	
OWNERSHIP COSTS						
	Annual Capital Recovery ⁴ (At Replacement Value):			Represents 65% Asset Ownership ⁵		VALUE PER COW
CASH COSTS						
Taxes & Insurance				\$6,096	\$26.74	
Overhead				\$2,100	\$9.21	
Total				\$8,196	\$35.95	
NON CASH COSTS						
Purchased Livestock				\$7,463	\$32.73	
Machinery & Equipment				\$6,096	\$26.74	
Housing & Improvements				\$22,151	\$97.15	
Interest on Retained Livestock ⁶				\$14,608	\$64.07	
Management & Operation Labor (6% of gross returns)				\$3,909	\$17.14	
Total				\$54,228	\$237.84	
TOTAL FIXED COSTS				\$62,424	\$273.79	
TOTAL CASH AND VARIABLE COSTS				\$34,290	\$150.39	
TOTAL COSTS				\$88,517	\$388.23	
RETURN ABOVE TOTAL CASH COSTS				\$56,953	\$249.80	
RETURN ABOVE TOTAL COSTS				\$2,726	\$11.96	
BREAKEVEN CALCULATIONS						
		VARIABLE COSTS	TOTAL COSTS			
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$27.72	\$36.42				
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$27.72	\$94.02				

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 2002 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 2002**

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	\$80	3.9%	\$640,000	\$640,000			
500	AU Values ¹	\$2,400	3.9%	\$1,200,000	\$1,200,000			
Subtotal				\$1,840,000				
Number	Buildings, Improvements	Price Per Unit						
18	Miles of pipeline	\$2,000	3.9%	\$36,000	\$3,600	25	100	\$2,193
7	Wells	\$11,000	3.9%	\$77,000	\$7,700	25	100	\$4,690
100	Miles of Fence	\$4,000	3.9%	\$400,000	\$40,000	25	100	\$24,361
2	Corrals/Working Facilities	\$10,000	3.9%	\$20,000	\$2,000	30	100	\$1,106
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$548,000				\$33,180
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$30,000	7.5%	\$60,000	\$12,000	7	50	\$4,981
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
1	Tractor	\$5,000	7.5%	\$5,000	\$1,000	7	100	\$830
3	Gooseneck trailer	\$6,500	7.5%	\$19,500	\$3,900	7	100	\$3,238
1	Horse tack	\$6,500	7.5%	\$6,500	\$1,300	10	100	\$855
1	Misc. equipment	\$7,000	7.5%	\$7,000	\$1,400	10	100	\$921
Subtotal				\$130,000				\$13,482
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
13	Horses	\$2,500	6.5%	\$32,500	\$12,350	10	100	\$3,606
16	Bulls	\$2,000	6.5%	\$32,500	\$12,350	4	100	\$6,685
100	Cows	\$1,100.00	6.5%	\$110,000	\$41,800	8	100	\$13,918
162	Total AUUs							
Subtotal				\$65,000				\$10,290
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
325	Cows	\$1,100	6.5%	\$357,500	\$135,850			\$18,324
49	Replacement Heifers	\$1,000	6.5%	\$48,750	\$18,525			\$2,499
362	Total AUUs							
Subtotal				\$406,250	\$154,375			\$20,823
Total				\$2,989,250				\$67,485

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 2002**

BREED HERD SIZE		COW TO BULL		CALF CROP PERCENT ¹		83%	
CULL RATE				REPLACEMENT HEIFERS KEPT		49	
VALUE OF PRODUCTION							
	<u>QUANTITY</u>	<u>WEIGHT/LBS.</u>	<u>PRICE²</u>	<u>VALUE</u>	<u>VALUE PER COW</u>		
STEER CALVES	135	510	\$0.94	\$64,659	\$198.95		
HEIFER CALVES	86	485	\$0.83	\$34,670	\$106.68		
CULL COWS	60	900	\$0.39	\$21,060	\$64.80		
CULL BULLS	1	1200	\$0.44	\$528	\$1.62		
TOTAL				\$120,917	\$372.05		
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	40.00	\$150	\$6,000	\$18.46		
STATE	AUY	45.0%	\$25.08	\$0	\$0.00		
FEDERAL LEASE	AUY	35.0%	\$16.20	\$5,265	\$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	\$230	\$1,380	\$4.25		
PROTEIN SUPP	TON	10.00	\$350	\$3,500	\$10.77		
OTHER		0.00	\$0	\$0	\$0.00		
TOTAL				\$16,145	\$49.68		
2. OTHER VARIABLE COSTS							
				<u>COST</u>	<u>VALUE PER COW</u>		
VET AND MEDICINE				\$4,063	\$12.50		
LIVESTOCK HAULING				\$1,481	\$4.56		
HIRED LABOR				\$0	\$0.00		
OPERATING COSTS-EQUIP & MACH				\$1,500	\$4.62		
OPERATING COSTS-VEHICLE				\$4,300	\$13.23		
RANCH MAINTENANCE				\$1,000	\$3.08		
BEEF CHECKOFF				\$221	\$0.68		
OTHER				\$2,500	\$7.69		
TOTAL				\$15,064	\$46.35		
3. INTEREST ON VARIABLE COSTS							
SUM OF VARIABLE COSTS X MONTHS BORROWED					<u>VALUE PER COW</u>		
X INTEREST RATE PER MONTH							
ANNUAL INTEREST RATE				7.5%			
NUMBER OF MONTHS BORROWED				6			
				\$1,170	\$3.60		
TOTAL				\$32,379	\$99.63		
TOTAL				\$88,537	\$272.42		
OWNERSHIP COSTS							
Annual Capital Recovery ⁴ (At Replacement Value):				Represents 65% Asset Ownership ⁵ VALUE PER COW			
CASH COSTS							
Taxes & Insurance				\$13,482	\$41.48		
Overhead				\$2,100	\$6.46		
Total				\$15,582	\$47.94		
NON CASH COSTS							
Purchased Livestock				\$10,290	\$31.66		
Machinery & Equipment				\$13,482	\$41.48		
Housing & Improvements				\$33,180	\$102.09		
Interest on Retained Livestock ⁶				\$20,823	\$64.07		
Management & Operation Labor (6% of gross returns)				\$7,255	\$22.32		
Total				\$85,030	\$261.63		
TOTAL FIXED COSTS				\$100,612	\$309.57		
TOTAL CASH AND VARIABLE COSTS				\$47,961	\$147.57		
TOTAL COSTS				\$132,991	\$409.20		
RETURN ABOVE TOTAL CASH COSTS				\$72,956	\$224.48		
RETURN ABOVE TOTAL COSTS				(\$12,074)	(\$37.15)		
BREAKEVEN CALCULATIONS							
	<u>VARIABLE COSTS</u>	<u>TOTAL COSTS</u>					
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$24.13	\$35.74					
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$24.13	\$99.10					

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 2002 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 2002**

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	\$2,450	3.9%	\$490,000	\$490,000			
Subtotal				\$750,000				
Number	Buildings, Improvements	Price Per Unit						
5	Miles of pipeline	\$2,000	3.9%	\$10,000	\$1,000	25	100	\$609
4	Wells	\$11,000	3.9%	\$44,000	\$4,400	25	100	\$2,680
22	Miles of Fence	\$4,000	3.9%	\$88,000	\$8,800	25	100	\$5,360
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$12,000	3.9%	\$12,000	\$1,200	30	100	\$664
Subtotal				\$164,000				\$9,865
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	1 ton pickup 4WD	\$32,000	7.5%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$6,500	7.5%	\$6,500	\$1,300	7	100	\$1,079
1	Horse tack	\$3,000	7.5%	\$3,000	\$600	10	100	\$395
1	Misc. equipment	\$3,500	7.5%	\$3,500	\$700	10	100	\$460
Subtotal				\$43,000				\$4,425
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
4	Horses	\$2,500	6.5%	\$10,000	\$3,800	10	100	\$1,109
7	Bulls	\$2,000	6.5%	\$13,000	\$4,940	4	100	\$2,674
40	Cows	\$1,100.00	6.5%	\$44,000	\$16,720	8	100	\$5,567
63	Total AUYS							
Subtotal				\$23,000				\$3,783
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
130	Cows	\$1,100	6.5%	\$143,000	\$54,340			\$7,330
20	Replacement Heifers	\$1,000	6.5%	\$19,500	\$7,410			\$1,000
145	Total AUYS							
Subtotal				\$162,500	\$61,750			\$8,329
Total				\$1,142,500				\$22,619

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 RANCH INVESTMENTS 2002**

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	\$2,450	3.9%	\$980,000	\$980,000			
Subtotal				\$1,370,000				
Number	Buildings, Improvements	Price Per Unit						
12	Miles of pipeline	\$2,000	3.9%	\$24,000	\$2,400	25	100	\$1,462
6	Wells	\$11,000	3.9%	\$66,000	\$6,600	25	100	\$4,020
75	Miles of Fence	\$4,000	3.9%	\$300,000	\$30,000	25	100	\$18,271
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$12,000	3.9%	\$12,000	\$1,200	30	100	\$664
Subtotal				\$412,000				\$24,969
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
0	Dozer/Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$6,500	7.5%	\$13,000	\$2,600	7	100	\$2,159
1	Horse tack	\$4,000	7.5%	\$4,000	\$800	10	100	\$526
1	Misc. equipment	\$4,500	7.5%	\$4,500	\$900	10	100	\$592
Subtotal				\$83,500				\$8,424
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
8	Horses	\$2,500	6.5%	\$20,000	\$7,600	10	100	\$2,219
13	Bulls	\$1,500	6.5%	\$19,500	\$7,410	4	100	\$4,011
80	Cows	\$1,100.00	6.5%	\$88,000	\$33,440	8	100	\$11,134
126	Total AUYS							
Subtotal				\$39,500				\$6,230
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
260	Cows	\$1,100	6.5%	\$286,000	\$108,680			\$14,660
39	Replacement Heifers	\$1,000	6.5%	\$39,000	\$14,820			\$1,999
289	Total AUYS							
Subtotal				\$325,000	\$123,500			\$16,659
Total				<u>\$2,230,000</u>				<u>\$50,052</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
LARGE COW/CALF BUDGET 2002**

	BREED HERD SIZE 260	COW to BULL 20	CALF CROP PERCENT ¹ 82%	REPLACEMENT HEIFERS KEPT 39	
VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE²	VALUE	VALUE PER COW
STEER CALVES	107	510	\$0.92	\$50,017	\$192.37
HEIFER CALVES	68	485	\$0.85	\$27,868	\$107.19
CULL COWS	45	900	\$0.37	\$14,985	\$57.63
CULL BULLS	1	1200	\$0.42	\$504	\$1.94
TOTAL	220			\$93,374	\$359.13
VARIABLE COSTS					
1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	40.00	\$150	\$6,000	\$23.08
STATE	AUY	45.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	25.0%	\$16.20	\$4,212	\$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	\$230	\$1,150	\$4.42
PROTEIN SUPP	TON	12.00	\$350	\$4,200	\$16.15
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$15,562	\$59.85
2. OTHER VARIABLE COSTS				COST	
VET AND MEDICINE				\$3,250	\$12.50
LIVESTOCK HAULING				\$1,156	\$4.45
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$1,000	\$3.85
OPERATING COSTS-VEHICLE				\$4,000	\$15.38
RANCH MAINTENANCE				\$800	\$3.08
BEEF CHECKOFF				\$174	\$0.67
LIVESTOCK PURCHASES				\$2,000	\$7.69
TOTAL				\$12,380	\$47.62
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
				\$1,048	\$4.03
TOTAL				\$28,990	\$111.50
OWNERSHIP COSTS					
Annual Capital Recovery ⁴ (At Replacement Value):					Represents 65% Asset Ownership⁵ VALUE PER COW
CASH COSTS					
Taxes & Insurance				\$8,424	\$32.40
Overhead				\$2,100	\$8.08
Total				\$10,524	\$40.48
NON CASH COSTS					
Purchased Livestock				\$6,230	\$23.96
Machinery & Equipment				\$8,424	\$32.40
Housing & Improvements				\$24,969	\$96.04
Interest on Retained Livestock ⁶				\$16,659	\$64.07
Management & Operation Labor (6% of gross returns)				\$5,602	\$21.55
Total				\$61,884	\$238.02
TOTAL FIXED COSTS				\$72,408	\$278.49
TOTAL CASH AND VARIABLE COSTS				\$39,514	\$151.98
TOTAL COSTS				\$101,398	\$389.99
RETURN ABOVE TOTAL CASH COSTS				\$53,860	\$207.15
RETURN ABOVE TOTAL COSTS				(\$8,024)	(\$30.86)
BREAKEVEN CALCULATIONS					
	VARIABLE COSTS	TOTAL COSTS			
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$27.33	\$37.25			
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$27.33	\$95.60			

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 2002 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 2002**

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	\$2,450	3.9%	\$1,347,500	\$1,347,500			
Subtotal				\$1,997,500				
Number	Buildings, Improvements	Price Per Unit						
15	Miles of pipeline	\$2,000	3.9%	\$30,000	\$3,000	25	100	\$1,827
8	Wells	\$11,000	3.9%	\$88,000	\$8,800	25	100	\$5,360
110	Miles of Fence	\$4,000	3.9%	\$440,000	\$44,000	25	100	\$26,798
2	Corrals/Working Facilities	\$10,000	3.9%	\$20,000	\$2,000	30	100	\$1,106
1	Barns & Shop	\$12,000	3.9%	\$12,000	\$1,200	30	100	\$664
Subtotal				\$590,000				\$35,754
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$30,000	6.5%	\$60,000	\$12,000	7	50	\$4,766
1	1 ton pickup 4WD	\$32,000	6.5%	\$32,000	\$6,400	7	50	\$2,542
1	Tractor	\$5,000	6.5%	\$5,000	\$1,000	7	100	\$794
3	Gooseneck trailer	\$6,500	6.5%	\$19,500	\$3,900	7	100	\$3,098
1	Horse tack	\$6,000	6.5%	\$6,000	\$1,200	10	100	\$746
1	Misc. equipment	\$6,000	6.5%	\$6,000	\$1,200	10	100	\$746
Subtotal				\$128,500				\$12,691
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
12	Horses	\$2,500	6.5%	\$30,000	\$11,400	10	100	\$3,328
18	Bulls	\$2,000	6.5%	\$35,800	\$13,604	4	100	\$7,363
110	Cows	\$1,100.00	6.5%	\$121,000	\$45,980	8	100	\$15,310
175	Total AUys							
Subtotal				\$65,800				\$10,692
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
358	Cows	\$1,100	6.5%	\$393,800	\$149,644			\$20,185
54	Replacement Heifers	\$1,000	6.5%	\$53,700	\$20,406			\$2,753
398	Total AUys							
Subtotal				\$447,500	\$170,050			\$22,938
Total				<u>\$3,229,300</u>				<u>\$71,383</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
EX-LARGE COW/CALF BUDGET 2002**

BREED HERD SIZE	358	COW to BULL	20	CALF CROP PERCENT ¹	82%
CULL RATE	25%			REPLACEMENT HEIFERS KEPT	54
VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE²	VALUE	VALUE PER COW
STEER CALVES	147	510	\$0.92	\$68,869	\$192.37
HEIFER CALVES	93	485	\$0.85	\$38,372	\$107.19
CULL COWS	50	900	\$0.37	\$16,650	\$46.51
CULL BULLS	1	1200	\$0.42	\$504	\$1.41
TOTAL	291			\$124,395	\$347.47
VARIABLE COSTS					
1. FEED COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	45.00	\$150	\$6,750	\$18.85
STATE	AUY	45.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	25.0%	\$16.20	\$5,800	\$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	\$245	\$1,960	\$5.47
PROTEIN SUPP	TON	20.00	\$300	\$6,000	\$16.76
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$20,510	\$57.29
2. OTHER VARIABLE COSTS					
				COST	
VET AND MEDICINE				\$4,296	\$12.00
LIVESTOCK HAULING				\$1,527	\$4.27
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$1,200	\$3.35
OPERATING COSTS-VEHICLE				\$3,900	\$10.89
RANCH MAINTENANCE				\$1,200	\$3.35
BEEF CHECKOFF				\$240	\$0.67
OTHER				\$3,000	\$8.38
TOTAL				\$15,363	\$42.91
3. INTEREST ON VARIABLE COSTS					
				7.5%	
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				6	VALUE PER COW
NUMBER OF MONTHS BORROWED					
				\$1,345	\$3.76
TOTAL				\$37,218	\$103.96
				\$87,178	\$243.51
OWNERSHIP COSTS					
	Annual Capital Recovery ⁴ (At Replacement Value):			Represents 65% Asset Ownership ⁵	
VALUE PER COW					
CASH COSTS					
Taxes & Insurance				\$12,691	\$35.45
Overhead				\$2,100	\$5.87
Total				\$14,791	\$41.32
NON CASH COSTS					
Purchased Livestock				\$10,692	\$29.87
Machinery & Equipment				\$12,691	\$35.45
Housing & Improvements				\$35,754	\$99.87
Interest on Retained Livestock ⁶				\$22,938	\$64.07
Management & Operation Labor (6% of gross returns)				\$7,464	\$20.85
Total				\$89,539	\$250.11
TOTAL FIXED COSTS				\$104,330	\$291.42
TOTAL CASH AND VARIABLE COSTS				\$52,009	\$145.28
TOTAL COSTS				\$141,548	\$395.38
RETURN ABOVE TOTAL CASH COSTS				\$72,386	\$202.20
RETURN ABOVE TOTAL COSTS				(\$17,152)	(\$47.91)
BREAKEYEN CALCULATIONS					
	VARIABLE COSTS	TOTAL COSTS			
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$25.48	\$35.61			
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$25.48	\$96.92			

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 2002 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 2002**

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	\$75	3.9%	\$112,500	\$112,500			
52	AU Values	\$2,400	3.9%	\$124,800	\$124,800			
Subtotal				\$237,300				
Number	Buildings, Improvements	Price Per Unit						
5	Miles of pipeline	\$2,000	3.9%	\$10,000	\$1,000	25	100	\$609
1	Wells	\$12,000	3.9%	\$12,000	\$1,200	25	100	\$731
15	Miles of Fence	\$4,000	3.9%	\$60,000	\$6,000	25	100	\$3,654
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$107,000				\$6,377
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ²	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
0	3/4 ton pickup 4WD	\$32,000	7.5%	\$0	\$0	7	50	\$0
0	Dozer/Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$6,500	7.5%	\$6,500	\$1,300	7	100	\$1,079
1	Horse tack	\$4,000	7.5%	\$4,000	\$800	10	100	\$526
1	Misc. equipment	\$3,500	7.5%	\$3,500	\$700	10	100	\$460
Subtotal				\$44,000				\$4,556
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
4	Horses	\$2,500	6.5%	\$10,000	\$3,800	10	100	\$1,109
3	Bulls	\$2,000	6.5%	\$6,933	\$2,635	4	100	\$1,426
12	Cows	\$1,100.00	6.5%	\$13,200	\$5,016	8	100	\$1,670
24	Total AUys							
Subtotal				\$16,933				\$2,535
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
52	Cows	\$1,100	6.5%	\$57,200	\$21,736			\$2,932
8	Replacement Heifers	\$1,000	6.5%	\$7,800	\$2,964			\$400
58	Total AUys							
Subtotal				\$65,000	\$24,700			\$3,332
Total				<u>\$470,233</u>				<u>\$14,265</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
SMALL COW/CALF BUDGET 2002**

BREED HERD SIZE **52** COW to BULL **15** CALF CROP PERCENT¹ **82%**
CULL RATE **25%** REPLACEMENT HEIFERS KEPT **8**

VALUE OF PRODUCTION					
ANIMALS SOLD	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	21	500	\$0.91	\$9,701	\$186.55
HEIFER CALVES	14	475	\$0.84	\$5,394	\$103.74
CULL COWS	35	900	\$0.36	\$11,340	\$218.08
CULL BULLS	1	1200	\$0.41	\$492	\$9.46
TOTAL	71			\$26,927	\$517.83
VARIABLE COSTS					
1. FEED COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
HAY	TON	12.00	\$150	\$1,800	\$34.62
STATE	AUY	25.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	65.0%	\$16.20	\$842	\$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	\$230	\$230	\$4.42
PROTEIN SUPP	TON	3.00	\$350	\$1,050	\$20.19
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$3,922	\$75.43
2. OTHER VARIABLE COSTS					
				COST	VALUE PER COW
VET AND MEDICINE				\$650	\$12.50
LIVESTOCK HAULING				\$372	\$7.15
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$300	\$5.77
OPERATING COSTS-VEHICLE				\$900	\$17.31
RANCH MAINTENANCE				\$200	\$3.85
BEEF CHECKOFF				\$35	\$0.67
OTHER				\$1,000	\$19.23
TOTAL				\$3,457	\$66.48
3. INTEREST ON VARIABLE COSTS					
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	VALUE PER COW
				\$277	\$5.32
TOTAL				\$7,656	\$147.23
TOTAL				\$19,271	\$370.60
OWNERSHIP COSTS					
		Annual Capital Recovery ⁴ (At Replacement Value):		Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS					
Taxes & Insurance				\$4,556	\$87.62
Overhead				\$2,100	\$40.38
Total				\$6,656	\$128.01
NON CASH COSTS					
Purchased Livestock				\$2,535	\$48.76
Machinery & Equipment				\$4,556	\$87.62
Housing & Improvements				\$6,377	\$122.63
Interest on Retained Livestock ⁴				\$3,332	\$64.07
Management & Operation Labor (6% of gross returns)				\$1,616	\$31.07
Total				\$18,416	\$354.16
TOTAL FIXED COSTS				\$25,073	\$482.17
TOTAL CASH AND VARIABLE COSTS				\$14,312	\$275.24
TOTAL COSTS				\$32,729	\$629.40
RETURN ABOVE TOTAL CASH COSTS				\$12,615	\$242.59
RETURN ABOVE TOTAL COSTS				(\$5,802)	(\$111.57)
BREAKEVEN CALCULATIONS					
		VARIABLE COSTS	TOTAL COSTS		
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$36.83	\$98.85			
REQUIRED AVERAGE CALF PRICES TOTAL COSTS(cwt)	\$36.83	\$157.45			

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 2002 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 2002**

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	\$75	3.9%	\$262,500	\$262,500			
130	AU Values ¹	\$2,400	3.9%	\$312,000	\$312,000			
Subtotal				\$574,500				
Number	Buildings, Improvements	Price Per Unit						
12	Miles of pipeline	\$2,000	3.9%	\$24,000	\$2,400	25	100	\$1,462
4	Wells	\$12,000	3.9%	\$48,000	\$4,800	25	100	\$2,923
45	Miles of Fence	\$4,000	3.9%	\$180,000	\$18,000	25	100	\$10,963
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$277,000				\$16,731
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	7.5%	\$30,000	\$6,000	7	50	\$2,491
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
0	Dozer/Tractor	\$5,000	7.5%	\$0	\$0	7	100	\$0
2	Gooseneck trailer	\$6,500	7.5%	\$13,000	\$2,600	7	100	\$2,159
1	Horse tack	\$6,000	7.5%	\$6,000	\$1,200	10	100	\$789
1	Misc. equipment	\$4,500	7.5%	\$4,500	\$900	10	100	\$592
Subtotal				\$85,500				\$8,687
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
8	Horses	\$2,500	6.5%	\$20,000	\$7,600	10	100	\$2,219
9	Bulls	\$2,000	6.5%	\$17,333	\$6,587	4	100	\$3,565
30	Cows	\$1,100.00	6.5%	\$33,000	\$12,540	8	100	\$4,175
58	Total AUys							
Subtotal				\$37,333				\$5,784
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
130	Cows	\$1,100	6.5%	\$143,000	\$54,340			\$7,330
20	Replacement Heifers	\$1,000	6.5%	\$19,500	\$7,410			\$1,000
145	Total AUys							
Subtotal				\$162,500	\$61,750			\$8,329
Total				\$1,136,833				\$33,747

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 2002**

BREED HERD SIZE **130** COW to BULL **15** CALF CROP PERCENT¹ **82%**
 CULL RATE **25%** REPLACEMENT HEIFERS KEPT **20**

VALUE OF PRODUCTION					VALUE PER COW
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	
STEER CALVES	53	500	\$0.91	\$24,252	\$186.55
HEIFER CALVES	34	475	\$0.84	\$13,486	\$103.74
CULL COWS	45	900	\$0.36	\$14,580	\$112.15
CULL BULLS	1	1200	\$0.41	\$492	\$3.78
TOTAL	133			\$52,810	\$406.23

VARIABLE COSTS					VALUE PER COW
1. FEED COSTS					
	UNITS	QUANTITY/PERCENT	PRICE	COST	
HAY	TON	14.00	\$150	\$2,100	\$16.15
STATE	AUY	30.0%	\$25.08	\$0	\$0.00
FEDERAL LEASE	AUY	60.0%	\$16.20	\$2,106	\$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	\$230	\$460	\$3.54
PROTEIN SUPP	TON	3.00	\$350	\$1,050	\$8.08
OTHER		0.00	\$0	\$0	\$0.00
TOTAL				\$5,716	\$43.97

2. OTHER VARIABLE COSTS					VALUE PER COW
				COST	
VET AND MEDICINE				\$1,625	\$12.50
LIVESTOCK HAULING				\$699	\$5.38
HIRED LABOR				\$0	\$0.00
OPERATING COSTS-EQUIP & MACH				\$500	\$3.85
OPERATING COSTS-VEHICLE				\$3,500	\$26.92
RANCH MAINTENANCE				\$800	\$6.15
BEEF CHECKOFF				\$87	\$0.67
PURCHASED LIVESTOCK				\$1,500	\$11.54
TOTAL				\$8,711	\$67.01

3. INTEREST ON VARIABLE COSTS					VALUE PER COW
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE				7.5%	
NUMBER OF MONTHS BORROWED				6	
				\$541	\$4.16
TOTAL				\$14,968	\$115.14
TOTAL				\$37,842	\$291.09

OWNERSHIP COSTS					VALUE PER COW
Annual Capital Recovery ³ (At Replacement Value):				Represents 65% Asset Ownership ⁵	
CASH COSTS					
Taxes & Insurance				\$8,687	\$66.82
Overhead				\$2,100	\$16.15
Total				\$10,787	\$82.98
NON CASH COSTS					
Purchased Livestock				\$5,784	\$44.49
Machinery & Equipment				\$8,687	\$66.82
Housing & Improvements				\$16,731	\$128.70
Interest on Retained Livestock ⁴				\$8,329	\$64.07
Management & Operation Labor (6% of gross returns)				\$3,169	\$24.37
Total				\$42,700	\$328.46
TOTAL FIXED COSTS				\$53,487	\$411.43
TOTAL CASH AND VARIABLE COSTS				\$25,755	\$198.11
TOTAL COSTS				\$68,454	\$526.57
RETURN ABOVE TOTAL CASH COSTS				\$27,055	\$208.11
RETURN ABOVE TOTAL COSTS				(\$15,645)	(\$120.34)

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$28.80	\$49.56
REQUIRED AVERAGE CALF PRICES TOTAL COSTS(cwt)	\$28.80	\$131.73

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 2002 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 2002**

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			
325	AU Values ¹	\$2,400	3.9%	\$780,000	\$780,000			
Subtotal				\$1,230,000				
Number	Buildings, Improvements	Price Per Unit						
18	Miles of pipeline	\$2,000	3.9%	\$36,000	\$3,600	25	100	\$2,193
3	Wells	\$12,000	3.9%	\$36,000	\$3,600	25	100	\$2,193
90	Miles of Fence	\$4,000	3.9%	\$360,000	\$36,000	25	100	\$21,925
1	Corrals/Working Facilities	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
1	Barns & Shop	\$15,000	3.9%	\$15,000	\$1,500	30	100	\$830
Subtotal				\$457,000				\$27,693
Number	Machinery & Vehicles	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
2	3/4 ton pickup 4WD	\$30,000	7.5%	\$60,000	\$12,000	7	50	\$4,981
1	1 ton pickup 4WD	\$32,000	7.5%	\$32,000	\$6,400	7	50	\$2,657
1	Tractor	\$5,000	7.5%	\$5,000	\$1,000	7	100	\$830
3	Gooseneck trailer	\$4,500	7.5%	\$13,500	\$2,700	7	100	\$2,242
1	Horse tack	\$8,000	7.5%	\$8,000	\$1,600	10	100	\$1,052
1	Misc. equipment	\$6,500	7.5%	\$6,500	\$1,300	10	100	\$855
Subtotal				\$125,000				\$12,617
Head	Purchased Livestock	Price Per Unit	Interest Rate ³	Price	Salvage/Cull			
10	Horses	\$2,500	6.5%	\$25,000	\$9,500	10	100	\$2,774
22	Bulls	\$2,000	6.5%	\$43,333	\$16,467	4	100	\$8,913
34	Cows	\$1,100.00	6.5%	\$37,400	\$14,212	8	100	\$4,732
82	Total AUYS							
Subtotal				\$68,333				\$11,686
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
325	Cows	\$1,100	6.5%	\$357,500	\$135,850			\$18,324
49	Replacement Heifers	\$1,000	6.5%	\$48,750	\$18,525			\$2,499
362	Total AUYS							
Subtotal				\$406,250	\$154,375			\$20,823
Total				\$2,286,583				\$61,133

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
LARGE COW/CALF BUDGET 2002**

BREED HERD SIZE **325** COW to BULL **15** CALF CROP PERCENT¹ **82%**
CULL RATE **25%** REPLACEMENT HEIFERS KEPT **49**

VALUE OF PRODUCTION					
	QUANTITY	WEIGHT/LBS.	PRICE ²	VALUE	VALUE PER COW
STEER CALVES	133	500	\$0.91	\$60,629	\$186.55
HEIFER CALVES	85	475	\$0.84	\$33,716	\$103.74
CULL COWS	49	900	\$0.36	\$15,876	\$48.85
CULL BULLS	1	1200	\$0.41	\$492	\$1.51
TOTAL	268			\$110,712	\$340.65

VARIABLE COSTS						
		UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW
1. FEED COSTS						
	HAY	TON	45.00	\$150	\$6,750	\$20.77
	STATE	AUY	40.0%	\$25.08	\$0	\$0.00
	FEDERAL LEASE	AUY	40.0%	\$16.20	\$5,265	\$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	5.00	\$230	\$1,150	\$3.54
	PROTEIN SUPP	TON	12.00	\$350	\$4,200	\$12.92
	OTHER		0.00	\$0	\$0	\$0.00
	TOTAL				\$17,365	\$53.43
2. OTHER VARIABLE COSTS						
	VET AND MEDICINE				\$4,063	\$12.50
	LIVESTOCK HAULING				\$1,406	\$4.33
	HIRED LABOR				\$0	\$0.00
	OPERATING COSTS-EQUIP & MACH				\$1,200	\$3.69
	OPERATING COSTS-VEHICLE				\$3,900	\$12.00
	RANCH MAINTENANCE				\$1,500	\$4.62
	BEEF CHECKOFF				\$218	\$0.67
	LIVESTOCK PURCHASES				\$2,500	\$7.69
	TOTAL				\$14,786	\$45.50
3. INTEREST ON VARIABLE COSTS						
	SUM OF VARIABLE COSTS X MONTHS BORROWED					
	X INTEREST RATE PER MONTH					
	ANNUAL INTEREST RATE				7.5%	
	NUMBER OF MONTHS BORROWED				6	VALUE PER COW
					\$1,206	\$3.71
	TOTAL				\$33,357	\$102.64
					\$77,356	\$238.02

OWNERSHIP COSTS				
		Annual Capital Recovery ⁴ (At Replacement Value):	Represents 65% Asset Ownership ⁵	VALUE PER COW
CASH COSTS				
	Taxes & Insurance		\$12,617	\$38.82
	Overhead		\$2,100	\$6.46
	Total		\$14,717	\$45.28
NON CASH COSTS				
	Purchased Livestock		\$11,686	\$35.96
	Machinery & Equipment		\$12,617	\$38.82
	Housing & Improvements		\$27,693	\$85.21
	Interest on Retained Livestock ⁶		\$20,823	\$64.07
	Management & Operation Labor (6% of gross returns)		\$6,643	\$20.44
	Total		\$79,463	\$244.50
	TOTAL FIXED COSTS		\$94,180	\$289.78
	TOTAL CASH AND VARIABLE COSTS		\$48,074	\$147.92
	TOTAL COSTS		\$127,536	\$392.42
	RETURN ABOVE TOTAL CASH COSTS		\$62,639	\$192.73
	RETURN ABOVE TOTAL COSTS		(\$16,824)	(\$51.77)

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$25.67	\$37.00
REQUIRED AVERAGE CALF PRICES CASH COST (cwt)	\$25.67	\$98.17

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 2002 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.

Notes

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