

TABLE 1. Basic cost information for Grant and Catron Counties, 2003.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		6.45
General & Irrigators	\$/hour		5.90
Purchased Inputs:			
Seed:			
Alfalfa	\$/pound		3.00
Wheat	\$/pound		0.13
Pasture	\$/pound		2.50
Canal Water (Maintenance)	\$/acre		10.00
Baling Wire	\$/lb		0.39
Energy:			
Butane	\$/MCF		1.16
Diesel fuel	\$/gallon		1.30
Gasoline	\$/gallon		1.35
Electricity	cents/KwHr		6.29
Natural Gas	\$/MCF		3.28
Employee Liability Insurance	e	\$/1,000 wages	20.00
Employee Benefits		percent/w ages	18.00%
Labor Downtime		percent	25.00%
Financial Rates:			
Operating Capital Interest Rate		percent	8.00%
Land Interest Rate		percent	7.00%
Equipment Interest Rate		percent	8.00%
Real Interest Rate		percent	4.00%
Land Taxes		390.00 /acre (full value)	2.02
Personal Property Tax Rate - NR		\$/1,000 (Assessed Value)	15.52
- R			15.60
Supervision Factor		\$/labor hour	0.50
Management Rate		percent	7.00%

BUDGET AREA..... GRANT AND CATRON COUNT s, 2006
 FARM SIZE..... 40 ACRES
 IRRIGATION TYPE..... FLOOD
 NUMBER OF CROPS.. 3

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC. IN. PER ACRE	TOTAL AC. IN.
ALFALFA ESTABLISHMENT *	4	0	0
ALFALFA	25	0	0
PASTURE ESTABLISHMENT *	2	0	0
PERMANENT PASTURE	10	0	0
SMALL GRAINS PASTURE	0	0	0
ROADS, HOMESTEAD	5		
TOTAL	40		0
ACRE FEET PER ACRE OF WATER RIGHTS			0.00

Table 1a. Overhead cost information for Grant and Catron Counties, 2003.

ITEM	CROP ENTERPRISE		LIVESTOCK ENTERPRISE		TOTAL
Electricity (Domestic & Shop)	80.00 per month		960	96.00	1,056
Telephone	65.00 per month		780	78.00	858
Accounting & Legal			350		350
Misc. Supplies & Hand Tools			615		615
Pickup and Auto	Crop Ent. 7,000	Livestock Ent. 3,500	@	0.365 per mile	
Insurance					
- general liability (non-employee)			5	0.00	5
- fire/theft			260	0.00	260
Property Taxes					
- non-planted land			10	0.00	10
- other than land & machinery			200		200
Building repairs and maintenance			360	36.00	396
Dues, fees, publications			200	10.00	210
Farmstead Equipment			160	15.97	176
Irrigation Well Depreciation and Taxes			1,579		
Total			6,455	1,513	7,969
Total per planted acre			184.44		

TABLE 2. Pumping costs and data for irrigation wells, Grant and Catron Counties, 2006

INPUT DATA

DEPTH CHARACTERISTICS:

STATIC.....	40
DRAW DOWN.....	10
TOTAL HEAD.....	50
CASING.....	70

GALLONS PER MINUTE (GPM)...	1000
WORK HORSEPOWER.....	13

EFFICIENCY FACTOR:

ELECTRICITY.....	0.540
NATURAL GAS.....	0.154
LP GAS.....	0.154
DIESEL.....	0.160

FUEL COST PER UNIT:

ELECTRICITY.....	0.00	CENTS/K wHr
NATURAL GAS.....	0.00	\$/MCF
LP GAS.....	0.00	\$/GAL
DIESEL.....	0.00	\$/GAL

FUEL PUMPING COSTS:

ELECTRIC WELL:

COST PER HOUR.....\$	0.03
COST PER ACRE INCH.....\$	0.01

NATURAL GAS WELL:

COST PER HOUR.....\$	0.03
COST PER ACRE INCH.....\$	0.01

BUTANE WELL:

COST PER HOUR.....\$	0.03
COST PER ACRE INCH.....\$	0.01

DIESEL WELL:

COST PER HOUR.....\$	0.03
COST PER ACRE INCH.....\$	0.01

TABLE 3a. Equipment summary for a 60 acre farm with above average management, Grant and Catron Counties, 2006

EQUIPMENT ITEM & SIZE	ANNUAL		VARIABLE COSTS					FIXED COSTS		
	HOURS OF USE	NUMBER	TOTAL VALUE	FUEL AND LUBRICANT	REPAIR	FUEL,LUBE PER HR	REPAIR PER HR	DEPRE- CIATION	TAXES	TOTAL PER HOUF
TRACTOR 65 HP	81	1	2,400	532	31.22	6.56	0.39	138	14	1.87
PICKUP 3/4 TON *	50	1	15,000	425	150.00	8.51	3.00	3,000	78	61.55
CORRUGATER	3	1	250		0.03		0.01	33	1	10.69
BALER, PTO 2-WIRE	27	1	1,500		12.15		0.45	150	8	5.84
LAND PLANE 8 FT.	4	1	1,000		0.17		0.04	133	5	32.06
DISC 8 FT	4	1	700		3.23		0.87	93	4	26.06
PLOW (MOLDBOARD) 2-16 IN	8	1	250		1.97		0.25	33	1	4.41
DRILL 8 FT.	2	1	1,000		1.18		0.48	200	5	83.40
SWATHER, PTO 10 FT.	28	1	5,000		14.00		0.50	500	26	18.78
MOWER 7 FT SICKLE BAR	5	1	1,300		1.64		0.36	130	7	30.38
BUTANE WELL	0	1	11,400		0.00			1,520	59	
			39,800	958	216			5,931	208	

* 1/4 CHARGED TO FARM.

Table 4a. Livestock Production Parameters

NUMBER OF COWS	50
COWS PER BULL	20
NUMBER OF HORSES	2
REPLACEMENT RATE (%)	0.1
CALF DEATH LOSS (%)	0.02
YEARLING DEATH LOSS (%)	0
COW DEATH LOSS (%)	0.01
BULL DEATH LOSS (%)	0
CALF CROP (%)	0.92
PRODUCTIVE LIFE OF BULLS (YE/)	5
PERCENT SOLD AS YEARLINGS:	
HEIFERS	0
STEERS	0

Table 4b. Forage Sources for Livestock

	ACRES	AUMS/ ACRE	AUMS PROVIDED
ALFALFA	25.00	1.00	25.00
PERMANENT PASTURE	10	12	120
FOREST			297.5
BALED HAY (TONS)		115.7	289.25
TOTAL	35.00		731.75

Table 4c. STOCK COUNT CHART

CALVES WERE BORN IN: MARCH

SEASON	BULLS	REPLACEMENT		YEARLING		STEERS	HEIFER	HORSES	TOTAL AUMs REQUIRED
		COWS	HEIFERS	STEERS	HEIFERS	CALVES	CALVES		
	1.4	1	0.7	0.7	0.7	0.5	0.5	1.25	
JANUARY	2.5	50				0	5	2	58.5
FEBRUARY	2.5	50				0	5	2	58.5
MARCH	2.5	50	5					2	59.5
APRIL	2.5	50	5					2	59.5
MAY	2.5	50	5					2	59.5
JUNE	2.5	50	5					2	59.5
JULY	2.5	50	5					2	59.5
AUGUST	2.5	50	5					2	59.5
SEPTEMBER	2.5	50	5					2	59.5
OCTOBER	2.5	50				25	25	2	81
NOVEMBER	2.5	50				0	5	2	58.5
DECEMBER	2.5	50				0	5	2	58.5
									732

Table 4d. FORAGE BALANCE CHART

	TOTAL AUMs REQUIRED		TOTAL AUMs SUPPLIED		HAY	
	ALFALFA	FOREST	PASTURE			
JANUARY	58.5	6.25	0	0	6.25	52.25
FEBRUARY	58.5	6.25	0	0	6.25	52.25
MARCH	59.5	0	0	20	20	39.5
APRIL	59.5	0	0	30	30	29.5
MAY	59.5	0	29.75	30	59.75	0
JUNE	59.5	0	59.5	0	59.5	0
JULY	59.5	0	59.5	0	59.5	0
AUGUST	59.5	0	59.5	0	59.5	0
SEPTEMBER	59.5	0	59.5	0	59.5	0
OCTOBER	81	0	29.75	20	49.75	31.25
NOVEMBER	58.5	6.25	0	10	16.25	42.25
DECEMBER	58.5	6.25	0	10	16.25	42.25
Total AUMs	731.5	25	297.5	120	442.5	289.25

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 60 acre farm with above average management, Grant and Catron Counties, 2006
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL	
PURCHASED INPUTS								
SEED	3.00	30.00 LBS	90.00				90.00	
CANAL WATER		18.00 AC. IN.					9.00	
SUBTOTAL			90.00				90.00	
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW (MOLDBOARD)	65 HP	1.31 HR		8.45	8.60	0.83	8.22	26.10
DISC (2X)	65 HP	0.62 HR		4.00	4.07	0.78	17.32	26.16
LAND PLANE (2X)	65 HP	0.72 HR		4.64	4.73	0.31	24.43	34.11
CORRUGATE	65 HP	0.54 HR		3.48	3.54	0.21	6.78	14.02
DRILL	65 HP	0.41 HR		2.64	2.69	0.35	34.96	40.65
IRRIGATE (3X)		2.25 HR		13.28				13.28
SUBTOTAL		5.85 HR		36.50	23.63	2.48	91.72	154.32
OVERHEAD EXPENSES								
DOWNTIME		0.90 HR		5.81				5.81
EMPLOYEE BENEFITS				6.57				6.57
INSURANCE			0.73					0.73
SUPERVISION AND MANAGEMENT				20.03				20.03
SUBTOTAL		0.90 HR	0.73	32.40				33.13
TOTAL OPERATING EXPENSES		6.75 HR	90.73	68.90	23.63	2.48	91.72	277.46

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 60 acre farm with above average management, Grant and Catron Counties, 2006
Harvesting dates: June 15 - September 15

ITEM	PRICE	YIELD		TOTAL				
GROSS RETURNS								
HAY	138.00	3.00 TONS (STACKED)			414.00			
GRAZING	10.00	1.00 AUM			10.00			
TOTAL					424.00			
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL			
WIRE ESTABLISHMENT: Principal	0.39	25.71 LBS	10.03		10.03			
: Interest		6.00 YEARS		46.24	46.24			
CANAL WATER		60.00 AC. IN.	10.00	9.22	9.22			
					10.00			
SUBTOTAL			20.03	55.46	75.49			
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (8X)		6.00 HR		35.40			35.40	
SUBTOTAL		6.00 HR		35.40			35.40	
HARVEST OPERATIONS								
SWATHER, PTO (4X)	65 HP	1.12 HR		7.22	7.35	0.99	23.13	38.70
BALER, PTO (4X)	65 HP	1.08 HR		6.97	7.09	0.90	8.33	23.29
LOAD (4X)	3/4 TON	2.00 HR		12.90	17.01	6.00	123.10	159.01
SUBTOTAL		4.20 HR		27.09	31.45	7.89	154.56	221.00
OVERHEAD EXPENSES								
DOWNTIME		1.05 HR		6.77				6.77
EMPLOYEE BENEFITS				11.25				11.25
INSURANCE			1.25					1.25
LAND TAXES						2.02		2.02
SUPERVISION AND MANAGEMENT				34.78				34.78
OTHER EXPENSES			189.87					189.87
SUBTOTAL		1.05 HR	191.12	52.80		2.02		245.94
TOTAL OPERATING EXPENSES		11.25 HR	211.15	115.29	31.45	7.89	212.05	577.83
NET OPERATING PROFIT								-153.83
INTEREST ON OPERATING CAPITAL	(13.29	@	0.08)			1.06
INTEREST ON EQUIPMENT INVESTMENT								74.77
RETURN TO LAND AND RISK								-229.66

BUDGET SUMMARY

GROSS RETURN		424.00	
VARIABLE OPERATING EXPENSES	250.49		
RETURN OVER VARIABLE EXPENSES	173.51	(GROSS MARGIN)	
FIXED EXPENSES	212.05		
NET FARM INCOME	-38.54	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	115.29		
NET OPERATING PROFIT	-153.83	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	75.83		
RETURN TO LAND AND RISK	-229.66		

TABLE 7. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 60 acre farm with above average management, Grant and Catron Co ties, 2006
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS		TOTAL			
PURCHASED INPUTS								
SEED	2.50	20.00 LBS		50.00	50.00			
CANAL WATER		18.00 AC. IN.			0.00			
SUBTOTAL				50.00	50.00			
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW (MOLDBOARD)	65 HP	1.31 HR		8.45	8.60	0.83	8.22	26.10
DISC (2X)	65 HP	0.62 HR		4.00	4.07	0.78	17.32	26.16
LAND PLANE (2X)	65 HP	0.72 HR		4.64	4.73	0.31	24.43	34.11
CORRUGATE	65 HP	0.54 HR		3.48	3.54	0.21	6.78	14.02
DRILL	65 HP	0.41 HR		2.64	2.69	0.35	34.96	40.65
IRRIGATE (3X)		2.25 HR		13.28				13.28
SUBTOTAL		5.85 HR		36.50	23.63	2.48	91.72	154.32
OVERHEAD EXPENSES								
DOWNTIME		0.90 HR		5.81				5.81
EMPLOYEE BENEFITS				6.57				6.57
INSURANCE			0.73					0.73
SUPERVISION AND MANAGEMENT				17.23				17.23
SUBTOTAL		0.90 HR	0.73	29.60				30.33
TOTAL OPERATING EXPENSES		6.75 HR	50.73	66.10	23.63	2.48	91.72	234.66

TABLE 8. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 60 acre farm with above average management, Grant and Catron Counties 2006
Harvesting dates: March 1 - September 30

ITEM	PRICE	YIELD		TOTAL					
GROSS RETURNS									
PASTURE	12.00	12.00	AUMS		144.00				
TOTAL					144.00				
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL				
ESTABLISHMENT: Principal		15.00	YEARS	15.64	15.64				
Interest				7.17	7.17				
CANAL WATER		32.00	AC. IN.	10.00	10.00				
SUBTOTAL			10.00	22.81	32.81				
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
MOWER	65 HP	0.45 HR		2.90	2.95	0.34	14.51	20.71	
IRRIGATE (8X)		5.25 HR		30.98				30.98	
SUBTOTAL		5.70 HR		33.88	2.95	0.34	14.51	51.68	
OVERHEAD EXPENSES									
DOWNTIME		0.11 HR		0.73				0.73	
EMPLOYEE BENEFITS				6.10				6.10	
INSURANCE			0.68					0.68	
LAND TAXES							2.02	2.02	
SUPERVISION AND MANAGEMENT				12.71				12.71	
OTHER EXPENSES			189.87					189.87	
		0.11 HR		190.55	19.53		2.02	212.09	
TOTAL OPERATING EXPENSES		5.81 HR		200.55	53.41	2.95	0.34	39.35	296.59
NET OPERATING PROFIT								-152.59	
INTEREST ON OPERATING CAPITAL	(5.82	@	0.08				0.47	
INTEREST ON EQUIPMENT INVESTMENT								11.62	
RETURN TO LAND AND RISK								-164.68	

BUDGET SUMMARY

GROSS RETURN	144.00	
VARIABLE OPERATING EXPENSES	203.84	
RETURN OVER VARIABLE EXPENSES	-59.84	(GROSS MARGIN)
FIXED EXPENSES	39.35	
NET FARM INCOME	-99.18	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	53.41	
NET OPERATING PROFIT	-152.59	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	12.09	
RETURN TO LAND AND RISK	-164.68	

TABLE 9. Small grains pasture, flood-irrigated, budgeted per acre costs and returns for a 60 acre farm with above average management, Grant and Catron Counties, 2006
 Planting dates: August 15 - September 30
 Harvesting dates: December 1 - May 30

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
WHEAT PASTURE	16.00	8.00 AUMS						128.00	
TOTAL							128.00		
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
SEED	0.13	90.00 LBS	11.70				11.70		
LIVESTOCK FAC & EQUIP				5.00				5.00	
CANAL WATER		24.00 ACRE IN.	10.00				10.00		
SUBTOTAL			21.70	5.00				26.70	
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FLOW (MOLDBOARD)	65 HP	1.31 HR		8.45	8.60	0.83	8.22	26.10	
DISC	65 HP	0.31 HR		2.00	2.03	0.39	8.66	13.08	
CORRUGATE	65 HP	0.54 HR		3.48	3.54	0.21	6.78	14.02	
DRILL	65 HP	0.41 HR		2.64	2.69	0.35	34.96	40.65	
IRRIGATE (5X)		3.00 HR		17.70				17.70	
SUBTOTAL			5.57 HR	34.28	16.87	1.79	58.63	111.56	
OVERHEAD EXPENSES									
DOWNTIME		0.64 HR		4.14				4.14	
EMPLOYEE BENEFITS				6.17				6.17	
INSURANCE			0.69				0.69	0.69	
LAND TAXES							2.02	2.02	
SUPERVISION AND MANAGEMENT				11.75				11.75	
OTHER EXPENSES			189.87					189.87	
SUBTOTAL			0.64 HR	190.55	22.06	2.02		214.63	
TOTAL OPERATING EXPENSES			6.21 HR	212.25	56.34	16.87	1.79	65.64	352.89
NET OPERATING PROFIT							-224.89		
INTEREST ON OPERATING CAPITAL	(15.51	@	0.08			1.24		
INTEREST ON EQUIPMENT INVESTMENT							31.64		
RETURN TO LAND AND RISK							-257.77		

BUDGET SUMMARY

GROSS RETURN	128.00	
VARIABLE OPERATING EXPENSES	230.91	
RETURN OVER VARIABLE EXPENSES	-102.91	(GROSS MARGIN)
FIXED EXPENSES	65.64	
NET FARM INCOME	-168.55	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	56.34	
NET OPERATING PROFIT	-224.89	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	32.88	
RETURN TO LAND AND RISK	-257.77	

TABLE 10. Summary of per acre costs and returns, 60 acre part-time farm with above average management, Grant and Catron Counties, 2006

	ALFALFA ESTABLISHMENT		PERMANENT PASTURE	
	TONS	AUMS	PERMANENT PASTURE	PERMANENT PASTURE
PRIMARY YIELD	3.00	12.00		
PRIMARY PRICE	138.00	12.00		
GOVERNMENT PAYMENTS	0.00	0.00		
SECOND INCOME	10.00	0.00		
GROSS RETURN	424.00	144.00		
CASH OPERATING EXPENSES				
SEED	90.00	50.00		
FERTILIZER				
CHEMICALS				
CROP INSURANCE				
OTHER PURCHASED INPUTS		10.03		
CANAL WATER		10.00		10.00
FUEL OIL & LUBRICANTS-EQUIPMENT	23.63	31.45	23.63	2.95
FUEL-IRRIGATION				
REPAIRS	2.48	7.89	2.48	0.34
CUSTOM CHARGES				
LAND TAXES		2.02		2.02
OTHER EXPENSES	0.73	191.12	0.73	190.55
TOTAL CASH EXPENSES	116.84	252.51	76.84	205.85
RETURN OVER CASH EXPENSES	-116.84	171.49	-76.84	-61.85
FIXED EXPENSES	91.72	210.03	91.72	37.33
TOTAL EXPENSES	208.56	462.54	168.56	243.18
NET FARM INCOME	-208.56	-38.54	-168.56	-99.18
LABOR AND MANAGEMENT COSTS	68.90	115.29	66.10	53.41
NET OPERATING PROFIT	-277.46	-153.83	-234.66	-152.59
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		1.06		0.47
INTEREST ON EQUIPMENT INVESTMENT		74.77		11.62
TOTAL CAPITAL COSTS	0.00	75.83	0.00	12.09
RETURN TO LAND AND RISK	-277.46	-229.66	-234.66	-164.68

TABLE 11. Whole farm summary, Grant and Catron Counties, 2006

GROSS RETURNS		
ALFALFA HAY	25 ACRES	
CROP		10,350.00
GRAZING		250.00
PASTURE	10 ACRES	
GRAZING		1,440.00
WHEAT PASTURE	0 ACRES	
GRAZING		0.00
LIVESTOCK		51,880.60
GROSS RETURN		<u>63,921</u>
CASH OPERATING EXPENSES		
FORAGE		2,091.63
LIVESTOCK		17,556.78
SEED		460.00
FERTILIZER		0.00
CHEMICALS		0.00
CROP INSURANCE		0.00
OTHER PURCHASED INPUTS		250.67
CANAL WATER		350.00
FUEL, OIL & LUBRICANTS-EQUIPMENT		957.57
FUEL-IRRIGATION		0.00
REPAIRS		215.59
CUSTOM CHARGES		0.00
LAND TAXES		70.62
OTHER EXPENSES		6,687.80
TOTAL CASH EXPENSES		<u>28,641</u>
RETURN OVER CASH EXPENSES		35,279.95
FIXED EXPENSES		4,861.81
TOTAL EXPENSES		33,502.46
NET FARM INCOME		30,418.14
LABOR AND MANAGEMENT COSTS	3,824.11	
NET OPERATING PROFIT		26,594.03
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		31.24
INTEREST ON EQUIPMENT INVESTMENT		1,985.41
TOTAL CAPITAL COSTS		<u>2,017</u>
RETURN TO LAND AND RISK		<u>24,577.39</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
1,000.00 /ACRE	22,177.39	0.27
2,000.00 /ACRE	19,777.39	0.17
3,000.00 /ACRE	17,377.39	0.12
4,000.00 /ACRE	14,977.39	0.10
5,000.00 /ACRE	12,577.39	0.08

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)