

TABLE 1. Basic cost information for Lincoln County, 2003.

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$6.25
General & Irrigators		\$/hour	\$5.95
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)		\$/pound	\$0.36
Phosphorus (P205)		\$/pound	\$0.33
Seed:			
Alfalfa		\$/pound	\$3.00
Pasture		\$/pound	\$2.50
Natural Gas		\$/MCF	\$3.28
Diesel fuel		\$/gallon	\$1.30
Gasoline		\$/gallon	\$1.35
Electricity		cents/kwhr	5.72
Employee Liability Insurance	\$/ \$1,000	wages	\$12.00
Employee Benefits	percent/w	ages	12.00%
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%
Expected Inflation Rate	percent		4.00%
Land Taxes	\$175.00	/acre (full value)	\$1.57
Personal Property Tax Rate - NR	\$/ \$1,000	(Assessed Value)	\$26.83
- R			\$21.63
Supervision Factors			
Field Crop-Irrigation	\$/acre		\$1.00
Field Crop-Equipment & General	\$/acre		\$0.50
Management Rate	percent		4.00%

TABLE 1a. Overhead cost information for Lincoln County, 2003.

ITEM			
Electricity (Domestic & Shop)	\$50.00	per month	\$600
Telephone	\$40.00	per month	\$480
Accounting & Legal			\$125
Misc. Supplies & Hand Tools			\$225
Pickup and Auto			
miles	4120	@	\$0.365 per mile
			\$1,504
Insurance			
- general liability (non-employee)			\$160
- fire/theft			\$135
Property Taxes			
- non-planted land			\$14
- other than land & machinery			\$135
Building repairs and maintenance			\$190
Dues, fees, publications			\$105
Farmstead Equipment			\$160
		Total	\$3,833
		Total per planted acre	\$127.75

TABLE 2. Pumping costs and data for irrigation wells, Lincoln County, 2003.

INPUT DATA

DELIVERY PSI:		DEPTH CHARACTERISTICS:	
SPRINKLER...	0	STATIC... ..	50
		DRAW DOWN	25
		TOTAL HEAD....	75
		CASING... ..	100
GALLONS PER MINUTE (GPM)...	400		
WORK HORSEPOWER	8		
EFFICIENCY FACTOR:			
ELECTRICITY.	0.447		
NATURAL GAS.	0.125		
LP GAS..... ..	0.186		
DIESEL..... ..	0.199		
FUEL COST PER HOUR:			
ELECTRICITY.	\$5.72	CENTS/K	WH
NATURAL GAS.	\$3.28	\$/MCF	
LP GAS..... ..	\$0.67	\$/GAL	
DIESEL..... ..	\$1.30	\$/GAL	

PUMPING COSTS

ELECTRICAL WELL:	
COST PER HOUR.....	\$0.75
COST PER ACRE INCH	\$0.85
NATURAL GAS WELL:	
COST PER HOUR.....	\$0.58
COST PER ACRE INCH	\$0.66
BUTANE WELL:	
COST PER HOUR.....	\$0.78
COST PER ACRE INCH	\$0.89
DIESEL WELL:	
COST PER HOUR.....	\$0.91
COST PER ACRE INCH	\$1.03

TABLE 3. Equipment summary for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2003.

EQUIPMENT		VARIABLE COSTS						FIXED COSTS		
ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	FUEL, OIL LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HOUR
----- (DOLLARS)										
TRACTOR 29 HP	100	1	\$2,300	\$272.15	\$24.74	\$2.73	\$0.25	\$46	\$10	\$0.57
BALER, PTO 2-WIRE	15	1	\$3,000		\$1.35	\$0.00	\$0.09	\$150	\$13	\$10.89
HARROW 8 FT	1	1	\$400		\$0.01	\$0.00	\$0.01	\$27	\$2	\$23.71
FLOAT 8 FT	2	1	\$600		\$0.03	\$0.00	\$0.01	\$40	\$3	\$17.78
DISC 6 FT	10	1	\$1,200		\$5.76	\$0.00	\$0.60	\$80	\$5	\$8.89
FERT. SPREADER	10	1	\$200		\$0.61	\$0.00	\$0.06	\$20	\$1	\$2.05
RAKE 8 FT	15	1	\$3,100		\$12.09	\$0.00	\$0.81	\$155	\$14	\$11.26
DRILL 8 FT.	1	1	\$2,000		\$0.58	\$0.00	\$0.48	\$80	\$9	\$74.12
MOWER 7 FT	30	1	\$2,600		\$28.86	\$0.00	\$0.96	\$130	\$12	\$4.72
WELL ELECTRIC	204	1	\$14,200	\$153.51	\$18.43	\$0.75	\$0.09	\$710	\$63	\$3.80
			\$29,600	\$426	\$92			\$1,438	\$132	

TABLE 4. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2003.
Planting dates: August 15 - October 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
ALFALFA SEED	\$2.65	20 LBS		\$53.00				\$53.00
PHOSPHORUS (P2O5)	\$0.20	50 LBS		\$10.00				\$10.00
CANAL WATER		12 AC. IN.						
SUBTOTAL				\$63.00				\$63.00
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
DISC (2X)	30 HP	2.40 HR		\$15.00	\$6.56	\$2.04	\$22.70	\$46.29
HARROW	30 HP	0.30 HR		\$1.88	\$0.82	\$0.08	\$7.28	\$10.06
FLOAT	30 HP	0.60 HR		\$3.75	\$1.64	\$0.16	\$11.01	\$16.56
FERT. SPREADER	30 HP	0.30 HR		\$1.88	\$0.82	\$0.09	\$0.78	\$3.57
DRILL	30 HP	0.30 HR		\$1.88	\$0.82	\$0.22	\$22.41	\$25.32
IRRIGATE (2X)		1.00 HR		\$5.95				\$5.95
SUBTOTAL		4.90 HR		\$30.33	\$10.66	\$2.58	\$64.18	\$107.74
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.98 HR		\$6.09				\$6.09
EMPLOYEE BENEFITS				\$3.64				\$3.64
FARM INSURANCE			\$0.36					\$0.36
SUPERVISION AND MANAGEMENT				\$9.78				\$9.78
SUBTOTAL		0.98 HR	\$0.36	\$19.51				\$19.88
<u>TOTAL OPERATING EXPENSES</u>		5.88 HR	\$63.36	\$49.84	\$10.66	\$2.58	\$64.18	\$190.62

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2003.
Harvesting dates: June 15 - September 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$140.00	3.50 TONS STACKED						\$490.00	
GRAZING	\$15.00	1.00 ACRE						\$15.00	
TOTAL								\$505.00	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
NITROGEN (N)	\$0.24	20 LBS	\$4.80						\$4.80
PHOSPHORUS (P2O5)	\$0.20	90 LBS	\$18.00						\$18.00
INSECTICIDE	\$16.00	1 ACRE	\$16.00						\$16.00
WIRE	\$0.37	35 LBS	\$12.95						\$12.95
ESTABLISHMENT: Principal		5 YEARS						\$38.12	\$38.12
: Interest								\$6.38	\$6.38
CANAL WATER		30 AC. IN.							
PUMP WATER*		6 AC. IN.							
SUBTOTAL			\$51.75					\$44.50	\$96.26
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
FERT. SPREADER	30 HP	0.30 HR		\$1.88	\$0.82	\$0.09	\$0.78	\$3.57	
DITCH MAINTENANCE		0.25 HR		\$1.56				\$1.56	
IRRIGATE (6X)		3.00 HR		\$17.85	\$5.12	\$0.61	\$25.78	\$49.36	
SUBTOTAL		3.55 HR		\$21.29	\$5.94	\$0.71	\$26.57	\$54.50	
HARVEST OPERATIONS									
MOWER (3X)	30 HP	3.00 HR		\$18.75	\$8.20	\$3.63	\$15.86	\$46.44	
RAKE (3X)	30 HP	1.50 HR		\$9.38	\$4.10	\$1.58	\$17.73	\$32.79	
BALER, PTO (3X)	30 HP	1.50 HR		\$9.38	\$4.10	\$0.51	\$17.19	\$31.17	
HAUL (3X)	30 HP	1.50 HR		\$9.38	\$4.10	\$0.37	\$0.85	\$14.69	
SUBTOTAL		7.50 HR		\$46.88	\$20.49	\$6.09	\$51.63	\$125.09	
OVERHEAD EXPENSES									
DOWNTIME		2.01 HR		\$12.58				\$12.58	
EMPLOYEE BENEFITS				\$8.18				\$8.18	
FARM INSURANCE			\$0.82					\$0.82	
LAND TAXES							\$1.57	\$1.57	
SUPERVISION AND MANAGEMENT				\$27.23				\$27.23	
OTHER EXPENSES			\$127.75					\$127.75	
SUBTOTAL		2.01 HR		\$128.57	\$47.98		\$1.57	\$178.12	
TOTAL OPERATING EXPENSES		13.06 HR		\$180.32	\$116.15	\$26.43	\$6.80	\$124.26	
NET OPERATING PROFIT								\$51.04	
INTEREST ON OPERATING CAPITAL	(\$247.13	@	8.00%)			\$5.67	
INTEREST ON EQUIPMENT INVESTMENT								\$61.17	
RETURN TO LAND AND RISK								(\$15.80)	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$505.00	
VARIABLE OPERATING EXPENSES	\$219.22		
RETURN OVER VARIABLE EXPENSES		\$285.78	(GROSS MARGINS)
FIXED EXPENSES	\$124.26		
NET FARM INCOME		\$161.52	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$116.15		
NET OPERATING PROFIT		\$45.37	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$61.17		
RETURN TO LAND AND RISK		(\$15.80)	

TABLE 6. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2003.
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL				
<u>PURCHASED INPUTS</u>								
PASTURE SEED	\$2.50	20 LBS	\$50.00	\$50.00				
NITROGEN (N)	\$0.24	50 LBS	\$12.00	\$12.00				
PHOSPHORUS (P2O5)	\$0.20	20 LBS	\$4.00	\$4.00				
CANAL WATER		12 AC. IN.						
SUBTOTAL			\$66.00	\$66.00				
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
DISC (2X)	30 HP	2.40 HR		\$15.00	\$6.56	\$2.04	\$22.70	\$46.29
HARROW	30 HP	0.30 HR		\$1.88	\$0.82	\$0.08	\$7.28	\$10.06
FERT. SPREADER	30 HP	0.30 HR		\$1.88	\$0.82	\$0.09	\$0.78	\$3.57
FLOAT	30 HP	0.60 HR		\$3.75	\$1.64	\$0.16	\$11.01	\$16.56
DRILL	30 HP	0.30 HR		\$1.88	\$0.82	\$0.22	\$22.41	\$25.32
IRRIGATE (3X)		1.00 HR		\$5.95				\$5.95
SUBTOTAL		4.90 HR		\$30.33	\$10.66	\$2.58	\$64.18	\$107.74
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.98 HR		\$6.09				\$6.09
EMPLOYEE BENEFITS				\$3.64				\$3.64
FARM INSURANCE			\$0.36					\$0.36
SUPERVISION AND MANAGEMENT				\$9.90				\$9.90
OTHER EXPENSES			\$127.75					\$127.75
SUBTOTAL		0.98 HR	\$128.11	\$19.63				\$147.75
TOTAL OPERATING EXPENSES		5.88 HR	\$194.11	\$49.96	\$10.66	\$2.58	\$64.18	\$321.49

TABLE 7. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2003.
Harvesting dates: March 1 - September 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
PASTURE	\$12.00	10.00 AUMS						\$120.00
TOTAL								\$120.00
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
NITROGEN (N)	\$0.24	50 LBS	\$12.00					\$12.00
PHOSPHORUS (P2O5)	\$0.20	20 LBS	\$4.00					\$4.00
LIVESTOCK FAC & EQUIP ESTABLISHMENT: Principal		10 YEARS					\$12.00	\$12.00
: Interest							\$32.15	\$32.15
CANAL WATER		24 AC. IN.					\$12.62	\$12.62
PUMP WATER*		6 AC. IN.						
SUBTOTAL			\$16.00				\$56.76	\$72.76
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
FERT. SPREADER	30 HP	0.30 HR		\$1.79	\$0.82	\$0.09	\$0.78	\$3.48
DITCH MAINTENANCE		0.25 HR		\$1.49				\$1.49
IRRIGATE (5X)		2.50 HR		\$14.88	\$5.12	\$0.61	\$25.78	\$46.39
SUBTOTAL		3.05 HR		\$18.15	\$5.94	\$0.71	\$26.57	\$51.36
OVERHEAD EXPENSES								
DOWNTIME		0.14 HR		\$0.86				\$0.86
EMPLOYEE BENEFITS				\$2.18				\$2.18
FARM INSURANCE			\$0.22					\$0.22
LAND TAXES							\$1.57	\$1.57
SUPERVISION AND MANAGEMENT				\$7.58				\$7.58
OTHER EXPENSES			\$127.75					\$127.75
SUBTOTAL		0.14 HR	\$127.97	\$10.61			\$1.57	\$140.15
TOTAL OPERATING EXPENSES		3.19 HR	\$143.97	\$28.76	\$5.94	\$0.71	\$84.90	\$264.27
NET OPERATING PROFIT								(\$144.27)
INTEREST ON OPERATING CAPITAL	(\$124.12	@	8.00%)			\$3.94
INTEREST ON EQUIPMENT INVESTMENT								\$19.44
RETURN TO LAND AND RISK								(\$167.65)

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$120.00	
VARIABLE OPERATING EXPENSES	\$154.55		
RETURN OVER VARIABLE EXPENSES		(\$34.55)	(GROSS MARGINS)
FIXED EXPENSES	\$84.90		
NET FARM INCOME		(\$119.44)	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$28.76		
NET OPERATING PROFIT		(\$148.20)	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.44		
RETURN TO LAND AND RISK		(\$167.65)	

TABLE 8. Summary of per acre costs and returns for a 35 acre part-time farm, Hondo Valley,
Lincoln County, 2002.

	ALFALFA ESTABLISHMENT	ALFALFA HAY -----FLOOD-----	ANNUAL PASTURE EST.	ANNUAL PASTURE
		TONS		AUMS
PRIMARY YIELD		3.50		10.00
PRIMARY PRICE		140.00		12.00
GOVERNMENT PAYMENTS		0.00		0.00
SECOND INCOME		15.00		0.00
GROSS RETURN		\$505.00		\$120.00
CASH OPERATING EXPENSES				
SEED	\$53.00		\$50.00	
FERTILIZER	\$10.00	\$22.80	\$16.00	\$16.00
CHEMICALS		\$16.00		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$12.95		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$10.66	\$21.31	\$10.66	\$0.82
FUEL-IRRIGATION		\$5.12		\$5.12
REPAIRS	\$2.58	\$6.80	\$2.58	\$0.71
CUSTOM CHARGES				
LAND TAXES		\$1.57		\$1.57
OTHER EXPENSES	\$0.36	\$128.57	\$128.11	\$127.97
TOTAL CASH EXPENSES	\$76.60	\$215.12	\$207.35	\$152.18
RETURN OVER CASH EXPENSES	(\$76.60)	\$289.88	(\$207.35)	(\$32.18)
FIXED EXPENSES	\$64.18	\$122.70	\$64.18	\$83.33
TOTAL EXPENSES	\$140.78	\$337.81	\$271.53	\$235.51
NET FARM INCOME	(\$140.78)	\$167.19	(\$271.53)	(\$115.51)
LABOR AND MANAGEMENT COSTS	\$49.84	\$116.15	\$49.96	\$28.76
NET OPERATING PROFIT	(\$190.62)	\$51.04	(\$321.49)	(\$144.27)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$5.67		\$3.94
INTEREST ON EQUIPMENT INVESTMENT		\$61.17		\$19.44
TOTAL CAPITAL COSTS	\$0.00	\$66.84	\$0.00	\$23.38
RETURN TO LAND AND RISK	(\$190.62)	(\$15.80)	(\$321.49)	(\$167.65)

TABLE 9. Whole farm summary, Hondo Valley, Lincoln County, 2002.

GROSS RETURNS		
ALFALFA HAY	10 ACRES	
CROP		\$4,900
GRAZING		\$150
PASTURE	20 ACRES	
GRAZING		\$2,400
GROSS RETURN		\$7,450
CASH OPERATING EXPENSES		
SEED		\$206
FERTILIZER		\$600
CHEMICALS		\$160
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$130
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$272
FUEL-IRRIGATION		\$154
REPAIRS		\$92
CUSTOM CHARGES		\$0
LAND TAXES		\$47
OTHER EXPENSES		\$4,102
TOTAL CASH EXPENSES		\$5,763
RETURN OVER CASH EXPENSES		\$1,687
FIXED EXPENSES		\$2,126
TOTAL EXPENSES		\$7,889
NET FARM INCOME		(\$439)
LABOR AND MANAGEMENT COSTS		\$1,936
NET OPERATING PROFIT		(\$2,375)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$135
INTEREST ON EQUIPMENT INVESTMENT		\$1,001
TOTAL CAPITAL COSTS		\$1,136
RETURN TO LAND AND RISK		(\$3,511)

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	(\$4,491)	-4.39%
\$900 /ACRE	(\$4,771)	-3.89%
\$1,100 /ACRE	(\$5,051)	-3.49%
\$1,300 /ACRE	(\$5,331)	-3.16%
\$1,500 /ACRE	(\$5,611)	-2.89%
\$1,700 /ACRE	(\$5,891)	-2.67%
\$1,900 /ACRE	(\$6,171)	-2.47%
\$2,100 /ACRE	(\$6,451)	-2.30%

* 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)