

TABLE 1. Basic cost information for Lincoln County, 2002.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$6.25
General & Irrigators	\$/hour	\$5.95
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.32
Phosphorus (P205)	\$/pound	\$0.30
Seed:		
Alfalfa	\$/pound	\$2.90
Pasture	\$/pound	\$2.50
Natural Gas		
	\$/MCF	\$3.28
Diesel fuel		
	\$/gallon	\$1.05
Gasoline		
	\$/gallon	\$1.00
Electricity		
	cents/kwhr	7.28
Employee Liability Insurance	\$/1,000 wages	\$12.00
Employee Benefits	percent/wages	12.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	8.00%
Land Interest Rate	percent	7.50%
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%

BUDGET AREA..... HONDO VALLEY, LINCOLN COUNTY, 2002.
 FARM SIZE..... 35 ACRES
 IRRIGATION TYPE..... FLOOD
 NUMBER OF CROPS... 4

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	2 *	12	24
ALFALFA HAY	10	36	360
PASTURE ESTABLISHMENT	2 *	12	24
PERMANENT PASTURE	20	30	600
ROADS, DITCHES, HOMESTEAD	5		
TOTAL	35		1008
ACRE FEET PER ACRE OF WATER RIGHTS			2.40

*DOUBLE-CROPPED

TABLE 1a. Overhead cost information for Lincoln County, 2002.

ITEM			
Electricity (Domestic & Shop)		\$45.00 per month	\$540
Telephone		\$35.00 per month	\$420
Accounting & Legal			\$120
Misc. Supplies & Hand Tools			\$220
Pickup and Auto			
miles	4120	@ \$0.345 per mile	\$1,421
Insurance			
- general liability (non-employee)			\$155
- fire/theft			\$130
Property Taxes			
- non-planted land			\$14
- other than land & machinery			\$130
Building repairs and maintenance			\$185
Dues, fees, publications			\$100
Farmstead Equipment			\$155
		Total	\$3,590
		Total per planted acre	\$119.67

TABLE 2. Pumping costs and data for irrigation wells, Lincoln County, 2002.

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.....	\$7.28	CENTS/KwHr	
NATURAL GAS.....	\$3.28	\$/MCF	
LP GAS.....	\$0.67	\$/GAL	
DIESEL.....	\$1.05	\$/GAL	

PUMPING COSTS

ELECTRICAL WELL:	
COST PER HOUR.....	\$0.95
COST PER ACRE INCH.....	\$1.08
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.....	\$0.74
COST PER ACRE INCH.....	\$0.84

TABLE 3. Equipment summary for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2002.

EQUIPMENT ITEM & SIZE	ANNUAL		VARIABLE COSTS					FIXED COSTS		
	HOURS OF USE	NUMBER	TOTAL VALUE	FUEL, OIL LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRE- CIATION	TAXES	TOTAL PER HOUR
----- (DOLLARS) -----										
TRACTOR 29 HP	100	1	\$2,300	\$201.59	\$24.74	\$2.02	\$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	\$193.71	\$18.43	\$0.95	\$0.09	\$710	\$63	\$3.80
			\$29,600	\$395	\$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, 2002.
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	\$4.86	\$2.04	\$22.70	\$44.59
HARROW	30 HP	0.30 HR		\$1.88	\$0.61	\$0.08	\$7.28	\$9.84
FLOAT	30 HP	0.60 HR		\$3.75	\$1.21	\$0.16	\$11.01	\$16.13
FERT. SPREADER	30 HP	0.30 HR		\$1.88	\$0.61	\$0.09	\$0.78	\$3.36
DRILL	30 HP	0.30 HR		\$1.88	\$0.61	\$0.22	\$22.41	\$25.11
IRRIGATE (2X)		1.00 HR		\$5.95				\$5.95
SUBTOTAL		4.90 HR		\$30.33	\$7.89	\$2.58	\$64.18	\$104.98
<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				\$9.67				\$9.67
SUBTOTAL		0.98 HR	\$0.36	\$19.40				\$19.77
<u>TOTAL OPERATING EXPENSES</u>		5.88 HR	\$63.36	\$49.73	\$7.89	\$2.58	\$64.18	\$187.75

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2002.
Harvesting dates: June 15 - September 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$118.00	4.00	TONS STACKED					\$472.00	
GRAZING	\$15.00	1.00	ACRE					\$15.00	
TOTAL								\$487.00	
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	\$14.63	1 ACRE	\$14.63						\$14.63
WIRE	\$0.37	35 LBS	\$12.98						\$12.98
ESTABLISHMENT: Principal		5 YEARS						\$37.55	\$37.55
: Interest								\$6.23	\$6.23
CANAL WATER		30 AC. IN.							
PUMP WATER*		6 AC. IN.							
SUBTOTAL			\$50.40					\$43.78	\$94.19
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	\$0.61	\$0.09	\$0.78	\$3.36	
DITCH MAINTENANCE		0.25 HR		\$1.56				\$1.56	
IRRIGATE (6X)		3.00 HR		\$17.85	\$6.46	\$0.61	\$25.78	\$50.70	
SUBTOTAL		3.55 HR		\$21.29	\$7.06	\$0.71	\$26.57	\$55.62	
HARVEST OPERATIONS									
MOWER (3X)	30 HP	3.00 HR		\$18.75	\$6.07	\$3.63	\$15.86	\$44.31	
RAKE (3X)	30 HP	1.50 HR		\$9.38	\$3.04	\$1.58	\$17.73	\$31.73	
BALER, PTO (3X)	30 HP	1.50 HR		\$9.38	\$3.04	\$0.51	\$17.19	\$30.11	
HAUL (3X)	30 HP	1.50 HR		\$9.38	\$3.04	\$0.37	\$0.85	\$13.63	
SUBTOTAL		7.50 HR		\$46.88	\$15.18	\$6.09	\$51.63	\$119.78	
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				\$26.51				\$26.51	
OTHER EXPENSES				\$119.67				\$119.67	
SUBTOTAL		2.01 HR		\$120.49	\$47.26		\$1.57	\$169.32	
TOTAL OPERATING EXPENSES		13.06 HR		\$170.89	\$115.43	\$22.24	\$6.80	\$123.54	
NET OPERATING PROFIT								\$48.09	
INTEREST ON OPERATING CAPITAL	(\$239.74	@	8.00%				\$5.58	
INTEREST ON EQUIPMENT INVESTMENT								\$61.17	
RETURN TO LAND AND RISK								(\$18.66)	

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

BUDGET SUMMARY

GROSS RETURN		\$487.00	
VARIABLE OPERATING EXPENSES	\$205.52		
RETURN OVER VARIABLE EXPENSES		\$281.48	(GROSS MARGINS)
FIXED EXPENSES	\$123.54		
NET FARM INCOME		\$157.94	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$115.43		
NET OPERATING PROFIT		\$42.51	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$61.17		
RETURN TO LAND AND RISK		(\$18.66)	

TABLE 6. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2002.
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	\$4.86	\$2.04	\$22.70	\$44.59
HARROW	30 HP	0.30 HR		\$1.88	\$0.61	\$0.08	\$7.28	\$9.84
FERT. SPREADER	30 HP	0.30 HR		\$1.88	\$0.61	\$0.09	\$0.78	\$3.36
FLOAT	30 HP	0.60 HR		\$3.75	\$1.21	\$0.16	\$11.01	\$16.13
DRILL	30 HP	0.30 HR		\$1.88	\$0.61	\$0.22	\$22.41	\$25.11
IRRIGATE (3X)		1.00 HR		\$5.95				\$5.95
SUBTOTAL		4.90 HR		\$30.33	\$7.89	\$2.58	\$64.18	\$104.98
<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				\$9.79				\$9.79
OTHER EXPENSES			\$119.67					\$119.67
SUBTOTAL		0.98 HR	\$120.04	\$19.52				\$139.56
<u>TOTAL OPERATING EXPENSES</u>		5.88 HR	\$186.04	\$49.85	\$7.89	\$2.58	\$64.18	\$310.54

TABLE 7. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 35 acre part-time farm, Hondo Valley, Lincoln County, 2002.
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							\$31.05	\$31.05
CANAL WATER		24 AC. IN.					\$12.08	\$12.08
PUMP WATER*		6 AC. IN.						
SUBTOTAL			\$16.00				\$55.13	\$71.13
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
FERT. SPREADER	30 HP	0.30 HR		\$1.79	\$0.61	\$0.09	\$0.78	\$3.27
DITCH MAINTENANCE		0.25 HR		\$1.49				\$1.49
IRRIGATE (5X)		2.50 HR		\$14.88	\$6.46	\$0.61	\$25.78	\$47.73
SUBTOTAL		3.05 HR		\$18.15	\$7.06	\$0.71	\$26.57	\$52.48
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			\$119.67					\$119.67
SUBTOTAL		0.14 HR	\$119.89	\$10.61			\$1.57	\$132.07
TOTAL OPERATING EXPENSES		3.19 HR	\$135.89	\$28.76	\$7.06	\$0.71	\$83.26	\$255.69
NET OPERATING PROFIT								(\$135.69)
INTEREST ON OPERATING CAPITAL	(\$123.62	@	8.00%)			\$3.89
INTEREST ON EQUIPMENT INVESTMENT								\$19.44
RETURN TO LAND AND RISK								(\$159.02)

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

BUDGET SUMMARY

GROSS RETURN		\$120.00	
VARIABLE OPERATING EXPENSES	\$147.56		
RETURN OVER VARIABLE EXPENSES		(\$27.56)	(GROSS MARGINS)
FIXED EXPENSES	\$83.26		
NET FARM INCOME		(\$110.82)	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$28.76		
NET OPERATING PROFIT		(\$139.58)	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.44		
RETURN TO LAND AND RISK		(\$159.02)	

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		4.00		10.00
PRIMARY PRICE		118.00		12.00
GOVERNMENT PAYMENTS		0.00		0.00
SECOND INCOME		15.00		0.00
GROSS RETURN		\$487.00		\$120.00
CASH OPERATING EXPENSES				
SEED	\$53.00		\$50.00	
FERTILIZER	\$10.00	\$22.80	\$16.00	\$16.00
CHEMICALS		\$14.63		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$12.98		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$7.89	\$15.79	\$7.89	\$0.61
FUEL-IRRIGATION		\$6.46		\$6.46
REPAIRS	\$2.58	\$6.80	\$2.58	\$0.71
CUSTOM CHARGES				
LAND TAXES		\$1.57		\$1.57
OTHER EXPENSES	\$0.36	\$120.49	\$120.04	\$119.89
TOTAL CASH EXPENSES	\$73.84	\$201.50	\$196.51	\$145.23
RETURN OVER CASH EXPENSES	(\$73.84)	\$285.50	(\$196.51)	(\$25.23)
FIXED EXPENSES	\$64.18	\$121.98	\$64.18	\$81.70
TOTAL EXPENSES	\$138.02	\$323.48	\$260.69	\$226.93
NET FARM INCOME	(\$138.02)	\$163.52	(\$260.69)	(\$106.93)
LABOR AND MANAGEMENT COSTS	\$49.73	\$115.43	\$49.85	\$28.76
NET OPERATING PROFIT	(\$187.75)	\$48.09	(\$310.54)	(\$135.69)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$5.58		\$3.89
INTEREST ON EQUIPMENT INVESTMENT		\$61.17		\$19.44
TOTAL CAPITAL COSTS	\$0.00	\$66.75	\$0.00	\$23.34
RETURN TO LAND AND RISK	(\$187.75)	(\$18.66)	(\$310.54)	(\$159.02)

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

GROSS RETURNS		
ALFALFA HAY	10 ACRES	
CROP		\$4,720
GRAZING		\$150
PASTURE	20 ACRES	
GRAZING		\$2,400
GROSS RETURN		\$7,270
CASH OPERATING EXPENSES		
SEED		\$206
FERTILIZER		\$600
CHEMICALS		\$146
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$130
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$202
FUEL-IRRIGATION		\$194
REPAIRS		\$92
CUSTOM CHARGES		\$0
LAND TAXES		\$47
OTHER EXPENSES		\$3,844
TOTAL CASH EXPENSES		\$5,460
RETURN OVER CASH EXPENSES		\$1,810
FIXED EXPENSES		\$2,114
TOTAL EXPENSES		\$7,574
NET FARM INCOME		(\$304)
LABOR AND MANAGEMENT COSTS		\$1,929
NET OPERATING PROFIT		(\$2,233)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$134
INTEREST ON EQUIPMENT INVESTMENT		\$1,001
TOTAL CAPITAL COSTS		\$1,134
RETURN TO LAND AND RISK		(\$3,367)

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	(\$4,347)	-4.13%
\$900 /ACRE	(\$4,627)	-3.65%
\$1,100 /ACRE	(\$4,907)	-3.28%
\$1,300 /ACRE	(\$5,187)	-2.97%
\$1,500 /ACRE	(\$5,467)	-2.72%
\$1,700 /ACRE	(\$5,747)	-2.51%
\$1,900 /ACRE	(\$6,027)	-2.32%
\$2,100 /ACRE	(\$6,307)	-2.17%

* 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)