

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2015
Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
ALFALFA SEED	\$6.00	30 LBS	\$180.00					\$180.00
PUMP WATER*		8 AC. IN.						
SUBTOTAL			\$180.00					\$180.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$3.12	\$3.65	\$0.42	\$3.17	\$10.36
PLOW	50 HP	1.05 HR		\$8.40	\$9.82	\$1.46	\$17.31	\$36.98
DISC (2X)	50 HP	0.78 HR		\$6.24	\$7.29	\$1.52	\$12.48	\$27.53
FLOAT (2X)	50 HP	0.64 HR		\$5.12	\$5.98	\$0.70	\$8.18	\$19.98
DRILL	50 HP	0.21 HR		\$1.68	\$1.96	\$0.45	\$34.51	\$38.60
IRRIGATE (4X)		2.00 HR		\$15.00	\$14.21	\$0.00	\$6.52	\$35.74
SUBTOTAL		5.07 HR		\$39.56	\$42.92	\$4.54	\$82.17	\$169.19
OVERHEAD EXPENSES								
DOWNTIME		0.77 HR		\$6.14				\$6.14
EMPLOYEE BENEFITS				\$4.75				\$4.75
FARM INSURANCE			\$0.47					\$0.47
SUPERVISION AND MANAGEMENT				\$17.50				\$17.50
SUBTOTAL		0.77 HR	\$0.47	\$28.39				\$28.86
TOTAL OPERATING EXPENSES		5.84 HR	\$180.47	\$67.95	\$42.92	\$4.54	\$82.17	\$378.06

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2015
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$245.00	6.00 TONS (STACKED)	\$1,470.00
TOTAL			\$1,470.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
FERT. (ALFALFA MIX)	\$0.16	250 LBS	\$40.00		\$40.00
INSECTICIDE	\$23.97	1 ACRE	\$23.97		\$23.97
WIRE	\$0.36	56 LBS	\$20.16		\$20.16
ESTABLISHMENT: Principal		10 YEARS		\$37.81	\$37.81
: Interest				\$9.67	\$9.67
PUMP WATER*		45 AC. IN.			
SUBTOTAL			\$84.13	\$47.47	\$131.61

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (11X)		5.50 HR		\$41.25	\$79.95	\$0.00	\$36.70	\$157.90
SUBTOTAL		5.50 HR		\$41.25	\$79.95	\$0.00	\$36.70	\$157.90

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (5X)	14 FT	0.80 HR		\$6.40	\$0.00	\$0.22	\$17.72	\$24.35
BALER, PTO (5X)	50 HP	1.05 HR		\$8.40	\$9.82	\$1.29	\$18.17	\$37.68
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$8.00	\$9.35	\$2.36	\$28.27	\$47.98
SUBTOTAL		2.85 HR		\$22.80	\$19.17	\$3.88	\$64.16	\$110.01

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.71 HR		\$5.70				\$5.70
EMPLOYEE BENEFITS			\$7.69				\$7.69
FARM INSURANCE			\$0.77				\$0.77
LAND TAXES						\$2.66	\$2.66
SUPERVISION AND MANAGEMENT			\$65.73				\$65.73
OTHER EXPENSES			\$294.53				\$294.53
SUBTOTAL	0.71 HR		\$295.30	\$79.11		\$2.66	\$377.07

TOTAL OPERATING EXPENSES	9.06 HR		\$379.43	\$143.16	\$99.12	\$3.88	\$150.99	\$776.58
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NET OPERATING PROFIT								\$693.42
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INTEREST ON OPERATING CAPITAL	(\$63.97	@	5.50%)			\$3.52
INTEREST ON EQUIPMENT INVESTMENT								\$51.61

RETURN TO LAND AND RISK								\$638.29
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$1,470.00	
VARIABLE OPERATING EXPENSES	\$485.94		
RETURN OVER VARIABLE EXPENSES		\$984.06	(GROSS MARGINS)
FIXED EXPENSES	\$150.99		
NET FARM INCOME		\$833.06	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$143.16		
NET OPERATING PROFIT		\$689.90	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$51.61		
RETURN TO LAND AND RISK		\$638.29	

TABLE 8. Oats for hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2015
 Planting dates: September 1 - November 1
 Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
OATS FOR HAY	\$195.00	3.00 TONS (STACKED)							\$585.00
TOTAL									\$585.00
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PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
OAT SEED	\$0.64	100 LBS	\$64.00						\$64.00
NITROGEN (N)	\$0.45	100 LBS	\$45.00						\$45.00
PUMP WATER*		18 AC. IN.							
SUBTOTAL									\$109.00
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PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$3.12	\$3.65	\$0.76	\$6.24	\$13.76	
PLOW	50 HP	1.05 HR		\$8.40	\$9.82	\$1.46	\$17.31	\$36.98	
DISC (2X)	50 HP	0.78 HR		\$6.24	\$7.29	\$1.52	\$12.48	\$27.53	
FLOAT (2X)	50 HP	0.64 HR		\$5.12	\$5.98	\$0.70	\$8.18	\$19.98	
DRILL	50 HP	0.21 HR		\$1.68	\$1.96	\$0.45	\$34.51	\$38.60	
IRRIGATE (4X)		2.00 HR		\$15.00	\$31.98	\$0.00	\$14.68	\$61.66	
SUBTOTAL									\$198.52
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HARVEST OPERATIONS									
SWATHER	14 FT	0.16 HR		\$1.28	\$0.00	\$0.04	\$3.54	\$4.87	
BALER, PTO	50 HP	0.21 HR		\$1.68	\$1.96	\$0.26	\$3.63	\$7.54	
BALE WAGON	50 HP	0.20 HR		\$1.60	\$1.87	\$0.47	\$5.65	\$9.60	
SUBTOTAL									\$22.00
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OVERHEAD EXPENSES									
DOWNTIME		0.91 HR		\$7.28				\$7.28	
EMPLOYEE BENEFITS				\$5.29				\$5.29	
FARM INSURANCE			\$0.53					\$0.53	
LAND TAXES							\$1.33	\$1.33	
SUPERVISION AND MANAGEMENT				\$27.22				\$27.22	
OTHER EXPENSES			\$147.26					\$147.26	
SUBTOTAL									\$188.92
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TOTAL OPERATING EXPENSES		6.55 HR	\$256.79	\$83.91	\$64.52	\$5.66	\$107.55	\$518.43	
NET OPERATING PROFIT									\$66.57
INTEREST ON OPERATING CAPITAL (\$71.28 @ 5.50%)									\$3.92
INTEREST ON EQUIPMENT INVESTMENT									\$40.03
RETURN TO LAND AND RISK									\$22.61

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

BUDGET SUMMARY

GROSS RETURN		\$585.00	
VARIABLE OPERATING EXPENSES	\$330.89		
RETURN OVER VARIABLE EXPENSES		\$254.11	(GROSS MARGINS)
FIXED EXPENSES	\$107.55		
NET FARM INCOME		\$146.56	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$83.91		
NET OPERATING PROFIT		\$62.65	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.03		
RETURN TO LAND AND RISK		\$22.61	

TABLE 9. Sorghum-sudan hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2015
 Planting dates: May 1 - June 1
 Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
SORGHUM/SUDAN HAY	\$215.00	5.00 TONS (STACKED)						\$1,075.00
TOTAL							\$1,075.00	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$1.04	50 LBS	\$52.00					\$52.00
NITROGEN (N)	\$0.45	100 LBS	\$45.00					\$45.00
PUMP WATER*		16 AC. IN.						
SUBTOTAL			\$97.00					\$97.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$3.12	\$3.65	\$0.76	\$6.24	\$13.76
FLOAT (2X)	50 HP	0.64 HR		\$5.12	\$5.98	\$0.70	\$8.18	\$19.98
DRILL	50 HP	0.21 HR		\$1.68	\$1.96	\$0.45	\$34.51	\$38.60
IRRIGATE (4X)		2.00 HR		\$15.00	\$28.43	\$0.00	\$13.05	\$56.48
SUBTOTAL		3.24 HR		\$24.92	\$40.02	\$1.91	\$61.97	\$128.82
HARVEST OPERATIONS								
SWATHER (2X)	14 FT	0.32 HR		\$2.56	\$0.00	\$0.09	\$7.09	\$9.74
BALER, PTO (2X)	50 HP	0.42 HR		\$3.36	\$3.93	\$0.52	\$7.27	\$15.07
BALE WAGON (2X)	50 HP	0.40 HR		\$3.20	\$3.74	\$0.94	\$11.31	\$19.19
SUBTOTAL		1.14 HR		\$9.12	\$7.67	\$1.55	\$25.67	\$44.00
OVERHEAD EXPENSES								
DOWNTIME		0.60 HR		\$4.76				\$4.76
EMPLOYEE BENEFITS				\$4.08				\$4.08
FARM INSURANCE			\$0.41					\$0.41
LAND TAXES							\$1.33	\$1.33
SUPERVISION AND MANAGEMENT				\$46.19				\$46.19
OTHER EXPENSES			\$147.26					\$147.26
SUBTOTAL		0.60 HR	\$147.67	\$55.03			\$1.33	\$204.04
TOTAL OPERATING EXPENSES		4.98 HR	\$244.67	\$89.07	\$47.69	\$3.46	\$88.97	\$473.86
NET OPERATING PROFIT							\$601.14	
INTEREST ON OPERATING CAPITAL		(\$59.75	@	5.50%)	\$3.29	
INTEREST ON EQUIPMENT INVESTMENT							\$35.84	
RETURN TO LAND AND RISK							\$562.02	

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

BUDGET SUMMARY

GROSS RETURN		\$1,075.00	
VARIABLE OPERATING EXPENSES	\$299.10		
RETURN OVER VARIABLE EXPENSES		\$775.90	(GROSS MARGINS)
FIXED EXPENSES	\$88.97		
NET FARM INCOME		\$686.93	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$89.07		
NET OPERATING PROFIT		\$597.86	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$35.84		
RETURN TO LAND AND RISK		\$562.02	

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County,
Projected 2015

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$245.00	\$195.00	\$215.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$1,470.00	\$585.00	\$1,075.00
CASH OPERATING EXPENSES				
SEED	\$180.00		\$64.00	\$52.00
FERTILIZER		\$40.00	\$45.00	\$45.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$28.70	\$19.17	\$32.54	\$19.26
FUEL-IRRIGATION	\$14.21	\$79.95	\$31.98	\$28.43
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$2.66	\$1.33	\$1.33
OTHER EXPENSES	\$0.47	\$295.30	\$147.79	\$147.67
TOTAL CASH EXPENSES	\$227.94	\$485.08	\$328.30	\$297.14
RETURN OVER CASH EXPENSES	(\$227.94)	\$984.92	\$256.70	\$777.86
FIXED EXPENSES	\$82.17	\$148.34	\$106.22	\$87.64
TOTAL EXPENSES	\$310.11	\$633.42	\$434.52	\$384.78
NET FARM INCOME	(\$310.11)	\$836.58	\$150.48	\$690.22
LABOR AND MANAGEMENT COSTS	\$67.95	\$143.16	\$83.91	\$89.07
NET OPERATING PROFIT	(\$378.06)	\$693.42	\$66.57	\$601.14
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$3.52	\$3.92	\$3.29
INTEREST ON EQUIPMENT INVESTMENT		\$51.61	\$40.03	\$35.84
TOTAL CAPITAL COSTS	\$0.00	\$55.13	\$43.95	\$39.13
RETURN TO LAND AND RISK	(\$378.06)	\$638.29	\$22.61	\$562.02

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,
Projected 2015

GROSS RETURNS		
ALFALFA HAY CROP	40.00 ACRES	\$58,800
OATS FOR HAY CROP	5.00 ACRES	\$2,925
SORGHUM/SUDAN CROP	5.00 ACRES	\$5,375
GROSS RETURN		<u>\$67,100</u>
CASH OPERATING EXPENSES		
SEED		\$1,300
FERTILIZER		\$2,050
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,141
FUEL-IRRIGATION		\$3,557
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$120
OTHER EXPENSES		\$13,291
TOTAL CASH EXPENSES		<u>\$23,442</u>
RETURN OVER CASH EXPENSES		\$43,658
FIXED EXPENSES		\$5,281
TOTAL EXPENSES		\$28,723
NET FARM INCOME		\$38,377
LABOR AND MANAGEMENT COSTS		\$6,863
NET OPERATING PROFIT		\$31,514
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$177
INTEREST ON EQUIPMENT INVESTMENT		\$2,444
TOTAL CAPITAL COSTS		<u>\$2,621</u>
RETURN TO LAND AND RISK		<u>\$28,893</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	\$27,843	45.78%
\$900 /ACRE	\$27,543	39.98%
\$1,100 /ACRE	\$27,243	35.48%
\$1,300 /ACRE	\$26,943	31.89%
\$1,500 /ACRE	\$26,643	28.96%
\$1,700 /ACRE	\$26,343	26.52%
\$1,900 /ACRE	\$26,043	24.46%
\$2,100 /ACRE	\$25,743	22.70%

* 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)