

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

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$7.55
General & Irrigators		\$/hour	\$6.75
Purchased Inputs:			
Fertilizer:			
Nitrogen (N) (N)		\$/pound	\$0.36
Phosphate (P205)		\$/pound	\$0.33
Potash (K2O)		\$/pound	\$0.21
Seed:			
Alfalfa		\$/pound	\$3.00
Wheat		\$/pound	\$0.13
Corn for Grain		\$/bag	\$89.75
Grain Sorghum		\$/pound	\$1.20
Haygrazer/Millet		\$/pound	\$0.43
Oats		\$/pound	\$0.40
Natural gas		\$/MCF	\$3.28
(service charge)		\$/month	\$10.00
Diesel fuel		\$/gallon	\$1.30
Gasoline		\$/gallon	\$1.35
Electricity		cents/KwHr	5.73
LP Gas		\$/gallon	\$1.21
Baling Twine		\$/roll	\$25.00
Employee Liability Insurance		\$/ \$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	\$27.00	/acre	\$0.28
Personal Property Tax Rate - NR		\$/ \$1,000 (Assessed Value)	\$30.93
- R			\$27.08
Supervision Factors			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
Management Rate		percent	7.00%

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

ITEM				
Electricity (Domestic & Shop)			\$430.00 per month	\$5,160
Telephone			\$210.00 per month	\$2,520
Accounting & Legal				\$3,970
Misc. Supplies & Hand Tools				\$4,030
Pickup and Auto				
miles	31,000	@	\$0.365 per mile	\$11,315
Insurance				
- general liability (non-employee)				\$2,570
- fire/theft				\$2,060
Property Taxes				
- non-planted land				\$40
- other than land & machinery				\$985
Building repairs and maintenance				\$1,655
Dues, fees, publications				\$380
Farmstead Equipment				\$320
Total				\$35,005
Total per planted acre				\$32.17
Total per dryland acre				\$6.43

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

INPUT DATA

DELIVERY PSI:		DEPTH CHARACTERISTICS:	
SPRINKLER...	30	STATIC... ..	180
		DRAW DOWN	50
		TOTAL HEAD.....	230
		CASING... ..	400
GALLONS PER MINUTE (GPM)...	700		
WORK HORSEPOWER.....	53		
EFFICIENCY FACTOR:			
ELECTRICITY..... ..	0.540		
NATURAL GAS..... ..	0.140		
LP GAS..... ..	0.140		
DIESEL..... ..	0.180		
FUEL COST PER UNIT:			
ELECTRICITY..... ..	5.73	CENTS/K	wHr
NATURAL GAS.... ..	\$3.28	\$/MCF	
LP GAS..... ..	\$1.21	\$/GAL	
DIESEL..... ..	\$1.30	\$/GAL	

FUEL PUMPING COSTS

ELECTRIC WELL:	
COST PER HOUR.....\$	\$4.22
COST PER ACRE INCH.....\$	\$2.73
NATURAL GAS WELL:	
COST PER HOUR.....\$	\$3.49
COST PER ACRE INCH.....\$	\$2.26
LP GAS WELL:	
COST PER HOUR.....\$	\$12.70
COST PER ACRE INCH.....\$	\$8.21
DIESEL WELL:	
COST PER HOUR.....\$	\$6.90
COST PER ACRE INCH.....\$	\$4.46

TABLE 3. Equipment summary for a 1,280 acre sprinkler-irrigated farm with above average management, Union County, 2003.

EQUIPMENT		VARIABLE COSTS						FIXED COSTS		
ITEM & SIZE	ANNUAL HOURS OF USE	NUMBE	TOTAL VALUE	FUEL AND LUBRICANT	FUEL,LUBE REPAIR	PER HR	REPAIR PER HR	DEPRE-CIATION	TAXES	TOTAL PER HOUR
TRACTOR 95 HP	118	1	\$19,240	\$1,133	\$760	\$9.59	\$6.44	\$1,226	\$221	\$12.25
TRACTOR 126 HP	429	1	\$31,240	\$3,948	\$3,588	\$9.19	\$8.36	\$2,740	\$353	\$7.20
TRACTOR 185 HP	241	1	\$40,700	\$3,245	\$973	\$13.49	\$4.05	\$5,995	\$464	\$26.85
COMBINE 145 HP	102	1	\$38,150	\$1,178	\$2,213	\$11.54	\$21.66	\$7,600	\$588	\$80.16
SWATHER 14 FT	270	1	\$4,300	\$1,316	\$0	\$4.87	\$0.00	\$1,450	\$149	\$5.92
ROUND BALER	287	1	\$4,100		\$0		\$0.00	\$550	\$57	\$2.11
PLANTER 8-ROW	31	1	\$4,060		\$239		\$7.81	\$1,100	\$57	\$37.80
CHISEL HAYMIE 21 FT	78	1	\$1,650		\$53		\$0.68	\$220	\$17	\$3.04
ROLLING CULTIVATOR 8-ROW	38	1	\$4,000		\$104		\$2.72	\$533	\$41	\$15.02
DISC 28 FT	119	1	\$10,000		\$668		\$5.60	\$1,333	\$103	\$12.04
DRILL 21 FT	80	1	\$4,500		\$815		\$10.22	\$900	\$46	\$11.86
CORN HEAD 8-ROW	26	1	\$10,800		\$147		\$5.75	\$1,667	\$129	\$70.41
GRAIN TABLE 22 FT	77	1	\$4,150		\$84		\$1.09	\$501	\$39	\$7.05
SPRAYER 30 FT	26	1	\$1,500		\$54		\$2.13	\$200	\$15	\$8.45
GRAIN CART	102	2	\$6,200		\$222		\$2.17	\$827	\$64	\$8.72
SEMI-TRACTOR/TRAILER	84	1	\$16,000	\$1,308	\$1,093	\$15.52	\$12.96	\$3,200	\$165	\$39.92
CULTI-PACKER	9	1	\$3,200		\$30		\$3.20	\$427	\$33	\$49.16
TANDEM-AXLE TRUCK	18	1	\$9,000	\$154	\$58	\$8.65	\$3.24	\$1,800	\$93	\$106.04
MINI-GATOR SPRINKLER	6779	1	\$2,800	\$633	\$136	\$0.09	\$0.02	\$373	\$29	\$0.06
CENTER PIVOT SPRINKLER	16583	7	\$105,000	\$8,238	\$15,008	\$0.50	\$0.91	\$14,000	\$1,083	\$0.91
NATURAL GAS WELL	16583	4	\$82,000	\$57,848	\$3,773	\$3.49	\$0.23	\$8,632	\$845	\$0.60
			\$402,590	\$79,002	\$30,015			\$55,274	\$4,591	

TABLE 4. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003.
Planting dates: August 1 - September 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
<u>PURCHASED INPUTS</u>									
SEED	\$3.00	20 LBS		\$60.00					\$60.00
OAT SEED	\$0.40	30 LBS		\$12.00					\$12.00
PUMP WATER*		3 AC. IN.							
SUBTOTAL				\$72.00					\$72.00
<u>PREHARVEST OPERATIONS</u>									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.07 HR			\$0.53	\$0.94	\$0.68	\$2.72	\$4.87
CULTI-PACKER	93 HP	0.17 HR			\$1.28	\$1.63	\$1.64	\$10.44	\$14.99
DRILL	93 HP	0.12 HR			\$0.91	\$1.15	\$2.00	\$2.89	\$6.95
IRRIGATE (4X)		0.40 HR			\$2.70	\$7.73	\$2.20	\$2.93	\$15.55
SUBTOTAL		0.76 HR			\$5.42	\$11.46	\$6.51	\$18.99	\$42.37
<u>OVERHEAD EXPENSES</u>									
DOWNTIME		0.09 HR			\$0.68				\$0.68
EMPLOYEE BENEFITS					\$0.98				\$0.98
INSURANCE				\$0.11					\$0.11
SUPERVISION AND MANAGEMENT					\$8.59				\$8.59
SUBTOTAL		0.09		0.11	10.24				10.35
<u>TOTAL OPERATING EXPENSES</u>		0.85 HR		\$72.11	\$15.66	\$11.46	\$6.51	\$18.99	\$124.72

TABLE 5. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003.
Harvesting dates: June 1 - October 10

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$140.00	7.00	TONS (STACKED)					\$980.00	
TOTAL								\$980.00	
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS		FIXED COST		TOTAL	
NITROGEN (N)	\$0.36	30	LBS	\$10.80				\$10.80	
PHOSPHATE (P2O5)	\$0.33	100	LBS	\$33.00				\$33.00	
POTASH (K2O)	\$0.21	50	LBS	\$10.50				\$10.50	
TRACE ELEMENTS	\$0.15	12	LBS	\$1.80				\$1.80	
ESTABLISHMENT:Principal		7	YEARS			\$17.82		\$17.82	
: Interest						\$5.20		\$5.20	
BALING TWINE	\$25.00	0.57	ROLL	\$14.17				\$14.17	
PUMP WATER*		40	AC. IN.						
SUBTOTAL				\$70.27		\$23.02		\$93.29	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (11X)		1.10	HR		\$7.43	\$103.06	\$29.29	\$39.05	\$178.82
SUBTOTAL		1.10	HR		\$7.43	\$103.06	\$29.29	\$39.05	\$178.82
HARVEST OPERATIONS									
SWATHER (4X)	13 FT SP	0.64	HR		\$4.83	\$3.12	\$0.00	\$3.79	\$11.73
BALER (4X)	126 HP	0.68	HR		\$5.13	\$6.25	\$5.68	\$6.33	\$23.40
SUBTOTAL		1.32	HR		\$9.97	\$9.37	\$5.68	\$10.12	\$35.14
OVERHEAD EXPENSES									
DOWNTIME		0.33	HR		\$2.49				\$2.49
EMPLOYEE BENEFITS					\$3.13				\$3.13
INSURANCE				\$0.35					\$0.35
LAND TAXES							\$0.28		\$0.28
SUPERVISION AND MANAGEMENT					\$70.36				\$70.36
OTHER EXPENSES				\$32.17					\$32.17
SUBTOTAL		0.33	HR		\$32.52	\$75.98		\$0.28	\$108.78
TOTAL OPERATING EXPENSES		2.75	HR		\$102.79	\$93.37	\$112.43	\$34.97	\$242.56
NET OPERATING PROFIT									\$563.98
INTEREST ON OPERATING CAPITAL	(	\$69.47	@	8.00%	)				\$5.56
INTEREST ON EQUIPMENT INVESTMENT									\$12.55
RETURN TO LAND AND RISK									\$545.86

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

BUDGET SUMMARY

GROSS RETURN		\$980.00	
VARIABLE OPERATING EXPENSES	\$250.18		
RETURN OVER VARIABLE EXPENSES		\$729.82	(GROSS MARGIN)
FIXED EXPENSES	\$72.47		
NET FARM INCOME		\$657.35	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$93.37		
NET OPERATING PROFIT		\$563.98	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$18.11		
RETURN TO LAND AND RISK		\$545.86	

TABLE 6. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003.
 Planting dates: August 15 - November 15
 Harvesting dates: July 1 - July 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
WHEAT	\$3.45	47.00	BUSHELS					\$162.15	
DIRECT PAYMENT	\$0.52	80.00	BUSHELS					\$41.60	
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00	
GRAZING	\$40.00	1.00	ACRE					\$40.00	
TOTAL								\$243.75	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS		FIXED COST		TOTAL	
SEED	\$0.13	100	LBS	\$13.00				\$13.00	
MANURE	\$2.70	8	TON	\$21.60				\$21.60	
LIVESTOCK FAC & EQUIP						\$5.00		\$5.00	
PUMP WATER*		11	AC. IN.					\$0.00	
CROP INSURANCE	\$0.12							\$0.12	
SUBTOTAL				\$34.60			\$5.00	\$39.72	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.07	HR		\$0.53	\$0.94	\$0.68	\$2.72	\$4.87
CHISEL	185 HP	0.09	HR		\$0.68	\$1.21	\$0.43	\$2.69	\$5.01
DISC	185 HP	0.07	HR		\$0.53	\$0.94	\$0.68	\$2.72	\$4.87
DRILL	126 HP	0.12	HR		\$0.91	\$1.10	\$2.23	\$2.29	\$6.53
IRRIGATE (7X)		0.70	HR		\$4.73	\$29.01	\$8.20	\$11.16	\$53.09
SUBTOTAL		1.05	HR		\$7.37	\$33.21	\$12.20	\$21.58	\$74.36
HARVEST OPERATIONS									
COMBINE	GRAIN TABLE	0.14	HR		\$1.06	\$1.62	\$3.19	\$12.21	\$18.07
GRAIN CART	93 HP	0.14	HR		\$1.06	\$1.34	\$1.20	\$2.94	\$6.54
TRUCK	SEMI	0.14	HR		\$1.06	\$2.17	\$1.81	\$5.59	\$10.63
SUBTOTAL		0.42	HR		\$0.00	\$3.17	\$5.13	\$6.20	\$35.24
OVERHEAD EXPENSES									
DOWNTIME		0.19	HR		\$1.45				\$1.45
EMPLOYEE BENEFITS					\$1.90				\$1.90
INSURANCE				\$0.21					\$0.21
LAND TAXES							\$0.28		\$0.28
SUPERVISION AND MANAGEMENT					\$18.15				\$18.15
OTHER EXPENSES				\$32.17					\$32.17
SUBTOTAL		0.19	HR		\$32.38	\$21.50		\$0.28	\$54.16
TOTAL OPERATING EXPENSES		1.66	HR		\$66.98	\$32.04	\$38.34	\$18.40	\$203.48
NET OPERATING PROFIT								\$40.27	
INTEREST ON OPERATING CAPITAL	(	\$29.66	@	8.00%	)			\$2.37
INTEREST ON EQUIPMENT INVESTMENT								\$18.59	
RETURN TO LAND AND RISK								\$19.31	

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

BUDGET SUMMARY		
GROSS RETURN		\$243.75
VARIABLE OPERATING EXPENSES	\$123.73	
RETURN OVER VARIABLE EXPENSES		\$120.02 (GROSS MARGIN)
FIXED EXPENSES	\$47.59	
NET FARM INCOME		\$72.42 (RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$32.04	
NET OPERATING PROFIT		\$40.39 (RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$20.96	
RETURN TO LAND AND RISK		\$19.42

TABLE 7. Corn for grain, sprinkler-irrigated, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003.
 Planting dates: April 15 - May 15
 Harvesting dates: October 1 - November 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
CORN FOR GRAIN	\$2.85	185.00	BUSHEL						\$527.25
DIRECT PAYMENT	\$0.28	200.00	BUSHEL						\$56.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00	BUSHEL						\$0.00
GRAZING	\$20.00	1.00	ACRE						\$20.00
TOTAL									\$603.25
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$1.12	26	000	\$29.17					\$29.17
NITROGEN (N)	\$0.36	220	LBS	\$79.20					\$79.20
PHOSPHATE (P2O5)	\$0.33	70	LBS	\$23.10					\$23.10
POTASSIUM (K-MAG)	\$0.21	300	LBS	\$63.00					\$63.00
INSECTICIDE	\$15.07	3	ACRE	\$45.20					\$45.20
HERBICIDE	\$22.60	1	ACRE	\$22.60					\$22.60
LIVESTOCK FAC & EQUIP						\$5.00			\$5.00
PUMP WATER*		34	AC. IN.						\$0.00
CROP INSURANCE	\$0.39								\$0.39
SUBTOTAL				\$262.27		\$5.00			\$267.66
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.07	HR		\$0.53	\$0.94	\$0.68	\$2.72	\$4.87
CHISEL	185 HP	0.09	HR		\$0.68	\$1.21	\$0.43	\$2.69	\$5.01
DISC & SPRAY	185 HP	0.10	HR		\$0.76	\$1.35	\$1.18	\$4.73	\$8.02
PLANTER	126 HP	0.12	HR		\$0.91	\$1.10	\$1.94	\$5.40	\$9.35
ROLLING CULT (2X)	126 HP	0.20	HR		\$1.51	\$1.84	\$2.22	\$4.44	\$10.01
SIDEDRESS	185 HP	0.17	HR		\$1.28	\$2.29	\$0.69	\$4.57	\$8.83
IRRIGATE (16X)		1.60	HR		\$10.80	\$89.65	\$25.33	\$34.50	\$160.28
SUBTOTAL		2.35 HR			\$16.46	\$98.40	\$32.45	\$59.05	\$206.37
HARVEST OPERATIONS									
COMBINE	CORN HEAD	0.20	HR		\$1.51	\$2.31	\$5.48	\$30.11	\$39.41
GRAIN CART	93 HP	0.20	HR		\$1.51	\$1.92	\$1.72	\$4.19	\$9.34
TRUCK	SEMI	0.20	HR		\$1.51	\$3.10	\$2.59	\$7.98	\$15.19
SUBTOTAL		0.60 HR			\$0.00	\$4.53	\$7.33	\$9.80	\$42.29
OVERHEAD EXPENSES									
DOWNTIME		0.30	HR		\$2.23				\$2.23
EMPLOYEE BENEFITS					\$3.78				\$3.78
INSURANCE				\$0.42					\$0.42
LAND TAXES							\$0.28		\$0.28
SUPERVISION AND MANAGEMENT					\$45.47				\$45.47
OTHER EXPENSES				\$32.17					\$32.17
SUBTOTAL		0.30 HR			\$32.59	\$51.47		\$0.28	\$84.35
TOTAL OPERATING EXPENSES		3.25 HR			\$294.86	\$72.47	\$105.73	\$42.25	\$106.62
NET OPERATING PROFIT									(\$19.07)
INTEREST ON OPERATING CAPITAL	(	\$165.47	@	8.00%)					\$13.24
INTEREST ON EQUIPMENT INVESTMENT									\$41.33
RETURN TO LAND AND RISK									(\$73.63)

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

GROSS RETURN		\$603.25	
VARIABLE OPERATING EXPENSES	\$442.84		
RETURN OVER VARIABLE EXPENSES		\$160.41	(GROSS MARGIN)
FIXED EXPENSES	\$106.62		
NET FARM INCOME		\$53.79	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$72.47		
NET OPERATING PROFIT		(\$18.68)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$54.56		
RETURN TO LAND AND RISK		(\$73.24)	

TABLE 8. Grain sorghum, sprinkler-irrigated, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003.
 Planting dates: May 15 - June 15
 Harvesting dates: October 15 - November 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
GRAIN SORGHUM	\$4.39	35.00 CWT						\$153.65
DIRECT PAYMENT	\$0.625	35.00 CWT						\$21.88
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT						\$0.00
GRAZING	\$5.00	1.00 ACRE						\$5.00
TOTAL								\$180.53
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$1.20	5 LBS	\$6.00					\$6.00
NITROGEN (N)	\$0.36	150 LBS	\$54.00					\$54.00
PHOSPHATE (P205)	\$0.33	50 LBS	\$16.50					\$16.50
HERBICIDE	\$22.60	1 ACRE	\$22.60					\$22.60
LIVESTOCK FAC & EQUIP						\$5.00		\$5.00
PUMP WATER*		12 AC. IN.						
CROP INSURANCE	\$0.39							\$0.39
SUBTOTAL			\$99.10			\$5.00		\$104.50
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.07 HR		\$0.53	\$0.94	\$0.68	\$2.72	\$4.87
CHISEL	185 HP	0.09 HR		\$0.68	\$1.21	\$0.43	\$2.69	\$5.01
DISC & SPRAY	185 HP	0.10 HR		\$0.76	\$1.35	\$1.18	\$4.73	\$8.02
PLANTER	126 HP	0.12 HR		\$0.91	\$1.10	\$1.94	\$5.40	\$9.35
ROLLING CULT.	126 HP	0.10 HR		\$0.76	\$0.92	\$1.11	\$2.22	\$5.00
SIDEDRESS ANHYDROUS	185 HP	0.17 HR		\$1.28	\$2.29	\$0.69	\$4.57	\$8.83
IRRIGATE (6X)		0.60 HR		\$4.05	\$31.64	\$8.94	\$12.17	\$56.81
SUBTOTAL		1.25 HR		\$8.96	\$39.47	\$14.95	\$34.51	\$97.89
HARVEST OPERATIONS								
COMBINE	GRAIN TABLE	0.14 HR		\$1.06	\$1.62	\$3.19	\$12.21	\$18.07
GRAIN CART	93 HP	0.14 HR		\$1.06	\$1.34	\$1.20	\$2.94	\$6.54
TRUCK	2 T 18 FT	0.14 HR		\$1.06	\$1.21	\$0.45	\$14.85	\$17.57
SUBTOTAL		0.42 HR	\$0.00	\$3.17	\$4.17	\$4.84	\$29.99	\$42.17
OVERHEAD EXPENSES								
DOWNTIME		0.23 HR		\$1.70				\$1.70
EMPLOYEE BENEFITS				\$2.18				\$2.18
INSURANCE			\$0.24					\$0.24
LAND TAXES							\$0.28	\$0.28
SUPERVISION AND MANAGEMENT				\$13.90				\$13.90
OTHER EXPENSES			\$32.17					\$32.17
SUBTOTAL		0.23 HR	\$32.42	\$17.78			\$0.28	\$50.47
TOTAL OPERATING EXPENSES		1.90 HR	\$131.52	\$29.91	\$43.64	\$19.80	\$69.78	\$295.03
NET OPERATING PROFIT								(\$114.51)
INTEREST ON OPERATING CAPITAL	(	\$64.10	@	8.00%	)			\$5.13
INTEREST ON EQUIPMENT INVESTMENT								\$28.57
RETURN TO LAND AND RISK								(\$148.20)

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

GROSS RETURN		\$180.53	
VARIABLE OPERATING EXPENSES	\$194.96		
RETURN OVER VARIABLE EXPENSES		(\$14.43)	(GROSS MARGIN)
FIXED EXPENSES	\$69.78		
NET FARM INCOME		(\$84.21)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$29.91		
NET OPERATING PROFIT		(\$114.12)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$33.69		
RETURN TO LAND AND RISK		(\$147.81)	

TABLE 9. Haygrazer/millet, dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2003
 Planting dates: June 1 - June 15
 Harvesting dates: September 1 - September 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
HAY	\$110.00	1.50 TONS							\$165.00
TOTAL									\$165.00
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.43	6 LBS	\$2.58						\$2.58
HERBICIDE	\$13.70	1 ACRE	\$13.70						\$13.70
BALING TWINE	\$25.00	0.13 ROLL	\$3.33						\$3.33
SUBTOTAL			\$19.61						\$19.61
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
CHISEL	185 HP	0.09 HR		\$0.68	\$1.21	\$0.43	\$2.69	\$5.01	
DISC	185 HP	0.07 HR		\$0.53	\$0.94	\$0.68	\$2.72	\$4.87	
DRILL	126 HP	0.12 HR		\$0.91	\$1.10	\$2.23	\$2.29	\$6.53	
SUBTOTAL		0.28 HR		\$2.11	\$3.26	\$3.33	\$7.70	\$16.41	
HARVEST OPERATIONS									
SWATHER	14 FT SP	0.16 HR		\$1.21	\$0.78	\$0.00	\$0.95	\$2.93	
BALER	126 HP	0.17 HR		\$1.28	\$1.56	\$1.42	\$1.58	\$5.85	
SUBTOTAL		0.33 HR	\$0.00	\$2.49	\$2.34	\$1.42	\$2.53	\$8.78	
OVERHEAD EXPENSES									
DOWNTIME		0.15 HR		\$1.15				\$1.15	
EMPLOYEE BENEFITS				\$0.83				\$0.83	
INSURANCE			\$0.09					\$0.09	
LAND TAXES							\$0.28	\$0.28	
SUPERVISION AND MANAGEMENT				\$11.86				\$11.86	
OTHER EXPENSES			\$32.17					\$32.17	
SUBTOTAL		0.15 HR	\$32.27	\$13.84			\$0.28	\$46.38	
TOTAL OPERATING EXPENSES		0.43 HR	\$51.88	\$18.44	\$5.60	\$4.75	\$10.51	\$91.18	
NET OPERATING PROFIT								\$73.82	
INTEREST ON OPERATING CAPITAL	(	\$11.77 @	8.00%	)				\$0.94
INTEREST ON EQUIPMENT INVESTMENT								\$6.35	
RETURN TO LAND AND RISK								\$66.53	

BUDGET SUMMARY

GROSS RETURN		\$165	
VARIABLE OPERATING EXPENSES	\$62.23		
RETURN OVER VARIABLE EXPENSES		\$102.77	(GROSS MARGIN)
FIXED EXPENSES	\$10.51		
NET FARM INCOME		\$92.26	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$18.44		
NET OPERATING PROFIT		\$73.82	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$7.29		
RETURN TO LAND AND RISK		\$66.53	

TABLE 10. Summary of per acre costs and returns for a 1,280 acre farm with above average management, Union County, 2002.

	ALFALFA ESTABLISHMENT -----SPRINKLER-----	ALFALFA HAY	WHEAT	CORN FOR GRAIN	GRAIN SORGHUM	HAYGRAZER & MILLET -DRYLAND-
	TONS	BU	BU	CWT	TONS	
PRIMARY YIELD	7.00	47.00	185.00	35.00	1.50	
PRIMARY PRICE	140.00	3.45	2.85	4.39	110.00	
GOVERNMENT PAYMENTS	0.00	41.60	56.00	21.88	0.00	
SECOND INCOME	0.00	40.00	20.00	5.00	0.00	
GROSS RETURN	\$980.00	\$243.75	\$603.25	\$180.53	\$165.00	
CASH OPERATING EXPENSES						
SEED	\$72.00		\$13.00	\$29.17	\$6.00	\$2.58
FERTILIZER		\$56.10	\$21.60	\$165.30	\$70.50	
CHEMICALS				\$67.80	\$22.60	\$13.70
CROP INSURANCE			\$0.12	\$0.39	\$0.39	
OTHER PURCHASED INPUTS		\$14.17				\$3.33
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$3.73	\$9.37	\$9.34	\$16.07	\$11.99	\$5.60
FUEL-IRRIGATION	\$7.73	\$103.06	\$29.01	\$89.65	\$31.64	
REPAIRS	\$6.51	\$34.97	\$18.40	\$42.25	\$19.80	\$4.75
CUSTOM CHARGES						\$0.00
LAND TAXES		\$0.28	\$0.28	\$0.28	\$0.28	\$0.28
OTHER EXPENSES	\$0.11	\$32.52	\$32.38	\$32.59	\$32.42	\$32.27
TOTAL CASH EXPENSES	\$90.07	\$250.46	\$124.13	\$443.51	\$195.63	\$62.51
RETURN OVER CASH EXPENSES	(\$90.07)	\$729.54	\$119.62	\$159.74	(\$15.10)	\$102.49
FIXED EXPENSES	\$18.99	\$72.19	\$47.32	\$106.35	\$69.50	\$10.23
TOTAL EXPENSES	\$109.06	\$322.65	\$171.45	\$549.86	\$265.13	\$72.74
NET FARM INCOME	(\$109.06)	\$657.35	\$72.30	\$53.39	(\$84.60)	\$92.26
LABOR AND MANAGEMENT COSTS	\$15.66	\$93.37	\$32.04	\$72.47	\$29.91	\$18.44
NET OPERATING PROFIT	(\$124.72)	\$563.98	\$40.27	(\$19.07)	(\$114.51)	\$73.82
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$5.56	\$2.37	\$13.24	\$5.13	\$0.94
INTEREST ON EQUIPMENT INVESTMENT		\$12.55	\$18.59	\$41.33	\$28.57	\$6.35
TOTAL CAPITAL COSTS	\$0.00	\$18.11	\$20.96	\$54.56	\$33.69	\$7.29
RETURN TO LAND AND RISK	(\$124.72)	\$545.86	\$19.31	(\$73.63)	(\$148.20)	\$66.53

TABLE 11. Whole farm summary, Union County, 2002.

GROSS RETURNS		
ALFALFA HAY	375 ACRES	
CROP		\$367,500
WHEAT	420 ACRES	
CROP		\$68,103
GRAZING		\$16,800
DIRECT PAYMENT		\$13,260
COUNTER CYCLICAL PAYMENT		\$0
CORN FOR GRAIN	128 ACRES	
CROP		\$67,224
GRAZING		\$2,550
DIRECT PAYMENT		\$7,140
COUNTER CYCLICAL PAYMENT		\$0
GRAIN SORGHUM	127.5 ACRES	
CROP		\$19,590
GRAZING		\$638
DIRECT PAYMENT		\$2,789
COUNTER CYCLICAL PAYMENT		\$0
HAYGRAZER/MILLET	190 ACRES	
CROP		\$31,350
GROSS RETURN		<u>\$596,944</u>
CASH OPERATING EXPENSES		
SEED		\$14,394
FERTILIZER		\$60,174
CHEMICALS		\$14,129
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$5,946
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$12,283
FUEL-IRRIGATION		\$66,719
REPAIRS		\$30,015
CUSTOM CHARGES		\$0
LAND TAXES		\$345
OTHER EXPENSES		\$40,222
TOTAL CASH EXPENSES		<u>\$244,377</u>
RETURN OVER CASH EXPENSES		\$352,567
FIXED EXPENSES		\$65,671
TOTAL EXPENSES		\$310,048
NET FARM INCOME		\$286,897
LABOR AND MANAGEMENT COSTS		\$65,888
NET OPERATING PROFIT		\$221,009
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$5,601
INTEREST ON EQUIPMENT INVESTMENT		\$22,635
TOTAL CAPITAL COSTS		<u>\$28,236</u>
RETURN TO LAND AND RISK		<u>\$192,773</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	\$167,173	21.20%
\$750 /ACRE	\$154,373	16.22%
\$1,000 /ACRE	\$141,573	13.14%
\$1,250 /ACRE	\$128,773	11.04%
\$1,500 /ACRE	\$115,973	9.52%

* 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)