

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 480 acre farm with above average management, Lea County, Actual 2018
Planting dates: August 15 - September 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
PURCHASED INPUTS									
SEED	\$2.95	30 LBS	\$88.50						\$88.50
NITROGEN (N)	\$0.42	55 LBS	\$23.10						\$23.10
PHOSPHATE (P205)	\$0.49	140 LBS	\$68.60						\$68.60
PUMP WATER		6 AC. IN.							
SUBTOTAL			\$180.20						\$180.20
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	155 HP	0.48 HR		\$4.10	\$13.13	\$4.95	\$9.91	\$32.09	
DISC (2X)	155 HP	0.28 HR		\$2.39	\$7.66	\$2.54	\$5.33	\$17.92	
FLOAT	155 HP	0.19 HR		\$1.62	\$5.20	\$1.02	\$5.29	\$13.13	
FERT SPREADER	126 HP	0.05 HR		\$0.43	\$1.26	\$0.20	\$0.44	\$2.32	
DRILL	126 HP	0.18 HR		\$1.54	\$4.53	\$0.90	\$5.14	\$12.11	
IRRIGATE (3X)		0.30 HR		\$2.25	\$9.67	\$0.72	\$5.52	\$18.16	
SUBTOTAL		1.48 HR		\$12.34	\$41.44	\$10.33	\$31.63	\$95.73	
OVERHEAD EXPENSES									
DOWNTIME		0.30 HR		\$2.52					\$2.52
EMPLOYEE BENEFITS				\$2.22					\$2.22
INSURANCE			\$0.25					\$0.25	
SUPERVISION AND MANAGEMENT				\$20.21					\$20.21
SUBTOTAL		0.30 HR	\$0.25	\$24.95					\$25.20
TOTAL OPERATING EXPENSES		1.78 HR	\$180.45	\$37.29	\$41.44	\$10.33	\$31.63	\$301.13	

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 480 acre farm with above average management, Lea County, Actual 2018
Harvest dates: May 20 - October 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$230.00	6.00 TONS (STACKED)	\$1,380.00
TOTAL			\$1,380.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.49	90 LBS	\$44.10		\$44.10
INSECTICIDE (CUSTOM)	\$14.08	1 ACRE	\$14.08		\$14.08
HERBICIDE	\$12.80	1 ACRE	\$12.80		\$12.80
WIRE	\$0.37	51 LBS	\$19.10		\$19.10
ESTABLISHMENT: Principal		6 YEARS		\$50.19	\$50.19
Interest				\$9.46	\$9.46
PUMP WATER*		42 AC. IN.			
SUBTOTAL			\$90.08	\$59.65	\$149.73

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERT SPREADER	126 HP	0.05 HR		\$0.43	\$1.26	\$0.20	\$0.44	\$2.32
IRRIGATE		1.40 HR		\$10.50	\$67.69	\$5.07	\$38.65	\$121.90
SUBTOTAL		1.45 HR		\$10.93	\$68.94	\$5.27	\$39.09	\$124.23

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (5X)	16 FT SP	0.55 HR	\$4.70	\$6.28	\$0.76	\$30.59	\$42.33
BALER & ACCUM (5X)	155 HP	1.25 HR	\$10.69	\$34.18	\$6.88	\$20.09	\$71.84
FRONT END LOADER (5X)	126 HP	1.25 HR	\$10.69	\$31.45	\$8.90	\$13.19	\$64.23
SUBTOTAL		3.05 HR	\$26.08	\$71.92	\$16.53	\$63.88	\$178.41

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	LABOR	FIXED COST	TOTAL
DOWNTIME	0.78 HR	\$6.63		\$6.63
EMPLOYEE BENEFITS		\$6.66		\$6.66
INSURANCE		\$0.74		\$0.74
LAND TAXES			\$1.01	\$1.01
SUPERVISION AND MANAGEMENT		\$99.55		\$99.55
OTHER EXPENSES		\$84.70		\$84.70
SUBTOTAL	0.78 HR	\$85.44	\$112.84	\$199.28

TOTAL OPERATING EXPENSES	5.28 HR	\$175.52	\$149.84	\$140.86	\$21.80	\$163.62	\$651.64
NET OPERATING PROFIT							\$728.36
INTEREST ON OPERATING CAPITAL	(\$70.96 @ 5.75%)						\$4.08
INTEREST ON EQUIPMENT INVESTMENT							\$20.62
RETURN TO LAND AND RISK							\$703.66

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

BUDGET SUMMARY			
GROSS RETURN		\$1,380.00	
VARIABLE OPERATING EXPENSES	\$338.18		
RETURN OVER VARIABLE EXPENSES	\$1,041.82		(GROSS MARGIN)
FIXED EXPENSES	\$163.62		
NET FARM INCOME	\$878.20		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$149.84		
NET OPERATING PROFIT	\$728.36		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$24.70		
RETURN TO LAND AND RISK		\$703.66	

TABLE 8. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 480 acre farm with above average management, Lea County, Actual 2018
 Planting dates: August 15 - October 30
 Harvest dates: June 20 - July 5

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$4.75	63.00 BUSHELS		\$299.25
DIRECT PAYMENT	\$0.00	63.00 BUSHELS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$50.00	1.00 ACRE		\$50.00
TOTAL				\$349.25

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	0.37	90 LBS	\$33.30		\$33.30
PHOSPHATE (P205)	0.49	70 LBS	\$34.30		\$34.30
ANHYDROUS AMMONIA (NH3)	0.15	200 LBS	\$30.00		\$30.00
PUMP WATER*		20 ACRE IN.			
CROP INSURANCE	0.47		\$0.47		\$0.47
SUBTOTAL			\$98.07		\$98.07

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	155 HP	0.15 HR		\$1.28	\$4.10	\$1.05	\$3.84	\$10.27
DISC	155 HP	0.14 HR		\$1.20	\$3.83	\$1.27	\$2.67	\$8.96
ANNHYDROUS APPL	155 HP	0.17 HR		\$1.45	\$4.65	\$1.03	\$4.31	\$11.44
FERT SPREADER	126 HP	0.05 HR		\$0.43	\$1.26	\$0.20	\$0.44	\$2.32
DISC	155 HP	0.14 HR		\$1.20	\$3.83	\$1.27	\$2.67	\$8.96
DRILL	126 HP	0.18 HR		\$1.54	\$4.53	\$0.90	\$5.14	\$12.11
IRRIGATE (12X)		1.20 HR		\$9.00	\$32.23	\$2.41	\$18.41	\$62.05
SUBTOTAL		2.03 HR		\$16.10	\$54.43	\$8.13	\$37.46	\$116.12

HARVEST OPERATIONS

COMBINE (CUSTOM)			\$15.52					\$15.52
HAUL (CUSTOM)			\$10.08					\$10.08
SUBTOTAL			\$25.60					\$25.60

OVERHEAD EXPENSES

DOWNTIME		0.21 HR		\$1.77				\$1.77
EMPLOYEE BENEFITS				\$2.90				\$2.90
INSURANCE			\$0.32					\$0.32
LAND TAXES							\$1.01	\$1.01
SUPERVISION AND MANAGEMENT				\$26.06				\$26.06
OTHER EXPENSES			\$84.70					\$84.70
SUBTOTAL		0.21 HR		\$85.02	\$30.73		\$1.01	\$116.76

TOTAL OPERATING EXPENSES

2.24 HR \$208.69 \$46.83 \$54.43 \$8.13 \$38.47 \$356.55

NET OPERATING PROFIT

(\$7.30)

INTEREST ON OPERATING CAPITAL	(\$66.81	@	5.75%)			\$3.84
INTEREST ON EQUIPMENT INVESTMENT								\$5.69

RETURN TO LAND AND RISK

(\$16.83)

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

BUDGET SUMMARY

GROSS RETURN		\$349.25		
VARIABLE OPERATING EXPENSES	\$271.25			
RETURN OVER VARIABLE EXPENSES		\$78.00	(GROSS MARGIN)	
FIXED EXPENSES	\$38.47			
NET FARM INCOME		\$39.53	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$46.83			
NET OPERATING PROFIT		(\$7.30)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$9.54			
RETURN TO LAND AND RISK		(\$16.83)		

TABLE 9. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 480 acre farm with above average management, Lea County, Actual 2018
 Planting dates: May 1 - May 25
 Harvest dates: November 1 - December 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
LINT	\$0.67	773.00 LBS		\$517.91
SEED	\$0.08	1,236.80 LBS		\$103.89
DIRECT PAYMENT	\$0.0000	773.00 LBS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.1373	675.00 LBS	0.85	\$78.78
TOTAL				\$700.58

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$8.45	20 LBS	\$169.00		\$169.00
NITROGEN (N)	\$0.42	32 LBS	\$13.44		\$13.44
PHOSPHATE (P2O5)	\$0.49	40 LBS	\$19.60		\$19.60
INSECTICIDE	\$11.20	1 X/ACRE	\$11.20		\$11.20
HERBICIDE	\$8.00	1 X/ACRE	\$8.00		\$8.00
INSECTICIDE (CUSTOM)	\$11.07	1 X/ACRE	\$11.07		\$11.07
CROP INSURANCE			\$0.35		\$0.35
PUMP WATER*		20 ACRE IN.			
SUBTOTAL			\$232.66		\$232.66

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	155 HP	0.48 HR		\$4.10	\$13.13	\$4.95	\$9.91	\$32.09
DISC	155 HP	0.14 HR		\$1.20	\$3.83	\$1.27	\$2.67	\$8.96
FERT SPREADER	126 HP	0.05 HR		\$0.43	\$1.26	\$0.20	\$0.44	\$2.32
DISC	155 HP	0.14 HR		\$1.20	\$3.83	\$1.27	\$2.67	\$8.96
PRE-IRRIGATE		0.10 HR		\$0.75	\$4.03	\$0.30	\$2.30	\$7.38
PLANTER	155 HP	0.17 HR		\$1.45	\$4.65	\$1.26	\$8.51	\$15.87
CULTIVATOR (3X)	126 HP	0.39 HR		\$3.33	\$9.81	\$2.99	\$6.42	\$22.57
HOE (CUSTOM 2X)			\$20.00					\$20.00
IRRIGATE (7X)		0.70 HR		\$5.25	\$28.20	\$2.11	\$16.10	\$51.67
SUBTOTAL		2.17 HR	\$20.00	\$17.71	\$68.73	\$14.35	\$49.02	\$169.82

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COTTON STRIPPER	126 HP	0.62 HR		\$5.30	\$15.60	\$3.03	\$11.20	\$35.12
MODULE BUILDER	155 HP	0.62 HR		\$5.30	\$16.96	\$7.93	\$16.31	\$46.50
GIN COTTON (CUSTOM)			\$145.48					\$145.48
SUBTOTAL		1.24 HR	\$145.48	\$10.60	\$32.55	\$10.95	\$27.51	\$227.10

POSTHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SHREDDER	155 HP	0.14 HR		\$1.20	\$3.83	\$0.80	\$4.38	\$10.21

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.68 HR		\$5.77				\$5.77
EMPLOYEE BENEFITS			\$5.31				\$5.31
INSURANCE		\$0.59					\$0.59
LAND TAXES						\$1.01	\$1.01
SUPERVISION AND MANAGEMENT			\$51.19				\$51.19
OTHER EXPENSES		\$84.70					\$84.70
SUBTOTAL	0.68 HR	\$85.29	\$62.27			\$1.01	\$148.57

TOTAL OPERATING EXPENSES	4.23 HR	\$483.43	\$91.79	\$105.12	\$26.11	\$81.92	\$788.35
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NET OPERATING PROFIT							(\$87.78)
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INTEREST ON OPERATING CAPITAL	(\$154.01	@	5.75%)		\$8.86
INTEREST ON EQUIPMENT INVESTMENT							\$15.42

RETURN TO LAND AND RISK							(\$112.05)
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$700.58	
VARIABLE OPERATING EXPENSES	\$614.65		
RETURN OVER VARIABLE EXPENSES		\$85.93	(GROSS MARGIN)
FIXED EXPENSES	\$81.92		
NET FARM INCOME		\$4.01	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$91.79		
NET OPERATING PROFIT		(\$87.78)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$24.28		
RETURN TO LAND AND RISK		(\$112.05)	

TABLE 10. Summary of per acre costs and returns for a 480 acre farm with above average management, Lea County, Actual 2018

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT	STRIPPER COTTON
		TONS	BU	LBS
PRIMARY YIELD		6.00	63.00	773.00
PRIMARY PRICE		\$230.00	\$4.75	\$0.67
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$78.78
SECOND INCOME		\$0.00	\$50.00	\$103.89
GROSS RETURN		\$1,380.00	\$349.25	\$700.58
CASH OPERATING EXPENSES				
SEED	\$88.50		\$33.30	\$169.00
FERTILIZER	\$91.70	\$44.10	\$64.30	\$33.04
CHEMICALS		\$26.88		\$30.27
CROP INSURANCE			\$0.47	\$0.35
OTHER PURCHASED INPUTS		\$19.10		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$31.77	\$73.17	\$22.20	\$72.89
FUEL-IRRIGATION	\$9.67	\$67.69	\$32.23	\$32.23
REPAIRS	\$10.33	\$21.80	\$8.13	\$26.11
CUSTOM CHARGES			\$25.60	\$165.48
LAND TAXES		\$1.01	\$1.01	\$1.01
OTHER EXPENSES	\$0.25	\$85.44	\$85.02	\$85.29
TOTAL CASH EXPENSES	\$232.21	\$339.18	\$272.25	\$615.66
RETURN OVER CASH EXPENSES	(\$232.21)	\$1,040.82	\$77.00	\$84.92
FIXED EXPENSES	\$31.63	\$162.61	\$37.46	\$80.91
TOTAL EXPENSES	\$263.84	\$501.80	\$309.72	\$696.57
RETURNS TO CAPITAL, LABOR, LAND & RISK	(\$263.84)	\$878.20	\$39.53	\$4.01
LABOR AND MANAGEMENT COSTS	\$37.29	\$149.84	\$46.83	\$91.79
RETURNS TO CAPITAL, LAND & RISK	(\$301.13)	\$728.36	(\$7.30)	(\$87.78)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$4.08	\$3.84	\$8.86
INTEREST ON EQUIPMENT INVESTMENT		\$20.62	\$5.69	\$15.42
TOTAL CAPITAL COSTS	\$0.00	\$24.70	\$9.54	\$24.28
RETURN TO LAND AND RISK	(\$301.13)	\$703.66	(\$16.83)	(\$112.05)

TABLE 11. Whole farm summary, Lea County,
Actual 2018

GROSS RETURNS		
ALFALFA HAY	125.00 ACRES	
CROP		\$172,500
WHEAT	106.25 ACRES	
CROP		\$31,795
GRAZING		\$5,313
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
COTTON	143.75 ACRES	
LINT		\$74,450
SEED		\$14,934
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$11,324
GROSS RETURN		<u>\$310,316</u>
CASH OPERATING EXPENSES		
SEED		\$29,690
FERTILIZER		\$19,020
CHEMICALS		\$7,712
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$2,388
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$22,650
FUEL-IRRIGATION		\$16,721
REPAIRS		\$7,559
CUSTOM CHARGES		\$26,508
LAND TAXES		\$377
OTHER EXPENSES		\$31,978
TOTAL CASH EXPENSES		<u>\$164,702</u>
RETURN OVER CASH EXPENSES		\$145,614
FIXED EXPENSES		\$30,328
TOTAL EXPENSES		\$195,031
NET FARM INCOME		\$115,285
LABOR AND MANAGEMENT COSTS		\$37,683
NET OPERATING PROFIT		\$77,602
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,191
INTEREST ON EQUIPMENT INVESTMENT		\$5,399
TOTAL CAPITAL COSTS		<u>\$7,590</u>
RETURN TO LAND AND RISK		<u>\$70,012</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	\$62,812	16.77%
\$700 /ACRE	\$59,932	13.89%
\$900 /ACRE	\$57,052	11.85%
\$1,100 /ACRE	\$54,172	10.34%
\$1,300 /ACRE	\$51,292	9.16%
\$1,500 /ACRE	\$48,412	8.23%

* 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)