

**Table 7A. Income and Cash Operating Summary; Upland Cotton, 1998**

COUNTY: Greenlee      FARM: Greenlee County 98      WATER SOURCE: Duncan East, Nat Gas      TILLAGE: Conventional  
 CROP: Cotton, Upland      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Duncan Valley      YIELD: 843.0 Lb / Acre      PREVIOUS CROP: Wheat, Winter      DATE: 2/4/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME	Lint	Pound	843.00	\$0.68	\$573.24	\$673.44
	Cottonseed	Ton	0.75	\$133.60	\$100.20	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					93.73	
	Tractor/Self Propelled			51.00		
	Hand			27.30		
	Irrigation			15.43		
Chemicals and Custom Applications					197.09	
	Fertilizer			139.98		
	Insecticide			17.67		
	Herbicide			3.95		
	Other Chemicals			35.49		
Farm Machinery and Vehicles					47.99	
	Diesel Fuel			18.98		
	Repairs and Maintenance			29.02		
Irrigation Water (excluding labor)					48.39	
	Natural Gas/Pumping			42.81		
	Repairs and Maintenance			5.57		
Other Purchased Inputs & Seed/Transplants					19.72	
	Other Services and Rentals			13.71		
				6.00		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					406.91	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					23.47	
	Tractor/Self Propelled			10.92		
	Other/Contract			12.56		
Chemicals and Custom Applications					9.02	
	Other Chemicals			9.02		
Farm Machinery and Vehicles					69.13	
	Diesel Fuel			10.31		
	Repairs and Maintenance			58.82		
Custom Harvest/Post Harvest					7.89	
	Cotton Ginning			73.14		
	Crop Assessment			4.72		
	Other Materials			0.01		
TOTAL HARVEST AND POST HARVEST EXPENSE					187.39	
OPERATING OVERHEAD PICKUP USE					15.14	
OPERATING INTEREST AT 10.0%					26.52	
TOTAL CASH OPERATING EXPENSES					\$635.95	
RETURNS OVER CASH OPERATING EXPENSES					\$37.49	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 7B. Allocations of Ownership Costs; Upland Cotton, 1998**

COUNTY: Greenlee      FARM: Greenlee County 98      WATER SOURCE: Duncan East, Nat Gas      TILLAGE: Conventional  
 CROP: Cotton, Upland      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Duncan Valley      YIELD: 843.0 Lb / Acre      PREVIOUS CROP: Wheat, Winter      DATE: 2/4/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.68 / Lb	\$673.44		\$673.44	
TOTAL OPERATING EXPENSES	\$635.95		\$635.95	
RETURN OVER CASH OPERATING EXPENSES		\$37.49		\$37.49
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	12.18		12.18	
Wells and Irrigation System	3.31		3.31	
General and Office Overhead (5.0% of Total Operating Exp.)	31.80		31.80	
General Farm Maintenance (3.0% of Total Operating Exp.)	19.08		19.08	
Total Cash Overhead Expenses	66.36		66.36	
Total Cash Operating and Overhead Cost	702.31		702.31	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$28.87)		(\$28.87)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			85.28	
Wells and Irrigation System			33.99	
Interest on Equity, Machinery and Vehicles			39.36	
Wells and Irrigation System			8.73	
Total Capital Allocations			167.36	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$28.87)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$196.23)
Land Cost / Ownership (100% Equity)				
Property Taxes (\$400.00 X 16.0% X 0.084)	5.44		5.44	
Opportunity Interest on Land (100% X 6.0 X \$400.00)			24.00	
Total Land Costs	5.44		29.44	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$34.31)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$225.67)
Management Services (8% of Total Operation Expenses)			50.88	
TOTAL OWNERSHIP COST	71.80		314.03	
TOTAL COST	\$707.75		\$949.98	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$34.31)		
RETURNS TO RISK (PROFITS) ----->				(\$276.54)
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$0.64		\$0.64
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.09		\$0.37
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.72		\$1.01

**Table 7C. Variable Operating Costs; Upland Cotton, 1998**

COUNTY: Greenlee FARM: Greenlee County 98 WATER SOURCE: Duncan East, Nat Gas TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Duncan Valley YIELD: 843.0 Lb / Acre PREVIOUS CROP: Wheat, Winter DATE: 2/4/99

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jan	Disk	0.180	0.200	1.76	1.64			3.40	2.0	6.80	L
2	Jan	Plow	0.600	0.667	5.99	5.46			11.45	0.5	5.72	L
3	Jan	Rip	0.600	0.667	5.02	5.46			10.48	0.5	5.24	L
4	Feb	Laser Level	0.900	1.000	7.02	8.19			15.21	0.3	4.56	L
5	Feb	Landplane	0.450	0.500	3.82	4.09			7.92	0.7	5.54	L
6	Feb	Apply Fert/Ground	0.150	0.167	1.90	1.37		31.74	35.00	1.0	35.00	G
7	Mar	Apply Herb. & Incorporate	0.150	0.167	1.61	1.37		3.95	6.92	1.0	6.92	G
8	Mar	List	0.180	0.200	1.54	1.64			3.17	1.0	3.17	L
9	Mar	Buck Rows	0.030	0.033	0.22	0.27			0.49	3.0	1.47	G
10	Mar	Preirrigate		0.630	12.10	5.16			17.26	1.0	17.26	G
11	Apr	Disk Ends	0.030	0.033	0.29	0.27			0.56	4.0	2.25	G
12	Apr	Mulch	0.300	0.333	3.01	2.73			5.74	1.0	5.74	L
13	Apr	Plant	0.225	0.250	2.87	2.05		13.71	18.63	1.0	18.63	L
14	Apr	Remove Cap	0.150	0.167	1.06	1.37			2.43	1.0	2.43	G
15	May	Cultivate	0.450	0.500	4.01	4.09			8.11	1.0	8.11	G
16	May	Irrigate		0.314	6.05	2.57			8.62	6.0	51.72	G
17	Jun	Hand Weeding		1.667		13.65			13.65	2.0	27.30	G
18	Jun	Apply Fert/Ground	0.150	0.167	1.35	1.37		42.09	44.81	1.0	44.81	G
19	Jun	Cultivate	0.300	0.333	2.67	2.73			5.40	1.0	5.40	G
20	Jun	Apply Fert/Inject	0.300	0.333	3.29	2.73		33.07	39.09	2.0	78.18	G
21	Jun	Field Scouting					6.00		6.00	1.0	6.00	G
22	Jun	Cultivate	0.225	0.250	2.01	2.05			4.05	2.0	8.11	G
23	Jul	Apply Insecticide/Air					4.23	27.65	31.88	1.0	31.88	G
24	Sep	Apply Growth Regulator					4.75	16.53	21.28	1.0	21.28	G
25	Oct	Apply Defoliant/Air					4.75	4.27	9.02	1.0	9.02	H
26	Oct	Cotton, First Pick	0.900	1.000	36.55	8.19			44.74	1.0	44.74	H
27	Oct	Cotton, Make Modules	0.450	0.500	6.12	4.09			10.21	1.0	10.21	H
28	Oct	Haul, Custom .2 Mu					5.79	0.01	5.79	1.0	5.79	H
29	Oct	Cotton Ginning 24.8 Cs					73.14		73.14	1.0	73.14	P
30	Nov	Cotton, Second Pick 24.8	0.600	0.667	24.37	5.46			29.83	0.8	23.86	H
31	Dec	Cotton, Rood 24.8 Cs	0.300	0.333	3.37	2.73			6.10	1.0	6.10	H
32	Dec	Cotton Classing 1.7 Ba					2.11		2.11	1.0	2.11	M
33	Dec	Crop Assessment 1.7 Ba					4.72		4.72	1.0	4.72	M
34	Jan	Cut Stalks 1.7 Ba	0.450	0.500	3.60	4.09			7.69	1.0	7.69	P
35	Jan	Disk Residue 1.7 Ba	0.180	0.200	1.76	1.64			3.40	1.0	3.40	L
		Pickup Use60 Mi/Acre	2.000		15.14						15.14	
		Operating Interest at 10.0					26.52				26.52	
=====												
TOTAL CASH OPERATING EXPENSES (includes all times over):												
635.95 T												

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

**Table 7C. Variable Operating Costs; Upland Cotton, 1998**

COUNTY: Greenlee      FARM: Greenlee County 98      WATER SOURCE: Duncan East, Nat Gas      TILLAGE: Conventional  
 CROP: Cotton, Upland      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Duncan Valley      YIELD: 843.0 Lb / Acre      PREVIOUS CROP: Wheat, Winter      DATE: 2/4/99

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price	
Land Preparation (L)	58.81	Yields	\$0.51	\$0.61	\$0.68	\$0.75	\$0.85		
Growing (G)	348.10	- 25%	632.3	-265.06	-200.57	-157.58	-114.59	-50.10	0.93
Harvest (H)	99.72	- 10%	758.7	-228.68	-151.29	-99.70	-48.11	29.28	0.81
Post Harvest (P)	80.84	Budgeted	843.0	-204.43	-118.44	-61.12	-3.79	82.19	0.75
Marketing (M)	6.83	+ 10%	927.3	-180.17	-85.59	-22.53	40.53	135.11	0.70
Operating Overhead (O)	41.66	+ 25%	1,053.8	-143.79	-36.31	35.35	107.00	214.49	0.65
Total (T)	=====	Break-even Yield		1,553.51	1,146.91	976.52	850.21	712.06	
	\$635.95								

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**Table 7D. Resource and Cash Flow Requirements; Upland Cotton, 1998**

COUNTY: Greenlee FARM: Greenlee County 98 WATER SOURCE: Duncan East, Nat Gas TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Duncan Valley YIELD: 843.0 Lb / Acre PREVIOUS CROP: Wheat, Winter DATE: 2/4/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
JAN C			1.07		9.02	8.74					17.76
FEB C			0.82		6.68	6.69	31.74				45.11
MAR C	1.0	12.0	1.03		15.46	8.43	3.95				27.84
APR C			0.78		7.23	6.41		13.71			27.36
MAY C	1.0	6.0	0.81		10.06	6.67					16.72
JUN C	1.0	6.0	1.46		15.87	11.98	75.17			6.00	109.02
JUL C	2.0	12.0	2.94		17.90	24.11	60.72			4.23	106.96
AUG C	2.0	12.0	2.30		12.10	18.79					30.89
SEP C							16.53			4.75	21.28
OCT C			0.83		17.37	6.82	4.27	0.00		20.54	49.00
NOV C			1.03		37.77	8.46		0.00		55.25	101.48
DEC C			0.53		10.68	4.37		0.00		14.72	29.77
JAN N			0.70		5.36	5.73					11.09
Pickup Use60 Mi/Acre					15.14						15.14
Operating Interest at 10.0										26.52	26.52
<b>Total</b>	<b>7.0</b>	<b>48.0</b>	<b>14.31</b>		<b>180.65</b>	<b>117.20</b>	<b>192.38</b>	<b>13.72</b>		<b>132.01</b>	<b>635.95</b>
<b>%</b>					<b>28.41</b>	<b>18.43</b>	<b>30.25</b>	<b>2.16</b>		<b>20.76</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS ( per Acre)**

Total N 215.8  
 Total P 89.6  
 Total K 0.0  
 Total Labor 14.3  
 Total Water 48.0

**TOTAL ENERGY REQUIREMENTS ( per Acre)**

Diesel Fuel 38.4 Gal  
 Unleaded Gas 6.0 Gal  
 Nat Gas/Pumping 103.7 Therms  
 All Direct Energy 16.5 M BTU

**EQUIPMENT REQUIREMENTS ( per Acre)**

Cotton Picker, 2 Row	1.38 Hr	Directed Spray Rig, 16	0.15 Hr	Drag Scraper, 10'	0.27 Hr
Fertilizer Injector, 4 Row	0.60 Hr	Fertilizer Spreader, 28'	0.15 Hr	Landplane 12'X 45'	0.31 Hr
Module Builder	0.45 Hr	Laser, Complete System	0.27 Hr	Lister, 5 Bottom	0.18 Hr
V-Ripper, 5 Shnk	0.30 Hr	Moldboard Plow, 3-16 2	0.30 Hr	Offset Disk, 12'	0.66 Hr
Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Drill Type, 4 Row	0.22 Hr	Power Mulcher, 4 Rw	0.30 Hr
Rood, 3 Row W/Basket	0.30 Hr	Rotary Stalk Cutter, 2 Row	0.45 Hr	Rowbuck, 10'	0.09 Hr
Saddle Tk Sprayer, 2 Tk 8	0.15 Hr	Section Harrow, 3 Section	0.15 Hr	Sled Cultivator, 4Rw	1.20 Hr
Tandem Disk, 12'	0.15 Hr	Tractor, 100 PTO HP,	6.24 Hr		

**MATERIALS REQUIREMENT ( per Acre)**

16-20-00, Dry	250.00 Lb	18-06-00, Lqd	60.00 Ga	20-0-0-40, Nitro-Sul	30.00 Ga
Chlorpyrifos	2.00 Pt	Ethephon	1.00 Qt	Mepiquat Chloride	1.00 Pt
Module Tarps	0.10 C	Paraquat	0.25 Pt	Sodium Chlorate	2.00 Ga
Trifluralin	1.20 Pt	Upland Cotton Sd+Fung	20.00 Lb	Water, Pump	48.00 Al

**LABOR REQUIREMENT ( per Acre)**

Hand Weeders	3.33 Hr	Harvest	1.53 Hr	Irrigators	1.88 Hr
Tractor	7.56 Hr				

\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 7E. Schedule of Operations; Upland Cotton, 1998**

COUNTY: Greenlee FARM: Greenlee County 98 WATER SOURCE: Duncan East, Nat Gas TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Duncan Valley YIELD: 843.0 Lb / Acre PREVIOUS CROP: Wheat, Winter DATE: 2/4/99

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use and Cost			Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit		
1	Jan	2.0	Disk	100	Offset Disk, 12'	5.00					Tractor
2	Jan	0.5	Plow	100	Moldboard Plow, 3-16 2	1.50					Tractor
3	Jan	0.5	Rip	100	V-Ripper, 5 Shnk	1.50					Tractor
4	Feb	0.3	Laser Level	100	Drag Scraper, 10' Laser, Complete System	1.00					Tractor
5	Feb	0.7	Landplane	100	Landplane 12'X 45'	2.00					Tractor
6	Feb	1.0	Apply Fert/Ground	100	Fertilizer Spreader, 28'	6.00	16-20-00, Dry	250.00 Lb	240.67 Tn		Tractor
7	Mar	1.0	Apply Herb. &	100	Saddle Tk Sprayer, 2 Tk 8 Tandem Disk, 12'	6.00	Trifluralin	1.20 Pt	24.95 Ga		Tractor
8	Mar	1.0	List	100	Lister, 5 Bottom	5.00					Tractor
9	Mar	3.0	Buck Rows	100	Rowbuck, 10'	30.00					Tractor
10	Mar	1.0	Preirrigate			1.59	Water, Pump	12.00 Al	12.10 AF		Tractor
11	Apr	4.0	Disk Ends	100	Offset Disk, 12'	30.00					Tractor
12	Apr	1.0	Mulch	100	Power Mulcher, 4 Rw	3.00					Tractor
13	Apr	1.0	Plant	100	Planter, Drill Type, 4 Row	4.00	Upland Cotton Sd+Fung	20.00 Lb	0.65 Lb		Tractor
14	Apr	1.0	Remove Cap	100	Section Harrow, 3 Section	6.00					Tractor
15	May	1.0	Cultivate	100	Sled Cultivator, 4Rw	2.00					Tractor
16	May	6.0	Irrigate			3.18	Water, Pump	6.00 Al	12.10 AF		Irrigators
17	Jun	2.0	Hand Weeding			0.60					Hand
18	Jun	1.0	Apply Fert/Ground	100	Directed Spray Rig, 16	6.00	20-0-0-40, Nitro-Sul	30.00 Ga	280.00 Tn		Tractor
19	Jun	1.0	Cultivate	100	Sled Cultivator, 4Rw	3.00					Tractor
20	Jun	2.0	Apply Fert/Inject	100	Fertilizer Injector, 4 Row	3.00	18-06-00, Lqd	30.00 Ga	190.00 Tn		Tractor
21	Jun	1.0	Field Scouting		CST Scout For Insects					6.00 Ac	
22	Jun	2.0	Cultivate	100	Sled Cultivator, 4Rw	4.00					Tractor
23	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Chlorpyrifos	2.00 Pt	50.95 Ga	4.23 Ac	
							Mepiquat Chloride	1.00 Pt	107.75 Ga		
24	Sep	1.0	Apply Growth Regulator		CST Air Spray, 5 Gal Mix		Ethephon	1.00 Qt	62.67 Ga	4.75 Ac	
25	Oct	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mix		Sodium Chlorate	2.00 Ga	1.40 Ga	4.75 Ac	
							Paraquat	0.25 Pt	40.00 Ga		
26	Oct	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.00					Harvest
27	Oct	1.0	Cotton, Make Modules		100 Module Builder	2.00					Tractor
28	Oct	1.0	Haul, Custom		CST Haul Cotton Modules		Module Tarps	0.10 C	0.05 CW	35.00 Mu	
29	Oct	1.0	Cotton Ginning		CST Gin Upland Cotton					2.95 Cs	
30	Nov	0.8	Cotton, Second Pick		Cotton Picker, 2 Row	1.50					Harvest
31	Dec	1.0	Cotton, Rood		100 Rood, 3 Row W/Basket	3.00					Tractor
32	Dec	1.0	Cotton Classing		CST Class Cotton, HVI					1.25 Ba	
33	Dec	1.0	Crop Assessment		CST Upland (High Elev)					2.80 Ba	
34	Jan	1.0	Cut Stalks		100 Rotary Stalk Cutter, 2 Row	2.00					Tractor
35	Jan	1.0	Disk Residue		100 Offset Disk, 12'	5.00					Tractor
			Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50					

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.