

Table 11A. Income and Cash Operating Cost Summary, Alfalfa Hay (Pivot), 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: StewNG TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Center Pivot w/ SOIL: Sandy
 AREA: Stewart YIELD: 8.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Alfalfa	Ton	8.00	\$82.0000	\$656.00	\$656.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					2.24	_____
Irrigation				2.24		_____
Farm Machinery and Vehicles					0.00	_____
Irrigation (excluding labor)					214.07	_____
Pump Energy - Elect.				41.65		_____
Natural Gas/Pumping				133.43		_____
Repairs & Maint.				38.99		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					216.31	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					22.39	_____
Tractor/Self Propelled				13.04		_____
Other/Contract				9.36		_____
Farm Machinery and Vehicles					33.49	_____
Diesel Fuel				10.72		_____
Repairs & Maint.				22.77		_____
Other Materials					16.90	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					72.78	_____
OPERATING OVERHEAD->PICKUP USE					10.57	_____
OPERATING INTEREST AT 8.0%					0.00	_____
TOTAL CASH OPERATING EXPENSES					\$299.67	=====
RETURNS OVER CASH OPERATING EXPENSES					\$356.33	=====

Notes: The above figures do not include ownership costs, see Table 11B on Next Page for detailed cost allocation.

Table 11B. Allocation of Ownership Costs; Alfalfa Hay (Pivot), 1996

COUNTY: Cochise	FARM: Cochise County Farm	WATER SOURCE: StewNG	TILLAGE: Conventional
CROP: Alfalfa Hay w/Graze	ACRES: 1.0	IRRIGATION SYSTEM: Center Pivot w/	SOIL: Sandy
AREA: Stewart	YIELD: 8.0 Tn/Acre	PREVIOUS CROP: Alfalfa Hay	DATE: 09/23/96

Item	- CASH COST BASIS (\$/ACRE) - Income & Costs	- TOTAL COST BASIS (\$/ACRE) - Income & Costs	Net Returns	Net Returns
TOTAL INCOME at \$ 82.0000/Tn	\$656.00	\$656.00		
TOTAL OPERATING EXPENSES	299.66	299.66		
RETURN OVER CASH OPERATING EXPENSES			\$356.33	\$356.33
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	5.04	5.04		
Wells & Irrig. System	18.90	18.90		
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	14.98	14.98		
General Farm Maint. (3% of Tot. Oper. Exp.)	8.99	8.99		
Total Cash Overhead Expenses	47.91	47.91		
Total Cash Oper. & Over. Cost	347.58	347.58		
RETURNS OVER CASH OPER. & OVER. EXPENSES.			308.41	308.41
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles		32.92		
Wells & Irrig. System		72.40		
Interest on Equity, Machinery & Vehicles		3.02		
Wells & Irrig. System		55.64		
Stand Establishment (3 Year Crop)	84.69	84.69		
Total Capital Allocations	84.69	248.67		
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK			223.72	
RETURNS TO LAND, MANAGEMENT & RISK				59.74
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$260 X 16% X .14112)	5.87	5.87		
Opport. Inter. on Land (100% X 6.0% X \$260)		15.60		
Total Land Costs	5.87	21.47		
RETURNS TO MANAGEMENT, CAPITAL & RISK			217.85	
RETURNS TO MANAGEMENT & RISK				38.27
Management Services (8% of Tot. Oper. Exp.)		23.97		
TOTAL OWNERSHIP COST	138.47	342.03		
TOTAL COST	\$438.14	\$641.69		
RETURN TO MANAGEMENT, CAPITAL & RISK			\$217.85	
RETURN TO RISK (PROFITS)				\$14.30
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)			\$37.45	\$37.45
BREAK-EVEN PRICE TO COVER OWNERSHIP COST			\$17.30	\$42.75
BREAK-EVEN PRICE TO COVER TOTAL COST			\$54.76	\$80.21

Table 11C. Variable Operating Costs; Alfalfa Hay (Pivot), 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: StewNG TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Center Pivot w/ SOIL: Sandy
 AREA: Stewart YIELD: 8.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

No.	First Month	Operation	Hours * —		Operating Costs (\$/Acre*)				Tot. Cash Expense	Class		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials			Total	
1	Mar	Irrigate/Center Pivot		0.002	1.34	0.01			1.35	160.0	215.34	G
2	May	Swathing	0.150	0.167	2.02	1.17			3.19	5.0	15.97	H
3	May	Raking	0.150	0.167	1.26	1.40			2.66	5.0	13.32	H
4	May	Baling	0.129	0.143	1.88	1.20		3.38	6.46	5.0	32.32	H
5	May	Roadsiding	0.090	0.100	1.53	0.70			2.23	5.0	11.13	H
		Pickup Use 40 Mi/Ac	1.330		10.57						10.57	O
		Operating Interest at 8.00%						0.24			0.24	O
TOTAL CASH OPERATING EXPENSES:					\$257.80	\$23.95	\$0.24	\$16.90			\$298.89	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.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$0.00								
Growing (G)	215.34								
Harvest (H)	72.73	Yields		\$61.50	\$73.80	\$82.00	\$90.20	\$102.50	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	6.0	88.29	162.09	211.29	260.49	334.29	46.78
Operating Overhead (O)	10.81	-10%	7.2	151.18	239.74	298.78	357.82	446.38	40.50
		Budgeted	8.0	193.10	291.50	357.10	422.70	521.10	37.36
Total (T)	\$298.89	+10%	8.8	235.03	343.27	415.43	487.59	595.83	34.79
		+25%	10.0	297.92	420.92	502.92	584.92	707.92	31.70
		Break-even Yield		4.31	3.49	3.10	2.78	2.42	

Table 11D. Resource and Cash Flow Requirements; Alfalfa Hay (Pivot), 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: StewNG TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Center Pivot w/ SOIL: Sandy
 AREA: Stewart YIELD: 8.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
MAR C	7.0	2.4	0.01		9.35	0.10				9.45
APR C	13.0	4.5	0.02		17.37	0.18				17.55
MAY C	26.0	9.1	0.62		41.43	4.84		3.38		49.65
JUN C	26.0	9.1	0.62		41.43	4.84		3.38		49.65
JUL C	26.0	9.1	0.62		41.43	4.84		3.38		49.65
AUG C	26.0	9.1	0.62		41.43	4.84		3.38		49.65
SEP C	26.0	9.1	0.62		41.43	4.84		3.38		49.65
OCT C	10.0	3.5	0.02		13.36	0.14				13.50
Pickup Use 40 Mi/Ac					10.57					10.57
Operating Interest at 8.0%									0.24	0.24
Total	160.0	56.0	3.20		257.80	24.63		16.90	0.24	299.58
%					86.05	8.22		5.64	0.08	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	0.0 lbs	Diesel Fuel	11.9 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	4.0 Gal
Total Labor	3.2 Hrs	Electricity/Pumping	517.2 KWH
Total Water	56.0 AI	Natural Gas/Pumping	349.9 Therms
		All Direct Energy	38.9 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Windrower, 14.0', HS, SC	0.75 Hrs	Tractor, 100 PTO HP, MFWD	1.40 Hrs
Baler, 2 Wire Auto PTO	0.65 Hrs	Bale Wagon, SP PRC	0.45 Hrs
		Rake, 9.5' LH	0.75 Hrs
		Pickup Truck, 1/2 Ton	1.33 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Water, Pump	56.00 AI	Baling Wire (6500')	2.45 TF

LABOR REQUIREMENTS (/Acre)			
Irrigators	0.32 Hrs	Harvest	1.34 Hrs
		Tractor	1.55 Hrs

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

Table 11E Schedule of Operations; Alfalfa Hay (Pivot), 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: StewNG TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Center Pivot w/ SOIL: Sandy
 AREA: Stewart YIELD: 8.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost Name	Service Cost		Labor Type
				HP	Self-Prop./Implem.			Appl. Rate	\$/Unit	
1	Mar	160.0	Irrigate/Center Pivot			480.00	Water, Pump	0.35 AI	33.32 AF	Irrigator
2	May	5.0	Swathing		Windrower, 14.0', HS, S	6.00				Harvest
3	May	5.0	Raking	100	Rake, 9.5' LH	6.00				Tractor
4	May	5.0	Baling	100	Baler, 2 Wire Auto PTO	7.00	Baling Wire (6500	0.49 TF	6.57 TF	Tractor
5	May	5.0	Roadsiding		Bale Wagon, SP PRC	10.00				Harvest
			Pickup Use 40 Mi/Ac		Pickup Truck, 1/2 Ton	0.75				

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

ARIZONA COOPERATIVE EXTENSION
 Department of Ag & Resource Economics
 The University of Arizona F 8/34