

Table 5A. Income and Cash Operating Summary; Alfalfa Silage w/Sheep, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
 CROP: Alfalfa Silage/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 20.0 Tn / Acre PREVIOUS CROP: Alfalfa Hay DATE: 2/3/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME	Silage	Ton	20.00	\$35.00	\$700.00	\$718.00
	Sheep	Head Days	200.00	\$0.09	\$18.00	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
	Paid Labor (including benefits)				40.94	
	Irrigation				40.94	
	Chemicals and Custom Applications				50.72	
	Insecticide			11.76		
	Herbicide			38.95		
	Irrigation Water (excluding labor)				96.00	
	Water Assessment (See Note Below) **					
	TOTAL CASH LAND PREPARATION AND GROWING EXPENSES				187.66	
CASH HARVEST AND POST HARVEST EXPENSES						
	Paid Labor (including benefits)				40.94	
	Tractor/Self Propelled			27.30		
	Other/Contract			13.65		
	Farm Machinery and Vehicles				61.05	
	Diesel Fuel			11.60		
	Repairs and Maintenance			49.45		
	TOTAL HARVEST AND POST HARVEST EXPENSE				102.00	
	OPERATING OVERHEAD PICKUP USE				10.19	
	OPERATING INTEREST AT 10.0%				17.37	
	TOTAL CASH OPERATING EXPENSES				\$317.22	
	RETURNS OVER CASH OPERATING EXPENSES				\$400.78	

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

** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

Table 5B. Allocations of Ownership Costs; Alfalfa Silage w/Sheep, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$35.00 / Tn	\$718.00		\$718.00	
TOTAL OPERATING EXPENSES	\$317.22		\$317.22	
RETURN OVER CASH OPERATING EXPENSES		\$400.78		\$400.78
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	8.91		8.91	
General and Office Overhead (5.0% of Total Operating Exp.)	15.86		15.86	
General Farm Maintenance (3.0% of Total Operating Exp.)	9.52		9.52	
Total Cash Overhead Expenses	34.29		34.29	
Total Cash Operating and Overhead Cost	351.51		351.51	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$366.49		\$366.49
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			62.72	
Interest on Equity, Machinery and Vehicles			3.82	
Stand Establishment (3 year crop)	110.89		110.89	
Total Capital Allocations	110.89		177.43	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$255.60		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$189.06
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	13.98		13.98	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			37.14	
Water Assessment	20.00		20.00	
Total Land Costs	33.98		71.12	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$221.62		
RETURNS TO MANAGEMENT AND RISK ----->				\$117.94
Management Services (8% of Total Operation Expenses)			25.38	
TOTAL OWNERSHIP COST	179.17		308.23	
TOTAL COST	\$496.38		\$625.44	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$221.62		
RETURNS TO RISK (PROFITS) ----->				\$92.56
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$14.96		\$14.96
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$8.96		\$15.41
BREAK-EVEN PRICE TO COVER TOTAL COST		\$23.92		\$30.37

Table 5C. Variable Operating Costs; Alfalfa Silage w/Sheep, 1998

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 AREA: Salt River Project YIELD: 20.0 Tn / Acre PREVIOUS CROP: Alfalfa Hay DATE: 2/3/99

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	Feb	Irrigate		0.300		2.92			2.50	5.42	8.0	43.40	G
2	Mar	Irrigate/Run Herbicide		0.300		2.92			19.16	22.08	6.0	132.50	G
3	Apr	Apply Insecticide/Air						4.23	7.53	11.76	1.0	11.76	G
4	Apr	Swathing	0.180	0.200	2.69	1.95				4.64	7.0	32.51	H
5	Apr	Chopping	0.180	0.200	3.98	1.95				5.93	7.0	41.48	H
6	Apr	Field Transport	0.180	0.200	2.05	1.95				4.00	7.0	28.00	H
		Pickup Use40 Mi/Acre	1.333		10.19							10.19	
		Operating Interest at 10.0						17.37				17.37	
TOTAL CASH OPERATING EXPENSES (includes all times over):											317.22	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.
 A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)						
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Land Preparation (L)	0.00							
Growing (G)	187.66	Yields	\$26.25	\$31.50	\$35.00	\$38.50	\$43.75	Break-even Price
Harvest (H)	102.00							
Post Harvest (P)	0.00	- 25%	15.0	105.98	184.73	237.23	289.73	368.48
Marketing (M)	0.00	- 10%	18.0	169.43	263.93	326.93	389.93	484.43
Operating Overhead (O)	27.56	Budgeted	20.0	211.73	316.73	386.73	456.73	561.73
	=====	+ 10%	22.0	254.04	369.54	446.54	523.54	639.04
Total (T)	\$317.22	+ 25%	25.0	317.49	448.74	536.24	623.74	754.99
		Break-even Yield		9.99	8.00	7.07	6.33	5.47

Table 5D. Resource and Cash Flow Requirements; Alfalfa Silage w/Sheep, 1998

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Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
FEB C	1.0	6.0	0.30			2.92				2.92
MAR C	1.0	6.0	0.30	5.00		2.92	6.49			14.42
APR C	2.0	12.0	1.20	5.00	8.72	11.70	14.03		4.23	43.68
MAY C	1.0	6.0	0.90		8.72	8.77				17.50
JUN C	2.0	12.0	1.20	16.50	8.72	11.70	6.49			43.41
JUL C	2.0	12.0	1.20	21.50	8.72	11.70	6.49			48.41
AUG C	1.0	6.0	0.90	5.00	8.72	8.77				22.50
SEP C	2.0	12.0	1.20	21.50	8.72	11.70	6.49			48.41
OCT C	1.0	6.0	0.90	16.50	8.72	8.77	6.49			40.49
NOV C	1.0	6.0	0.30	5.00		2.92				7.92
Pickup Use40 Mi/Acre					10.19					10.19
Operating Interest at 10.0									17.37	17.37
Water Assessment				**						
Total	14.0	84.0	8.40	96.00	71.24	81.89	46.49		21.60	317.22
%				30.26	22.46	25.81	14.66		6.81	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 0.0
 Total P 0.0
 Total K 0.0
 Total Labor 8.4
 Total Water 84.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 14.4 Gal
 Unleaded Gas 4.0 Gal
 All Direct Energy 2.5 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Forage Harvester PTO 1.26 Hr Forage Wagon PTO 2.52 Hr Pickup Truck, 1/2 Ton 1.33 Hr
 Tractor, 60 PTO HP, 1.26 Hr Tractor, 100 PTO HP, 1.26 Hr Windrower, 14.0', HS, SC 1.26 Hr

MATERIALS REQUIREMENT (per Acre)

Dimethoate 1.50 Pt EPTC 8.40 Pt Water, District 84.00 Al

LABOR REQUIREMENT (per Acre)

Harvest 1.40 Hr Irrigators 4.20 Hr Tractor 2.80 Hr

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

** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

Table 5E. Schedule of Operations; Alfalfa Silage w/Sheep, 1998

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First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use Name	Material Use and Cost			Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement			Appl. Rate	\$ / Unit	\$ / Unit		
1	Feb	8.0	Irrigate			3.33	Water, District	6.00	Al	5.00	AF	Irrigators
2	Mar	6.0	Irrigate/Run Herbicide			3.33	Water, District	6.00	Al	25.33	AF	Irrigators
							EPTC	1.40	Pt	35.08	Ga	
3	Apr	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix			Dimethoate	1.50	Pt	38.00	Ga	4.23 Ac
4	Apr	7.0	Swathing	Windrower, 14.0', HS, SC		5.00						Harvest
5	Apr	7.0	Chopping	100 Forage Harvester PTO		5.00						Tractor
				Forage Wagon PTO Unloader								
6	Apr	7.0	Field Transport	60 Forage Wagon PTO		5.00						Tractor
			Pickup use 40 Mi/Ac	Pickup Truck, 1/2 Ton		0.75						

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

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