

U.C. COOPERATIVE EXTENSION

SAMPLE COSTS TO ESTABLISH AND PRODUCE ALFALFA HAY IN SAN JOAQUIN COUNTY - 1991

AF-VN-91

by

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The detailed costs for alfalfa hay establishment and production in San Joaquin County are presented in this study. The hypothetical farm used in this report consists of 1000 acres of which 200 acres are in alfalfa hay production. The remainder of the farm is planted to different field crops.

Practices described are based on those production procedures considered typical for this crop and area. Sample costs given for labor, materials, equipment and contract services are based on current figures. Some costs and practices detailed in this study may not be applicable to your situation. This study is only intended as a guide and can be used in making production decisions, determining potential returns, preparing budgets and evaluating production loans. A blank Your Costs column is provided to enter your actual costs on Table 1 and Table 3, Costs Per Acre To Establish Alfalfa Hay and Costs Per Acre To Produce Alfalfa Hay.

This study consists of General Assumptions for Establishing and Producing Alfalfa Hay, and ten tables.

Table 1.	Costs Per Acre To Establish Alfalfa Hay
Table 2.	Monthly Cash Costs Per Acre To Establish Alfalfa Hay
Table 3.	Annual Equipment Costs
Table 4.	Hourly Equipment Costs
Table 5.	Costs Per Acre To Produce Alfalfa Hay
Table 6.	Monthly Cash Costs Per Acre To Produce Alfalfa Hay
Table 7.	Annual Equipment, Investment And Business Overhead
Table 8.	Hourly Equipment Costs To Produce Alfalfa Hay
Table 9.	Ranging Analysis
Table 10.	Costs And Returns / Breakeven Analysis.

For an explanation of calculations used for the study refer to the attached General Assumptions or call the Department of Agricultural Economics, Cooperative Extension, University of California, Davis, California, (916) 752-3589 or call the Farm Advisor in the county of interest.

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6. HARVEST:

In this cost study the ranch owns it's harvesting equipment and perform all of the harvest operations. The equipment for the harvest operations are inventoried, labor, fuel, repairs, depreciation and interest on investment, are calculated as a cost of production. If a grower contracts for his harvest operation, all of the harvest equipment and their appropriate costs should be subtracted and a custom charge would then be added. A custom rate of \$24 per ton for swathing, raking and baling could be used. A bankout and roadsiding custom charge of \$4.50 per ton should be used along with the swathing, raking and baling custom rate.

7. LABOR:

Basic hourly wages for workers are \$4.10 and \$3.36 per hour for skilled and field (irrigator) workers respectively. Adding 34% for SDI, FICA, insurance and other benefits gives the labor rates shown of \$5.50 per hour for skilled labor and \$4.50 per hour for field labor. The labor hours for operations involving machinery are 10% higher than the machine hours to account for the extra labor involved in equipment set-up, moving, maintenance and repair.

8. INVESTMENT:

The investments shown in Table 7 are those that are partially or completely allocated to the alfalfa hay operation. The cost for investments such as stand establishment are attributed only to the alfalfa hay and cannot be spread over the rest of the farms operations. Other investments including pickups, shop buildings and shop tools can be used by the whole farm. Only a portion of those costs can be assigned to the alfalfa hay operation while the rest of the costs are distributed to the other farm enterprises. Annual investments shown in Tables 1 and 5 represent the depreciation and opportunity cost for each investment on an annual per acre basis.

9. OVERHEAD:

County taxes are calculated as 1% of the average of the equipment, buildings and improvements. Insurance is charged at .5% of the average value of the equipment over its useful life. Office and business costs are estimated at \$30 per acre for the ranch. These expenses include office supplies, telephones, bookkeeping, accounting, legal fees, road preparation and maintenance, etc.

10. INTEREST:

Interest on operating capital is based on cash costs and is calculated monthly, for nine months, until harvest at the rate of 12.5% per year. Interest is also charged on investment at 12% per year to account for income foregone that could be received from an alternative investment (opportunity cost) and is based on the average value of the of the buildings and equipment.

11. EQUIPMENT COSTS:

In allocating the equipment costs per acre, the following calculations were made and shown in Table 7: (a) **Original Cost** of equipment is the cost of the new equipment plus sales tax. (b) **Depreciation** is straight line with no salvage value. (c) **Interest** on investment is calculated as one-half of the new cost per acre (the average value of the equipment during its useful life) multiplied by an interest rate of 12.50%. (d) The total investment costs are also calculated as 60% of the depreciation and the interest costs for all new equipment to reflect a mix of the new and used equipment. These values are also used in Table 5. Most of this equipment is used on the entire 1000 acre ranch.

Table 1.

COSTS PER ACRE TO ESTABLISH ALFALFA HAY
SAN JOAQUIN COUNTY - 1991

Labor Rate: \$5.50/hr. machine labor
\$4.50/hr. non-machine labor

Interest Rate: 12.50%
Yield per Acre: 8.00 ton

Operation	Operation Time (Hrs/A)	Cash and Labor Costs per Acre					Total Cost	Your Cost
		Labor Cost	Fuel & Repairs	Material Cost	Custom/ Rent			
Cultural:								
Disc stubble	0.16	1.08	3.42	0.00	0.00	4.50		
Laser plane	0.00	0.00	0.00	0.00	75.00	75.00		
Chisel heavy	0.27	1.77	5.14	0.00	0.00	6.91		
Fertilize	0.00	0.00	0.00	65.00	3.00	68.00		
Finish discing	0.13	0.84	2.23	0.00	0.00	3.07		
Land plane field	0.14	0.91	2.51	0.00	0.00	3.42		
Border preparation	0.00	0.00	0.00	0.00	15.00	15.00		
Plant	0.00	0.00	0.00	75.00	5.00	80.00		
Roll field	0.08	0.53	0.65	0.00	0.00	1.19		
Spray herbicides	0.00	0.00	0.00	20.00	6.50	26.50		
TOTAL CULTURAL COSTS	0.78	5.13	13.95	160.00	104.50	283.58		
Interest on operating capital @ 12.50%						11.87		
TOTAL OPERATING COSTS/ACRE		5.13	13.95	160.00	104.50	295.46		
TOTAL OPERATING COSTS/TON						36.93		
OVERHEAD:								
Rent						100.00		
Office Expense						20.00		
Property Taxes						0.73		
Equipment Insurance						0.36		
Investment Repairs						0.35		
TOTAL CASH OVERHEAD COSTS						121.44		
TOTAL CASH COSTS/ACRE						416.89		
TOTAL CASH COSTS/TON						52.11		
NON-CASH OVERHEAD:								
	Per producing Acre	Annual Cost						
Investment		Depreciation	Interest @ 12.00%					
Buildings	50.00	2.00	3.00	5.00				
Pickup #1, 3/4 ton	6.00	1.35	0.40	1.75				
Shop tools	10.00	0.60	0.66	1.26				
Equipment	70.57	5.51	4.66	10.17				
TOTAL NON-CASH OVERHEAD COSTS	136.57	9.46	8.71	18.17				
TOTAL COSTS/ACRE						435.07		
TOTAL COSTS/TON						54.38		

Table 2.

U.C. COOPERATIVE EXTENSION
 MONTHLY CASH COSTS PER ACRE TO ESTABLISH ALFALFA HAY
 SAN JOAQUIN COUNTY - 1991

Beginning AUG 89 Ending JUL 90	AUG 89	SEP 89	OCT 89	NOV 89	DEC 89	JAN 90	FEB 90	MAR 90	APR 90	MAY 90	JUN 90	JUL 90	TOTAL
Cultural:													
Disc stubble	4.50												4.50
Laser plane	75.00												75.00
Chisel heavy		6.91											6.91
Fertilize			68.00										68.00
Finish discing			3.07										3.07
Land plane field			3.42										3.42
Border preparation			15.00										15.00
Plant				80.00									80.00
Roll field				1.19									1.19
Spray herbicides						26.50							26.50
TOTAL CULTURAL COSTS	79.50	6.91	89.49	81.19		26.50							283.58
Interest on oper. capital	0.83	0.90	1.83	2.68	2.68	2.95							11.87
TOTAL OPERATING COSTS/ACRE	80.33	7.81	91.32	83.86	2.68	29.45							295.46
TOTAL OPERATING COSTS/TON	10.04	0.98	11.41	10.48	0.33	3.68							36.93
OVERHEAD:													
Land Rent						100.00							100.00
Office Expense						20.00							20.00
Property Taxes						0.36					0.36		0.73
Equipment Insurance						0.18					0.18		0.36
Investment Repairs	0.06	0.06	0.06	0.06	0.06	0.06							0.35
TOTAL CASH OVERHEAD COSTS	0.06	0.06	0.06	0.06	0.06	120.60						0.54	121.44
TOTAL CASH COSTS/ACRE	80.39	7.87	91.38	83.92	2.74	150.06						0.54	416.89
TOTAL CASH COSTS/TON	10.05	0.98	11.42	10.49	0.34	18.76						0.07	52.11

U.C. COOPERATIVE EXTENSION
ANNUAL AND HOURLY EQUIPMENT COSTS
SAN JOAQUIN COUNTY - 1991

Table 3.

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	- Non-Cash Over. -			- Cash Overhead -		Total
			Yrs Life	Depre- ciation	Interest	Insur- ance	Taxes	
90	165 hp 2wd tractor	84000	10	7560.00	5544.00	231.00	462.00	13797.00
90	200 hp 4wd tractor	94000	10	8460.00	6204.00	258.50	517.00	15439.50
90	70 hp 2wd Tractor	38000	10	3420.00	2508.00	104.50	209.00	6241.50
90	Chisel, heavy 11'	5300	15	318.00	349.80	14.58	29.15	711.53
90	Disc, finish, 18'	6000	15	360.00	396.00	16.50	33.00	805.50
90	Disc, stubble, 14'	17500	15	1050.00	1155.00	48.13	96.25	2349.38
90	Ringroller, 32'	6400	15	384.00	422.40	17.60	35.20	859.20
90	Triplane, 16'	16000	15	960.00	1056.00	44.00	88.00	2148.00
TOTAL		267200		22512.00	17635.20	734.81	1469.60	42351.61
60% of New Cost *		160320		13507.20	10581.12	440.89	881.76	25410.97

* Used to reflect a mix of new and used equipment.

Table 4.

U.C. COOPERATIVE EXTENSION
HOURLY EQUIPMENT COSTS
SAN JOAQUIN COUNTY - 1991

Yr Description	Actual Hours Used	----- COSTS PER HOUR -----							Total Oper.	Total Costs/Hr.
		-Non-Cash Over. -	- Cash Overhead -	----- Operating -----		Total				
		Depre- ciation	Interest	Insur- ance	Taxes	Repairs	Fuel & Lube	Oper.		
90 165 hp 2wd tractor	1307.7	3.47	2.54	0.11	0.21	5.04	9.36	14.40	20.73	
90 200 hp 4wd tractor	1313.0	3.87	2.84	0.12	0.24	4.70	11.35	16.05	23.10	
90 70 hp 2wd Tractor	175.1	11.72	8.59	0.36	0.72	2.28	3.36	5.64	27.02	
90 Chisel, heavy 11'	165.6	1.15	1.27	0.05	0.11	1.52	0.00	1.52	4.10	
90 Disc, finish, 18'	165.4	1.31	1.44	0.06	0.12	1.72	0.00	1.72	4.64	
90 Disc, stubble, 14'	166.8	3.78	4.15	0.17	0.35	5.03	0.00	5.03	13.48	
90 Ringroller, 32'	165.2	1.39	1.53	0.06	0.13	1.84	0.00	1.84	4.96	
90 Triplane, 16'	165.6	3.48	3.83	0.16	0.32	2.32	0.00	2.32	10.10	

Table 5.

U.C. COOPERATIVE EXTENSION
 COSTS PER ACRE TO PRODUCE ALFALFA HAY
 SAN JOAQUIN COUNTY - 1991

Labor Rate: \$5.50/hr. machine labor
 \$4.50/hr. non-machine labor

Interest Rate: 12.50%
 Yield per Acre: 8 ton

Operation	Operation Time (Hrs/A)	Cash and Labor Costs per Acre					Total Cost	Your Cost
		Labor Cost	Fuel & Repairs	Material Cost	Custom/ Rent			
Cultural:								
Make drains	0.10	0.66	1.91	0.00	0.00	2.57		
Irrigate	1.08	4.86	0.00	131.52	0.00	136.38		
Close drains	0.10	0.66	1.71	0.00	0.00	2.37		
Spray for aphids & weevils	0.00	0.00	0.00	11.26	6.50	17.76		
Spray for worm control	0.00	0.00	0.00	12.50	5.00	17.50		
TOTAL CULTURAL COSTS	1.28	6.18	3.62	155.28	11.50	176.58		
Harvest:								
Swath hay	0.64	4.20	10.15	0.00	0.00	14.35		
Windrow hay	0.57	3.76	6.67	0.00	0.00	10.43		
Bale hay	0.49	3.25	6.72	60.00	0.00	69.97		
Pickup & roadside hay	0.21	1.39	4.82	0.00	0.00	6.20		
TOTAL HARVEST COSTS	1.91	12.59	28.36	60.00	0.00	100.95		
Postharvest:								
Fertilize	0.00	0.00	0.00	65.00	5.00	70.00		
Herbicide weed control	0.00	0.00	0.00	27.65	6.50	34.15		
TOTAL POSTHARVEST COSTS	0.00	0.00	0.00	92.65	11.50	104.15		
Interest on operating capital @ 12.50%						8.83		
TOTAL OPERATING COSTS/ACRE		18.77	31.97	307.93	23.00	390.50		
TOTAL OPERATING COSTS/TON						48.81		
CASH OVERHEAD:								
Land Rent						176.00		
Office Expense						40.00		
Property Taxes						3.95		
Equipment Insurance						1.98		
Investment Repairs						0.50		
TOTAL CASH OVERHEAD COSTS						222.43		
TOTAL CASH COSTS/ACRE						612.93		
TOTAL CASH COSTS/TON						76.62		

Table 5. continued

NON-CASH OVERHEAD:				
Investment	Per producing Acre	Annual Cost		
		Depreciation	Interest @ 12.00%	
Shop & Buildings	50.00	2.00	3.00	5.00
Establishment cost	435.11	108.78	26.11	134.88
Shop tools	10.00	0.60	0.66	1.26
Pickup, used	6.00	1.35	0.40	1.75
Pickup, new	16.00	2.06	1.06	3.11
Equipment	245.66	21.94	16.21	38.15
TOTAL NON-CASH OVERHEAD COSTS	762.77	136.72	47.43	184.16
TOTAL COSTS/ACRE				797.09
TOTAL COSTS/TON				99.64

U.C. COOPERATIVE EXTENSION

MONTHLY CASH COSTS PER ACRE TO PRODUCE ALFALFA HAY

SAN JOAQUIN COUNTY - 1991

Table 6.

Beginning FEB 90 Ending JAN 91	FEB 90	MAR 90	APR 90	MAY 90	JUN 90	JUL 90	AUG 90	SEP 90	OCT 90	NOV 90	DEC 90	JAN 91	TOTAL
Cultural:													
Make drains			0.51		0.51	0.51	0.51	0.51					2.57
Irrigate				22.73	22.73	22.73	45.46	22.73					136.38
Close drains				0.46	0.46	0.51	0.46	0.46					2.37
Spray for aphids & weevils	17.76												17.76
Spray for worm control						17.50							17.50
TOTAL CULTURAL COSTS	17.76		0.51	23.19	23.71	41.26	46.44	23.71					176.58
Harvest:													
Swath hay				2.39	2.39	2.39	2.39	2.39	2.39				14.35
Windrow hay				1.74	1.74	1.74	1.74	1.74	1.74				10.43
Bale hay				11.66	11.66	11.66	11.66	11.66	11.66				69.97
Pickup & roadside hay				0.89	0.89	0.89	0.89	1.77	0.89				6.20
TOTAL HARVEST COSTS				16.68	16.68	16.68	16.68	17.56	16.68				100.95
Postharvest:													
Fertilize										70.00			70.00
Winter weed control											34.15		34.15
TOTAL POSTHARVEST COSTS										70.00	34.15		104.15
Investment on oper. capital	0.19	0.19	0.19	0.61	1.03	1.63	2.29	2.72					8.83
TOTAL OPERATING COSTS/ACRE	17.94	0.19	0.70	40.48	41.41	59.56	65.40	43.99	16.68	70.00	34.15		390.50
TOTAL OPERATING COSTS/TON	2.24	0.02	0.09	5.06	5.18	7.45	8.18	5.50	2.08	8.75	4.27		48.81
OVERHEAD:													
Land Rent									176.00				176.00
Office Expense									40.00				40.00
Property Taxes						1.98						1.98	3.95
Equipment Insurance						0.99						0.99	1.98
Investment Repairs	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.50
TOTAL CASH OVERHEAD COSTS	0.05	0.05	0.05	0.05	0.05	3.01	0.05	0.05	216.05	0.05	0.05	2.96	222.43
TOTAL CASH COSTS/ACRE	17.99	0.23	0.75	40.52	41.46	62.57	65.45	44.03	232.72	70.05	34.19	2.96	612.93
TOTAL CASH COSTS/TON	2.25	0.03	0.09	5.07	5.18	7.82	8.18	5.50	29.09	8.76	4.27	0.37	76.62

Table 7.

U.C. COOPERATIVE EXTENSION
ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SAN JOAQUIN COUNTY - 1991

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	- Non-Cash Over. -			Cash Overhead -		Total
			Yrs Life	Depre- ciation	Interest	Insur- ance	Taxes	
90	165 hp 2wd tractor	84000	10	7560.00	5544.00	231.00	462.00	13797.00
90	90 hp 2wd tractor	57900	10	5211.00	3821.40	159.23	318.45	9510.08
90	Baler, SP	72000	10	6480.00	4752.00	198.00	396.00	11826.00
90	Balewagon, SP	73000	10	6570.00	4818.00	200.75	401.50	11990.25
90	Ditcher, V	11200	15	672.00	739.20	30.80	61.60	1503.60
90	Rake, CD 20'	13000	10	1170.00	858.00	35.75	71.50	2135.25
90	Scraper, drag 10'	2800	15	168.00	184.80	7.70	15.40	375.90
90	Swather, SP 14'	44000	10	3960.00	2904.00	121.00	242.00	7227.00
TOTAL		357900		31791.00	23621.40	984.23	1968.45	58365.08
60% of New Cost *		214740		19074.60	14172.84	590.54	1181.07	35019.05

* Used to reflect a mix of new and used equipment.

ANNUAL INVESTMENT COSTS

Yr	Description	Price	- Non-Cash Over. -			Cash Overhead -			Total
			Yrs Life	Depre- ciation	Interest	Insur- ance	Taxes	Repairs	
INVESTMENT									
	Establishment cost	87022	4	21755.50	5221.32	217.55	435.11	0.00	27629.48
	Pickup, new	16000	7	2057.14	1056.00	44.00	88.00	150.00	3395.14
	Pickup, used	6000	4	1350.00	396.00	16.50	33.00	150.00	1945.50
	Shop & Buildings	50000	25	2000.00	3000.00	125.00	250.00	100.00	5475.00
	Shop tools	10000	15	600.00	660.00	27.50	55.00	100.00	1442.50
TOTAL INVESTMENT		169022		27762.64	10333.32	430.55	861.11	500.00	39887.62

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Land Rent	200.00	acre	176.00	35200.00
Office Expense	2000.00	acre	20.00	40000.00

U.C. COOPERATIVE EXTENSION
 HOURLY EQUIPMENT COSTS
 SAN JOAQUIN COUNTY - 1991

Table 8.

Yr Description	Actual Hours Used	COSTS PER HOUR							Total Costs/Hr.
		-Non-Cash Depre- ciation	Over- Interest	- Cash Overhead - Insur- ance	Taxes	Repairs	Operating Fuel & Lube	Total Oper.	
90 165 hp 2wd tractor	1315.6	3.45	2.53	0.11	0.21	5.04	9.36	14.40	20.69
90 90 hp 2wd tractor	1306.8	2.39	1.75	0.07	0.15	3.47	4.32	7.79	12.16
90 Baler, SP	263.3	14.76	10.83	0.45	0.90	10.46	1.95	12.41	39.36
90 Balewagon, SP	269.5	14.63	10.73	0.45	0.89	14.02	6.84	20.86	47.55
90 Ditcher, V	166.0	2.43	2.67	0.11	0.22	3.22	0.00	3.22	8.65
90 Rake, CD 20'	250.0	2.81	2.06	0.09	0.17	3.13	0.00	3.13	8.26
90 Scraper, drag 10'	166.0	0.61	0.67	0.03	0.06	0.80	0.00	0.80	2.16
90 Swather, SP 14'	260.9	9.11	6.68	0.28	0.56	10.60	3.91	14.51	31.12

Table 9.

U.C. COOPERATIVE EXTENSION
RANGING ANALYSIS
SAN JOAQUIN COUNTY - 1991

	COSTS PER ACRE AT VARYING YIELDS TO PRODUCE ALFALFA						
	YIELD (TON/ACRE)						
	6.5	7.0	7.5	8.0	8.5	9.0	9.5
OPERATING COSTS/ACRE:							
Postharvest Cost	104	104	104	104	104	104	104
Cultural Cost	177	177	177	177	177	177	177
Harvest Cost	93	96	98	101	104	106	109
Interest on operating capital	9	9	9	9	9	9	9
TOTAL OPERATING COSTS/ACRE	382	385	388	391	393	396	399
TOTAL OPERATING COSTS/TON	58.82	55.01	51.70	48.81	46.26	43.99	41.96
CASH OVERHEAD COSTS/ACRE	222	222	222	222	222	222	222
TOTAL CASH COSTS/ACRE	605	607	610	613	616	618	621
TOTAL CASH COSTS/TON	93.04	86.78	81.36	76.62	72.43	68.71	65.38
NON-CASH OVERHEAD COSTS/ACRE	184	184	184	184	184	184	184
TOTAL COSTS/ACRE	789	791	794	797	800	803	806
TOTAL COSTS/TON	121.32	113.06	105.90	99.64	94.11	89.20	84.80

Table 9. continued

NET RETURNS PER ACRE ABOVE OPERATING COSTS FOR ALFALFA

PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	6.5	7.0	7.5	8.0	8.5	9.0	9.5
95.00	235	280	325	369	414	459	504
100.00	268	315	362	409	457	504	551
105.00	300	350	400	449	499	549	599
110.00	333	385	437	489	542	594	646
115.00	365	420	475	529	584	639	694
120.00	398	455	512	569	627	684	741
125.00	430	490	550	609	669	729	789

NET RETURNS PER ACRE ABOVE CASH COSTS FOR ALFALFA

PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	6.5	7.0	7.5	8.0	8.5	9.0	9.5
95.00	13	58	102	147	192	237	281
100.00	45	93	140	187	234	282	329
105.00	78	128	177	227	277	327	376
110.00	110	163	215	267	319	372	424
115.00	143	198	252	307	362	417	471
120.00	175	233	290	347	404	462	519
125.00	208	268	327	387	447	507	566

NET RETURNS PER ACRE ABOVE TOTAL COSTS FOR ALFALFA

PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	6.5	7.0	7.5	8.0	8.5	9.0	9.5
95.00	-171	-126	-82	-37	8	52	97
100.00	-139	-91	-44	3	50	97	144
105.00	-106	-56	-7	43	93	142	192
110.00	-74	-21	31	83	135	187	239
115.00	-41	14	68	123	178	232	287
120.00	-9	49	106	163	220	277	334
125.00	24	84	143	203	263	322	382

U.C. COOPERATIVE EXTENSION
 COSTS AND RETURNS / BREAKEVEN ANALYSIS
 SAN JOAQUIN COUNTY - 1991

COSTS AND RETURNS - PER ACRE BASIS

Crop	1. Gross Returns	2. Operating Costs	3. Net Returns Above Oper. Costs (1-2)	4. Cash Costs	5. Net Returns Above Cash Costs (1-4)	6. Total Costs	7. Net Returns Above Total Costs (1-6)
Alfalfa Hay	880	391	489	613	267	797	83

COSTS AND RETURNS - TOTAL ACREAGE

Crop	1. Gross Returns	2. Operating Costs	3. Net Returns Above Oper. Costs (1-2)	4. Cash Costs	5. Net Returns Above Cash Costs (1-4)	6. Total Costs	7. Net Returns Above Total Costs (1-6)
Alfalfa Hay	176000	78101	97899	122586	53414	159418	16582
TOTAL	176000	78101	97899	122586	53414	159418	16582

BREAKEVEN PRICES PER YIELD UNIT

CROP	Base Yield (Units/Acre)	Yield Units	----- Breakeven Price To Cover -----		
			Operating Costs	Cash Costs	Total Costs
Alfalfa Hay	8.0	ton	48.81	76.62	99.64

BREAKEVEN YIELDS PER ACRE

CROP	Yield Units	Base Price (\$/Unit)	----- Breakeven Yield To Cover -----		
			Operating Costs	Cash Costs	Total Costs
Alfalfa Hay	ton	110.00	3.6	5.6	7.2