

Sample costs to produce Alfalfa Hay by: Mick Canevari, Farm Advisor  
 San Joaquin County 1980

Based on 330 acres of Alfalfa on 900 acre ranch Yield: 7 ton  
 Management fee of \$42 per acre may be included if applicable  
 Establish every 4th year

Additional notes

1. Fertilizer application in February:
 

Materials - 0-20-0	\$ 28.75/A
Application - custom	\$ 4.50/A
2. Ditch preparation in May:
 

Ditcher - 1 pass over field  
 Costs are determined by machinery usage and labor requirements
3. Insect Control:
 

3 applications - March, June, July	
Materials - Furadan (weevil & aphid), Pencap, Lanate	= \$25.00/A
Air application - 3 applications @ \$5.00/A	= \$15.00/A
4. Harvest in April - September:
 

Rent paid in October - 25% share rent	
Custom harvest (swath, rake, bail)	= \$20.00/ton
Custom bankout	= \$ 4.00/ton
5. Winter weed control in December:
 

Contract	= \$30.00/A
----------	-------------
6. Management fee:
 

5% of 7 ton @ \$120/ton	= \$42.00
-------------------------	-----------
7. Labor rates include benefits:
 

Machine operator	\$5.80/hr
Machine crew	\$4.56/hr
8. Irrigation:
 

Flood irrigation system - 75hp pump  
 1 hr/application  
 8 irrigations - 54 acin total:

May	1x
June	2x
July	2x
Aug	2x
Sept	1x

COST & RETURNS SUMMARY FOR ALFALFA HAY  
 SAMPLE COSTS TO PRODUCE ALFALFA HAY BY: NICK CANEVARI, FARM ADVISOR  
 SAN JOAQUIN COUNTY 1980

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
<b>1. GROSS RECEIPTS FROM PRODUCTION:</b>					
ALFALFA HAY	TON	120.000	7.000	840.00	
<b>TOTAL RECEIPTS:</b>				<b>840.00</b>	
<b>2. VARIABLE COSTS:</b>					
<b>PREHARVEST:</b>					
INSECTICIDE	ACRE	25.000	1.000	25.00	
CUSTOM AIR PEST	ACRE	5.000	3.000	15.00	
FERTILIZER	ACRE	28.750	1.000	28.75	
FERTILIZER APP	ACRE	4.500	1.000	4.50	
WTR WEED CONTROL	ACRE	30.000	1.000	30.00	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			0.57	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			0.05	
IRRIGATION (POWER-LUBE-REP)	ACTN	0.141	52.920	7.48	
MACHINERY LABOR	HOUR	5.800	0.048	0.28	
IRRIGATION LABOR	HOUR	4.560	8.000	36.48	
INTEREST ON OPERATING CAP.	DOL.	0.14000	61.754	8.40	
<b>TOTAL PREHARVEST COSTS:</b>				<b>156.51</b>	
<b>PREHARVEST COST PER TON</b>				<b>22.3590</b>	
<b>HARVEST:</b>					
CUSTOM HARVEST	TON	20.000	7.000	140.00	
CUSTOM BANKOUT	TON	4.000	7.000	28.00	
INTEREST ON OPERATING CAP.	DOL.	0.14000	35.008	4.20	
<b>TOTAL HARVEST COSTS:</b>				<b>172.90</b>	
<b>HARVEST COST PER TON</b>				<b>24.7002</b>	
<b>TOTAL VARIABLE COSTS:</b>				<b>329.41</b>	
<b>VARIABLE COST PER TON</b>				<b>47.0592</b>	
<b>3. INCOME ABOVE VARIABLE COSTS:</b>					
<b>INCOME PER TON</b>				<b>510.59</b>	
				<b>72.9408</b>	
<b>OVERHEAD:</b>					
PERSONAL PROPERTY TAXES:				0.10	
REAL PROPERTY TAXES:				8.01	
SHARE RENT:				210.00	
MISC. OFFICE & BOOKKEEPING ( 8.00% OF TOTAL VARIABLE COSTS)				26.35	
<b>TOTAL OVERHEAD:</b>				<b>244.46</b>	
<b>OVERHEAD COST PER TON</b>				<b>34.9225</b>	
<b>TOTAL CASH COSTS:</b>				<b>573.87</b>	
<b>TOTAL CASH COST PER TON</b>				<b>81.9817</b>	
<b>5. INCOME ABOVE ALL CASH COSTS:</b>					
<b>INCOME PER TON</b>				<b>266.13</b>	
				<b>38.0183</b>	
<b>6. OWNERSHIP COSTS:</b>					
<b>DEPRECIATION:</b>					
MACHINERY & EQUIPMENT	ACRE			0.24	
IRRIGATION SYSTEM	ACRE			21.21	
BUILDINGS	ACRE			0.14	
TREES, VINES OR STAND	ACRE			97.15	
<b>TOTAL DEPRECIATION:</b>				<b>118.73</b>	
<b>CAPITAL &amp; INTEREST:</b>					
MACHINERY & EQUIPMENT		0.14000	2.537	0.36	
IRRIGATION SYSTEM		0.14000	218.211	30.55	
BUILDINGS		0.10670	0.667	0.07	
TREES, VINES OR STAND		0.10670	388.590	20.73	
<b>TOTAL INTEREST CHARGE:</b>				<b>51.71</b>	
<b>TOTAL FIXED COSTS:</b>				<b>170.44</b>	
<b>FIXED COST PER TON</b>				<b>24.3480</b>	
<b>7. TOTAL OF ABOVE COSTS:</b>					
<b>TOTAL COST PER TON</b>				<b>744.31</b>	
				<b>106.3296</b>	
<b>8. NET RETURNS:</b>					
<b>NET RETURNS PER TON</b>				<b>95.69</b>	
				<b>13.6704</b>	

*This budget was never released 11/23/81*

BASED ON 330 ACRES OF ALFALFA ON 900 ACRE RANCH YIELD: 7 TON  
 MANAGEMENT FEE OF \$42 PER ACRE MAY BE INCLUDED IF APPLICABLE  
 ESTABLISH EVERY 4TH YEAR  
 DATE PRINTED: 10/22/80 HARVEST MONTH: 9 BUDGET RECORD NUMBER 373

UC Cooperative Extension

CASH FLOW & INVESTMENT SUMMARY FOR ALFALFA HAY  
 SAMPLE COSTS TO PRODUCE ALFALFA HAY  
 SAN JOAQUIN COUNTY 1980

BY: NICK CANEVARI, FARM ADVISOR

BUDGET RECORD NUMBER 373

CATEGORY	UNIT	MONTHLY SUMMARY OF RECEIPTS AND EXPENSES												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
RECEIPTS	\$/AC	0.00	0.00	0.00	140.04	140.04	140.04	140.04	139.92	139.92	0.00	0.00	0.00	840.00
OPERATING EXPENSES														
INSECTICIDE	\$/AC	0.00	0.00	8.35	0.00	0.00	8.35	8.30	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM AIR PEST	\$/AC	0.00	0.00	5.00	0.00	0.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00	15.00
FERTILIZER	\$/AC	0.00	28.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.75
FERTILIZER APP	\$/AC	0.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50
WTR WEED CONTROL	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	30.00
CUSTOM HARVEST	\$/AC	0.00	0.00	0.00	23.34	23.34	23.34	23.34	23.32	23.32	0.00	0.00	0.00	140.00
CUSTOM BANKOUT	\$/AC	0.00	0.00	0.00	4.67	4.67	4.67	4.67	4.66	4.66	0.00	0.00	0.00	28.00
MACHINE LABOR COST	\$/AC	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
INTEREST ON OPER. CAP.	\$/AC	0.00	2.64	0.90	1.63	1.59	1.79	1.19	0.45	0.00	0.00	0.00	3.10	13.30
TRACTOR COST	\$/AC	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
EQUIPMENT COST	\$/AC	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
IRRIGATION COST	\$/AC	0.00	0.00	0.00	0.00	0.94	1.87	1.87	1.87	0.94	0.00	0.00	0.00	7.48
IRRIG LABOR COST	\$/AC	0.00	0.00	0.00	0.00	4.56	9.12	9.12	9.12	4.56	0.00	0.00	0.00	36.48
TOTAL EXPENSES	\$/AC	0.00	35.89	14.25	29.64	36.00	54.14	53.49	39.42	33.48	0.00	0.00	33.10	329.41

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
MACHINE LABOR	HR/AC	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
IRRIGATION LABOR	HR/AC	0.00	0.00	0.00	0.00	1.00	2.00	2.00	2.00	1.00	0.00	0.00	0.00	8.00
IRRIG. WATER APPLIED	ACIN	0.00	0.00	0.00	0.00	6.62	13.23	13.23	13.23	6.62	0.00	0.00	0.00	52.92

MACHINERY FIXED AND VARIABLE COSTS PER ACRE														
MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANN HOURS USED	FIXED COST PER ACRE				VARIABLE COST PER ACRE				HRS PER ACRE
						DEPR.	INTER.	TAX & INS	TOTAL	FUEL	LUBE	REPAIRS	TOTAL	
CRAWLER DB 125HP	11	125.0	85200.	10.	1600.	0.17	0.21	0.05	0.43	0.30	0.04	0.23	0.57	0.044
IRR PUMP 75 HP*	22	2.0	13670.	25.	3200.	4.14	8.58	2.54	15.26	1.73	0.03	2.63	4.39	26.460
SURFACE IRR SYS*	128	2.0	45780.	10.	5000.	17.07	21.97	5.45	44.49	0.00	0.06	3.04	3.10	26.460
WATER PIPER	138	25.0	4500.	28.	90.	0.07	0.14	0.05	0.26	0.00	0.00	0.05	0.05	0.040
WHEELS 6" DIA	80		400.	8.		0.14	0.07	0.01	0.22	0.00		0.00	0.00	

MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE	453.	21.58	30.98	8.10	60.66	2.02	0.13	5.95	8.11					
TOTAL INVESTMENT	149550.													

BASED ON 330 ACRES OF ALFALFA ON 900 ACRE RANCH YIELD: 7 TON  
 MANAGEMENT FEE OF \$42 PER ACRE MAY BE INCLUDED IF APPLICABLE  
 ESTABLISH EVERY 4TH YEAR

UC Cooperative Extension

FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 373  
 SAMPLE COSTS TO PRODUCE ALFALFA HAY BY: NICK CANEVARI, FARM ADVISOR  
 SAN JOAQUIN COUNTY 1980

FUEL USED IN GALLONS PER HOUR

CRAWLER DB 125HP 7.000  
 IRR PUMP 75 HP\* 0.000 (KWRS)

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE GALLONS POWER UNIT  
 DITCHER 0.308 CRAWLER DB 125HP  
 SURFACE IRR SYS\* 0.000 (KWRS) IRR PUMP 75 HP\*

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
DITCHER	0.000	0.000	0.000	0.000	0.308	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.308	DIESEL
SURFACE IRR SYS*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	KWH
TOTALS	0.000	0.000	0.000	0.000	0.308	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.308	

GALLONS FUEL BY TYPE  
 0.00 GAS  
 0.00 LP  
 0.31 DIESEL  
 0.00 N. GAS  
 0.00 KWRS

FUEL TYPES  
 1=GAS  
 2=L.P.  
 3=DIESEL  
 4=N. GAS  
 5=ELEC.

MACHINERY OPERATIONS SUMMARY BUDGET RECORD NUMBER 373  
 SAMPLE COSTS TO PRODUCE ALFALFA HAY BY: NICK CANEVARI, FARM ADVISOR  
 SAN JOAQUIN COUNTY 1980

OPERATION	ITEM NO.	DATE	TIMES OVER	LABOR HOUR S	MACHINE HOURS	FUEL, OIL, LUB., PER ACRE	FIXED REP. COSTS PER ACRE
DITCHER	11,138	MAY	1.00	0.048	0.040	0.62	0.69

TOTALS 0.048 0.040 0.62 0.69  
 BASED ON 330 ACRES OF ALFALFA ON 900 ACRE RANCH YIELD: 7 TON  
 MANAGEMENT FEE OF \$42 PER ACRE MAY BE INCLUDED IF APPLICABLE  
 ESTABLISH EVERY 4TH YEAR

**INCOME ABOVE VARIABLE COSTS**

WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY		RANGES FROM RANGES FROM		100.00 TO 6.00 TO	140.00 TO 8.00	
PRICE OF ALFALFA HAY		100.00	110.00	120.00	130.00	140.00
*****						
QUANTITY OF ALFALFA HAY	6.00 *	270.59	330.59	390.59	450.59	510.59
	* * *					
	6.50 *	320.59	385.59	450.59	515.59	580.59
	* * *					
	7.00 *	370.59	440.59	510.59	580.59	650.59
* * *						
7.50 *	420.59	495.59	570.59	645.59	720.59	
* * *						
8.00 *	470.59	550.59	630.59	710.59	790.59	
* * *						

**INCOME ABOVE ALL CASH COSTS**

WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY		RANGES FROM RANGES FROM		100.00 TO 6.00 TO	140.00 TO 8.00	
PRICE OF ALFALFA HAY		100.00	110.00	120.00	130.00	140.00
*****						
QUANTITY OF ALFALFA HAY	6.00 *	26.13	86.13	146.13	206.13	266.13
	* * *					
	6.50 *	76.13	141.13	206.13	271.13	336.13
	* * *					
	7.00 *	126.13	196.13	266.13	336.13	406.13
* * *						
7.50 *	176.13	251.13	326.13	401.13	476.13	
* * *						
8.00 *	226.13	306.13	386.13	466.13	546.13	
* * *						

**INCOME ABOVE ALL COSTS**

WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY		RANGES FROM RANGES FROM		100.00 TO 6.00 TO	140.00 TO 8.00	
PRICE OF ALFALFA HAY		100.00	110.00	120.00	130.00	140.00
*****						
QUANTITY OF ALFALFA HAY	6.00 *	-144.31	-84.31	-24.31	35.69	95.69
	* * *					
	6.50 *	-94.31	-29.31	35.69	100.69	165.69
	* * *					
	7.00 *	-44.31	25.69	95.69	165.69	235.69
* * *						
7.50 *	5.69	80.69	155.69	230.69	305.69	
* * *						
8.00 *	55.69	135.69	215.69	295.69	375.69	
* * *						

BASED ON 330 ACRES OF ALFALFA ON 900 ACRE RANCH YIELD: 7 TON  
 MANAGEMENT FEE OF \$42 PER ACRE MAY BE INCLUDED IF APPLICABLE  
 ESTABLISH EVERY 4TH YEAR

STORED DATA PAGE (NO CALCULATIONS) FOR ALFALFA HAY

BUDGET RECORD NUMBER 373

SAMPLE COSTS TO PRODUCE ALFALFA HAY  
SAN JOAQUIN COUNTY 1980

BY: NICK CANEVARI, FARM ADVISOR

COSTS AND RETURNS WILL BE  
DIVIDED BY 7.0 TON  
TO OBTAIN PER TON COSTS

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PRODUCTION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PRICE	SHARE	UNIT	ITEM	TYPE	XXXX
1 ALFALFA HAY	0.00	0.00	0.00	1.17	1.17	1.17	1.17	1.17	1.17	0.00	0.00	0.00	120.000	0.250	3.	9.	2.	0.
OPERATING INPUTS																		
	RATE/UNIT												PRICE	SHARE	UNIT	ITEM	TYPE	HARV
														RENT	CODE	CODE	CODE	CODE
6 INSECTICIDE	0.00	0.00	0.33	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.00	0.00	25.000	0.000	7.	240.	3.	0.
7 CUSTOM AIR PEST	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	5.000	0.000	7.	372.	3.	0.
8 FERTILIZER	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.750	0.000	7.	201.	3.	0.
9 FERTILIZER APP	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.500	0.000	7.	356.	3.	0.
10 WTR WEED CONTROL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	30.000	0.000	7.	296.	3.	0.
11 CUSTOM HARVEST	0.00	0.00	0.00	1.17	1.17	1.17	1.17	1.17	1.17	0.00	0.00	0.00	20.000	0.000	3.	304.	3.	9.
12 CUSTOM BANKOUT	0.00	0.00	0.00	1.17	1.17	1.17	1.17	1.17	1.17	0.00	0.00	0.00	4.000	0.000	3.	309.	3.	9.

MACHINERY REQUIREMENTS	IMPLEMENTS =	TIMES OVER,	TRUCKS = #	MILES/ACRE,	TRACTORS =	HRS/ACRE	# A CREW	POWER	MACH	TYPE	HARV
							LABOR	UNIT	CODE	CODE	CODE
26 DITCHER	0.00	0.00	0.00	0.00	1.00	0.00	0.000	11.	138.	4.	0.
49 ACIN IRRIG WATER	0.00	0.00	0.00	0.00	6.62	13.23	13.23	13.23	6.62	0.00	0.00
50 NO. TIMES IRRIG	0.00	0.00	0.00	0.00	1.00	2.00	2.00	2.00	1.00	0.00	0.00

EQUIPMENT REQUIREMENTS	NUMBER	PROPORT	XXX	EQUIP	TYPE	XXXX
	UNITS	OF COST	CODE	CODE	CODE	CODE
51 SIPHONS 6" DIA	10.000	1.000	0.	80.	5.	0.
REQUIREMENTS	2	3	4	5	6	7
	CHARGE		NUMBER	VALUE OR	TAXES	PERENNIAL CROPS
	METHOD		OF ACRES	COST/ACRE	PER ACRE	YRS LIFE
71	3.		330.00	0.00	0.00	4.0
ENTERPRISE 2- 9 REGION/COUNTY	39	UNASSIGNED	00000	MACH COMP	4	IRIG SYST
	1	UNASSIGNED	0	EQUIP SET	1	HARVEST MONTH
	9					

BASED ON 330 ACRES OF ALFALFA ON 900 ACRE RANCH YIELD: 7 TON  
MANAGEMENT FEE OF \$42 PER ACRE MAY BE INCLUDED IF APPLICABLE  
ESTABLISH EVERY 4TH YEAR

MACHINERY COMPLEMENT 4  
EQUIPMENT COMPLEMENT 1

GENERAL NAME CHANGE-->	LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE
296 WTR WEED CONTROL					
11 CRAWLER DB 125HP					
80 SIPHONS 6" DIA					

RM CL	VALUE	RM CL	VALUE	RM CL	VALUE	RM CL	VALUE	RM CL	VALUE	RM CL	VALUE
MACH COMP CHGS-->*** 3.	4500.000000	***13.	4500.000000	11. 2.	125.000000	11.16.	125.000000				
EBDAT COMP CHGS-->80. 2.	0.500000	80. 3.	19.000000	80. 4.	2.000000	80. 5.	40.000000	80. 6.	40.000000	80. 7.	8.000000
80. 8.	0.100000										
PARAMETER CHGS-->10.	5.800000	11.	4.560000	12.	4.560000	18.	1.000000	28.	0.080000		