

AF-IR-79-3

1979 PRODUCTION COSTS FOR WHEEL LINE IRRIGATED ALFALFA  
FALL RIVER VALLEY AND BIG VALLEY

CATEGORY	UNIT	MONTHLY SUMMARY OF RECEIPTS AND EXPENSES												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
TOTAL RECEIPTS	\$/AC	0.00	0.00	0.00	0.00	0.00	120.00	120.00	0.00	120.00	0.00	0.00	0.00	360.00
<b>OPERATING EXPENSES</b>														
PHOSPHATE	\$/AC	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00
HERBICIDE	\$/AC	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.25
AERIAL SPRAYING	\$/AC	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50
HIRE	\$/AC	0.00	0.00	0.00	0.00	0.00	6.00	6.00	0.00	6.00	0.00	0.00	0.00	18.00
MACHINE LABOR COST	\$/AC	1.61	0.00	0.00	0.00	0.11	5.75	5.75	0.11	5.75	0.00	0.00	0.00	19.08
INTEREST ON OPER. CAP.	\$/AC	0.18	0.00	0.00	0.00	0.11	0.13	0.09	0.03	0.00	0.00	0.00	0.00	0.53
TRACTOR COST	\$/AC	0.79	0.00	0.00	0.00	0.00	2.20	2.20	0.00	2.20	0.00	0.00	0.00	7.40
EQUIPMENT COST	\$/AC	0.53	0.00	0.00	0.00	0.07	4.20	4.20	0.07	4.20	0.00	0.00	0.00	13.27
BLDG OPER. COST	\$/AC	0.11	0.00	0.00	0.00	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.65
IRRIGATION COST	\$/AC	0.00	0.00	0.00	0.00	22.74	22.74	22.74	22.74	11.37	0.00	0.00	0.00	102.35
IRRIG LABOR COST	\$/AC	0.00	0.00	0.00	0.00	4.25	4.25	4.25	4.25	2.13	0.00	0.00	0.00	19.13
TOTAL EXPENSES	\$/AC	22.96	0.00	0.00	0.00	27.39	45.39	45.35	27.31	31.76	0.00	0.00	0.00	200.16

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
MACHINE LABOR	HR/AC	0.32	0.00	0.00	0.00	0.02	1.13	1.13	0.02	1.13	0.00	0.00	0.00	3.74
IRRIGATION LABOR	HR/AC	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.50	0.00	0.00	0.00	4.50
IRRIG. WATER APPLIED	ACIN	0.00	0.00	0.00	0.00	8.00	8.00	8.00	8.00	4.00	0.00	0.00	0.00	36.00

MACHINERY FIXED AND VARIABLE COSTS PER ACRE

MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANNUAL HOURS USED	FIXED COST PER ACRE				VARIABLE COST PER ACRE				HRS PER ACRE
						DEPR.	INTER.	TAX	TOTAL	FUEL	LUBE	REPAIRS	TOTAL	
TRACTOR 40 HP	1	40.0	9500.	20.	600.	0.20	0.03	0.05	0.28	0.40	0.06	0.33	0.79	0.286
TRACTOR 40 HP	2	40.0	9500.	20.	600.	1.16	0.18	0.30	1.64	2.34	0.35	1.92	4.61	1.681
TRACTOR 90 HP	5	90.0	23000.	20.	600.	0.66	0.10	0.17	0.94	0.79	0.12	1.10	2.01	0.398
PICKUP 3/4 T	15	0.8	8500.	6.	750.	0.13	0.01	0.01	0.15	0.21	0.03	0.11	0.35	0.091
SP BALE PICKUP*	19	12.5	32000.	10.	100.	6.41	0.53	0.86	7.80	0.35	0.05	1.98	2.39	0.240
IRR PUMP 75 HP*	22	2.0	11388.	25.	3200.	4.69	0.82	1.44	6.95	77.22	1.16	2.63	81.01	36.000
SWATHER	35	14.0	22300.	15.	90.	9.23	0.99	1.73	11.95	0.91	0.14	4.33	5.38	0.619
FERT. SPREADER	49	12.0	3770.	15.	60.	0.99	0.10	0.18	1.28	0.00	0.01	0.52	0.53	0.260
SIDE DELIV RAKE	124	8.0	2000.	15.	150.	1.23	0.13	0.23	1.59	0.00	0.00	4.24	4.32	1.528
SIDENOVE TOW*	129	1.0	38655.	10.	5000.	19.61	2.12	3.13	24.86	0.00	0.42	20.92	21.34	36.000
BALERS WIRE*	140	8.3	6500.	15.	50.	2.85	0.30	0.53	3.68	0.00	0.01	0.30	0.30	0.361
FARM SHOP	1		9000.	35.		1.45	0.36	0.63	2.44	0.56		0.02	0.59	
SHOP TOOLS&EQUIP	4		5250.	15.		1.53	0.25	0.37	2.15	0.00		0.04	0.04	
FUELTANK 200 GAL	16		150.	30.		0.01	0.01	0.01	0.03	0.00		0.00	0.00	
HAY STORAGE	42		7500.	20.		2.11	0.30	0.53	2.94	0.00		0.02	0.02	

TOTAL INVESTMENT OR COST 189013.  
MACHINERY & EQUIPMENT 1181.  
INVESTMENT PER ACRE

160 ACRES OF ALFALFA ON A 320 ACRE FARM  
BY DAN MARCUM, FARM ADVISOR, SHASTA - LASSEN CO.'S

UPDATED 04/19/79

INCOME ABOVE VARIABLE COSTS  
WHEN THE PRICE OF ALFALFA HAY RANGES FROM 40.00 TO 80.00  
AND THE QUANTITY OF ALFALFA HAY RANGES FROM 4.00 TO 8.00

QUANTITY OF ALFALFA HAY	PRICE OF ALFALFA HAY				
	40.00	50.00	60.00	70.00	80.00
4.00	* -40.16	* -0.16	* 39.84	* 79.84	* 119.84
5.00	* -0.16	* 49.84	* 99.84	* 149.84	* 199.84
6.00	* 39.84	* 99.84	* 159.84	* 219.84	* 279.84
7.00	* 79.84	* 149.84	* 219.84	* 289.84	* 359.84
8.00	* 119.84	* 199.84	* 279.84	* 359.84	* 439.84

160 ACRES OF ALFALFA ON A 320 ACRE FARM  
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UC Cooperative Extension

UPDATED 04/19/79

TITLE: 1979 PRODUCTION COSTS FOR WHEEL LINE IRRIGATED ALFALFA  
FALL RIVER VALLEY AND BIG VALLEY

#363 Shasta/Lassen

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
<b>1. GROSS RECEIPTS FROM PRODUCTION:</b>					
ALFALFA HAY	TON	60.000	6.000	360.00	
<b>TOTAL RECEIPTS:</b>				\$ 360.00	
<b>2. VARIABLE COSTS:</b>					
<b>PREHARVEST:</b>					
PHOSPHATE	LBS.	0.220	50.000	11.00	
HERBICIDE	LBS.	3.500	1.500	5.25	
AERIAL SPRAYING	ACRE	3.500	1.000	3.50	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			0.79	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			0.87	
BUILDINGS (FUEL-LUBE-REPAIRS)	ACRE			0.65	
IRRIGATION POWER COST	ACRE			77.22	
IRRIGATION (LUBE-REPAIRS)	ACRE			25.13	
IRRIGATION WATER APPLIED	ACIN	2.843	36.000		
MACHINERY LABOR	HOUR	5.100	0.424	2.16	
IRRIGATION LABOR	HOUR	4.250	4.500	19.13	
INTEREST ON OPERATING CAP.	DOL.	0.012	38.085	0.45	
<b>TOTAL PREHARVEST COSTS:</b>				\$ 146.15	
<b>PREHARVEST COST PER TON</b>				\$ 24.36	
<b>HARVEST:</b>					
WIRE	TON	3.000	6.000	18.00	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			6.61	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			12.40	
MACHINERY LABOR	HOUR	5.100	3.317	16.92	
INTEREST ON OPERATING CAP.	DOL.	0.012	7.469	0.09	
<b>TOTAL HARVEST COSTS:</b>				\$ 54.01	
<b>HARVEST COST PER TON</b>				\$ 9.00	
<b>TOTAL VARIABLE COSTS:</b>				\$ 200.16	
<b>VARIABLE COST PER TON</b>				\$ 33.36	
<b>3. INCOME ABOVE VARIABLE COSTS:</b>				\$ 159.84	
<b>INCOME PER TON</b>				\$ 26.64	
<b>4. CASH OVERHEAD:</b>					
<b>REAL PROPERTY TAXES:</b>				15.00	
<b>MISC. OFFICE &amp; BOOKKEEPING ( 2.50% OF TOTAL VARIABLE COSTS)</b>				5.00	
<b>TOTAL CASH OVERHEAD:</b>				\$ 20.00	
<b>5. INCOME ABOVE ALL CASH COSTS:</b>				\$ 139.84	
<b>INCOME PER TON</b>				\$ 23.31	
<b>6. OWNERSHIP COSTS:</b>					
<b>DEPRECIATION:</b>					
MACHINERY & EQUIPMENT	ACRE			22.87	
IRRIGATION SYSTEM	ACRE			24.30	
BUILDINGS	ACRE			15.10	
TREES, VINES OR STAND	ACRE			12.50	
<b>TOTAL DEPRECIATION:</b>				\$ 64.77	
<b>CAPITAL &amp; INTEREST:</b>					
MACHINERY/EQUIPMENT		0.012	201.382	2.37	
IRRIGATION SYSTEM		0.012	249.738	2.93	
BUILDINGS		0.012	78.797	0.93	
TREES, VINES OR STAND		0.012	75.000	0.88	
LAND		0.083	1500.000	123.75	
<b>TOTAL INTEREST CHARGE:</b>				\$ 130.86	
<b>TOTAL FIXED COSTS:</b>				\$ 195.63	
<b>FIXED COST PER TON</b>				\$ 32.60	
<b>7. TOTAL OF ABOVE COSTS:</b>				\$ 415.79	
<b>TOTAL COST PER TON</b>				\$ 69.30	
<b>8. NET RETURNS:</b>				\$ -55.79	
<b>NET RETURNS PER TON</b>				\$ -9.30	

This has been updated

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UPDATED 04/19/79 UC Cooperative Extension

1979 PRODUCTION COSTS FOR WHEEL LINE IRRIGATED ALFALFA  
 FALL RIVER VALLEY AND BIG VALLEY

COSTS AND RETURNS WILL BE  
 DIVIDED BY 6.0 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
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PRICE	SHARE	UNIT	ITEM	TYPE	XXXX
PRODUCTION																		
1 ALFALFA HAY	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	60.000	0.000	3.	9.	2.	0.
OPERATING INPUTS																		
RATE/UNIT																		
6 PHOSPHATE	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.220	0.000	12.	214.	3.	0.
7 HERBICIDE	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.500	0.000	12.	250.	3.	0.
9 AERIAL SPRAYING	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.500	0.000	7.	370.	3.	0.
10 WIRE	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	3.000	0.000	3.	383.	3.	9.
MACHINERY REQUIREMENTS																		
IMPLEMENTS = TIMES OVER, TRUCKS = # MILES/ACRE, TRACTORS = HRS/ACRE																		
M CREW POWER MACH TYPE HARV																		
LABOR UNIT CODE																		
26 SWATHER	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.000	0.000	0.	35.	4.	9.
27 BALER3 WIRE#	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.000	0.000	5.	140.	4.	9.
28 SP BALE PICKUP#	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.000	0.000	0.	19.	4.	9.
29 PICKUP 3/4 T	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.000	0.000	0.	15.	4.	0.
30 SIDE DELIV RAKE	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.000	0.000	2.	124.	4.	9.
31 FERT. SPREADER	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	1.	69.	4.	0.
SHARE SHARE POWER SYSN																		
FIXED % VAR % UNIT CODE LIFT																		
49 ACIN IRRIG WATER	0.00	0.00	0.00	0.00	8.00	8.00	8.00	8.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	22.	129.	200.
50 NO. TIMES IRRIG	0.00	0.00	0.00	0.00	2.00	2.00	2.00	2.00	1.00	0.00	0.00	0.00						

EQUIPMENT REQUIREMENTS

	NUMBER	PROPORT	XXX	EQUIP	TYPE	XXXX
	UNITS	OF COST		CODE		
51 FARM SHOP	1.000	0.500	0.	1.	5.	0.
52 SHOP TOOLS&EQUIP	1.000	0.500	0.	4.	5.	0.
53 FUEL TANK 200 GAL	1.000	0.500	0.	16.	5.	0.
54 HAY STORAGE	2.000	0.500	0.	42.	5.	0.

LAND REQUIREMENTS

CHARGE	NUMBER	VALUE OR	TAXES	PERENNIAL CROPS
METHOD	OF ACRES	COST/ACRE	PER ACRE	YRS LIFE COST/ACRE
1.	160.00	1500.00	15.00	6.0 150.00

160 ACRES OF ALFALFA ON A 320 ACRE FARM  
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MACHINERY COMPLEMENT 2  
 EQUIPMENT COMPLEMENT 1

UPDATED 04/19/79

LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE
MACHNRY NAME CHANGE->	1	TRACTOR 40 HP		
RV CL	VALUE	RV CL	VALUE	RV CL
MACH COMP CHGS-->	1.	2.	40.000000	1.
PARAMETER CHGS-->	6.		0.011750	18.
			0.500000	
			9500.000000	1.13.
			9500.000000	1.16.
			40.000000	