

COST & RETURNS SUMMARY FOR ALFALFA HAY
 COSTS AND RETURNS TO PRODUCE ALFALFA HAY BY RON VARGAS, FARM ADVISOR
 NADERA COUNTY 1981
 YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

*** SCS. BUDGET ***

Alfalfa Hay #197 ✓

AF-VN-81-2

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
GROSS RECEIPTS FROM PRODUCTION:					
ALFALFA HAY	TON	115.000	7.500	862.50	
TOTAL RECEIPTS:				862.50	
2. VARIABLE COSTS:					
PREHARVEST:					
HERBICIDE	LBS.	4.250	3.000	12.75	
CUSTOM AIR HERB	ACRE	4.000	1.000	4.00	
IRRIG DIST WATER	ACIN	0.580	42.000	24.36	
SINGLE-SUPR PHOS	LBS.	0.059	450.000	26.55	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			1.56	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			0.48	
BUILDINGS (FUEL-LUBE-REPAIRS)	ACRE			2.87	
MACHINERY LABOR	HOUR	6.000	0.315	1.89	
IRRIGATION LABOR	HOUR	5.000	7.000	35.00	
INTEREST ON OPERATING CAP.	DOL.	0.07370	54.697	3.98	
TOTAL PREHARVEST COSTS:				113.44	
PREHARVEST COST PER TON				15.1249	
HARVEST:					
CUSTOM SWATHING	ACRE	6.000	7.000	42.00	
CUSTOM RAKING	ACRE	3.000	7.000	21.00	
CUSTOM TURN	ACRE	1.750	2.000	3.50	
CUSTOM BALE	TON	9.000	7.500	67.50	
ROADSIDE	TON	2.900	7.500	21.75	
INTEREST ON OPERATING CAP.	DOL.	0.07370	43.385	3.20	
TOTAL HARVEST COSTS:				158.95	
HARVEST COST PER TON				21.1930	
TOTAL VARIABLE COSTS:				272.38	
VARIABLE COST PER TON				36.3179	
3. INCOME ABOVE VARIABLE COSTS:					
INCOME ABOVE VARIABLE COSTS:				590.12	
INCOME PER TON				78.6821	
OVERHEAD:					
PERSONAL PROPERTY TAXES:				1.26	
REAL PROPERTY TAXES:				22.50	
TOTAL OVERHEAD:				23.76	
OVERHEAD COST PER TON				3.1676	
TOTAL CASH COSTS:					
TOTAL CASH COST PER TON				296.14	
				39.4855	
5. INCOME ABOVE ALL CASH COSTS:					
INCOME ABOVE ALL CASH COSTS:				566.36	
INCOME PER TON				75.5145	
6. OWNERSHIP COSTS:					
DEPRECIATION:					
MACHINERY & EQUIPMENT	ACRE			3.11	
BUILDINGS	ACRE			14.62	
TREES, VINES OR STAND	ACRE			113.33	
TOTAL DEPRECIATION:				131.06	
CAPITAL & INTEREST:					
MACHINERY&EQUIPMENT		0.07370	30.749	2.27	
BUILDINGS		0.07370	287.528	21.19	
TREES, VINES OR STAND		0.07370	340.000	12.53	
LAND		0.07370	2000.000	147.50	
TOTAL INTEREST CHARGE:				183.39	
TOTAL FIXED COSTS:				314.45	
FIXED COST PER TON				41.9263	
7. TOTAL OF ABOVE COSTS:					
TOTAL OF ABOVE COSTS:				610.59	
TOTAL COST PER TON				81.4117	
8. NET RETURNS:					
NET RETURNS:				251.91	
NET RETURNS PER TON				33.5883	

BASED ON 80 ACRES ALFALFA ON 160 ACRE FARM

IRRIGATION: 42 ACIN PER YEAR

OWNERSHIP BASIS 7 3/8% INTEREST RATES

PRINTED: 02/20/81

HARVEST MONTH: 11

UPDATED 02/20/81

BUDGET RECORD NUMBER 197

1980 default data

UC Cooperative Extension

*** SCS BUDGET ***

BUDGET RECORD NUMBER 197

CASH FLOW & INVESTMENT SUMMARY FOR ALFALFA HAY

COSTS AND RETURNS TO PRODUCE ALFALFA HAY
MADERA COUNTY 1981

BY RON VARGAS, FARM ADVISOR

YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

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	143.75	143.75	143.75	143.75	143.75	143.75	0.00	0.00	862.50
OPERATING EXPENSES														
HERBICIDE	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.75	12.75
CUSTOM AIR HERB	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.00
IRRIG DIST WATER	\$/AC	0.00	0.00	0.00	3.48	3.48	3.48	3.48	3.48	3.48	3.48	0.00	0.00	24.36
SINGLE-SUPR PHOS	\$/AC	0.00	0.00	0.00	26.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.55
CUSTOM SWATHING	\$/AC	0.00	0.00	0.00	0.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	0.00	42.00
CUSTOM RAKING	\$/AC	0.00	0.00	0.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	0.00	21.00
CUSTOM TURN	\$/AC	0.00	0.00	0.00	0.00	1.75	1.75	0.00	0.00	0.00	0.00	0.00	0.00	3.50
CUSTOM BALE	\$/AC	0.00	0.00	0.00	0.00	11.25	11.25	11.25	11.25	11.25	11.25	0.00	0.00	67.50
ROADSIDE	\$/AC	0.00	0.00	0.00	0.00	3.63	3.63	3.63	3.63	3.63	3.63	0.00	0.00	21.75
MACHINE LABOR COST	\$/AC	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89
INTEREST ON OPER. CAP.	\$/AC	0.00	0.00	0.00	1.68	1.28	1.06	0.81	0.61	0.40	0.20	0.00	1.13	7.17
TRACTOR COST	\$/AC	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56
EQUIPMENT COST	\$/AC	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
BLDG OPER. COST	\$/AC	0.00	0.00	0.00	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	2.87
IRRIG LABOR COST	\$/AC	0.00	0.00	0.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	0.00	0.00	35.00
TOTAL EXPENSES	\$/AC	0.00	0.00	0.00	41.31	36.05	35.84	33.83	33.63	33.43	33.23	9.32	18.20	272.38

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
	HR/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MACHINE LABOR	HR/AC	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
IRRIGATION LABOR	HR/AC	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	7.00
IRRIG. WATER APPLIED	ACIN	0.00	0.00	0.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	0.00	0.00	42.00

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
TRACTOR 75 HP	4	75.0	17400.	20.	300.	0.72	0.69	0.37	1.79	0.99	0.15	0.42	1.56	0.286
DRY FERT APPLIC.	69	12.0	4520.	15.	30.	2.38	1.58	0.88	4.84	0.00	0.01	0.47	0.48	0.260
SURFACE IRR SYS*	128	2.0	0.	10.	5000.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.000
SHOP	2		21060.	35.		6.77	10.67	2.63	20.07	2.63		0.11	2.75	
W-SHOP EQUIP	4		6143.	15.		3.58	3.68	0.77	8.03	0.00		0.10	0.10	
STORAGE SHED	8		13163.	35.		4.23	6.67	1.65	12.55	0.00		0.02	0.02	
FUELTANK 550 GAL	18		234.	30.		0.04	0.17	0.03	0.24	0.00		0.00	0.00	
MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE			781.			17.73	23.46	6.33	47.52	3.62	0.16	1.13	4.91	
TOTAL INVESTMENT			62519.											

BASED ON 80 ACRES ALFALFA ON 160 ACRE FARM
FLOOD IRRIGATION: 42 ACIN PER YEAR
LAND OWNERSHIP BASIS 7 3/8% INTEREST RATES
DATE PRINTED: 02/20/81

UPDATED 02/20/81

UC Cooperative Extension

*** SCS BUDGET ***

FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 197
 COSTS AND RETURNS TO PRODUCE ALFALFA HAY BY RON VARGAS, FARM ADVISOR
 MADERA COUNTY 1981
 YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

FUEL USED IN GALLONS PER HOUR

TRACTOR 75 HP 3.600

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED
 MACHINE GALLONS POWER UNIT

DRY FERT APPLIC. 1.031 TRACTOR 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
DRY FERT APPLIC.	0.000	0.000	0.000	1.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.031	DIESEL
TOTALS	0.000	0.000	0.000	1.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.031	

GALLONS FUEL BY TYPE

0.00 GAS
 0.00 LP
 1.03 DIESEL
 0.00 N. GAS
 0.00 KWHRS

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

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 FLOOD IRRIGATION: 42 ACIN PER YEAR
 LAND OWNERSHIP BASIS 7 3/8% INTEREST RATES
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MACHINERY OPERATIONS SUMMARY BUDGET RECORD NUMBER 197
 COSTS AND RETURNS TO PRODUCE ALFALFA HAY BY RON VARGAS, FARM ADVISOR
 MADERA COUNTY 1981
 YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

ITEM	TIMES	LABOR	MACHINE	FUEL, OIL, FIXED	
NO.	DATE	OVER	HOURS	LUB., REP. COSTS	
		HOUR	S	PER ACRE	PER ACRE
DRY FERT APPLIC.	4, 69 APR	1.00	0.315	0.260	2.04 6.63
TOTALS			0.315	0.260	2.04 6.63

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RANGING ANALYSIS FOR BUDGET RECORD NUMBER 197
 COSTS AND RETURNS TO PRODUCE ALFALFA HAY BY RON VARGAS, FARM ADVISOR
 MADERA COUNTY 1981
 YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

INCOME ABOVE VARIABLE COSTS
 WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY

	PRICE OF ALFALFA HAY	RANGES FROM	103.50 TO	126.50
		RANGES FROM	6.00 TO	9.00
	103.50	109.25	115.00	120.75 126.50

6.00 *	348.62	383.12	417.62	452.12 486.62
* *				
6.75 *	426.24	465.05	503.87	542.68 581.49
* *				
QUANTITY OF ALFALFA HAY 7.50 *	503.87	546.99	590.12	633.24 676.37
* *				
8.25 *	581.49	628.93	676.37	723.80 771.24
* *				
9.00 *	659.12	710.87	762.62	814.37 866.12
* *				

INCOME ABOVE ALL CASH COSTS
 WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY

	PRICE OF ALFALFA HAY	RANGES FROM	103.50 TO	126.50
		RANGES FROM	6.00 TO	9.00
	103.50	109.25	115.00	120.75 126.50

6.00 *	324.86	359.36	393.86	428.36 462.86
* *				
6.75 *	402.48	441.30	480.11	518.92 557.73
* *				
QUANTITY OF ALFALFA HAY 7.50 *	480.11	523.23	566.36	609.48 652.61
* *				
8.25 *	557.73	605.17	652.61	700.05 747.48
* *				
9.00 *	635.36	687.11	738.86	790.61 842.36
* *				

INCOME ABOVE ALL COSTS
 WHEN THE PRICE OF ALFALFA HAY AND THE QUANTITY OF ALFALFA HAY

	PRICE OF ALFALFA HAY	RANGES FROM	103.50 TO	126.50
		RANGES FROM	6.00 TO	9.00
	103.50	109.25	115.00	120.75 126.50

6.00 *	10.41	44.91	79.41	113.91 148.41
* *				
6.75 *	88.04	126.85	165.66	204.47 243.29
* *				
QUANTITY OF ALFALFA HAY 7.50 *	165.66	208.79	251.91	295.04 338.16
* *				
8.25 *	243.29	290.72	338.16	385.60 433.04
* *				
9.00 *	320.91	372.66	424.41	476.16 527.91
* *				

BASED ON 80 ACRES ALFALFA ON 160 ACRE FARM
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 LAND OWNERSHIP BASIS 7 3/8% INTEREST RATES
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STORED DATA PAGE (NO CALCULATIONS) FOR ALFALFA HAY

BUDGET RECORD NUMBER 197

COSTS AND RETURNS TO PRODUCE ALFALFA HAY BY RON VARGAS, FARM ADVISOR
 MADERA COUNTY 1981
 YIELD: 7.5 TON PER ACRE (6 CUTTINGS)

COSTS AND RETURNS WILL BE DIVIDED BY 7.5 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 RENT	UNIT CODE	ITEM CODE	TYPE	XXXX
1 ALFALFA HAY	0.00	0.00	0.00	0.00	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.00	115.000	0.000	3.	9.	2.	0.
OPERATING INPUTS																		
	RATE/UNIT												PRICE	SHARE RENT	UNIT CODE	ITEM CODE	TYPE	HARV CODE
3 HERBICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	4.250	0.000	12.	250.	3.	0.
4 CUSTOM AIR HERB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	4.000	0.000	7.	373.	3.	0.
5 IRRIG DIST WATER	0.00	0.00	0.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	0.00	0.00	0.580	0.000	11.	323.	3.	0.
6 SINGLE-SUPR PHOS	0.00	0.00	0.00	450.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.059	0.000	12.	219.	3.	0.
7 CUSTOM SWATHING	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	6.000	0.000	7.	314.	3.	9.
8 CUSTOM RAKING	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	3.000	0.000	7.	293.	3.	9.
9 CUSTOM TURN	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.750	0.000	7.	319.	3.	9.
10 CUSTOM BALE	0.00	0.00	0.00	0.00	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.00	9.000	0.000	3.	291.	3.	9.
11 ROADSIDE	0.00	0.00	0.00	0.00	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.00	2.900	0.000	3.	295.	3.	9.

MACHINERY REQUIREMENTS	IMPLEMENTS =	TIMES OVER,	TRUCKS = #	MILES/ACRE,	TRACTORS =	HRS/ACRE	# CREW	POWER	MACH	TYPE	HARV
26 DRY FERT APPLIC.	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49 ACIN IRRIG WATER	0.00	0.00	0.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	0.00
50 NO. TIMES IRRIG	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00

EQUIPMENT REQUIREMENTS	NUMBER UNITS	PROPORT OF COST	XXX	EQUIP CODE	TYPE	XXXX
51 FARM SHOP	1.000	0.500	0.	2.	5.	0.
52 TOOLS-SHOP EQUIP	1.000	0.500	0.	4.	5.	0.
53 STORAGE SHED	1.000	0.500	0.	8.	5.	0.
VELTANK 550 GAL	1.000	0.500	0.	18.	5.	0.

LAND REQUIREMENTS	CHARGE METHOD	NUMBER OF ACRES	VALUE OR COST/ACRE	TAXES PER ACRE	PERENNIAL CROPS YRS LIFE	COST/ACRE
71 ENTERPRISE 2- 9 REGION/COUNTY 20 UNASSIGNED	1.	80.00	2000.00	22.50	3.0	340.00

BASED ON 80 ACRES ALFALFA ON 160 ACRE FARM
 FLOOD IRRIGATION: 42 ACIN PER YEAR
 LAND OWNERSHIP BASIS 7 3/8% INTEREST RATES

UPDATED 02/20/81
 MACHINERY COMPLEMENT 1
 EQUIPMENT COMPLEMENT 1

GENERAL NAME CHANGE	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL
PARAMETER CHGS-->10.	319	6.000000	11.	295	4.900000	12.	5.000000	6.	0.073700	26.	0.073700				

DATE PRINTED: 02/20/81

UC Cooperative Extension

1980 default data

Additional Notes: Alfalfa Hay Production
Madera County 1981
By Ronald Vargas, Farm Advisor

A. Production

Yield: 7.5 ton per acre
6 cuttings per year; 1.25 ton/cutting

B. Operating Inputs

Preharvest:

1. Dormant herbicide in December. Air application.
2. Single super phosphate fertilizer in April

Harvest:

1. Custom turn: 1st and 2nd cutting only

C. Machinery Requirements

1. Fert. spreader 1x April Single super phosphate

D. Irrigation Schedule

Flood irrigation system: April-October
1x per month @ 6 Acin

E. Land Charges

Land ownership basis

Assume: stand life of 3 years average
cost of establishment = \$340 per acre

F. See Budget Record Number 196 for establishment costs.