

ALFALFA PROJECTED PRODUCTION COSTS 1987-1988

Mechanical operations at custom rates. Hand labor at \$5.50 per hour (\$4.30 plus Social Security, unemployment insurance and fringe benefits).

Yield--8.0 tons per acre

OPERATION	CUSTOM RATE	MATERIALS		HAND LABOR		COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Plow	24.25					24.25
Disc 2x	9.00					18.00
Fertilize	6.00	260# 11-52-0	30.55			36.55
Build & Break borders	15.00					15.00
Flood		1/2 ac ft	4.50	1	5.50	10.00
Disc 2x	9.00					18.00
Landplane 2x	9.50					19.00
Border, dump	11.75					11.75
Float	7.75					7.75
TOTAL LAND PREPARATION COSTS						160.30
COST OF ESTABLISHMENT						
Weed Control	8.75	Herbicide	13.00			21.75
Planting	10.50	20# seed @1.00/lb	20.00			30.50
Irrigate 2x		1 ac/ft	9.00	2	11.00	20.00
Insect Control 1x	4.90	Insecticide	7.00			11.90
COST OF ESTABLISHMENT						84.15
TOTAL COST OF STAND ESTABLISHMENT						244.45
Annual Costs of Hay Production--3 Year Life						
Weed Control		Herbicide	14.60			14.60
Irrigate 16x		6.5 ac. ft.	58.50	9	49.50	108.00
Fertilize	6.00	90# Phosphate	10.58			16.58
Insect Control 4x	4.90	Insecticide	46.00			65.60
TOTAL ANNUAL CULTURAL COSTS						204.78
Land Rent (gross)						150.00
Amortization--	33% of total cost of stand establishment					80.67
Cash Overhead--	12% of annual costs, land rent and amortization					52.25
TOTAL PREHARVEST COSTS						487.70
HARVEST COSTS						
Swather 7x	7.50	7 times				52.50
Rake 9x	4.00	9 times				36.00
Bale	9.00/ton	8 tons				72.00
Haul & Stack	.23/bale	16 bales/ton				29.44
TOTAL ALL COSTS						677.64

		PROJECTED INCOME ABOVE COSTS (PER ACRE)						Breakeven \$/ton	
		price/ton							
		60.00	70.00	80.00	90.00	100.00	110.00	120.00	
Tons	7	-245	-175	-105	-35	35	105	175	95
per	8	-198	-118	-38	42	122	202	282	85
acre	9	-150	-60	30	120	210	300	390	77
	10	-103	-3	97	197	297	397	497	70
	11	-56	54	164	274	384	494	604	65

ALFALFA CULTURE

1987-1988

<u>YEAR</u>	<u>ACRES</u>	<u>YIELD/ACRE (TONS)</u>	<u>VALUE/TON</u>
1986	176,900	8	\$65
1985	156,200	9	85
1984	143,900	9	82
1983	139,000	9	88
1982	136,700	9	69

SOIL PREPARATION: A uniform seed bed is a prerequisite to a good stand. High spots in the field cause uneven irrigation, resulting in poor stands. A well-drained field is also necessary to lessen the likelihood of salinity, scald, and root rot problems. Most growers will plow and some will subsoil.

PLANTING RATES: One pound of seed per acre will provide 4 to 5 seeds per square foot. At this rate, 15 pounds are equal to 60 to 75 seeds per square foot. Growers use 15 to 30 pounds seed depending on condition of their field, cost of seed, method of planting and time of planting.

PLANTING DATES: Late September through November is the preferred time for planting. Later plantings often result in poor germination. Spring plantings, if necessary, are suggested in February and March.

VARIETIES: Certified CUF 101 and other public varieties are recommended because of their resistance to the spotted alfalfa aphid, the blue alfalfa aphid, and superior yielding ability. A number of commercial proprietary varieties also have good spotted alfalfa aphid and blue alfalfa aphid resistance and are very good yielders.

FERTILIZATION: Approximately 100 pounds of phosphate is taken from the soil by each 7-8 tons of alfalfa. This must be replaced to maintain maximum hay production. A preliminary application of at least 100-150 pounds of phosphate per acre is recommended prior to planting. On soil low in nitrogen, 20-30 pounds of nitrogen stimulates seedling growth. A deficiency in nitrogen may occur on soils recently brought into production. Additional annual applications of 100 pounds of phosphate are recommended.

IRRIGATION: One to 3 irrigations per cutting are necessary depending on the type of soil and time of year.

PEST CONTROL: The spotted alfalfa aphid can cause damage on nonresistant alfalfa. Control is sometimes necessary for the Egyptian alfalfa weevil and for the pea aphid in February and March. The blue aphid may require additional insecticide costs on alfalfa hay. Alfalfa caterpillar and beet armyworm usually require control in mid to late summer. Occasionally, cutworm outbreaks occur in fall and spring months. Root rots can also be a severe problem. Consult pest control farm advisors for most efficient procedures. Alfalfa planted on beds are more susceptible to cutworm than flat planted alfalfa.

HARVESTING: Alfalfa is normally baled from March until October. During winter months both pasturing and green chopping are practiced. Both pasturing and green chop may return from \$35 to \$65 per acre for the winter months. In 1986, 134,500 acres were pastured.