

Calif. Univ. Agric. Ext. Service,
Fresno County

ESTABLISHING A STAND OF ALFALFA

Cost Analysis Work Sheet - 1963

E. J. Gregory and E. A. Yeary
Farm Advisors

This work sheet was developed to show sample costs for establishing a good stand of alfalfa hay. It includes all costs involved from land preparation through seeding. Included also is the cost of fertilization for the first year's production. It does not include any other production figures. A cost sheet is available for producing and processing hay.

In order to obtain high yields of good quality hay certain factors should be considered before seeding. Some of these factors are outlined below.

1. Subsoiling - Soil compacted by equipment in growing previous crops, especially cotton, develops compacted layers which restrict root growth and increases the incidence of phytophthora root rot. Subsoiling or ripping is needed for good production.
2. Land Grading - Most alfalfa fields require a 0.2 to 0.6 slope per 100 feet, depending on the type and depth of soil. Newly leveled land should be pre-irrigated so that low and high areas can be eliminated before planting. Water should not run in the checks over 8 hours.
3. Time of Seeding - Fall and early spring seedings are better than winter or late spring plantings. Fall planting usually produces a higher yield the first year. If weeds are a serious problem, irrigating to germinate weed seed and a light disking along with a spring seeding is recommended.
4. Method of seeding - Alfalfa should be uniformly covered (no deeper than $\frac{1}{2}$ inch) after broadcast seeding, then rolled or cultipacked to prevent moisture loss and provide protection against low temperatures. Drilled seedings should also be rolled or cultipacked.
5. Rate of Seeding - Twenty pounds of seed per acre is recommended for normal seeding on well prepared seedbeds. Twenty-five to thirty pounds per acre may be justified when seeding during cold or hot weather or on cloddy seedbeds.
6. Varieties - Aphid resistant varieties should be planted. Moapa is recommended for most of Fresno County. Lahontan is only recommended in areas where heavy soils or poor drainage results in extreme phytophthora root rot conditions. It should not be used in areas of high humidity because it is highly susceptible to leaf diseases. Poor yields and weak stands result when Lahontan is planted on sandy soil.
7. Weed Control - Clipping for weed control after emergence should not be done until the crown of the plant is well established. Before using herbicides contact the Farm Advisors' Office.

ESTABLISHING A STAND OF ALFALFA FOR HAY

Cost Analysis Work Sheet

Sample costs to establish a stand of alfalfa in Fresno County for hay production. Man labor at \$1.10 per hour total and equipment operator \$1.30. 70 h.p. tracklayer and 45 h.p. wheel diesel tractor.

	<u>Sample</u> <u>Costs</u> Per <u>Acre</u>	<u>My</u> <u>Costs</u> Per <u>Acre</u>
<u>CASH COSTS</u>		
Disc 3 times: 3/4 hr. man and tracklayer	2.97	
Chisel 1 time: 1 hr. man and tracklayer	3.96	
Land plane: 1/4 hr. man and tracklayer	.99	
Border preparation: 1/4 hr. man and wheel tractor	.58	
Pre-irrigation: 1 hr. per acre	1.10	
Water: 6" @ \$4.00/ac. ft. for power	2.00	
Seed: 20 lbs. @ 46¢	9.20	
Seeding: 1/4 hr. man and wheel tractor	.58	
Fertilizer: 500 lbs. single super phosphate \$51.51/ton	12.88	
Fertilize: 1/4 hr. man and wheel tractor	.58	
Cultipak or harrow: 1/4 hr. man and wheel tractor	.58	
Repairs to equipment except tractors	1.00	
Misc. expense: office, car, operating capital, etc.	1.80	
TOTAL CASH COSTS	38.22	
<u>DEPRECIATION</u>		
Wheel tractor: 1 hr. @ 47¢	.47	
Tracklayer: 2 hrs. @ \$1.78	3.56	
Equipment except tractors	1.50	
Total Depreciation	5.53	
<u>INTEREST ON INVESTMENT @ 6%</u>		
Wheel tractor: 1 hr. @ 17¢	.17	
Tracklayer: 2 hrs. @ 80¢	1.60	
Equipment except tractors	.50	
Total Interest	2.27	
TOTAL COST TO ESTABLISH ALFALFA STAND	46.02	