

ALFALFA'S COMPETITIVE POSITION IN CALIFORNIA FARM PRODUCTION

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Introduction

Alfalfa continues to be our most important commercial forage crop. It occupies nearly 1/8 of our irrigated and harvested acreage in this state, and during 1975 generated about 450 million dollars income at the farm level. At its best when skillfully managed on deep loam soils with adequate water it may be successfully produced under many less desirable conditions. Harvesting and handling methods are versatile too. This crop may be grazed, green chopped, baled, cubed, or stacked among other methods of handling. The long harvesting season provides many pay days per year and can greatly help the cash flow problem of diversified farms.

Production Costs

Production costs for all crops have increased at a startling rate during the past few years. This encourages growers to look very carefully at all crops available to them before establishing a production program.

To indicate how much this cost has increased we can go back to 1970 and note that the cash costs of producing alfalfa hay at 8 1/2 tons per acre was \$21 per ton. In 1976 on a comparable basis cash costs were approximately \$42 per ton. This rate of increase is generally true for all of the crops we produce but product values have not been entirely consistent in meeting these rising costs. The most significant impact of this change has been to increase the impact of risk, since any crop loss could have more devastating consequences at these higher costs.

Marketing

Alfalfa hay continues to be very flexible in its marketing programs. Nearly 30 percent of our total production is used by the producers for livestock feed and does not go through any market process. The dairy industry continues to be the biggest single buyer of alfalfa hay, consuming nearly 60 percent of the amount that is commercially marketed. The economic health of the beef and dairy industries is extremely important in considering the price and projecting market demand for alfalfa hay. At the time of this writing the range livestock industry is in deep economic trouble. Low prices combined with shortages of range feed have caused livestock people to buy more supplement feed than usual with less ability to pay for it. The older established dairies that are well managed are successfully competing but newer entries into the business with heavy debts are sometimes in financial difficulty.

A lower demand for feed grains in the export market is at this time depressing the prices of these crops, which in turn puts downward pressure on the price of alfalfa hay to a limited extent. The dairy industry has converted heavily to the use of silage crops to whatever extent they can be utilized and has reduced its demand for alfalfa hay, but again only to a limited extent.

How Does Alfalfa Compete with Other Crops that Could Use the Same Farm Land?

Most growers try to maximize net income from their farming operations. If alternative crops are available and can be produced without heavy reinvestment in equipment growers will produce the crop that generates the maximum net income. The most valuable crop will be produced until some limit is reached. This limit may be an acreage allotment, water supply, market availability or others that will finally restrict the acreage of the most valuable crop. Crops in order of ranking in income potential will be added until the land area is all occupied.

In the southern half of the state alfalfa competes very heavily with cotton, tomatoes, sugar beets and feed grains. In the northern portions processing tomatoes and sugar beets have been major competing crops. Following is a brief list of some crops together with projected yields and net incomes per acre that could prevail in 1977. The data have been made as comparable as possible and all crops are projected at slightly better than average yields.

Crop	Yield Per Acre	Unit Price	Projected net income per acre
Cotton	1,100 lbs. int	.70 lb. lint	\$242
Alfalfa hay	8 tons	\$68 ton	80
Processing tomatoes	24 tons	\$51 ton	240
Sugar beets	30 tons	\$23 ton	90
Barley	2 1/2 tons	\$108 ton	32.50
Wheat	2 1/2 tons	\$96 ton	15.00

It is not possible to accurately predict the prices of these crops in their 1977 marketing seasons. We have attempted to place them in comparable economic positions so they can be ranked in this cost-price relationship. The prices of cotton, barley and wheat are expected to fluctuate the most. The price of processing tomatoes for 1977 has not yet been established. The price of cotton is expected to be substantially higher than the present futures market for December 1977 would indicate but this is not a predictable value. The price of sugar beets does not vary so much and sugar beets would be a marginal crop unless high yields can be obtained.

In addition to net income, growers will also consider some other factors in deciding to grow more or less alfalfa in 1977. These include: (1) the requirement for debt service and timing of cash income; (2) the inventory of machinery available on the farm; (3) availability of custom services; and (4) the grower evaluation of risk.

Summary

Some pressures that indicate severe competition for alfalfa and possibly a declining acreage in part of the state include the very high prices of cotton. It is anticipated that cotton production will expand and part of this expansion could be at the expense of alfalfa. Pressures that could point toward an increasing alfalfa acreage include the extremely low present value of sugar beets and declining value of wheat. Processing tomatoes just completed a very difficult year and a most unsatisfactory one for a great many growers. Alfalfa hay is not subject to the extreme risks that plague processing tomatoes. An economic disaster caused by weather or labor problems is very unlikely in alfalfa.

Seed prices are very strong and interest is reviving in alfalfa production. Based on the evidence available at the present time we would expect an expansion of several percentage points in alfalfa hay north of the cotton area and an approximate holding of the line in alfalfa acreage in the cotton belt. Cotton acreage will expand but most of this expansion is expected to be on acreage of crops whose value has declined during the past several years. We expect a very slight net gain in alfalfa acreage in California based on the evidence available at present.