

The Sheep and Wool Industry

recent trends indicate continuing short supplies of lamb in California and of wool in the United States

Edwin C. Voorhies

California's population of stock sheep on January 1, 1951 was about 53% of the 1942 population and the comparative national figure was approximately 60%.

Many reasons are advanced for this decline. Cattle raising and farming, especially during the war, were more profitable. Labor trained in skills necessary for sheep husbandry was at a premium. Grazing on public lands has been reduced. In some areas, dogs and predatory animals were—and still are—problems. Meat and wool are joint products and during the past decade about 53% of the producer's income originated with meat and 47% with wool. Relatively low wool prices prevailed from 1940 through 1947 and large stockpiles of wool were built up.

In the past, lamb and mutton furnished from less than 3% to about 6% of the nation's total red meat consumption. With small supplies the meat side of the industry will probably be in a relatively advantageous position as compared with other meats in the next few years.

Lamb production, by the very nature of the industry, does not increase so rapidly as—for example—pork. Most certainly lamb prices are influenced by the supplies of other meats and the demand for them. While all meat production in the nation probably will increase in 1951, meat prices are expected to be slightly higher because of the larger anticipated consumer income.

The California meat animal producer is a beneficiary, insofar as prices are concerned, from the upsurge in the human population within the state as well as that in Oregon and Washington. This population growth has brought about an increasing reliance upon other areas for a substantially larger number of livestock required to furnish the state with meat. Approximately 60% of the beef, 80% of the pork and 40% of the lamb must be brought into California as live animals or as dressed meat to supply the demands.

The present location advantage pattern could be changed materially by alterations in transportation charges.

There are other modifications in certain relationships which might change the outlook. At the moment, lamb prices—as well as those for beef—are within the range subject to control. There is always the possibility of meat imports from such

countries as New Zealand and Australia.

Only apparel wool need be considered in an economic analysis of the domestic situation. Carpet wool is not produced in the United States and it is imported without duty. It has different uses than the apparel type which is subject to an import duty.

World wool production has not shown the same downward tendency which has prevailed in the United States, South Africa and Western Europe. Total world production in the fiscal year ending June 30, 1951 probably will be about 5% higher than it was on the average in the prewar years. Any future increments in world production will come along slowly. There is always a possibility that droughts in the leading wool country, Australia, may lessen production materially.

During the war large wool stocks accumulated. On July 31, 1945, Joint Organization stocks had reached 3,210 million pounds, grease basis. In the United States, Commodity Credit holdings reached a peak of about 540 million pounds, grease basis, on October 1, 1946. These stocks represented over a year's production and it was believed that many years would be required to dispose of these stockpiles, which today—for all practical purposes—are nonexistent.

For five years the world has been consuming not only the equivalent of its production but a portion of the stockpiles. In the fiscal year which ended on June 30, 1950 world consumption was from 15% to 20% greater than production. To an even greater degree the United States mills have been chewing up wool. In 1950 this country consumed a third more than in the average prewar year while domestic production was about two fifths less.

The reasons for the larger world wool consumption over the past few years can not be traced to any single cause. One of the simple facts is that more people are seeking wool. After hostilities ceased there was a demand for woolen goods by servicemen returning to civil life. A pent-up demand was evident among civilians in many countries. There was a remarkably fast comeback in Western Europe's textile industry. In the United States certain style changes—wool suits for women and sport coats for men—made for a greater demand.

The dependence of the United States upon foreign apparel wool is not new but there has been a change in this relationship. During 1935–1939 the American mills used wool in the proportion of approximately two thirds domestic and one third foreign. At present these proportions have changed to about one fourth and three fourths.

This greater dependence upon foreign wools is indicated by imports. The average of imports in the five years prior to the war was about 56 million pounds—clean content; 1950 imports totaled about 300 million pounds—between five and six times the prewar amount.

Prices abroad began to advance rather rapidly in 1948. An interruption occurred in September 1949 with the devaluation in foreign currencies. Prices firmed after this temporary setback and by June 1950 they were higher than they had been in the previous September. Between the latter month and September 1950 prices abroad skyrocketed—reaching higher levels than those of comparable wools in the United States.

Producer prices in the United States followed the same pattern. The October 15, 1950 producer price was the highest recorded since 1909.

The inflationary tendencies both at

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COOKER

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obtained. Such sirups may be profitably used by returning them to the canned pears.

The pilot apparatus used in these preliminary experiments was three feet high, one foot in diameter and built of a three millimeter thick glass lined steel. It is important that the whole column should end with a smooth and gradual cone.

If the bottom of the heating chamber is straight or only rounded there will be created a considerable obstruction to the material blown out. This will result in the steam forcing a passage out and leaving a considerable part of the fruit in the cylinder.

The quick opening valve at the bottom should be proportionally wide enough to let through the entire mass as fast and as freely as possible. The bottom valve in the laboratory pilot plant used was 1½ inches in diameter, but for large scale equipment at least three to four inch valves should be used.

A wide grid in the form of a cross should be inserted at the bottom of the conical apparatus just above the outlet

to prevent whole fruit from clogging the valve.

Grids or screen with small holes are inadequate because the outer skin of the tomato is so strong it would prevent the mass from passing through during the blow-out operation.

Further Studies Needed

Further detailed study is required on the application of this method in the processing of various fruits and agricultural waste material; the control of conditions; and, the value of the resulting products.

Some of the specific problems to be studied in connection with this method are:

1. The influence of the high temperature used on the retention and preservation of color and vitamin C.

2. The degree of inactivation of the pectic enzymes as well as the viscosity of the final products.

3. The degree of sterilization attained by this method.

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SHEEP

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home and abroad have aided in the upward price movement. The outlook for wool prices at home and abroad is that they will continue to be firm. An added factor in their strength will be rearmament as servicemen require several times the amount of wool normally used by a civilian.

As with lamb, wool prices at present are within the range of authority for control. The substitution of other fibers, especially synthetics, has increased since the close of the war. Undoubtedly part of this has come through price relationships.

The present differentials in prices will tend to encourage an increase in the substitution of synthetic fibers for wool—wherever and whenever this can be done.

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A more complete report of the sheep and wool situation—Sheep and Wool Situation in California 1950, by Edwin C. Voorhies—Exp. Sta. Cir. 399, may be obtained by writing to the Publications Office, 22 Giannini Hall, University of California, Berkeley 4, California.

SQUASH

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Starch generally accounted for slightly over one third of the alcohol-insoluble solids. In the Summer Crookneck variety it increased for about the first eight days and then decreased. In the other varieties there was a tendency for starch to remain constant for the first few days and then to decrease. When the fruits were in the best edible state, those of Summer Crookneck were the highest in starch followed in order by Bush Scallop, Early Prolific, and Black Zucchini.

All varieties were similar in sugar content and reducing sugars were dominant. There was a marked increase in sugar during the four days after bloom and then a gradual leveling off for the next six days. During the period of prime edibility fruit of White Bush Scallop had the highest sugar content and Summer Crookneck and Zucchini the lowest.

Taking the Early Prolific variety as an example, fruits on the fifth day after bloom, when they are considered as of prime market condition, had slightly over 6% total solids, nearly 3% alcohol-insoluble solids, slightly over 2% reducing sugars, about 1% fructose, and about .2% sucrose.

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The above progress report is based on Research Project No. 1175.

Average growth rate of fruits of four varieties of summer squash.

