

# Cotton Quotas and Allotments

## livestock earning possibilities on California cotton farms affected by new national acreage allotments

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The following article is the last of a four-part report on an analysis of the impact of cotton acreage allotments on the agriculture of California

**Livestock offers a chance**—for some California cotton farmers—to replace a portion of income lost through acreage allotments in 1954.

The farmer who already produces livestock can most readily substitute milk or meat earnings for cotton income. Even he usually will face important changes in his farm business setup.

The cotton farmer who is not also a livestock man must drastically reorganize his operations and adjust management policies and practices. He must increase capital, provide improvements and equipment, obtain livestock, and arrange new market outlets. Frequently he will have to renegotiate rental contracts, financing arrangements, and other legal relationships. Probably it will be necessary for him to learn new production technology and hire or train workers accordingly.

The farmer who does decide to substitute livestock for cotton income should be convinced that by doing so he can increase profit. Such gains can result from more complete or higher return use of land or labor—growing and feeding irrigated pasture or other forage crops, or providing additional profitable work for the farm labor supply.

### Meat

Demand for meat and livestock products in California has been increased sharply since 1940 by a tremendous population growth that is expected to continue at least five to 10 more years. Total people numbered 6.9 millions in 1940, 10.6 in 1950, and 12.1 in 1953. Estimates indicate about 13 millions in 1955 and there could be 14 millions by 1960.

Neither livestock numbers nor meat and livestock product production kept up with population increases from 1940 to 1953. All California livestock statistics show declines during this period when expressed in ratio to people. California has made up the deficit in state production by shipping in cattle, sheep, hogs, as well as meat. She also ships in poultry and eggs, and processed milk products.

The current position of the beef cattle cycle tends to conceal the increased dependence on outside supply; numbers

on January 1 were higher in ratio to people in 1952 and 1953 than for the two previous years. Heavy slaughter of California cattle in 1952 continued into 1953 and it is probable that beef cattle per person—if not state totals—will be lower on January 1, 1954. Stocker and feeder inshipments dropped 22,000 while slaughter of California cattle increased 129,000 in the first six months of 1953 as compared with 1952.

Population will continue to grow faster than beef numbers in California unless there are drastic changes in the pattern of feed production and use for cow and calf herds in the state. This means continued increases in inshipments and more beef cattle feeding.

### Milk

The State has met the demand for increased milk by shifting California use from manufacture—butter, cheese—to the fluid market. California marketed 5,693 million pounds of milk, or 492 pounds per person in 1952, and used 70% of it in fluid form. The total marketings represent 3.6% increase over 1946 when 61% was used as fluid milk.

Milk cow numbers have been increasing in California since 1951, but not fast enough to gain on population. If the shift from manufactured to fluid milk were terminated, an added million persons—using fluid milk at the average 1952 rate of 344.5 pounds per person—would require about 45,000 additional dairy cows in California.

If, as may be expected, the shift from manufactured to fluid use does not cease entirely—and even if fluid milk consumption per person continues to decline slowly—dairy cow numbers still must increase.

### Feed

The possible effect added production of grain and alfalfa—from cotton-released acres—may have on the prices of these substitute crops is a matter of concern to farmers both in and out of the cotton areas. Some growers see a warning in the 1953 price patterns, particularly for alfalfa hay.

The lower grain and alfalfa prices drop, the greater the opportunity will be for gains from converting these crops to meat or livestock products—provided prices of these end products do not decline enough to make such conversion unprofitable.

### Price Ratios

Price relationships in the summer of 1953 indicated that it was as profitable then as during most of the 1930–1952 period to feed livestock—except beef cattle.

Comparisons were made by dividing California farm prices of beef cattle, milk and other livestock or products by the annual average farm prices of barley and alfalfa hay. As compared with post-war years, price relationships were favorable in July and August 1953 for feeding barley to produce pork, poultry meat or eggs, but somewhat less favorable for producing beef.

The highly favorable price ratios for beef cattle in 1950–1952, on the other hand, reflected unusual conditions, and definitely should not be viewed as normal. The price ratios were relatively favorable in July and August 1953 for feeding alfalfa to both dairy cows and beef cattle. It is impossible to know how

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## COTTON

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price relationships in 1954—and in later years—will differ from July 1953, but it seems possible that beef cattle and calves should be as high or higher, assuming normal weather over the nation.

Drought-induced sales have reinforced the regular cyclical liquidation in causing heavy marketings—with the resulting down-pressure on prices—in 1953. It is likely that alfalfa prices also will rule somewhat lower in 1954 if acreage is increased as expected.

It is doubtful whether price ratios will continue equally favorable to hogs. Their numbers are at a low point in the cycle, and production probably will increase.

All in all, prospects appear favorable for feed-livestock price ratios favoring increased meat and livestock production in California. This is particularly true for feeding pasture and hay during the next several years.

### Converting Feed

The drylot method of converting feed into beef has become increasingly important during recent years. The cotton farmer who adds this enterprise is—essentially—going into a new business. Gains can be obtained at relatively little expense above feed costs—in a large

scale operation where modern endless-conveyor flow equipment is used. Little labor expense in relationship to overhead cost is involved. The investment in plant easily can amount to 50 to 100 thousand dollars, hence the need for large scale operations.

The grazing method of converting feed into beef usually is based on irrigated pasture in the cultivated valleys. Well-managed irrigated pasture alone, or supplemented with small amounts of hay, will produce 350 to 450 pounds of beef per acre per season at a cost of 15¢ to 20¢ per pound at current prices. The pasture plus three or four pounds of barley and four to six pounds of hay per head per day will produce 500 to 600 pounds of beef at similar costs, starting with 800-pound feeders. The margin between prices of feeder and finished cattle largely determines the profitability of this operation.

Home-grown feed is used profitably in dairying also. Feed represents 60% to 70% of total cost of producing milk on family dairies, about one third of which can be supplied by irrigated pasture and another third by hay. This would require about two feed acres per cow. Considering July 1953 prices, manufacturing milk sold in the San Joaquin Valley at \$3.47 per hundredweight could be produced for approximately \$3.00. Such production is a means of selling both home-grown feed and farm labor.

Feed cost alone represents about \$1.40 and labor another 75¢ out of the \$3.00 total cost.

### Livestock in Cotton Areas

The importance of livestock varies widely among the four California cotton-producing areas.

On January 1, 1953, Merced County had 65,000 dairy cows and 127,000 beef cattle; Madera had 16,000 dairy cows and 68,000 beef cattle. Tulare had 42,000 dairy cows and 130,000 beef cattle; Fresno County had 39,000 dairy cows and 105,000 beef; Kings 26,000 dairy and 46,000 beef; Kern 12,000 dairy and 125,000 beef.

The trend in dairy cow numbers has been down since the war except in Madera County. Other San Joaquin Valley counties have had declines of 11% to 25%.

A substantial portion of the beef cattle was in feed lots on January first, probably as many as 40,000 to 50,000, not considering Kern County.

Most cotton producers who make the shift to beef production will be involved with feeding—on pasture or in dry lots. Dairying can expand considerably in the San Joaquin Valley, merely by reversing recent trends and reestablishing production at 1947 levels. Such shifts would apply largely to the northern and eastern portions of the cotton area.

Beef production is highly important in Imperial and Riverside counties. Imperial had 146,000 and Riverside 68,000 beef cattle on January 1, 1953. Approximately 100,000 head were on feed in Imperial County. Dairying is relatively unimportant in these southern cotton counties, although it has been expanding gradually in Riverside.

There is opportunity for considerable livestock expansion by California cotton farmers adjusting to acreage allotments. The amount of capital required and the number and kind of production and management problems involved preclude rapid shifts by larger numbers of individuals. The ultimate extent of this shift will depend on how long cotton production controls continue.

The over-all demand for livestock and livestock products appears favorable in California for the next five to 10 years but beef producers should expect shifting price relationships in the future as in the past.

A favorable factor for both beef and dairy producers is expected to be the relatively plentiful forage and hay.

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California Farm Prices and Ratios Selected Feeds to Indicated Livestock and Livestock Products<sup>a</sup>

Year	Average farm prices (dollars)							
	Beef cattle	Calves	Hogs	Chickens	Eggs	Milk	Barley	Alfalfa
		100 pounds		pounds	doz.	cwt.	cwt.	ton
<b>1930—</b>								
1939 ave..	5.95	7.54	7.46	.175	.218	1.77	.96	9.63
1950 .....	22.60	27.20	20.40	.280	.415	3.93	2.54	19.70
1951 .....	28.60	33.70	22.10	.294	.542	4.66	3.15	30.40
1952 <sup>b</sup> .....	25.00	28.00	20.30	.289	.470	5.32	3.33	32.40
1953 <sup>c</sup> .....	19.23	21.90	23.05	.278	.510	5.12	3.05	27.23
July .....	17.20	18.00	26.10	.265	.54	4.45	2.83	21.00
August .....	17.00	17.30	25.50	.235	.57	4.55	2.76	20.10

Year	Price ratios (decimals)							
	Beef cattle		Hogs	Chickens	Eggs	Milk		
	vs. Barley	vs. Alfalfa	vs. Barley	vs. Barley	vs. Barley	vs. Barley	vs. Alfalfa	
<b>1930—</b>								
1939 ave....	6.20	.618	7.77	.182	.227	1.84	.184	
1950 .....	8.90	1.147	8.03	.11	.163	1.55	.199	
1951 .....	9.08	.941	7.02	.093	.172	1.48	.153	
1952 <sup>b</sup> .....	7.51	.772	6.10	.087	.141	1.60	.164	
1953 <sup>c</sup> .....	6.30	.706	7.56	.091	.167	1.67	.188	
July .....	6.08	.819	9.22	.092	.19	1.57	.212	
August .....	6.16	.84	9.24	.085	.21	1.65	.226	

<sup>a</sup> Sources: Price ratio calculations based on official reports of the California Crop and Livestock Reporting Service.

<sup>b</sup> Preliminary.

<sup>c</sup> Simple average January to June.