

# California Livestock Production

## trends in marketings of meat animals, dairy and poultry products during the period 1924 to 1948

Ivan M. Lee

**Production of livestock** and livestock products in California has increased markedly during the last 25 years.

Marketings—as shown in the following table—during the four years 1945–1948 averaged nearly 60% higher than during 1924–1929. This increase has not been distributed evenly among the various product groups indicated. In general, marketings of meat animals have increased less, and dairy products and poultry and eggs have increased more than the average for all products.

correspond precisely with the volume of production on farms for the same year. Differences in marketings and production result from inshipments of animals for further finishing on grass or grain and changes during the year in inventories of livestock on farms. For example, only the poundage added to feeder cattle shipped into California from other states should be counted as production on California farms. Yet poundage shipped in as well as poundage added would be counted as marketings from California

than it was one or two decades ago. Along with the nearly 60% increase in production since 1924–1929, California's population has nearly doubled. Per capita production has, therefore, declined over the period. Even dairy products and poultry and eggs, which have shown the most marked production increase, have failed to keep pace with the population increase. On the other hand, per capita production of livestock and products has increased for the nation as a whole. Here an increase of around 40% in production has been accompanied by an increase of less than 20% in total population. Per capita demands for livestock products in California have probably changed little, if any, in relation to per capita demands in the United States during this period. The decline in per capita production in this state relative to the nation as a whole along with the fairly stable relationship in per capita demand and the much greater relative increase in population has called for increased volume of inshipments of livestock products for direct consumption.

However, broad comparisons of this kind do not reveal the shifting position of this state in respect to particular commodities. In the meat animal category, the state has long been a deficit area in the production of cattle and hogs. What

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**Marketings\* of Livestock and Livestock Products from California Farms, 1924–1929 through 1945–1948**

Period	Meat animals (cattle calves sheep lambs and hogs)	Dairy products (whole- sale milk, milk fat and milk and cream sold retail)	Poultry and eggs (chick- ens, chicken eggs and turkeys)	All livestock and products (including wool)
1924–1929	100%	100%	100%	100%
1930–1934	83	116	108	101
1935–1939	106	127	111	115
1940–1944	113	149	143	133
1945–1948	140	170	178	159

\* Adjusted to include products consumed on farms where produced.

Marketings of livestock and products for the United States as a whole have likewise shown an increasing trend since 1924. The percentage increase for the nation, however, has not been as large as for California. In 1945–1948 the United States index averaged 139% of 1924–1929 as compared with 159% for California. The California and United States trends in marketings of meat animals and poultry and eggs over the entire 25 years have been rather similar, although changes for shorter periods within this span of years have diverged. In dairy products the California long-term upward trend has been more marked than that for the nation. However, in the period 1945–1948 the annual average volume of marketings for California stood higher in relation to 1924–1929 in all three commodity groups than for the United States as a whole. The comparable average indexes for the United States during these four years are 134 for meat animals, 133 for dairy products, and 165 for poultry and eggs.

The volume of marketings from California farms in any one year need not

farms. Furthermore, livestock produced in this state that are retained on farms to build up breeding herds constitute production but do not enter figures on marketings.

When adjustment is made for these two factors, the trends in production of all livestock products and each product group on California farms have paralleled fairly closely the trends in farm marketings. The main difference appears in the meat animal group, where the trend in marketings has continued slightly upward in the recent postwar years, while the trend in production has levelled off. This is due primarily to the heavier inshipments of stockers and feeders during this period, along with a significant decline in inventories on farms of cattle, calves, sheep and lambs.

Even with the very substantial increase in marketings—and production—of livestock and livestock products, California still remains a deficit producing area—that is, total consumption still exceeds total production. In fact, available evidence suggests that for livestock products generally, our deficit is even larger now

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## TORTRIX

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Two pickings of fruit were made—July 18th and August 9th—from the experimental plots, and a random sampling

### Percentage of Tortrix Injured Fruit at Harvest Following Spray Treatments

Plot Section 1				
First spray	Second spray	Fruit counted	Tortrix infested	Infested fruit
DDT	Lead arsenate	3894	452	11.6%
DDT	Methoxychlor	3748	400	10.7
DDT	Cryolite	3514	182	5.2
DDT	DDD	3479	149	4.3
DDT	Parathion	3634	83	2.3
Plot Section 2				
Lead arsenate	Lead arsenate	3876	21	0.5%
Methoxychlor	Methoxychlor	3651	104	2.9
Cryolite	Cryolite	3033	51	1.7
DDD	DDD	3240	4	0.1
Parathion	Parathion	3450	10	0.3
Control Section				
Unsprayed trees		3446	719	21.0%

Significant difference at 1% level in the first plot is 5.7% and in the second plot, 1.3%.

of about 3,500 fruit was carefully inspected for tortrix and other insect injury from each of the treatments. The control obtained is shown above.

When DDT was used in the petal fall

### Spray Residue Analysis

Plot Section 1	
ppm (parts per million)	
DDT—lead arsenate	1.25 as arsenic trioxide
DDT—methoxychlor	1.2 as methoxychlor
DDT—cryolite	2.1 as fluorine
DDT—DDD	1.6 as DDD
DDT—parathion	0.07 as parathion 0.51 as DDT
Plot Section 2	
Lead arsenate—lead arsenate	3.5 as arsenic trioxide
methoxychlor—methoxychlor	1.6 as methoxychlor
cryolite—cryolite	3.6 as fluorine
DDD—DDD	1.8 as DDD
parathion—parathion	0.03 as parathion

period and followed by one of the insecticides for the control of the orange tortrix, the results were not so good as when the same materials were used in both sprays. Considering that all of the materials used in the second plot are fairly effective in the control of codling moth as well as orange tortrix, any one of the materials should prove effective against either pest.

The codling moth population in this plot was too low to give significant differences in the control of this pest.

In orchards where spider mites are a problem, the use of a suitable acaricide in combination with these materials may be required.

Fewer woolly apple aphids were found on the fruit and trees sprayed with parathion, cryolite and lead arsenate. Aphids were noticeably heavier on unsprayed, DDD and methoxychlor sprayed trees.

Spray residue analysis of fruit from each of the treated plots at harvest gave the results shown in lower table.

There is apparently no danger from spray residues following these treatments when the last application is made six weeks before harvest.

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See "Orange Tortrix on Deciduous Fruits," page 13, CALIFORNIA AGRICULTURE, August, 1948.

## CITRUS

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any given element is deficient, the direction of change of the other elements is fairly well known in many instances. Knowledge of the usual range of values for healthy leaves provides a somewhat broader base for evaluating the leaf analysis.

In another example case, the nitrogen might turn out to be around 2.75%, but phosphorus might be less than 0.08%. Under these conditions it might reasonably be suspected that phosphorus is lacking, and it would be worthwhile to try out phosphorus fertilizer in the orchard.

Data given here—while for orange leaves of a given age range—suggest that these values may be used on similarly aged lemon and grapefruit leaves even though the certainty be somewhat less.

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## LIVESTOCK

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evidence is available, however, suggests that the deficit in sheep and lambs came during the World War II period. Although California has been a deficit area for dairy products as a group over the period under review, in recent years it has been a surplus state in the production of evaporated and dried whole milk. In the poultry products group a deficit position in chicken meat production has persisted throughout the period. In egg production a change from a surplus to a deficit state occurred around the middle 1930's. The state has been a surplus area in turkey production since the late 1930's. Commercial turkey production did not really get under way in this state until the early 1930's. Thus turkeys constitute the only product in the entire livestock group in which California has established a surplus position relatively early in its production history and maintained this surplus position continuously throughout the recent period of very rapid population growth.

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## POULTRY

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ing of turkey poults is also practiced commercially. Schools teaching the cloacal sexing method have been developed, and associations of trained sexers formed for the promotion of commercial employment of sexers by hatcherymen. Certain problems still remain in the use of this method, since breeds and strains differ in the ease with which the sexes can be identified accurately. Future breeding work may prove that the accuracy of sexing of a strain can be improved by selecting for well-defined copulatory organs in males and their absence in females at hatching.

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## CANKER

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as smut and molds, that may be carried by insects to the fruit and there result in spoilage and additional loss. For these reasons all prunings should be removed every year from the orchards and destroyed by burning.

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