

State's Productive Capacity

changes in production of livestock and livestock products projected for 1955 on basis of trends

Trimble R. Hedges and Warren R. Bailey

The following article is the sixth and final report in a series based on a study of California's agricultural productive capacity, that can be attained by 1955, which was conducted by the California State Committee on Survey of Agricultural Productive Capacity. The Committee included representatives of the University of California, the United States Department of Agriculture, and State agencies.

Increasing demand for meat and other livestock products—associated with a huge increase of population and high level business activity—has been a dominant factor affecting California's livestock and poultry industry. Except for market milk the state has been a deficit producing area and the deficit is growing wider. That situation tends to create a favorable position for the state's livestock and poultry producers. Partially offsetting factors are relatively high prices for feed grains and labor.

Beef, Sheep, and Lambs

Beef production has increased steadily since 1940 despite a decline in number of native beef cattle from 1944 to 1950. The increase in production has come from the feeding of inshipped stockers and feeders on irrigated pasture and in dry lots. Expansion of irrigated pasture has permitted an increase in production of grass-fat cattle which find a ready demand in West Coast markets. The trend toward more inshipped feeder cattle has permitted an even greater increase in net liveweight production because relatively less feed was needed for breeding herds.

The year 1950 marked the beginning of another upswing in the cattle cycle. But, the start was at a higher level of beef cow numbers—559,000 compared to 470,000—than the last cycle beginning in 1941. The range can carry more breeding cows because fewer yearlings and two-year-olds are on the ranges; there are fewer range sheep; and because some range has been improved. Therefore, a higher peak will be reached during the current cycle, and the projected number of beef cows is 670,000 in 1955.

The number of cattle put on feed is projected at 1,000,000 in 1955 compared with 650,000 in 1950, 900,000 in 1951.

The number of stocker and feeder cattle and calves shipped into California is projected at 1,200,000 compared to 953,000 in 1950 and 1,000,000 in 1951. Inshipments are expected to consist of relatively younger, lighter weight animals and fewer two-year-olds. Younger cattle are preferred on irrigated pastures.

Range sheep numbers and production, after reaching a peak in 1944, have declined steadily. The decline has been due to a shortage of competent herdsmen, the overstocked condition of some ranges, and because ranchers feared a postwar depression in the sheep and wool business.

During the past year or two, interest has renewed in farm type sheep—as contrasted with range sheep. Because of this interest, the number of all sheep and lambs increased during 1950. On January 1, 1951, there were 1,867,000 head compared to 1,819,000 head a year earlier. Total numbers are still relatively low—704,000 below the 1940-49 average, and 1,257,000 below the 1930-39 average.

Indications are that range sheep numbers are continuing to decrease while farm flocks are increasing. These trends are reflected in other areas. Sheep have decreased in typically range states—increased in typically domestic-sheep states.

It seems reasonably certain that farm flocks will continue to increase. The January 1, 1955 attainable number of all sheep and lambs is projected at 2,157,000 head—15% above the 1951 number.

California's maximum potential capacity for carrying sheep is much greater than these projections. It has been estimated that from one to two million more sheep could be accommodated but no substantial expansion is expected to develop in the next few years and it was not included in the projections for 1955.

The number of sheep and lambs put on feed was projected at 215,000 in 1955, compared to 180,000 in 1950. Net liveweight production of sheep and lambs was projected at 118 million pounds in 1955, compared to 99.6 million in 1950.

Dairy Production

Milk cow numbers and total milk production have fallen behind population growth. However, the supply of market milk and cream has been maintained, by diverting milk from manufactured dairy products, to fluid use.

The number of dairy cows on farms

January 1, 1951 was 885,000 head, down 18,000 from a year earlier, but equal to the number in 1948 and 1949. Dairy cow inventories declined during 1950 mainly because of the heavier-than-usual culling of low producers—stimulated by very high prices for slaughter cattle—and by increasing dairy production costs. The number of cows is projected to 910,000 in 1955.

Milk production per cow increased steadily from 1942 when it averaged 265 pounds of milk fat per cow until 1950 when it averaged 289. A further increase to 300 pounds is projected for 1955. Some shift in breeds from Jersey and Guernseys to Holsteins is expected.

The 1955 attainable yield of milk per cow would be 7,798 pounds compared to 7,410 in 1950. The 1955 projected total production of milk will be 6,550 million pounds compared with 6,024 million in 1950 and 6,025 million in 1951.

Hogs

California regularly raises one third and ships in two thirds of all the hogs

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CAPACITY

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it slaughters. In addition, large quantities of cured meat—hams and bacon—and fresh pork are shipped into the state. California producers marketed about 800,000 hogs in 1951—431 under inspected slaughter—while inshipments for immediate slaughter amounted to 1,630,000 head.

Considering physical resources alone, California could produce many more hogs than it does. Producers have almost year-round pasture and a large local market and hogs can be produced on grains other than corn. However, other kinds of livestock have appeared more profitable to farmers.

Hog production was projected at about current levels for 1955.

Poultry

Two outstanding developments in poultry since 1940 have been the large expansion in production of commercial broilers and fryers and in turkeys. Both products have been priced relatively lower than red-meats since War II and have improved in quality.

California produced 23 million broilers in 1950, compared to 6 million in 1940—nearly a four-fold expansion in 10 years. This growth resulted directly

from favorable chicken-feed price ratios coupled with increased production efficiency. Price ratios are favorable because of the strong demand for chicken meat. Improved technology and efficiency have permitted volume production at reasonable cost.

Broiler production is tentatively projected at 36 million in 1955.

Turkey production has had strong year-round consumer demand, generally favorable feed-price ratios and increased technology and efficiency.

Much of the further expansion in turkey production is likely to come in the Beltsville small white. These small 6–10 pound birds are gaining in popularity with consumers. Production of both the Beltsville and the larger Bronze turkeys are projected together at 12 million birds in 1955, compared with 8 million in 1951. Production in pounds would be projected at 177 million compared to 145 million.

In 1950, California had almost 50% more hens and pullets on farms than in the 1937–41 prewar period. Average rate of lay also had increased—from 153 to 186 eggs per bird. Thus, total egg production in 1950 was 79% above the prewar level. Meanwhile human population increased by 53%. But, the per capita consumption has also increased, so the State is still deficit in egg production. In 1951, 1.2 million cases, about 40 eggs per capita, were shipped into the State.

The January 1, 1955 inventory of hens and pullets is projected at 23,400,000, compared with 21,444,000 in 1951—an increase of 9%. Egg production is projected at 300 million dozen in 1955, compared to 270 million in 1951—an increase of 10%. Rate of lay is projected at 189 eggs compared to 186 eggs per layer.

Chickens raised—excluding broilers—have not kept pace with laying flocks. This means a larger proportion are raised for flock replacement, a smaller proportion for market. The deficit in market supply has been partly closed by expansion in commercial broilers.

The number of chickens raised was projected at 36 million compared with 32.4 million in 1951.

Projections of California's considerably higher agricultural productivity in 1955 assume favorable farm prices and adequate supplies of production materials, but a somewhat smaller farm labor force. Improved farming practices and new technology are expected to be available and—being profitable—more widely used. Higher levels of production—to be attainable—must be profitable to farmers.

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CHRISTMAS TREE

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table trees when they reach three feet, but the greatest market demand is for trees between five and eight feet. A limited market exists for trees up to 20 feet. Most trees should be cut before they reach 12 feet in height. Trees too low in quality, or too big to be sold, should be cut back. Cutting should be done with a pruning saw with a curved blade. The saw leaves an undamaged stump and a clean butt on the tree which may not need further trimming.

On some species of trees it is possible to grow a second tree on the stump remaining after a tree has been harvested if one or more branch whorls are left when the tree is cut. A new tree can be grown from one of these branches in the same time or less than is required for the original tree. The base will be slightly bent but a good marketable tree can be taken from above this bend. With some species, including Douglas fir, white fir, and red fir, this method of stump-culture may be repeated several times.

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Trees Suitable for Christmas Tree Planting in California

Trees	Stock to plant T or S*	Years to reach 5 to 6 ft.	Where to plant	Christmas tree form	Remarks
Douglas fir	2 yr. T or S	5 to 8	Central & N. Coast. Middle Elev. Mts.	Excellent	Good results in plantations
White fir	3 yr. T	10 to 15	Mountain Timber Belt	Excellent	Experimental in central coast and middle elev. mts.
Red fir	3 yr. T	12 to 18	Mountains—4,000 ft. and up	Excellent	Experimental in plantations. Known as "silver-tip" in trade
Monterey pine	1 yr. S	4 to 6	Coastal	Good to fair	Rapid growth. Good form for a pine
Scots pine	2–3 yr. T	5 to 7	Coastal. Middle Elev. to N. Valley	Good to fair	Popular Christmas tree in Middle West
Bishop pine	1 yr. S	4 to 6	Coast	Fair	Experimental but widely adaptable along N. coast
Beach pine	2–3 yr. T	4 to 6	Coast	Fair to good	Dwarf tree. Widely adaptable along N. coast
Ponderosa pine	2–3 yr. T	6 to 8	Mountain Timber Belt	Good to fair	Widely adaptable on light soils
Aleppo pine	2 yr. T	4 to 6	Valley and Desert	Fair	Does well in hot interior with irrigation. A good pot tree
Knobcone pine	2 yr. T	4 to 6	Foothills	Fair to poor	Good for dry sites and shallow soils. Produces cones early.
Norway spruce	3 yr. T	9 to 12	Coastal and Sacramento Valley	Good to fair	Slow growth but adaptable with irrigation
Colorado blue spruce	2–3 yr. T	8 to 12	Valley, Foothill & Coastal	Good to fair	Experimental as a Christmas tree
Monterey cypress	1 yr. S	4 to 6	Coast	Fair to poor	Good form but flexible branches
Arizona cypress	2 yr. T	4 to 7	Valley and Desert	Fair to poor	Grown as a Christmas tree in Georgia
Port Orford cedar	2 yr. S or T	5 to 7	Coast, Valley and Foothills	Fair	Wide use as ornamental
Deodar cedar	2–3 yr. T	5 to 8	Coast and Valley	Fair to good	Excellent as an outdoor tree
Incense cedar	2 yr. S or T	5 to 8	Coast, Valley and Mountains	Fair	Very hardy but only fair in form
Redwood	2 yr. T	4 to 6	Coast & Valley Foothills to 2,000 ft.	Fair to good	Stands pruning well—sprouts vigorously

* T—transplant. S—seedling.