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ADJUSTMENTS IN WESTERN BEEF CATTLE PRODUCTION AND MARKETING DURING THE WAR AND POST-WAR PERIODS

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Some Trends and Changes During the Decades 1920 to 1940

As an introduction to the subject of recent and possible future changes in beef cattle production and marketing, it appears desirable to review some of the trends and changes that developed during the two decades prior to 1941. First some national trends as related to the production and marketing of beef cattle by the stock farms and ranches of the seventeen western states.

The national cycle of cattle numbers was due to reach its peak some time between 1935 and 1940. The upward trend of the cycle was arrested by the widespread drouth of 1934 and the subsequent dry years in the Great Plains. This extended the upswing of the cycle, and the war demand for meats and dairy products has now induced an expansion of all cattle numbers to an all-time high that is about ten percent above the previous high point. The livestock population statistics indicate, however, that the national population of cattle classed as beef animals are even now little, if any, higher than the high level of 1920, while the 1940 census of the human population of the United States stands approximately 25 percent above 1920.

Another national aspect of beef production and markets that appears worthy of note is the changes that have taken place in per capita consumption. There was a rather steady decline in per capita beef and veal consumption from approximately 67 pounds in 1920 to a low of 53 pounds in 1932. The per capita consumption of beef and veal leveled off at about 63 pounds from 1934 to 1940 and rose to around 75 pounds for 1943. This 1943 figure is an average for both civilian and military consumption of beef and veal.

Let us also make note of the fact that the imports and exports of beef and beef products were not important, nationally, during the decades 1920 to 1940. There was a small average annual net export from 1925 to 1935, and a small net import during 1938 and 1939.

Let us review next some of the changes in beef cattle production and markets that have occurred in the western states during the period 1920 to 1940. First and most important is the fact that by 1940 the beef production deficit of California and Washington had reached a level that made the seven farthest western states, as a market area influenced by the West Coast markets, a deficit area to the extent of 15 to 20 percent of their 1940 consumption. By 1940 the transition zone between eastward and westward marketings of beef cattle had shifted east of the Continental Divide.

Another important change was the rapid shift of the cattle ranches of the Great Plains to a cow and calf basis during the thirties, and especially from 1935 to 1940. By 1940 the cattle production of the Great Plains was

closely geared to the feeder and stocker markets of the corn belt. The drouth of the thirties in the Great Plains accelerated this change, but the primary cause was a shift in markets and prices. The midwestern and eastern slaughter markets for the two- and three-year-old range steer became more and more limited, and the feeder markets demanded animals that could be finished into young choice and prime beef.

As a result of the eastward shift of the transition zone between the eastern and western market movement of cattle and the changes that caused the plains ranches to adjust to a cow and calf basis, the mountain valley and foothill cattle ranches of Montana, Wyoming, Colorado, and New Mexico were on a mixed marketing basis by 1940. Because of the limited extent of feed-lot finishing of cattle in the eleven western states, these mountain valley and foothill ranches marketed principally older animals to the *western* markets. The marketings of these ranches to the corn-belt markets were principally young feeder animals, along with some older "two way" cattle.

This shift of the plains ranches and, to a considerable extent, of the mountain valley and foothill ranches of the Rocky Mountain states to a cow and calf herd basis, was accompanied by a significant change in breeding and type of animal used by the growers. This change was toward a thicker-bodied and earlier-maturing type of beef animal and consequently a better young feeder animal, but probably with some sacrifice in size of frame, rangeworthiness, and growth potential to maturity on range and roughage feeds. This change took place during a period of time when the national relationship between food-producing capacity and demand was such that highly-finished beef was not considered a luxury. We raise the question here, without presuming to answer it now, how soon after the war this situation may again prevail.

Again as a background for our consideration of adjustments during the war period and possible post-war changes, let us take note of the fact that the average western beef cattle price that prevailed from 1920 to 1940 was not favorable from a net income standpoint considering the general picture of cost and price relationships for agricultural commodities. The western land banks, in developing a normal value appraisal of western cattle ranch properties, have been keenly aware of the limited debt service capability of a \$6.00 per hundred weight average ranch price for beef cattle. Important factors in this price and income situation have been the narrowing of the slaughter markets for mature animals from the western ranches, the time and the management changes required in converting to a cow and calf basis, and the drouth years of the thirties. It is not difficult to understand why the western grower of beef cattle sees difficulties in a considerable war-time shift to the marketing of older animals, and then a probable return to the pre-war cow and calf basis of operation.

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1940 and the price relationship between feed grains and meat animals, created a strong demand for young feeder animals. This recent trend reached a peak in 1942, and changed abruptly during 1943, when it became apparent that the heavy drain on feed grains by hogs, poultry, and dairy production would soon cause a change in grain and livestock price relationships.

The corn belt cattle feeder is shifting his operation to the feeding of older animals, a shorter feed period, less grain in proportion to pasture and roughage, and a lesser degree of finish in the animals he markets. He must do this to compete for feed grains. As a result the western grower has found a better market demand from the feeder for long-yearlings than for weaner calves. He has also found the slaughter markets again very receptive to well-fleshed, mature animals from the ranges. As a result of these market influences the western grower has retained young animals, without a corresponding liquidation of breeding cows and heifers. This was the primary cause for the considerable increase in western beef cattle numbers during 1943.

The western grower has been reluctant to reorganize his operations to a basis of marketing older animals, that is, reduce his breeding herd as he increases the number of yearling and two-year-old market animals, so as to stay within the limit of normal range and feed capacity. The tendency has been to retain the same or even a larger breeding herd while holding market animals to more maturity, and the recent favorable seasons have made this possible.

The recent seasons in the plains, where about sixty percent of western range cattle are produced, have been *very* favorable. Competent ecologists state that the plains country north of the Platte River and west of the hundredth meridian has rather generally recovered to climax dominance.

There is a distinct management contrast, however, between the plains grasslands, and the bunchgrass associations of the foothill and mountain lands of the Rocky Mountain and Intermountain regions. These foothill and mountain lands, with their greater diversity of range plant growth, can be overused for quite a period of time before the adverse effects on livestock production become apparent, and the restoration of the productivity of the resource is slow and uncertain. In contrast, the overuse of the grasslands of the plains has an almost immediate adverse effect on the market weights of the livestock, and the native grasses have unusual ability to regenerate following a period of drouth or overuse. In the event of an unfavorable season during 1944, the adverse effect of present high cattle numbers will be on the livestock production more than on the resource in the plains. But the reverse would be true for many of the foothill and mountain lands to the west of the plains.

Some Possible Post-War Trends

Present post-war outlook and plans are rather generally predicated on the premise that we shall be able to convert rather rapidly to post-war

economy after 1945. I shall use those premises, and assume that following 1945 there will be a sustained period of high business activity and employment, and a considerable restoration of world commerce.

In that event we have the probability of a continuation of much the same influences that are now affecting production and markets for western beef cattle. That is, with a continued high demand for food, the value of feed grains for hog, poultry, and dairy production would continue to restrict the use of feed grain for the making of choice and prime beef in the feed lot. The western beef cattle grower would then operate on the basis that he has so far been reluctant to adopt,—that of reducing his breeding herd to the point where he would normally have the range and feed capacity for the production of medium age and older animals.

It appears to be a reasonable possibility that under this situation we would not produce a supply of beef equal to consumer desires in the national setting of food supplies and food price relationships. As a result there would be the possibility of a rather insistent demand for some beef imports, and for beef prices that would permit a high national level of beef consumption by all consumer groups. There has likely been some important shifts in beef consumption by the civilian population during the war, and this may result in a higher potential demand for beef following the war, if there is the employment and the purchasing power.

Thus we arrive at the deduction that while the western beef cattle grower will likely have a more favorable price situation for some time following the war than the average from 1920 to 1940, he will probably receive prices materially below those prevailing during the war, and will find it difficult to make any considerable reduction in his operating costs, especially for hired labor.

The type of production and the markets may be quite different from those that were developing during the 1930's; that is, there may be more emphasis by western growers on the sale of older animals, and within the limits of feed resources and the suitability of seasons, on the production of mature animals for slaughter. A change of this nature will likely require some reversal in the recent trend of breeding and selection for type of beef animal. This will be true to the extent that the recent trend has been toward a type of beef animal that has early maturity and ability to make good young-animal weights in the feed lot but with some sacrifice of ability to grow out to a good mature weight on range and roughage feeds.

In summarizing, let us re-emphasize the following concepts:

1. There is likely to be a considerable liquidation of beef cows and heifers, as the western operations adjust to a basis of marketing older animals. The time and extent of this liquidation will depend to quite a degree on whether the recent favorable seasons continue.

2. The beef cattle producers of the Rocky Mountain states will find more of their markets to the west coast states following the war, and to take ad-

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vantage of this the growers will need to manage ranges and pastures for the production of good grade slaughter animals.

3. The western breeders may find that the type of beef animal they have been developing in recent years is not too well adapted to the western growers' market opportunities during the next several years.

4. In the event of a recurrence of unfavorable climatic conditions, the adverse effect of present high cattle numbers will be on the livestock production more than on the resource in the plains, but the reverse of this will be true for many of the foothill and upland ranges.

5. It appears probable that the national economic forces that are now causing production and marketing changes for the western cattle ranch will prevail for some time following the close of the war.