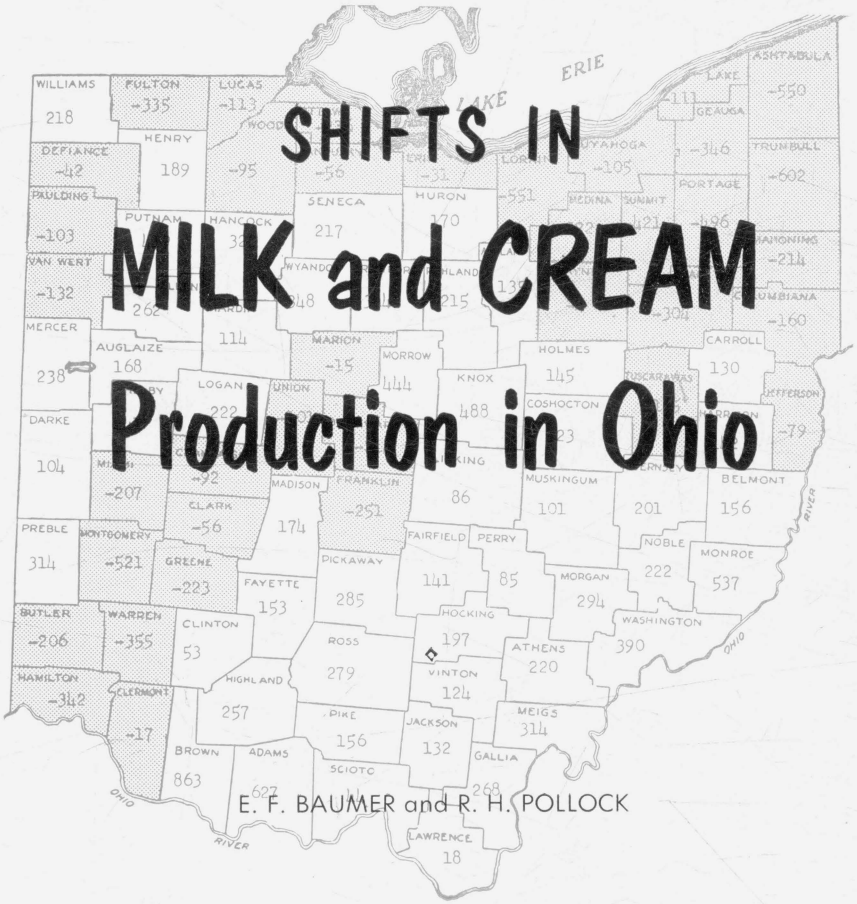

SHIFTS IN MILK and CREAM Production in Ohio

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INTRODUCTION

Every ten years the Bureau of the Census releases data relative to current agricultural production levels. It is the purpose here to show milk and cream production shifts as they have occurred over the last decade in Ohio. Requests for this type of information have come from producer and handler organizations and various other groups interested in studying Ohio's dairy industry. This material can also be used by producer and handler organizations as guides in expanding or contracting supply areas.

SOURCE OF DATA

The 1940, 1945, and 1950 "Census of Agriculture for Ohio", was used as the principal source of information for this study. In some instances the 1945 census reports were used to obtain 1940 data on the same basis as the 1950 data were available.

A report entitled "Ohio Monthly Dairy Report" was used as the source of data relative to fluid milk and manufactured milk markets. The term "21 fluid markets" refers to the 21 principal fluid milk markets of the state. This includes all markets under federal orders plus data from some markets not under orders. The term "manufacturing plants" refer to all manufacturing plants in Ohio that do not sell fluid milk. There is however, some milk moving from these manufacturing plants to fluid milk markets and sold as fluid milk. It was not possible to separate this out of the milk labeled in this study as manufactured milk.

RELATIONSHIP BETWEEN THE PRODUCTION OF FLUID MILK AND MANUFACTURED MILK IN OHIO, 1943-1952

The number of producers selling milk to manufacturing plants (Figure 1) has decreased about 20 percent during the period 1945 to 1952 or a change of some 10,000 producers. During the same period, 1945 to 1952, the number of producers selling milk to 21 Ohio fluid

markets increased from 22,000 in 1945 to a peak of 29,000 in 1948 and then dropped off to 27,000 in 1952 or 23 percent more producers in 1951 than in 1945.

The 1953 figures just released show, 44,100 manufacturing plant producers and 27,500 fluid milk market producers.

In 1946 there were twice as many producers selling milk to manufacturing plants in Ohio as were selling to the 21 Ohio fluid milk markets. This relationship had changed by 1952 when there were only about one-third more producers selling to manufacturing plants. It is significant to note that even though one group of producers gained in number and the other decreased, the respective changes did not fully

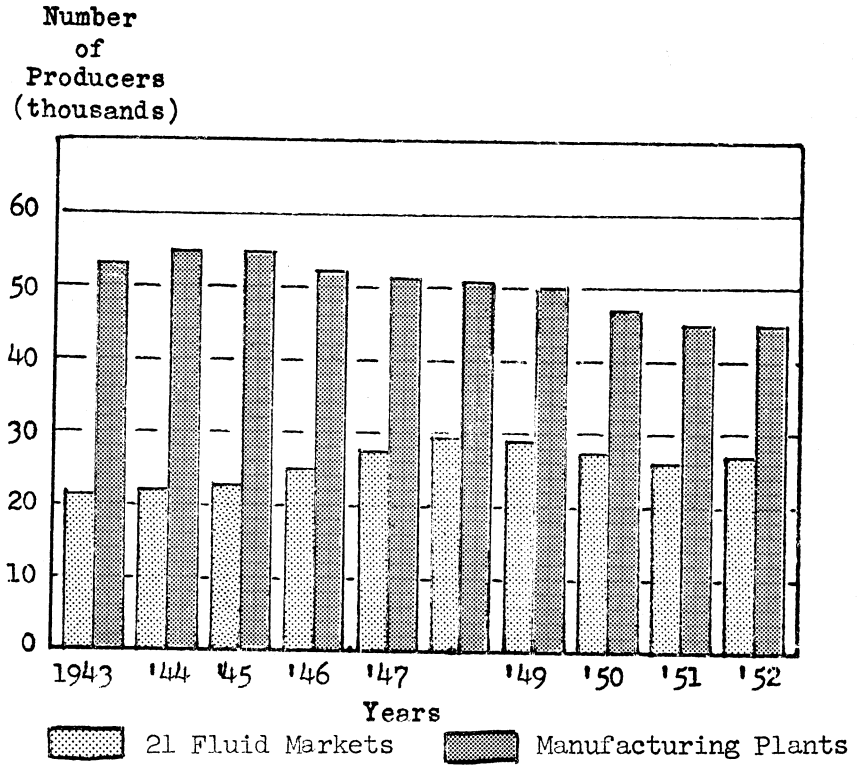


Fig. 1.—Average number of producers selling milk to 21 Ohio fluid milk markets and to Ohio milk manufacturing plants, 1943-1953.

compensate for each other. Thus, the total as represented by the two groups decreased during this period. The foregoing comparisons indicate that some producers selling to manufacturers shifted to the fluid plants while other shifted their farm enterprise.

Increased pressure due to the growing population in the State may continue this shift of producers from manufacturing plants to fluid milk markets. Price spreads have been generally from $1.00 to $1.25 per hundredweight between milk for manufacturing purposes and milk for fluid purchases which has also attracted many producers to the fluid markets. This has been true especially for the larger producers.

AVERAGE VOLUME OF MILK PURCHASED PER PRODUCER PER DAY

The producers selling milk to the 21 Ohio fluid markets sell a much larger volume of milk per day than do the producers selling to manufacturing plants (Figure 2). The average purchases per day per producers for the manufacturing plants has remained at a rather constant level between 90 to 100 pounds. The average purchases per day per producer for the 21 Ohio fluid milk plants increased from 166 lbs. in 1943 to 252 lbs. in 1952. Several factors may account for these differences. The increase which occurred may be due to culling of low producing cows and replacement with better cows, better feeding, increases in herd size, less farm use of milk and others. The static condition of the production per producer for manufacturing, and the low production per producer per day indicates that dairying is generally not the principal farm enterprise on these farms. The larger producers have found it profitable to attach themselves to a fluid milk market where prices are higher.

In 1953 production per producer increased to 102 pounds per day for manufacturing plant producers and 277 pounds for the fluid market producers.

AVERAGE MONTHLY PURCHASES OF MILK

During the period 1943 through 1952, the total volume of milk purchased by plants in 21 Ohio fluid milk markets has increased every year with the exception of 1951 (Figure 3). During this same 9 year period the average volume of milk purchased per month by Ohio milk manufacturing plants reached a peak in 1945. Since 1945 the trend has been toward a smaller volume of milk purchased by manufacturing plants. Previous to 1947 the average monthly purchase of milk by manufacturing plants was greater than the volume purchased by fluid

milk plants. However, since 1946 the volume purchased by the plants in 21 Ohio fluid milk markets has exceeded the purchases by manufacturing plants.

Average monthly purchases of milk during 1953 amounted to 138 million pounds for manufacturing plants and 231 million for the fluid markets.

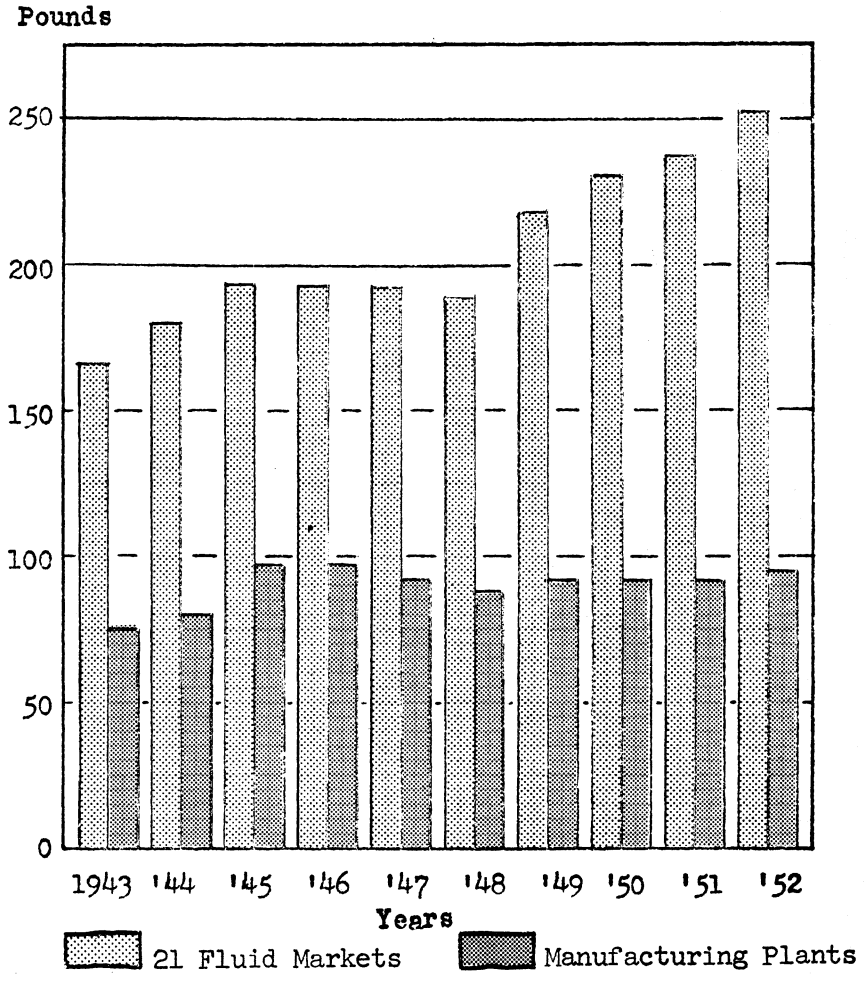


Fig. 2.—Average volume of milk purchased per producer per day at 21 Ohio fluid milk markets and by Ohio milk manufacturing plants, 1943-1953.

SHIFTS IN MILK PRODUCTION IN OHIO

The 1950 United States Census of Agriculture reported 199,359 farms in Ohio with 157,941 farms reporting milking cows. Of these farms reporting milking cows 112,351 reported selling dairy products. This compared with 220,575 farms in Ohio in 1945 with 177,900 farms reporting milking cows and 130,643 farms selling dairy products. During 1950, 3,605,885,766 pounds of milk were sold from Ohio farms compared with 3,646,339,217 pounds sold during 1945.

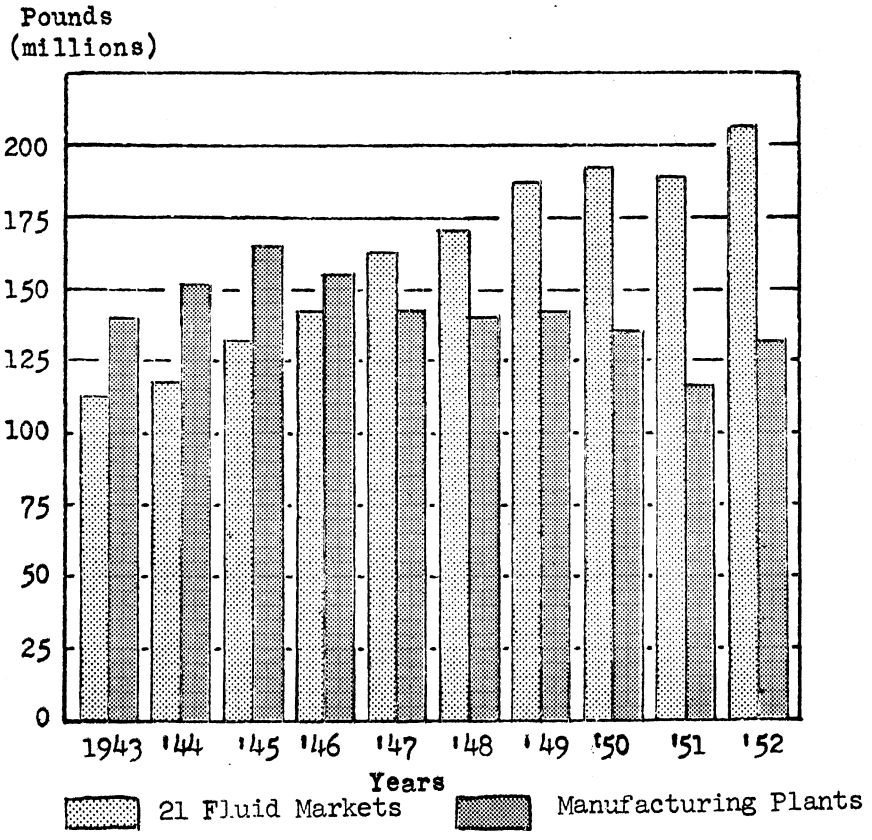


Fig. 3.—Average volume of milk purchased per month at 21 Ohio fluid milk markets and by Ohio milk manufacturing plants, 1943-1953.

Figures 4 to 10 indicate shifts that have occurred from 1940 to 1950 in the production of milk in the state of Ohio. Figure 4 shows the volume of whole milk sold from farms by crop reporting districts. Production increases in the various sections of the state varied considerably over this 10 year period. Although all crop reporting districts show increases in total pounds of whole milk sold, some counties within

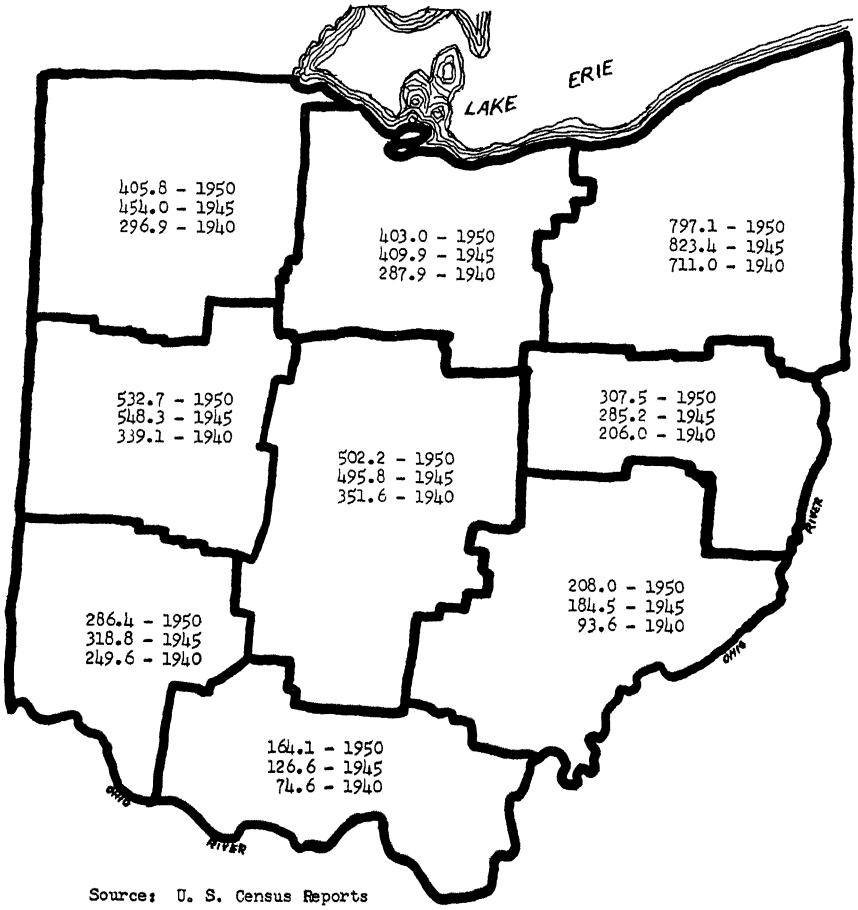


Fig. 4.—Pounds of whole milk sold, by crop reporting districts, Ohio, 1940, 1945 and 1950. (In millions of pounds).

the districts showed marked decreases. This occurred most frequently in the extreme northeast and extreme southwest districts of the state. In six of the nine districts milk production decreased from 1945 to 1950. Most of this decrease occurred in those counties located near the large metropolitan cities.

Figures in each county
Top - 1950
Bottom - 1940

Source: United States Census of Agriculture 1945 and 1950

Fig. 5.—Pounds of whole milk sold from Ohio farms by counties for the years 1940 and 1950. (In millions of pounds).

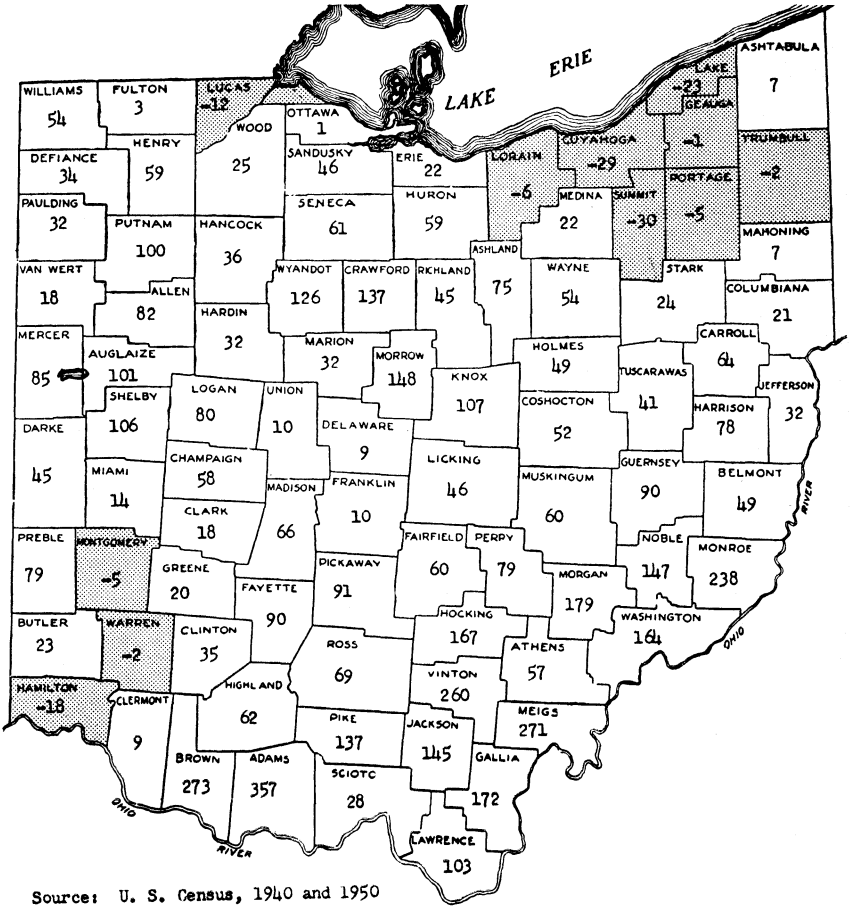
Figure 5 shows total milk production by counties for the years 1940 to 1950. Figure 6 indicates the change in pounds of whole milk sold by counties from 1940 to 1950. These two figures indicate regions of the state where volume increases and decreases have taken place over this 10 year period. The central and central western sections of the

Source: U. S. Census Reports, 1940 and 1950

Fig. 6.—Change in pounds of whole milk sold from farms in Ohio from 1940 to 1950 by counties. (In millions of pounds).

state show the largest increases in pounds of whole milk sold. Expansion of fluid milk market supply areas into those sections of the state increased the incentive for the production of whole milk.

Figure 7 shows the percentage change in whole milk sold by counties from 1940 to 1950, while figure 8 shows the same percentage



Source: U. S. Census, 1940 and 1950

Fig. 7.—Percentage change in pounds of whole milk sold from Ohio farms, by counties, 1940 to 1950.

for the period 1945 to 1950. From figure 7 it is apparent that Southeastern Ohio has made the largest percentage gain in milk production over the state. It is necessary to keep in mind figure 6 since although Southeastern Ohio has the largest percentage increase, other areas have had larger volume increase.

Counties which are shaded decreased in amount of whole milk sold from 1945 to 1950.

Source: United States Census Reports 1945 to 1950.

Fig. 8.—Percentage change in pounds of whole milk sold from Ohio farms, by counties, 1945 to 1950.

Much of the increase in whole milk sold in Southeastern Ohio is the result of dairy farmers changing from the sale of cream to whole milk. Demands for fluid milk have been greatly increased in this area during this 10 year period, and plants located within this area have encouraged the sale of milk as whole milk. In many of the other counties, cream production was drastically cut from 1940 to 1950.

Source: 1940 and 1950 United States Census Reports

Fig. 9.—Change in number of milk producers in Ohio selling whole milk from 1940 to 1950, by counties.

An analysis of figure 8 indicates that the increases in production from 1940 to 1950 have occurred mostly in the first five years of this period. Increased prices over the lows of the 1940's and the urge for more production for defense purposes may have caused much of this increase. In the period 1945 to 1950 the total volume of whole milk sold in Ohio actually decreased. Approximately one-third of the

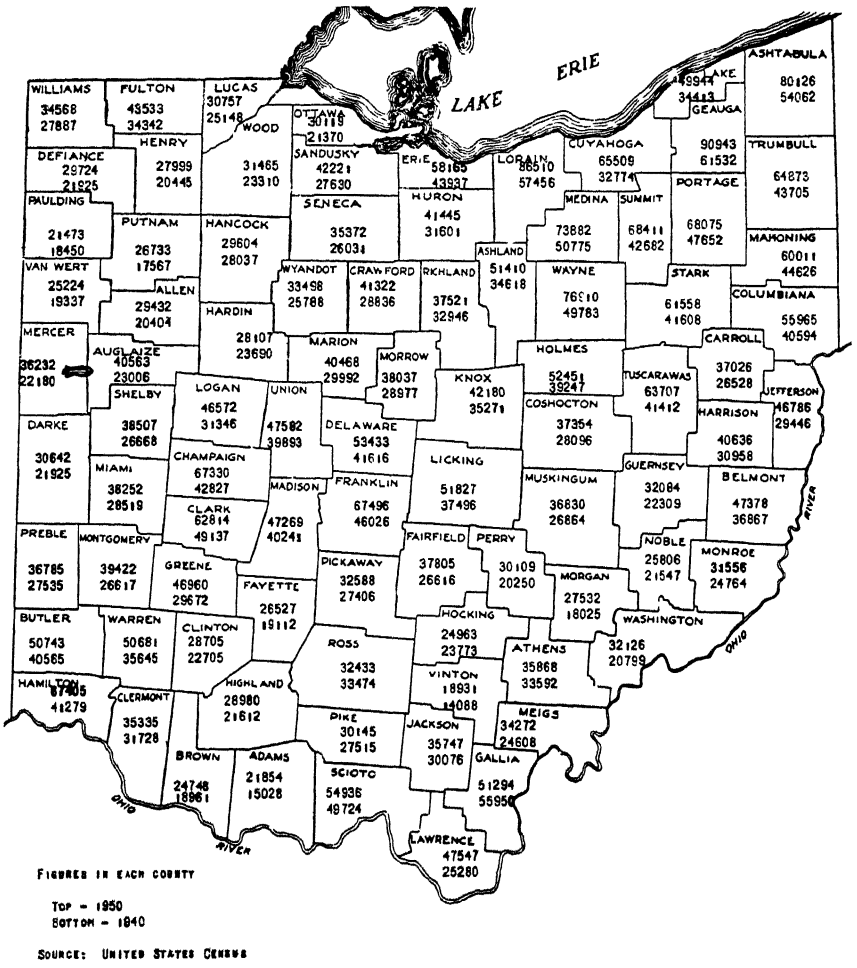


Fig. 10.—Average number of pounds of whole milk sold per farm per year in Ohio, by counties, 1940 and 1950.

counties within the state sold within five percent the quantity of milk during 1950 that they sold during 1945. Increases during this period occurred mostly in Southeastern Ohio with some scattered increases all over the state. Largest decreases occurred within the milksheds of the large industrial cities of Cleveland, Cincinnati and Toledo. Relatively high beef prices during those 5 years may also have had significant effects on milk production in certain areas of the state.

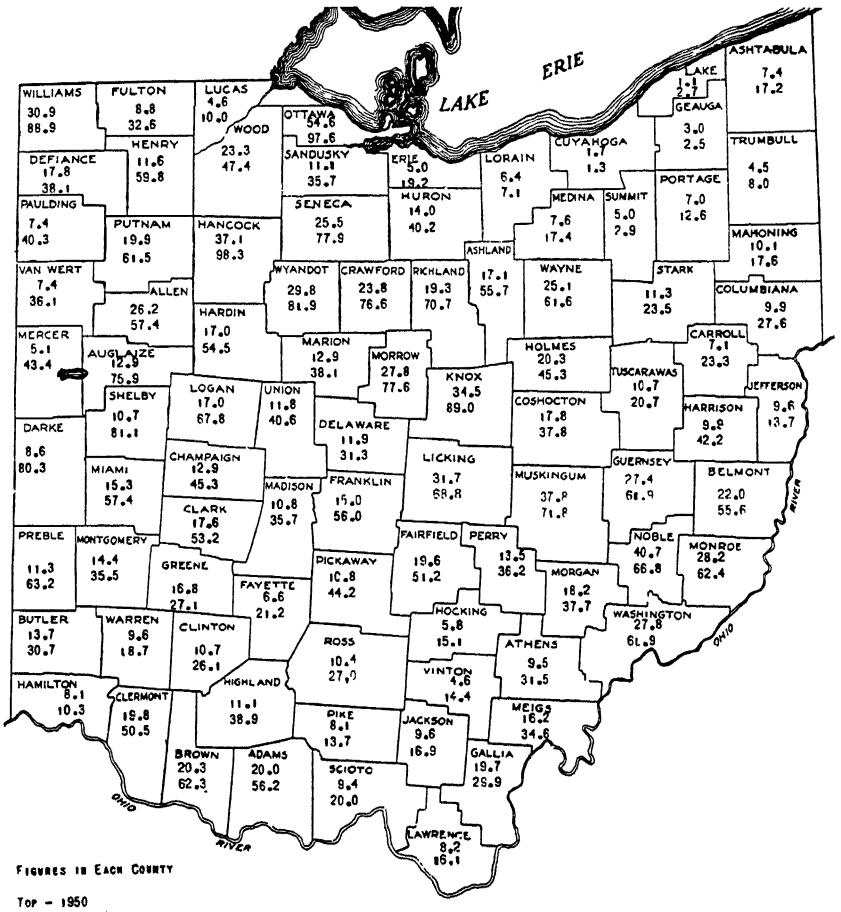


Fig. 11.—Pounds of cream sold from Ohio farms, by counties for 1940 and 1950. (0000 omitted).

Figure 9 shows increases and decreases in producer numbers from 1940 to 1950. Producer numbers increased in all the southeastern Ohio counties. The central and central western counties also show rather general increases in producer numbers from 1940 to 1950 by counties. The overall number of producers selling whole milk increased by almost six percent with the big increases occurring in the area formerly selling a large percent of their volume as cream.

Source - U.S. Census of Agriculture, 1945 and 1950

Fig. 12.—Percentage increase or decrease in volume of cream sold from Ohio farms, by counties, 1940 to 1950.

Decreases in the number of producers selling whole milk occurred mainly in those counties surrounding the major fluid milk markets. The Cleveland and Cincinnati markets lost the largest number of producers and the major part of this reduction occurred since 1945. Following World War II with relatively good wages being paid by industry, many dairymen found the labor situation very tight or may have gone into factory work themselves. Also with the fluid milk markets generally striving for higher sanitary regulations many small

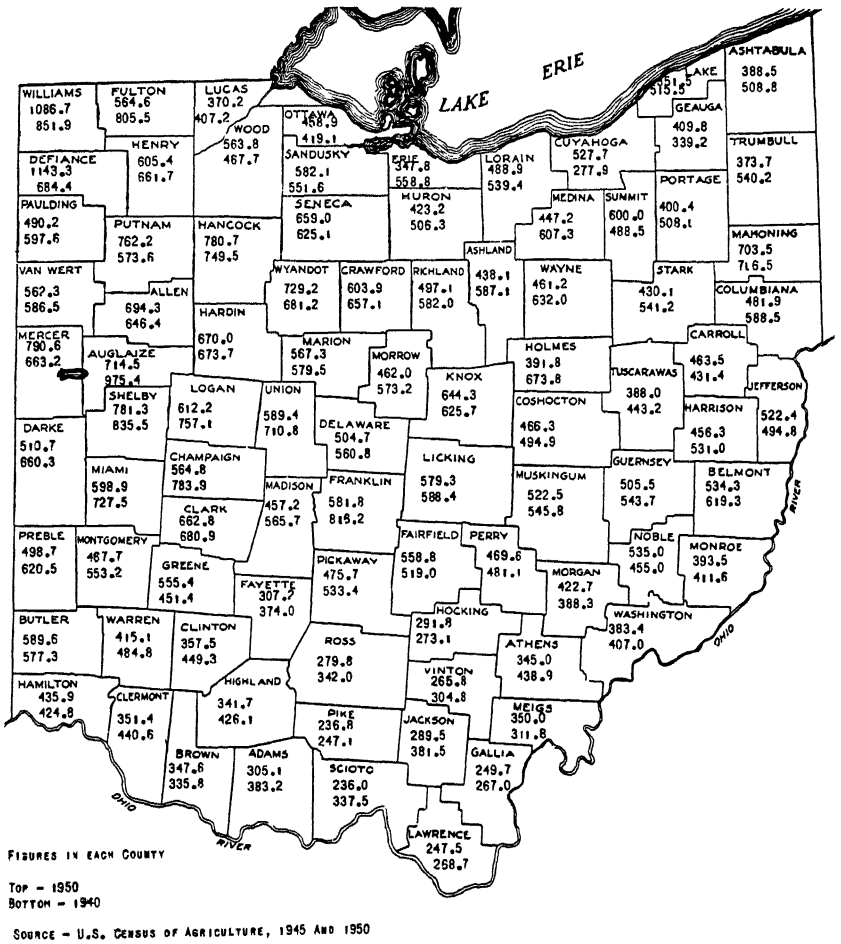


Fig. 13.—Average number of pounds of cream sold per farm per year in Ohio, by counties, 1940 and 1950.

producers found the overhead requirements too high. Those remaining in milk production generally increased the size of their herds. This is indicated by the fact that with the decreases in producer numbers in the fluid milk areas (generally considered as having the largest producers) overall production of fluid milk was up 38 percent in 1950 over 1940.

Source - U.S. Census of Agriculture, 1940 and 1950

Fig. 14.—Change in number of cream producers in Ohio, by counties from 1940 to 1950.

Figure 10 shows the increased production per producer from 1940 to 1950. In 1940 the average Ohio milk producer sold 33,086 pounds of milk per year while in 1950 this figure increased 31 percent to 43,322 pounds per year.

Northeastern Ohio counties show the largest production per producer with a definite tendency for increased production per producer surrounding fluid milk markets. Southeastern Ohio counties show the smallest increasee in 1950 over 1940 probably due to the high percentage increase in producers selling whole milk over this 10 year span.

SHIFTS IN CREAM PRODUCTION IN OHIO

The 1950 United States Census of Agriculture reported 27,012 farms selling 13,042,832 pounds of cream. This compared with 38,847 farms selling 19,300,946 pounds of cream in 1945 and 66,429 farms selling 36,336,307 pounds of cream in 1940.

Figures 11 to 15 indicate shifts that have occurred from 1940 to 1950 in the production of cream in the state of Ohio. Figure 11 shows total cream production by counties for the years 1940 to 1950. Most counties showed a marked decrease in production of cream from 1940 to 1950. Several northeastern Ohio counties, with a small volume showed increases. The largest volume decreases occurred in central western Ohio.

Figure 12 shows the percentage change in volume of cream sold from Ohio farms by counties from 1940 to 1950. Largest percentage decreases also occurred in central western Ohio.

The average number of pounds of cream sold per farm per year indicates farmers in the Northwestern section of the state to be the heaviest producers of cream on a per farm basis. Southeastern Ohio, as was the case for fluid milk production, was also the smallest in volume of cream produced per farm.

All counties in the state showed a decrease in the number of cream producers as shown in Figure 14. In northeast Ohio where the volume produced is small, this decrease was also minor, but in some southeastern and southern Ohio counties the decrease in numbers was quite large. This is especially true from a percentage standpoint and explains most of the variations found in Figures 7 and 9. It is evident that in many cases farmers changed from the production of cream to fluid milk during this ten year period especially in Southeast Ohio.