

## Geographic Aspects of the Fruit Industry of Illinois

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Apples are the most common of the orchard fruits and are grown in every county in the state. Commercial production, however, is limited to the southern part of the state.

We may roughly classify the commercial apple sections of Illinois as the Central Western, the South Central, and the Southern Districts.

The Central Western District centers in Calhoun County, with lesser plantings in Jersey, Greene, Pike, and Adams counties. This section produces the late ripening varieties and is the leading producing district of the state. Taking the single year 1929, Illinois produced 3,025,895 bushels, which was a short crop inasmuch as the five year period 1928-32 showed an average of 5,019,000 bushels. The Central Western District produced a little over 35 per cent of the 1929 crop and Calhoun County alone produced 21 per cent of the total crop of the state. This area has pushed forward in the number of bearing trees from 1920 to 1930. Calhoun leads the procession, for her number of trees of bearing age has more than doubled during the ten year period. With her good climate, rolling topography, and deep, rich loess soil, she has ideal conditions for the growing of apples. A recent test, the results of which were announced in August, 1935, stated that the Department of Agriculture found that Calhoun County apples contained more sugar, better flavor, and higher color than any grown elsewhere in the United States. The test was made on fruit produced in every section of the country. A new highway bridge across the river at Hardin and the railroad extension to East Hardin have broadened her market. Formerly, the apples were shipped to St. Louis by boat.

The South Central District is composed of Cumberland, Jasper, Richland, Clay, and Marion Counties, together with parts of Crawford and Effingham counties. It may be said to be the second most important commercial area in the state, but the industry in this region is now distinctly on the decline. The number of trees of bearing age in 1930, in the seven counties named in this region, was less than 15 per cent of the number in 1900. This area was, in fact, the first important apple producing center of Illinois. Throughout the territory there are no large highly developed apple sections and both the early and winter varieties are grown. Some adverse factors are encountered here, such as spring frosts which cause irregularity in the yield, an impervious subsoil which comes near the surface making the land absolutely un-

suitable for orchards, and level land which makes drainage a serious problem.

The Southern District includes Union and Johnson counties, together with parts of Jackson and Williamson. The region is one of the leading early apple sections of the United States. Fruit moving late in June or in early July has the advantage of a fairly open market to the west, north, and east of this district. The number of bearing trees declined in this area between 1900 and 1924, but during the period 1920 to 1930 the total number of trees, both bearing and non-bearing has increased a little over 27 per cent, the greatest increase being in Union and Johnson counties. Thus, we can see that this district, together with the Central Western District has increased rapidly from 1920 to 1930. However, in contrast to the ideal Calhoun centered district, the soil here is of poor physical texture and low in fertility. In some places there is an outcrop of stone. The topography and character of the soil presents an erosion problem. The apples in this section blossom early and there is often considerable damage from spring frosts which check the normal development of the fruit. On the other hand the section has some advantages over others. Early apple movement, good transportation facilities throughout the distributing territory, and abundance of cheap labor and land, coupled with the fact that few crops other than apples and peaches can be profitably produced on this land, are all tending to favor this territory as one of the most important centers for early apple production in the United States.

Considering the average production of apples for the five year period 1928-32, Illinois ranked tenth among the states.

Peaches are the second most important of the orchard fruits of Illinois, but their production is more limited than that of the apple due to the great hazard of winter killing of the fruit buds and often the trees. Low temperatures in the spring months, during bloom, is another great hazard. In Illinois the production of peaches fluctuate greatly with the climatic conditions. There were no peaches in 1918 and 1930 and less than a fourth of a crop in 1919, 1921, 1932, and 1933. The five year period, 1928-32, showed an average production of 1,889,200 bushels, during which time Illinois ranked next to the important states of California, Georgia, and North Carolina.

In spite of the great chances taken, because of weather conditions, commercial orchardists in the extreme south and southeastern part of Illinois are willing to gamble on getting a crop as the state's peaches go on the market about three weeks ahead of the Michigan fruit. Too, the Elberta crop in Illinois fits fairly well into a period when there is a decided dropping off following the end of peach shipments from Georgia.

The total number of peach trees reported in Illinois in 1930 was 4,027,456, nearly three-fourths of which were trees of bearing age. The

number of trees of bearing age declined a little over 64 per cent between 1910 and 1920, with the largest decline in the small farm orchards. However, the total number of trees increased from 1,851,037 in 1920 to 4,139,100 in 1925.

The southern Illinois peach region is a comparatively recent development, the production being rather small in 1924. A survey made in 1925 indicated that 77 per cent of all the peach trees in the commercial orchards of Illinois had been set in 1920 or later. A slight decline in the total number of trees was noted from 1925 to 1930, while only 25 per cent of the trees were of non-bearing age in 1930 as compared with 45 per cent in 1920. The total number of trees in Union, Johnson, Pulaski, and Jackson counties was two and a half times as large as in 1920.

Commercial peach production in Illinois is limited to the Southwestern Section centering in Union, Johnson, Pulaski, and Jackson counties, and the South Central Section centering in Marion and Jefferson counties.

Taking the single crop year 1929, which was almost a million bushels above the average of the five year period, 1928-32, the Southwestern Section is by far the most outstanding production center. It produced 40 per cent of the state's crop in 1929, with Union—the outstanding peach producing county—producing 22 per cent of the state's total, and alone, almost as much as the South Central District. This section has a rolling topography that gives good soil and air drainage.

In the South Central Section there is greater risk of frost damage than in the Southwestern Section as the surface there is fairly flat. Crop failures in this region are common. Marion County had more peach trees in 1900 than any other county in the state, however, the number declined until 1920 when thousands of new trees were set.

The pear is the third most important of the deciduous tree fruits of Illinois. The Kieffer is the principal variety grown, while the more recent plantings include the Garber. However, neither variety is of high quality, consequently, they do not command the price of the better varieties from the Pacific Coast States. Fire blight, a disease, is the limiting factor in the production of the high quality varieties in Illinois.

In 1930, Marion County had nearly one third of the state's pear trees of bearing age. In 1929, she produced nearly one third of the total crop of the state. The 1929 crop, however, was above the five year 1928-32 average which was 445,800 bushels—the 1930 Federal Census figures showing 538,667 bushels for Illinois.

The pear is more resistant to frosts and winter than any other Illinois fruit tree. It will stand wet feet better than any other fruit tree that we grow in Illinois. Since it is quite level in Marion County, making drainage a problem, the pear is not so handicapped with excess moisture as other deciduous fruit trees.

The total number of trees in the state declined quite rapidly from 1910 to 1920 and increased following the war, but declined 21 per cent between 1925 and 1930.

In grapes, Illinois ranks higher than is generally known. Taking the single year, 1929 Federal Census figures, she ranked tenth in grape production among the states. The number of grape vines, according to Federal Census figures, showed her ranking eleventh in 1930.

There is an intensive commercial planting in Hancock County in the Nauvoo district. This county is by far the leader and in 1929 produced a little over 28 per cent of the grapes of Illinois and in 1930 had a little over 26 per cent of the state's bearing and non-bearing vines. Practically the entire crop from the Nauvoo district is ferried across the Mississippi River to Montrose, Iowa, and from there taken by rail to states north and northwest.

Peoria and Madison counties rank second and third respectively in the total number of vines in the state.

The Nauvoo district in Hancock County has ideal conditions with a west exposure on the Mississippi. Here the air and water drainage are good and the soil is moderately fertile. Since the grape vine will not stand wet feet, the water drainage is very important. There are favorable sites and soils in other parts of the state, especially in the southern third and along the Mississippi River in the western part.

In 1900 there were nearly as many grape vines in Pulaski as in Hancock County, but the number in the southern county declined rapidly from 1900 to 1910. In 1900 in the entire state, there were 3,008,888 vines of bearing age and that number declined to 1,750,332 in 1930.

The strawberry is the most commonly grown of all the small fruits of Illinois. They are grown in all counties and in most of the counties there are some commercial plantings to supply nearby towns. The larger commercial plantings are found in the southern part of the state. The acreage of this fruit varies greatly from year to year, due to the short period that individual plantings are allowed to fruit. However, within the past few years a new district in Edgar County has been pushing forward.

The strawberry thrives in widely different soils and climates, but seems well adapted to the good sites of southern Illinois that provide good air and water drainage. Pulaski County produced 13 per cent of all the state's strawberries in 1929.

In the southern part of the state the strawberries are not far from the Illinois Central Railroad which provides good fast transportation for this highly perishable fruit. On short hauls, the trucks are taking their share of the business away from the railroads<sup>1</sup>.

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