

## FACTORS IN THE ESTABLISHMENT OF COMMERCIAL ORCHARDING IN SOUTHERN ILLINOIS

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### INTRODUCTION

One of several commercial orchard economies of the Midwest is located in southern Illinois (Fig. 1). Peaches and apples comprise the principal fruits which this specialized economy embraces. All but 10% of the state's peaches and 40% of its apples are produced in six regions. Michigan is the only state in the Midwest which outranks Illinois in apple production, but both Michigan and Arkansas surpass the state in peach production.

Commercial orcharding has become a significant element in the agriculture economy of six distinct regions in Illinois (Anna-Cobden, Vienna - New Burnside, Metropolis, Villa Ridge, Centralia - Salem, and Sesser.) These regions differ not so much in their physical environment as they do in the actual conditions of their orcharding economy. Analysis of the factors in the establishment of the orchard areas and of their early development reveals some of the factors which shed light upon the present day status of orcharding.

Commercial orcharding grew out of subsistence agriculture, but not until the areas were served by railroads. Subsistence farmers unknowingly tested the southern Illinois climate for several decades before railroads opened the region to the

expanding urban markets of the Midwest. The Illinois Central Railroad was the prime moving factor in the initial stages of orcharding along its lines from Cairo to Kinmundy. Early day nursery-men and other individuals interested in various phases of orcharding contributed greatly to the ultimate character of the industry in the various areas of concentration. Later developments of some orchard regions and expansion of others were related to the development of coal mining in southern Illinois and to the extension of railroads to serve the mines.

### BEGINNINGS OF ORCHARDING IN SOUTHERN ILLINOIS

Southern Illinois was the first part of the state to be settled, the process of occupying the land for agriculture beginning in earnest about 1820. The areas along the Ohio, Mississippi, and Wabash rivers were settled first, and the uplands and the interior not until some time later. Early settlers, coming from Kentucky and Tennessee in the main, brought with them a self-sufficient type of agriculture which they began practicing as soon as land could be cleared for cultivation. Their subsistence economy included corn, wheat, vegetables, livestock, and fruits, especially apples and peaches.

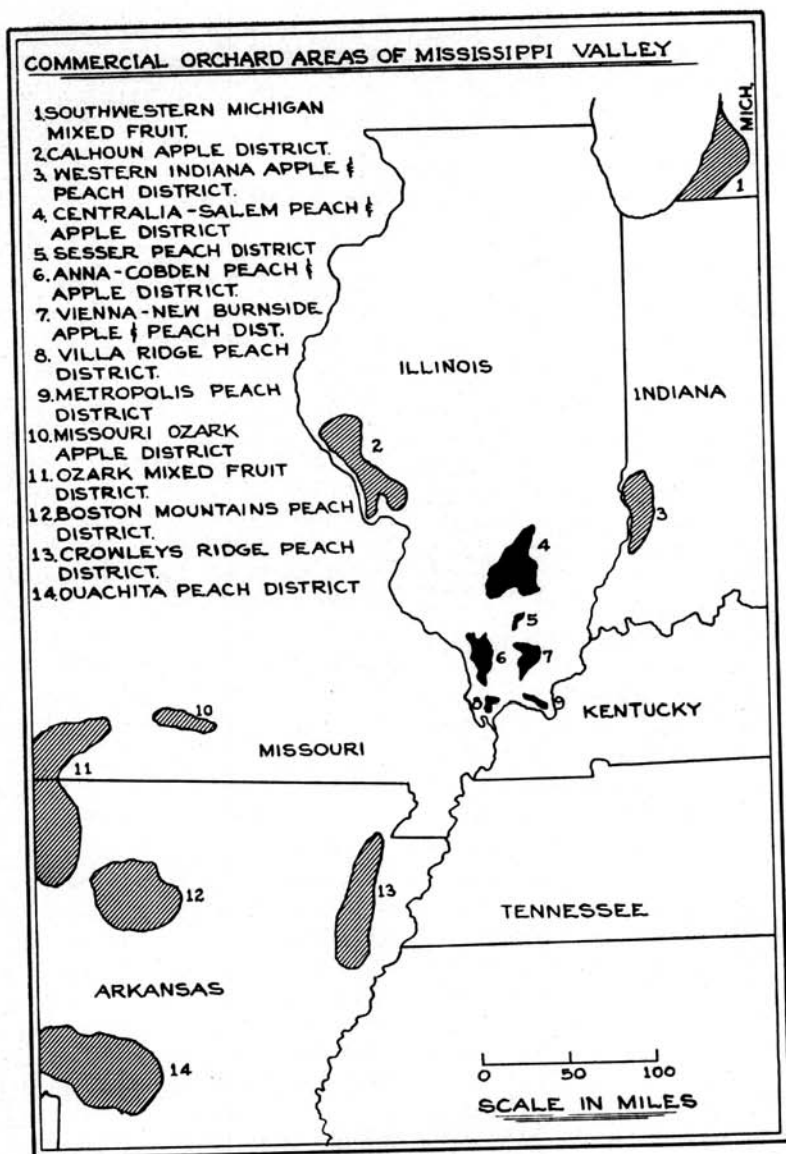


FIGURE 1.

Very little commercial agriculture of any kind developed in southern Illinois until after 1850 when the first railroad was built through the region. Whereas river routes were utilized to transport some agricul-

tural products, they were not used for shipping fruit from the area under study, and orcharding took on importance only because of farm family consumption. Surplus fruit production from farms, if any, was

either given away or sold to neighbors.

The early-day subsistence farmers unknowingly made a valuable contribution to the ultimate development of commercial orcharding in the region by planting apple and peach orchards all over southern Illinois. In so doing, they tested the physical environment for orchards over a period of 30 or 40 years and found it not unfavorable to fruit culture. When later developments made it possible to start some form of commercial agriculture, some farmers of southern Illinois turned to apples and peaches because they had learned from experience that such crops could be grown successfully.

The Illinois Central was the first railroad to extend lines through southern Illinois and thus became the first to provide the transportation facilities by which area farmers could market some of their crops outside of the region. As soon as railroad transportation became available, farmers began to see the opportunities for selling fruit as well as other farm products in Chicago markets; and some began to expand their family orchards to commercial proportions. However, some of the expansion of commercial orcharding was effected through outside capital and by new settlers who came specifically for the purpose of establishing orchard farms; these were attracted to the region by the promotion and advertising work of the Illinois Central during the 1860's. For a time almost every station along the Illinois Central, from Mounds to Effingham, became the nucleus for a fruit industry. To this day some of the railroad stations

serve in the same capacity in the orchard regions (Fig. 2).

The town of Cobden was one such station which achieved fame in 1866 when one of its citizens, Parker Earl, began one of the first experiments with refrigeration of strawberry shipments. He soon perfected his experiments sufficiently so that refrigerated strawberries were shipped to Chicago and even to more distant markets. In the meantime, small shipments of apples, peaches, and vegetables were being made from Cobden and Anna to Chicago, with gratifying results. The Illinois Central quickly saw the possibilities for freight revenue and gave a powerful stimulus to commercial orcharding by inaugurating the "Thunderbolt Express" which was a fast train especially designed to carry fruit to Chicago. The special, fruit-train service and the refrigeration experiments attracted nationwide attention to the possibilities of commercial orcharding in the Cobden area. The widespread publicity began to attract settlers who had sufficient capital to promote commercial orchard farms. But many farmers who were already living in the area were able to finance small orchard plantings and began to expand them into commercial proportions. The fruit industry prospered because supply was unable to keep up with the demand for foodstuffs in the rapidly growing urban markets such as Chicago and St. Louis.

In 1867, the year after Parker Earl began his refrigeration experiments, the Illinois Central Railroad devised an orcharding promotion campaign by conducting a group of horticulturalists on a tour of its main line. The party stopped at

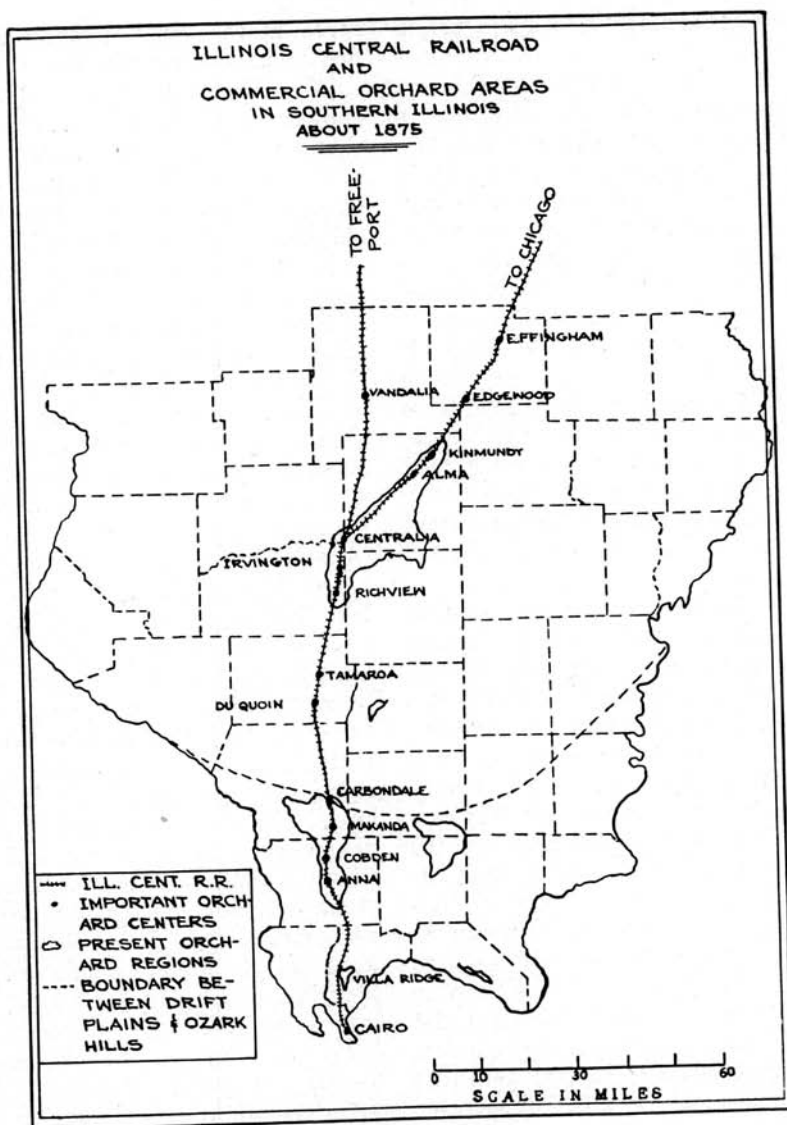


FIGURE 2.

stations all along the railroad, from Champaign southward to Cairo, to view orchards. One stop on the tour was made at the W. A. Perrine Nursery at Centralia to view a model orchard. Nurserymen such as Mr. W. S. Perrine were highly instru-

mental in aiding the establishment of commercial orcharding during the formative years. Their chief interest was selling nursery stock, but they maintained model orchards to demonstrate the possibilities of orcharding in the region. Most of the

nurseries now are gone, but some of the present-day orchards are still operated by descendants of early nurserymen—orchardists.

In the meantime, settlers had discovered ways to utilize the rich prairies of central Illinois for farming. As a result, homesteaders began refusing to buy the poorer lands offered for sale by the Illinois Central Railroad in southern Illinois. Since the Illinois Central had been granted large parcels of land by the state of Illinois to aid in building its railroad, it was faced with the problem of selling its holdings in the southern part of the state which were not being sought by prospective settlers. To be nearer its holdings and to promote land sales in southern Illinois, the Illinois Central moved its land office to Centralia in 1871. The railroad officials, recognizing the marked success of orcharding along the line farther south in the Anna-Cobden district, and of the nurserymen's model orchards, decided to recommend this type of agricultural specialization to prospective land purchasers in the Centralia area. Officials of the railroad gave no little publicity to commercial orcharding because they were convinced that it was the most promising branch of agriculture in the southern part of the state. The railroad authorities correctly recognized that southern Illinois could not compete very successfully with central Illinois in grain farming but that it could produce fruit. As an added inducement to orcharding, the Illinois Central for a time even gave a 33% rate reduction to fruit shipped from southern Illinois to Chicago. It wasn't long before reports of high profits in fruit farming became wide-

spread, and planting fruit orchards became almost a mania all along the Illinois Central line in southern Illinois.

Many of the people who became interested in the fruit-raising industry were attracted to southern Illinois from elsewhere; generally they were from the north. It took considerable capital to launch a very large commercial orchard farm and the older residents, being subsistence farmers, didn't have the resources to develop the business on as large a scale as the newcomers. Yet entire communities became infected with a goldrush-like fever to produce fruit commercially.

In spite of the great impetus given to orchard agriculture along the Illinois Central Railroad, the industry did not spread north of Effingham, even in its heyday. Writers of the day sensed that orcharding could not succeed any farther north because of too frequent frost danger. Even the Illinois Central, for all of its enthusiasm about orcharding, did not recommend apples and peaches northward beyond Effingham. However, it must be stated that the railroad had no difficulty selling its holdings of better agricultural lands northward and thus felt no compulsion to promote orcharding outside of southern Illinois.

#### EARLY PATTERNS OF DISTRIBUTION OF ORCHARDS

Many of the early descriptions of the orchard economy leave the impression that orcharding was widespread over southern Illinois. This could not have been true for commercial orcharding, although it may well have been for kitchen orchards.

Since orchardists had to haul their fruit laboriously by teams and wagon over exceedingly rough roads, it was imperative that commercial orchards be located within a few miles of the nearest railroad station. If the haul was too long, the fruit would be damaged too much and the orchardist could not make the round trip to the station in one day.

The resultant patterns of distribution in the early commercial orchard regions were somewhat like irregularly spaced beads on a string. The

Illinois Central Railroad resembled the string whereas the stations and their orcharding clusters resembled beads (Fig. 2). Every station along the Illinois Central did not witness the development of commercial orcharding around it. However, patterns of regionality were emerging which have persisted to the present (Fig. 3).

The hilly Ozarks served as the setting for one of these important groups of clusters. Most of the towns northward from Cairo to Carbondale

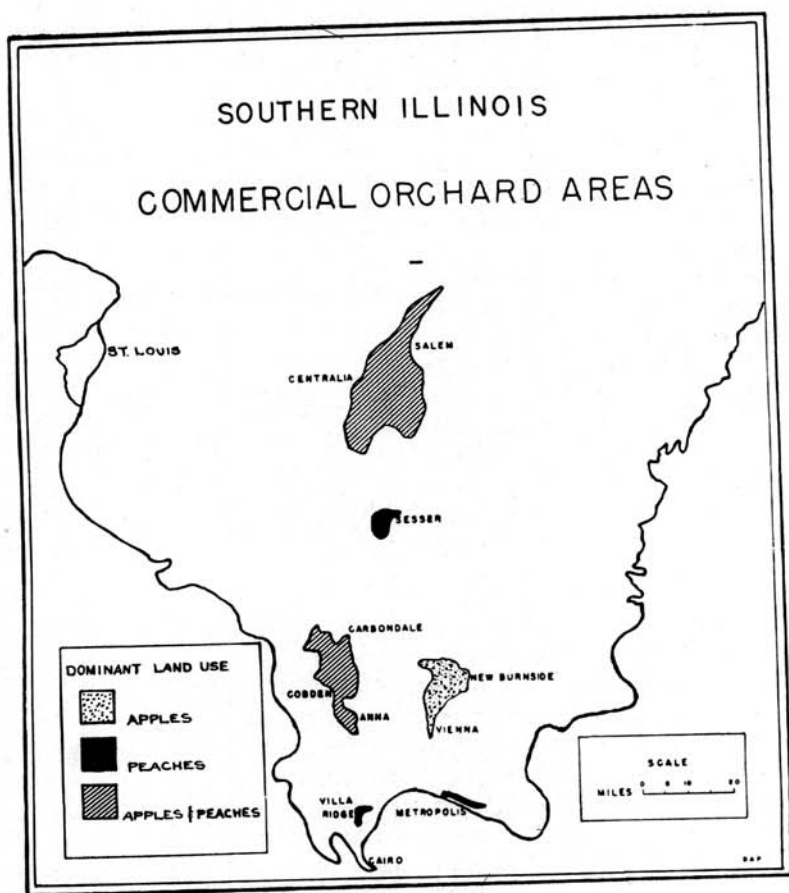


FIGURE 3.



developed as centers of commercial orcharding, though the areas around Anna and Cobden became the most significant. Cobden received the greatest stimulus of all stations, partly because of the great amount of interest engendered by Parker Earl and his refrigeration developments, but also because of the Illinois Central's efforts to provide fast train service at special, low rates. The area in the vicinity of Cobden was admirably suited for orcharding since it was in the more hilly part of the Ozarks. Even pioneer orchardists were aware of the principles of air and water drainage and sought out upper slopes and ridges for their orchards. Such sites were especially abundant in the Anna-Cobden area.

The Drift Plains Region (this term applies to the glaciated portion of southern Illinois) provided the other setting for commercial orchard clusters (Fig. 2). The Drift Plains, in contrast to the Ozarks, were quite featureless and without appreciable hilly land and not the type of land-form region one would expect the early-day orchardists would have selected for planting fruit trees. Yet commercial orcharding gained a foothold in this region, and several stations along the Illinois Central became centers of commercial orchard activity. The most important development took place in the vicinity of Centralia, not because of terrain advantages especially but primarily because of the intensive commercial orchard promotion work of the Illinois Central Railroad. In turn, nurserymen were induced to locate their nurseries and model orchards in the immediate vicinity. In addition, the most favorable terrain

for locating the Illinois Central Railroad also happened to be best suited for orchard sites. This type of terrain extended northeastward from Centralia where the Illinois Central followed long higher divides which witnessed significant orchard plantings at about the same time the Centralia cluster was developing.

Three of the present-day orchard regions in southern Illinois grew out of the original railroad station nuclei. Two of them, Anna-Cobden and Centralia-Salem, presently are the most important orchard regions in southern Illinois. Further enlargements of these same orchard regions, beyond their early boundaries, had to await the building of other railroads near enough to the original stations that there was fusing of the older clusters with the new ones. A third region, the Villa Ridge, did not become significant for commercial orcharding until 1910 or thereabouts and remains quite small.

Very likely orcharding would not have developed beyond the areas traversed by the Illinois Central if it had not been for the coal mining developments in southern Illinois. Several railroads, in seeking coal, provided transportation to new areas, which local nurserymen and others interested in developing cash-crop agriculture took advantage of by promoting commercial orcharding. Two orchard regions (Vienna-New Burnside and Sesser) became established with this second wave of railroad building. An extension of a third, Centralia-Salem, was made possible by the development of coal-hauling railroads near the original orchard center.

## TYPES OF ORCHARD FRUIT

During the formative years of commercial orcharding, apples were favored in all of the regions, whereas peaches took a secondary role. The reasons why apples were more important were that they were harder than peaches, were less susceptible to frost, and required less care in growing, harvesting, and shipping. Apples, moreover, could withstand the rugged haul from orchard to railroad station and the rough train trip far better than could peaches. In addition, apples were less subject to diseases and pests, whose control was poorly understood. It was possible to select varieties of apples with differing harvesting dates so that the marketing season could be greatly extended. Peaches, on the other hand, ripen within a very short period of time and must be disposed of very quickly. Because of the above factors, not one orchard region in southern Illinois had as many peach trees as it did apples, until after the turn of the century.

The earliest orchardists and subsistence farmers experimented with cherries and plums but soon discovered that they did not have the knowledge to combat diseases and pests which vigorously attacked these two fruits in southern Illinois. Plantings of pears were more preva-

lent than of cherries and plums, but the kinds of pears which could be raised successfully were the hard variety and thus were not as readily acceptable in the urban markets as were apples and peaches.

## SUMMARY

The development of orcharding in southern Illinois followed definite patterns which are important in an understanding of present-day conditions. Early subsistence farmers tested the environment and found it suitable for fruit production. The coming of the Illinois Central Railroad made it possible to market fruit in northern urban areas. The Illinois Central aggressively promoted orcharding by several devices and left lasting imprints on the areas. Present-day orchard areas reflect early associations with the railroads and the stations around which commercial orcharding took root. Coal-seeking railroads indirectly opened up other areas for orcharding by providing necessary transportation facilities. Developments of refrigeration in the Cobden area focused nationwide attention on it as an orchard region. Many individuals, nurserymen, and settlers with capital had great faith in commercial orcharding and enthusiastically promoted its firm establishment in the agriculture economy of southern Illinois.