



FIG. 1.—Occupance patterns of the Lower Illinois Valley.

## OCCUPANCE PATTERNS OF THE LOWER ILLINOIS VALLEY

JOHN H. GARLAND  
*University of Illinois, Urbana*

From the confluence of the Kankakee and the DesPlaines rivers to the Mississippi River, approximately 250 miles to the southwest, flows the Illinois River in a valley which is one of the significant features of the geographic patterns of the State. The several sections of the valley which extend entirely across the Central Division of Illinois form the northern and western boundaries of the Eastern and Southwestern Districts. From the Kankakee-DesPlaines confluence to the Bureau bend is the Upper Illinois Valley whereas the Middle Illinois Valley extends from Bureau to Pekin. These two sections are a part of the Eastern District. The Lower Illinois Valley, which extends from Pekin to the Mississippi, a distance of 140 miles, is a portion of the Southwestern District (fig. 1).

The Lower Illinois Valley is composed of two well-marked and contrasting segments. The Upper Segment, which extends from Pekin to Beardstown, consists of a lake studied valley trough occupied by the braided river channel and a broad series of sand terraces interspersed with poorly drained depressions. These sandy terraces, with a maximum width of twenty miles, occupy the left side of the valley from the Shelbyville moraine to the Sangamon River whose meandering course has been canalized and straightened from its confluence with Salt Creek to the Illinois River. The Lower

Segment, from Beardstown to the Mississippi River, consists of a north-south valley trough which becomes narrower and deeper with distance down stream until it swings away from the narrow ridge that is Calhoun County and merges with the wide eastward trending Mississippi trough.

### CULTURAL PATTERNS

The Lower Valley is decidedly one of the problem areas of the State as well as a zone of conflict concerning the solution of those problems. The conflicting agents include the State, the twelve counties which line both sides of the river, several organized drainage districts, and the Army Engineers. The latter are concerned with drainage, navigation, and flood control.

Within the area lives a small dominantly rural population. Pekin, at the northern apex of the valley with a population of about 20,000, is the largest urban center, whereas, Havana (4000) and Beardstown (6500), river towns spaced at thirty mile intervals down the valley, are the only other towns with populations over 2500. Twenty incorporated towns of less than 2500 people, thirty unincorporated villages, and scattered rural habitations make up the rest of the population pattern.

Human interests and activities are concerned largely with the land of the valley and with the river itself. Outside of Pekin and the Orchard

and Kingston Mines across the river, manufacturing and mining are of little significance. Farming dominates the valley with as many as one quarter of the gainfully employed population engaged in that activity. The Upper Segment of the valley is a commercial grain area and the Lower Segment an area of general mixed agriculture, which in general is the less prosperous of the two as is indicated by federal income tax returns. Based upon 1940 returns, before the base was lowered and the rates increased to meet wartime conditions, less than 8% of the population of the Lower Valley received a yearly income sufficiently large to be taxed by the federal government. This figure varied from a high of 13% in the Pekin district of the Upper Segment to a low of less than 3% in the lower portion of the Lower Segment.

There is no other area, with the possible exception of the Ohio Border, where fishing and lumbering engage the activity of as many people as in the Lower Illinois valley. The braided and impounded Upper Segment is a more notable area for commercial fishing than the Lower Segment. These river activities do not produce large incomes nor do they contribute to a high standard of living. In a land of alluvial river bottoms, poor drainage, and flood menace, economic returns are low and the handicaps numerous. Although the river is a portion of a navigational link between the Gulf of Mexico and the Great Lakes, no advantages accrue to the Lower Valley as the decadent river towns attest. Flood is a constant menace to the towns and rural areas alike, and

drainage of the low flat lands is a necessity to agricultural utilization over much of the area.

#### THE UPPER SEGMENT

Although alike as far as the general problems are concerned, the Upper Segment of the valley presents some sharp contrasts to the Lower Segment. In the former, population and transportation patterns emphasize the two contrasting physical features, the valley trough and the broad terrace. The three largest towns, Pekin, Havana, and Beardstown, are evenly spaced at positions where the broad terrace meets a narrow portion of the river thus affording a satisfactory crossing of the valley trough by railroads and highways. Seven railroads and two highways focus on Pekin on its terrace site between the Shelbyville moraine and the valley bottom. Four of the railroads cross the terrace from the south, and two of them cross the river as does one highway.

Havana is served by several railroads, one of which terminates on the river front. The highway, however, crosses the river there and follows the river bluff both up and down on the west side of the river. At Beardstown, at the lower end of the Upper Segment, both the highway and two railroads cross the river.

Small river front towns are conspicuously lacking in the Upper Segment of the valley. On the broad terrace, alignments of small towns and villages conform to the railroad pattern. One follows the inner edge of a sandy terrace between Pekin and Havana, another occupies the outwash of the Shelbyville moraine

at the extreme eastern margin of the area, and a scattered group of village alignments radiate southward from Havana. In the valley trough a line of bluff-side villages connected by a valley highway occupy tributary valley mouth sites. However, the largest tributary, Spoon Creek, which joins the Illinois River directly opposite Havana, is not the site of a town.

#### VALLEY BOTTOM OCCUPANCE

Although the Upper Segment of the valley is a portion of the cash grain area of the State, a variety of land uses prevail. On the alluvial bottom lands, drainage is the outstanding problem. Organized drainage districts have dug ditches, built levees, and installed pumping stations to improve portions of the valley bottom which are consistently in corn crops. Improved valley bottom drainage, however, does not prevent or control floods and much of the land is unused. Lakes and vegetation choked sloughs, some of which are set aside as wild life refuges, are conspicuous elements of the valley bottom, whereas roads and farmsteads are limited to the bluff side margins and to the intermittent areas that have been ditched and drained.

#### BROAD TERRACE OCCUPANCE

The broad terrace on the left side of the Upper Segment presents a different pattern of occupance. Well-drained sandy terraces contrast with adjacent sloughs and depressions in which drainage ditches and levees have been constructed by organized drainage districts. The Sangamon and Mackinaw rivers and Quiver Creek flow through portions of the

depressions which divide the area into a series of terraces. The Mackinaw describes a sharp arc from the Shelbyville moraine to the Illinois River about two and one-half miles below Pekin, separating the terrace site of the city from the remainder of the sandy outwash which lies along the margin of the moraine from the Illinois River to the vicinity of Emden. Three of the railroads follow this terrace to Pekin, and along them is one of the alignments of villages.

From the Mackinaw River to Quiver Creek, about four miles above Havana, is a crescent-shaped sandy terrace that is separated from the outwash area adjacent to the Shelbyville moraine by an extensive depression which has been ditched and drains into Quiver Creek. The railroad from Pekin to Havana follows the inner margin of the terrace along which the towns are aligned at a distance of four to six miles from the river. Farmsteads, many of which are old, are scattered over both terrace and depression. The cash grain farming of the Grand Prairie extends over the Shelbyville moraine and into the Upper Segment of the valley. Corn is the major crop although small grain, especially wheat, is much more important on the lighter soils of the terraces than it is on the heavy soils of the depressions. About 4500 acres of the sandy terrace, above Quiver Creek between Forest City and Clear Lake on the valley bottom, are given over to the Mason County State Forest.

From Quiver Creek to the Sangamon is another extensive terrace which is interrupted in several places by depressions which have

been ditched into the Sangamon. At a point near the upper end, where the Illinois River flows against the terrace, is the town of Havana from which railroads and highways radiate. Although there is much unused land, cash grain farmsteads are scattered over the entire terrace.

The southern edge of the broad terrace is marked by the Sangamon River, which enters the area from the south and follows the flat bottom of the narrow valley trough westward to the Illinois River. The meandering course of the river has been straightened and, except for the lower ten miles, has been enclosed by levees leaving oxbows and meander scars scattered over the valley floor. The boundary between Mason and Cass counties, which followed the original course of the river, now follows a devious path back and forth across the river. Roads and farmsteads are not numerous on the valley floor of the Sangamon.

#### THE LOWER SEGMENT

Beardstown marks the end of the Upper Segment and the beginning of the Lower. At that point the valley narrows to about ten miles in width, and the levees, which enclose the valley trough throughout most of its lower course, are established on both sides of the river. On the right side they begin at Fulton County line about twenty miles above Beardstown. On the left side the levee begins in the Sangamon Valley and extends to the river front entirely enclosing the valley floor on which Beardstown is situated. Drainage from the area is pumped from ditches into the river at the site of the new LaGrange lock and dam six miles below the town.

From a width of ten miles the Lower Segment narrows to less than two and one-half miles and the river bluffs rise to several hundred feet above the valley floor. The river pursues a direct course on the right side of the valley leaving only a narrow strip of valley floor on that side, especially in the lower narrow course. Except for LaMoine River and McGees Creek in the upper portion of the Segment, the tributaries on the right side of the valley consist of short narrow valleys locally known as "hollows." The floor on the left side of the valley is considerably wider and is interrupted at regular intervals by Indian, Apple, Big Sandy, and Macoupin creeks.

The left valley floor is protected by a levee from Beardstown to Macoupin Creek, but since the river flows on the right side of the valley only the upper twenty-five miles of that side are protected. Ditches and pumping stations drain much of the valley bottom on both sides of the river except in times of high water on the Illinois when much of the bottom land is flooded. Corn and hay crops are produced on the alluvium of the valley bottom, although graded unsurfaced roads and farmsteads are distributed over much of the bottom land, towns and villages and surfaced highways occupy the better drained position at the margin of the valley trough or the bluffs just above the valley.

Meredosia (1000) and Naples (260) are river front towns on a low sandy terrace that extends about twenty-five miles down the left side of the valley from Beardstown. A railroad crosses the river at Meredosia as does another at a point five

miles below Naples. The rest of the villages are aligned on the bluff-side highway in the mouths of tributary valleys where spring freshets cause considerable damage.

At Hillview in the valley of Hurricane Creek, forty miles above the Mississippi, a railroad crosses the Illinois River directly to Pearl in Hill Creek valley. Twelve miles farther down the valley at Eldred, a railroad spur enters the valley by way of a tributary, likewise known as Hurricane Creek, turns southward and terminates on the valley bottom nine miles farther down the valley opposite the town of Hardin, the county seat of Calhoun County. A large movable elevator type bridge, the last one down the valley, and an improved highway cross the valley there. In this manner the railroad serves Calhoun County, which is the only county in the state without a railroad within its boundaries.

Because of the better drained conditions of the right side of the valley the major highway has been constructed on that side, but it does not follow the valley all of the way. At Hardin, about fifteen miles above the Mississippi the highway crosses the valley on the bridge noted above and continues southward to Pere Marquette State Park and the town of Grafton at the Illinois-Mississippi confluence. Pere Marquette State Park occupies about seven square miles on the wooded bluffs at the left side of the lower end of the Illinois Valley.

#### EXTRA-REGIONAL RELATIONSHIPS

Grafton, a town of 1100, holds the same relative position to the Illinois

Valley that Cairo holds to the Ohio, both of which are indicative of the general significance of rivers as highways in America. Like the Ohio, the Illinois River is part of a national navigational system under the jurisdiction of the Army Engineers who dredge its channel and erect dams and levees. As such the Lower Illinois Valley, along with the rest of the river, assumes national significance. That the national relations are of little consequence to the local area is obvious. Like the Ohio, the Lower Illinois Valley is subject to high water and infrequent disastrous floods; these are of significance to the local area. The river is used for sanitary drainage as well as for navigation on an extra-regional basis; it is a source of water supply and fish within the area. It is quite unsatisfactory to consider the Lower Valley as a corridor in the complete geographic sense, yet many of the corridor problems are there. The major one is the conflict of indigenous and extra-regional interests. Although indigenous interests are in many instances based upon unfortunate natural environmental associations which result in poverty, it is unjust to condemn without exhaustive consideration of all facts concerned and without offering advantageous alternatives. The extent to which occupance is satisfactorily readjusted to natural environmental conditions by all people concerned, the greater will be our state and national advancement toward a long enduring maturity. River valleys are included among our problem areas, and the Lower Illinois Valley is not one of the exceptions.