

A METHOD FOR DETERMINING MOUNDS AND MOUND GROUPS IN THE WISCONSIN GLACIAL AREA OF CENTRAL EASTERN ILLINOIS

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INTRODUCTION

In the spring of 1943, the writer, after five years of field work, completed an archaeological survey of Douglas County, Illinois, located 150 miles south of Chicago, Illinois, and 27 miles west of the Illinois-Indiana state-line. The archaeology of Douglas County is the archaeology of its main streams and tributaries, as in all other counties.

The investigation was made chiefly along the Embarrass and Kaskaskia rivers. Both rivers originate on the southern slope of a branch of the Champaign morainic system. The Embarrass begins directly south of the grounds of the University of Illinois and flows through the eastern portion of Douglas County. The Kaskaskia begins five miles west and somewhat north of the city of Champaign, and flows directly south through the western part of Douglas County. These streams closely resemble each other today. Their headwaters are immediately adjacent. Both have equal lengths of approximately 25 miles through the county. The widths and depth of the streams are nearly constant, and the forest belts along their margins are of equal widths.

Forty mounds and several large camp and village sites were found on Embarrass River and no mounds and only one village site on the Kaskaskia. Flint chips picked up on the latter site put it in a subordinate rôle for they show that it was probably used by the large bands that occupied more permanent camps on the Embarrass. The same type of flint was found at both places and the same method of chipping was employed. All of the large camp sites were located on the north and east banks of the river.

A study of a morainic map, distributed by the Illinois State Geological Survey, shows that in Douglas County Kaskaskia River lies several miles to the west of any morainic system, while Embarrass

River, in the northern part of Douglas County, crosses the Savoy ridge, a branch of the Champaign morainic system. This study of the morainic map leads the writer to believe that all migrations of the prehistoric Indians into the Prairie Province were by way of moraines. They were the boulevards of a thousand years ago across the wet marshy prairies, corresponding to the elevated transcontinental highways of tomorrow across the United States.

The writer believes that the Indians camped on the east banks of the rivers not to be safe from prairie fires or because they were afforded more shelter in winter, but because there they found heaviest growths of timber and consequently the largest concentrations of game and wood. The writer has searched the literature regarding the opinions set forth herein, and has found that no one has ever before expressed similar theories. These statements are advanced as an hypothesis. To state that they hold true for all of the 50 counties in the Prairie Province, or Early Wisconsin glacial area may be erroneous, for that would necessitate counting all the mounds in that area, many of which were long ago obliterated by the plow, as well as study of all camp and village sites. Likewise it might not hold true along large waterways, notably Illinois River, even though it may apply to the counties of Champaign, Vermilion, Piatt, Douglas, McLean, Livingston, and Coles, insofar as a systematic survey can show.

MORAINES AS PATHWAYS OF MIGRATIONS

The moraines that the author believes were pathways of Indian migration were deposited by the Wisconsin glacier, which represents the fourth glacial stage of the Pleistocene or last period of geologic time. This glacier advanced southward into Illinois as far as Paris, Charles-

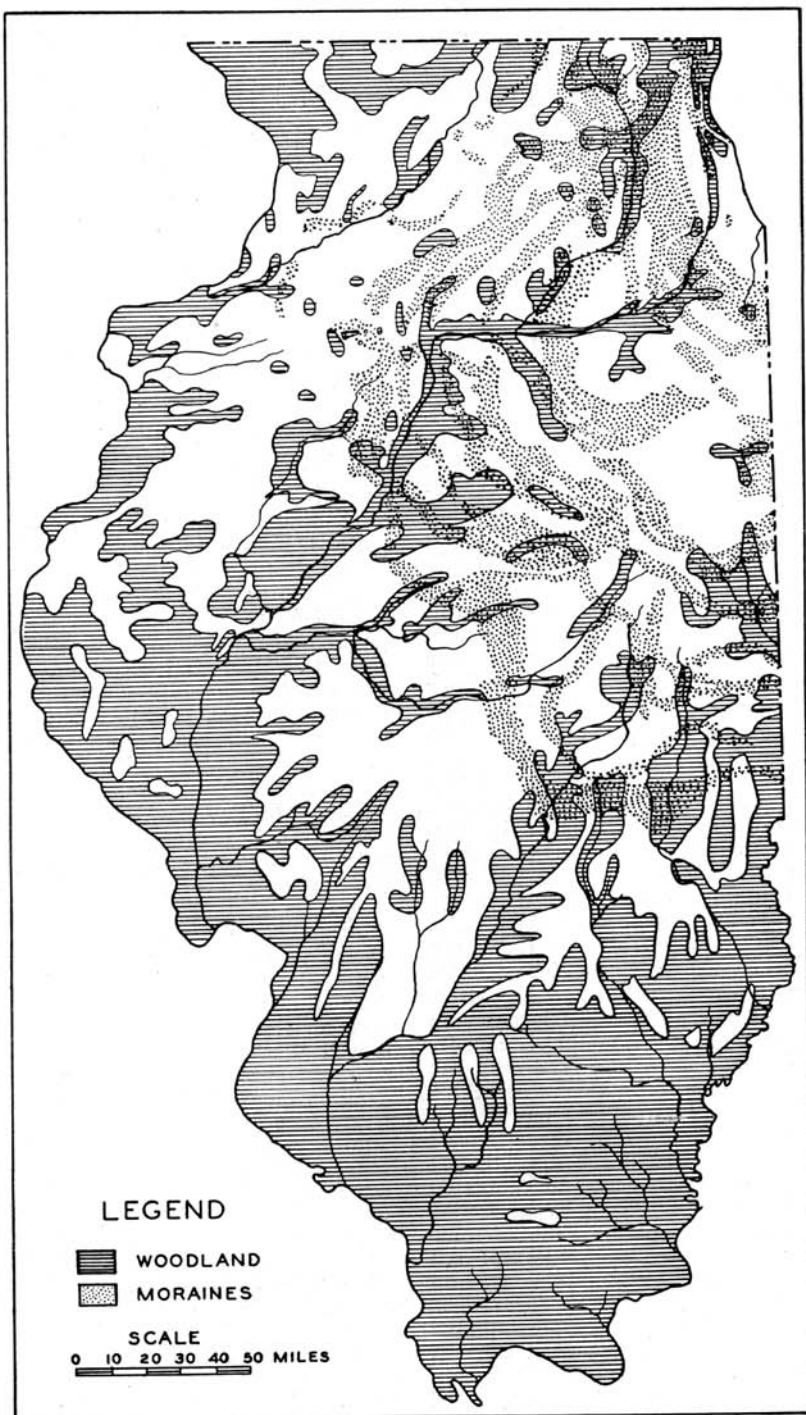


Fig. 1.—Map of Illinois showing natural woodland and moraines. (Assembled from data compiled by State Natural History and State Geological Surveys.)

ton, and Shelbyville. When the glacier reached this position, the melting of the ice equaled its advance, so its margin was relatively stationary for a considerable time and along it accumulated a ridge of glacial drift or ice-borne debris. This ridge is known as the Shelbyville moraine. Subsequently the ice-front receded and readvanced to positions successively behind the Shelbyville moraine, and there built the Champaign, Bloomington, and other moraines.

After the glacial ice disappeared there was a conflict between the long-stem bluegrass which thrives east of the 100th Meridian, and the deciduous trees to the south. The grass won, for the rainfall was insufficient to support forest growth. Also, the long-stem bluegrass completed its cycle sooner and shaded out the forest seedlings, and the poorly-drained land was not conducive to the growth of the seedlings. The Shelbyville and Bloomington morainic systems extended through this area, 150 feet high, like planks across a muddy road. As they were better drained than the flat terrain surrounding them, the east and north sides were the first to become wooded. The prevailing winds in this area are from the west, so the corresponding banks of the streams were the first to receive tree seeds. The afternoon sun, shining on the east and north banks produced higher temperatures for growing the vegetation than did the morning sun, shining on the west and south banks.

The moraines were first covered by trees at their edges, by willows in the stagnant pools, then next the sycamores, followed by oak-hickory. It is reasonable to assume that primitive man used these prehistoric highways, for the Prairie Province was an ocean of grass with a few islands of timber, and only the streams had extensive timber belts. In these islands of timber, and along the streams, lived the animals that would feed and clothe the Indians. From the tops of the moraines the Indians could wage offensive and defensive warfare; so the writer believes that the migration from the east, north, and west was via the moraine systems. There is possibly another reason that the prehistoric Indian buried his dead on the east bank of streams and that is that the east bank is more often steeper and higher.

From the south I believe that entrance was gained into the Prairie Province by way of the Vermilion, Little Wabash and Embarrass rivers. Gurdon Hubbard, when trading at Danville, floated a boat load of produce to New Orleans, and in the early days on Embarrass River, near Charleston, there was a large flat-boat building concern, so to cross to the region in the light canoes of the Indians would not have been difficult. A glance at the map shows the most direct route via water to be by the Embarrass into the Prairie Province from the south. By way of the Kaskaskia it would have been necessary to battle the up-stream current of the Mississippi for miles to reach the confluence of the Mississippi and Kaskaskia.

PREPONDERANCE OF MOUNDS AND CAMPSITES ON THE EAST AND NORTH BANKS OF STREAMS

I do not believe, as many archaeologists do, that the Indians camped and lived on the east banks of streams as a protection against forest fires. It is true that the prevailing winds are from the west, but forest fires do not occur in winter and spring. In summer and fall when the danger is great, the streams are low and can be easily waded. Also it has been set forth that the Indians wanted the protection of the trees against winter winds. A glance at a soil map will show that the timber belts of streams in the area of early Wisconsin glaciation are only one-half as wide on the west side as on the east side of the river. Research has shown that all hunting parties moved into regions where timber was thickest and where the largest concentrations of game animals are to be found. In the area of Wisconsin glaciation this would be on the east and north sides of the streams.

Another feature that might have influenced their choice was the presence of Tabanid flies. County histories and newspaper items regarding early settlers have shown that the horseflies and other species of the Tabanid group were so vicious that travel could be undertaken only at certain hours. They would attack oxen and horses; causing them to become uncontrollable, endangering the life of the rider or driver. A newspaper item regarding an old settler relates that he

would often return from a day's work in the field, with his shirt drenched with blood as a result of the bites of vicious flies. The Tabanid flies bred in the stagnant pools of the poorly drained prairies. With winds blowing from the west, these flies would be blown into the timber lines along the west banks.

To one who thinks that the above facts are fanciful, I would like to call your attention to the fact that all but one of the county seats in the area of Wisconsin glaciation area are located on or near moraines. The one exception is in Douglas County where the first county seat, Camargo, was located on a branch of the Champaign moraine. All of the early towns were located on or close to moraines. The pioneer dead were interred

in drumlins, kames, or the moraine itself. The early schools were also so located.

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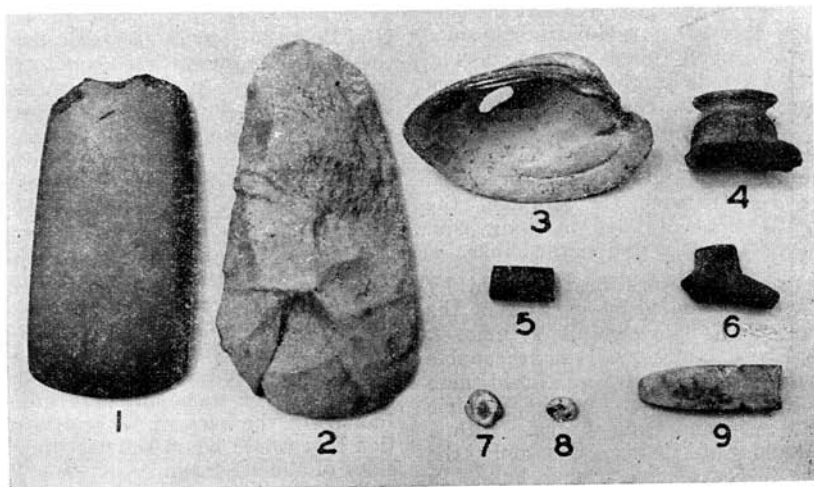


Fig. 1.—CULTURAL OBJECTS FROM CLEAR LAKE VILLAGE.
(Photograph by William Holling.)

1. Polished hematite 6 in. adz. or blade
2. Flint spade, with blade edge polished from use
3. Shell spoon, with unevenly shaped, oddly placed hole
4. Broken platform pipe made from fossil
5. Section of a stone bar with $\frac{3}{4}$ groove. (Not yet identified)
6. Broken platform pipe made of clay
7. Disk-shaped shell bead, perforated through the larger dimension
8. Shell bead made from *Anculosa praerosa*
9. End portion of a stone bar, having a partial groove. (Not yet identified)