

SOME OBSERVATIONS ON THE ANTIQUITY OF MAN IN ILLINOIS

BY

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ABSTRACT

The systematic work which archaeologists have recently done in the excavation of Indian mounds in Illinois has revealed additional information with regard to the antiquity of man in this State. The line of evidence of greatest use in analyzing this question is the profile of weathering which the mounds show. Most of the mounds have poorly developed profiles. The soils are thin and the amount of natural differentiation and the weathering is slight. The rate of profile development is not definitely known, but the mounds are known to be pre-Columbian in age, that is to say, more than 400 years old. The youngest glacial drift-sheets in Illinois are thirty to thirty-five thousand years old and they show leaching to a depth of $2\frac{1}{2}$ to 3 feet, oxidation to a depth of 6 to 9, a well developed humus horizon with its own structural elements, grading below into a sub-soil zone which has become plastic, due partly to filtration of colloidal particles from above and partly to weathering of materials in place. Such profiles are regarded by geologists as youthful, in spite of their being thirty to thirty-five thousand years old. Therefore, it would seem that the time required for any appreciable development of a profile of weathering would be more than a few hundred years.

A few such instances have been found, one of them on a terrace in Illinois Valley near Utica, excavated by Dr. A. R. Kelly of the University of Illinois. The profile of weathering on this mound stood out in contrast with other mounds that had been excavated in that it possessed a well developed soil over it and graded downward into a dense, compact sub-soil horizon. My impression was that this profile required something like two or three thousand years to develop.

Another mound near Liverpool, Illinois, of considerable age was brought to my attention by Dr. Fay-Cooper Cole, of the University of Chicago, who was carrying on systematic excavation here. In this case, the mound showed two stages of development. The lower portion of the mound possessed a soil horizon with some fairly definite structural elements separating it from the overlying mound. As a result of a conference attended by Dr. Cole, Dr. Rollin T. Chamberlin and myself, the lower portion was estimated to be at least two thousand years old and possibly five thousand.

On the second plat of the Mississippi River flood-plain in Jackson County, a mound was excavated last summer by Dr. Kelly which showed certain relations to an overlying deposit of alluvial fan material and certain weathering characteristics that impressed the writer as being considerably older than other mounds of that region, possibly two thousand or more years old.

A critical attitude should continue to be maintained on evidences pointing to the antiquity of man in Illinois in connection not only with Indian mounds but in caves, shelters in glacial gravel deposits, and in inter-glacial soil horizons.