Proceedings of the Iowa Academy of Science

Volume 33 | Annual Issue Article 36

1926

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Last fall while the writer was classifying material for the Cherokee high school museum, Mr. N. Stiles, one of the leading citizens of the town who is interested in geology and history, and who has made an excellent collection of Indian, geological and historical material for the high school museum, suggested to the writer that he thought he knew where there might be a deposit of fossil bones. The writer became interested immediately and accompanied Mr. Stiles to the place in question. After a careful examination it was found that the bones represent a rich deposit of mammalian remains.

The discovery was made possible by the erosion of the Little Sioux River which has at this particular locality, meandered to

Fig. 1. Bluff made by the meandering of the Little Sioux River

the east side of its valley making a steep perpendicular slope from which the bones protruded. Excavations were made at intervals along the bone horizons for a distance of about one hundred yards to determine, if possible, the nature and extent of the deposit. The deposit is located in the N. E. ¼ of Section 1, Cherokee township, Cherokee county, about four miles north of the town of Cherokee.

During the time of the first visit several specimens were secured including vertebrae, ribs, femur and radius and ulna bones. In one instance an entire skeleton was encountered with all the vertebrae intact. The bones, though very soft, are in a fine state of preservation. Figure 1, shows some of the bones secured by the author.

Sometime later, after some of the state newspapers had published the find, Doctor Matthews of the American Museum of Natural History, made a trip to Iowa to examine the deposit and

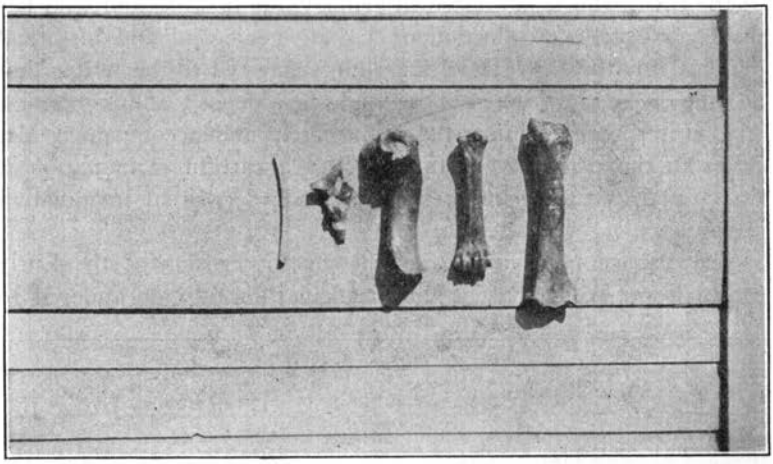

Fig. 2. Bones of the Cherokee Deposit

to determine its scientific value. It is his opinion that the bones are of great scientific value and should be removed for museum purposes.

The types of mammals represented in the deposit cannot, as yet, be determined. Extended excavation will, no doubt, reveal several different kinds of mammals. Enough bones have already been secured to make quite certain that the American bison will be well represented in the deposit.

The writer has made several trips to the deposit since its first discovery in the hopes that a definite time horizon might be assigned to them. There is, however, considerable difficulty to be encountered in arriving at a positive statement as to the time of burial. At first inspection one might easily reach the conclusion that the animals whose bones lie buried here, were of post Wisconsin age. It may have been a watering place where the animals came in large numbers to assuage their thirst and, miring down in the swampy area, were later buried.

A careful study of the recent geological report of the glacial drifts in this part of the state by J. Ernest Carman,[1] reveals two drift sheets in the vicinity. The lower is of Nebraskan age, while the upper is Kansan. Over the surface drift in the valley are thick deposits of Wisconsin gravel and silt. The terminal moraine of the Wisconsin ice sheet is placed by Doctor Carman about twelve miles to the east of the bone deposit. The writer is of the opinion, after examining much of the drift north, south and east of Cherokee, that it is possibly not of Kansan age but is probably intermediate between the Kansan and the Wisconsin. If this should be true, the time of burial of the bones is still more complicated.

The following is a section of the east bank of the Little Sioux in which the bones occur.

	Feet	Inches
1. Black soil	3	
2. Black soil and loam, grayish in color	6	
3. Clay — buff colored, compact	7	
4. Clay — grayish in color with bones		8
5. Clay — yellowish gray, compact	2	
6. Clay — grayish in color, with bones		

Figures (3) and (4) show a view of the cliff in which the bones occur. It will be noted that there are two bone horizons separated by about two feet of clay.

After the first visit to the deposit the writer was inclined to the view that the bones were of Aftonian age. He, no doubt, was somewhat influenced in this belief by Doctor Carman's report of the township. By reference to Plate XXV of Doctor Carman's report [2] it will be seen that he charts Nebraskan drift within a short distance of the deposit and at about the same level, so near as the writer could determine. Above this drift he speaks of a grayish black material having in it fragments of snail shells, which he calls Aftonian interglacial deposits.

A careful study will be made at the time of the excavation of the bones and may result in fixing the time of their burial more accurately.

1 Iowa Geol. Surv. Reports, Vol. 26, pp. 239-445.
2 Iowa Geol. Surv. Report, Vol. 26, pp. 421-424.

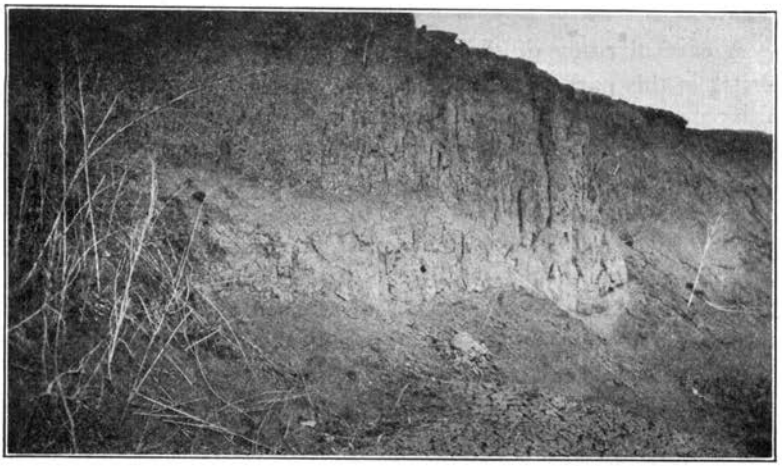

Fig. 3. Section of Bluff in which are found the Two Bone Horizons.

Fig. 4. Upper Bone Horizon shown below the hat