

Evidences of Early Woodland Culture at Chalk Bluff Rock Shelter

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Rock shelters and caves are ubiquitous features in the Shawnee Hills or Little Ozarks. The Shawnee Hills occupy parts of the three southernmost tiers of counties in Illinois and are located in the crotch of the Y formed by the junction of the Ohio and Mississippi rivers. Here, the terrain is of a hilly nature, generally rough and broken with many precipitous rocky slopes, and has a maximum difference in elevation of approximately 600 feet. At the base of many of the perpendicular cliffs (a conspicuous feature of this area) are found rock shelters. These shelters are formed by a more rapid weathering of the exposed basal rock material than of that higher on the bluff so that we have an overhanging cliff. There is material evidence that these rock shelters have given cover to prehistoric man, the historic Indians, early white travelers and settlers, as well as livestock and machinery of the present day dwellers.

These overhanging cliffs furnish such fine protection from the weather elements that it would seem only natural for early man to take advantage of their existence. Just how early and how long and by whom the shelters were occupied can be determined only by careful investigation of their sites.

The site of Chalk Bluff rock shelter is the southern end of Chalk Bluff in sec. 2, T. 10 S., R. 3 W., approximately nine miles southwest of Murphysboro in Jackson County. The Chalk Bluff in which this shelter is located is an unbroken sedimentary rock escarpment nearly one mile long and has an almost uniform height of 250 feet. Calcareous sandstones are the predominant rocks in the cliff-like escarpment. This escarpment, lying in a north-south direction and paralleling the Mississippi flood plain has a westerly exposure. Here, where the shelter is located, is a conspicuous overhanging cliff offering the shelter ideal protection from the weather elements. Huge boulders having fallen from the cliff furnish ground protection from westerly winds. Some of these boulders are over 6 feet high. The shelter itself is about 50 feet long and about 40 feet wide.

At the time of excavation, the filled-in floor was from 4 to 6 feet deep and contained a large number of fallen slabs and boulders. These were found lying in such a position that it seemed necessary to begin excavating from the back of the shelter and work outward. Just how long these boulders, varying in weight from a few hundred pounds to several tons, had been buried can only be conjectured. However, they were buried so deeply in the floor debris that they could not have fallen into the debris to such a depth. Therefore, the debris in part at least had been filled in around them.

Judging by the fire-smoked walls, and a few flint spalls, potsherds and fragmentary bones found scattered about the floor, the writers felt the find to be of importance and were certain that further excavation would reveal more interesting remains.

As work progressed, it became apparent from the charcoal beds, crematory pits, ashes, fragmentary animal bones and human bones, especially those of children, found in the floor debris, that man was an early and prolonged occupant of this shelter.

Work was started at the back of the shelter by digging a trench five and one-half feet deep, parallel to the bluff and down to the original stone floor. In the process of digging, an abundance of prehistoric evidence was found. This evidence was in the form of flint chips, bone awls, potsherds, and fragments of bone found throughout the floor debris. All the floor debris was

taken from the trench and passed through a one-half inch screen in order to secure all fragmentary bones, potsherds, flint and bone awls. Because of the dry powdery condition of the debris and the large rocks that could not be removed, much difficulty was encountered by cave-ins.

No burials were found until the trench reached the rock floor of the shelter. The first skeleton was found lying in a semi-flexed position and badly crushed by fallen rock. After the trench was widened to about 10 feet, several parts of burials were found in close proximity. These burials were found tightly wedged between and under fallen slabs, and were apparently badly crushed by the weight of heavy rocks.

The finding of these burials created much interest. The fragmentary skulls showed a decided flattening of the frontal bone; another peculiarity evident was the shape of the skull indicating prognathism and pathological conditions. This skeletal material was covered by a thin layer of whitish substance that could not be identified. This same material was also found on the stone floor at the bottom of the trench and was covered by about four and a half feet of filled-in floor debris.

At this stage in the excavation, work was stopped. Believing the find to be one of unusual importance, the writers sought the aid of professional archaeologists. Since it seemed impossible to get someone interested enough to take over the work, some of the material was sent to the Milwaukee Public Museum, Milwaukee, Wisconsin, for study purposes. In the meantime, continuing with the excavation, it was decided to widen the trench. A slab weighing approximately a ton was encountered lying on top of the dirt floor. By working carefully we were able to dig under this rock. Excavation here revealed the cremated body of a young child, and in juxtaposition was found a large piece of red ochre and a burnt snail shell bead. This was the only instance where grave goods were found with any human skeletal material. Near this cremated body were other evidences of cremated burials, but the large slab prevented further explorations. After digging a few holes on both sides of the slab to see if anything of importance could be found in the dirt, we abandoned work here.

From the animal bones that could be identified, the Virginia deer was found to be the most common; also present were those of the elk, wolf, fox, beaver, woodchuck, squirrel, raccoon, opossum, and wild cat. Practically all of the bones had been broken. This probably was done to extract the marrow. Shell remains from several varieties of fresh water mollusks and snails were found along with fragments of terrapin and turtle shell. Remains of fish and bird bones were also present. The remains of the animals mentioned here were the most numerous of all materials recovered. Such a large quantity of animal bone suggests a long and continued occupancy of this shelter by prehistoric man who used it either as a permanent abode or as an oft frequented shelter during hunting expeditions.

A very few projectile points were found, and a very small amount of flint awls and chips. The points are crudely made and also of the stemmed and notched base types. They are all less than two inches long and suggest a very limited knowledge of flint chipping. The flint projectile points recovered were made from the "flint ball" and "muscovite" cherts. The material for these points came from the prehistoric quarries found in Union County, about ten miles southeast of Chalk Bluff.

The bone awls and ornaments of bone and shell that were found are very interesting. The bone awls, made from deer and bird bones, are highly polished and some of them are six inches long. The ornaments are of two types, bone and shell. The former are parts of bird bones made into beads, while the latter are made of fresh water mollusks perforated for suspension. One of the numerous wolf tusks found was perforated.

The potsherds found in this shelter seem to be typical of the Woodland culture. They are all tempered with a coarse grit and have a granular texture. The shoulders are poorly defined while the necks are straight or slightly curving. The bottom fragments include several with flat bottoms; the feet have rounded bottoms. The flat bottom ones are very crude and compact. In contrast with the potsherds found in other bluff shelter sites in southern Illinois, those found in the Chalk Bluff rock shelter have very

little decoration on the rims. A few specimens, however, show incised zigzag lines, raised points and small imperforations near the rim. Most of these have been poorly fired in the process of making. They varied in thickness from one eighth to almost five eighths of an inch.

One of the writers, having studied other rock shelters in southern Illinois, believes there has always been a marked resemblance in the pots, beads, bone tools, and other remains found in the various shelters. In these rock shelters, evidences of agriculture such as small digging tools and charred corn cobs were found. In none of them was there any evidence of the use of tobacco, such as would be indicated by the presence of pipe or pipe remnants.

The Chalk Bluff shelter differs from other shelters in that no evidence was uncovered that might lead one to believe that these people knew anything about agriculture. The only textile evidence found was the cord imprint on pottery shards. Judging by the remains found in the shelter, it seems that the inhabitants were unskilled in working flint, and possibly did not know about the use of the bow and arrow.

Up to the present time rock shelters in southern Illinois have been neglected in scientific research, while the more conspicuous mounds of the State have been and are being thoroughly studied. In conclusion, the writers wish to say that they and others are of the opinion that a thorough investigation of these rock shelters should be made—preferably by or under the direction of well-trained archaeologists. Investigations of these shelters may reveal important information on man's early occupancy of the State. However scientific study should not be too long delayed. Since the partial excavation of the Chalk Bluff rock shelter, upon which this paper is based, was stopped, "pot hunters" have blasted the boulders in the shelter several times. Frequent vandalism is destroying important scientific archaeological material in the rock shelters of southern Illinois.

*Knowing for some time the existence of this shelter a group of interested persons went to this shelter on November 14, 1937, and spent several days excavating. The party consisted of Charles Thomas, Joe Thomas, Warren Whelpley, all of Cobden, and Homer Benz, Raymond Deoz, and Irvin Peckham, all of Carbondale, Ill.

*This method of excavation is no longer used. In the last excavation in which the writers worked the five foot square method with horizontal layers removal of material was employed.

*These animal bones were checked by Dr. L. A. Adams of the University of Illinois during December, 1937.

*Peckham, Irvin: "Bluff Shelters on Indian Creek, Jackson Co., Illinois," *National Archaeological News*, Vol. 1, No. 11, pp. 6-9, 1933.

*Since this paper was written, a partial excavation of the Cave Bluff rock shelter in Jackson County has been made under the guidance of Professor Fay-Cooper Cole of the University of Chicago and his men, Dr. Horace Miner, Wayne University, Detroit, Michigan and Mr. R. Robert Teschler, Philadelphia Museum.