

*Preprinted from the Proceedings, University of Bristol Speleological Society,
Vol. 10, No. 2, 1964*

Picken's Hole, Crook Peak, Somerset A Pleistocene Site

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Price: 2s. 6d.

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PRELIMINARY NOTE

(N.G.R. ST 396550. 150 ft. O.D.)

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This site is proving of such importance that a short preliminary note on it seems justified. References to it have already appeared in the Secretary's Reports for 1961-62 and 1962-63. The present account is intended to be no more than a brief summary of what has so far been found at this exciting Pleistocene site. It was discovered in 1961 by Mr. M. J. Picken, who was studying the habits of badgers at the site. In the earth thrown out by these beasts he noted some teeth. These were identified as pieces from hyæna, horse and rhinoceros. The information was passed to this Society, but no excavations were started till after the badgers had reared their young for the season.

In August, 1961, a Trial Trench was begun. It became apparent that this cutting had only touched the fringe of an extensive deposit outside what was and is thought to be a cave running back into the limestone cliff, but even now, December, 1963, the cave has not been entered. Excavations have been continued in fresh cuttings outside the cave. The deposits have been proved to extend farther still and their limits have not yet been defined. However, it is possible to give some account of what has been found.

The excavations have been made carefully layer by layer following the natural layers and their slopes. The layers are banked against a limestone cliff or bluff to the south and, as far as the base of layer 3, have been truncated by erosion towards the north, so that they wedge out and merge into hillwash. The section (*Fig. 18*) is intentionally semidiagrammatic, but it is based on a detailed section drawn by Mr. A. M. ApSimon. It shows the west face of the Trial Trench looking west.

The bottom layer, 6, so far exposed is a massive breccia of rock fragments, containing some Triassic material, recemented with calcite. Its upper part has a sandy matrix and lower down there are air spaces. It has not yet been breached and is of unknown depth. The Geological Survey map records Triassic deposits at or very close to the site.

On layer 6 lies layer 5, filling in the irregularities of the upper surface of layer 6 and extending a short way farther. It is composed of a red-brown

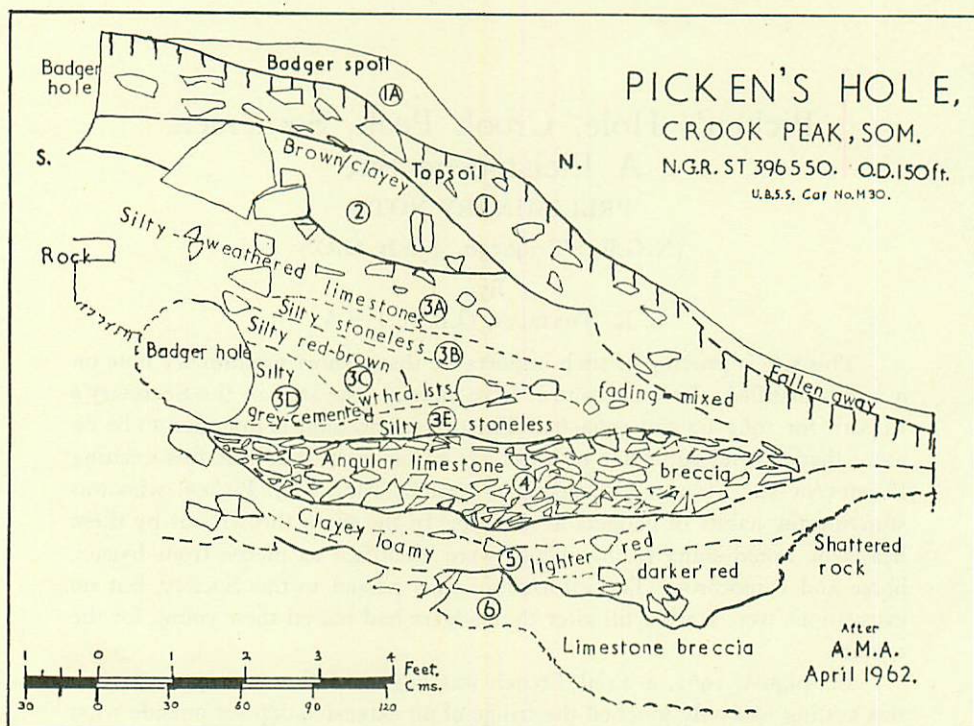


Fig. 18.—Semidiagrammatic section of west face of Trial Trench in square EE. 1A, Recent badger spoil. Contains some Pleistocene material. 1, Turf and top soil. 2, Subsoil, reddish brown, clayey with angular limestones. PLEISTOCENE. 3, Hyæna layer—silty throughout. 3A, Red-brown with weathered limestones. 3B, Pale brown, practically stoneless. 3C, Reddish brown with greatly weathered limestones. 3D, Sandy with weathered limestones, compact and cemented with calcite. 3E, Stoneless with clayey admixture. 4, Angular limestone breccia with sharp sandy matrix. Loose and entirely unconsolidated. 5, Bear layer. Clayey, generally red. Colour varies considerably. 6, Massive cemented limestone breccia with air spaces below. Excavated but not to face.

earth with a substantial clay fraction. Only a very little of it has been exposed. It contains a high percentage of bone. Most of the bones are very fragmentary, but sufficient of the layer has been dealt with to show that at least some of the bones are complete bones though lying in many fragments. The bones do not show gnawing to any large extent and their fragmentary nature seems to be due to weathering of the layer in which they lie before it was covered by other material and perhaps to subsequent earth pressure. The excavation of this layer presents considerable technical difficulties because of the quantity of bone and its fragmentary nature. The dominant carnivore from this layer is bear, though wolf is also present.

Above is an abrupt transition to an angular scree deposit, layer 4, obviously derived by frost shattering of the native limestone rock. It is quite a thin layer and very loosely packed in the section so far exposed. It is embedded into the top of layer 5 and the finer material from layer 3 has intruded into it from above. The spaces between the stones are filled with an angular sand. It appears to be sterile except for the occasional bones of small animals and birds. These are, perhaps, derived from above or below, but they may be truly contemporary with the layer.

Next comes layer 3, which is subdivisible by its varying constitution into several sublayers, but so far there has not been found any faunal distinction between the different portions of this layer. Such subdivision should be possible when more of the layer has been dug. The soil characteristics of this layer vary considerably. The contained limestones are generally well weathered and near the base almost completely so, being easily cut with a trowel. The matrix is largely silty with, in parts, a clay fraction as well as coarser sandier material in other parts. The layer contains quantities of bone, gnawed almost to destruction. This is to be expected as the dominant carnivore is the hyæna. Even the teeth have been gnawed and mostly only the crowns remain. The other large predator represented is the cave lion. Bear does occur very sparsely at the very base immediately adjacent to layer 4.

In addition to these three beasts mammoth, woolly rhinoceros, horse, red deer, reindeer, arctic fox, fox and other animals are represented. Some rodent remains have been found but so far have not been identified. The hyæna is represented by many animals of all ages from very young ones to very old ones. At least three mammoths are represented, one of them probably fœtal, and about a dozen rhinoceros. Horse is common. Over 500 recognizable teeth and fragments (the hyænas have not left much else) have been found and catalogued. Man is represented by two teeth and a number of flint fragments. The flint is of very poor quality. One piece might be deemed to be a small point. The layer is generally richest towards the base.

Layer 2, next above, is a barren hillwash/talus with a considerable number of limestones, partly weathered and partly unweathered, in it. Upwards it merges fairly abruptly into the brown subsoil and turf of layer 1. Layer 2 has yielded no finds; layer 1 contains a few recent-looking human bone fragments and teeth and some very small sherds of Romano-British pottery and a number of pieces of slate, usually very small. It is difficult to account for these as they mostly come from amongst the roots of trees growing from the cracks in the limestone bluff at the site. The smallest fragments of slate tend to slither out of the face and to turn up again at lower levels.

Thus at Picken's Hole there is a sequence of deposits. Care in the excavation of these allows distinction to be made between the areas disturbed

by badgers and those undisturbed. Layer 1 is deposited unconformably on the erosion surface cutting through layers 2-4. Layer 4 is undoubtedly the product of intense frost action. The irregularities of layer 5 below may be simply due to it filling in the uneven surface of the massive breccia below, 6. The fauna from layer 3 is of Upper Pleistocene age and layers 2-4 indicate periglacial conditions with the coldest phase represented by layer 4. Layer 5, with its different but still cold fauna, may represent an interstadial. Far more work on the site is necessary before an attempt is made at a more detailed dating. For the same reason no attempt is here made to quote possible correlations with other local and more distant sites.

Finally I would like to express the gratitude of the Society and of myself to the owner of the property, Sir Nigel John Mordaunt, Bart., for permission to excavate at this site, which has so much promise. It ought to provide the answer to many of the problems of the last glacial period and its effects in the Mendips. I would also like to express my thanks to the many members of the Society who have helped with the excavations and particularly to Mr. A. M. ApSimon and Dr. R. J. G. Savage. The former has drawn the sections and the latter has identified the fauna.

THE FAUNA

PROVISIONAL LIST OF SPECIES IDENTIFIED		LAYER 3	LAYER 5
1. Man	<i>Homo</i> sp.	2 teeth	Nil
2. Hyæna	<i>Hyæna crocuta</i>	Plentiful	Nil
3. Cave lion	<i>Panthera leo</i>	X	Nil
4. Wild cat (large)	<i>Felis silvestris</i>	X	Nil
5. Wolf	<i>Canis lupus</i>	1 tooth*	X
6. Dog	<i>Canis</i> sp.	X	Nil
7. Arctic fox	<i>Alopex lagopus</i>	X	X
8. Fox	<i>Vulpes vulpes</i>	X	Nil
9. Brown bear	<i>Ursus arctos</i>	Rare.	Plentiful
		Base only	
10. Cave bear	<i>Ursus spelæus</i>	Nil	?
11. Horse (large)	<i>Equus caballus</i>	X	Nil
12. Horse (small)	<i>Equus caballus</i>	X	Nil
13. Woolly rhinoceros	<i>Cœlodonta antiquitatis</i>	X	Tooth fragment†
14. Mammoth	<i>E. primigenius</i> (Blum)	X	Nil
15. Reindeer	<i>Rangifer tarandus</i>	X	X
16. Red deer	<i>Cervus elaphus</i>	X	X
17. Irish deer	<i>Megaceros</i>	?	Nil
18. Ox	<i>Bos</i> sp.	X	X
19. Hare	<i>Lepus variabilis anglicus</i>	?	Nil
20. Rodents	<i>Rodentia</i> sp.	X	Nil
21. Birds	<i>Aves</i> sp.	X	Nil

* One tooth of wolf from layer 3 came from the north end of the cutting where the layers are poorly differentiated and the specimen may really belong to layer 5.

† One tooth fragment of woolly rhinoceros was found in similar circumstances to those above and may really belong to layer 3.

