

EXCAVATIONS AT A MESOLITHIC CAVE SITE AT CLIFF END, PETT, SUSSEX

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INTRODUCTION

Approximately 60 to 70 years ago several flint artifacts were found in a small cave at Cliff End, Pett (NGR TQ 88771303) by the father of Mr. S. M. Vidler of Iden, near Rye, who was then a child and entered the cave with his father. These finds were brought to the notice of the present writer by Mrs. M. Rickman of Udimore during 1969 and kindly made available for study by Mr. Vidler. It was decided to conduct an exploratory excavation in the cave in the hope of finding more evidence of prehistoric activity and to determine the stratigraphy of the deposits from which the artifacts could have been derived.

The excavation was carried out during March, 1970 by kind permission of Mr. F. W. A. Gostick, the owner of the cave, and with the co-operation of Mr. E. W. Holden, F.S.A., Mrs. Rickman, Mr. Vidler and five volunteers. The surveying was undertaken by Messrs. N. M. Young and P. S. Covell. The help of all these people is acknowledged with gratitude.

THE CAVE AND IMMEDIATE VICINITY

The cave is of shallow exogenic type, formed from outside by water and subsequently enlarged by erosion. It is formed in fine sandstone of the Ashdown Beds and is situated at the edge of a cliff overlooking Rye Bay, on the western edge of Pett Level. The floor of the cave is 18.2 metres above Ordnance datum, which is approximately the average height for coastal features relating to the Tyrrhenian II (Main Monastirian) sea-level of the Late Pleistocene (Zeuner, 1959, 301). During the investigations, sea-sand was found in some of the crevices in the walls of the cave and at the base of the deposits on the floor, suggesting that the cave may have been formed by the sea entering a fissure in the sandstone, more than 70,000 years ago.

The edge of the cliff in which the cave is located, is rapidly receding and 12 years ago a ledge several feet wide, still existed outside the cave. This ledge is now completely eroded away. This would mean that the cave was originally sited at the rear of a wide platform sloping down to the sea. On the beach immediately below the

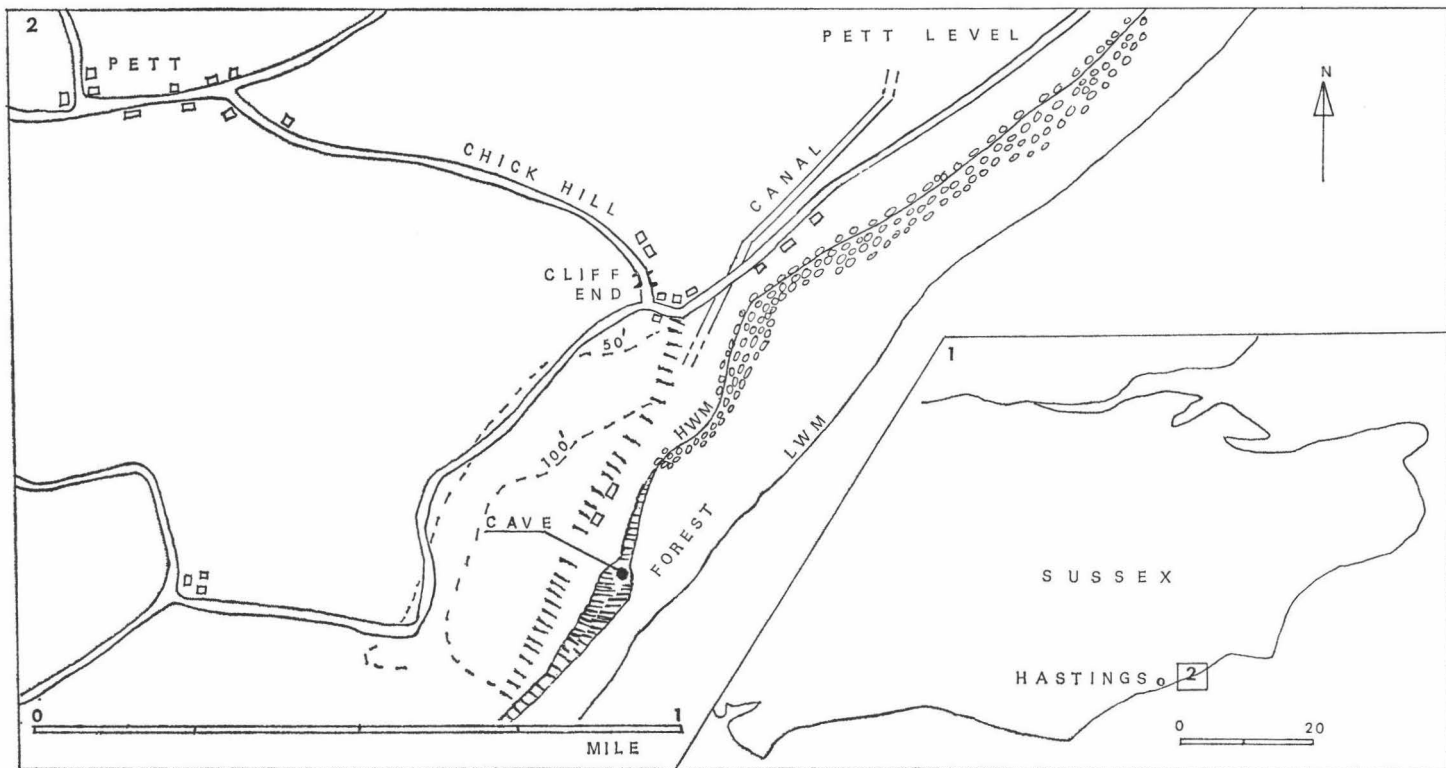


FIG. 1. Map of Cliff End, Pett, showing the location of the cave.
Inset map of Sussex shows the location of the site area.

eastern side of the cave are the remnants of a submerged forest below highwater mark. Similar forests exist at Bexhill and Bognor, and they can probably be related to a low level phase prior to the maximum Flandrian transgression of *c.* 5,500 B.C.

The cave now has two entrances X and Y, facing north-east and south-east and both leading out on to the cliff face; entrance Y was enlarged during the last war for defensive purposes, but never used.

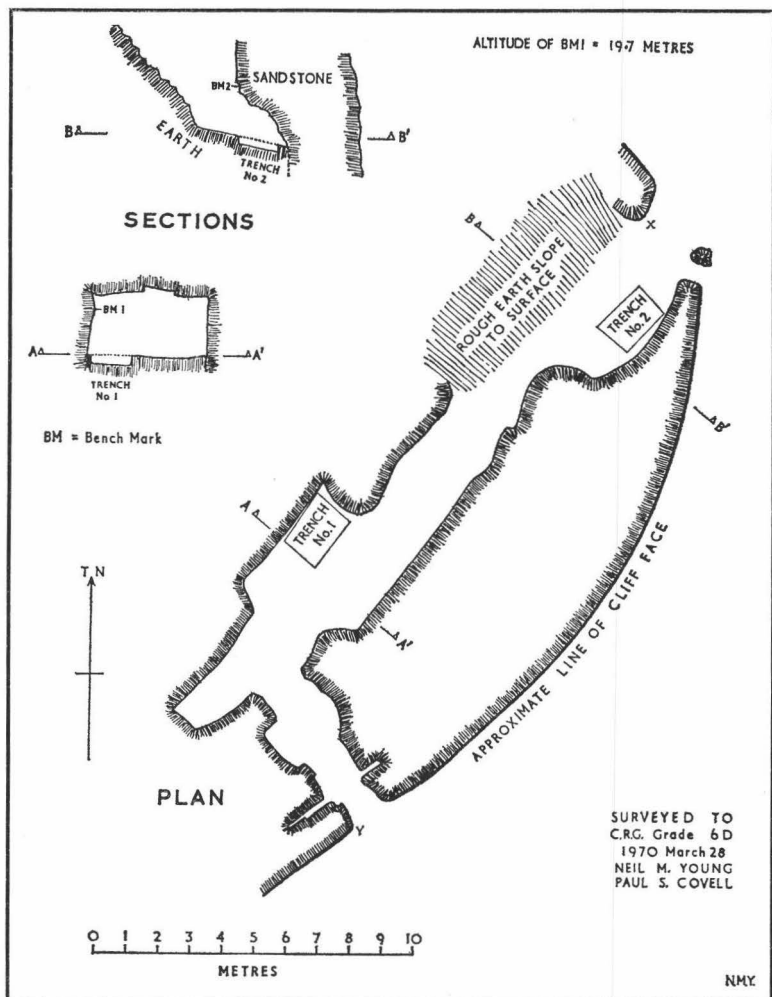


FIG. 2. Plan of the cave at Cliff End, Pett, showing the position of the two excavated trenches.

At present it is also possible to enter the cave from the top of the cliff, down a rough earth slope on the north-west side of the cave where part of the original roof had collapsed. This collapse left a chamber approximately seven metres long and four metres wide, open to the sky immediately inside entrance X. The chamber becomes a gallery with parallel walls, two metres wide, two metres high and five metres long, after which it widens out and then quickly becomes narrower again to form a small end chamber. A side passage leads off in a south-eastern direction, at a right angle from the main gallery and terminates at entrance Y. It is in this side passage where sea-sand with tiny fragments of shells can be found in crevices. All corners and edges in the cave are well-rounded, except in the enlarged part of the side passage.

THE EXCAVATION AND STRATIGRAPHY

Two trenches were excavated: Trench 1 inside the main gallery and Trench 2 by entrance X (fig. 2). The stratigraphy of Trench 1 along line A-A1 is indicated in figure 3. The upper layer consists of disturbed brown clayey loam, about six inches thick, mixed with leaf mould and recent refuse; below this is approximately 10 inches of fine white Ashdown sand and comminuted particles derived from the roof and walls of the cave. This deposit is very pure and generally undisturbed, except in a few small localized areas. There is no admixture of loam. This suggests a period of thermoclastic decay of the cave walls during which the interior of the cave was left completely undisturbed. It also suggests a steady rate of decomposition, without major climatic changes which might have caused lenses of different deposits. It seems possible that this deposit may date to a moderately cold phase with a fair degree of precipitation, probably towards the end of the Weichsel glaciation or early in the Flandrian period. Below the white sand is a thin deposit of three to four inches of sea-sand lying directly on a bed of fairly even Ashdown sandstone. In one small area of this trench the stratigraphy had been disturbed by the recent burial of a block of wood with corroded nails.

The stratigraphy of Trench 2 is indicated in figure 3. It differed from that of Trench 1, confirming the fact that this area was at or near the original cave entrance. Below the layer of clayey loam and debris is a grey loamy clay, about four to five inches thick, containing large angular pieces of sandstone from the cave walls; below is a layer six to nine inches thick of stiff grey clay with hardly any admixture of debris, suggesting a period of increased precipitation when there may have been a large puddle of muddy water near the cave entrance; below this is a thin and uneven spread of the white Ashdown sand lying directly on the solid stone bed, which is here very uneven. The sea-sand is absent here and was therefore

presumably either washed out of the cave by rain and drip-water or washed into the back of the cave.

No artifacts were found during the excavations and it is therefore not possible to know for certain from which layer the finds of 60 years ago were derived, or what the circumstances were which exposed them. The top of the white sand is probably the most likely layer from which they could have come, but the possibility should be kept in mind that they may have been washed into the cave from the hillside, even though a search there also did not reveal any artifacts. In the limited time available, it was not feasible to excavate the whole cave, so that there is still some possibility of making finds in the unexplored areas at a future date when further excavations may again be undertaken. It is, of course, possible that there are no more artifacts in the cave and that the cave was only used as a short-term bivouac by the tool-makers who discarded a few tools there; the results of the excavations so far do not warrant any conclusions to be reached about the nature of the site or of the archaeological data.

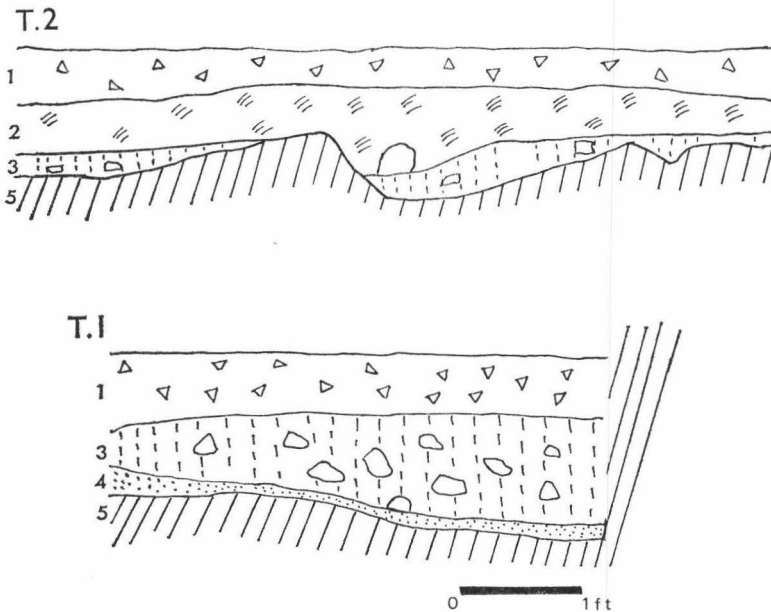


FIG. 3. Section drawings of the stratigraphy in trenches 1 and 2. Layer 1 humic clay and debris; layer 2 clay; layer 3 white Ashdown sand with angular pieces from the roof and walls of the cave; layer 4 sea-sand; 5 solid Ashdown bed and cave wall.

THE ARTIFACTS

The finds found earlier in the century, consist of four blades of brown flint, between 9 to 12cms. long, and the major part of a large flint axe. Long blades such as these do occur in some Mesolithic assemblages, but they would not be out of place in a Late Palaeolithic context. The axe is typical of the Mesolithic period, so that this is the most likely date for the whole assemblage, unless it can be shown that the site was occupied twice. There is at present no justification to assume such a multi-period occupation.

One of the blades, from which the bulb of percussion has been removed, has fine blunting retouch along most of the right hand edge (fig. 4, no. 1), whereas another (no. 2) has a small area of inverse blunting retouch at the bulbar extremity. A broad, thick blade 8.5cms. long (no. 3), has been retouched along the right edge, possibly for use as a knife or scraper. The longest blade (no. 4) is 12.5cms. long, has not been retouched, but the slightly jagged edges exhibit some signs of utilization. The axe is 22cms. long and has

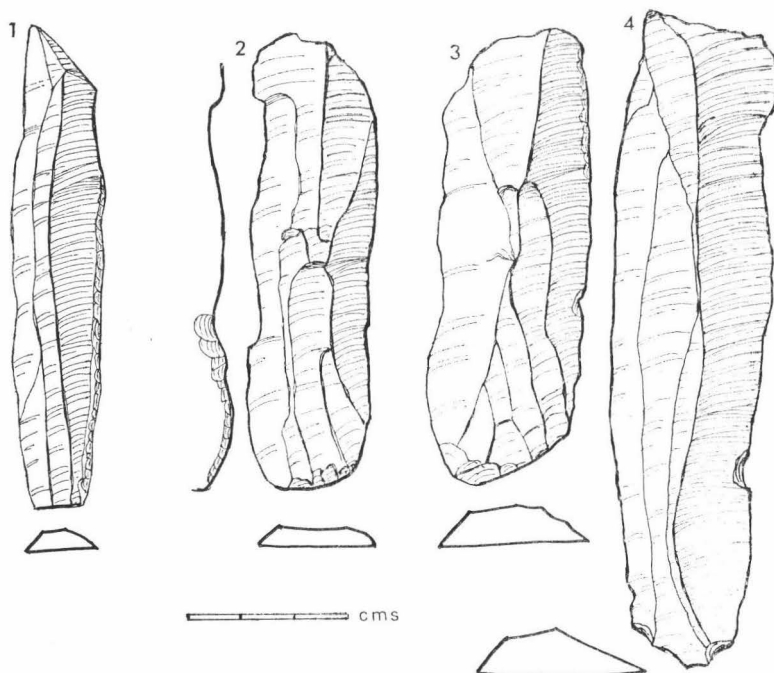


FIG. 4. Blades found earlier this century in the cave at Cliff End.

had a large, very thick flake anciently removed from the butt end, parallel with the long axis of the tool. This may have been a clumsy effort at reshaping the tool or else it was used as a core to provide a flake for another purpose. A small axe, similarly retouched, has been found at Cams, Hampshire, and is in a private collection. The axe from Cliff End has not been sharpened by a *tranchet* blow at the working edge, but it is nevertheless very much in the Mesolithic tradition.

During the excavations, a member of the public found a flake from a Mesolithic-type blade-core at low tide in the mud of a mussel-bed in the intertidal zone, near the submerged forest. It is a further indication of Mesolithic activity in the cave neighbourhood.

OBSERVATIONS

During past years the present writer has made a study¹ of all Mesolithic material found in the littoral zone of Sussex and in the other southern counties. It was found that the ratio of coastal to inland sites is approximately two to one in relation to area size, limiting the coastal zone to four miles from the sea. Many of these sites are situated in areas of cliff coasts, as for instance, Fairlight, Hastings, Seaford and Peacehaven. A study of Mesolithic habitation patterns in the littoral zone must, of course, take into consideration various problems relating to the Flandrian sea-level phases; it does appear, however, as though cliff sites which are adjacent to low-lying access points to the beach, may have been regarded as areas with maximum favourability for camping. The nature of the soil does not appear to have been of importance as the present survey has shown that in every area many sites are not on sandy soil. Although the floor of the Cliff End cave may have been sandy during the Mesolithic period, the cliffs outside are covered with intermediate heavy loam.

Although axes frequently occur inland, it was found that these tools, and picks, have a higher ratio of occurrence in the littoral zone. It is therefore of interest that although the assemblage from Cliff End is so small, an axe is included. Blades (length to breadth ratio of three to one or more) are outnumbered by flakes in most of the littoral industries, but long, broad blades do occur, as at Hastings and on several Mesolithic sites in the Fareham and Portsmouth areas of Hampshire. Blades are numerous on a prolific site on Winfrith Heath, Dorset, at present being investigated. Although no detailed comparisons with other industries are possible because of the small number of artifacts from the cave, it can be said that it appears as though the Cliff End assemblage is in the tradition of the coastal Mesolithic industries of southern England.

¹ To be published at some future date.