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Palaeolithic Artefacts from the River Avon terraces near Bristol

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ABSTRACT. A description is given of two Lower Palaeolithic (Acheulian) bifacial implements and a small number of flakes found recently on ploughed ground on a 50 ft. terrace of the Bristol Avon at Ham Green, on the left bank of the river. The context of these artefacts is considered in terms of the considerable number of Lower Palaeolithic finds previously made in the Bristol region, which do not seem to be well known, other than locally, in spite of several publications. Brief comments are made on the distribution of Acheulian finds in southwest Britain. Attention is drawn to the uncertainties of the Pleistocene chronology of the Bristol Avon and the hope is expressed that new evidence might be sought to help clear these up.

THE RECENT FINDS

In June 1971 an examination was made by members of the University of Bristol Spelaeological Society of a freshly ploughed area of the medieval pottery site at Ham Green, (U.B.S.S. area K, site 10, NGR.ST 535759; Barton 1964). The position of the site is shown in *fig. 92*. Amongst the material of various ages collected from the surface were the two Lower Palaeolithic bifacial implements shown in *fig. 93*.

K10.5/1. (*Fig. 93A*). A small irregularly pear-shaped biface patinated creamy white but shown by recent scars – probably plough damage – to be made from a pebble of grey-brown chert or cherty flint. The maximum dimensions, measured parallel or at right angles to the long axis are: length, 92 mm: breadth (slightly damaged), 53 mm: thickness, 38 mm. The butt consists of irregular pitted pebble cortex, which also extends along almost the whole of one long edge, making the implement what some observers would classify as a bifacial backed knife rather than a handaxe (*c.f.* Kleindienst 1962, 89-90), though this category does not seem to have been much used in classifications of British Lower Palaeolithic artefacts. The other long edge is unhampered by cortex except at the butt, and is rather bluntly worked with a good deal of step flaking on one face and only a few flat scars, on which recent damage has been superimposed, on the other. About half of the face is taken up with a single large scar, probably but not certainly of mechanical rather than thermal origin, representing the splitting of the pebble at an early stage of manufacture of the implement, or, if it is a thermal scar, prior to manufacture. The implement is weathered, cracked and slightly abraded here and there, but does not seem to be water-rolled.

K10.5/2. (*Fig. 93b*). A small, much-rolled bifacially-worked implement, apparently a small handaxe and probably incomplete. Its physical condition makes it impossible to decide whether an area at the butt end has been broken away, thus spoiling an approximately oval shape, or whether the present squat cordiform or broad sub-triangular shape is original. There seems also to have been ancient loss by damage at various points on the circumference, which is now distinctly irregular. The existing

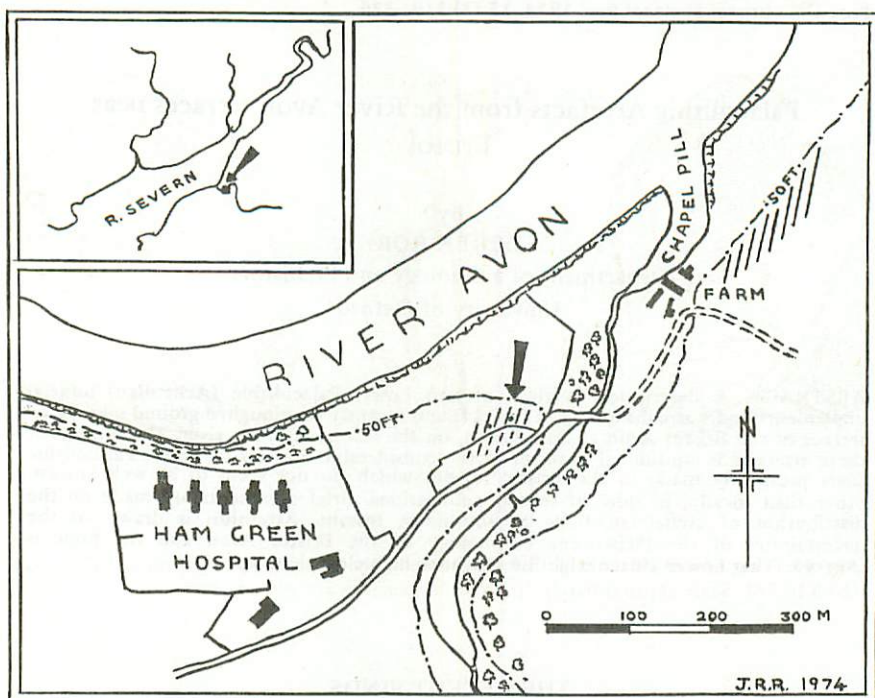


Fig. 92. Map based on Ordnance Survey. Crown copyright reserved. The 50 ft. terrace areas at Ham Green and Chapel Pill Farm are really parts of the same site though now separated by a Holocene pill. The main areas of concentration of material are shown by hatching. Map drawn by J. R. Russell.

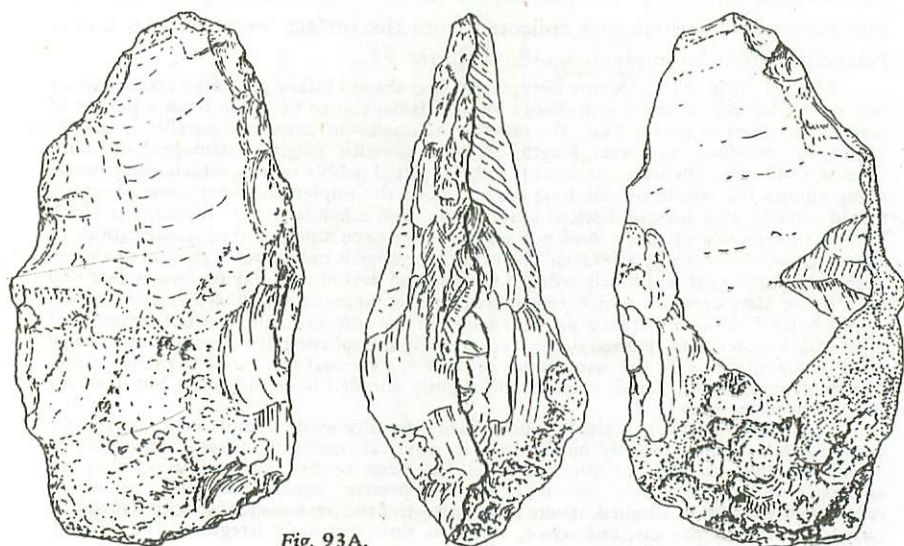


Fig. 93A.

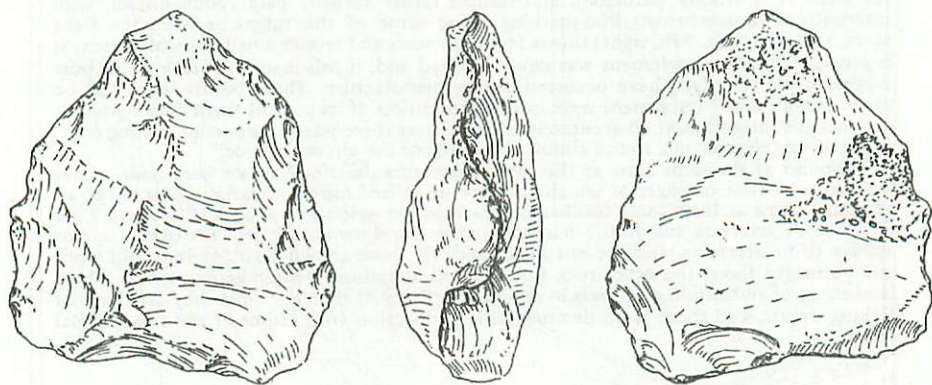


Fig. 93B.

Fig. 93. Two Lower Palaeolithic bifacial implements found at Ham Green. (A) K10.5/1; (B) K10.5/2. Scale approximately $\frac{3}{4}$. Exact dimensions are given in text.

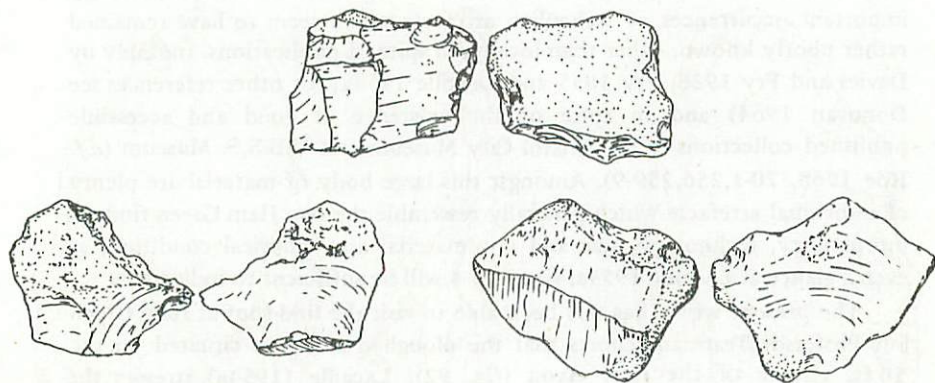


Fig. 94. Three flakes found with the bifaces. Top, K10.5/7; below, left, K10.5/3 below, right, K10.5/6. Scale approximately $\frac{3}{4}$.

maximum dimensions, (measured as above), are: length, 63 mm: breadth, 57 mm: thickness, 24 mm. The implement is made of flint or chert, whose true colour is not revealed: it is wholly patinated, and stained rather variably pale yellow-brown, with intermittent orange-brown iron-marking along some of the ridges between the flake scars. One face (*fig. 93b*, right) shows few flake scars and retains small areas of cortex: it is possible that the implement was never finished and, if this is so, the break at the butt suggested above might have occurred during manufacture. These points would all be plain enough if the implement were in fresh condition. If its present form does represent the maker's intentions at all accurately, then at least there was some sort of cutting edge, if not a very elegant one, round almost the whole of the circumference.

Found at the same time as the two implements described above were many other fragments of flint or chert of which six were submitted for examination (K10.5/3-8) all of which show at least some mechanical scars. In the writer's opinion K10.5/3 and 7 are likely to be artefacts and K10.5/6 may be: these are shown in *fig. 94*. The others do not appear to be artefacts, and are not illustrated. Of those shown K10.5/6 is an old worn and patinated flake, the other two, unworn and unpatinated could be of any age. There is nothing of outstanding interest in any of the three. At the very most they are items of flaking debris, and there is no demonstrable connection with either of the two bifacial tools.

CONTEXT OF THE FINDS

None of the objects described is in itself a particularly striking testimonial to the life and times of Lower Palaeolithic man in what is now the Bristol region, and their occurrence on a modern ploughed surface naturally offers no clue to their precise age. The days are long gone when one would cheerfully have assigned the bifaces on 'typological' grounds alone to some numbered stage of the Acheulian culture. In fact the morphology of both is generalised, and there is no technological feature with a restricted time range, either, to help us to classify them confidentially even as 'Middle Acheulian', 'Late Acheulian' or whatever, though their general nature and physical condition certainly indicate a Lower Palaeolithic age. Nevertheless, they do at least allow us to recall that in the Bristol region there are prolific and important occurrences of Acheulian artefacts which seem to have remained rather poorly known, other than locally, in spite of publications, (notably by Davies and Fry 1928, Fry 1955 and Lacaille 1954a; for other references see Donovan 1964) and in spite of the existence of good and accessible published collections in the Bristol City Museum and U.B.S.S. Museum (*c.f.* Roe 1968, 70-1,256,259-9). Amongst this large body of material are plenty of individual artefacts which generally resemble the two Ham Green finds in morphology, technology, size and raw material and physical condition, as even a glance at Lacaille 1954a, figures 3-4 will be sufficient to indicate.

The present writer has not been able to visit the find-spot at Ham Green but Professor Tratman reports that the ploughed area was situated on the 50 ft. terrace of the river Avon (*fig. 92*). Lacaille (1954a) stresses the importance in the lower reaches of the Bristol Avon of two terraces, at about 100 ft. and 50 ft. O.D. These are particularly well represented on the lands of Chapel Pill Farm and the adjacent Ham Green, on the left or south bank of the river. On the other side of the valley there are equivalent features, of which important exposures have been noted from time to time in the

Shirehampton district. The precise nature of these terraces, and their geochronology, are by no means certain. The topography of the west coast in general, and, in this case, of the narrow Bristol Channel in particular would seem likely to make it difficult to predict the heights of terrace formation in the Avon valley at particular stages of the Pleistocene, in so far as they depended on eustatic factors. Also the occurrence of the well known gorges of the Avon renders hazardous attempts to correlate particular terraces in the lower reaches with those further upstream, — *e.g.* the important one containing fauna at Twerton near Bath. There have been good exposures of this at the Victoria Gravel Pit and a Wolstonian age has been tentatively assigned to it by Stephens (in Mitchell *et al*, 1973). Other writers on this subject include Oriol 1903, Palmer 1931 and others listed in Donovan 1964. Similarly it would be wrong to assume a close correlation between a terrace of the lower Avon at 50 ft. of 100 ft. O.D. and one formed at a similar height in another river valley, — for example in the Lower Thames, where the topographic situation was quite different, with the river flowing generally eastward in a broad valley to a flat open coast.

On both the 100 ft. and 50 ft. terraces in the Abbotsleigh-Shirehampton area, exposures studied by Davies, Fry and others revealed usually no more than thin sheets of gravel, little of which remained in an unaltered or undisturbed state (Lacaille 1954a, 6-12). The gravels in many places had been profoundly affected by solifluction, solution, weathering or other processes, and their remnants were sometimes overlain by solifluction deposits. On the left bank of the river the gravel had in many places been largely or wholly replaced by the solifluction material. It was evidently the latter which had last contained the large majority of the Lower Palaeolithic artefacts, though most of them had found their way to the modern surface as had the two bifaces described at Ham Green. A small number, however, were found *in situ* in the gravel exposures in Shirehampton, and others were picked directly out of the solifluction deposits. The weathered condition of many of the artefacts indicates prolonged exposure on the surface at some stage of their history.

In the principal surviving collections the present writer has noted nearly 450 Lower Palaeolithic artefacts from the Lower Avon valley, including finds from both sides of the river (Roe, 1968, 70-1, 256, 258-9; Lacaille, 1954a, 4-8). Of these 170 were handaxes and 46 were flake implements, the rest falling mainly into various categories of waste material. Three Levalloisian cores and one Levalloisian flake were noted, though Lacaille's account of the artefacts suggests a stronger Levalloisian element (1954a, 17-19). A considerable amount of material additional to this is known to have been destroyed in the Second World War (Fry, 1955, 121).

The fields of Chapel Pill Farm were far and away the most productive source of finds, with 114 surviving handaxes, 40 of the retouched flakes and other material. Ham Green itself is included by Lacaille on his map of sites as

a minor find-spot of artefacts (*op. cit.* pl. 1). The present writer has actually seen only a single flake from Ham Green, thought to be of Lower Palaeolithic age. This is in the collection of the U.B.S.S. Davies and Fry, writing sixteen years earlier than Lacaille, record that no artefacts had at that time been found at Ham Green, in spite of a long and careful search (1928, 167).

There is no way whatsoever of establishing for certain how long a period of time may be represented by the whole mass of material, or which of the artefacts originally belonged together. The general standard of workmanship of the handaxes is unimpressive, but their appearance has suffered considerably from the effects of weathering, solifluction and various kinds of abrasion. The raw material, which included many small pebbles of rather poor quality chert, with some flint, a little indurated sandstone and quartzite, was not good. The commonest handaxe types in the Chapel Pill Farm series are small, irregular, crudely formed points, with the butts often left rough or covered with pebble cortex. A few flatter and more regular pyriform shapes occur, and there are also ovates, of which two at least have twisted profiles. After making allowance for the effect of poor raw materials, one might feel that the bulk of the Chapel Pill Farm handaxes were the scrag end, so to speak, of a Middle Acheulian industry not very different from that found in the Middle Gravels at Barnfield Pit, Swanscombe (Wymer, 1968, 334-45), but in the actual circumstances we can hardly put this forward as a demonstrable conclusion. Lacaille, whose choice of specimens to illustrate has perhaps flattered the material, also felt that the collections he saw were dominated by Middle Acheulian, with perhaps some derived older implements and some that were younger.

A point of interest about the Bristol Avon palaeoliths is that they are one of the most westerly occurrences in Britain of Lower Palaeolithic artefacts in quantity (Roe, 1964, 246-7 and 1968, pl.27). There are comparatively few sites in Britain in the areas of drainage to the Atlantic, as opposed to drainage to the English Channel or Southern North Sea. We may even say that what Chapel Pill Farm was once a northwesterly outpost of the whole Acheulian world — that is, of a distribution which extends as far as peninsular India, all over Africa, around most of the Mediterranean and a little way into the Middle East. It includes also all Western and much of Central Europe.

Certainly there are finds of Lower Palaeolithic handaxes further west in Britain, with individually important sites like Kent's Cavern, Torquay (Campbell and Sampson 1971, 17-23), and a scatter of stray finds even as far west as western Cornwall (Smith 1926, 60; Guthrie 1960). Occasionally a find-spot has yielded about a dozen artefacts *e.g.* Doniford in Somerset (Wedlake and Wedlake, 1963) or Tavistock in Devon (Smith, 1931, 110) but only the famous Broom Pits in the Axe valley on the Dorset-Devonshire border (Moir, 1936) can show really prolific finds of handaxes and associated artefacts further west than Chapel Pill Farm. It is also rather curious that there has been apparently no filling out of the Lower Palaeolithic distribution

across the Bristol Channel in South Wales since the discovery of the single handaxe from Pen-y-lan, Cardiff, in 1953 (Lacaille, 1954b). There is only this artefact, and a possible Levalloisian flake of earlier rather than later style, noted amongst unstratified material from Paviland Cave (Lacaille, 1954b, 67), to represent the Lower Palaeolithic in all South Wales. The Levalloisian flake implement from Chepstow, Monmouthshire (Savory, 1961), a stray find, is a small, carefully worked, mainly bifacial point, fashioned from a Levalloisian flake blank; it is far more likely to be of Middle Palaeolithic (Mousterian) age than Lower Palaeolithic, as Savory indeed suggested, and one might expect French colleagues to classify it as a *pointe moustérienne sur éclat Levallois* (c.f. Bordes 1961, 22).

A few other Middle Palaeolithic artefacts have come from South Welsh caves, notably Coygan Cave near Laugharne, Carmarthen (c.f. Roe 1964, 39), but apparently nothing earlier. More finds of the period can certainly be anticipated.

CONCLUSION

The present paper has added little beyond the writer's personal impressions to Lacaille's admirable account (1954a) of the nature and context of the Lower Palaeolithic finds from the lower reaches of the Bristol Avon, or to the other literature. Informative new evidence is unfortunately lacking. There seems no reason why more implements should not come to light from time to time in the area, and they will always be of interest. In the present state of knowledge, however, it might be more rewarding if faunal or botanical evidence could be obtained to cast light on the age of the Lower Avon terraces. Conversely, a rich Lower Palaeolithic site higher up the valley, in association with the Pleistocene fauna known to be preserved there, would be an important find.

It would, perhaps, have been possible to report the new Ham Green finds adequately in a single paragraph, but a longer account will have served its purpose if it succeeds in drawing active attention to an important and neglected body of material, and to chronological problems that are well worth solving.

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