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HAMPSHIRE PALAEOLITHS AND THE CLAY-WITH-FLINTS.

By G. W. WILLIS, F.S.A.

SOME 20 years ago a brief account was given in the Hants Field Club *Proceedings* of what appeared to be Palaeolithic implements scattered sparsely and promiscuously over the undulating countryside around Basingstoke. Tentative suggestions were then made as to a possible association of these implements with the Clay-with-Flint formation, although no definite connection, either by stratification or excavation, could be claimed. Much further evidence has since accumulated which has substantially strengthened the idea that a definite association does exist between the Clay-with-Flints and the work of Palaeolithic man.

The area under consideration comprises the district some 8 to 10 miles to the East, South and West of Basingstoke bounded on the N.W. by the Hannington Hills 700 O.D. and to the South by the Farleigh spur of the North Downs and still farther South by the hills above Froyle 740 O.D. which form the watershed between the Loddon and Wey Valleys. These figures have importance as being the highest in the immediate neighbourhood.

Geologically the area lies at the extreme edge of the chalk formation of Hants where it dips below the Tertiaries of the London Basin to the North. Several rivers—the Loddon, Lyde, Whitewater, Blackwater rise in the area, to flow almost at once on to the Tertiaries to the North-East. The Test, rising and flowing to the West of the area, is now but the feeble descendant of the river that has deposited valley gravel along its ancient course several miles above its present springheads. These river gravels are the only gravel recorded on the Geological Survey maps. As befits a watershed area, the maps record no terrace gravels—the usual source of palaeolithic implements—nor is there any plateau gravel indicated on the Chalk area.

The special geological feature to which attention is called is the superficial drift known as the Clay-with-Flints, a variable and often puzzling formation. At Brickfield Copse, Ellisfield, it consists of a red-blue mottled clay, indistinguishable from that of Sherborne St. John Brickfield in the Reading Beds, while at Preston Candover it includes shingle and pebbles resembling the bottom bed of this formation; evidently in both cases Tertiary debris. But its normal texture is that of a stiff red-brown plastic clay, containing flints, many or few, with a harsh white cortex, which, if broken, show a core of dark colloidal flint. In no case has any

evidence of stratification been noted. It caps the hilltops, being of maximum thickness at the greatest heights and even where occurring on lower levels, still occupies the highest points.

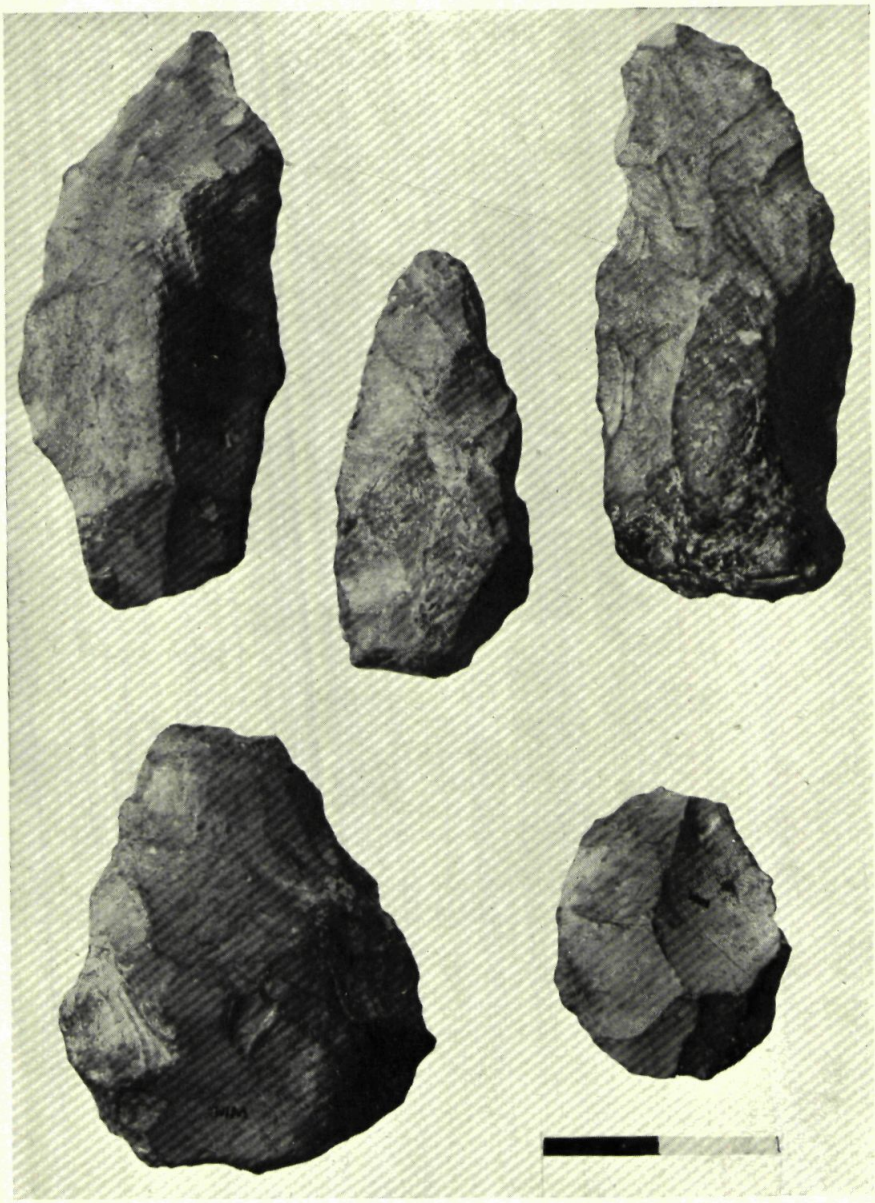
The fact that its development is greatest at the greatest heights and that the lower chalk areas retain only slight patches, does suggest that the Clay-with-Flints was once much more extensive than at present, but that subsequent denudation has carved out from it and the underlying chalk many of the lesser valleys of the present river system.

The edges of the mapped Clay-with-Flint areas often show a marked parallelism with the contour lines, which would appear to support the theory of a wider and more general extension of this formation, but too much weight cannot be attached to this argument as the boundaries of the Clay-with-Flint drift are very indefinite and can only be approximately indicated by lines on a map.

On arable land the white cortexed flints are the invariable sign of this drift, but many years of flint hunting has revealed the fact that there sometimes occurs on these patches a sparse spread of gravel of an entirely different patination, deep red-brown, distinguishable at a glance from the normal Clay-with-Flint flints; distinct too from the valley gravel of the area, in which its occasional fragments can be readily detected and entirely unlike any plateau gravel that covers the Tertiaries to the north at lower levels. So that one is forced to conclude that this old drift is an integral geological part of the Clay-with-Flints and has acquired its specific texture and patina from long exposure and possibly from extreme conditions of temperature. This is borne out by the curious oblique fracturing of many of the flints which have broken, or show lines of fracture, in a way that would not arise from percussion or ordinary causes of accidental breakage, but resemble the vagaries of fracture by frost. It was the discovery of indubitable flakes of human workmanship of this older gravelly patina that induced the specific research of which the results are given here.

During a long period of flint-hunting, a few implements of Palaeolithic type were picked up, usually with their surfaces much disintegrated by heavy white patina. These were regarded as casual introductions, as there were no terrace gravels or other normal Palaeolithic sources to give them an orthodox provenance. But at Ellisfield 600 O.D. there came to light a small defined area that produced 80 to 100 of these ancient flakes, together with other nondescript but undoubtedly humanly-chipped flints of which later experience justifies their classification as rough implements.

Some were of a deep clear orange colour, but the majority were of this incredibly ancient appearance, deep red-brown with patination carried so far as to obliterate all distinction between cortex and chipped surface. When broken for examination, the internal



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surfaces confirmed the extreme changes due to patination as no colloidal core was present, the whole flint having been converted to a harsh granular texture.

The first local identification of this patina with a typical Palaeolithic implement was made at Worting Wood 400 O.D., where a pointed ovate of the desired red-brown coloration was found, supported happily by several similar flakes.

A more prolific site was subsequently discovered at Winslade 650 O.D. on the edge of the Clay-with-Flints. Here among an abundance of red-brown flakes and nondescripts, a two-hour search produced seven or eight implements, one at least an entirely typical pointed ovate. Others less formal in pattern may either be earlier and more primitive or may represent the inferior tools that must obviously have co-existed with the more finished productions *on a working site.*

With the very deep patination of this series which so degrades the flint surfaces that the sharp aretes are removed, it is not easy to say whether they exhibit evidence of abrasion by rolling, but while some are definitely unrolled, it seems likely that as a whole they will be so classed. As a result of this discovery, efforts were directed at the highest points on the map covered by Clay-with-Flints. At Hannington 700 O.D. an indubitable flake was found, but on visiting the 730 O.D. area above Holybourne the unusual experience was enjoyed of having decided to go and find Palaeoliths at a given spot and finding them! On the first visit two implements and a good flake were picked up on the open field, one of the implements being a long pointed ovate of a yellow-buff colour, while the other and the flake were of the typical red-brown surface. The area, about 40-50 yards across, has since received intensive and continuous examination (until war transport difficulties stopped it) and every visit has resulted in the acquisition of at least one implement, besides flakes. Finds include ovates and pointed ovates, some of a clear orange yellow, others of the old granular patina, several small specimens, ovate and pointed, being less than 2 inches in length Altogether some 60 and 70 implements have been secured from this compact area.

The importance of this site rests on two factors, the very limited area on which the relatively abundant implements and flakes occur and the high ground on which it is situated. The range of hills runs parallel to the River Wey, sloping steeply down to Holybourne and Froyle in the Wey Valley and forming the watershed between the Wey and the lower ground to the north. The concentration of material strongly suggests a working site, and the high altitude makes it difficult to suppose that it could have been brought from any higher ground. It seems a reasonable deduction that Palaeoman lived on this Clay-with-Flint surface, at a time when it was much more extensive than at present, leaving his evidence on the

remaining patches that survive the denudation that has formed our present river system, in which case this may well be an original site from which the South of Hampshire has, in past times, received its Terrace and Valley Gravel implements at second hand.

It is to be noted that these high level palaeoliths are much more deeply patinated than the usual implements found in the lower gravels which have obviously come from higher sources. This again supports the idea that the original sites of manufacture were on the heights of North Hampshire, which sites may perhaps have gradually sunk by the solution of the chalk in forming the Clay-with-Flints, but have not otherwise moved.

When the various sites are superimposed on the Clay-with-Flints outlines, the presumed association is greatly strengthened as the more prolific and compact sites are closely connected with the main development of this formation, while the more casual and scattered finds are in most cases adjacent to some isolated patch.

A re-examination of the earlier finds suggests they may have closer contact with the older types than at first appeared. They often show traces of yellow colour, as though, having been removed from their drift source on to the chalk, they were in process of repatination to the normal white patina of chalk down implements.

Mr. H. Dewey, in describing the discovery of Palaeolithic implements on areas in Kent that strongly resemble North Hants in geological structure, states that both Neolithic and Palaeolithic material is found, sometimes together, sometimes separately, on the plateaux formed by the cutting down of the local valley system through the Clay-with-Flints and the underlying chalk. He inclines to the idea that both series of implements were made and left on the present land surface and that little change has taken place in it since Palaeolithic times, but he does not associate Palaeolithic implements directly with Clay-with-Flint. The distribution of Palaeolithic material in North Hants seems markedly more specific than in Kent, as the accompanying sketch map shows. One feels that in the removal of so much of the Clay-with-Flints, many Palaeolithic sites have gone.

South of the area under discussion, there are vast sweeps of Clay-with-Flints within the 600-700 contour lines, rising, in the neighbourhood of Stonor Hill to 800 O.D. It is much to be hoped that these higher levels could come under careful and detailed examination, as the discovery of Palaeolithic sites thereon would substantially strengthen the argument that has been advanced.

All the material referred to, now in the Basingstoke Museum, has been collected in the field by Messrs. Ellaway and Rainbow and by the writer, who cordially recognises the important contributions made to the subject by his colleagues. Acknowledgements are also due to Mr. H. J. Osborne White for timely advice on the difficult problem of the Clay-with-Flints.