## SOME PALAEOLITHS FROM THE DONIFORD GRAVELS ON THE COAST OF WEST SOMERSET

## BY A. L. AND D. J. WEDLAKE

The occurrence of palaeolithic implements in considerable numbers from the gravels of the Axe valley at Broom Pit, near Axminster, Devon, has been known since 1877, when Sir John Evans<sup>1</sup> mentioned the discovery of chert implements there. Since that date many hundreds of implements have been taken from Broom, and other pits in the locality, and most museums in the south-west have representative collections. An interesting account of the quarries, descriptions of the types, and other data relating to these palaeoliths, was given in a fairly comprehensive paper published in 1936 by the late Mr. J. Reid Moir.<sup>2</sup>

It is obvious that the area around Broom was an important centre during palaeolithic times, both for the raw material, chiefly chert, from which most of the implements were made, and for the actual implements manufactured there. The distribution of handaxes from the Broom locality appears to have covered an area from the mouths of the Rivers Otter, and Axe, on the south coast, to the area around Taunton to the north. Palaeoliths have also been found at Exeter, Tiverton, Upton Pynes, Brent Moor, Tavistock, and the Lizard in Cornwall.

This distribution pattern for palaeolithic implements had been known for some time, and it therefore came as something of a surprise when in the spring of 1948, while walking along the beach from Doniford to St. Audries, one of the writers found lying on the shingle just below high-water mark, an ovate palaeolithic hand-axe, made from Blackdown chert (No. 6).<sup>3</sup>

The discovery of a palaeolithic implement made from material found on the Blackdown Hills, approximately fifteen miles away as the crow flies, following the finding of mammoth (*Elephas primigenius*) remains in the cliff, and on the foreshore at Doniford,<sup>4</sup> prompted us to further search and enquiry. One result of this — through the kindness of the late H. W. Kille of Minehead who brought it to our

- 3 Proc. S.A.S. 95 (1950) p. 157.
- 4 Ibid.

<sup>&</sup>lt;sup>1</sup> Sir John Evans. Ancient Stone Implements, p. 639.

<sup>2</sup> Proc. Devon A.E.S. (1936) Vol. 2, p. 264.

notice — was a paper read before the West Somerset Archaeological and Natural History Society in 1943, entitled 'Minehead Submarine Forest',<sup>5</sup> by the late C. W. K. Wallis of Birmingham.

In this paper Mr. Wallis had written:

In 1913 and 1914 I was so fortunate as to find three palaeolithic flint implements (probably of Acheulean date) on the shore at Doniford. This was the first record of these very ancient implements from this part of Somerset and I had some correspondence with Sir William Boyd Dawkins on the subject.

Our efforts to trace these implements at the time were not very successful, but later we were more fortunate through the generosity of Dr. Mabel E. Tomlinson of Solihull, Birmingham, who sent us the only implement of the group that she could trace (No. 3).

The source of these palaeolithic implements is the lower gravels exposed in the cliffs and on the foreshore at Doniford. Here gravel cliffs extend from a point about a quarter of a mile east of the river, where they rest against the rising cliffs of Lias, to Helwell Bay, at Watchet in the west (Fig. 1),<sup>6</sup> where they thin out and disappear on



another rising cliff of Trias. These gravels run inland from the coast forming the floor of the valley between the Quantock and the Brendon Hills. Much of this gravel was deposited during interglacial times when the whole of the valley was virtually a river bed. Now the present stream gently cuts its way through the most recent gravel deposit in which it has made its bed.

- <sup>5</sup> Now in the Library of the West Som. Socy., Minehead.
- <sup>6</sup> The writers wish to thank Mr. R. Madge for drawing this section.



These Doniford gravels appear to us to consist of three sections:

1. The upper section is almost certainly post-glacial, for in this we have found many implements of Mesolithic facies, including gravers, microliths, and micro-burins, as well as typical cores and flakes of the period.

As the Mesolithic period in Britain is considered, on well established dating evidence, to have covered the period approximately 9,000 to 2,500 B.C., there seems little doubt as to the post-glacial origin of the gravel.

2. The second or middle section of these gravels also contains material from which we can obtain dating information. This occurs in the form of skeletal remains of the mammoth (*Elephas primigenius*). Teeth and tusks of these great extinct elephants have been found in the gravels and on the Doniford foreshore during the past century.<sup>7</sup>

In the light of modern research it would appear that *Elephas* primigenius was uncommon until the beginning of the last interglacial period, approximately 150,000 B.C.<sup>8</sup> We may therefore assume that the middle gravels of Doniford can be assigned to this period, containing as they do numerous skeletal remains of this mammal. The writers have in fact during the past few years found both a tooth, and a tusk, *in situ*, in these middle gravels.

3. The third and lowest section of the gravel presents more problems, both of origin and dating. We feel, however, that on the evidence of the majority of the implements we can safely claim an early to middle Acheulean dating.

The implements have in most cases been very much abraded, in fact in some cases a high proportion of the original flake scars has been eroded. The reason for this condition, we suggest, is that the implements, already abraded through transportation in the gravel before they finally reached their present situation, have ultimately been uncovered by the sea, and again been very much abraded in the process.

The difference in condition of those found on the foreshore to the two implements found in the gravels inland is very apparent. The first (No. 7) was found at Williton in 1950 by the late A. T.

7 Proc. S.A.S. 95 (1950) p. 167.

8 F. E. Zeuner. Dating the Past, pp. 378-9.



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Love when workmen were excavating old foundations in his garden.<sup>9</sup> The other implement, a small ovate (No. 10) was found by one of the writers in his garden on the Doniford Road, Watchet, adjacent to some foundation trenches about twenty years ago. In both cases the condition of the implements is much fresher and less abraded than those found on the foreshore.

Professor Zeuner<sup>10</sup> suggests that the south coast of England affords corroborative evidence that the middle Acheulean was the industry of the Great Interglacial Period. From the distribution of palaeolithic hand-axes it is obvious that palaeolithic man moved around the south-western district, from the shores of the English channel to the shores of the Bristol channel, and as far west as Lands End.

We are of the opinion that the group of palaeoliths from Doniford, found in the ancient bed of a river, which in palaeolithic times was a tributary of the greater Severn, can also be assigned to this period. Eleven of these are described and illustrated in this paper, the writers, however, have more than double that number, as well as a number of flakes. In conclusion we hope that the publication of these implements will add a little to the future study of palaeolithic man in the south-west.

## DESCRIPTION OF IMPLEMENTS

- Square-butted pyriform hand-axe. 3.7 in.; 2.7 in.; .8 in. Colour, ochreous yellow with creamy patches, some dark green staining. Material, black flint. Condition well rolled.
- Fine ovate hand-axe. 5.2 in.; 3.5 in.; 1.3 in. Colour, deep ochreous brown. Material Blackdown chert. Condition well rolled.
- Ovate hand-axe made from flake. 4.7 in.; 3.1 in.; 1.2 in. Colour, creamy brown with dark brown flecks. Frost pitted on one side near butt. Material Blackdown chert. Condition well rolled.
- Irregular ovate hand-axe. 4.6 in.; 3.0 in.; 1.1 in. Colour, ochreous orange. Material Blackdown chert. Condition, well rolled and abraded.
- Early Acheulian pyriform hand-axe. 4.8 in.; 2.7 in.; 1.4 in. Colour, deep ochreous brown. Material, flint. Condition, well rolled, patch of cortex on butt.
- Ovate hand-axe. 4.3 in.; 2.7 in.; 1 in. Colour, cream patina with purplebrown patches. Material, Blackdown chert. Condition, rolled and abraded.

9 Now in the Somerset County Museum, Taunton.

10 F. E. Zeuner. Dating the Past, p. 198.



## Some Palaeoliths from the Doniford Gravels

- 7. Ovate hand-axe. 5.4 in.; 3.8 in.; 1.6 in. Colour, brown with iron staining. Material, Blackdown chert. Condition, slightly rolled.
- Square butted pyriform hand-axe. 3.8 in.; 2.8 in.; 1.2 in. Colour, orange brown with creamy patches, some green staining. Condition, upper portion well rolled, lower much worn and abraded.
- 9. Large ovate hand-axe. 6.9 in.; 3.6 in.; 1.3 in. Colour, creamy brown. Material, Blackdown chert. Condition, much rolled and abraded.
- Small ovate hand-axe. 2.6 in.; 2.0 in.; 1.3 in. Colour, light brown with iron staining. Patch of cortex on one face. Material, Blackdown chert. Condition, slightly rolled.
- 11. Large ovate hand-axe. 6.7 in.; 4.2 in.; 1.6 in. Colour, creamy brown with darker patches. Material, Blackdown chert. Condition, heavily rolled and abraded.

All these implements with the exception of No. 7 are now in the possession of the authors. It is intended that they shall be deposited with the Somerset County Museum at some future date.