

MORE STONE TOOLS FROM RAINBOW BAR, HILLHEAD

By BRIAN HACK

ABSTRACT

Continuing fieldwork on Rainbow Bar, Hillhead, Hants, SU 531023, has yielded stone tools of a probable lower palaeolithic type. The artefacts are described and discussed, together with consideration of the problems of characterising the assemblage.

INTRODUCTION

The gravel spit which goes by the name of Rainbow Bar (NGR SU 531023) is the source of a prolific stone tool accumulation. The site, which is only uncovered during periods of low water, was discovered by J C Draper (1951). He considered that lower palaeolithic material was being uncovered here by marine erosion, and believed that the majority of his finds belonged to the 'Clactonian' period. More recently, the author has found many more stone tools on the site, some of which were published in 1998 (Hack 1998). More are described and illustrated in the present article.

The artefactual finds have all been made as a result of collection from the Bar itself. Roe (1981) has recorded that no serious excavation has been undertaken on Rainbow Bar, doubtless mainly because of the logistical difficulties of excavating below the high-tide line. The writer recently attempted a small, 2 x 1 m exploratory trench some 180 m from the high-tide line. Unfortunately, it was unsatisfactory, since after 30 cm the gravel turned to sand, and after a further 15 cm the trench began to fill with water. No artefacts were found. It is now thought that exploratory trenches nearer the beach might produce useful information, and it would also help if a similar deposit were to be found, above, and away from the tide line.

Repeated searching of the beaches and other gravel spits in the area, when these are exposed at low water, confirms the late Chris Draper's statement (1951) that they do not produce artefacts.

THE ARTEFACTS (Figs 1–7)

All of the artefacts are made from flint cobbles and pebbles of the type which predominate on Rainbow Bar, and are characteristic of the collection as a whole. When fractured they exhibit a black to dark grey colouration, with some lighter grey inclusions. Many of the cores display only limited flake removal with which to effect a short, irregular cutting or chopping edge. Irregular cores with evidence of struck flake removals have been found weighing up to 4 kg. The degree of patina on all of the early type of artefacts is uniform, and is of an ochreous to creamy white colour. Most of the struck flakes exhibit some areas of cortex on their outer faces. The cones of percussion are prominent, and the flakes were detached on a plain, high angled striking platform. There is little evidence of secondary working and none of deliberate shaping of the struck flake. Some of the artefacts show areas where the flint edges and ridges between facets have been degraded and eroded chemically into soft 'chalky' surfaces. These respond to the 'sticking tongue test', as may be experienced with a piece of chalk. This degrading by wear and chemical change has been recorded as being a natural process in the aging of flint artefacts subjected to certain conditions (Wymer 1988). The majority of the artefacts have sustained wear and rounding to their edges and to the ridges between their struck facets.

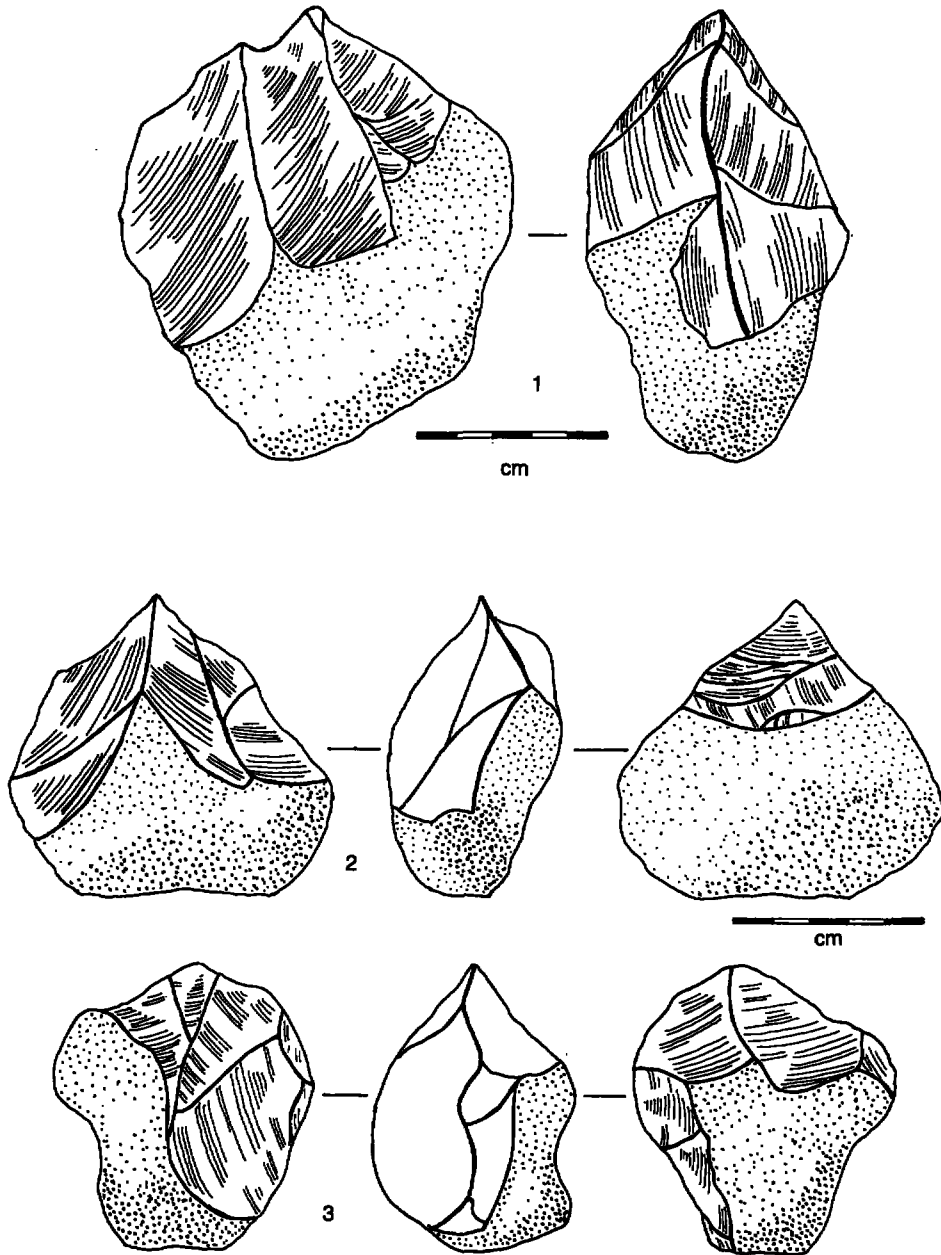


Fig. 1 Rainbow Bar, Hillhead: stone tools

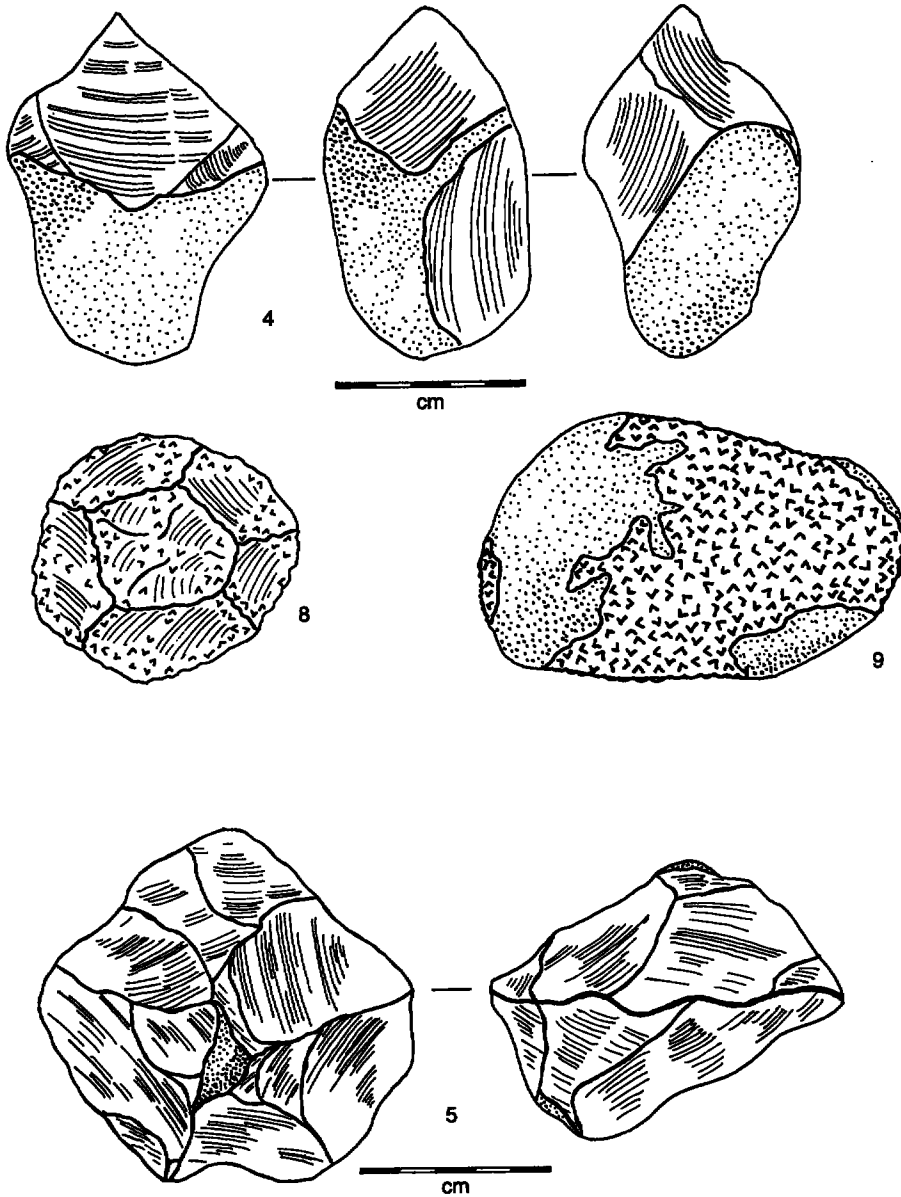


Fig. 2 Rainbow Bar, Hillhead: stone tools

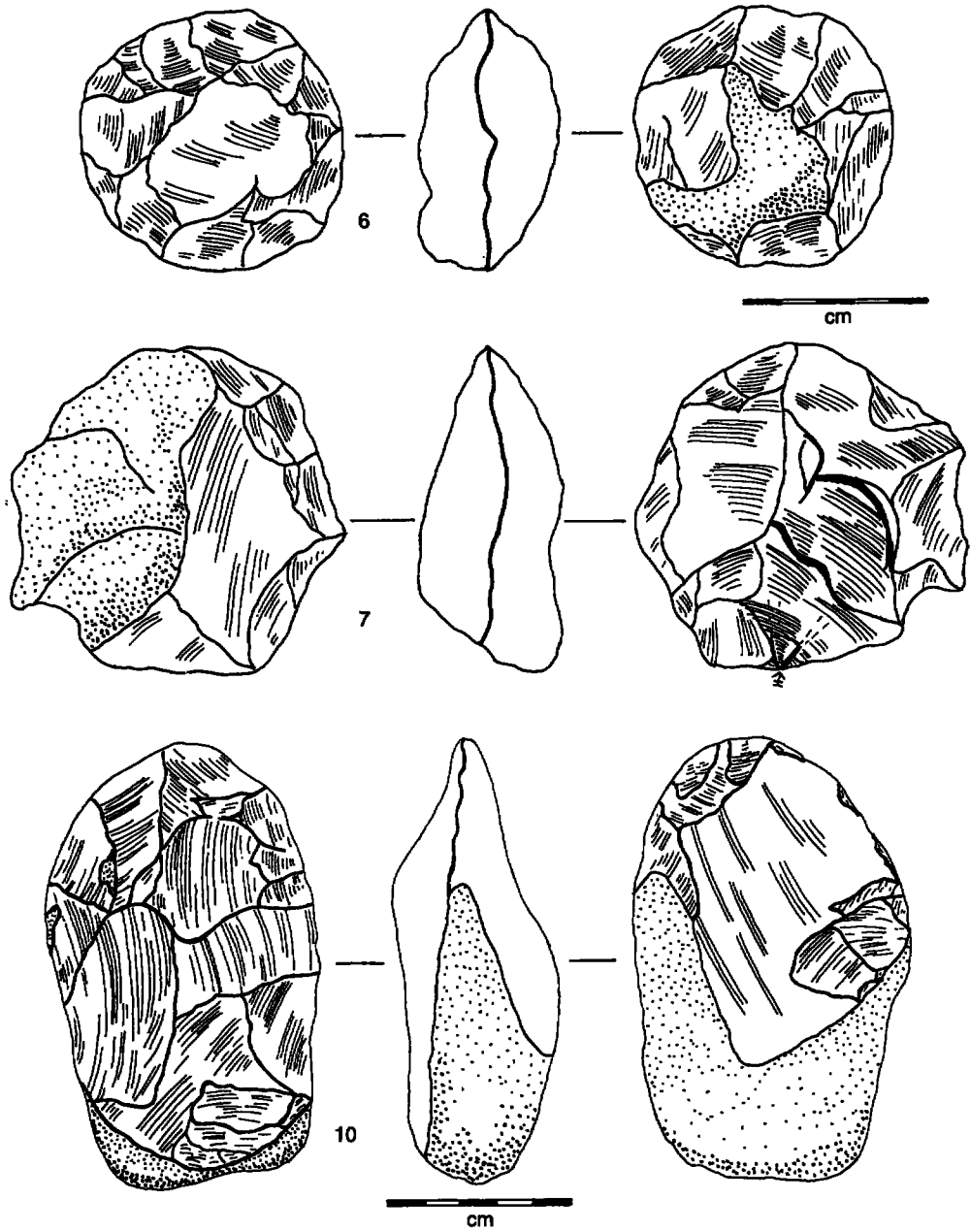


Fig. 3 Rainbow Bar, Hillhead: stone tools

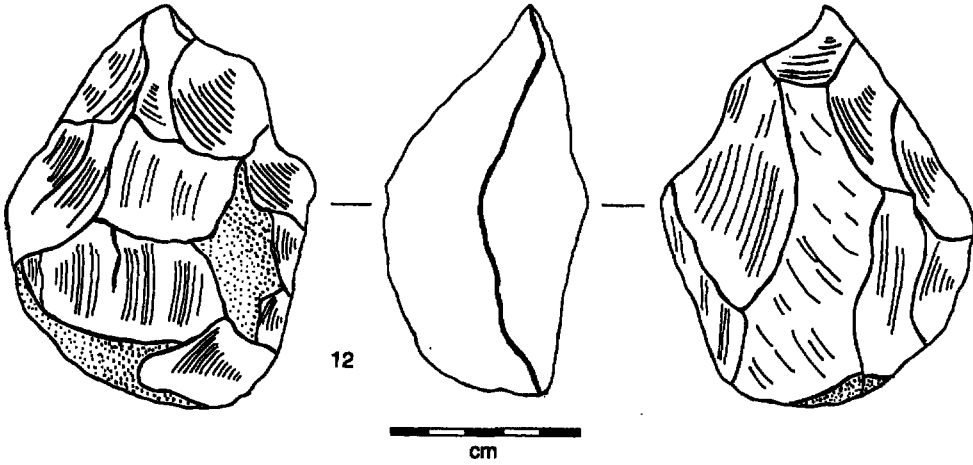
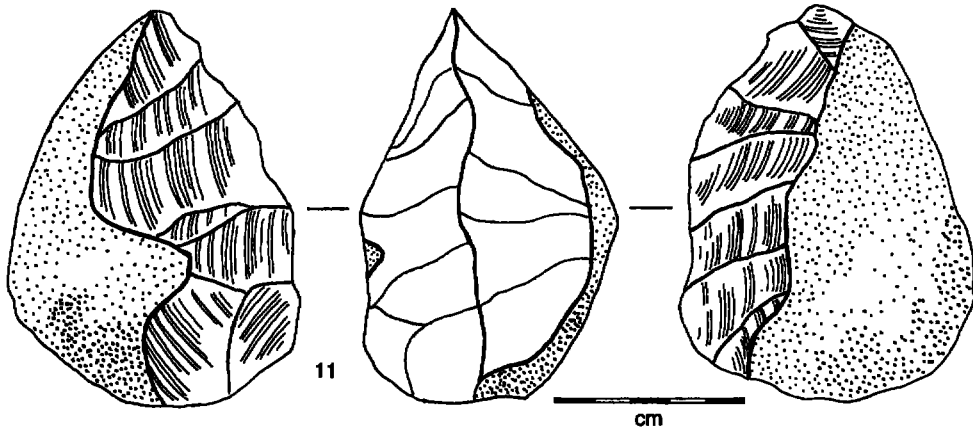


Fig. 4 Rainbow Bar, Hillhead: stone tools

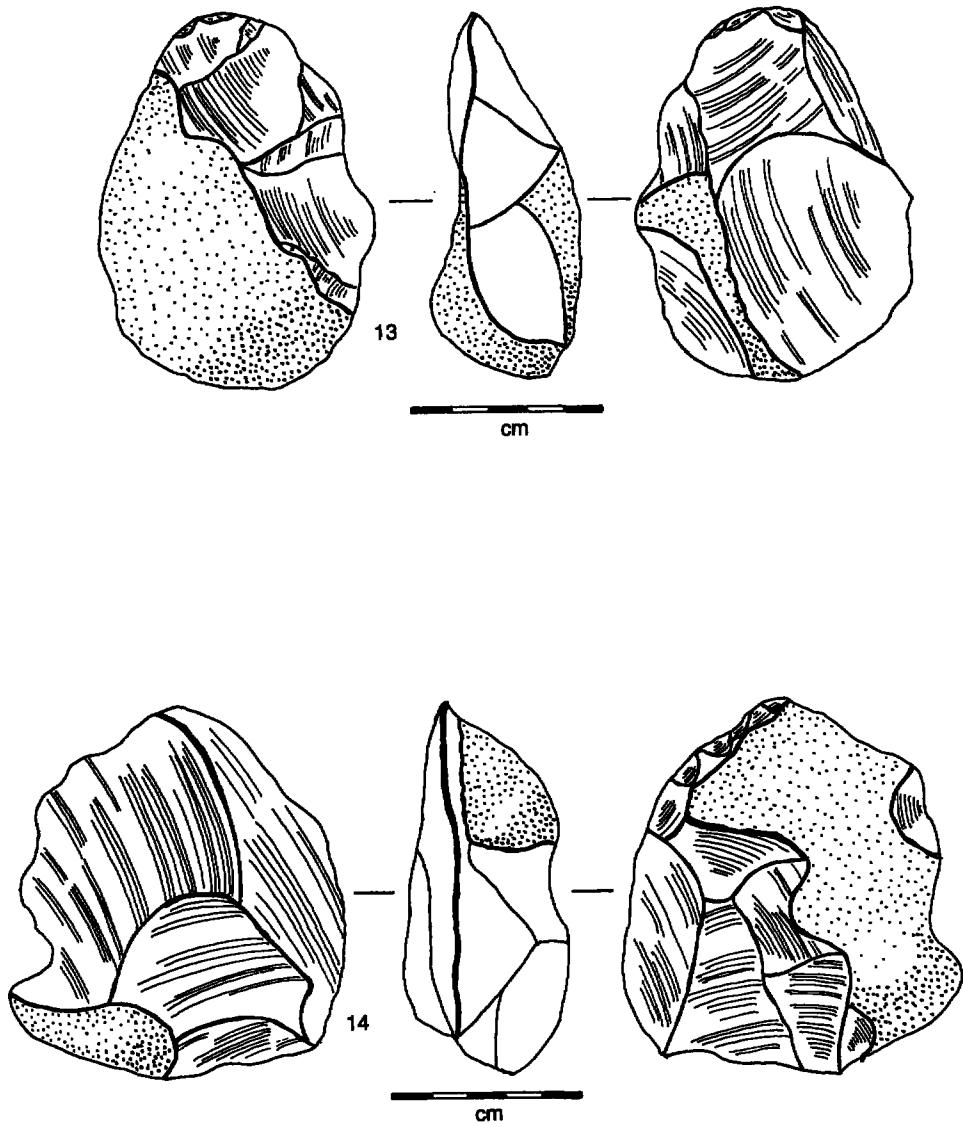


Fig. 5 Rainbow Bar, Hillhead: stone tools

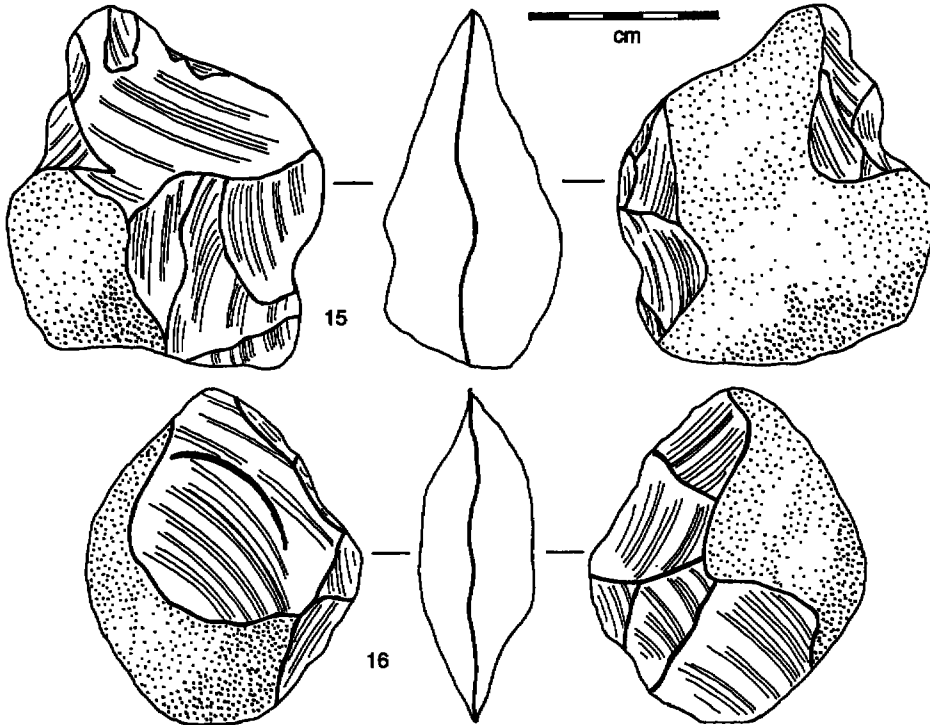


Fig. 6 Rainbow Bar, Hillhead: stone tools

- 1 A large bifacial chopper.
- 2 A bifacial, pointed chopper.
- 3 bifacial chopper.
- 4 An unusual, triangular sectioned, trifacial pointed chopper.
- 5 A fine example of a biconical core.
- 6 A fine example of a discoid, bifacially flaked to give a fully edged circumference.
- 7 A discoid made on a 40 mm thick struck flake.
- 8 A polyhedron, contused and battered through use as a hammer stone.
- 9 A hammer stone battered and contused over most of the pebble surface.
- 10-16 Examples of 'proto-handaxes'.
- 17-20 Examples of struck flakes, 38, 32, 28 and 27 mm thick respectively. 17, 18 & 20 exhibit some secondary work to strengthen or sharpen one edge. 19 shows some evidence of utilisation to one edge.

DISCUSSION

Draper's assessment is supported by many authorities of the British lower palaeolithic periods. Dr Roe records 'that it is perfectly possible that the Rainbow Bar gravel represents the surface of a buried Pleistocene channel capped by traces of a younger land surface' (Roe 1981, 149-50). Few detailed geological studies of the gravels appear to have been published, but attention should be directed to the hypothetical reconstruction of the 'Solent River System' (Melville et al 1982, fig. 35), at a time of low sea level when the Isle of Wight was part of the mainland.

Roe goes on to draw comparisons to a not dissimilar occurrence just across the Channel at Wimereaux in north-west France, and suggests that the Rainbow Bar assemblage may prove to

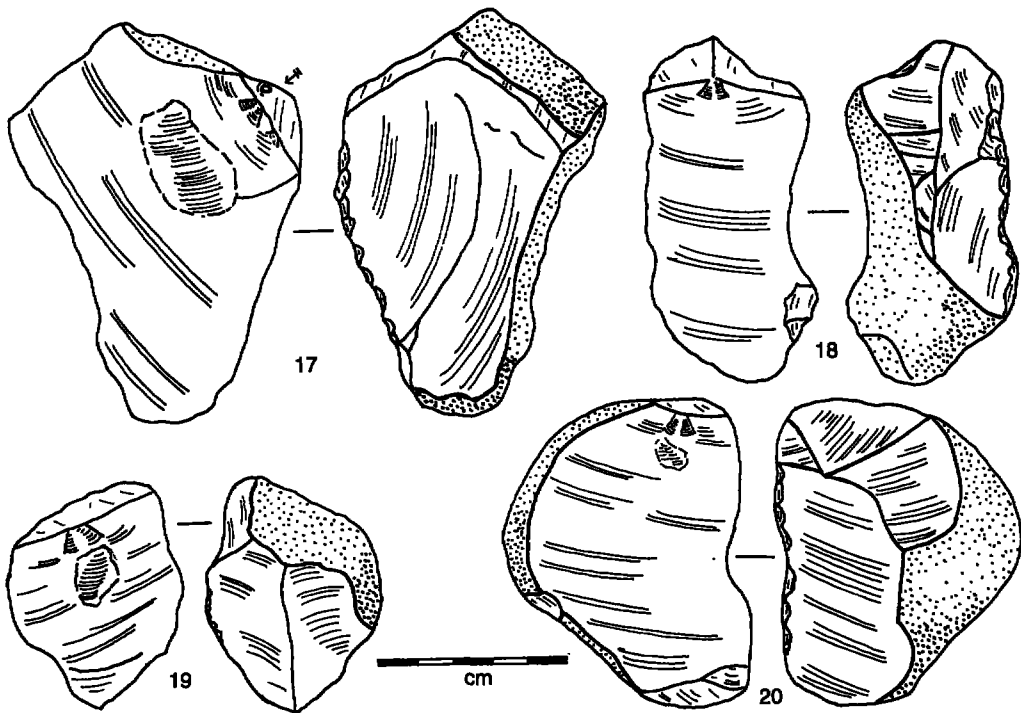


Fig. 7 Rainbow Bar, Hillhead: stone tools

include one of the more prolific 'Clactonian' occurrences in Britain. Other authorities reject these suggestions on the grounds of there being, as yet, no clear geological or palaeontological dating evidence with which to support the claims. However, a similar exposure at the type site at Clacton-on-Sea, braced as it is by two excavations in the area, appears to have been acceptable (Warren 1951; Oakley & Leakey 1937; Singer et al 1973).

It has been realised for many years that the 'Clactonian' and pebble tool assemblages which occur in Britain and other parts of Europe were similar to those earlier artefact assemblages found on the African continent. The term 'European Oldowan' has been suggested by Leakey (1953). It would seem to be generally acceptable that the 'Clactonian' is a distinct industry rather than one of alternative tool forms made by the same population. Roe (1981) points out that 'we must be prepared to encounter elsewhere in Britain indus-

tries or even lower palaeolithic stages which are not seen at our principal north Kent sites'.

The fairly recent new assessments made for the dating of well-made handaxes found at sites such as Boxgrove (Pitts & Roberts 1997), High Lodge at Mildenhall (Cook & Aston 1991), and Waverley Wood Farm Pit (Wise 1993) has led to much further thought being given to previously dated sites which also contain similar well-made handaxes. However, little light has been thrown onto the enigmatic question of the true age of the 'British Clactonian'. It possibly becomes even more confusing when one considers that 'Clactonian' tools are found stratified below handaxe levels at some of our principal lower palaeolithic sites (Wymer 1974; Roe 1981).

The present writer has collected several hundred flint artefacts from Rainbow Bar, the vast majority of which would be acceptable as elements of lower palaeolithic industry. Whilst some of these artefacts would slot comfortably into any of

the accepted 'British Clactonian' assemblages, there occur others which would appear to fit more comfortably into Dr Leakey's suggested category of 'European Oldowan'. A number of roughly formed examples of what are never-the-less identifiable 'proto-handaxes' have been included in the collection. These are made from flint pebbles and cobbles of the Bar matrix, and need not be confused with the better formed handaxes which are made from a differing source of raw material, which have for many years been found along the local shoreline and in the gravel cliffs from which they derive. It should perhaps be noted that 'proto-handaxes' occur prominently in 'Developed Oldowan' industries at Oldoway Gorge (Leakey, M D 1971).

Mention must be made of a comparatively small numbered occurrence of what appear to be

'Mesolithic' or later artefacts. Indeed, Draper found a very typical 'Mesolithic' pick here which he illustrated in his note. The small number of artefacts of this type found by the present writer are easily distinguishable by their lighter and more finely produced appearance, and by a lesser degree of patination and wear.

The writer intends to continue to search Rainbow Bar. It is still enthusiastically hoped that dating evidence will eventually be found.

ACKNOWLEDGEMENTS

I am grateful to Dr J J Wymer for his generous council, and for his continued interest in the site and its artefacts. Robert Dunn has greatly supported my activities at the site.

REFERENCES

- Cook, J & Aston, N 1991 High Lodge, Mildenhall *Current Archaeol* 123.
- Draper, J C 1951 Stone industries from Rainbow Bar, Hants, *Archaeol Newsletter* 3:9 147-9.
- Hack, B 1998 Stone tools from Rainbow Bar, Hillhead *Proc Hampshire Field Club Archaeol Soc* 53 219-21.
- Leakey, L S B 1953 *Adam's Ancestors* (4th ed), London; Methuen.
- Leakey, M D 1971 *Olduvai Gorge*, vol. 3, Cambridge Univ. Press.
- Melville, R V et al. 1982 *British Regional Geology, The Hampshire Basin, & Adjoining Areas*, London; HMSO.
- Oakley, K P & Leakey, M D 1937 Report on excavations at Jaywick Sands, Essex *Proc Prehist Soc* 3:2 217-60.
- Pitts, M & Roberts, M 1997 *Fairweather Eden, Excavations at Boxgrove*, London; Century Books Ltd.
- Roe, D A 1981 *The Lower and Middle Palaeolithic Periods in Britain*, London; Routledge & Kegan Paul.
- Singer, R et al 1973 Excavation of the Clactonian industry at the Golf Course, Clacton-on-Sea, Essex *Proc Prehist Soc* 39 6-74.
- Warren, S H 1950 The Clacton flint industry, a new interpretation *Proc Geol Assoc London* 62 107-35.
- Wise, P 1993 Waverley Wood Farm Pit *Current Archaeol* 133.
- Wymer, J J 1974 Clactonian and Acheulian industries in Britain: their chronology and significance *Proc Geol Assoc London* 85:3 391-421.
- 1988 in MacRae, R J & Maloney, N (ed), *Non-flint Stone Tools and the Palaeolithic Occupation of Britain* (BAR Brit Ser 189), Oxford, 19.

Author: Brian Hack, 94 Stubbington Lane, Stubbington, Fareham, Hampshire, PO14 2PB.

© Hampshire Field Club and Archaeological Society