

Mesolithic Sites in Norfolk

BY J. E. SAINTY, B.Sc.

Ten thousand years ago the great Pleistocene ice sheets were melting fast, and the vast floods, flowing into the ocean, raised the sea level by over two hundred feet, inundating the lowlands. However, the countries to the north, freed from the tremendous weight of the ice fields, began to rise, as corks pressed below the surface of a pond will rise when the pressure is removed. The struggle between the deepening sea and the rising land is still unended, for the British mainland north of a line through Flamborough Head is tilting upwards whilst the south is tilting down. The ameliorating climate encouraged the return of plant and animal life to the lands that had too long been sterile ice deserts. The great pachyderms of mid-palæolithic times had gone forever, and the steppe and tundra fauna hunted by upper palæolithic man was being replaced by forest-loving animals, aurochs and red deer instead of reindeer, for alders flourished in the marshlands and pines on the sandy wastes, with deciduous trees spreading on the loams and clays. By 6000 B.C. man himself reached Norfolk, travelling slowly across the marshy plain that now forms the southern bed of the North Sea, for at that time the coast line ran from Holderness to Southern Sweden.

At the beginning of the present century one of the chief tasks facing the archæologist was to fill in the gap in our knowledge that covered the transition from the wandering, hunting, and food-gathering existence of palæolithic man to the comparatively stable agricultural and pastoral economy of developed neolithic times. The accomplishment of the task of supplying the main outlines during the first quarter of the century was largely due to the work of Danish and West Baltic workers, but the discoveries in East Anglia contributed no mean share to the study of the cultures included under the term mesolithic.

The sandy soils of our county are ill suited to the preservation through long ages of organic material, and the bones of the hunter and of his prey have alike disappeared, as has the wealth of wooden and bone implements he utilized. In Norfolk the only relics that tell of his former presence are the flints he flaked and used. Evidence from the continental sites throws but scanty light upon his appearance, for skeletal remains are few and incomplete; no burials are known, and the fragmentary condition of the longer bones has led to suggestions of cannibalism. The few skulls discovered tend to show the impact of broader-headed peoples on the prevailing long heads of palæolithic days. Wooden paddles, a fragment of net, and a number of bone fish-hooks and fish spears or leisters—one of the most beautiful being that

recovered from moor log off the Leman Sands and now in Norwich Castle Museum—bear witness to their keenness as fishers, pike being the chief victim. Remains of aurochs and red deer, elk and wild pig, of ducks, geese and swans tell of their prowess as hunters, and they gathered the hazel nuts whose broken shells remain, but there is no evidence that they practised agriculture or had domestic animals other than the dogs which aided them in their hunting.

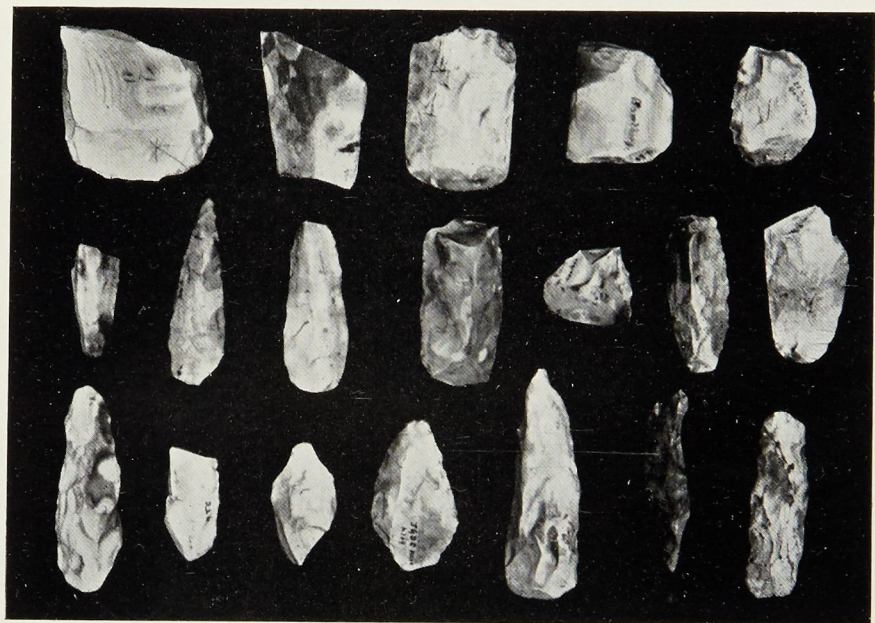
A study of their flint implements shows that their evolution was influenced by two distinct traditions, each of which may be traced back towards upper palaeolithic sources. The first, truly microlithic, evolved on the southern shores of the Mediterranean Sea where, as the storm belts moved northward and desiccation set in, the Sahara could no longer support its former population. The flint implements decreased in size, producing the Capsian industry of North Africa and moving into Europe as the Tardenoisian of France. These implements finally attained pigmy dimensions, the tiny worked flakes being obviously intended for mounting in wooden or bone hafts to form "composite" implements. These widely spread "pigmy" had long puzzled archæologists before their derivation, age and use were determined. The second tradition first appeared as the Lyngby culture of the Western Baltic, characterized by axes, adzes and hafts of reindeer antler, an adaptation to the spreading forest conditions, and was displaced by the vigorous Maglemose ("big-bog") industries with flaked flint axes, adzes and picks, combined with bone fish-hooks and spears and a well developed microlithic industry. It was Maglemose man who wandered over the great European plain stretching from the lowlands of Britain to Poland and Esthonia, the culture centring especially around the island of Zealand.

Although geometric microliths had long been known from over the Suffolk border at Wangford and Lakenheath, no Norfolk specimens had been recorded until 1910, when "pigmy" from Northwold and Methwold were exhibited at Norwich. A year later H. W. Cockrill described "Implements from a Sand Stratum at Lyng", recording "the first pigmy found in situ in the county". In February, 1914, F. N. Haward read an account of "A Workshop Site of Primitive Culture at Two Mile Bottom, Thetford", containing a typical industry with cores, long narrow flakes and "points", which he suggested was "not of palaeolithic age but probably belonged to an isolated tribe of hunters of the true neolithic period". In the same year J. Cox exhibited a pigmy found at Gresham in 1883. In December 1915 appeared an important joint paper on "Cone Cultures in the Wensum Valley", in which W. G. Clarke and H. H. Halls described an industry discovered at Hellesdon on a field lying just above river level, a single pigmy point being present among the several thousand worked specimens examined, whilst the writer dealt with corresponding industries from Sparham, also on a field just above river level, and at Lyng on the south bank, the strong affinities with upper palaeolithic flake industries being offset by the presence of a

polished axe and a rubbed scraper. War conditions intervened and delayed further developments until in June 1922 W. G. Clarke and H. H. Halls published an account of *An Early Neolithic Site at Hockham* on Spong Heath on the border of the site of the drained Hockham mere. This produced a tranchet arrowhead "of the kitchen midden type" and "two small blade implements almost pigmies, having the characteristic pigmy chipping pointing to Maglemose or the late palæolithic". "Obvious analogies occur between the implements from this station and the Thetford Two Mile Bottom site." "Most of the Hockham implements appear to be early neolithic."

In August 1924, at Kelling was discovered one of the most important and prolific sites in the country. In contrast to those already listed it was a plateau station 200 feet above sea level, the specimens occurring immediately below heather and above glacial gravel, the main finds being concentrated in an area of about sixty yards square. Good collections of typical implements are to be seen in Norwich, Cambridge and Ipswich Museums. Enormous numbers of cones, long flakes, scrapers and points were obtained, whilst well-made saws, burins, axes and picks were frequent. With them occurred a polished adze, a polished flake knife, a harpoon barb, and a curious barbed arrowhead—an assemblage that was distinctly puzzling, but I suggested "as a working hypothesis that we are here dealing with that somewhat nebulous period when the earliest neolithic (Tardenoisian) is evolving into the full neolithic". Visits to the site by the Abbé Breuil and Miss D. (now Professor) Garrod confirmed this view and, as knowledge of the Danish sites increased, it became clear that Kelling was of mesolithic age and of Maglemose type. A. L. Armstrong called my attention to the striking similarity in design and technique between the Kelling implements and those in Copenhagen Museum from Mullerup; a subsequent visit to Denmark allowed me to confirm the resemblance. Dr. J. G. D. Clark remarks "The great quantity of worked flints on the site suggests that we may have to deal with a strong centre of flint working which may well have persisted into the beginning of a new period," and he adds, "Typologically the Kelling industry presents very close analogies to that from Duvensee near Lübeck, though it probably flourished at a slightly later date." Implements of Kelling type—picks, cones, flakes and points have been found sporadically in the surrounding areas and these may have been made on the flaking site. Muckleburgh Hill has yielded a few whilst the road cutting above Weybourne Springs provided a number in situ, including a leaf-shaped arrowhead.

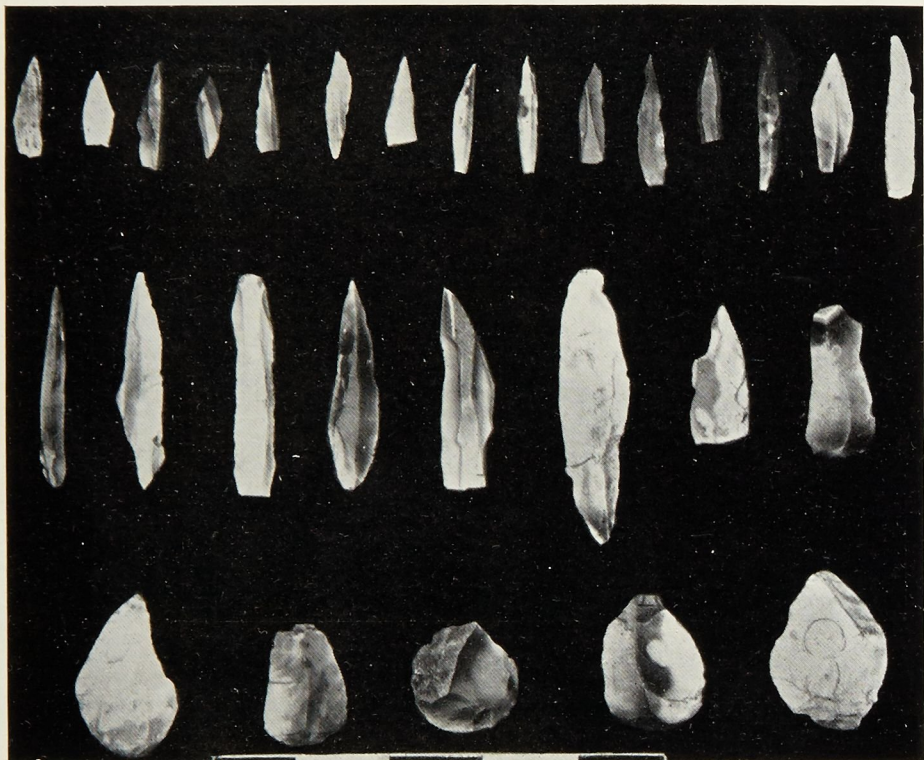
In 1926, W. G. Clarke and H. H. Halls found another river-side flaking site by the Yare at Bowthorpe, half a mile south-west of Bowthorpe Hall. The soil, of stony gravel, made detection of small specimens difficult but the technique and the implements accord well with those from Hellesdon and Sparham. Here again the presence of polished implements occurs, for H. H. Halls found a broken axe nearer the river level, whilst at a later date I picked up a fine adze a hundred yards from the main site.



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PLATE I

- No. 1.—A “gros hache-burin” of fine banded flint, Kelling. F. H. Barclay.
- No. 2.—Central portion of polished axe of coarse cherty flint, Kelling.
- No. 3.—A beautifully symmetrical polished axe, 4 in. long, Bowthorpe.
- No. 4.—Central portion of polished axe with flattened side edges, slightly yellow stained, Bowthorpe. H. H. Halls.
- No. 5.—Boldly flaked adze, Bowthorpe. H. H. Halls.
- No. 6.—Typical cone-pick, Kelling.
- No. 7.—Flaked axe; tranchet flake scar, Kelling.
- No. 8.—Symmetrical flaked axe, Kelling.
- No. 9.—Boldly flaked axe; tranchet flake scars 4 in., Kelling.
- No. 10.—End of finely polished axe; the edge is rounded, not sharp and probably deliberately prepared for use in skinning large animals to avoid cutting the pelt. Sparham.
- No. 11.—Lustrous flaked axe; tranchet flake, Sparham.
- No. 12.—Finely flaked symmetrical axe; slight polishing, Sparham.
- No. 13.—Finely flaked axe, tranchet end, Kelling. F. H. Barclay.
- No. 14.—“Hache-burin”, showing tranchet flake scar, Kelling.
- No. 15.—“Hache-burin”, Kelling.
- No. 16.—Flaked axe, large tranchet flake scar, Kelling.
- No. 17.—Large adze, lower face orange-stained thermal scar; upper face boldly flaked with tranchet scar; an unusual specimen, Kelling. F. H. Barclay.
- No. 18.—Triangular section pick; blackish grey lustrous flint, Kelling.
- No. 19.—Triangular section pick, dull grey, iron-stained arrêtes Morston.



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PLATE II (ALL KELLING SPECIMENS)

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| <i>Top line</i> | { | “Points”—narrow flakes with one edge left sharp and the other blunted by steep flaking, somewhat like penknife blades. |
| | | Nos. 1 and 2.—“Points”. |
| | | No. 3.—Delicate flake with signs of usage. 3 in. long. |
| | | No. 4.—Symmetrical flake, trimmed for piercing, probably for use as lance point. |
| <i>Middle line</i> | { | No. 5.—Burin (engraving or skin-cutting tool). |
| | | No. 6.—Long worked flake. |
| | | No. 7.—Delicately worked harpoon barb; intended for insertion in wood or bone harpoon head. |
| | | No. 8.—Steeply flaked grattoir. |
| <i>Bottom line</i> | { | No. 1 and No. 5 are tranchet flakes, removed by a sideways blow at the cutting end of an axe for resharpening purpose. |
| | | Nos. 2, 3, 4.—Typical scrapers. |

In 1931, whilst visiting with Dr. J. Solomon the raised beach which he had discovered lying below the brown (Hessle) boulder clay at Morston, I found on the surface implements of Kelling type. The clayey soil made it difficult to detect small specimens but in the cliff section a number were found in situ, giving definite evidence that the industry was later than the deposition of the latest glacial boulder clay. Isolated specimens of typical mesolithic technique were found by H. H. Halls at Salhouse and by the writer at Old Costessey adjoining the Wensum, and also at West Runton, but the flaking sites that produced these have not yet been detected. Others were collected by Mr. Weeks in the Waveney valley. The flint mining sites at Grimes' Graves and Great Melton show elements, particularly in the tranchet trimming, of mesolithic technique.

MICROBURINS. The scarcity on Norfolk flaking sites of the so-called "microburin", so typical of the geometric microlithic industries in general is striking. The suggestion that this scarcity is only apparent and not real, and due rather to the difficulty of detecting such small specimens among the flinty subsoils of most of the sites hardly holds for those such as Kelling, where much material was sifted, and where the abundance of worked flint has attracted field workers long familiar with microliths. The ordinary technique of manufacture of worked points resulted in the production of a microburin for each point so made, but among the hundreds of points from Kelling only a few possible microburins have been claimed and even these have been explained away as accidental, so that it appears probable that the method of manufacture adopted differed somewhat from those which resulted in the mass production of the microburin.

CONCLUSION. It appears that at the end of the ice age, Norfolk, from which palaeolithic man had long withdrawn, was colonized by mesolithic hunters from the Baltic area wandering westwards across the North Sea plain. These immigrants were reinforced at intervals by later arrivals bringing new inventions and new ways of living, until a knowledge of agriculture, of domestic animals and of pottery, together with the polishing of flint implements, gave them soon after 3000 B.C. the main characteristics of the neolithic cultures. Thus the true neolithic in Norfolk was probably of limited duration before bronze-using arrivals ushered in the latter culture.

I must express my thanks to Mr. T. Wake for the plates illustrating this paper.