

NOTE

A Mesolithic site at Merland Rise, Tadworth

Introduction

This short paper describes the results of an archaeological evaluation that produced traces of a previously unrecorded Mesolithic worked flint scatter at Merland Rise Recreation Ground, Tadworth (TQ 2340 5750) (fig 1). The work was conducted by Wessex Archaeology in February 2015 to satisfy the archaeological planning condition imposed on a planning application for housing development. Seven mechanically-excavated trial trenches were dug along the east side of the site and a further eleven to the west to establish the presence and date of any archaeological remains within the area and assess their importance.

The worked flints were discovered on the eastern part of the site, which comprised an irregular block of land situated at *c* 175m OD. This location occupies the south face of a gentle eminence that rises to 180m OD within the dip-slope of the North Downs. The view dominates an extensive network of coombes that drain from the crest of the North Downs northwards to the Thames Valley. The geology lies at a point where the Upper Chalk is capped by a combination of Thanet Sand and Clay-with-Flints (British Geological Survey Sheet 286). Preliminary survey of archaeological records in the immediate area confirmed multi-period activity extending from the Palaeolithic to the medieval period.

The trial trenching produced a collection of 69 struck flints, which were recovered from five contexts in trenches 2, 3 and 4 at the north-eastern end of the site (fig 1). The two largest groups of material, containing 58 pieces, were found in the filling (408) of a linear ditch (406) and a tree-throw hole (409) (context 410) in trench 4. The ditch contained a residual sherd of medieval pottery, but was otherwise undated. Significantly, three small groups of material were recovered from the surrounding yellow/grey sand and clay subsoil (202, 302 and 402). No other features or finds of interest were identified in any of the other trial trenches.

The worked flint

The artefacts are unpatinated or only lightly patinated with no edge damage to indicate that they have undergone movement in the soil since their deposition; only one artefact, a tranchet axe (302), is more ‘weathered’ than the remainder. This suggests that the artefacts recovered from the ditch and tree-throw hole were derived from a relatively undisturbed flint scatter contained in the subsoil, albeit possibly partially truncated by ploughing.

The artefacts are made from good quality flint, which is covered by chalky cortex that is dappled black/brown. This surface appearance indicates that the raw material was undoubtedly obtained from the Clay-with-Flints capping, rather than direct from the Chalk.

Technologically the assemblage demonstrates characteristics of a blade or bladelet industry (table 1). The three blade/let cores from context 408 are all made on large flakes, indicating that large nodules were broken up to provide blanks for blade/let cores. Despite the relatively small number of pieces involved, elements of the complete reduction sequence are present including a primary flake, a broken crested blade and rejuvenation tablets. Retouched material comprises a tranchet axe from subsoil 302 and a backed bladelet from ditch 406 (fig 2, 1–2).

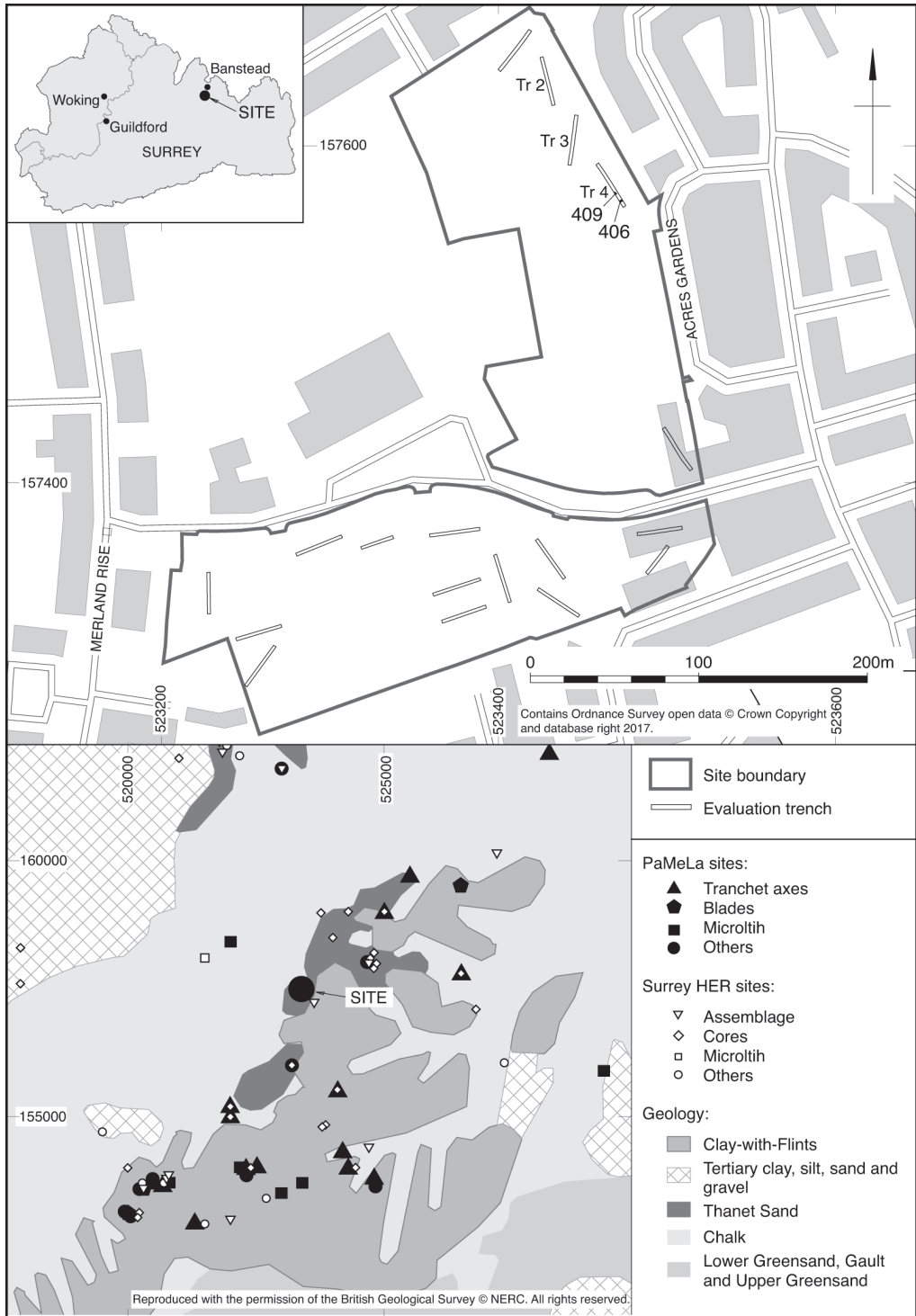


Fig 1 Merland Rise, Tadworth. Site location plan, showing Mesolithic findspots (derived from the PaMeLa database and the Surrey HER) superimposed on basal geology (derived from BGS Sheet 286). (© Crown copyright 2017. OS 100014198)

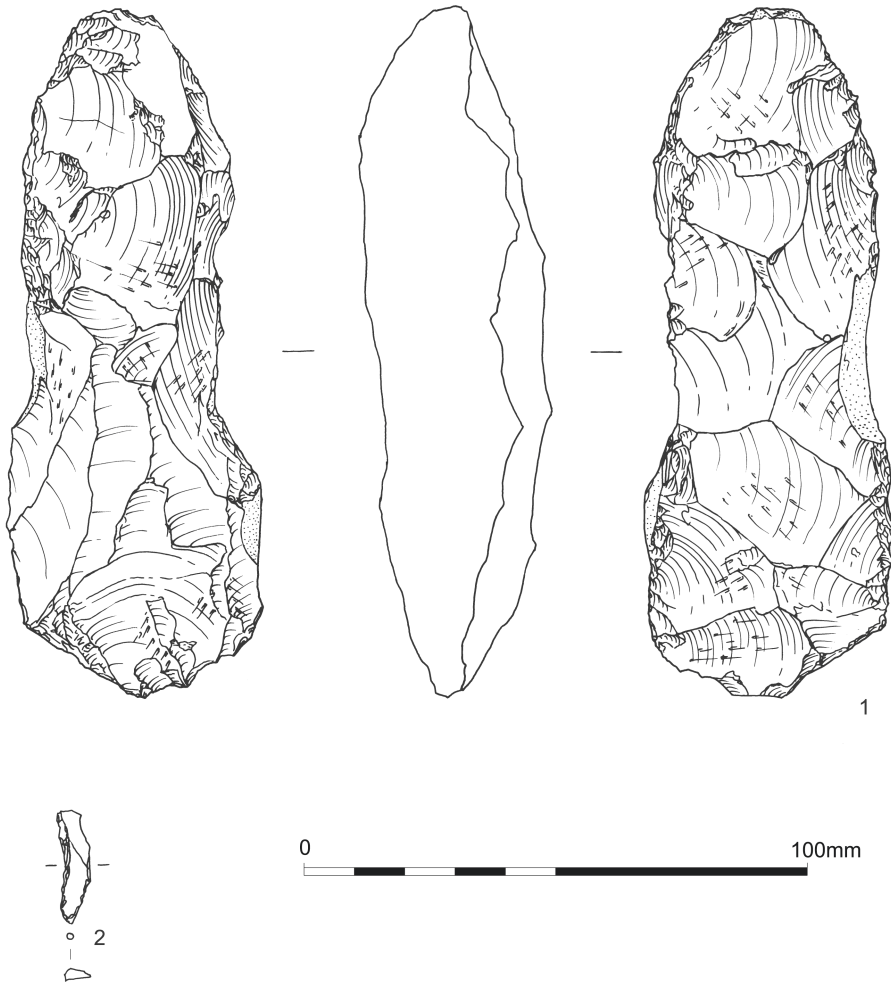


Fig 2 Merland Rise, Tadworth. Worked flint 1) tranchet axe; 2) backed bladelet.

Discussion

The recovery of Mesolithic artefacts from Merland Rise, Tadworth marks a significant discovery of what is probably a previously unrecognised open-air Mesolithic camp site. This period, extending from 8500 to 4000 BC, is most frequently represented by artefact scatters, principally worked and burnt flint, with very few cut features. As a result, the presence of these sites cannot be predicted easily and methods by which they can be examined are inconsistent.

The largest group of material was collected from a probable medieval or post-medieval field boundary ditch. These artefacts were undoubtedly derived directly from the adjacent subsoil and may represent only a small fraction of the material remaining in that deposit, as confirmed by similar material recovered from subsoil in trenches 2, 3 and 4. Some vertical and horizontal disturbance of artefacts is likely to have occurred since the objects were discarded. This occurs as a result of sediment composition (Barton & Collcutt 1992), local gradient and former land use. However, the lack of edge damage indicates that movement was probably limited and artefacts are unlikely to have moved far from where they were discarded.

Table 1 Distribution of flint types by context

Context	202	302	402	408	410
Flake core	–	–	1	–	–
Blade/let core	–	–	1	3	–
Blade	–	–	–	6	2
Broken blade	–	–	–	6	1
Bladelet	–	–	–	1	–
Broken bladelet	–	–	–	1	1
Flake	2	–	3	16	1
Broken flake	–	–	1	11	4
Crested blade	–	–	1	–	–
Rejuvenation flake	–	–	–	2	–
Tranchet axe	–	1	–	–	–
Backed bladelet	–	–	–	1	–
Chip	–	–	–	1	1
Debitage	–	–	1	–	–
Total	2	1	8	48	10
Burnt flint	–	–	5 (174g)	1 (2g)	1 (70g)

Artefacts were recovered from three adjacent trenches, which covered a distance approaching 100m. This observation, in itself, is of interest, but provides no indication of whether the material was derived from a single dispersed spread, a collection of individual scatters or a palimpsest of scatters, representing multiple visits; all are possible.

The technology and retouched tools of this small assemblage indicate a date at some point within the Mesolithic period. The date is strengthened by the location of the site within the broader landscape. The distribution of 81 Mesolithic findspots within 6km of Merland Rise that are entered on the Surrey HER database, when superimposed on the basal geology, indicate that Mesolithic activity frequently occurred along geological boundaries, which at Merland Rise comprise Chalk, Thanet Sand and Clay-with-Flints (fig 1). This pattern is confirmed by 24 Mesolithic records derived from the Palaeolithic and Mesolithic Lithic Artefact database (PaMeLa). These fringe areas were undoubtedly recognised as providing the benefits of three contrasting ecosystems. Although the Chalk is frequently viewed as an area where Mesolithic activity is thinly represented, Care (1979) demonstrated that Mesolithic groups habitually exploited upland areas of Clay-with-Flints for stone tool production, especially tranchet axes. Sandy geologies have traditionally been recognised as providing favourable locations for Mesolithic occupation, most notably on the Wealden Greensand, immediately south of the North Downs escarpment (Clark & Rankine 1939; Harding 2006). The distribution of Mesolithic findspots from the Tadworth area reflects these trends. Artefacts are sparse on the Chalk, while records are concentrated around outliers of Thanet Sand and at the boundaries of the Clay-with-Flints and Chalk. The artefact distributions from the two databases have been compiled primarily from surface finds, and frequently refer to tranchet axes, which are large, easily identified objects, and are especially prevalent on the Clay-with-Flints. However, records in the Surrey HER also include locations where tranchet axes were found with blades and cores, which are plotted as an ‘assemblage’ on figure 1. These artefact classes, which are both present at Merland Rise, provide the strongest indicators of camp site locations.

These collective results establish the area around Merland Rise as one of relatively high potential for the recovery of Mesolithic material and consequently of considerable interest for the distribution of Mesolithic activity on the North Downs. Despite this potential, Mesolithic material has not been recorded from undisturbed locations and rarely from controlled archaeological excavations with most discoveries being predominantly of residual material in prehistoric and Romano-British features (Stansbie & Score 2004; Cramp 2004, 204; Mathews & Bashford 2003; Oxford Archaeology 2014). Such opportunistic discoveries

from Clay-with-Flints on the North Downs can be matched by those made fortuitously at New Ash Green, Kent (Harding 2015), approximately 50km east of Tadworth, during construction of the Hadlow–Farningham pipeline. This site, which contained core tools, blades and microliths, was located at the edge of a probable coombe that drained north towards the river Thames, thereby replicating not only upland exploitation of Clay-with-Flints, but also technology and a location offering improved visibility across the wider landscape. These locations are unlikely to have formed major long-term settlements, possibly lacking a permanent water supply, but functioned as short-term bases where flint was worked, tools refurbished and hunting undertaken. Similar patterns, where coombes and spring heads were integral parts of the landscape use, have also been noted on Clay-with-Flints and Reading Beds on Cranborne Chase, Dorset (Green 2000).

The recent discoveries at Merland Rise and New Ash Green have demonstrated that there is clearly potential for more sites of this type on the North Downs. These examples, which were apparently of a single period with minimal disturbance, were both discovered during evaluation or watching brief projects. The presence of Mesolithic sites, which are often contained within subsoil deposits and comprise only relatively few, small artefacts, can be overlooked. Worked flint assemblages contained within the upcast of machine-excavated trenches can remain unseen unless they are exposed following rain. In other cases, artefacts from subsoil contexts may be regarded as unstratified or residual requiring no supplementary excavation.

There remains a pressing need to recognise such artefact spreads and employ methods by which they can be evaluated before decisions are made to determine the need for further re-examination. Test pits remain a relatively easy and relevant methodology. Gerrard and Aston (2007) reviewed the use of test pits and employed them successfully to investigate development of settlement within Shapwick, Somerset. The technique has also been used at Denham in the Colne Valley and at Eversley in the Blackwater river valley, Berkshire to locate and assess Mesolithic flint scatters. The results have confirmed that a supplementary gridded test pit strategy, with sieving, can provide a cost-effective methodology by which the presence, distribution and density of material in a subsoil artefact scatter can be established.

The discoveries at Merland Rise were unexpected, but remain significant. It is imperative that potentially undisturbed sites, often in subsoil deposits, are recognised and that they receive an appropriate response to ensure that their potential is maximised.

The archive

There is currently no museum in the area able to accept the project archive. Therefore, the archive will be retained at the office of Wessex Archaeology until a suitable repository can be found.

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