Excavations on Avebury Down, Avebury, Wiltshire, July-August 2017

An interim report



Living with Monuments Project September 2017











Allen Environmental Archaeology



LMP Reports 2

Living with Monuments Project

The *Living with Monuments Project* is a joint venue between researchers in the Universities of Southampton, Leicester, Ghent and Cambridge, Allen Environmental Archaeology and the National Trust. It is funded by the Arts & Humanities Research Council with support in kind from the National Trust and the University of Ghent.

The project's aim is to redress a critical imbalance in our knowledge of life and cultural landscapes during the Neolithic and Early Bronze Age (c.4,000-1500 BC). Accounts of these periods are dominated by interpretive frameworks devised to explain the creation of ceremonial and funerary monuments, which form the most visible and tangible part of its archaeological record in many regions. By contrast, knowledge of the character of contemporary settlement and other non-monument focussed activity lags behind. The project will redress this imbalance through a coherent and innovative programme of targeted fieldwork and reassessment of existing data within one landscape that is famed for its monumental architecture: that of the Avebury region in Wiltshire.

Introduction

The fieldwork outlined here constitutes the first substantive excavation of the AHRC-funded *Living with Monuments Project* (LMP). The LMP developed out of an earlier programme of research entitled the *Between the Monuments Project* (2007-2015) which: investigated an intensive Neolithic and Early Bronze Age artefact scatter bisected by the line of the West Kennet Avenue – the so-called West Kennet Avenue occupation site (Gillings *et al.* 2014, 2015 a and b); evaluated more diffuse Neolithic occupation traces in Rough Leaze, to the east of Avebury (Pollard *et al.* 2012); and undertook surface collection on the Foot of Avebury Down (Gillings *et al.* 2014), which formed the initial stage of the project fieldwork presented here.

The aim of the *Living with Monuments Project* is to redress a critical imbalance in our knowledge of life and cultural landscapes during the Neolithic and Early Bronze Age (c.4,000-1500 BC) (Appendix 1). Accounts of these periods are dominated by interpretive frameworks devised to explain the creation of ceremonial and funerary monuments, which form the most visible and tangible part of its archaeological record in many regions. By contrast, knowledge of the character of contemporary settlement and other non-monument focussed activity lags behind. This project will redress this imbalance through a coherent and innovative programme of targeted fieldwork and reassessment of existing data within one landscape that is famed for its monumental architecture: that of the Avebury region in Wiltshire.

The specific questions to be addressed are:

- 1. Can we develop a detailed understanding of the extent, scale, density, character and tempo of human settlement in the core area of the Avebury landscape during the Neolithic and Early Bronze Age?
- 2. What was the relationship between landscape occupation and monument building, both in terms of how monument building impacted on the scale and composition of settlement (e.g. drawing people and resources into the region), and the way that settlement imparted a history to places that could lead to subsequent monumentalisation?
- 3. How was the process of living within this landscape enacted in relation to natural phenomena such as the distinctive local sarsen stone spreads, woodland, other vegetation regimes, springs, streams and rivers?
- 4. Can we provide, through the mapping of sedimentary deposits and the establishment of fine-grained palaeo-environmental sequences, robust estimates as to the likelihood of where well-preserved traces of prehistoric activity might be buried or masked?
- 5. In order to overcome the perception of Neolithic and Early Bronze Age settlement and other routine practices as ephemeral and essentially passive and static compared to the active and dynamic practices of monument building, can we generate diachronic accounts that foreground the social complexities of lived life (networks, politics, mobilities, identity formation, etc.)? Essentially, can we be more ambitious in the way we engage with such evidence?
- 6. Linked to the above, how can a regional study of this kind contribute to the development of widely-applicable methodologies and interpretive frameworks with which to interrogate the often intractable traces of settlement during these periods?

There exists a close tie with agenda items identified in the recent Research Framework for the Stonehenge, Avebury and Associated Sites World Heritage Site (Leivers & Powell 2016), specifically agenda items C.2 and C.3 which relate to better understanding of the scale, tempo, duration and composition of Neolithic settlement within the WHS, and the relationship between settlement and monuments.

Through work at Rough Leaze, at the West Kennet Avenue occupation site, and in the Winterbourne valley during Easter 2017, we have already acquired data that begins to address some of these questions. However, in order to develop even base-level understandings of settlement activity contemporary with the region's great monuments (e.g. issues of location, preservation, date, duration, associated activities, residential composition) requires further investigation of likely occupation/residential sites. The flint scatter on the 'foot' (mid-slope) of Avebury Down/Big Penning c.1.2km to the east of Avebury (SU 114703) is one such site (Figure 1). While little known, its commanding location, overlooking the Avebury henge, Waden, Folly and Windmill Hills, and the dry valley running south to West Kennett, along with the distinctive range of lithic implements recovered from it during the early 20th century, marks it out as a site of great potential significance.

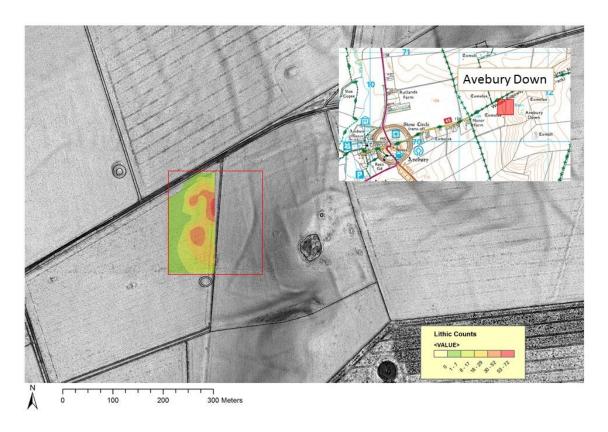


Figure 1 – Location of Avebury Down scatter site

Background

The foot of Avebury Down/Big Penning flint scatter was identified in the 1920s by H.G.O. Kendall and W.E.V. Young. They recognised a discrete but dense scatter of Neolithic flintwork, recovering 250 scrapers, 37 piercers, 24 rods/fabricators, 11 leaf-shaped and 21 transverse arrowheads, and a relatively large number of ground and flaked axe fragments (31 and 25 respectively). Telling of collection policies of the time, debitage is under-represented among the 818 pieces recorded by Holgate in museum collections (Holgate 1988, table 4). The scatter was not investigated as part of the Holgate and Thomas 1983 survey (Holgate 1987), nor has it been subject to any other form of systematic investigation, its precise position being effectively 'lost' since the 1920s. As a result, it is unlikely to have suffered the same degree of depletion through casual collection as other major lithic scatters such as that on the southern slope of Windmill Hill (Whittle *et al.* 2000).

Topography and geology

The site sits on the westerly-facing mid-slope of Hackpen/Avebury Down, between 175-185m O.D. The solid geology here is Holywell Nodular Chalk Formation and the New Pit Chalk Formation, with the junction to the Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation just up-slope to the east (BGS). At other points along this interface (e.g. Overton Hill and Knoll Down) nodular flint outcrops, and the potential accessibility of workable stone provides one reason for the scatter's location and, if being produced here, the number of flaked axes previously recovered. Overlooking the henge and southern slopes of Windmill Hill, the site occupies a commanding and significant landscape location.

The site extends across the boundary of two fields. That to the west is currently under arable, while up-slope to the east the ground is under pasture.

Surface collection

The scatter's position was relocated in 2006, as a result of archive research by Jim Gunter, followed up with on-the-ground investigation undertaken by Ros Cleal, Joshua Pollard and Nick Snashall (further details are given in Gillings *et al.* 2014). 181 pieces of worked flint were collected in a 'grab sample' over a two-hour period. Details are given in Table 1. A number of implements/retouched pieces were recovered (accounting for 9.9% of the assemblage), including eight notched flakes, a piercer and two bifacially worked pieces, one of which might be the broken handle of a sickle or elaborate knife. The cores are predominantly irregular, multi-platform forms from which flakes had been removed; and the flake debitage is likewise dominated by hard-hammer struck flakes without systematic platform preparation.

Unit	Flake	Primary Flk.	Rejuv. Flk.	Chip	Core	Misc. debitage	Implement	Retouched	Burnt (wkd / unwkd)	Total
Nos.	107	20	7	2	15	12	11	7	-/1	181
%	59.1	11.0	3.9	1.1	8.3	6.6	6.0	3.9		

Table 1. Foot of Avebury Down: 2006 flint 'grab sample'. Chips are defined as worked pieces under 10mm in maximum dimension. Miscellaneous debitage comprises shatter fragments and flaked pieces that cannot be classed as cores due to the limited extent of working. Totals exclude burnt unworked flint.

In order to more fully evaluate the scale and composition of the scatter, systematic collection was undertaken over two days in late October—early November 2013 by a team of experienced archaeologists familiar with surface collection methodologies and worked flint recognition. Thirty-four $10 \times 10m$ squares/collection units were walked across an area that extended for $210 \times 90m$ in maximum extent within the north-eastern corner of the field where the 2006 reconnaissance had identified the core of the scatter to lie.

Initially collection unit squares were laid out on a 40m grid, starting in the northern corner of the field and offering a 6.25% coverage of the area. A strategy of more intensive coverage was then adopted for the northern 130m of the area, with the grid interval being reduced to 20m, offering 25% coverage across this zone (Figure 2). The site code was FAD-13.

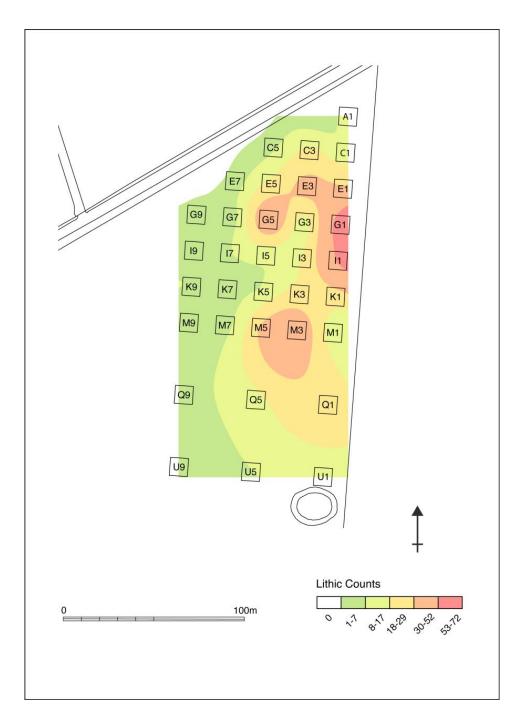


Figure 2 – Lithic densities from surface collection, Foot of Avebury Down, 2013

In total, 573 pieces of unburnt worked flint were recovered (there were an additional 12 pieces of burnt worked flint and 182 fragments of unworked burnt). Densities per collection unit ranged from 2 to 68 pieces of unburnt worked flint (Table 2). The average per collection unit was 16.9. The greatest concentration of worked flint occurs against the eastern edge of the field where densities in squares I1 and G1 reach 55 and 68 pieces per collection unit respectively (Figure 2). This corresponds with the location of a possible ring-ditch, though it is not clear whether its position has influenced the structure of the scatter (e.g. through subsequent barrow-focussed deposition). The distribution can be seen to tail-off down-slope to the west, suggesting the limits of the scatter were close to being reached here. There is also a corresponding fall-off in densities to the south; this being confirmed by a rapid visual scan of the surface outside the collection area. Given the high densities against the eastern edge of

the field, it was clear that the scatter continued into the area of higher ground pasture immediately to the east.

Unit	Flake	Primary Flk.	Rejuv. Flk.	Chip	Core	Misc. debitage	Implement	Misc. Ret.	Burnt (wkd / unwkd)	Total
Total	376	56	33	38	26	18	9	17	(12/182)	573 (585)
%	65.6	9.8	5.8	6.6	4.5	3.1	1.6	3.0		

Table 2. Foot of Avebury Down: worked flint from the 2013 gridded surface collection.

In all 95.4% of the worked flint comprises debitage (flakes, chips, cores and miscellaneous flaked pieces and irregular waste). As with the sample recovered in 2006, flakes are predominately hard-hammer struck, displaying little evidence for careful core preparation or maintenance, and with a relatively high incidence of hinge fracture. Cores likewise show evidence of expedient flake rather than blade production. There is, nonetheless, some variability in working, in part due to the presence of components of different age. Among diagnostic elements are a relatively crude Levallois-style core and a more systematically worked narrow flake core, the latter most probably of earlier Neolithic date. A small number of blades/narrow flakes are also present, along with core tablets. Of especial note given Kendall and Young's recovery of flaked axe fragments was a large axe thinning flake.

Nine recognisable implements and 17 miscellaneous retouched and utilised pieces were recovered. The former include six scrapers, two notched pieces and a possible knife. The scrapers display competent working, with three examples being formed through fine invasive/semi-invasive retouch. There is a small triangular flake with regular continuous retouch along one side to form a point, possibly a very basic oblique arrowhead. The regular tool forms present a distinct distribution, being limited to a zone that is peripheral to the main concentration around squares G1 and I1. Contrast can be made with the distribution of cores, which is largely restricted to a NE-SW zone defined by squares G3, I1, I3, K5 and M5; that is largely within the area ringed by implements.

The flint utilised is of variable quality and likely local, with a thin, weathered cortex and internal flaws resulting in occasional flake breakages and other irregularities in fracture. All but one of the pieces of worked flint is heavily patinated.

The 2006 and 2013 work was successful in relocating the scatter first identified by Kendall and Young, and in providing additional detail on its structure and composition. The detailed gridded collection suggests the core (i.e. greater than average density) of the scatter occupies an area >150 x >50m, with the highest concentrations of material occurring against the eastern edge of the cultivated area. There is a marked and apparently genuine drop-off in material (and so a sense of an 'edge' to the scatter) to the west, south and perhaps north. It was clear that the scatter must extend, even if for a short distance, up-slope into the zone of pasture to the east, where it is soon met by the edge of a later prehistoric fieldsystem (Fowler 2004).

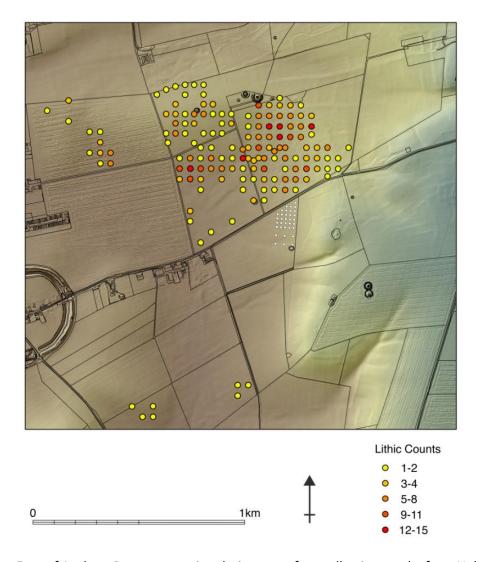


Figure 3 – Foot of Avebury Down scatter in relation to surface collection results from Holgate and Thomas 1983 survey

Taking note of the results of the Holgate and Thomas programme of surface collection, it is evident that the Foot of Avebury Down site is just the southern extent of a series of interconnected scatters running north along the edge and base of Avebury Down, (cf. Holgate 1987). These are quite difficult to 'disentangle', since they merge into each other, but they do include localised concentrations that might be seen as distinct areas of more intensive activity, the Foot of Avebury Down being one such locale (Figure 3).

Geophysical survey

Three separate geophysical surveys have covered parts of the scatter site. The first was undertaken Gunter and Roberts using earth resistance in 2006-7 (Gunter & Roberts 2007). Parts of both the western (arable) and eastern (pasture) fields were surveyed, including the area where the core of the scatter is projected to lie. At the eastern edge of the arable field, an ill-defined circular feature within the scatter zone was thought to represent a ploughed-out barrow. Immediately to the east, within the pasture field, are three high-resistance anomalies approximately 5m in diameter, which it was considered might represent large pits.

The pasture field was covered during the extensive, on-going landscape-scale magnetometer survey by Darvill and Lüth in 2013. They reported 'numerous pit-like anomalies running along the contour at about 200m OD [i.e. slightly above the area of the scatter]... It is possible that some of these anomalies represent flint mines or quarries of some kind' (Darvill & Lüth 2014, 10).

During Easter 2017 the pasture field was included within a second landscape-scale programme of work, involving electromagnetic induction (EMI) survey, directed by Philippe De Smedt of the University of Ghent. This work is being undertaken as an integral element of the project, and results are pending.

HER data

The Wiltshire and Swindon Historic Environment Record lists several sites and artefact findspots within a 300m radius of the centre of the scatter (Figure 4). These include three round barrows (MWI14621, 15693 and 14622) and a low mound that may mark the position of another (MWI14616); Romano-British pottery (MWI15584); Beaker sherds (MWI15557); and, of particular relevance here, part of a Group VI axe (MWI15522) and a 'number of Mesolithic axes' (MWI15509). Comprising 'axes or adzes', it is unclear whether the latter are in fact Mesolithic, or flaked (i.e. unpolished) Neolithic heavy duty tools. The findspot location of these is vague.

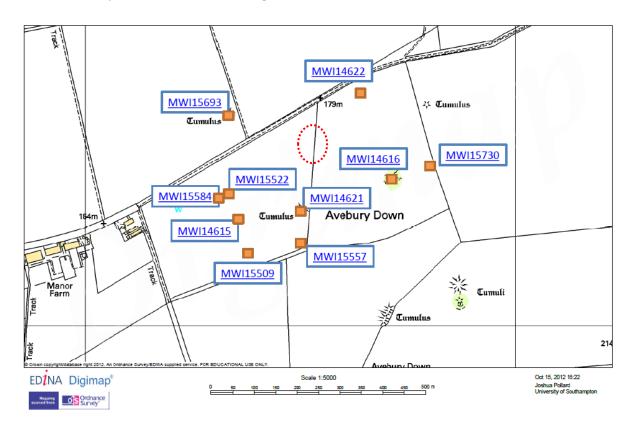


Figure 4 – Foot of Avebury Down. HER records within 300m radius. Scatter location shown in red

Research aims and objectives

The aims of the fieldwork were:

• to better characterise the flint scatter;

- to better understand its relationship to contemporary activity, both monumental and non-monumental, within the Avebury landscape.;
- to enhance knowledge of settlement and other non-monumental landscape engagements in the Neolithic of Britain.

Specific objectives were:

- 1. to define the extent of the flint scatter, and define the presence or otherwise of prehistoric buried soils, pits, and structures;
- 2. to define any internal spatial variation within the scatter;
- 3. to gain knowledge of the chronology of the activity that generated the flint scatter (i.e. date range, and whether single or multi-period);
- 4. to ground truth selected anomalies detected during geophysical surveys of the site and understand how they relate to the scatter;
- 5. to understand the range of practices that lay behind its formation (e.g. settlement, flint procurement and working, a combination of activities);
- 6. to understand how the former presence of activity here may have influenced subsequent engagements with the site;
- 7. to recover information relating to environmental conditions during the time the scatter formed, land-use and erosion/agricultural impacts, and to characterise histories of adjacent (up-slope) landuse via study of colluvial deposits and buried soils, if present.

Excavation Results

Methodology

The approach taken builds on experience working on the West Kennet Avenue occupation site (Gillings et al. 2014, 2105), utilising a methodology that affords equal attention to both 'surface'/soil artefact scatters and sub-soil features and involves excavation of the scatter rather than the routinely-employed strategy of machining off topsoil/ploughsoil. It recognises that much of the record of activity is 'locked' within artefact scatters; that cut features likely represent exceptional events and need not register the totality of presence (i.e. all occupation or activity phases); and that there is a necessity to integrate surface and sub-surface traces.

Excavation took place over a period of three weeks during late July to mid August 2017. All the work, with the exception of backfilling, was undertaken by hand. The site code is FAD-17.

The original Project Design specified the excavation of 17 trenches and test pits (five 10 x 10m, four 5 x 5m and eight 2 x 2m) over an area of 80 x 80m, with a focus on the core of the scatter identified in the arable field during surface collection in 2013. Adjustments were made to this trenching plan in response to both the archaeology and local ground conditions. In particular, the presence of a wheat crop in the western arable field limited access here, and so only one trench (designated Trench 9, and 21 x 5m in extent) out of a planned total of six was eventually excavated. It also became apparent that the burrowing activity of badgers had created severe disturbance across the upper slopes of the arable field where excavation was to be concentrated. Resources were instead focussed on the eastern pasture field. Early in the excavation it was evident that the scatter continued into this area, with high densities of worked flint and even some prehistoric pottery being present within the soil. With a long history of being under pasture, this eastern field has witnessed episodes of cultivation, but of a limited duration: during the late 1980s to late 1990s and perhaps as a result of arable extension during the World Wars (Judy and Tony Farthing pers. comm.). Two of the planned 5 x 5m trenches in the pasture field were enlarged to become 10 x 10m areas, providing a north-south run of three 10 x 10s (Trenches

1-3) spaced 20m apart. A single line of 2 x 2m trenches (numbers 4-7), spaced 25m apart, was positioned parallel to Trenches 1-3, and 20m to the east of the latter. A single 15 x 2m trench (Trench 8) was located further up-slope to the east in order to investigate a linear earthwork, the apparent bank of which it was hoped might seal a buried soil of later prehistoric date. Taken together, Trenches 1-7 and 9 facilitated the evaluation of a 90 x 65m area of the scatter (Figure 5). The combined trench area (excluding Trench 8) of 421 sq. m. comprises 7.1% of this sampled zone, which itself is likely a small proportion of the total scatter site.

Further details of the excavation methodology can be found in the Project Design (Gillings et al. 2017).

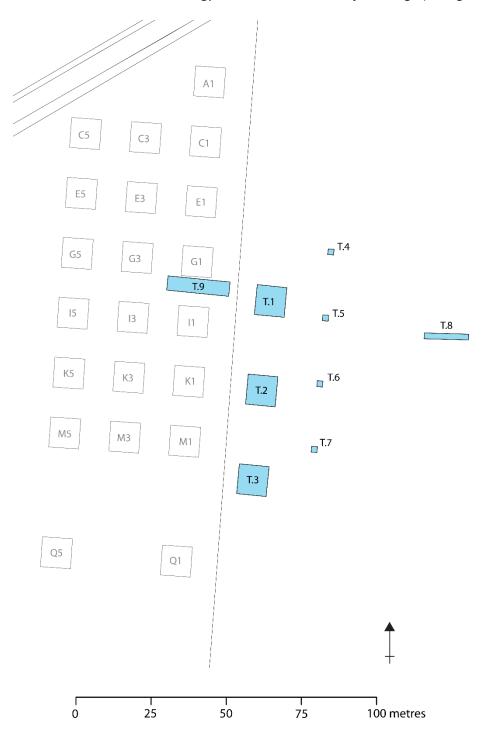


Figure 5 – FAD-17 Trench locations. Surface collection units shown in grey outline



Figure 6 – Excavation in progress, looking north with Trench 3 in foreground

Excavation results

The soil and scatter

Within the pasture field the soil was heavily worm-sorted: the upper part (contexts 100, 200, etc.) comprising a stone-free, very dark grey-brown loam around 0.07m thick; the lower (contexts 101, 201, etc.) a similar clay loam with abundant small chalk and occasional flint, around 0.12m thick (Figure 6). It was within the stony lower part of the soil profile that the bulk of the worked flint and other artefactual material occurred. Finer lithic debitage was usually concentrated towards the base of the profile at the interface with the chalk natural. In Trench 9 was an actively worked ploughsoil (context 900), being a grey-brown silty clay with common and poorly sorted small chalk and occasional flint. Between 0.25-0.3m thick, this was marginally more chalky in the lower 0.1m of the profile, where a 'lower ploughsoil' looked to be present. Only very thin (c.0.05m) colluvial deposits are present in the bottom of the valley downslope from the site, indicating the soil on the slope sides has never been thick and that erosion has been minimal (observations by Mike Allen and Charly French, August 2017).

A systematic programme of artefact recovery and geochemical investigation was undertaken on the soil/ploughsoil. All soil in Trenches 1-7 and 9 was hand excavated on a 1m grid in order to provide spatial control to the recovery of artefacts (primarily worked flint, pottery and sarsen), the soil being sieved through a 10mm mesh. 20 litre samples of soil were taken from a sub-set of squares (comprising 13% of squares in Trenches 1-3 and 9, and 25% or a single square in Trenches 4-7) for wet sieving in order to recover lithic microdebitage. Magnetic susceptibility readings were measured on site and soil chemistry samples taken for subsequent analysis, using the metre grid established for soil excavation.

Densities of worked flint were moderate to high across all the trenches (in the order of c.10-60 pieces per square metre). Cursory examination during excavation and finds washing suggests an unusually high percentage of debitage (flakes and blades), cores, flaked pieces and shatter fragments among the lithic assemblage. This is likely to be of mixed date, certainly spanning the 4th to 2nd millennia BC, with some pieces (e.g. core tablets) being of likely late Mesolithic date. Flakes are abundant, though a few blades and narrow flakes are also present, along with occasional single-platform blade and narrow flake cores. From Trenches 2 and 3 are a small number of broad thinning flakes from the working of either discoidal cores or large bifaces. Flakes with facetted platforms and multi-directional dorsal flake scars in Trench 3 are of likely middle or early-part-of-late Neolithic date. All the flint is heavily patinated. The bulk is certainly locally-sourced; and indeed good-sized and workable flint nodules outcrop from the chalk just up-slope from the main excavation area (they are present in Trench 8). The frequency of thermally flawed worked flint also suggests that surface nodules were regularly being worked. It is likely that the availability of this flint provided a focus for much of the activity here, and accounts for the rather 'industrial' balance of the assemblage.

Three barbed-and-tanged arrowheads came from the soil in Trench 1 and a fourth from Trench 2. This small group includes an exceptionally fine arrowhead of Green's Conygar type d, and a very crude example likely produced by a novice flint worker. A fine plano-convex knife and another with scale-flaking along one edge, again distinctively Early Bronze Age, also came from Trench 1. Of the remaining formal tools are a small number of scrapers, including a notable concentration in Trench 9, and a chisel or large bifacially flaked rod from Trench 1.

Small amounts of prehistoric pottery were also recovered from the soil in Trenches 1-3 and 9. A few sherds may be of Middle or Late Bronze Age date, but the bulk comprises small sherds of Peterborough Ware. The distribution of the latter formed loose clusters in the central and NW corner of Trench 1 and the NE corner of Trench 2.

Full analysis and reporting of this material will be undertaken in due course.

Features

Anthropogenic and natural features were present in all the large trenches (1-3, 8 and 9). These include six Neolithic - Early Bronze Age pits, a large late Neolithic post-hole, stake-holes, two tree-throws and other natural features. Not all features were excavated within the time available, so it remains possible that a handful of other pits and post-holes remain unidentified.

It is worth pointing out that despite the solidness of the chalk natural in Trenches 1-3, features, or at least their full extent, were not always easy to detect, partly because of thin smears of chalk over their edges and the weathered topmost profile to the chalk. Animal burrowing was evident in every trench, though particularly pronounced in Trench 2 and the western half of Trench 9. In the latter, recent badger activity has created severe disturbance. The area is also scored by deep ploughmarks running parallel to the two axes of the fields.

Excavated and planned features are described by trench, beginning with Trenches 1-3 and 9, followed by Trench 8.

Trench 1

Trench 1 contained two Neolithic-Early Bronze Age pits (F.2 and F.12), a shallow pit or scoop (F.5), a pair of tree-throws (F.3 and F.4), and four uninvestigated features (F.17-20) that were considered at the time to be natural (Figure 7). Most of these were clustered in the centre and SE corner of the

trench. Of the two pits, F.2 is provisionally dated to the middle Neolithic on the basis of sherds of a Mortlake bowl found placed within it. The fill of F.12 included fresh worked flint and cattle bone, but pending radiocarbon dating the pit can only be assigned a broad Neolithic-Early Bronze Age date. It is likely the tree-throw pits belong to a Mesolithic or early Neolithic horizon. Similarities in form and fill suggest they are contemporary and created during the same fall event. Both appear to have blown over from the NE. Significant quantities of burnt flint within their fills show some human activity prior or close to their formation, depending on whether this material is weathered in or in situ. They remained as slight hollows long enough to accumulate worked flint and a little later 2nd millennium BC pottery within their topmost fills, and would certainly have been visible earthworks when the two pits were dug. Details of the features are as follows, beginning with pits F.2, F.12 and F.5.

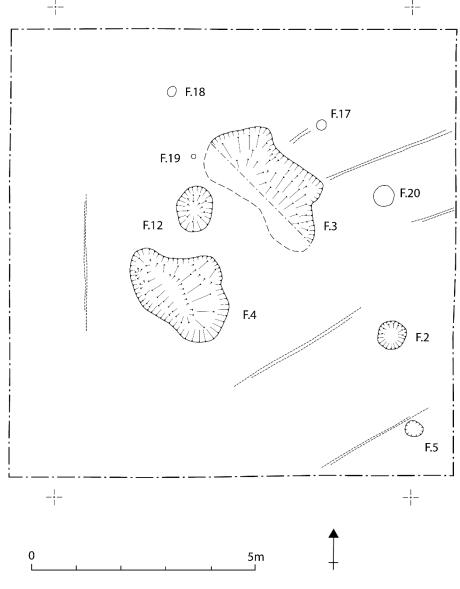


Figure 7 – FAD-17 Trench 1 features

F.2. Sub-circular pit (cut [110]), 0.7m in diameter and 0.22m deep, quite regularly dug. Sides very steep in upper profile, continuing so on the southern side, elsewhere becoming moderately steep in the lower profile. Sides merge with a flat base, though with a more defined junction on the southern side. Lower fill 105 was a grey-brown clay loam, quite friable with a little small chalk and flint. Upper fill 104 was a dark grey-brown clay loam with common chalk pieces and some flint. The two fill components likely represent blocks of original turf (105) and sub-soil (104), that have been returned in reverse order. Sarsen, bone, pottery and flint were all present in the fills, with elements of the assemblage

forming a placed deposit (Figure 8). Cattle bone and some smaller sherds of pottery were placed at the interface between the two fills. On the base were two larger sherds of the same Mortlake Bowl, placed outer surface down, and pieces of rounded sarsen. On the east side, one large split block of sarsen was set upright within, and supported by, the fill.



Figure 8 – Pit F.2 showing sarsen and pottery deposit on base

F.12. Oval pit (cut [116]), 1.1 x 0.9m across, 0.35m deep, and quite regularly dug. Sides moderate to steep in upper profile, becoming shallower with depth and merging with a slightly dished base (Figure 9). The primary fill 117 was of loose chalk rubble. Over this was 115, a thicker deposit of grey-brown clay loam with abundant chalk rubble, relatively compact and rather more humic in the top 0.1m. This was increasingly loose with depth, and certainly results from deliberate backfill. Within the centre of 115 was a concentration of flint debitage, associated with two large pieces of cattle bone (one a scapula). Given its position, it may have been dug through the remnant upcast of tree-throw F.3. A small animal burrow entered the pit from the NE side.



Figure 9 – Pit F.12 (foreground) under excavation

F.5. A very shallow pit or scoop (cut [109]). Sub-circular, 0.35m diameter, 0.08m deep, sides moderate to shallow merging with a dished base. Fill 111 was dug out during excavation of the overlying soil 101, and so is not recorded. A large sarsen hammerstone was apparently associated.

Tree-throws F.3 and F.4 were both of elongate lobate form, with a common NW-SE long axis, and were set 1.4m apart. F.4 was fully excavated, F.3 half-sectioned.

F.3 (cut [114]) was 3.2 x 1.8m in extent and up to 0.4m deep; **F.4** (cut [108]) was 2.6 x 1.7m, and again up to 0.4m deep. The sides of both were shallow to steep, merging with irregular, stepped bases. The edges were more easily defined on the NE sides. The basal fill of F.3, 113, was a grey-brown clay silt with abundant small, weathered chalk pieces and occasional flint. It was disturbed by burrowing, especially on the east side. That of F.4, 107, was a light grey-brown clayey silt with abundant fine chalk, powdery in places, and up to 0.1m deep. Over this was 106, a grey-brown clay silt with some small chalk and flint, and pieces of grey (burnt?) chalk. Animal burrowing had again disturbed these fills. The upper fills of both (112 and 102, respectively) comprised a compact and mixed deposit of grey-brown clay loam and fine chalk, along with occasional small flint nodules and abundant fine burnt flint. 102 and 112 represent a soil, or the base of such, which had developed over the hollows. Most of the burnt flint and other artefactual material came from this, though burnt flint was also present in the lower fills.

Trench 2

A single large pit, a series of stake-holes and several features resulting from intensive animal burrowing were revealed in Trench 2 (Figure 10). Pit F.6 was located in the NE corner of the trench. Radiating out from this downslope was a series of burrows, some of which had broken the surface and appeared as irregular cut features (e.g. F.7 and F.8). Diagonal plough-scars were especially evident here, perhaps resulting from early steam-ploughing.

Pit **F.6** (cut [206]) was roughly oval, 2.0 x 1.4m across, and up to 0.6m deep. It was extensively disturbed by animal (rabbit?) burrowing on the west and southern sides. Where surviving, the upper sides were moderate to steep, with some weathering out at the top. It was steep in its lower profile, with a relatively defined junction to a flattish base. The primary fill 203 comprised a very pale grey calcareous silt with common small chalk, quite cemented on the top, looser below. It was confined to undisturbed patches on the base of the feature. Above this was 202, a thick (up to 0.25m) grey-brown silty loam, quite friable and poorly sorted, with some small chalk and occasional blocks of chalk and flint. Lenses of chalk were present within this, and the deposit was also more chalky against the east side where concentrations of worked flint were found. The upper fill, 205, was a dark grey-brown clay loam with some chalk and flint, up to 0.1m thick. This is a remnant soil surviving in the top of the hollow formed by the feature.

The pit looks to have filled naturally, with a typical sequence of primary chalk, secondary fill and soil. Its fill was rich in artefactual material, including animal bone, worked flint and pottery. Among the latter were sherds from several Mortlake bowls and a few sherds of flint-tempered wares that may be of later 2nd millennium BC date. Its age is uncertain since the artefacts within it could have weathered in from soil surrounding the feature; but with an absence of later material there is a good chance it is prehistoric.

A number of certain and possible stake-holes in the southern and western parts of trench were excavated, each 0.05-0.1m diameter, and up to 0.1m deep. One group of five (F.26-30) described a shallow arc running over 4m, while a cluster of four to the SE of this (F.31-34) formed a short (1.3m) line.

Of the burrows, assigned a general cut number [207], these were irregular and variable in extent and depth, but in places (e.g. to the south of F.6) up to 0.5m deep. They were filled with a friable dark grey-brown clay loam, 204.

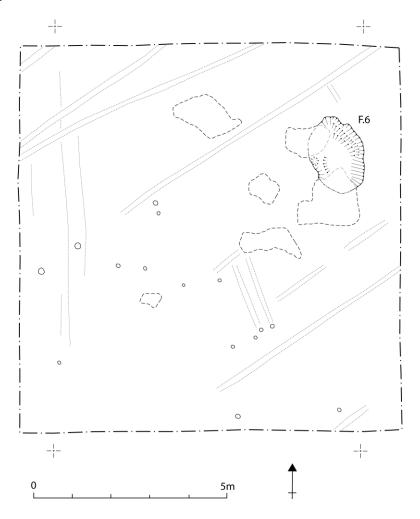


Figure 10 – FAD-17 Trench 2 features. Bold dashed outlines indicate animal burrows

Trench 3

Following removal of the soil 301 and cleaning, extensive areas of 'dirty' and seemingly disturbed chalk were visible across the eastern half of Trench 3 (Figure 11). These gave the initial appearance of resulting from tree/root/burrow disturbance, and one such area, in the NE corner of the trench was investigated as such. Designated **F.13**, this soon resolved itself into a sub-circular cut, [302], 2.7 x 2.0m and up to 0.2m deep, with a flat base terraced back into the slope. Filled with redeposited chalk rubble and soil, 303, it had the character of an artificial cut. An extension to the hollow on the west side takes in a pit, **F.14**, and large post-hole, **F.15**. The strong spatial relationship between the terrace, pit and post-hole, along with unexcavated feature **F.21** on the north side, suggests all three are broadly contemporary and related. Together, they provide the best evidence for a structure of sorts revealed during the excavation.

Pit **F.14** and post-hole **F.15** abutted each other. **F.14** (cut [308]) proved to be sub-circular, 0.6m diameter and 0.3m deep, with a shallow 'weathering cone' or recut scoop around the top. It was conical in profile, with steep sides merging with a dished base. The basal fill, 311, was a thin layer of

powdery grey 'ashy' soil with charcoal flecks. Above this, and comprising the bulk of the fill, was 307, a dark grey-brown silty clay with common small chalk, becoming chalkier with depth. Both deposits likely comprise deliberate backfill. Sealing 307, but off-set very slightly to the east of centre of the pit was a placed group of animal bone and pottery, 304 (Figure 12). 0.4m across, this included an articulated radius and ulna, potentially from an aurochs and a large sherd belonging to a rusticated vessel (likely Grooved Ware) at its centre which overlay a cattle metatarsal, rib fragments and other cattle bone on its east side. A further sherd, bone and flint flake to the east of this overlay **F.15**. It is conceivable that deposit 304 sat within a separate shallow cut, yet respected the position of **F.14**.

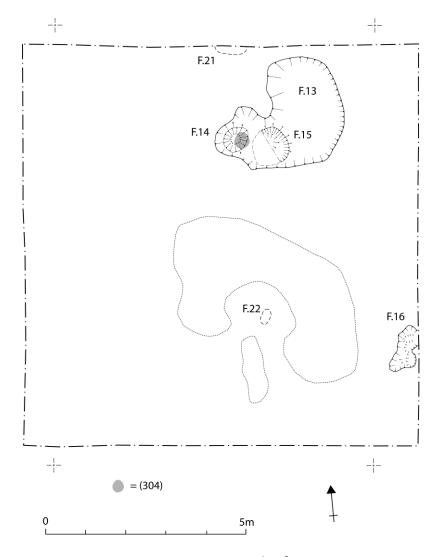


Figure 11 - FAD-17 Trench 3 features

Due to time constraints (being discovered late on the last day of digging), post-hole **F.15** was only half-sectioned. Its cut, [310], was sub-circular, 1.0 x 0.95m in diameter, and 0.5m deep, with near vertical sides and a flat but sloping base. The post packing, 312, was of a reasonable compact chalk rubble, powdery in places, with a localised soil lens against the post-pipe. In the top 0.2m, 313 formed a very compact, rammed chalk rubble with soil. Tip lines came in from the north, and half way up the fill, in 312, was an extremely worn antler pick. The post-pipe, represented by fill 309 was near vertical sided and 0.5m in diameter. It comprised a dark grey-brown clay loam with small chalk and rare flint. There was a greater concentration of chalk, including larger pieces, in the basal 0.1m.

Set against the eastern edge of the trench, **F.16** (cut [305]) was an animal burrow or small tree-throw. It was highly irregular in form, $>1.2 \times 0.6 \text{m}$ in extent; the fill 306 being a dark brown loam with some chalk and burnt flint.



Figure 12 – Bone and pottery deposit 304

Further investigation of this area is planned for Easter 2018.

Trench 9

Location within the western arable field, the top of the chalk natural in Trench 9 had seen more truncation than that in the area of pasture, especially against the fence edge. Nonetheless, a number of features had survived, including two Neolithic pits and a scatter of stake-holes (Figure 13).

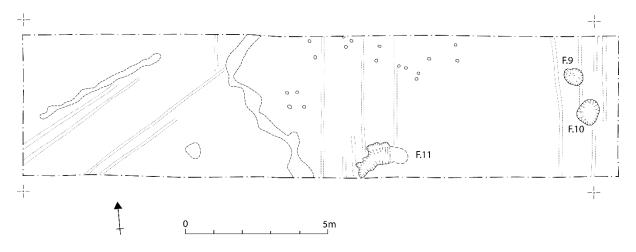


Figure 13 – FAD-17 Trench 9 features

Pits **F.9** and **F.10** were set close to the eastern end of the trench and spaced 0.6m apart. They first gave the appearance of forming a pair (i.e. being contemporaneous), but excavation revealed quite different contents, fill composition and sequences. Their creation may well be separated by a substantial interval. **F.9** (cut [904]) was oval, 0.7 x 0.6m in diameter and just 0.12m deep. Its sides were moderate, merging with a slightly dished base. It was filled with a poorly sorted dark grey-brown silty clay with common small and medium chalk and rare flint, 901, having the appearance of a rapid backfill. Worked flint, including three scrapers, was recovered from the fill, and on the base of the pit were two sherds of possible Grooved Ware.

F.10 (cut [905]) was sub-oval and slightly more substantial, being 0.95 x 0.8m in diameter and 0.25m deep. The cut followed a natural fracture line in the chalk on its SE side. In its upper profile near vertical, it became shallower with depth, and possessed a slightly dished base. The lower fill 907 was a mixed and highly friable dark grey-brown and 'burnt' dark orange-brown loam with small quantities of chalk, burnt bone, charcoal and fire-cracked flint. This likely to derive from burnt turf. Placed on top of this, on the north side, was a large fragment of quern, working surface down, next to which was a large piece of carbonised wood and fragment of burnt sarsen (Figure 14). Sealing this evidently placed deposit was 902, a dark grey-brown clay loam with variable small chalk. A number of larger chalk blocks were present on the south side. As seen with **F.2**, the process of backfill here involved inversion of turf and sub-soil.

In the centre of the trench was a cluster of 17 possible stake-holes (**F.41-57**), occupying a zone of c.6.5 \times 3.0m. These were planned but not excavated. Immediately to the south was a feature of likely natural origin, **F.11**, perhaps a tree-throw. Lenticular, 1.6m+ in length (it runs into the trench edge) and up to 0.3m deep, **F.11** (cut [906]) possessed very steep to vertical sides on the south, moderate on the north, with a slightly irregular base. It was much disturbed by animal burrows. The fill 903 was a grey-brown silty loam with small quantities of chalk and occasional flint, including some burnt pieces. The fill of the animal burrows, 908, was a loose clay loam with variable chalk. An extensive system of animal burrows, some very recently active, covered the eastern half of the trench.



Figure 14 – Quern stone in turf soil in F.10

Trench 8

Trench 8 was sited to bisect a linear earthwork located up-slope from the main excavation area. It was hoped that the earthwork might be of later prehistoric (i.e. late Bronze Age – Iron Age) date, and that remnant bank material might preserve underneath it a buried soil whose analysis would allow insight into the character of prehistoric soils on the slope sides. The earthwork can be seen to run for a distance of c.250m within the pasture field, initially north-south, then curving to the SW. It may continue in the field to the north of Green Street, here visible in lidar and aerial photography plots.



Figure 15 – FAD-17 Trench 8, showing shallow lynchet

Excavation showed the linear, designated **F.1**, to be a lynchet, and the erstwhile up-slope bank to have been removed by ploughing. In addition to a zone of 'protected chalk' it comprised a broad, shallow terrace, cut [802], c.3.0m wide and up to 0.2m deep. This was reasonably defined on the east side by a shallow to moderate slope merging with a flat base, and filled with a fine and largely stone-free greybrown clay loam (803). It is essentially undated.

Worked flint was present in some quantity from the overlying soil 801. A band of outcropping flint nodules was present in the eastern part of the trench.

Discussion

This was always going to an exercise for which the results were difficult to predict, especially in the up-slope area of pasture beyond the mapped scatter. Here we ran the risk of hitting the margins of the site. As it transpired, the flint scatter continues into this zone, with a density that is equal or even greater than that seen in the arable field. We must, however, await the analysis of the material recovered through the gridded excavation of the soil before more can be said of the scatter's density, structure and composition, and its unfolding development. In-field observations of the material as it was being excavated suggests the scatter formed through repeated visitation, flint working and deposition across at least a millennium-and-a-half, rather than a single 'episode' of activity. If

confirmed, late Mesolithic elements may extend that temporal range, as might the possibility of flint working here running into the mid and late 2nd millennium BC (hinted at by some of the pottery in the ploughsoil and tops of feature fills), associated perhaps with fieldsystems and settlements on the higher ground immediately to the east (Fowler 2004). Certain phases of activity seem well represented, or at least have an enhanced visibility because of the presence of distinctive material culture. Middle Neolithic Peterborough Ware pottery was present as scatters in the soil in Trenches 1 and 2, and in pit F.2. Grooved Ware occurred in pits in trenches 3 and 9. Early Bronze Age barbed-and-tanged arrowheads and scale-flaked knives, were present in the soil in Trenches 1 and 2, though as yet no features can be ascribed to this period.

The greatest surprise was the apparent compositional difference in the lithic material recovered during the excavation compared with earlier episodes of surface collection (by Kendall and in 2006 and 2013). Against the vast quantities of debitage, recognisable implements seemed to be few (a concentration of scrapers in Trench 9 being an exception), and items like flaked and ground axes and chisel arrowheads, which are well represented in the Kendall material, are seemingly absent from the excavated material. This balance towards debitage is unlikely to reflect the selective 'picking out' of implements during Kendall and Young's phase of investigation, not least because the pasture field seems not to have been under cultivation during their time. One can note, too, that fieldwork in 1993 on the much more heavily picked-over scatter on the southern slopes of Windmill Hill, involving both gridded surface collection and test-pitting, still produced a rich and balanced range of tools (Whittle et al. 2000). Perhaps we need to consider Kendall's site as a more localised tool-rich concentration – conceivably a focussed point of implement deposition – within the larger area of the scatter, and that this lies in the arable zone that could only be partially explored in detail in 2017. Again, these observations are provisional and processing of the artefactual material from the excavations may alter perceptions.

The dominance of debitage here (and perhaps increasing as one moves up-slope?) is surely related to the acquisition and working of flint nodules that are outcropping from the chalk at this point. Plenty of nodules were seen protruding from the chalk in Trench 8 and a good number of displaced and unworked nodules were present in other trenches, notably Trench 2. Up to c.O.4m in size, these were large enough to work effectively, and while some displayed internal flaws that would lead to uncontrolled shatter when struck, many were of good quality flint. The slopes of Avebury Down were perhaps a major source of workable flint during the Neolithic and Early Bronze Age of the region. This acknowledged, we should be wary of simply glossing the scatter as 'industrial' (pace e.g. Richards 1990). Worked down cores and debitage from the later stages of core reduction are well represented, which could indicate all stages of working were being performed here, at least some of the time. We need not envisage a 'hit-and-run' quarry model of extraction, with grubbing out of nodules, preliminary working and then removal of preforms. The aspect of the site has significance here, with its views and vantage; making it a location where more protracted stays, framed by working, gathering, observation, reflection and gossip, could feature.

And there is settlement of sorts, even if short-lived. Pottery was brought here, used and deposited. There is animal bone, even if in limited quantity, also pits, and structural traces. If prehistoric, the stake-holes in Trenches 2 and 9 could be parts of shelters or even temporary dwellings. The late Neolithic terrace and large post-hole in Trench 3 (F.13 and F.15) show greater investment and suggest the presence of more substantial structures. Time limited fuller investigation of further possible post-holes in Trench 3, though it is planned to return to complete work here in Easter 2018. There is a possibility, given the Grooved Ware associations, that the Trench 3 features belong to four-post/square-in-circle buildings (Noble *et al.* 2012) or other kinds of structural configurations. The association with a deposit containing aurochs bone hints at feasting and/or displays of prowess linked

to the structure. Its position facing directly into the eastern entrance of the Avebury henge may also mark it out as special and of elevated status.

While the specific circumstances of their digging and infilling likely relate to special acts, the pits also tell of settlement-related episodes of activity. There is variation within these. Pits **F.2** and **F.10** are linked in terms of fill process, with staged return of turf then soil, and the inversion too of artefacts (pottery outer-face down and the grinding surface of the quern placed face down). **F.9** and **F.12** share similar chalk rubble fills and a high frequency of flint. **F.14** is distinctive in its ashy basal fill and covering by a placed group of bone and pottery. **F.6**, if prehistoric, was dug and left to fill naturally. The frequency of pits and other features here is striking, occurring in all the large trenches with the exception of Trench 8. This was also hinted at in the results of the geophysical survey undertaken across the pasture field by Lüth and Darvill (Darvill & Lüth 2014). Even within the evaluated area of a little over half a hectre, if the results of our trenches are in any way representative, there could be upwards of 80 pits in this zone alone. For the scatter as a whole, numbers might run into the hundreds. In this respect, the site looks exceptional.

Despite its necessarily limited scale, the excavation has highlighted the significance and enormous potential of the prehistoric archaeology of the foot of Avebury Down. Pit and worked flint densities are very high for this region, and bespeak of a substantive and lasting (if intermittent) presence. Avebury Down needs now to be considered alongside locales such as the southern slopes of Windmill Hill as a significant place within the Neolithic and Bronze Age landscape of the Avebury region.

Acknowledgements

We wish to thank the National Trust, and Tony and Judy Farthing for allowing us to undertake fieldwork on their land. The work was funded by the Arts and Humanities Research Council (AHRC) and the Universities of Leicester and Southampton, with support in-kind from the National Trust and Savernake Forest Scout Group. Helpful advice was received in developing the Project Design from Ros Cleal, Melanie Pomeroy-Kellinger, Phil McMahon and Nick Snashall. Mike Allen and Charly French provided guidance on matters environmental and geoarchaeological. Philippe De Smedt and colleagues undertook the EMI survey of the site in advance. Numerous visitors provided helpful comment, including Brian Edwards, Dave Field, Frances Healy, Steve Marshall, Mike Parker Pearson and members of ASAHRG.

The summer 2017 fieldwork team comprised: Courtney Allardice, Mike Allen, Shannon Ashleigh, George Attard, Emily Banfield, Edrys Barkham, Dave Bennett, Ben Chan, Helen Chittock, Ros Cleal, Briony Clifton, Anwen Cooper, Georgia Day, Dani De Carle, Paul Derwent, Paul Dickinson, Judy Farthing, Charly French, Julie Gardiner, Mark Gillings, Phoebe Gilmour, Susan Greaney, Martin Green, Ben Grindrod, Philip Hughes, Peter Hunter, David James, Petra Jones, Jake Keen, Saskia Key, Lizzie Land, Maria Land, Sally Lawrence, Beth Linscott, India McDermott, Alistair Pike, Joshua Pollard, Tom Rapley, Kate Rogers, Jake Rowland, Nick Snashall, Andrew Spencer, Tia Stamatia, Jess Thompson, Mick Tizzard, Nathan Towers, Daniel Turner and Marian Valev. We would like to thank them all for their hard work and enthusiasm.

Bibliography

- Darvill, T. & Lüth, F. 2014 Avebury World Heritage Site: extensive high-resolution geophysical surveys 2012-13. An interim report. Bournemouth & Berlin
- Fowler, P. 2004. East of Avebury: ancient fields in a local context. In R. Cleal & J. Pollard (eds), Monuments and Material Culture. Papers in honour of an Avebury archaeologist: Isobel Smith, 130-8. East Knoyle: Hobnob Press
- Gillings, M., Pollard, J., Allen, M., French, C. Cleal, R., Pike, A. & Snashall, N. 2014 Between the Monuments: Fieldwork on the West Kennet Avenue 'occupation site' and Foot of Avebury Down lithic scatter, Avebury, Wiltshire, 2012-13. An interim report. Leicester & Southampton: Between the Monuments Project
- Gillings, M., Allen, M., French, C. Cleal, R., Snashall, N. Pike, A. & Pollard, J. 2015. Living on the Avenue: investigating settlement histories and other events at West Kennet, near Avebury. *PAST* 81, 6-9
- Gillings, M., Pollard, J., Allen, M., Pike, A., Snashall, N., Cleal, R. & French, C. 2015. *The West Kennet Avenue occupation site, Avebury: an interim report on the 2015 excavation season*. Leicester & Southampton: Between the Monuments Project
- Gillings, M., Pollard, J. & Snashall, N. 2017. Foot of Avebury Down, Avebury, Wiltshire: Project Design for excavation, 2017. Southampton, Leicester & Avebury: Living with Monuments Project
- Gunter, J. & Roberts, V. 2007. Foot of Avebury Down, Avebury, Wiltshire. Unpublished survey report, TALITS
- Holgate, R. 1987. Neolithic settlement patterns at Avebury, Wiltshire. Antiquity 62, 349-53
- Holgate, R. 1988. Neolithic Settlement of the Thames Basin. Oxford: British Archaeological Reports
- Kendall H.G.O. 1914. Flint implements from the surface near Avebury: their classification and dates. *Proceedings of the Society of Antiquaries of London*, 2nd Series 27, 73-85.
- Leivers, M. & Powell, A.B. 2016. A Research Framework for the Stonehenge, Avebury and Associated Sites World Heritage Site: Research Agenda and Strategy. Salisbury: Wessex Archaeology
- Noble, G., Greig, M., Millican, K., Anderson, S., Clarke, A., Johnson, M., McLaren, D. & Sheridan, A. 2012. Excavations at a multi-period site at Greenbogs, Aberdeenshire, Scotland and the four-post timber architecture tradition of Late Neolithic Britain and Ireland. *Proceedings of the Prehistoric Society* 78, 135-71
- Pollard, J., Allen, M., Cleal, R., Snashall, N., Gunter, J., Roberts, V. & Robinson, D. 2012. East of Avebury: tracing prehistoric activity and environmental change in the environs of Avebury henge (excavations at Rough Leaze 2007). Wiltshire Archaeological and Natural History Magazine 105, 1-20
- Richards, J. 1990. The Stonehenge Environs Project. London: English Heritage
- Whittle, A., Davies, J.J., Dennis, I., Fairbairn, A.S. & Hamilton, M.A. 2000. Neolithic activity and occupation outside Windmill Hill causewayed enclosure, Wiltshire: survey and excavation 1992-3. Wiltshire Archaeological & Natural History Magazine 93, 131-80

Authorship

Mark Gillings and Joshua Pollard with Mike Allen, Ben Chan, Rosamund Cleal, Charly French, Alistair Pike and Nick Snashall

Contact

Joshua Pollard University of Southampton Avenue Campus Highfield Southampton, SO17 1BF

Telephone: (023) 8059 4198 Email: <u>c.j.pollard@soton.ac.uk</u>

Nick Snashall National Trust Avebury Estate Office High Street Avebury Marlborough, Wiltshire, SN8 1RF

Telephone: (01672) 538028

Email: nicola.snashall@nationaltrust.org.uk

Mark Gillings School of Archaeology & Ancient History University of Leicester University Road Leicester, LE1 7RH

Telephone: (0116) 252 2723

Email: mg41@le.ac.ukArchaeology