

# EXCAVATION AND SURVEY AT PORLOCK STONE CIRCLE AND ROW, EXMOOR

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## INTRODUCTION

During 2013 a programme of fieldwork was carried out in and around the Porlock stone circle (ENPHER MSO7898); the first excavations at the site since Harold St. George Gray's sondages of the late 1920s. The present paper discusses the results of this work and the implications they have for management and research.

## PORLOCK CIRCLE

Porlock Circle sits on Porlock Allotment, 4.7km to the southwest of the modern settlement. It comprises one of only two stone circles so far identified on Exmoor (Figure 1). Directly adjacent to the circle to the northeast is a denuded cairn and the structure appears to have been accompanied by a stone row or avenue, a portion of which survives some 57m to the east (see below). The site was first recorded in 1928, when Mr E.T. MacDermot brought it to the attention of Harold St. George Gray. A detailed plan of the site was begun on the 24<sup>th</sup> of September and completed on the 8<sup>th</sup> of October 1928 (Gray 1928, Plate XII). Assuming geometric regularity, Gray proposed a 6 foot (1.83m) interval between uprights (on the basis of measurements taken from the most complete portions of the arc) calculating an original total of 43 stones (ibid, 74). He also noted gaps in the northwest and southeast portions, concluding that the best stones had most likely been removed from these areas by the builders of the nearby road.

Gray supplemented his plan with a short stone-by-stone description, drawing upon the results of a programme of limited excavation designed to better define partially buried stones and explore gaps in the circuit. The excavations were carried out on the 24<sup>th</sup> of September 1928 by the discoverer of the circle Mr E.T. MacDermot, his son and Mrs Gray and warrant only the briefest mention in the report. We know it was carried out by spade, was undertaken around part-buried stones and

'systematically' at 6 foot (1.83m) intervals in the areas between stones (presumably guided by Gray's assumption of regularity in spacing). No indication of where excavation took place was given in the published plan of the site, though the summaries given in Gray's 'Short Description of the Stones' appendix (ibid, 76-7) do indicate whether a given stone had been revealed through digging or not. On the basis of the latter we can reconstruct the extent of Gray's sondages (though only in part – it is inevitably silent with regard to the gaps between stones) (Figure 2). A 'small trench' was also dug into the adjacent mound though this produced no archaeological results of note. Needless to say the location of the latter excavation was not recorded. Through this work Gray succeeded in identifying 21 component stones; 10 upright and 11 recumbent (ibid, 74; 1950, 87).

There appears to be little in the way of unpublished archival material relating to Gray's fieldwork at Porlock Circle. Although a single close-up photograph of Stone 1 is attributed to Porlock Circle it does not bear close similarity to the extant Stone 1 and the recorded date – 20<sup>th</sup> May 1928 – predates Gray's first visit by some 4 months. Of more interest are two plans; the first draft of his published plan (reproduced here as Figure 2) and his field plan, complete with bearing and distance measurements along with marginalia and his original numbering schema (Figure 3). A single small notebook containing stone descriptions and correspondence between MacDermot and Gray make up the remainder of the archive (Webster, pers. comm). The field plan is of particular interest as it records a stone (15a) that did not make it into the final plan, as well as clarifying the status of stone 11 which was originally recorded as two adjacent stones. As the stones on this plan were drawn to an exaggerated scale, it also records nuances of shape that were generalised away in the final published version (e.g. the 'beak' on stone 18 – compare its representation in Figures 3 and 2 with Gray's published plan).



Fig. 1 Location of the general study area (this figure contains data that is © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service)



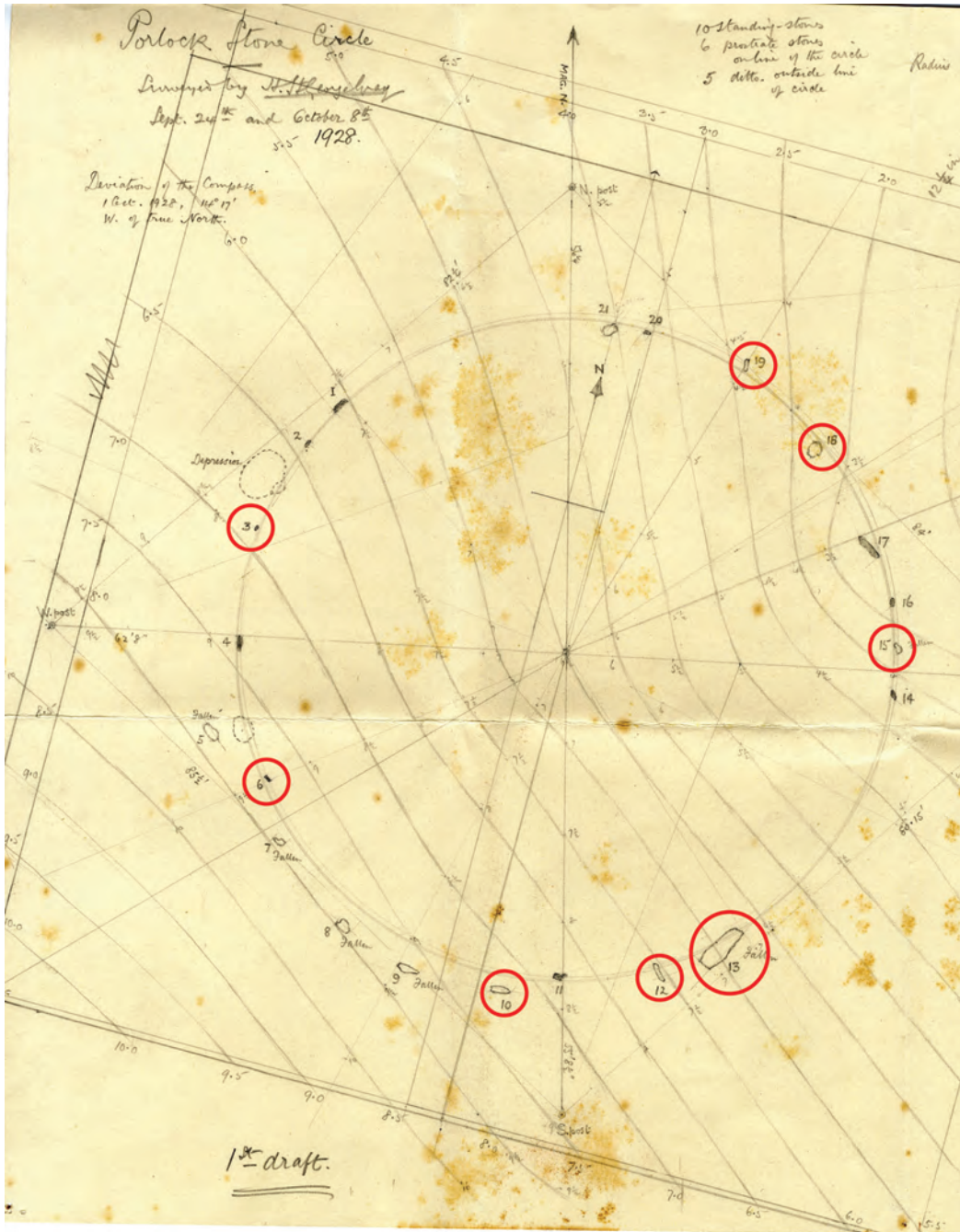


Fig. 2 Harold St. George Gray's 1928 survey, publication draft (SANHS Collection) – circled are the stones where digging took place

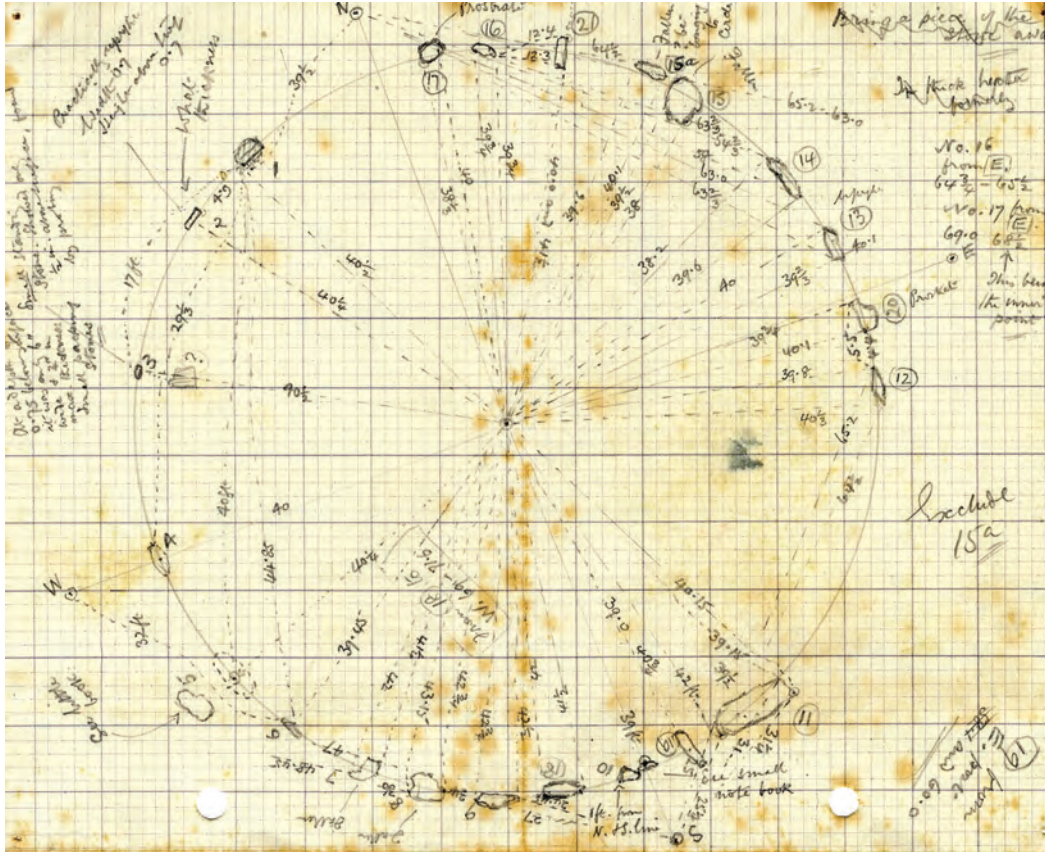


Fig. 3 Harold St. George Gray's original field plan (SANHS Collection)

Subsequently the site deteriorated; Gray himself noting that it had been 'somewhat disturbed in military training' during the Second World War (1950, 87). By the time of the detailed RCHME survey of 1989 only 13 stones were visible (Quinnell and Dunn 1992, 63). Of Gray's original 21, stone numbers 6, 7, 8, 9, 10, 12, 15 and 18 had been lost and 3, 4 and 11 fallen (Figure 4). Interestingly three recumbent stones and a possible stone position marked by an erosion hollow seem to have appeared – A in the approximate centre of the circle, B and D to the north and C to the southeast of stone 19. An undated, annotated copy of Quinnell and Dunn's plan in the ENPA archive (referred to here as Undated-Plan – UP) subsequently recorded the loss of both B and D, along with stones 3 and 11, yet added two entirely new upright stones – 22 and 23 – to the northern arc of the circle, a small upright to the east (No. 24) along with some loose stones on

the eastern and southwestern arcs (Figure 9, No. 25 and 26 respectively). Finally, stone 19 had been set upright and 4 had been moved and re-erected. The most recent record comprises a condition survey carried out on behalf of the Exmoor National Park Authority (ENPA) in August 2009. This survey could only identify 10 stones, noting that significant damage had taken place to the fabric of the structure since the 1989 survey.

In reviewing the surviving records for the site two factors become clear. First, subsequent to its discovery in 1928 the site has suffered sustained (and significant) alterations to its fabric. Second, and unusually, these alterations have not only involved the toppling, movement and removal of standing stones, but their introduction and addition, particularly over the last 24 years. Irrespective of its stability prior to its discovery, Porlock Circle has since become a very dynamic monument.

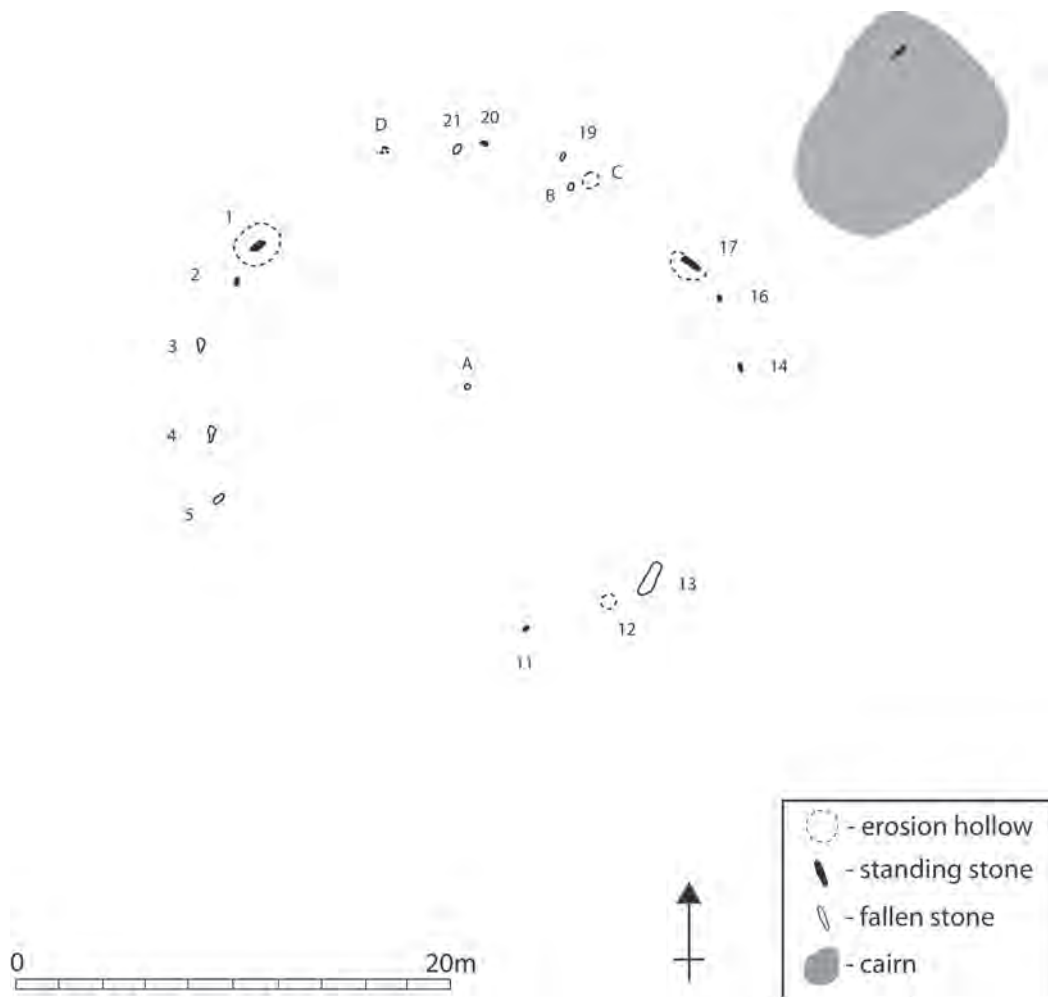


Fig. 4 The 1989 plan of Porlock Circle and adjacent cairn (redrawn from Quinnell and Dunn 1992)

### THE STONE ROW

Located 57m to the southeast of the circle edge is a linear setting of small standing stones described as an incomplete double row (ENPHER MSO7924). First recorded by McDonnell in 1975, the row comprised eight stones (six upright) covering a length of 12m, with a row spacing of 0.88m. The stones are extremely small, the majority only just visible above the level of the turf. Following a burn of the heather in early 2012, a further 5 small stones were identified comprising a single line of settings that extended the row to the southeast for a total distance of 35.23m (Figure 5). As for any

relationship between the row and the nearby circle, the area between the monuments has been badly disturbed through road construction and quarrying. Quinnell and Dunn (1992) had noted that the row appeared to be aligned upon the cairn located just to the northeast of Porlock Circle (and now out of sight behind the banks and hedges bounding the road). With the extension of the row this relationship is much clearer – the projected axis passing through the notional centre of the badly denuded cairn. During geophysical survey of the Circle (discussed below) a cluster of four small stones were noted poking through the turf to the east of stone 23. Sited at the edge of the shallow earthwork marking



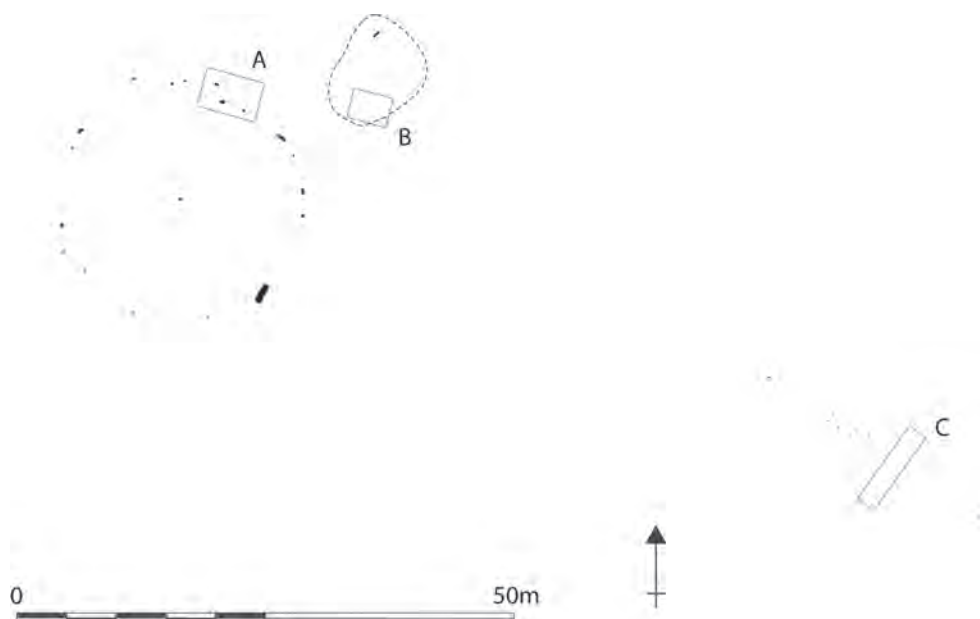


Fig. 5 Plan of Porlock Circle and stone row showing the location of the excavation trenches

the location of the cairn, the configuration of these stones was remarkably regular, raising the possibility that they represented a continuation of the row beyond the area of modern disturbance.

#### GEOPHYSICAL SURVEY

Geophysical investigation comprised soil resistance and fluxgate gradiometry, utilising the sampling strategy that had been employed to great effect at other megalithic settings on Exmoor (e.g. Gillings 2013; Gillings *et al.* 2010; Gillings and Taylor 2011). At Porlock Circle survey soil-resistance survey was carried out on a 60 x 60m area, with the gradiometry focused upon a 40 x 60m subset of this. To the southeast a block of 10 grids covered the area traversed by the stone row, extending to the northeast to encompass a pair of diffuse scoops into the hillside that had been tentatively interpreted as possible hut platforms (Wilson-North, pers. comm.) (Figure 6).

The results of the geophysical survey at Porlock Circle have been discussed in detail elsewhere and are summarised in Figure 7 (Gillings and Taylor 2012). In the case of the stone row, the feature was seen to follow a wide (c.4m) low resistance feature

that crosses the survey area (Figure 8 – Feature 2). This appears to be too broad and diffuse to indicate a formal ditch and most likely represents a peat-filled hollow (either natural or perhaps marking the line of an eroded track). Whilst there is no clear indication of any structural signatures associated with putative hut platforms, there are a series of faint high resistance features whose perpendicular arrangement is suggestive of some form of linear boundary or enclosure (Feature 1). Otherwise the results indicate modern trackways and a number of discrete high-resistance features; most likely small cairns. Crossing the entire survey area (northeast-southwest) is a very faint linear anomaly that may mark the position of a former fence or hedge-line. Setting aside the isolated anomalies caused by the presence of iron/shrapnel, the magnetometer results hint at the presence of a rectangular feature – possibly an enclosure – some 38m in diameter, that shares the same basic alignment as Features 1 and 2 on the resistance plot not to mention the stone row.

#### STONE RECORDING

Prior to the detailed recording of the stones of Porlock Circle, a pedestrian survey was carried

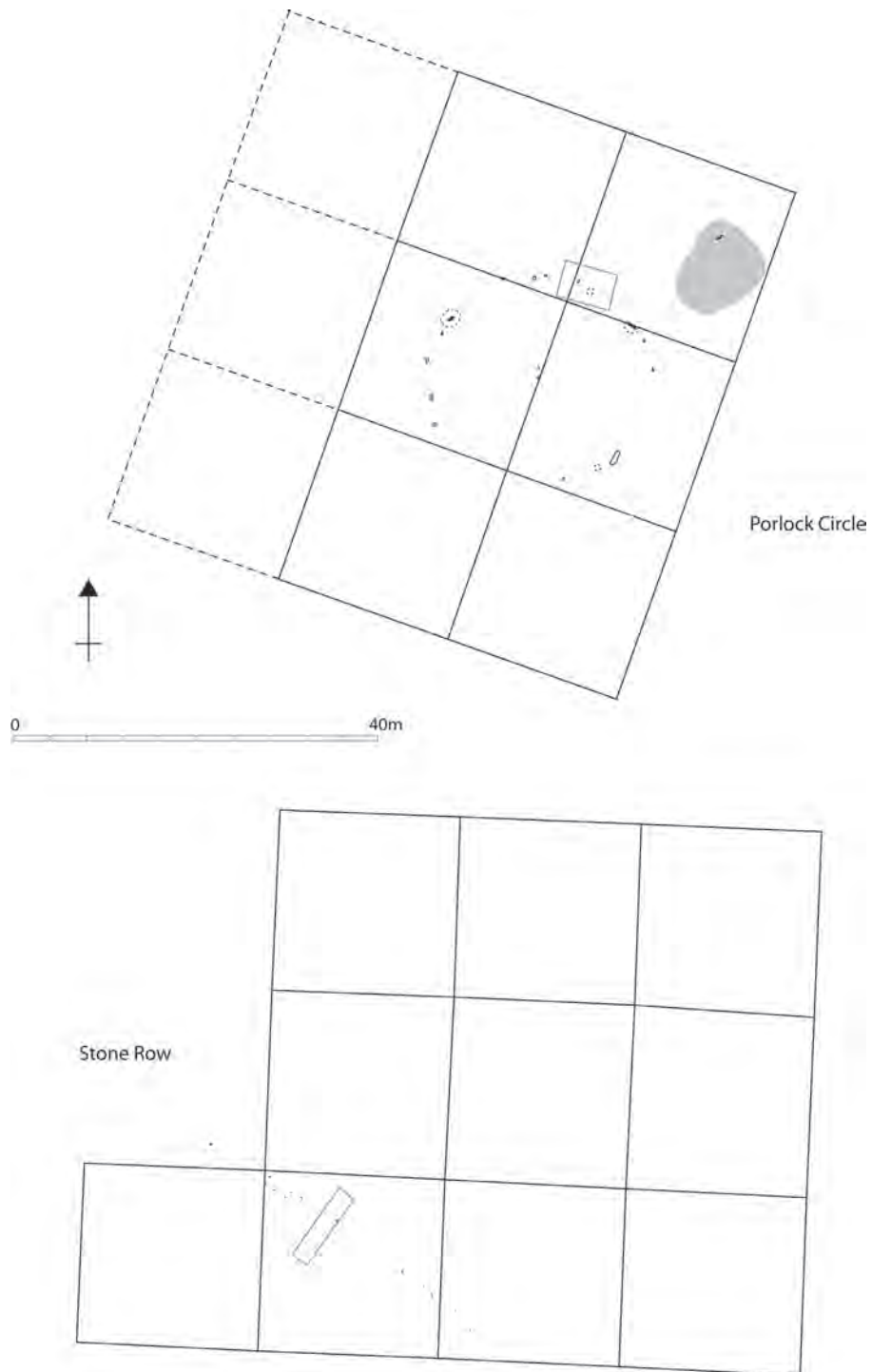


Fig. 6 Locations of geophysical survey grids

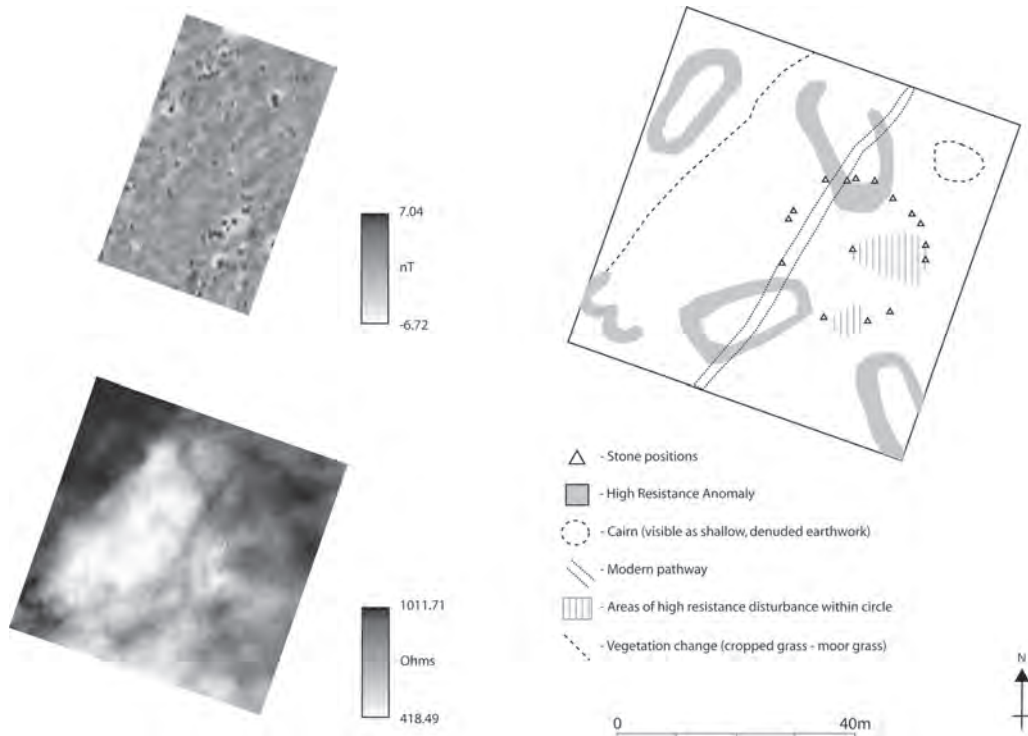


Fig. 7 Results of geophysical surveys at Porlock Circle

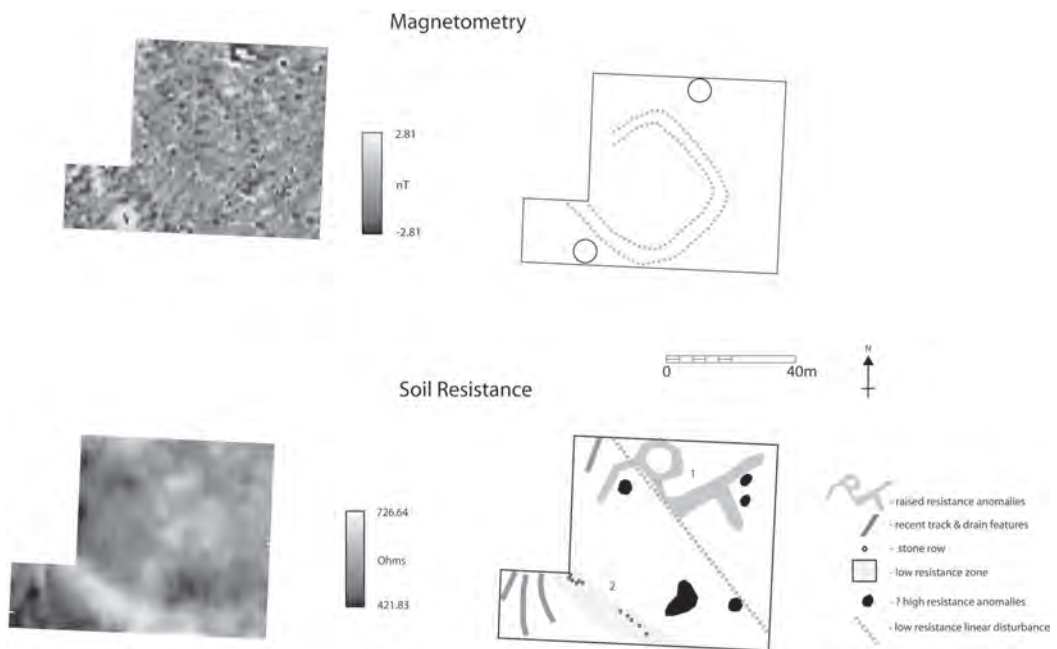


Fig. 8 Results of geophysical surveys on the stone row



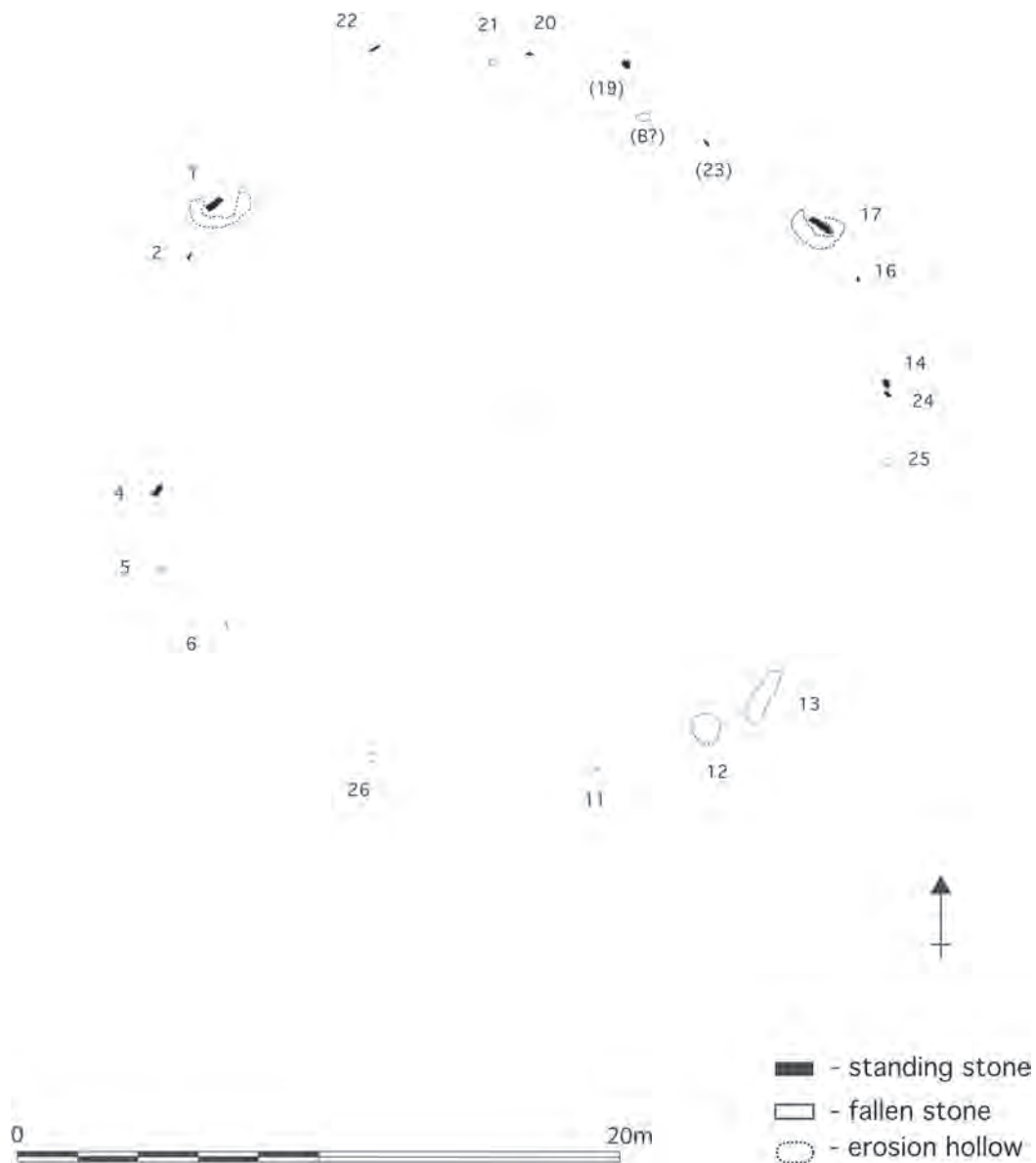


Fig. 9 New survey plan of Porlock Circle (August 2013)

out to identify component stones. This exercise succeeded in identifying 18 stones – 11 upright and 8 fallen – as well as relocating Stone B through excavation (see below). The overall plan is shown in Figure 9. As can be seen, this largely confirmed the situation recorded in the UP with the addition of a pair of loose surface stones in the vicinity of Gray’s stone 6. Recording of the stones involved two

elements. Drawn elevations (inner and outer face) were produced for each of the surviving uprights along with plans of recumbent stones. These were complimented by re-survey of the ground plans of the structures. The same methodology was used to record the stone row, though here the extremely small size of the component stones rendered elevation drawing impractical (Figure 10).



Fig. 10 New survey plan of the stone row (August 2013)

Labelling of the row stones follows Quinnell and Dunn's letter convention, working back from Z from the easternmost of the newly recorded stones to allow for the possibility of further discoveries in the intervening gap. In practice records were made of all of the component stones bar A and B which could not be reliably located at the time of survey; their positions have been taken from Quinnell and Dunn's survey record.

#### EXCAVATION OF PORLOCK CIRCLE (TRENCH A)

Excavation of the Circle was confined to a 6 x 4m trench (Trench A) around stones 19 and 23 of the northern arc of the monument (Figures 2, 11 & 22), an area that exemplified the complex history of the site and as a result the challenges posed to effective consolidation and management. Stone 19

had been found by digging and recorded by Gray as a long, thin, narrow slab (0.46 x 0.15m) buried 0.05m below the surface. Although a recumbent stone was still visible here in 1989, by the time of the UP survey it had been replaced by an upright. However, the current upright does not appear to be the stone recorded by Gray – it is much too big (0.60 x 0.27m) and could hardly be described as 'thin' in section (Figure 11). In the case of stone 23, this was a wholly new addition with nothing in this location recorded in any survey prior to the UP survey. The trench also intersected one of the geophysical 'petals' (see Gillings and Taylor 2012) albeit across a rather broad, diffuse area of the anomaly (Figure 7).

The area investigated was covered by a dense mat of grass, with a clump of rushes growing to the northwest of stone 23 in the area recorded as a scoop (C) by Quinnell and Dunn (although no hollow was currently visible at the surface). This

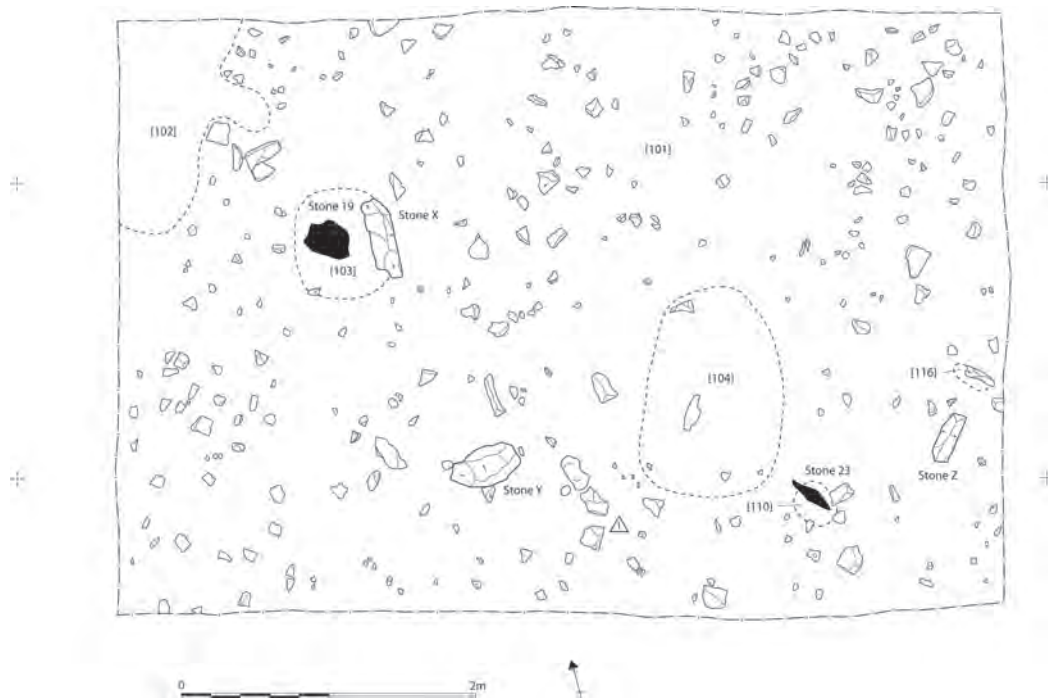


Fig. 11 Trench A following turf removal and initial clean

layer of peaty turf [100] was removed by hand, revealing a light grey-brown compacted silt [101] covering the area of the trench. Abundant small fragments of angular sandstone (0.2 – 2cm, typ. 1cm) along with occasional larger chunks (4 – 18cm) gave this deposit a gravelly texture. At the interface between the turf [100] and silty gravel [101] was a thin, intermittent weathering deposit of ashy-grey, loose silt and stone. Upon cleaning the surface of the [101] a number of cut features could be seen. The single small find recovered by the excavation (SF1 – see section 4.3.7) lay directly upon its surface (Figure 11).

#### Stone 19 (Features 1 and 5)

Upon removal of the turf, Stone 19 could be seen to be sitting at the edge of a roughly circular deposit of dark, grey-black peaty silt with rare, small angular sandstone inclusions (typ. 1cm) and abundant root-matting [103]. Lying across the eastern edge of [103] was a large, thin slab of sandstone (0.56 x 0.16m) – marked as stone X in Figure 11. Stone 19 comprised a substantial chunk of local sandstone – 0.61m in length and 0.28m width. Broadly sub-

rectangular in shape, the stone tapered to a point at either end, shallow at the top and very sharp at the bottom. The base displayed a number of unweathered flaking scars indicating that it had been deliberately worked into a point. In section the stone was roughly diamond shaped, with a maximum thickness of 0.15m. Although Quinnell and Dunn did not provide individual stone dimensions, this stone bears little resemblance to that recorded by Gray as prostrate in position 19 – it is the wrong shape, thickness and is notably larger (i.e. it could not be the result of the working down of the original stone). It was very loosely held within its stonehole and upon removal was seen to be sitting within a steep-sided cut (0.18 x 0.12m), merging at a depth of 0.11m with a narrow dished base [123] (Figures 12 & 13). Side-to-side movement had served to enlarge the hole somewhat and a thin layer of fresh root-matting covered the sides. The width of a modern spade, the hole (Feature 1) appears to have been expediently dug and there was no evidence of any deliberate packing or fill deposits beyond the stone itself.

The stonehole [123] had been cut partly through the [103] deposit and partly into the compacted

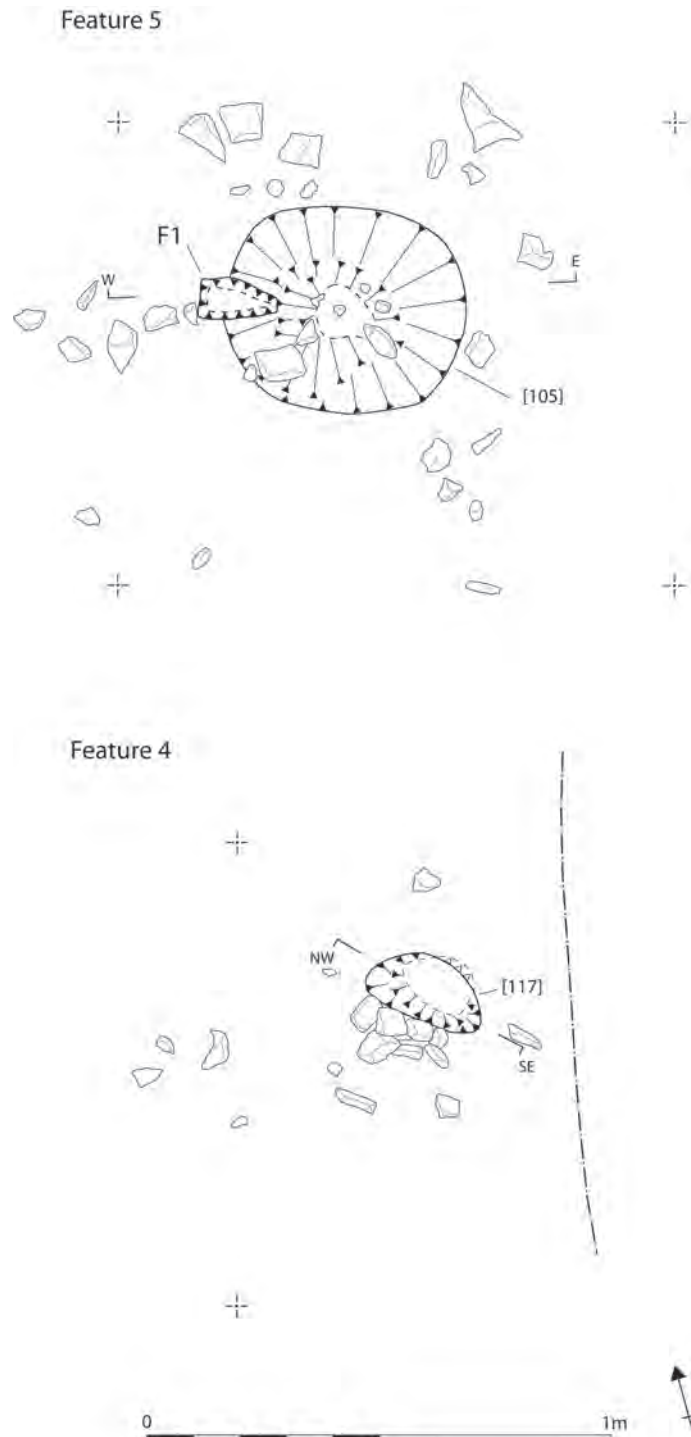


Fig. 12 Trench A Features 4 and 5



gravelly silt [101] at the edge of a more substantial feature (Feature 5). Upon investigation it became clear that the [103] comprised the single fill of the original Stone 19 socket, a sub-circular stonehole (0.53 x 0.43m) with sides sloping shallowly at the top (presumably an erosion hollow that had formed around the original upright stone) before stepping down vertically to reach a flat base at a depth of 0.20m (Figures 12 & 13). A number of packing stones were visible pushed into the sides of the stonehole and a large packing stone lay upon the gently sloping eastern edge sealed beneath stone X. This thin, sharply pointed fragment of sandstone (0.28m x 0.12m) is best interpreted as a former 'trigger'. The fill of the stonehole [103] was uniform throughout and the suggestion is of a feature originally filled by an upright stone and its supportive packing. When these were removed peaty topsoil fell and/or weathered into the resultant void – there was certainly no evidence of any deliberate soil-packing surviving in the feature. No artefactual material was recovered from either of these features.

What is clear is that the present upright recorded as stone 19 is neither stone 19 (as recorded by Gray) or in the correct position. It sits on the western edge of the original stonehole in a simple, ad-hoc socket (Feature 1). The stonehole proper (Feature 5) contains abundant packing stones (including a substantial trigger) and has an erosion halo (presumably caused by animal rubbing). Lying across the eastern edge of this feature, stone X most likely corresponds to the original upright. A simple experiment showed that it fitted neatly into the excavated stonehole and its shape and general size fit closely Gray's description. Stone X had been laid neatly alongside the original stonehole, the latter showing little evidence of the levels of disturbance or violence seen in other excavated examples where a stone has been deliberately toppled – e.g. Lanacombe I stone C (Gillings *et al.* 2010). Instead, and in common with a number of former standing stones excavated on Exmoor, such as Furzehill common (Gillings and Taylor 2012) and Feature 4 (below), the impression is one of careful, controlled extraction. If this is the case the key question becomes when this decommissioning took place.

### Stone 23 (Feature 3)

Stone 23 comprised a thin slab of sandstone of elongated diamond shape, tapering to an edge on each side. Unlike Stone 19, there was no evidence

of any deliberate flaking or shaping of the base. Immediately surrounding the upright was a loosely compacted, dark grey-brown peaty-silt containing abundant small angular fragments of sandstone (0.005 – 0.01m) with occasional larger stones (max. 4cm) [110]. Although rooty throughout, this was more pronounced in the upper portion of the deposit. Together, the stone and peaty-silt filled a sub-rectangular cut (0.27 x 0.19m). The northeast side and ends were very steep, with a gentler slope to the southwest. The base (as dug) was originally dished, but the stone had been pushed down through this into the bright orange natural (depth 0.17m). The hole was a spade's width and could have been dug in two simple cuts, one vertical and one sloping to meet it at the base (Figures 13 & 15). No artefactual material was recovered from the feature.

The contrast between this stone setting and Features 4, 5 and 6 could not be more striking. The stonehole shows every sign of having been spade dug, with the soil removed used to pack the stone in place against the near vertical NE face. Although stones were present in this soil these were infrequent and erratically distributed. Although three small (< 4cm) stones were tucked down the edge of the stone these had most likely fallen in or been introduced at a later date to stabilise the upright than been employed as deliberate packing from the outset. Unlike Stone 19, there has been no attempt to approximate or re-purpose an existing stonehole and Stone 23 must, as a result, be regarded as a wholly 20<sup>th</sup>/21<sup>st</sup> century construct.

### Hollow 'C' (Features 2 and 6)

In their 1989 survey, Quinnell and Dunn recorded a 0.2m deep hollow 2m to the southeast of stone 19 which they labelled 'C', noting that it was not related to any known stone position. Although there was no surface indication of this hollow at the time of excavation, the area of C was marked by a thick clump of rushes. Upon removal of [100] a sub-circular area of clean, firm, grey-brown peaty silt was encountered densely packed with the roots and stems of the rushes [104] (Figure 11). This filled a shallow, C-shaped hollow (1.45 x 1.40m) with very shallow sides merging at a depth of 0.10m with a flat base (Feature 2) (Figures 13 & 14).

In the northern lobe of the feature the edges became much steeper and the base marked by a dense concentration of stone [118] which proved to be displaced packing material sitting above an original stonehole (Feature 6) (Figure 14). The packing

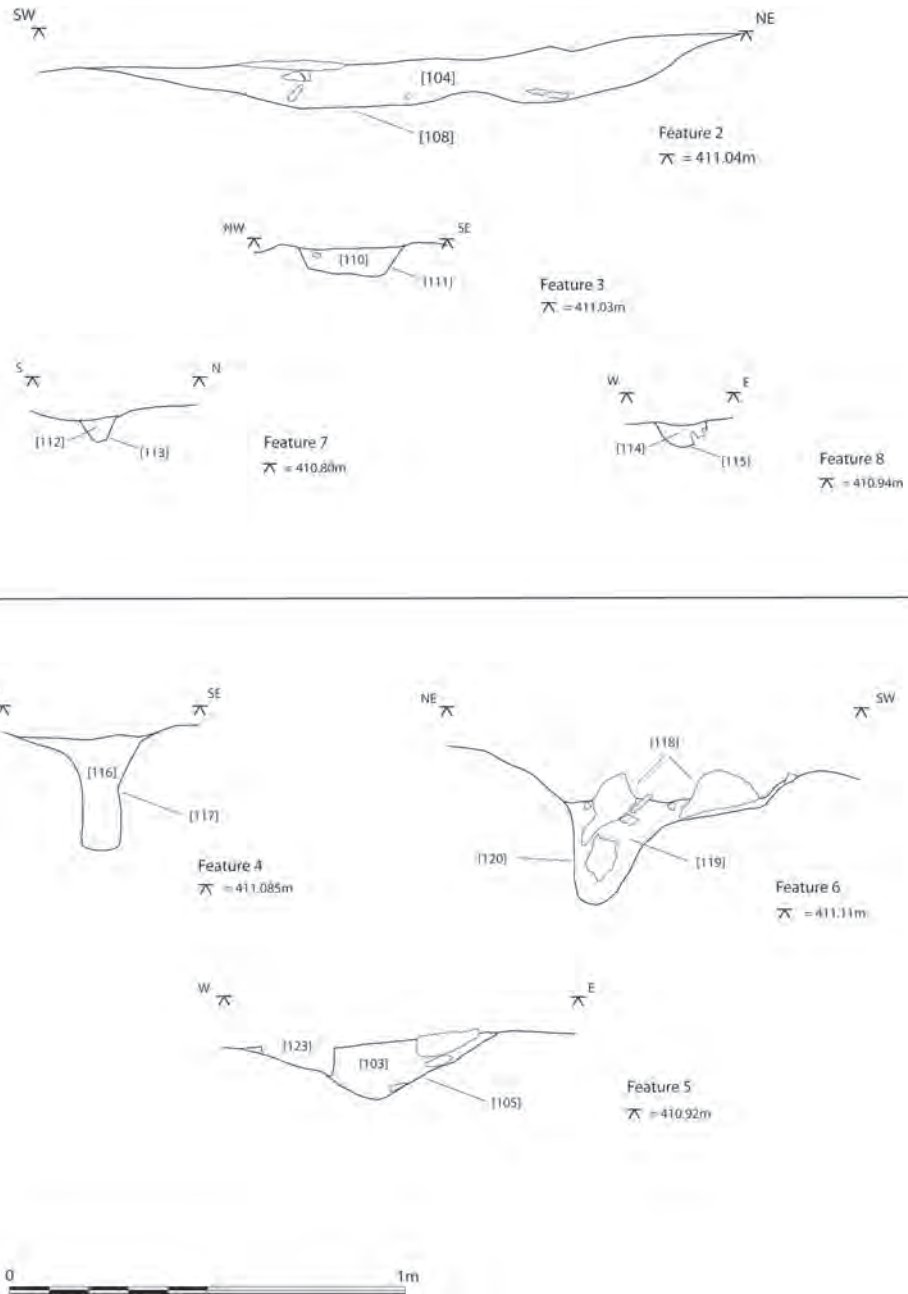


Fig. 13 Trench A sections

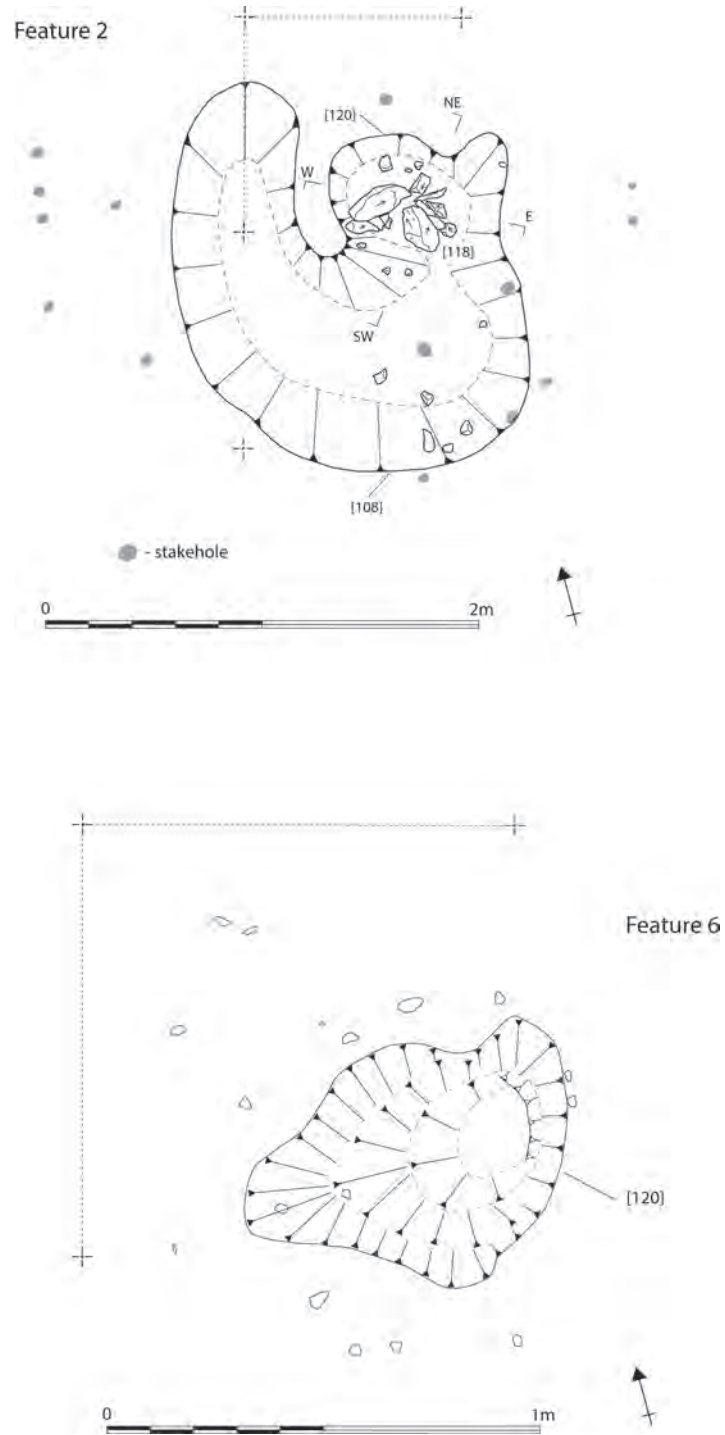


Fig. 14. Trench A Features 2 and 6

comprised 53 pieces of sandstone, which ranged in size from 4 – 16cm in maximum dimension. Although blockier stones were present, the majority comprised thin, sharp wedges – either specially selected or specifically flaked to push down the edge of the stone to fix it into place. The bulk of this material was concentrated on the western, more sloping edge of the stonehole (see below). At the base of the packing were three notably larger stones (max. dimension 0.38m) all of which showed evidence of flaking to accentuate their tapering form. Presumably trigger stones, two of these lay flat, fanned out around the rim of the socket, whilst one had clearly fallen in and across the centre of the stonehole when the original upright had been removed. The bulk of the stonehole was filled with a loose dark grey peaty-silt [119] containing rare sub-rounded stones (typ. 1cm) and showing little evidence of any root penetration. This was uniform throughout and appears to represent material that had fallen into the hole when the stone it originally contained had been removed. The stonehole itself was deep (0.37m) and well-formed. Sub-rounded (0.60 x 0.50m), the north and eastern edges were vertical, merging with a dished base [120]. To the

west a shallow lip was present at the surface. The base tilted noticeably to the east, where it was undercut, giving the overall feature a sloping, rather than vertical, form (Figures 13 & 14).

The scale of the stonehole and packing suggest that Feature 6 originally held a substantial standing stone. This is given further weight by Feature 2, whose morphology and position suggest that it corresponds to an erosion hollow caused by livestock rubbing – a common feature of Exmoor’s surviving megalithic sites (see for example stones 1 and 17 of the Circle). For such a hollow to have developed, there had to have been a sufficiently substantial stone in this position for the livestock to have wanted to rub. In terms of scale, the C-shaped erosion hollow visible around Stone 1 of the Circle provides a useful comparison.

The Feature 6 stone was not recorded by Gray. His stone 18, albeit recorded as lying in a large depression alongside a second stone (18a – subsequently excised from his plan of the site) lay some 2m closer to Stone 17 outside the limits of the current trench. It was also rather small in comparison to both the stonehole and erosion hollow (c.0.61 x 0.43m). From the configuration of



Fig. 15 Trench A final excavation plan



the disturbed packing, it is clear that at some stage the stone had been taken from its stonehole (with little of the care evident in the case of Features 4 and 5) and removed from the immediate vicinity. The shape of the stonehole is particularly interesting as it implies a leaning, rather than standing, stone was intended from the outset. The two largest uprights in the circle both lean (1 and 17) and the results from the excavation of Feature 6 raise the possibility that this was a deliberate design feature with respect to the larger stones of the circle.

#### Unrecorded stonehole (Feature 4)

Close to the eastern edge of the trench a small stonehole was identified, marked by a large trigger stone protruding at an angle from its fill (Figure 12). The stonehole was sub-circular (0.33 x 0.24m) with vertical sides joining to form v-shaped base at a depth of 0.29m [117] (Figure 13). On the southern side was a gently sloping lip. Clustered on this lip and pressed into the edge of the stonehole cut were eight packing stones comprising angular fragments of sandstone varying between 0.05 – 0.10m in maximum dimension [122]. Lying hard against the northern edge and tilting towards the base was the trigger stone noted above (0.28 x 0.09 x 0.06m) which tapered to a point at its base. Filling the stonehole was a uniform deposit of compacted, very dark grey-black peaty-silt with a notably greasy texture [116]. This deposit contained no inclusions bar dense root matting in its upper fraction. Some 0.3m to the southwest of the hole, lying upon the surface of the [101] was a long, flat slab of sandstone (Figure 11 – Stone Z) (0.36 x 0.15m). As with Feature 5 (see above) this stone fitted well when inserted into the excavated stonehole and most likely represents the original upright (Figure 23).

Feature 4 marks a previously unrecorded stone of the Circle. As in the case of Feature 5, the intact nature of the stonehole and stone lying adjacent to it, are suggestive of decommissioning rather than deliberate (or accidental) toppling. The position of the stonehole relative to F6 and F5 stresses how irregular stone placement seems to have been. F5 is 2.58m from F6 whilst the latter is in turn 1.62m from F4. These measurements do not support Gray's assumption of a regular 6 foot (1.83m) interval and this irregularity may go some way to explain why his systematic digging was not successful in locating further stoneholes. Together with Features 5 and 6 it also indicates the degree to which later

stone additions have disrupted the circularity of the original plan (Figure 20).

#### Post and stakeholes (Features 7 and 8)

Two small, relatively shallow sub-circular features were also excavated (Figures 13 & 15). Truncated by the western trench edge, Feature 7 comprised an oval cut (0.17 x 0.12m) with vertical sides meeting a flat, stepped base [113] (max. depth 6cm). It was filled by a compact grey-black peaty soil [112]. Feature 8 was located 1m to the southeast of Feature 5 and took the form of a pear-shaped cut (0.13 x 0.10m) with vertical sides and a dished base (depth 6cm) [115]. It too was filled with a compact, grey-black peaty-silt [114].

A number of stakeholes were evident cut into the [101]. The vast majority were small (typ. diameter 4-6cm) and shallow (typ. depth 2-4cm) and all were filled with an identical dark peaty-silt (Table 1). The exception was SH20, the largest recorded, which contained a 0.28m length of crudely tooled stake that had been cut to a rough point. For the wood to have survived in such good condition implies a relatively recent date and this was borne out by the presence of a modern (i.e. mass produced) nail that had been hammered through the stake 0.23m from the tip.

It is possible that Feature 7 represents the very edge of an unrecorded stonehole – it appears to be on the arc of the circle and the distance between it and Feature 5 (1.50m) is comparable to that between Features 4 and 6. However, the flat, stepped base and lack of any conspicuous packing stones are unusual and a more economical interpretation would be to see both it and Feature 8 as post (or large stake) holes. Within the cluster of smaller stakeholes clear and definitive patterns are difficult to discern; however, the window provided by the trench is small (Figure 21). The density implies considerable, if rather ephemeral, fencing activity across this area of the circle, perhaps related to modern farming practices or the military use of the area during the Second World War. There is certainly nothing to indicate that these were prehistoric features.

#### Stone 'B'

In their 1989 survey, Quinnell and Dunn recorded 'a triangular surface exposure of uncertain relevance' 0.70m to the south of recumbent stone 19. They labelled this stone 'B' (Quinnell and Dunn 1992, 63). This had disappeared by the time of the UP

TABLE 1 – STAKEHOLE DIMENSIONS

No.	Depth (Cm)	Diameter (cm)	Shape of base
1	3	5	Flat
2	3	5	Flat
3	3	7	Flat
4	4	4	Pointed
5	2	4	Pointed
6	3	5	Flat
7	3	5	Flat
8	2.5	4.5	Flat
9	2	5	Flat
10	4	4	Flat
11	3	6	Flat
12	1	4	Pointed
13	3	2	Flat
14	3	3	Flat
15	2	3	Flat
16	1.5	3	Flat
17	1	1.5	Pointed
18	2	5	Flat
19	1	2.5	Flat
20	19	8	Pointed
21	3	3	Flat
22	2	3	Flat
23	2.5	3.5	Flat
24	2	3	Flat
25	3.5	4	Flat
26	2	2	Flat
27	2	4	Flat
28	3	3	Flat
29	4	4	Flat
30	4	4	Flat
31	3	5	Pointed
32	4	5	Flat
33	3	5	Flat
34	4	4	Flat
35	2	4	Flat
36	2	6	Flat
37	2	5	Flat
38	3	5	Flat
39	3	9	Flat

survey (and no such stone is visible on the surface today) but during excavation a flat, sub-rectangular slab of sandstone (0.51 x 0.31m ) was found some 1.5m to the south of Feature 5 lying on the surface of [101] directly beneath the turf (Figure 11 – Stone Y). Given uncertainties with respect to the position of recumbent 19, it is possible that this is the stone that they recorded; it was not associated with any stonehole or other visible feature.

#### Small finds

In common with other excavated examples of megalithic settings on Exmoor, the stone-related features were completely free of artefactual material. The only find recovered during excavation came from the surface of the [101] deposit, within the arc of the circle 0.60m from the southern edge of the trench. It comprised a crude, 4-spoked lead wheel 7cm in diameter (Figure 16). Formerly intact, it had unfortunately been struck across the ‘hub’ with a spade during de-turfing and as a result was partly folded. A series of nine ED-XRF spot analyses (carried out at the School of Archaeology and Ancient History XRF facility) across the surface revealed a composition varying between 99.65% and 100% Lead (with the remainder made up of Copper).

Precise attribution of the lead wheel has proven difficult. Consultation with small-finds specialists (and through them the PAS and British Museum) has suggested that we may be dealing with a late

Iron Age/early Roman votive object, with the purity of the lead pushing towards a Roman date (Figure 16). However, it is extremely large for such objects and they are rare finds in Britain (being most commonly found in Gaul). If the Porlock Circle example is Roman then it is unique. If we accept that this provisional attribution is correct, this implies that the Porlock Circle was known and visited during the Roman period, the deposition of a votive wheel implying a ritual function.

#### Gray’s excavations

There was no evidence of any disturbance or disruption that could unequivocally be associated with Gray’s excavations and this is undoubtedly due to the shallowness of the buried archaeology; the excavation required to define the extent of stones in most instances requiring little more than the removal of the turf. In saying this, in the northeast corner of the trench was an irregular zone of clean compacted grey-brown silt [102] that sat above a patch of slightly more mixed and less compact material [101] (Figure 11). Although only a small area of this was sampled in the trench it is possible that it represents the results of speculative, shallow digging of the type we can presume took place. Only more extensive excavation will tell.

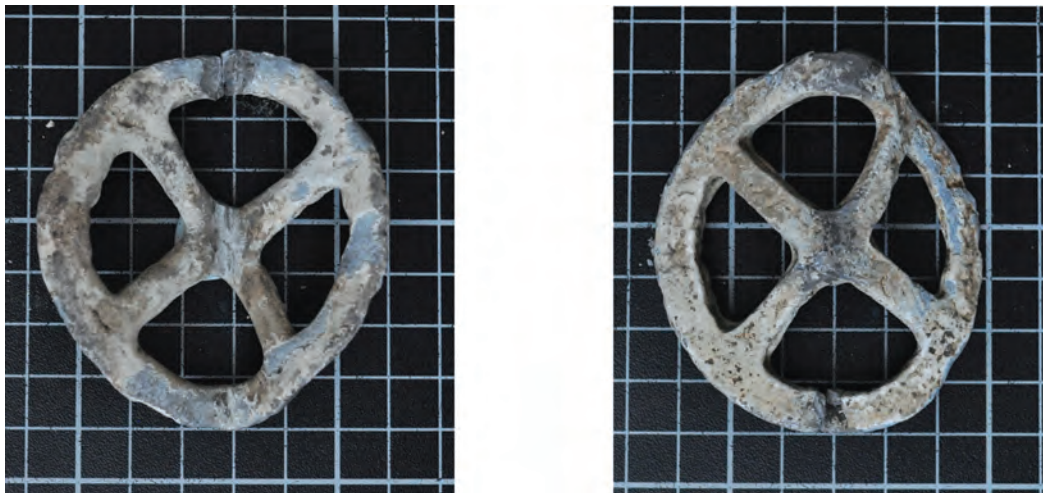


Fig. 16 The lead wheel (SF1 – grid scale is in cm)

### EXCAVATION OF THE STONE ROW (TRENCH B)

Trench B sought to determine the status of the small group of regularly placed stones to the east of the circle, thought to represent a continuation of the stone row. The turf [200] in this area was thin, covering a dense and continuous spread of stone. To the south and west these were large and mostly flat [201] with a raised area containing much smaller blocks of stone to the north and east [202] (Figure 24). The four stones protruding above the turf are marked A-D (Figure 17). Towards the eastern edge of the trench several small spreads of lime – presumably modern – sealed the stone spread.

To investigate the [201] a section was established running approximately north-south, with excavation continuing to the west of this line (Figure 18). Following a clean, it became clear that the [201]

deposit comprised a dense arc of large, flat, sub-rectangular slabs of sandstone (0.10 – 0.45m, typ. 0.28m). A maximum of two courses thick, these gave the impression of a deliberate (albeit very rough) attempt to create a level stone surface though a form of crude paving (Feature 201). Whatever its function the [201] spread appears to be extensive, probing suggesting that it extends for some 5.5m from the edge of the cairn. The [201] deposit curved around the core of the cairn [202]; the latter characterised by a dense spread of small, blocky chunks of angular sandstone (typ. 0.04-0.18m) whose sloping edge was marked by a series of larger, sloping or upright, slabs of distinctive pale-yellow sandstone. This in turn was bounded by an arc of very large, flat slabs seemingly interspersed with upright settings (Feature 202). Spilling over the sloping edge and flat slabs were spreads of small angular chunks of sandstone [204] (typ.



Fig. 17 Trench B following turf removal showing stones A-D



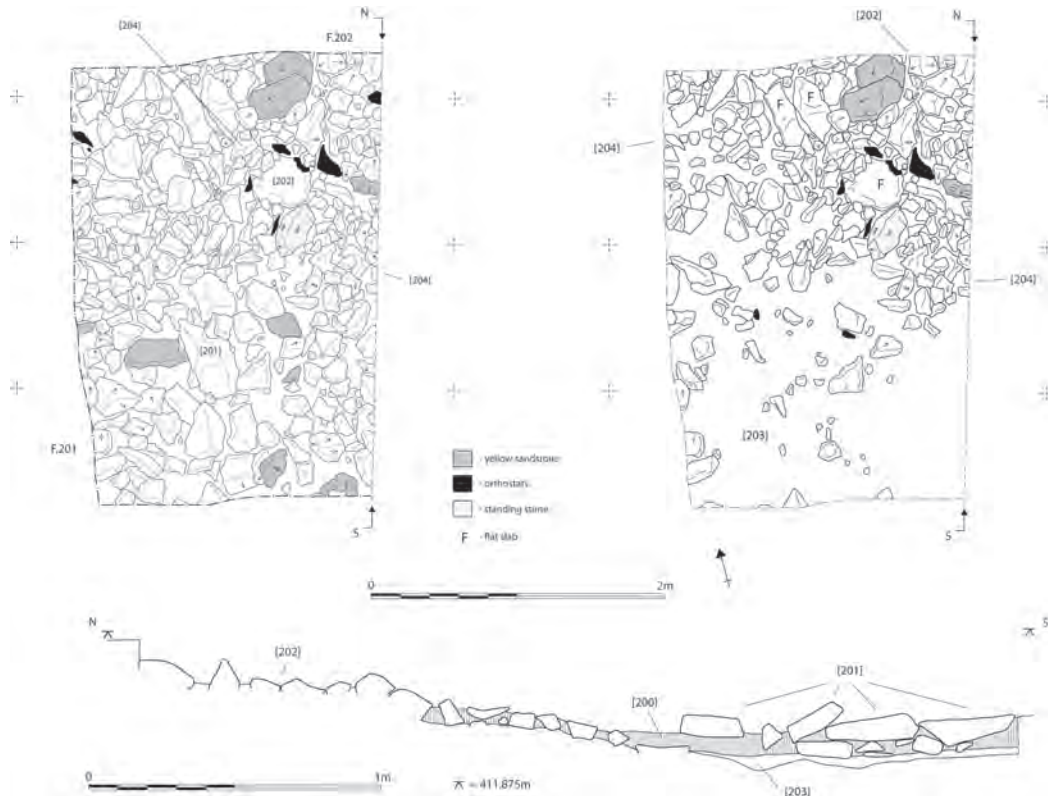


Fig. 18 Trench B excavated features

0.14m) which appear to correspond to tumble from the cairn core (Figure 18). As the intention was to investigate the uprights (not the cairn) this primary cairn material was defined but not excavated.

To determine the stratigraphic relationship of the various elements the rough paving [201] was removed to reveal a thin (0.02-0.05m) layer of mid greyish brown silt [203] – presumably a buried soil or turf-line. The latter was sampled through a small slot dug against the section. Both the paving and buried soil in turn sealed the primary cairn material [202] and spreads of tumble [204] (Figure 18). The paving therefore represents a later addition to the cairn – subsequent to a period of erosion/

displacement of cairn material and the formation of a distinct turf/soil horizon. Environmental analysis of the buried soil revealed rare flecks of charcoal and two larger fragments (> 4mm), one of Oak (*Quercus*) and the other Gorse (*Ulex spp*). As for dating, it was possible that the spread of flat stones represented a very late attempt at consolidation, perhaps related to the military use of the site during the Second World War; a series of trackways certainly skirt the circle in this area. In the absence of any artefactual material from either [201] or [203], the decision was taken to submit the fragment of Gorse charcoal (a short-lived species) for radiocarbon dating (Table 2). The resultant date

TABLE 2 – CALIBRATED DATE FROM THE BURIED SOIL [203] (USING OXCAL V4.1.7)

Sample	Context	Description	Date BP	Calibrated (cal BC) 95.4% probability	δ13C
SUERC-53021	203	Buried soil/turf line – <i>Ulex spp</i>	3091±29	1426-1279	-25.5%

range of 1426-1279BC (95.4% probability) suggests that [201] was prehistoric, the date providing a *terminus post quem* for the addition of the rough paving, with this phase of structural activity taking place at some point after the early half of the middle Bronze Age.

Although undoubtedly badly disturbed and denuded, sufficient of the cairn has survived to reveal much about its original form. With its core of small blocks, bounded by steeply sloping slabs of yellow sandstone, and perimeter of large flat slabs interspersed with orthostats, this would have originally been a complex and striking structure – a circle of uprights ringing a raised mound or platform, adjacent to the arc of Porlock circle. As to how typical (or otherwise) this particular format is for Exmoor, this is impossible to ascertain in the absence of more excavated examples. At some point after construction of the cairn, and following a degree of dispersal of the original cairn material and formation of a turf/soil horizon above this, a spread of large flattish stones was placed in an arc around it. This may have been undertaken to enlarge and elaborate the original cairn structure through the creation of a platform. Of the four uprights that prompted the excavation it is now clear that these were not related to the row and that their suggestive configuration was fortuitous. The only deliberate upright was stone C – part of the original cairn perimeter. Stones A and B were simply components of the cairn and D part of the encircling spread of rough paving.

#### Small finds from Trench B

Finds were limited to four badly corroded .303 calibre rifle cartridges from the initial turf layer. All appeared to be thinner at the head than Second World War examples and identification marks on one identified Eley Brothers of Edmonton, London as the manufacturer. Cross-referencing the date the company were active (1828-1919) with the introduction of the .303 round (1887) argues for a late 19<sup>th</sup> – early 20<sup>th</sup> century date for manufacture though subsequent use could have been much later (Hyam, pers. comm).

#### EXCAVATION OF THE STONE ROW (TRENCH C)

A 9 x 2m long trench was excavated, perpendicular to the line of the stone row some 3m to the southeast of stone H. This was to determine the presence

(or otherwise) of standing stones in this area and ground-truth the low-resistance geophysical anomaly (Figure 8 – Feature 2). The turf in this area was very soft and peaty, and sat directly above a very compacted grey-brown silt; abundant small sub-angular fragments of stone (< 1cm) giving this deposit a very gravelly texture [301] (Figure 19). In the central third of the trench (starting just to the northeast of the line of the stone row) this deposit became less compacted and noticeably more mixed [303]. This latter zone corresponded to the point at which a north-south animal track crossed the line of the trench, the observed mixing the result of trampling and churning. The [303] sat above a deposit of very compact, clean grey-brown silt [302] thinning away to the northeast, which in turn sealed the [301] in the central portion of the trench. With excavation focusing upon a slot centred upon the area of the stone row, the southwestern extent of this deposit was not fully resolved but it is feasible that it sits within a depression in the underlying [301] giving rise to the noted geophysical anomaly. Cut into the [302] and truncated by the eastern edge of the trench was a stonehole (Feature 301).

The exposed portion of the stonehole was sub-rectangular, with steeply sloping sides merging with a flat base at a depth of 0.09m below the surface of the [302]. It was filled with a very loose, dark brownish-grey peaty silt [304] with no evidence of any packing stones. This setting has been labelled XX on the final row plan. The [303] deposit became deeper towards the west and south of Feature 301 and whilst a number of other possible stonehole features were investigated (marked ? on Figure 19) none were convincing, lacking clearly diagnostic cuts or fills. Whilst the possibility of further stoneholes having originally been present cannot be ruled out, any trace of such features has been destroyed by later disturbance associated with the track.

In hindsight we could not have chosen a less auspicious location for trench C, the degree of churning caused by the animal trackway removing any trace of the shallow stoneholes associated with the row settings. The results do suggest that the visible break in the line of the row is artificial and that the feature was once continuous. As to whether this comprised a single, or double row can only be resolved through further excavation. Looking in terms of its relationship to the nearby structures, although a direct physical link has not been forthcoming, confirmation has been given to the suggestion that it aligns upon the cairn. This



Fig. 19 Trench C excavated features.

suggests in turn that the row is a later addition to this monumental landscape. That the row may represent a distinct phase of monument construction is also argued by the excavated stonehole (Feature 301). Albeit based upon a sample of one, the character of this reflects a different technological approach that that employed upon the arc of the circle, the feature lacking both depth and conspicuous packing material.

#### THE GEOPHYSICAL ANOMALIES REVISITED

At Porlock Circle, although it is tempting to see the compacted gravelly deposit through which the stoneholes were cut [101] as accounting for the raised resistance anomaly (petal) that runs through the excavated area, the location of the trench was not optimum (being determined by conservation/management concerns). Given the diffuse nature of the anomaly in this area it is likely that the trench sat wholly within (rather than across) it, as a result failing to sample a sufficient area 'off-anomaly' to enable characterisation to take place.

Put simply, the trench was too small. To resolve the anomaly will require a different excavation sampling strategy. If it was the compacted gravel deposit causing the raised resistance signal, then on stratigraphic grounds this pre-dated the stone holes and thus the circle.

Not only is the line of the stone row/avenue respecting a pre-existing feature (a wide gully or hollow) but there is the tantalising suggestion that a series of other features (rather amorphous, yet frequently aligned in a perpendicular fashion) were laid out on a complimentary alignment to the row. These could conceivably mark the boundaries of former enclosures, and in this regard the position of possible cairns tucked into the corners is suggestive. As to what the low resistance band might indicate, one of the more disappointing aspects of the excavation of trench C was the failure to resolve the status of the geophysical anomaly, although the inception of the [302] deposit at the point the anomaly begins is interesting. The anomaly could mark a natural gully or hollow, a worn trackway, or some combination of the two, and whilst the strong suspicion remains that the [302] fills a

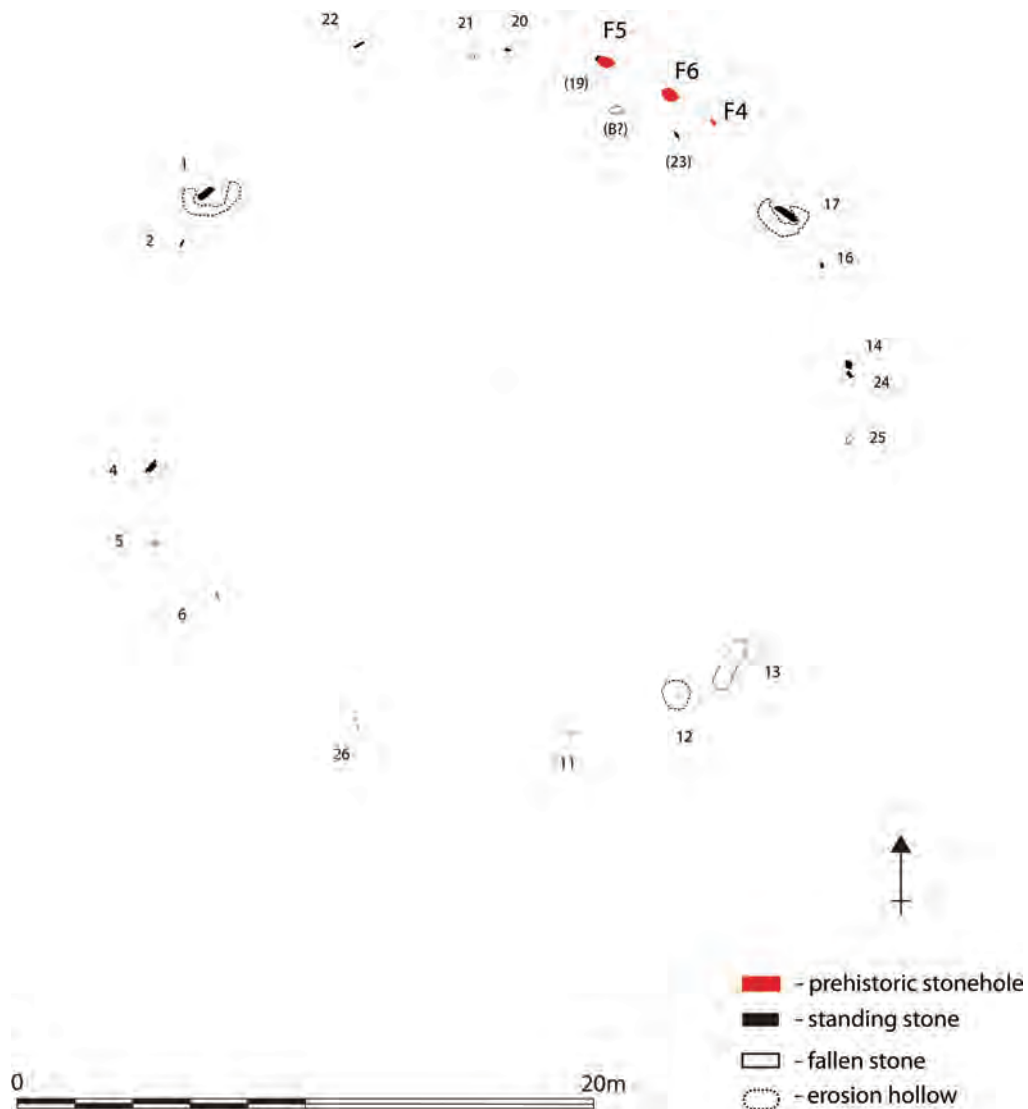


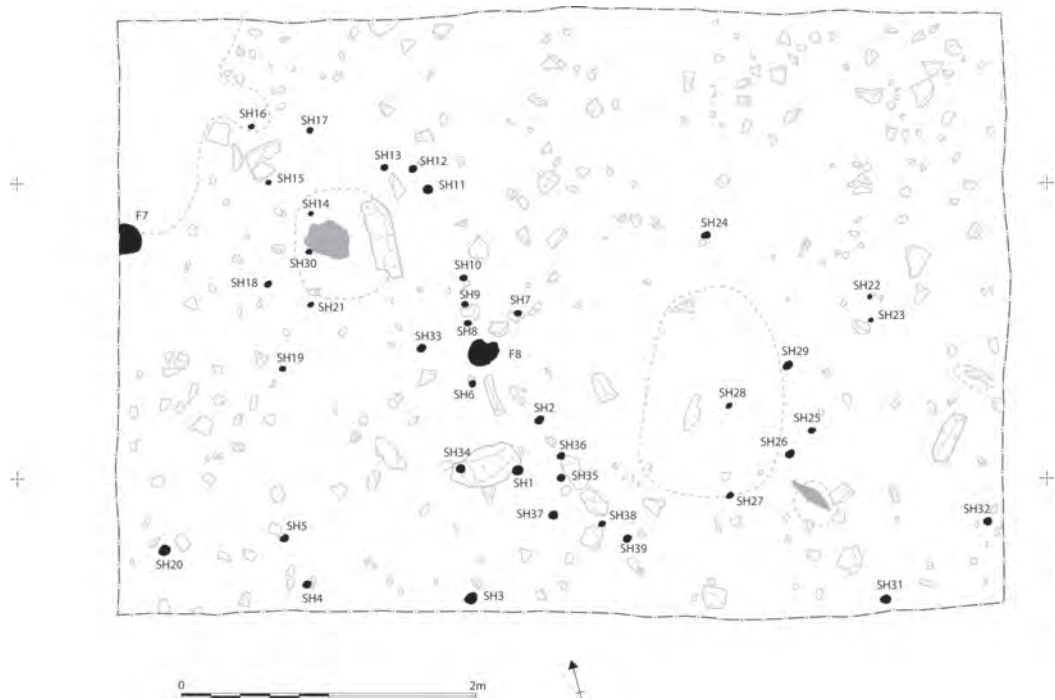
Fig. 20 Porlock Circle after excavation

depression in the level of the underlying natural this can only be determined by further excavation; preferably away from the effects of later trackways. Whatever its origin, given that the stonehole cuts the [302], if the latter fills the depression than it predates the creation of the row, perhaps indicating a pre-existing pathway to the cairn.

#### ENVIRONMENTAL SAMPLING & DATING

The excavation of Trenches A and C failed to encounter any sealed, undisturbed deposits suitable for environmental sampling and/or radiocarbon dating. None of the original stoneholes excavated (Features 4, 5, 6 and 301) contained undisturbed packing deposits (that might contain carbonised material or be suitable for OSL dating) and in each case the peaty-silt deposits excavated from the





*Fig. 21 Trench A stakeholes*



*Fig. 22 Trench A following clean showing Stones 19 and 23 (looking northwest)*

holes had clearly entered after the standing stone had been removed and all displayed evidence for recent root disturbance. Where stones were upright (and stoneholes presumably not disturbed) these had been erected in the last 24 years (Features 1 and 3). As noted, in Trench B a sample of the buried soil [203] was wet sieved revealing rare charcoal flecks and two larger pieces of charcoal (>4mm) from Oak (*Quercus*) and a Gorse type species (*Ulex spp*).

#### DISCUSSION

Porlock Circle as it exists today is clearly an amalgamation of prehistoric and wholly modern standing stones. The latter can be distinguished by the expedient way in which their shallow stoneholes have been created and the lack of packing to ensure stability. Together these account for the loose nature of a number of uprights (e.g. 22). The way in which these have been erected will inevitably mean that they will continue to work loose and/or fall in the near future. In management terms, this raises important questions as to whether these stones should be removed or actively curated as

illustrations of the on-going biography and dynamic life of the monumen.<sup>1</sup>

Whilst the results demonstrated that Gray's assumption of geometric circularity was correct, that of regularity in stone placement cannot be sustained and his excavations may well have missed stone settings as a result. Looking to the surviving prehistoric fabric, if the interpretation of Stone Z as the original occupant of Feature 4 is correct, then only a small portion of the stone would have been visible above the turf when standing, the rest of this long, thin slab anchored into the socket and packed firmly into place with stones. Rather than broken stumps (as claimed by Gray) the circle may have always included barely projecting stones in its fabric. This 'iceberg' approach would make them extremely stable, and it may well be the case that the very smallest stones of the Circle are in fact the most solidly anchored and therefore least prone to subsequent damage; they certainly do not project sufficiently to attract animal rubbing. As well as stones being deliberately set in this fashion, the results from Feature 6 suggest that others, the largest, were intentionally set at an angle rather than this resulting from later disturbance (e.g. 1



Fig. 23 Feature 4 stonehole fully excavated (Stone Z sits to the right of the chalkboard).





*Fig. 24 Looking east across the curving area of rough paving [201].  
The core of the cairn can be seen in the top-left quarter of the image*

and 17). Rather than a simple ring of upright (albeit small) standing stones, Porlock Circle combined at least three very different, and distinctive, practices: traditional small uprights seen elsewhere on the moor; deliberately low uprights (a literal inversion of the former); large sloping stones. This implies a very deliberate strategy with regard to the size and shape of the component stones. The significance of this has been discussed elsewhere (Gillings, 2015) but at the very least it suggests that the circle was an unusually complex and dynamic monument. This is borne out further by the evidence for on-going modification through the careful extraction (de-commissioning) of stones that were then left neatly placed at the side of the original stonehole, a practice seen elsewhere on Exmoor (Gillings and Taylor 2012). As to when this took place it could conceivably be prehistoric – the lack of deep stratigraphy does not help in this regard. The final point to make concerns the geophysical results and the lead wheel. Together these suggest that not only was the circle not the earliest elaborate structure on the site, if the wheel does prove to be a Roman

votive it certainly enjoyed a very active after-life.

With regard to the stone row and cairn, rather than regarding (recording and managing) these as separate and independent monuments, it is better to think of them as integrated components of a larger monumental landscape. As in the recent excavations at Lanacombe, even the most visibly damaged and unpromising of Exmoor's cairns can reveal considerable structural variability and complexity (Gillings 2013). With its encircling orthostats and strategic deployment of yellow sandstone to kerb the structure, the Porlock Circle cairn would have been a striking monument in its own right. The alignment between row and cairn implies that the latter was already in place when the former was laid out, but the geophysical survey results allow us to nuance this interpretation, revealing that the row simply followed a pre-existing alignment – conceivably a path to the cairn. With regard to dating, we have a single radiocarbon determination upon a single fragment of short-lived charcoal from the buried soil sealed by the final constructional phase of the cairn. Given the buried soil would

have taken a while to develop and in turn sealed tumble from the primary phase(s) of the cairn, the sense is of a rather fancy Early Bronze Age cairn subsequently enlarged in the middle Bronze Age through the addition of an area of rough paving around its perimeter. If the argument that the cairn pre-dated the row is accepted, it is tempting to see both the paving and construction of the row as part of a middle Bronze Age re-organisation of the landscape that may also have involved the creation of the circle. This can only be resolved through more targeted excavation, defining the full extent of the paving spread and establishing its stratigraphic relationship to both the row and circle.

#### ACKNOWLEDGEMENTS

Archival material relating to the Harold St. George Gray fieldwork was kindly provided by Chris Webster of the Somerset Historic Environment Record, Taunton. Fieldwork was carried out by students from the University of Leicester and enthusiastic volunteers from the Dig Porlock project.<sup>2</sup> Environmental processing was carried out by Rachel Small and charcoal identification, Graham Morgan, both of University of Leicester Archaeological Services (ULAS). Many thanks to Rob Wilson-North, Faye Balmond, Shirley Blaylock and Catherine Dove (ENPA) for support throughout the project and to Flemming Ulf-Hansen (English Nature), Richard Richards and Porlock Manor Estate for granting the necessary permissions to carry out the work. Thanks are also extended to Jeremy Taylor, Doug Mitcham and the anonymous reviewer for their constructive comments on the text; needless to say any errors and omissions are entirely down to the author.

#### ENDNOTES

<sup>1</sup> Following close consultation with ENPA Trench A was restored to its pre-excavation condition. Stones 19 and 23 were re-inserted into their sockets (Features 1 and 3) and packed into place with soil. The prehistoric stones holes were lined with terram and in each case the complete assemblage of packing stones associated with the stonehole was placed within it. The holes were then backfilled with soil.

<sup>2</sup> <http://www.exmoor-nationalpark.gov.uk/environment/?a=418723>

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