

# A Neolithic burial and pit alignment near Ranbury Ring, Ampney St Peter: Excavations in 2008/9

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## INTRODUCTION

This report presents the results of an excavation undertaken by Cotswold Archaeology at Ranbury Farm, Ampney St Peter, six kilometres to the east of Cirencester (centred on OS Nat. Grid SP 0880 0085). The site lies approximately 500 m to the south-east of the village of Ampney St Peter and 50 m to the west of Ranbury Ring, an upstanding Iron Age ringwork and Scheduled Monument (No. GC52) (Figs. 1 and 2). The underlying geology consists of Cornbrash limestone (BGS 1998).

Ranbury Ring occupies a slight eminence in the otherwise flat Cotswold landscape to the east of Cirencester. This class of monument is not uncommon in the region and, while Ranbury Ring has been traditionally labelled a ‘fort’ or ‘hillfort’, and described as such in the Royal Commission’s survey of the Gloucestershire Cotswolds (RCHME 1976, 3–4), a defensive function is not assured. There are 21 monuments classified as ‘hillforts’ in the Royal Commission’s survey (*ibid.*, xxv), although this includes a range of forms from small earthwork enclosures or ringworks of a hectare or less in internal area, to large enclosed settlements such as Uley Bury (15 ha) and Credenhill (20 ha). In his recent study of the Iron Age of the region, Tom Moore (2006a, 39) prefers the term ‘enclosure’, to take account of similar monuments with poorly preserved or flattened ramparts, and to avoid assumptions about role and status.

Ranbury Ring is described as ‘bivallate by reason of a feeble outer bank and ditch’ (RCHME 1976, 3) and, at 4.65 ha, as being on the large side or medium in size, depending upon which classification is used (Moore 2006a, 39 and table 4.1). It is similar in size and form to Sodbury Camp, Trewsbury (Coates), The Castles (Dowdeswell) and Dean Camp (Coln St Aldwyn) in the county. The role of these sites within the Iron Age settlement pattern is unclear and it is not generally known how they were occupied, whether as permanent settlements, as seasonal meeting places, or as storage centres for a dispersed population. Ranbury Ring had not been examined by excavation until a trial trench was excavated part way through the outer ditch during preliminary work to the present investigations (FA 2007).

The Royal Commission’s survey was undertaken before cropmarks, photographed in July 1975, showed not only linear and circular features outside the earthworks, but also clear linear boundaries underlying the monument (Figs. 1 and 2). It was this combination of potentially early field boundaries and ring-ditches in and around the Iron Age enclosure which suggested the potential for archaeological remains to be present in the land to the west of the Scheduled

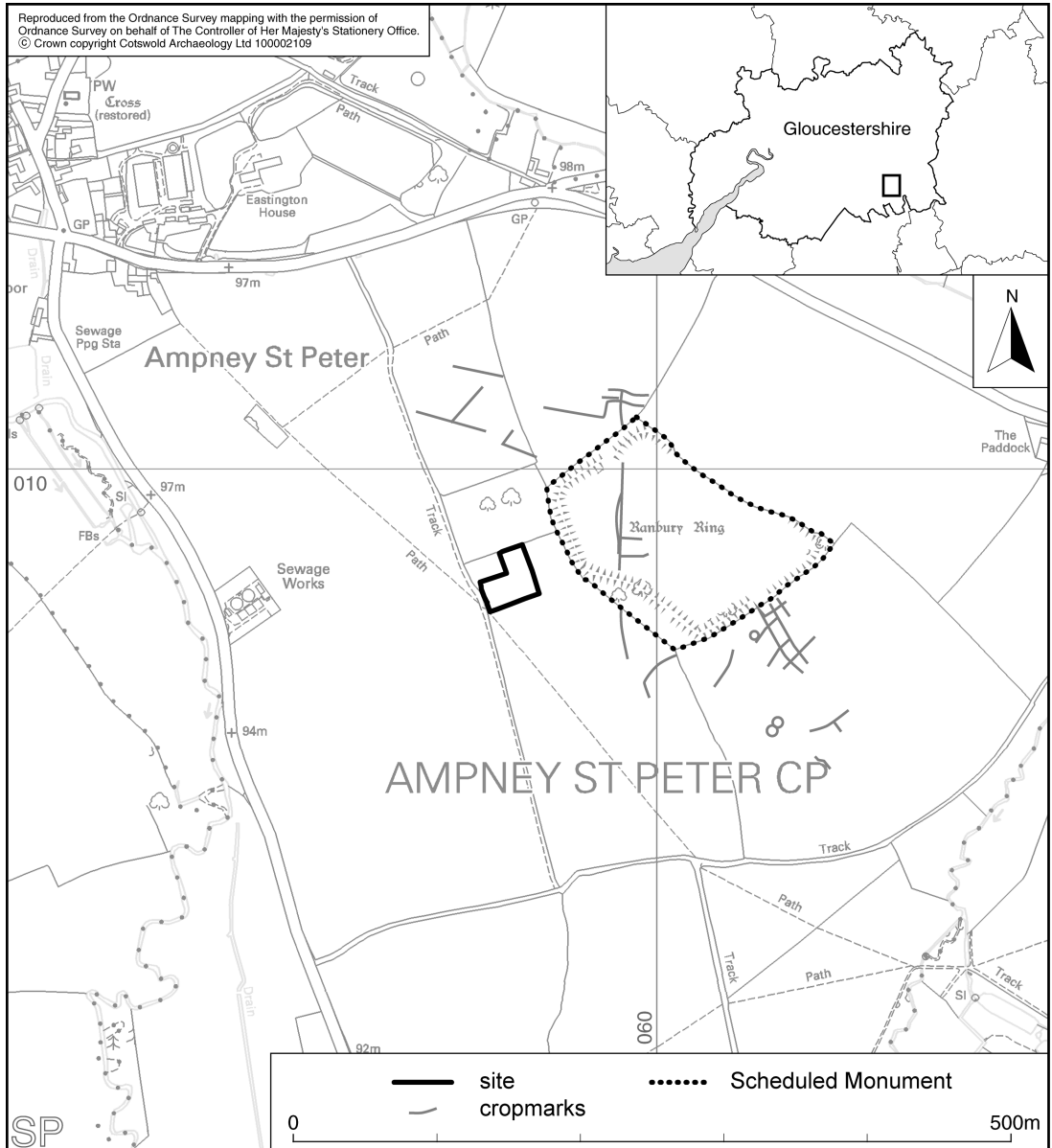


Fig. 1. Site location showing Ranbury Ring Iron Age earthwork and cropmark plot. Transcription of the cropmarks courtesy of Foundations Archaeology (Scale 1:5000)

Monument where the landowner had proposed the construction of two agricultural buildings. The excavation that is the subject of this report was required by a condition imposed following a successful appeal against refusal of planning permission. It had been preceded by desk-based assessment and field evaluation (FA 2006; FA 2007). The evaluation comprised the excavation



Fig. 2. Aerial photograph (July 1975) of Ranbury Ring, looking north, showing some of the cropmarks plotted on Fig. 1. The location of the excavation area is also shown. A possible pit alignment is indicated by the arrow 'A'. © Crown Copyright. NMR. Reproduced under English Heritage Permission No. 1829

of five trenches and three test pits across the development site and included the extension of one of the trenches as far as the outer earthwork of the Scheduled Monument so as to determine the presence of this ditch and any associated features (Fig. 3). The test pits, in the northern part of the site, were hand-dug in an area where trees were then present. The evaluation revealed an undated pit, an undated ditch, and a post-medieval quarry.

The subsequent excavation was undertaken between Dec. 2008 and Jan. 2009 over *c.* 0.4 ha within the footprint of the development. The archaeological work was commissioned by The Environmental Dimension Partnership (EDP) on behalf of LEDA Properties Ltd. The strategy for excavation, approved by Gloucestershire County Council Archaeology Service as advisers to Cotswold District Council, stipulated the excavation of 20% of linear features; and at least 50% of all discrete features unless they were demonstrably post-medieval in date, in which case only a limited intervention would be required, or of high significance (e.g. structures or burials), where 100% excavation would be undertaken. The excavation commenced with the removal of the thin topsoil by machine. The hand excavation of identified features followed.

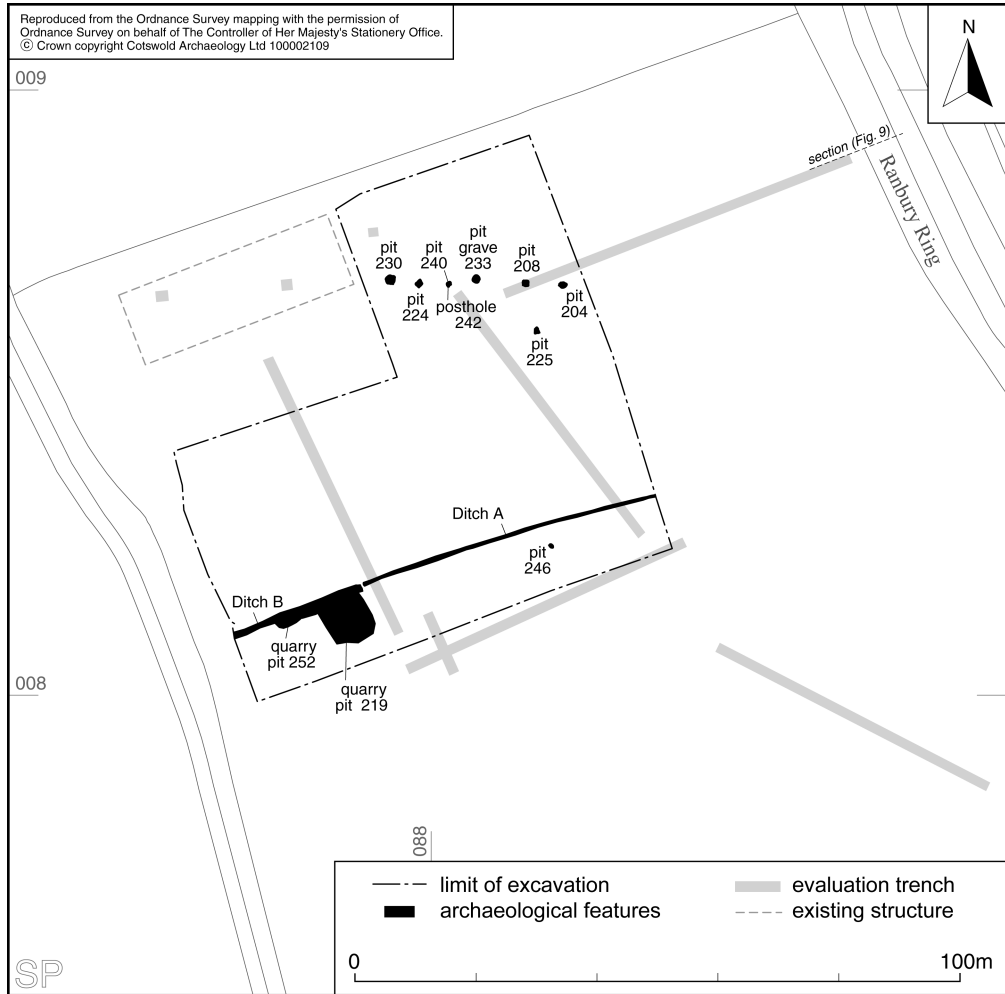


Fig. 3. Excavation area and features (Evaluation trench and section location from FA 2007). (Scale 1:1250)

## EXCAVATION RESULTS

### Neolithic features

A ragged alignment of six pits was revealed in the northern part of the site, running approximately east/west (Fig. 3). These were of sub-square or sub-circular form and not regularly spaced; the western three (pits 230, 224, 240) were about 5.0 m apart (centre to centre) while the eastern two (pits 208, 204) were 6.5 m apart. Pit 233 lay slightly north of the alignment and proved to be the most interesting.

*Pit grave 233*

Pit 233 was an irregular circle in plan, *c.* 1.4 m in diameter and 0.5 m deep, and contained the remains of a crouched inhumation (234) set within a small rectangular recess cut into the rock in the bottom of the pit (Figs. 4 and 5). The bone had not survived well despite the calcareous geology but the skeletal remains, found as far as could be ascertained in their correct anatomical position, suggest that the body was originally tightly flexed, on its right side, and with the chin tucked in. There were no accompanying grave goods. Examination of the skeleton (by Harriet Jacklin) identified that the individual was a child between about 9.5 and 12.5 years old, but the sex could not be determined. An estimation of stature was also not possible due to the lack of complete long bones (only about 25% of the skeleton was present). What was present showed no signs of pathology or ill health.

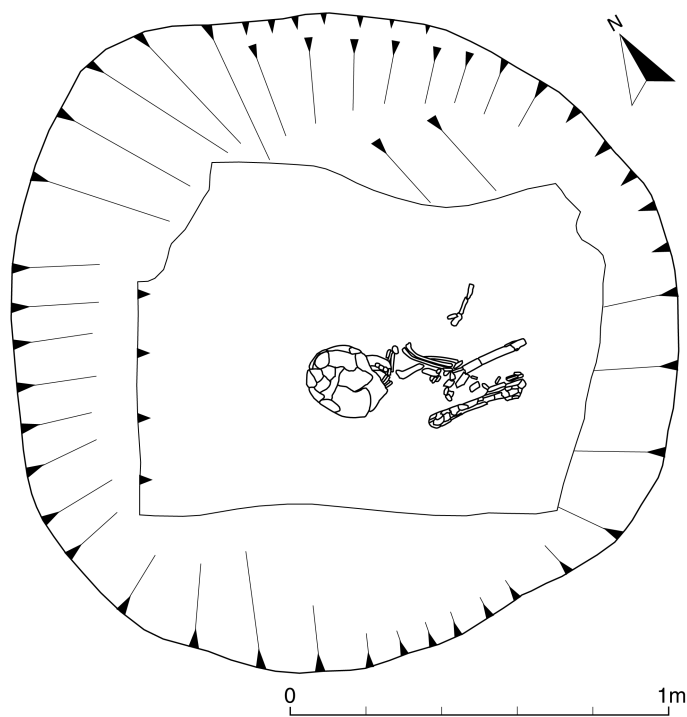


Fig. 4. Pit grave 233 with child inhumation 234 (Scale 1:20)

The right femur was sent for radiocarbon dating. The results are shown in Table 1. To increase the precision of the date, a weighted mean was calculated from the two closest measurements of three (the third was omitted because of some doubt over its statistical validity) and this returned a date within the range 3362–3107 cal. BC (95% confidence: 4543  $\pm$  21 BP: NZA 33908 and NZA 33909). The result is plotted in Fig. 6. The measurement intercepts a plateau in the radiocarbon calibration curve, with the result that the calibrated date is not as precise as it might have been. Nonetheless the date clearly falls within the period conventionally referred to as the middle Neolithic (*c.* 3500–3000 BC).

Table 1: AMS radiocarbon dates

Feature / context number	Laboratory number	Material	C:N ratio	Conventional Radiocarbon Age BP	Calibrated date at 95% confidence **	Calibrated date at 68% confidence **
233/234	NZA 33908	human bone right femur	3.4	4566+/- 30	3490 BC to 3106 BC	3366 BC to 3132 BC
233/234	NZA 33909	human bone right femur	3.4	4520+/- 30	3354 BC to 3100 BC	3348 BC to 3114 BC
233/234	NZA 33938	human bone right femur	3.4	4654+/- 30	3516 BC to 3363 BC	3498 BC to 3368 BC
				4543 +/- 21*	3362 BC to 3318 BC (31.7%)	3356 BC to 3331 BC (26.3%)
230/237	NZA 33830	<i>Quercus</i> oak charcoal	n/a	5241 +/- 35	plus 3271 BC to 3267 BC (0.5%)  plus 3235 BC to 3107 BC (62.7%) 4226 BC to 3968 BC	plus 3211 BC to 3187 BC (23.0 %)  plus 3153 BC to 3131 BC (18.6%) 4218 BC to 3979 BC

\* weighted mean of first two dates.

\*\* Individual calibrated dates show the overall range only.



Fig. 5. Child inhumation 234 (Scale 0.5 m, looking north-west)

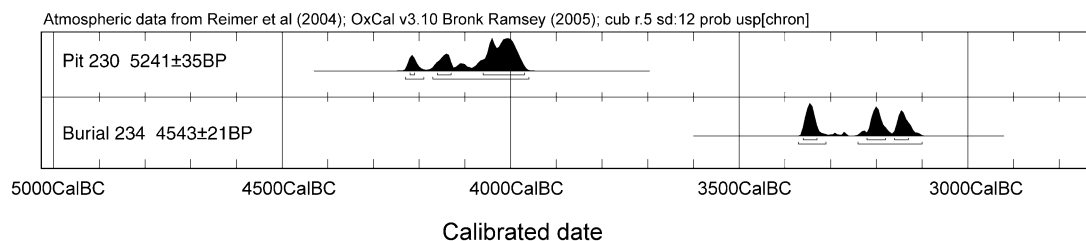


Fig. 6. Radiocarbon calibration curves. Upper: pit 230, fill 237 (oak charcoal); lower: grave 233, skeleton 234 (OxCal v3.10 multiplot; Atmospheric data from Reimer *et al.* 2004)

Three soil samples from the grave fill yielded small amounts of charcoal and a few snails, as well as some uncharred seeds. Among the small assemblage of snails was the burrowing species *Ceciloides accicula*, which suggests some bioturbation of the soils resulting in the inclusion of modern seeds. The provenance of the charred material was therefore considered to be unreliable. The grave fill also yielded ten fragments of heavily weathered mammal bone, which were identified (by Sylvia Warman) as long bone shafts of sheep-sized and cow-sized animals. This would appear to be redeposited material of little archaeological significance.

#### *Other pits*

The other pits in the alignment (pits 224, 240, 208 and 204) were mostly less than 0.5 m deep with single, sterile silty fills. Pit 230, however, was larger (1.6 m in diameter and 1.5 m deep) with

vertical sides and a flat base (Figs 7. and 8). This pit was also filled with largely sterile sediment. Soil samples from the lowest fill (237) yielded small quantities of wood charcoal, as well as some mollusca. Examination (by Lucy Allott) of the charcoal identified deciduous oak (*Quercus* sp.), but this appeared to derive from mature wood (on the basis of the projected growth ring curvature).

For want of more suitable material, one of the charcoal fragments was sent for radiocarbon dating and returned a date of 4226–3968 cal. BC (95% confidence: 5241±35 BP: NZA 33830) (Fig. 6). This places the burning event in the early Neolithic period, although it is possible that the wood was several hundred years old at the time of burning, so the event might have been rather later than indicated.

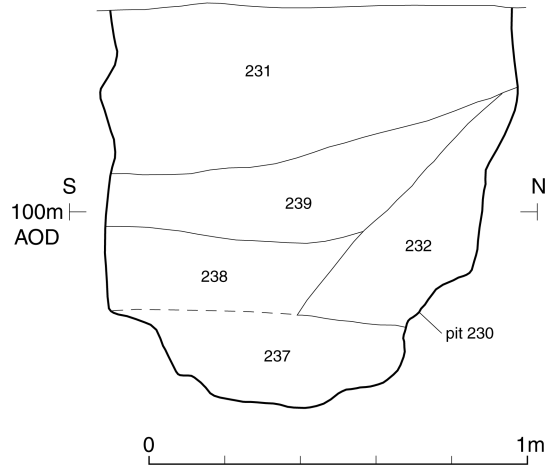


Fig. 7. Section of deep pit 230 (Scale 1:20)



Fig. 8. Photograph of pit 230 half sectioned. (Scales 1 m, looking south-west)



The mollusca were examined (by Keith Wilkinson), with 36 identifiable specimens recovered from these two samples. Shell preservation was generally poor and the numbers limited, so overall interpretations remain circumspect. The majority were *Vertigo pymaea*, *Vallonia costata* and *Vallonia excentrica*, which are classified by Evans (1972) as open country species, while Kerney (1999) states that all prefer short grassland environments. The dominance of the open country species suggests that, during initial pit infill, the surrounding environment was open and probably of grazed grassland.

Basal fill 237 was sealed by a steeply tipping stony deposit 232, which appeared to derive from the collapse of the pit side (Fig. 7). Subsequently, the pit was partly filled with stony silt deposits (238 and 239), which may represent a gradual infilling by ploughsoil that had incorporated broken bedrock. A flint flake from deposit 238 is characteristic of earlier Neolithic flintwork, although an individual find cannot be seen as reliable dating. The uppermost fill (231) was a relatively stone-free soil, which again appeared to be naturally derived, although it contained fragmented cattle bone. A broken flint flake of undiagnostic type also came from this deposit.

A small feature (242), which may have been a posthole next to pit 240, contained a few fragments of burnt animal bone, none of which could be identified to species, but originated from cow-sized and sheep-sized animals. The burning was consistent with higher temperatures than would commonly be reached in domestic cooking fires. It is not known whether this burning had a ritual significance, or had any association with the child burial. Pits 225 and 246 were similar to the other sterile pits, but were located off the alignment. A broken flint flake came from the former.

### Post-medieval features

The later features comprised two ditches in the southern part of the site (Fig. 3, Ditches A and B), which appear to represent a former field boundary shown on the Tithe Map of the parish of Ampney St Peter in 1842 (Gloucestershire Record Office: GDR/T1/5). Ditch A yielded a sherd of post-medieval pottery. The ditch terminated just short of a large quarry pit (219), with which it may have been contemporary. Ditch B, which was wider and deeper but on the same alignment as Ditch A, cut a smaller quarry pit (252) containing a single small medieval potsherd that was probably residual. Taken together, the group of features suggests stone quarries adjacent to a field boundary.

## DISCUSSION

The discovery of a burial dated to the early fourth millennium BC (middle Neolithic) was an unexpected outcome of the fieldwork. Articulated burials of this date are rare, both regionally and nationally. The regional picture has been reviewed by Timothy Darvill (2006), who illustrates a similar example excavated at Wormington Farm, Worcestershire, where the skeleton, within a pit grave, was shown to be that of a woman aged 25–40. She had been placed in a flexed position on her left side (Coleman *et al.* 2006, 89, Fig. 20). A radiocarbon determination from that skeleton returned a date of 3650–3370 BC (Wk-15335: 4747±48 BP), making it earlier than the Ranbury Farm burial.

It is assumed that the Wormington Farm burial was in a flat grave as there was no indication of a surrounding ditch, and a similar interpretation may be applied to the Ranbury Farm burial. A burial with an early Neolithic date, very similar to that from Wormington Farm, came from beneath the bank of the causewayed enclosure at Windmill Hill, Wiltshire (Whittle *et al.* 1999, 79–81), and Darvill (2006, 22) gives other scattered examples from further afield. In his review

of Neolithic burial, Kinnes (1979) listed 20 'flat graves' from a wide area of Britain, although it is possible that some had had ploughed-out mounds (*ibid.*, Appendix 2).

The Ranbury Farm burial is slightly later than those from the Cotswold Severn long barrows and other monumental burial structures of the region. There is at present no indication that the burial formed part of a mortuary or ritual 'complex' although, excepting Ranbury Ring itself, little is known of the wider prehistoric landscape. An association with monuments of a similar date need not require very close proximity. The prehistoric burial complex at Barrow Hills, Radley, Oxfordshire, includes a cluster of flat graves of Neolithic date set apart from the main monument complex, which incorporated the Abingdon causewayed enclosure a little over 200 m to the west, an oval barrow 180 m to the south-west and a linear mortuary structure 80 m to the south-east (Barclay and Halpin 1998, Figs 1.10, 9.12). These flat graves contained the articulated and flexed skeletons of a child on its right side (Grave 5354), an adult man on his left side (Grave 5355), and the disturbed skeleton, possibly of a woman, on her right side (Grave 5356) (*ibid.*, Fig. 3.9). Samples of bone returned radiocarbon dates of 3650–3100 BC (4650±80 BP; OXA-1882), 3380–3090 BC (4530±50 BP; BM-2710) and 3800–3100 BC (4700±100 BP; Ox-A-4359) respectively (*ibid.*, 31–2), all of which overlap with the Ranbury Farm date. While the dates were too imprecise to determine whether this group of burials was contemporaneous with others at this site, or whether it was part of a chronologically distinct tradition of relatively brief duration, the flat graves were considered to be part of the earlier Neolithic ritual complex of causewayed enclosure, oval barrow and mortuary enclosure at this site, and, in general terms, contemporary with other mortuary traditions in the earlier Neolithic. The social and ritual context of these burials, however, remains enigmatic (Garwood with Barclay 1998, 275).

The question remains as to how the Ranbury Farm burial fitted into the wider Neolithic landscape. It certainly appears to be part of the pit alignment, and while the early Neolithic date from pit 230 is not entirely reliable, the pits appear likely to be broadly of 4th millennium BC date. Alignments of pits, forming 'permeable boundaries' or constructed for other reasons, are a relatively well-known and widely occurring monument. However, while they are notoriously difficult to date due to a scarcity of associated material, where dating is known they are normally shown to be of Iron Age origin (see Moore 2006b for a summary of the regional evidence). Pit alignments dating to the Neolithic are much rarer and there are no known comparable examples in the region.

Elsewhere, there are a handful of possible examples; that published as Ewart 1 in the Milfield Basin, Northumberland, being securely dated by assemblages of Grooved Ware (Miket 1981). Ewart 1 was described as an irregular line of closely spaced pits, which cropmarks show running for over 1 km. The form of the pits, where examined in a limited excavation, was unlike those at Ranbury Farm, since they were spaced at 2–3 m intervals, were large, i.e. generally about 2 m across and 0.6–0.8 m deep, and each had a distinctive internal shelf. Their interpretation as large post-holes looks convincing.

A Neolithic pit alignment of a different form was examined at near Leuchars, Fife (Carter 1996). Cropmarks show this to have been a very irregular alignment of unevenly spaced pits, and the single excavated example was broad and shallow. It was not clear whether the pit was made-made or created as a tree throw, and the only dating evidence came from a single radiocarbon determination, on oak charcoal, indicating a date within the range 3258–2900 BC. While an interpretation of these features is not conclusive, they suggest the presence of man-made or natural alignments of features of Neolithic date, perhaps not within current categories of Neolithic 'monument', which may be recognisable more widely. Certainly the Ranbury Farm pits do not appear to have been post-holes, although pit 230 might have been, and the others may have served

as settings for stones, or, if natural, could conceivably have been an alignment of tree-throw pits.

Other kinds of pits of middle Neolithic date have been excavated relatively locally at Cotswold Community, Somerford Keynes. These were widely scattered and arranged singly or in small groups of two or three, which is characteristic of the evidence for early prehistoric activity generally. While it is possible to make out a short alignment of three pits in one instance, this appears likely to be fortuitous (Powell *et al.* 2010, Fig. 2.3). The pits, which contained flintwork, Peterborough Ware pottery and charcoal, appeared to have been deliberately dug and were interpreted as relating to intermittent domestic activity, rather than occupation in any firm sense (*ibid.*, 29). The charcoal gave environmental information which is otherwise rare in this period, and indicated scrubby vegetation with mature oak-hazel woodland present; a finding supported by similar evidence nearby from Horcott (*ibid.*, 29), which contrasts with the open country mollusca evidence from Ranbury Farm.

This review of comparable Neolithic features and their contexts has not led to a conclusive interpretation for the Ranbury Farm burial and pit alignment, but it has emphasised the rarity of these features and the potential for further understanding of their setting. The aerial photograph of the ringwork in fact may show the pit alignment extending into the field to the north-west (Fig. 2) although this has not been plotted (Fig. 1). There is the intriguing suggestion that it is aligned on a kink in the south-western side of the Iron Age earthworks, a change of course that has no obvious origin in the local topography, and it is possible that Ranbury Ring was sited on an earlier earthwork. A coincidence between Iron Age and Neolithic enclosures certainly has precedents: Crickley Hill and Salmonsbury within Gloucestershire, and Hambledon Hill in Dorset, being obvious examples. Cropmarks within Ranbury Ring suggest the presence of linear boundaries pre-dating the ringwork, and ring-ditches and other enclosures lie to the south (Figs. 1 and 2). Present interpretation of these types of features is that they are likely to be Bronze Age rather than earlier, but this awaits confirmation. The limitation of cropmark evidence is demonstrated by not showing an outer ditch of the ringwork on the south-west side, which is described in the 1976 survey as being 'traced only along the S half of the SW side where it is 6ins deep and 12ft wide' (RCHME 1976, 3). This ditch has not been completely lost to ploughing as had been feared (FA 2007, para. 2.6) and was recorded in Trench 3 of the evaluation, where it was shown to survive to a depth of over 0.65 m beneath the ploughsoil (Figs. 3 and 9). It was without finds.

It is on the strength of this outer bank and ditch that the ringwork has been classified as 'bivallate' in the description set out in the Schedule. While this may be the case, the true form of its complete circuit, both within and without the Scheduled Area, still remains poorly defined, while the development of its boundary, enclosed space and its setting have remained unresearched and are full of possibilities.

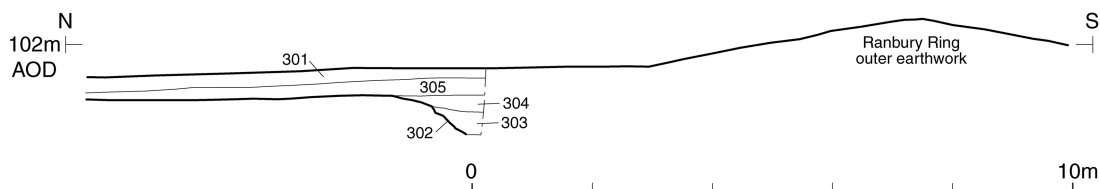


Fig. 9. Profile of eastern end of evaluation trench 3 (from FA 2007) (Scale 1:125)

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