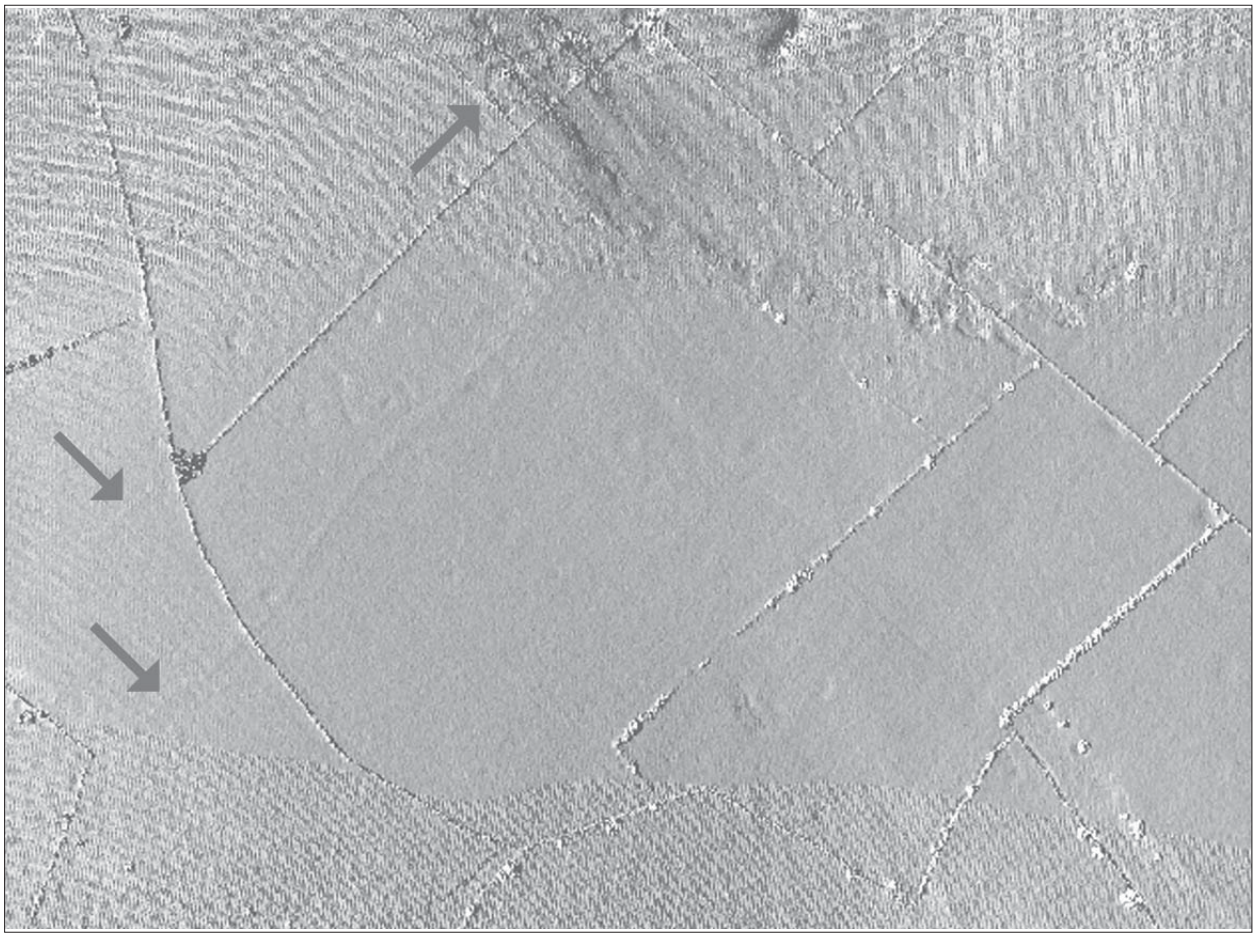
WESTBURY SLEIGHT

A Bronze Age cairn & field system on Mendip?



Researched & written in 2007
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A Bronze Age cairn and field system on Mendip, in the parish of Westbury-sub-Mendip, Somerset ?

Westbury Society 2007

Summary
Early in 2007 fieldwork and a geophysical survey were undertaken by members of the Westbury Society at the site of an Ordnance Survey recorded earthwork enclosure on the Mendip scarp. At the same time English Heritage completed a fresh earthwork survey. The enclosure is most likely to be a much damaged platform cairn of Bronze Age date. Nearby linear banks may be part of a farming landscape of the late Bronze Age. It is further suggested that these banks and many of the present field boundaries along the southern Mendip slopes may be successors to a co-axial field system of late prehistoric date.

Introduction
The earthwork site is listed in the Somerset Historic Environment Record with the number 24837 and described as *"Incomplete oval earthwork comprising a bank with an outer ditch. It is in an area of medieval or later fields. The purpose of the earthwork is obscure but it may be associated with nearby quarries".* The nearby field system is listed separately as HER 25093 but no suggestion of its age is given.

Aims
The main aim of the geophysical and earthwork surveys, related fieldwork and documentary investigation was to try to establish the most likely explanation of the dating and purpose of the enclosure and linear features. A secondary aim was to establish the extent of these linear banks.

Location
The earthwork, centred at ST 5134 4976, and linear banks are located in a Parliamentary Enclosure field now called *Sleight* on the Mendip scarp looking southwards over the Moor of Westbury and the Axe Valley. It lies within 100 m. distance of the highest point of 263 m. OD. To the south west the Quantock Hills and Exmoor are visible; to the west South Wales; to the north west the hill of Blackdown; to the north Priddy Nine Barrows; and to the east Penn Hill above Wells.

Geology and land use
The *Soil Survey of the Mendip District* published in 1955 (Findlay) mapped the soil in the area of the enclosure as shallow free draining reddish brown earth of the Lulsgate Series (Findlay 1955, 63ff). In terms of solid geology the site is located close to the junction of the Hotwells (to the south) and Clifton Down Limestones (to the north); both are hard Carboniferous rocks (Geological Survey of Great Britain Sheet 280). At the north eastern end of the site the underlying limestone has outcropped. In this area there are also numerous shallow quarrying pits, probably used as a source of stone for the post-1791 Enclosure walls or to supply the two field lime kilns close by (HER 24852+3).

Immediately to the north east lies one of the large glacial lake basins identified by Ford & Stanton in 1968 (Ford & Stanton 1968); the approximate area of this basin is indicated in light blue in Fig 1 opposite. It is also visible on the aerial photograph Fig 7 on page 8.

Sleight is a local word, derived from OE *slaeget,* meaning sheep walk or pasture but the field has only been used for grazing heifers or for an occasional hay crop within living memory. The field was rotavated twice in the early 1970s for reseeding. The farmer who carried this out reported that the soil was very shallow & full of rocks (Sealy pers. comm.).

Landscape context

Seven barrows lie within 900 m. of the site surveyed and are marked on Fig 1 with red spots (HER 23974, 24151-2, 24843-6). *Cross Swallet* and its adjacent pool lie about 250 m. to the north east. The pool is mapped on the 1791 plan of Enclosures on Mendip, with *Ramspit Way* leading directly to it from the east (Somerset Archive and Record Service DD/CC/11685). See Fig 2. The pool is also marked in dark blue on both Figs 1 and 2.

A Mesolithic tranchet axe and numerous flint scatters dating from the Mesolithic to Bronze Age are also recorded within fields 500 m. to the north (HER 24869, 25693, 25798 & 44947). A single flint was found during the survey, see page 11. (SOMDOR-1B912).

The significant medieval settlement site of Ramspits lies 500 m. to the south and it has been suggested that the field system there may be of Romano-British date (HER 25675 & Pattison 1991).

Most of the field boundaries in the area are dry-stone walls. The 1791 *Plan of Westbury Hill* indicates the location of *Old Inclosures* to the south west and the lines for the proposed new field divisions of the allotments. The boundary wall between these two areas has been indicated by the purple line on Figs 1 and 2. Stone walls that were built as planned are highlighted in green on Fig 1. The other walls were built on a different plan after exchange and consolidation of allotments. It is clear that there was a considerable amount of reorganisation of the allotted areas before most of the present walls were built.

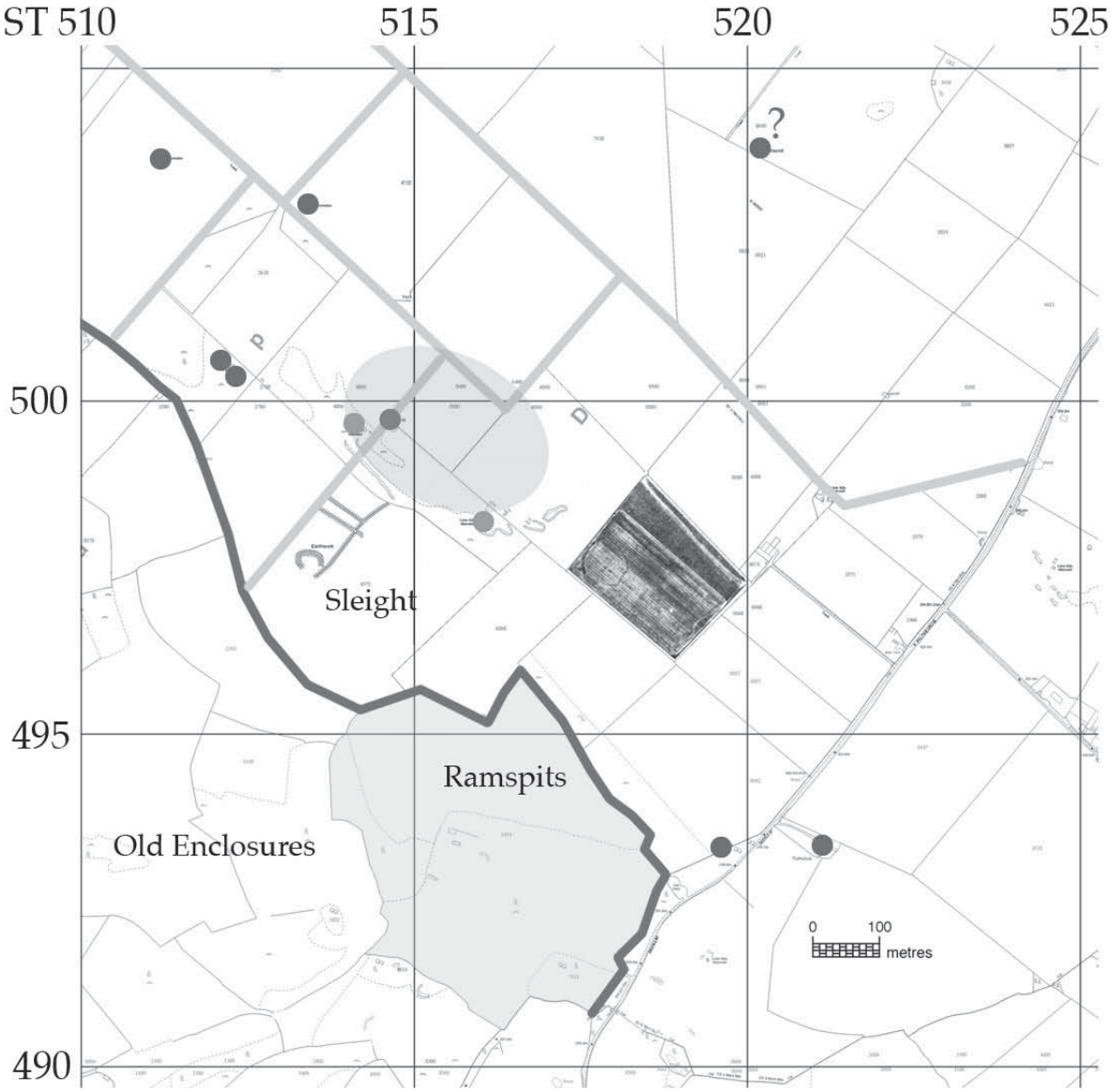


Fig.1 Historic landscape context (map based upon OS Explorer 141)

- Bronze Age round barrows
- NE boundary of pre-1791 "Old Enclosures"
- Post-1791 Parliamentary enclosures as planned
- Post-1791 lime kilns with adjacent quarrying
- Post -1791 pool for stock

Aerial photograph insert from RAF 1947 CPE-UK-2062-3249

Previous work

The first survey and description of the enclosure were published by Professor Tratman in 1925 (Tratman 1925, 285). Part of his Plate XVIII is shown on the opposite as Fig 3. His description reads *"In the parish of Westbury at Lat. 51, 14', 41", N., and Lon. 2, 41', 49", W., is a small earthwork. Its shape is an imperfect and incomplete circle consisting of a low inner mound with a ditch outside. There is a large gap in the circle to the S.E. Its purpose and date of contruction are unknown, but similar structures have been described as large hut circles. Its average diameter is 27 yds".* Tratman did not record the adjacent linear banks.

Five years later, in 1930, the Ordnance Survey included both the enclosure and linear features in the archaeological additions to the Second Edition survey of 1903 (1:2500 Somerset Sheets XXVII:11 and 12).

A more detailed earthwork survey at a scale of 1:2500 was undertaken in 1966 by the Ordnance Survey Archaeology Division and given the reference Antiquity No. ST54NW25 SCPD. This survey is shown in Fig 4 opposite. It was described and interpreted as follows: *"This appears to be an incomplete oval earthwork comprising a bank*

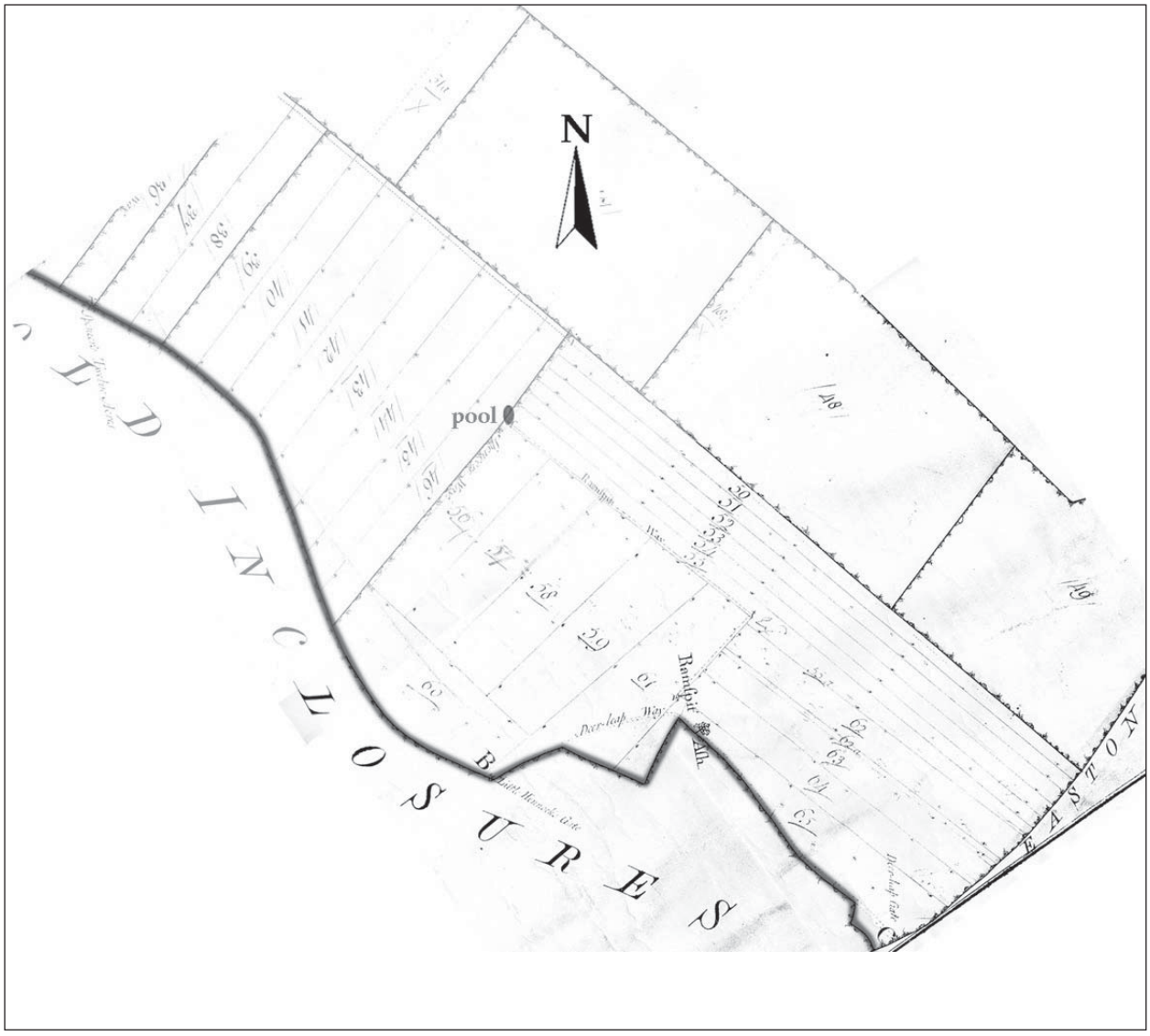


Fig 2. Part of the 1791 *Plan of Westbury Hill.* The earthwork enclosure lies within plot 56 just south of the pool.

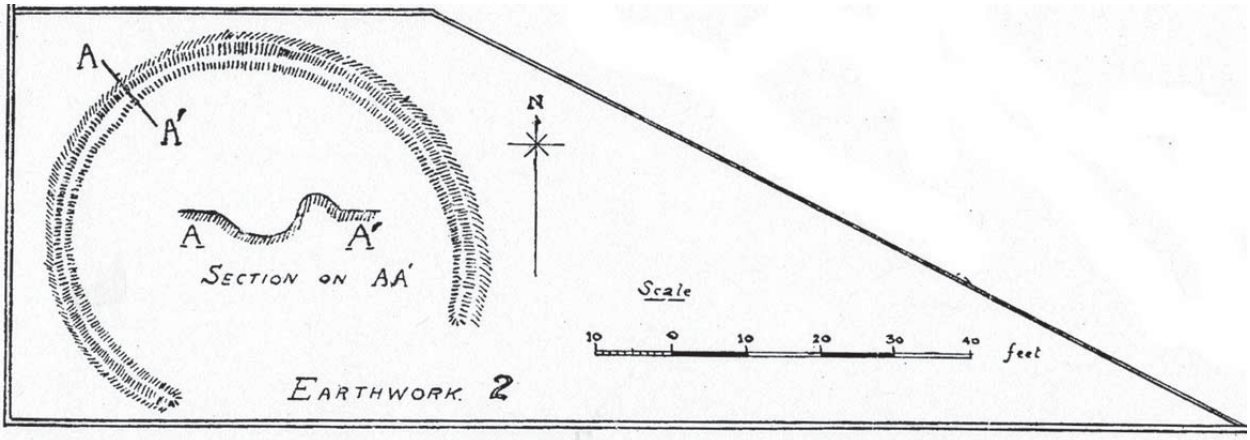


Fig 3. Part of Plate XVIII from Tratman 1925.

with outer ditch. It is in an area of Medieval or later fields. The purpose of the earthwork is obscure but it may be associated with nearby quarries" (Somerset HER 24837). Both of these quarries have associated limekilns (HER 24852 & 24853) and their locations are shown in pink on Fig 1.

Peter Ellis produced a sketch plan of the linear banks in 1986 as part of his survey for the Mendip Hills AONB (Ellis 1997). This plan is shown over the page as Fig 5. He recorded four roughly parallel banks orientated SW/NE and one cross bank. He also noted that the *"intrenchments"* were *"now filled in"*. His drawing makes it clear that he was referring to the sub-circular enclosure. Recent ploughing in the field immediately north west of the enclosure has removed most of the evidence for the linear banks that he saw there. His comment on the enclosure is curious as it is still clearly visible today. Ellis completed his notes with the comments *"It is very likely that these banks form part of a larger set of fields, and indeed that there may be other no longer distinct alignments of banks and closes"*. He made no suggestion of date for these features.

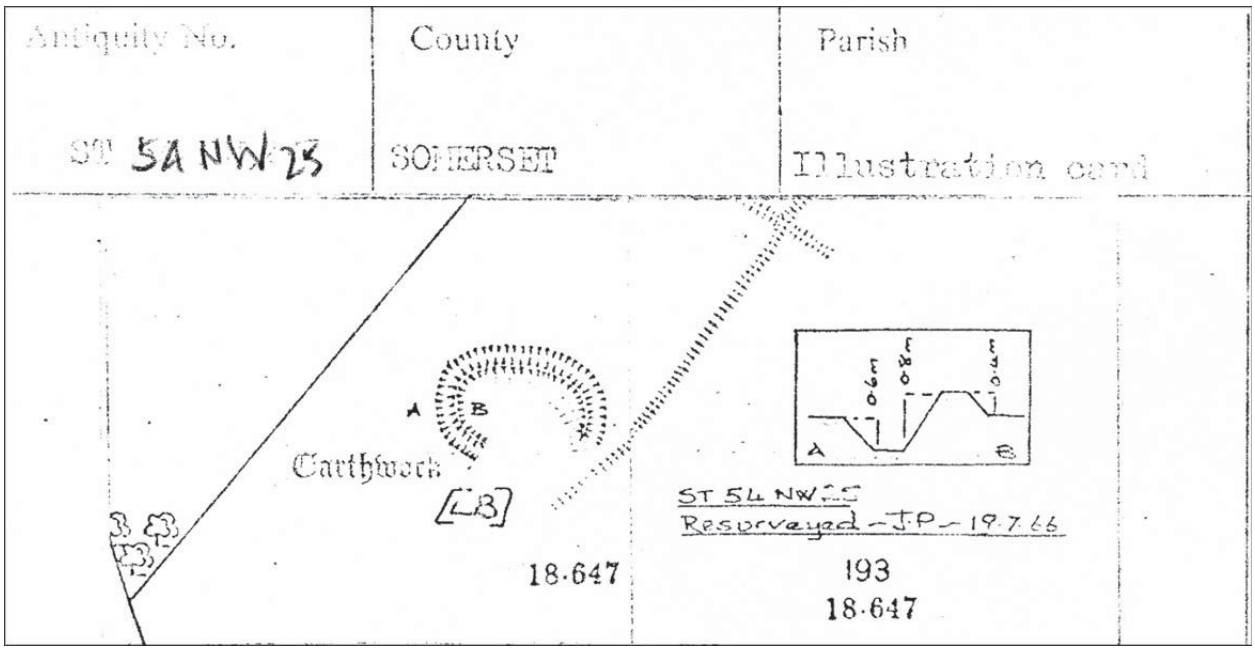
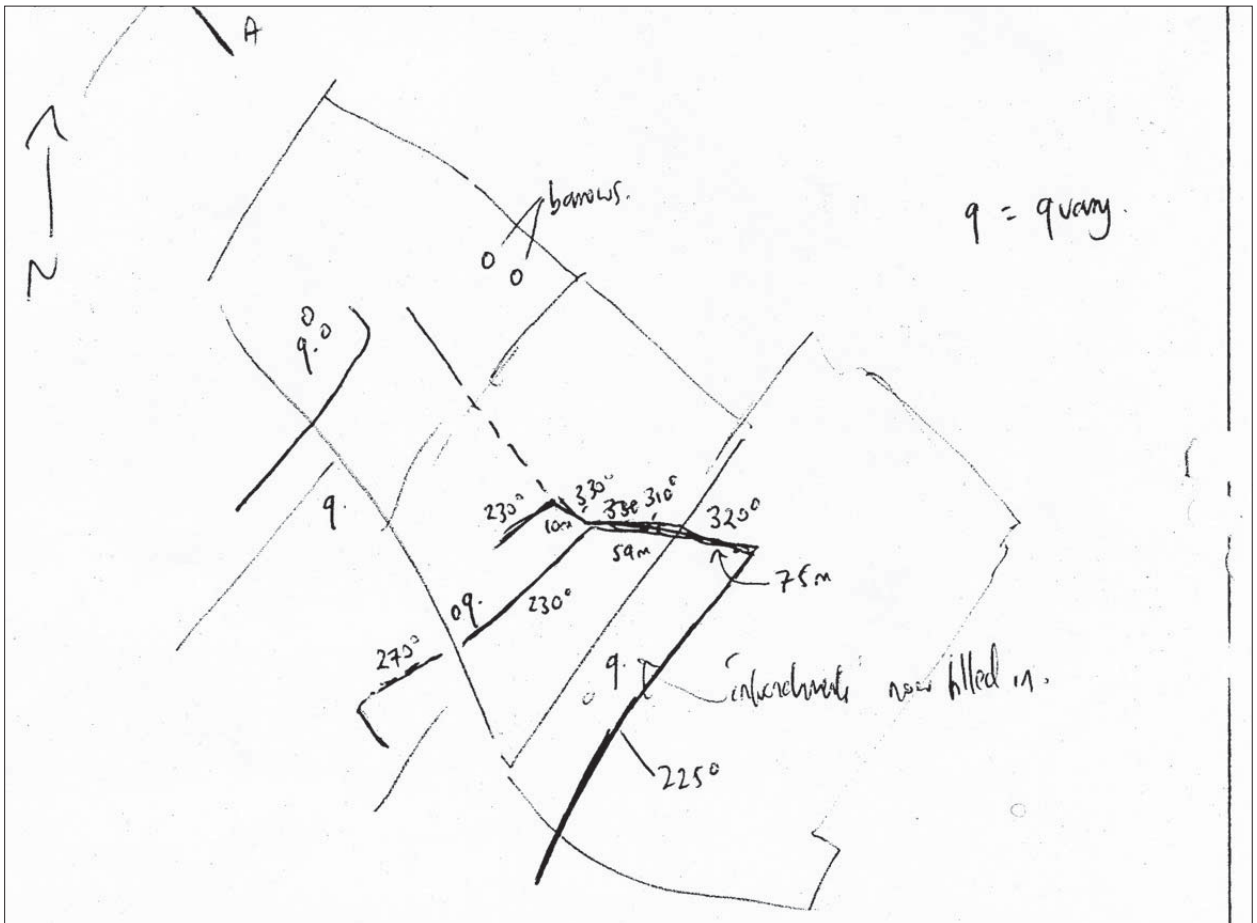


Fig 4. 1966 Ordnance Survey record card ST54NW25 SCPD

Earthwork Survey 2007 by English Heritage

As part of the English Heritage project on the Mendip Hills Area of Outstanding Natural Beauty, Archaeological Investigator Elaine Jamieson undertook a fresh earthwork survey using Trimble differential Global Positioning System equipment and completed using graphical survey methods. The GPS survey data was processed using Trimble Geomatics Office software and located to the Ordnance Survey National Grid using Trimble's OSTN02 transformation. A digital plan of the survey at 1:500 scale was produced using AutoCAD software and is shown here as Fig 6 opposite.

No direct relationship is revealed between the enclosure and field banks. The inner bank of the enclosure, recorded by Tratman, has almost disappeared. The linear bank runs underneath the stone wall towards its south west end and appears to terminate just before it reaches an older enclosure wall. At its north eastern end it turns to the north west and is overlain by another bank also running north west. The numerous quarry pits are clearly mapped.



A. To W a further bank at ST 510 513 running 140 degrees to SE. Could relate to above. This in a cultivated field and so very unclear.

Fig 5. Part of Peter Ellis' field notes dated 15 October 1986 (HER 25093)

ENGLISH HERITAGE

OFFICE OF ORIGIN	COUNTY	SCALE OF SURVEY	METHOD	OS MAP No.
Exeter	Somerset	1:500	GPS, Graphic	ST 54 NW
PROJECT NAME	**DISTRICT**	**DATE OF SURVEY**	**ASSOCIATED PLANS**	**NMR No.**
Mendip Hills AONB	Mendip	April 2007		ST 54 NW 25
SITE NAME	**PARISH**	**SURVEYOR(S)**		**SAM No.**
Ramspitts Enclosure	Westbury	EJ		
DOCUMENT STATUS	**NGR**	**© ENGLISH HERITAGE**	**SHEET**	**CATALOGUE No.**
Archive	ST 51338 49755			

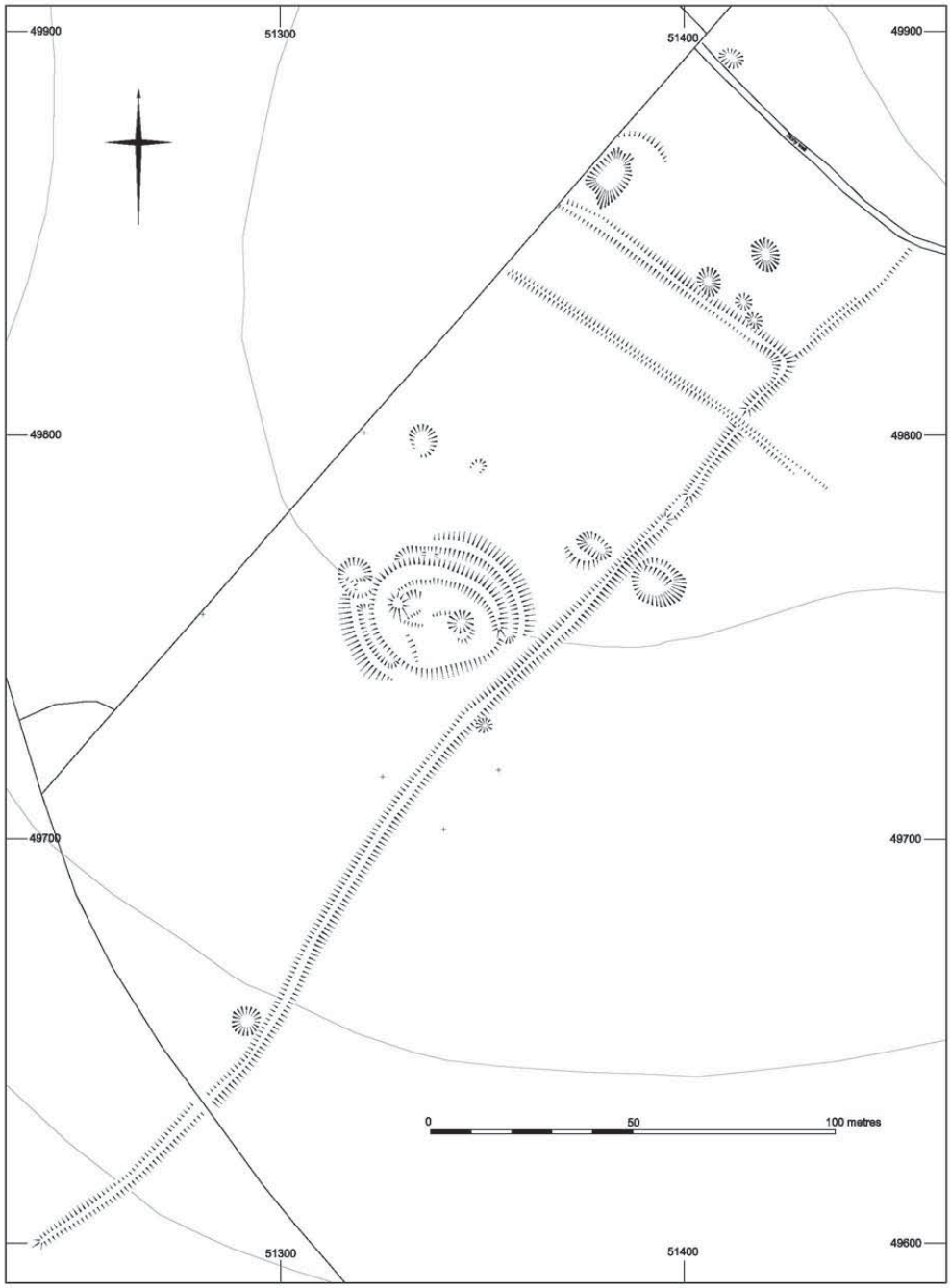


Fig 6. English Heritage earthwork survey 2007.

Aerial photography

The best aerial photograph of the sub-circular earthwork is an RAF photograph of 1946 (3G-TUD-UK-15-24 Part 2 no.5243) shown as Fig 7. The adjacent NE-SW linear bank is just visible too and appears to extend beyond the stone wall to the south west and to the north east into the glacial basin and just east of Cross Swallet. A short bank running NW-SE between the stone wall and the long linear bank is also visible. The medieval lynchets to the west of Ramspits field are clearly visible, as are the deserted settlement remains and linear banks within it.

Fig 7. 1946 RAF photograph (3G-TUD-UK-15-24 Part 2 no.5243)

A second RAF photograph of 1950 shown in Fig 8 (reference 541/540 frame 3110) also reveals the linear bank running downhill beyond the wall to the south west and shows another large curvilinear cropmark in a field 400 m. to the east (HER 25802). It has been suggested that this may be a "banjo" type enclosure (Krystyna Truscoe pers. comm). Such enclosures are generally assumed to be a new settlement type that emerged in the Middle Iron Age (Cunliffe 1995, 52).

Fig 8. 1950 RAF aerial photograph (ref.541/540 frame 3110)

LiDAR Survey

A LiDAR survey of Mendip was commissioned by the Mendip Hills Area of Outstanding Beauty in the late summer of 2006 and undertaken by the Cambridge Unit for Landscape Modelling (CULM). The gridded surface LiDAR models were prepared by English Heritage. Fig 9 illustrates the area around the site as a result of manipulation of the LiDAR data with QT Reader viewer. The enclosure and linear bank adjacent to it are clearly visible. This bank runs under an Enclosure wall and continues south west towards the corner of an old enclosure wall. The English Heritage earthwork survey does not record it meeting that wall. A short parallel bank can be seen just to its north heading north east and perhaps underlying the Enclosure wall that runs to the to centre of the image. The short cross bank at the north eastern end again runs under the stone wall and continues to the north west.

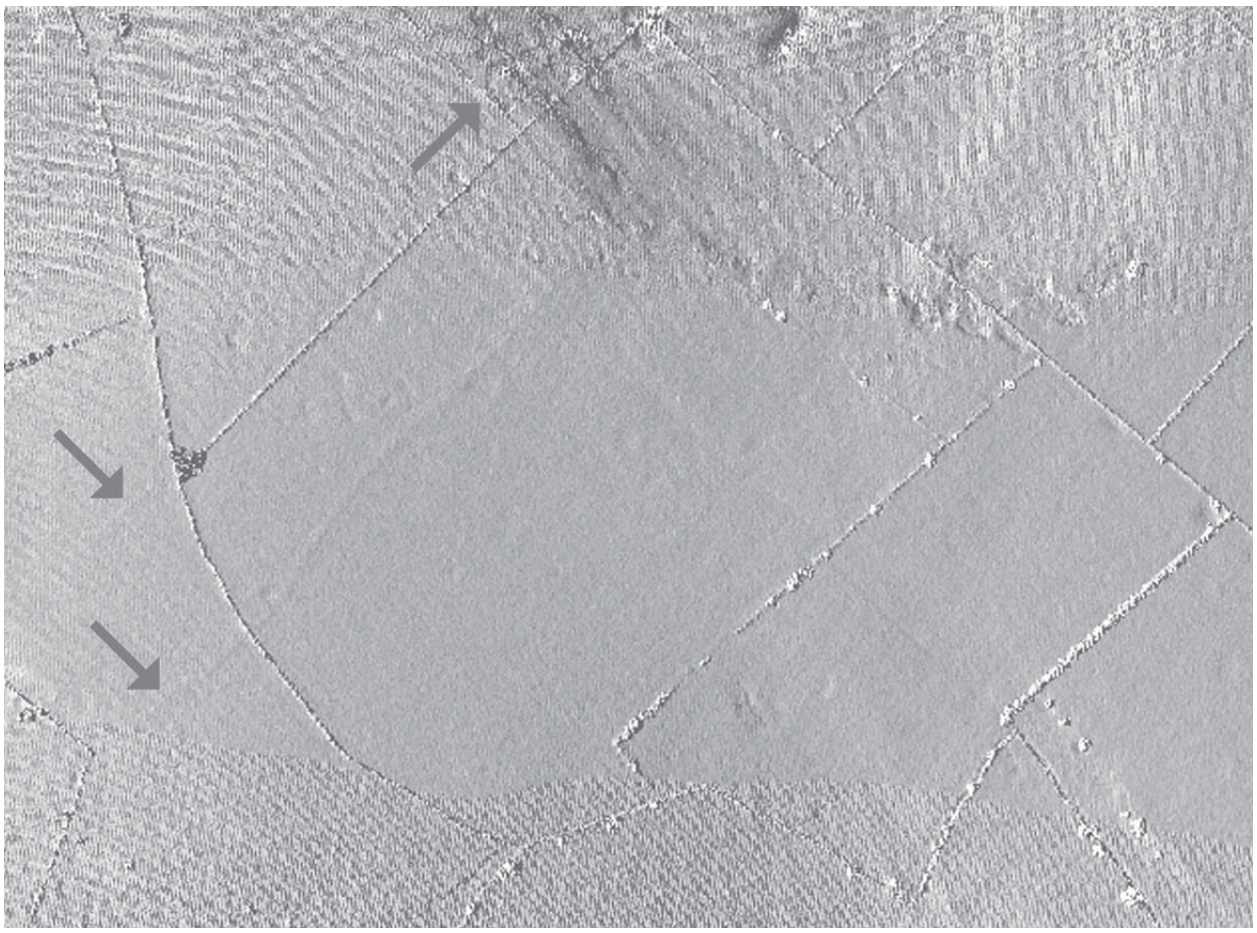


Fig 9. LiDAR survey. Red arrows indicate the linear banks described in the text.

Resistivity survey

Resistivity surveying was carried out one day per week from 5 February to 19 March 2007. A baseline was laid out aligned roughly north east - south west parallel to, and about 1 m. east of, the stone wall. This baseline was accurately located and mapped by English Heritage. A grid of 20m squares was then laid out from that baseline. Each of these squares was surveyed using a TR/CIA resistance meter. The Twin Electrode configuration was employed with a probe spacing of 0.5 m. Readings were recorded at 1.0 m. intervals along traverses spaced 1.0 m. apart. The data was downloaded using TR Systems software. Fig 11 shows the raw data after edge-matching. High resistance areas are dark in tone, while low resistance areas are light. A variety of algorithms have been applied to the raw data to aid visual recognition and interpretation using Archaeosurveyor software. Fig 12 shows the data resulting from a High Gaussian pass, together with a graphic interpretation of the evidence.

Interpretation of data

Fig 12 suggests an interpretation of the resistivity data. The underlying rocks are visible across the whole plot as an irregular pattern criss-crossed with lighter damper fissures. In the field A is clearly visible as a large shallow quarry pit. The curvilinear enclosure ditch B is sharply defined with stone both inside and outside the south west quadrant. On the surface remains of banks are just visible. There is no evidence that the enclosure ditch extends any further than is visible on the ground. No clear structures are visible within the enclosure. The linear bank C shows as a high resistance line, presumably a stone core or base of a wall. The cross bank D surprisingly shows as a dark or damp line edged in part by lighter drier lines. The second cross bank to the north east is not visible at all in the data plot.

Flint find

A single flint, a waste flake or blade tip of probable Neolithic to early Bronze Age date, was found in a molehill on the site during the survey. This is illustrated in Fig 2 below (SOMDOR-1B912).

Fig 10. Flint flake or blade tip from the site (x2).

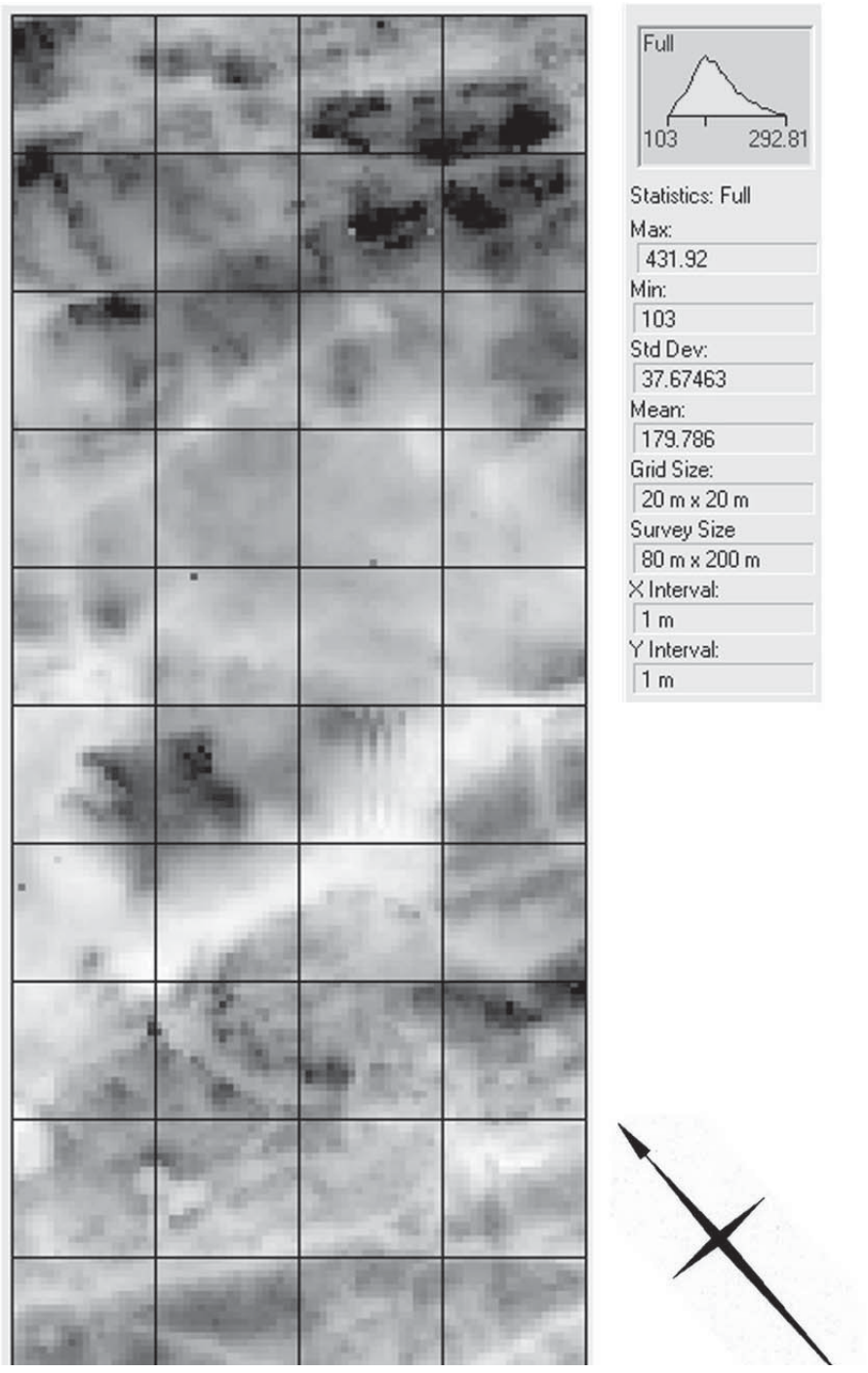


Fig 11. Resistivity raw data plot Low resistance is light in tone..

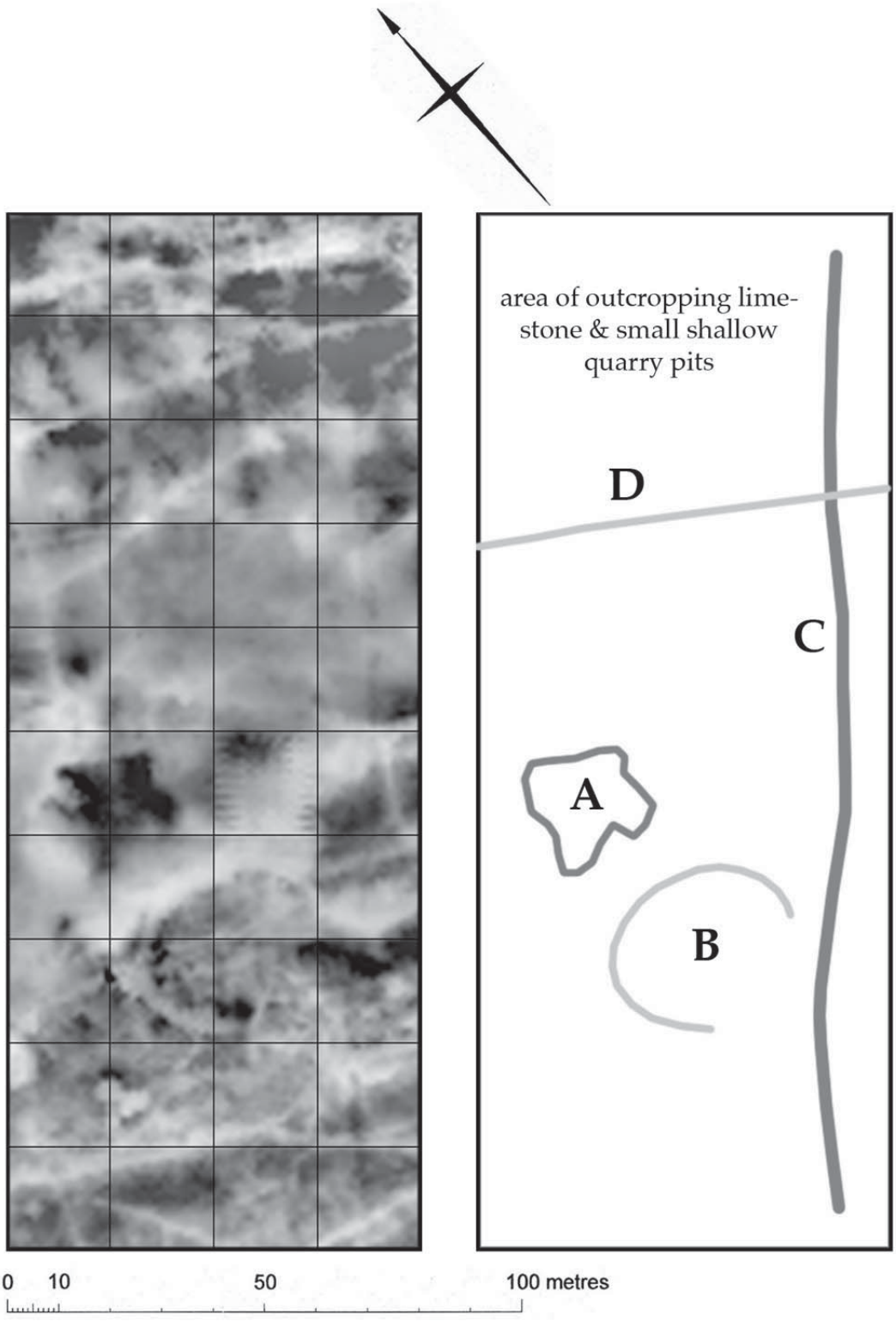


Fig 12. Resistivity data after High Gaussian pass, and its interpretation.

Discussion
Water is likely to have been present at the base of the Cross Swallet glacial lake basin attracting wandering animals, at least for parts of the year, over the last 15,000 - 10,000 years. Three tiny streams rise on the lake bed clays and run into the swallet. One fills a pool en route. The natural clays may have retained some water and animals may themselves have puddled the clays, preventing further seepage. Human beings may have later learned that skill to ensure that water was present most of the time. The present stone-lined post-Enclosure pool may be only the most recent attempt to retain the water (Stanton 1995, 20). The concentration of hunter-gatherer Mesolithic and later flints found in the area around Cross Swallet strongly suggests that people were at least seasonal visitors and may even have become permanent settlers at some periods.

The earthwork enclosure is difficult to interpret. Despite considerable disturbance the earthwork evidence recorded by the English Heritage survey in *Sleight* suggests that a small hut may have been located in its north west corner (Elaine Jamieson, pers. comm.). As a ditched hut enclosure it may be compared to the Bronze Age enclosed settlement at Porlock Allotment, Exmoor where the ditch leaves a wide east facing entrance (Riley & Wilson-North 2001, 49). However that enclosure has a diameter of 52-58 m. compared with the diameter in Westbury of 29 m. Its exposed position in *Sleight* on the hilltop is however not typical of a settlement site.

The enclosure is unlikely to be the remains of a flattened round barrow as the ditch is neither complete, nor circular. However a possible parallel may be the platform cairn at Five Barrows on Exmoor (Riley & Wilson-North 2001, 37) although that is somewhat smaller (23-26 m. in diameter compared with the Westbury example of about 29 m.). Its location in *Sleight* is excellent for a ritual monument - it lies on a prominent knoll with spectacular views for 360 degrees around, with a number of small barrow groups nearby. A much damaged platform cairn has to be the most probable explanation of this earthwork.

Despite the large number of Bronze Age barrows on Mendip there has been very little research or discussion of related settlement. In his review of the archaeology of the Mendip Hills AONB Peter Ellis (1992, 19 & 28) speculated that *"The blank areas near the barrow groups may represent the position of these settlements and their fields"*. He suggested that there were three such possible upland sites indicated by fieldwork – above Cheddar (HER 10405), near Ubley Drove (HER 25838) and at Bradley Cross (HER 11458 & 11515). He also suggested that there were two possible sites where there were parallel boundaries laid out across apparently unsuitable terrain, similar to the Dartmoor reaves (Fleming 1988). Those Mendip plateau areas were above Cheddar south of the Gorge (HER 10355) and at Dolebury (HER 261 *sic*). It may be significant that both the suggested sites close to Cheddar and Bradley Cross are also adjacent to glacial lake basins, each with post-Enclosure pools at their lowest points.

The nearest pool, called *Bagpit*, lies 3.5 km to the north west of *Cross Swallet*, which may originally have been called *Ramspit*. Close by are at least four long parallel linear banks, completely ignoring the terrain and crossed by the later post-Enclosures walls. These are shown on the aerial photograph Fig 13 opposite.
They are listed in the Historic Environment Record and described as *"possibly*

prehistoric field boundaries" and differing *"from the medieval field boundaries in the vicinity'* (Somerset HER 11515).

The linear banks identified in this survey may well be part of another Bronze Age farming lanscape. A supply of water may have been available at the pool just 250 m. to the north adjacent to Cross Swallet. Continuity of occupation and land use is suggested by the larger curvilinear enclosure (HER 25802) revealed in the 1950 RAF aerial photograph only 450 m. to the east (see Fig 8), which is likely to be late Bronze Age or Iron Age in date, and the possible Romano-British and medieval site of Ramspits 500 m. to the south (HER 25675).

It may be argued that the linear banks are medieval. Medieval settlement close by at Ramspits is well documented and described (Pattison 1991). However the plan of the long linear bank is not that of a reverse-S shape of a medieval furlong strip. Furthermore the profile of the bank is quite unlike the narrow (less than 1 m. wide) and sharply defined field boundaries within Ramspits; although the *Sleight's* banks have clearly been reduced by ploughing and de-turfing. Close to the surveyed enclosure the banks are less than 0.5 m. high and 2-3 m. wide, very comparable to the reaves described by Fleming on Dartmoor. Similarly the way that this bank heads across Cross Swallet ignoring the topography of the landscape is another characteristic of reaves; Fleming described them as "terrain oblivious" (Fleming 1988, 61). Riley and Wilson-North map a similar series of parallel prehistoric field banks at the Valley of the Rocks (Riley & Wilson-North 2001, 44). A late Bronze Age or early Iron Age date appears to be the most likely origin for the linear banks in *Sleight.*

Fig 13. Aerial photograph of linear banks above Batcombe. Red arrows point them out.

Fig 14 suggests that the Westbury bank may indeed be part of a wider co-axial field system that extends across the villages of Westbury, Rodney Stoke and Draycott. Such co-axial field systems have frequently been dated to the late prehistoric period, for example on Orcheston Down, Salisbury Plain (McOmish 2002), Dartmoor (Fleming 1988) and South Cadbury (Davey 2005). Indeed Taylor maintains that by 1000 BC there was a fully developed agricultural system in lowland Britain comprising rectilinear co-axial fields planned on a wide scale (Taylor 2000, 38). Willamson has also noted that co-axial field systems tend to originate in the late prehistoric period as droves perpendicular to major river valleys (Williamson 2003,40). The long linear bank in *Sleight* certainly has that orientation related to the river Axe. Fleming has also demonstrated that later medieval field boundaries often followed the layout of underlying reaves. That the one long linear bank on this site extends across the medieval boundary of the Forest of Mendip and the old enclosures again suggests a pre-medieval date for the bank.

Conclusion

The area of Mendip investigated has clearly been subject to much agricultural improvement in the medieval and post-medieval periods. De-turfing, ploughing and field clearance has probably removed a great deal of evidence of earlier land-use. However the survival of large number of barrows and recovery of flint artefacts and waste are testimony to the active use of Mendip in the prehistoric period. At those locations where the land is highest, the soil thinnest and perhaps least disturbed, evidence of settlement may have survived. The likely presence of water in the glacial lake basins would have made at least seasonal settlement possible. It is suggested therefore that the site at *Sleight* represents a platform cairn and field banks of Bronze Age date. Indeed the field banks may be survivors of a once more widespread co-axial field system.

Recommendations

1. Small scale excavations across the enclosure ditch and the linear bank might provide some dating evidence.

2. Geophysical survey of the second "banjo" enclosure might provide more evidence of its internal structure and use.

3. Further exploration of the relationship of archaelogical sites and finds to the other 17 glacial lake basins on Central Mendip might reveal more of the structure of prehistoric settlement and land use of the plateau.

4. Seek more evidence to support the suggestion of an extensive co-axial field system of late prehistoric date.

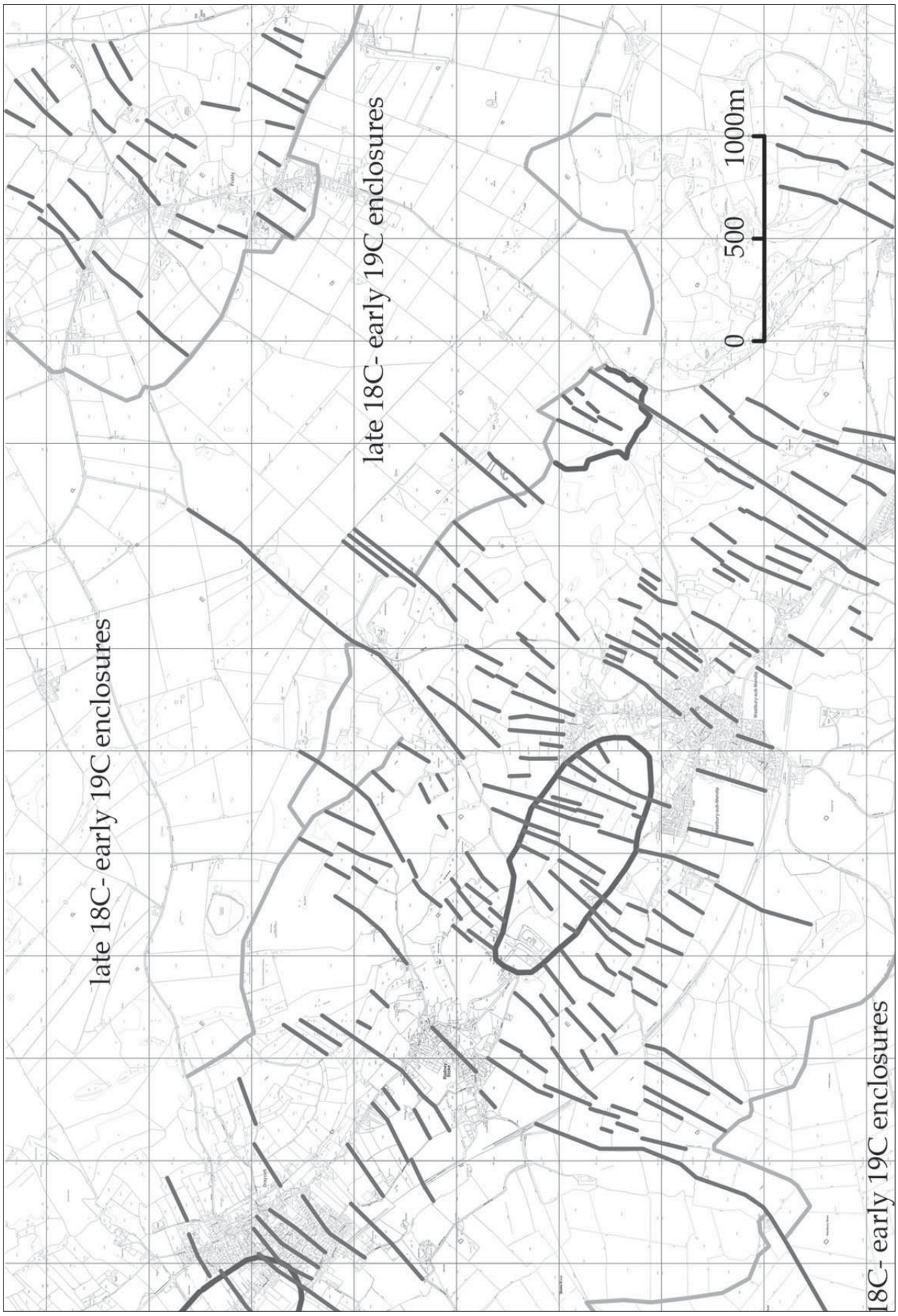


Fig 14. Co-axial alignment of modern field boundaries from Draycott to Westbury

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List of illustrations

Chronology

When used in this report the following dates are indicated by these terms:

Mesolithic	10,000 - 4000 BC
Late Prehistoric	2000 BC - 43 AD
Bronze Age	2000 - 700 BC
Late Bronze Age	1000 - 700 BC
Iron Age	700 BC - 43 AD
Early Iron Age	700 - 400 BC
Middle Iron Age	400 - 100 BC
Later Iron Age	100 BC - 43 AD
Roman/ Romano-British	43 - 410 AD
Medieval	410-1600AD
Early Medieval	410-1066AD
Late Medieval	1066-1600AD

Acknowledgements

The Society is grateful for permission to work on the site given by the owners Jim and Helen Sealy of Combhay Farm, Westbury. Thanks are also offered for the support and advice provided by Willie Stanton and by Elaine Jamieson of English Heritage, who also produced a new earthwork survey and established the accurate GPS location of the resistivity survey itself. Permission was granted by the National Monuments Record to reproduce the photographs in Figs 7 & 8, by English Heritage to reproduce the earthwork survey in Fig.6 and by the Mendip Hills AONB and English Heritage to reproduce the LiDAR on the cover and in Fig 9. Finally thanks are offered to the CBA South West which loaned the resistivity equipment.

Resistivity survey by: John Ball, Peter Bright, Andrew Buchanan, John Finch, Roger Kergozou, Barry Lane, Austin Little, Malcolm Mogford, Jill Polak, Rachel & Stephen Taylor & Nicky Venning

Date of survey: 5 February to 17 March 2007

Resistivity data processing: Barry Lane, Jill Polak & Albert Thompson

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Date of report: 5 July 2007