

MARDEN HENGE AND ENVIRONS VALE OF PEWSEY, WILTSHIRE

NATIONAL MAPPING PROGRAMME REPORT

Edward Carpenter and Helen Winton



**Marden Henge and Environs
Vale of Pewsey
Wiltshire**

A report for the National Mapping Programme

Edward Carpenter and Helen Winton

© English Heritage

ISSN 1749-8775

The Research Department Report Series incorporates reports from all the specialist teams within the English Heritage Research Department: Archaeological Science; Archaeological Archives; Historic Interiors Research and Conservation; Archaeological Projects; Aerial Survey and Investigation; Archaeological Survey and Investigation; Architectural Investigation; Imaging, Graphics and Survey, and the Survey of London. It replaces the former Centre for Archaeology Reports Series, the Archaeological Investigation Report Series and the Architectural Investigation Report Series.

Many of these are interim reports which make available the results of specialist investigations in advance of full publication. They are not usually subject to external refereeing, and their conclusions may sometimes have to be modified in the light of information not available at the time of the investigation. Where no final project report is available, readers are advised to consult the author before citing these reports in any publication. Opinions expressed in Research Department reports are those of the author(s) and are not necessarily those of English Heritage.

Requests for further hard copies, after the initial print run, can be made by emailing:

Res.reports@english-heritage.org.uk

or by writing to:

English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD

Please note that a charge will be made to cover printing and postage.

SUMMARY

This report describes the methods and results of the Marden Henge and Environs National Mapping Programme (NMP) project. Aerial photographs, taken from the 1930s to present, were studied and all archaeological features were mapped and recorded. The report discusses perceptions of the Vale and its archaeology. Remains of prehistoric funerary monuments and possible prehistoric or Roman settlement enclosures were seen on the edges of the Vale and along the river to the south east of Marden henge. Medieval or post-medieval settlement remains were seen in and around some of the modern villages. Extensive earthworks of post-medieval water meadows flanked virtually all the streams in the Vale, but many were ploughed level. Aerial photographs from the 1940s recorded many structures associated with the Second World War.

CONTRIBUTORS

Edward Carpenter and Helen Winton carried out the interpretation, transcription, recording and report writing.

ACKNOWLEDGEMENTS

Thanks to the English Heritage Archive (formerly the NMR), Wiltshire HER, and to the Cambridge University Collection of Aerial Photography (CUCAP) for access to and loan of photographs. Thanks also to the Wiltshire HER staff for supplying GIS and monument records for the area and for providing access to their air photo collection. Thanks to Paul Tubb for kindly supplying his PhD during our survey. Particular thanks to Lynn Amadio and Bob Clarke for the results of the Wiltshire Archaeological Field Group artefact collection in the Vale of Pewsey. Thanks to Damian Grady for aerial reconnaissance during the project. Thanks to Martyn Barber and Pete Horne at EH for comments on the report.

Cover photograph: 26840/22 21 July 2010 © English Heritage

ARCHIVE LOCATION

English Heritage,
The Engine House,
Fire Fly Avenue,
Swindon,
SN2 2EH

DATE OF SURVEY

2010 and 2013

CONTACT DETAILS

Helen Winton, Aerial Investigation & Mapping,
English Heritage,
The Engine House,
Fire Fly Avenue,
Swindon, SN2 2EH

www.english-heritage.org.uk/aerialsurvey

CONTENTS

INTRODUCTION	6
PROJECT AREA.....	7
Topography and land use	8
THE VALE OF PEWSEY AND PREVIOUS ENQUIRIES	10
SUMMARY OF NMP RESULTS.....	15
Methods	15
Distribution of archaeological remains visible on aerial photographs	16
PREHISTORIC.....	19
Enclosures and barrows	20
Monuments in the landscape.....	29
Settlements, enclosures and boundaries	32
Settling and dividing the Vale.....	45
ROMAN.....	48
EARLY MEDIEVAL	51
Burial and monument reuse	51
Fearful places and hundred meeting places.....	52
Creating estates.....	53
Discussion.....	55
MEDIEVAL AND POST-MEDIEVAL.....	57
Introduction	57
Water meadows.....	58
Arable farming	64
Sheep.....	69
Settlement.....	71
The Gentry.....	73
Roads, tracks and lanes.....	76
Inclosure.....	77
COMMUNICATIONS AND THE EARLY 20TH-CENTURY VIEW.....	81
SECOND WORLD WAR	83
Devizes and the Militia.....	83
Devizes Barracks and the transition to war	85
Development of Devizes Barracks and arrival of the Americans	86
Prisoners of War at Devizes Barracks.....	89
Emergency Water Supplies.....	90
Anti-invasion	91
Airfields	92
CONCLUSION AND RECOMMENDATIONS FOR FURTHER WORK.....	95
REFERENCES.....	98
APPENDIX METHODS.....	111

Figure 1 The area considered in this report.....	7
Figure 2 The topography and villages in and around the Vale of Pewsey.....	8
Figure 3 Looking west from Marden with the edge of the Plain shrouded in cloud.....	11
Figure 4 Mapping conventions.....	15
Figure 5 Map of topography and archaeological features visible on aerial photographs in the Vale of Pewsey.....	18
Figure 6 Distribution of possible prehistoric or Roman archaeological features seen on aerial photographs.....	20
Figure 7 Map and aerial photograph of the possible Neolithic feature at Cat's Brain..	21
Figure 8 Plan of archaeological features on aerial photographs at Marden Henge.....	22
Figure 9 Archaeological map of all features visible on aerial photographs along the river Avon between Marden and Charlton.....	24
Figure 10 Plan of the henge and barrow cemetery at Wilsford. .	25
Figure 11 Plan of the barrow cemetery between Wilsford and Charlton.....	26
Figure 12 Plan of the barrows and other features at Woodbridge.....	27
Figure 13 Swanborough Tump (top right) and possible barrows nearby.....	28
Figure 14 Prehistoric enclosure and ring-ditches at Horton Bridge.....	34
Figure 15 Map of archaeological features near Scales Bridge including possible Neolithic or Bronze ring ditches and later prehistoric settlement.....	35
Figure 16 Map of archaeological features north and north-west of West Stowell.....	37
Figure 17 Map of archaeological features, including possible prehistoric enclosures and a field system, near Tawsmead Copse and Woodborough Hill.....	38
Figure 18 Map of archaeological features, including possible prehistoric or Roman enclosures and boundaries by All Cannings and Stanton St Bernard.....	40
Figure 19 Map including sub-circular enclosures flanking the river Avon.....	42
Figure 20 Map of prehistoric or Roman enclosures near the Manningfords.....	44
Figure 21 Prehistoric or Roman enclosure near Drove Farm.....	45
Figure 22 Possible boundaries which appear to predate the modern field pattern near Devizes.....	46
Figure 23 Examples of sub-square enclosures which could have a Roman date.....	48
Figure 24 The Roman villa at Charlton.....	49
Figure 25 Relationship between the ring ditches (thought to be Bronze Age) and the location of the two Anglo Saxon burials excavated in 1935.....	52
Figure 26 The relationship between possible 'Celtic' fields (in red) and the parish boundaries of the three Manningfords.....	54
Figure 27 The earthworks of water meadows at Charlton.....	59
Figure 28 Water meadows at Wilsford.....	60
Figure 29 Co-operation in the construction and operation of the water meadows implied by the arrangement of channels and drains.....	62
Figure 30 The earthwork remains of a headland bank.....	65
Figure 31 Different evidence for open fields.....	66
Figure 32 Strip lynchets at Charlton.....	67
Figure 33 Chirton sheep enclosures.....	69
Figure 34. Remains of settlement and water management at North Newnton.....	72
Figure 35 New House at Puckshipton. Map reproduced by permission of the President and Fellows of Corpus Christi College, Oxford.....	74

Figure 36 Edward Poore's manor house and gardens at Rushall.....	75
Figure 37 Hollow ways on Urchfont Hill.....	76
Figure 38 Area of inclosure north of Wedhampton.....	78
Figure 39 The earthworks of a dewpond and an enclosure, possibly marking the site of farm buildings on Salisbury Plain.....	80
Figure 40 Devizes barracks in 1946.....	84
Figure 41 American tanks at Devizes Barracks 1944.....	87
Figure 42 Two games of baseball being played at Devizes Barracks on Sunday 31st April 1944 confirm that these troops are American.....	87
Figure 43 The framework is visible of a building under construction at Devizes Barracks. At the western end is a wooden tower.....	88
Figure 44 New buildings at Devizes barracks, part of the southern hospital.....	88
Figure 45 The completed hospital site (southern).....	89
Figure 46 The prisoner of war camp at Devizes Barracks.....	90
Figure 47 Alton Barnes airfield in 1946.....	92
Figure 48 American temporary landing strip north-east of Devizes barracks.....	93

INTRODUCTION

This report describes the methods and results of the Marden Environs National Mapping Programme (NMP) project. The English Heritage (EH) Aerial Survey team (Swindon) carried out this archaeological survey from aerial photographs in 2008-9. The Marden Environs NMP project was carried out to provide context for archaeological work at Marden henge (Field et al 2009, Leary and Field 2010). This report considers the central and western parts of the Vale of Pewsey between Devizes, Pewsey and the chalk escarpments of Salisbury Plain to the south and the Marlborough Downs to the north.

Compared to the surrounding chalk downlands, the Vale of Pewsey has few earthwork monuments but it does include Marden Henge, one of the largest Neolithic henges in Britain. The henge, and associated prehistoric monuments within the henge, are situated in an area called 'Hatfield Common', 'Great Hatfield' or 'Hatfield Grounds' in 17th and 18th-century documents (Field et al 2009, 8-9) and they are sometimes collectively referred to as the 'Hatfield Earthworks'. Most archaeological publications refer to Marden Henge, and this name is used in this report.

Concern over the management and conservation of the henge and associated monuments led the Inspector of Ancient Monuments to request the provision of modern plans, interpretations and other data on which to base decisions concerning the future of the site. In response, a multi-team survey and investigation of the Neolithic henge was carried out using targeted non-invasive techniques: earthwork survey, geophysical survey and aerial photograph analysis and mapping (Field et al 2009). Targeted excavation in 2010 provided further information (Leary and Field 2010). The combined results of these surveys provided new data to inform management of the site as well as comparative research data for the wider landscape, including the contemporary monuments at Stonehenge and Avebury.

The Vale separates Salisbury Plain from the Marlborough Downs which include the two components of the Stonehenge and Avebury World Heritage Site (WHS). The area along the northern edge of the Vale, below the escarpment, was surveyed as part of the Avebury WHS NMP project in 1999 (Small 1999, Crutchley 2005). There is now continuous NMP data for the area between Stonehenge, Marden and Avebury.

Aerial photographs, taken from the 1930s to present, were studied and all archaeological features were interpreted, mapped and recorded. The Marden Environs NMP survey created 304 new records for the National Record of the Historic Environment (NRHE) and amended 101 of the 144 records already covering the project area. Details of the form and extent of the monuments were mapped and described. See Appendix I for details.

PROJECT AREA

The new NMP survey covered 75 square kilometres of the Vale of Pewsey, between Market Lavington, Devizes, Upavon and Manningford Abbots (Fig 1). The areas to the immediate north, south and east were surveyed from aerial photographs as part of the Avebury World Heritage Site NMP Project (Small 1999, Crutchley 2005) and Salisbury Plain Training Area NMP Project (Crutchley 2000; McOmish et al 2002). During the Marden environs project, the southern portion of the Avebury mapping (on the northern side of the Vale) was updated using aerial photographs accessioned since 1999. The new NMP survey was intended to inform the work at Marden Henge and so covered the central and western parts of the Vale of Pewsey only. The areas to the north and east of Pewsey village remain to be surveyed.

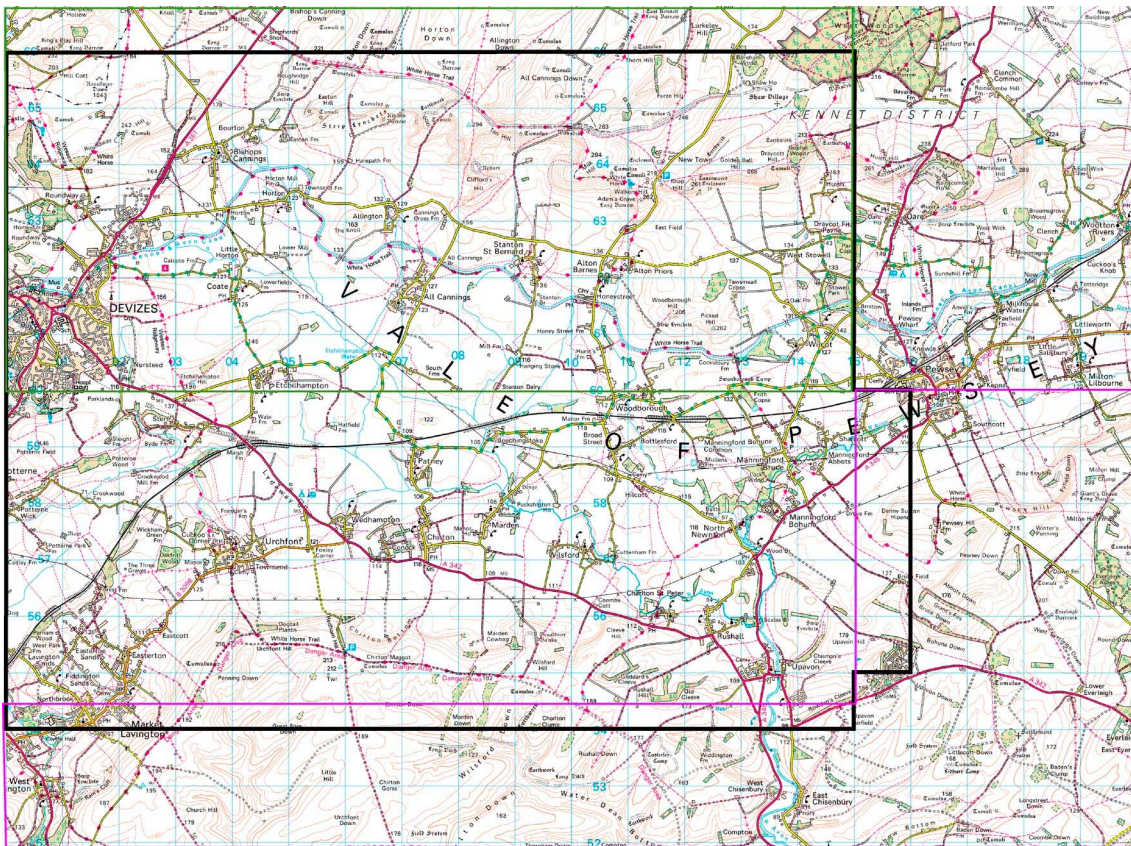


Figure 1 The area considered in this report, outlined in black, covers the western and central part of the Vale of Pewsey. The previous NMP surveys of Salisbury Plain Training area and Avebury are outlined in pink and green. Background mapping © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

Topography and land use

The Vale of Pewsey was created by surface erosion of the chalk along the upper, weaker parts of a geological fold (Geddes 2000, 143). This exposed older rocks, in particular the Greensand. This gap between the chalk of the Marlborough Downs and Salisbury Plain constitutes the 'fertile vale of Pewsey' where the soil has been enriched by drift deposits (Barron 1976, 89). Erosion was more rapid in the west of the Vale and there is exposed Gault clay and below that Portland Beds.

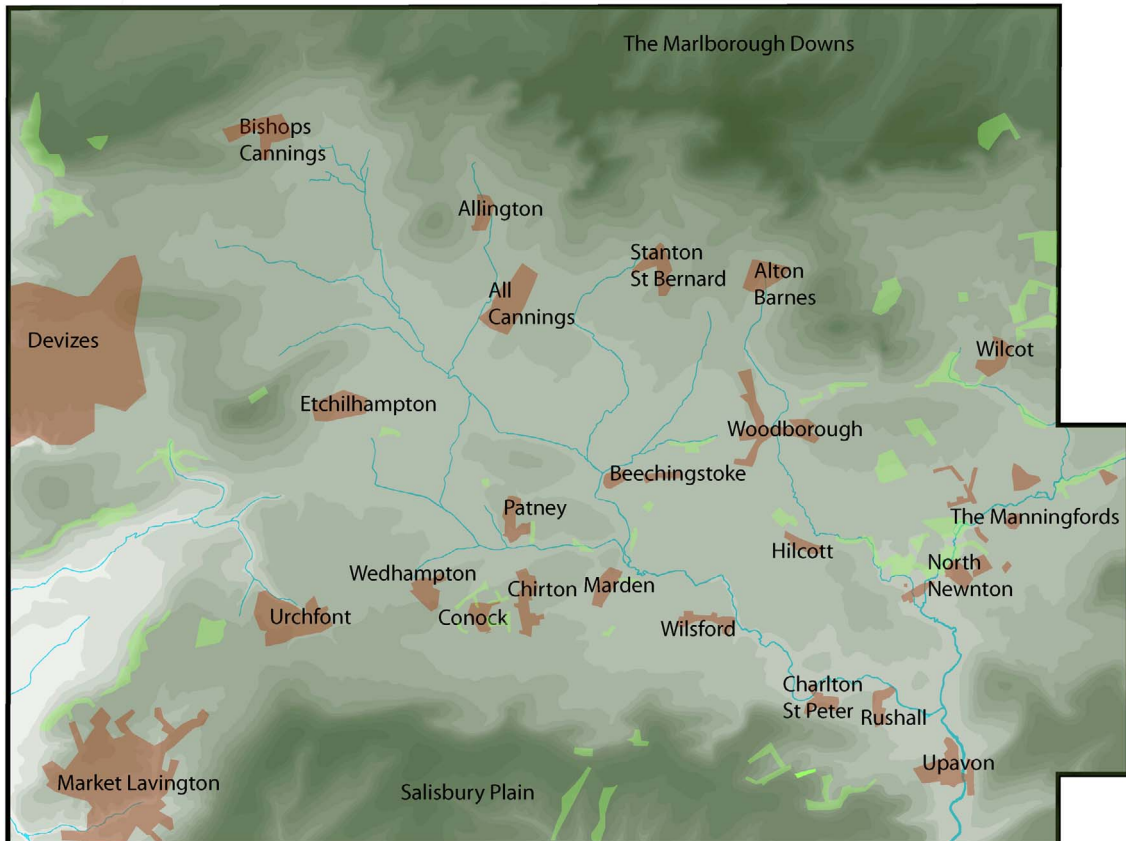


Figure 2 The topography and villages in and around the Vale of Pewsey. Settlements in brown, woods in green. Base map derived from Ordnance Survey 1:50,000 scale map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

The northern edge of the Vale of Pewsey is defined by the steep scarp of the Marlborough Downs, which at Milk Hill reaches 295m, the highest point in Wiltshire. The southern edge of the Vale is defined by the northern scarp of Salisbury Plain that rarely exceeds 200m. The eastern end of the Vale is generally considered to start near the village of Burbage (Chandler 2000) although this does not mark the point where the Greensand is first exposed; this is another 6km to the east. The western end of the Vale is less well defined, but is generally considered to be marked by Etchilhampton Hill, east of

Devizes. Etchilhampton Hill is one of a number of outcrops of Lower Chalk which range in height from the pronounced Woodborough Hill at 205m to the low wide rise of chalk at Beechingstoke which reaches 130m - only 10-20m higher than the immediately surrounding land.

There is no westward flowing river in the Vale as may be expected from the above description. Etchilhampton Hill forms a watershed and all streams to the west of this eventually feed into the Bristol Avon (Barron 1976, 102). The headwaters of the Salisbury Avon rise on the north side of the Vale joining at Rushall in the south-east. From here the Avon heads south reaching the sea at Christchurch, Dorset.

The creation of the Salisbury Plain Training Area (SPTA) from the late 19th century had an impact on the parishes on the south side of the Vale with the intake of large areas of farmland. This preserved large tracts of pasture while most areas outside the military training area continued or were converted to arable.

THE VALE OF PEWSEY AND PREVIOUS ENQUIRIES

The antiquarian Sir Richard Colt Hoare, in his introduction to the History of North Wiltshire in *Ancient Wiltshire* (1819), described the Vale of Pewsey as 'a rich and spacious valley'. The word 'rich', however, was not a reference to a wealth of archaeological remains but instead a comment on the productive farmland found there and other writers shared this impression of the Vale. John Leland, writing about his travels through this part of Wiltshire c1545 described his journey between Pewsey and Manningford as 'through flat open-field country, which produces abundant grass and corn, and exceptional wheat and barley' (Chandler 1993, 500). William Cobbett's 1830 description of the 'valley of Avon' (which included the Vale of Pewsey) ends with the comment that 'the land appears all to be of the very best' (Cobbett 1830, 298).

With the exception of *Ancient Wiltshire*, none of the above writings name the valley separating Salisbury Plain from the Marlborough Downs as either the 'Vale of Pewsey' or 'Pewsey Vale' and in the case of *Ancient Wiltshire* the name is only used in the index and not in the main text. To date, the earliest use of 'Pewsey' found in association with the Vale would appear to be in Thomas Davis' *General View of the Agriculture of Wiltshire* of 1794 (Davis 1794, 63). This work also refers to a 'Canning's Vale' (ibid) which may have been an alternative name for the Vale, or may suggest that 'Pewsey Vale' then only named what is now understood as the eastern end of the Vale of Pewsey. In his book Davis divides Wiltshire into two regions, but not, as is 'usual...by supposing an east and west line to pass through the county at or near Devizes' and therefore through the Vale of Pewsey (ibid 6). Instead he makes the division further north to include the Marlborough Downs with Salisbury Plain so as to comprehend 'the whole of the Wiltshire Downs, with their intersecting valleys and their surrounding verges' (ibid 7). His approach reflects the interaction between vale and downland that is apparent in the boundaries of many vale parishes that extend up on to the chalk. It is however somewhat paradoxical that this work, with its inclusive approach to studying the landscape, is also the earliest to single-out the Vale by a giving it a name.

From the available evidence it would appear that the name 'Pewsey Vale' or the 'Vale of Pewsey' gradually gained currency during the 19th century. The name is used sporadically by Thomas Davis' in 1794, once by Colt Hoare in 1819 and is absent in William Cobbett's *Rural Rides* of 1830. Its first appearance in the Wiltshire Archaeological and Natural History Magazine is in 1859 in papers concerning the geology and the flora of the county (Poulett Scrope, 1859; Flower 1859). While absent from earlier maps (see Chandler 1998) it is included on the first edition 1:2500 Ordnance Survey map produced in 1886. While the establishment of a name means that the Vale of Pewsey is seen as distinct from the chalk downland to the north and south, it also had the unfortunate effect of separating it from the rest of the Avon valley. The establishment of this name may have in part been encouraged by these scientific studies of the county and their requirement to clearly refer to different parts of the landscape. This way of looking at the landscape may not have been shared by those farmers and labourers from parishes whose boundaries

encompassed both vale and downland. However, the inclosures of the 19th century saw a change in the distribution of land and new farms were sometimes created with holdings that did not occupy both the vale and downland. This was the case at Rushall Down farm whose fields were exclusively on the downs (Crowley 1975, 143). While changes in the farming regime led to some disconnection between the Vale and the Plain, the purchase of large areas of downland by the War Department from 1897 resulted, for many parishes, in a complete separation.



Figure 3 Looking west from Marden with the edge of the Plain shrouded in cloud.
26123/25 10-OCT-2008 © English Heritage

In Colt Hoare's division of Wiltshire, he loosely follows the tradition of a dividing line passing at or near Devizes separating the county into northern and southern districts. The information provided in his writing and maps as to where the dividing line actually passes is contradictory. According to the map produced in *Ancient Wiltshire* (Colt Hoare 1819, op. p3), the dividing line between north and south Wiltshire was the northern edge of Salisbury Plain, placing the Vale of Pewsey in North Wiltshire. However, in the first two sentences of his introduction he presents the Vale, as a 'grand separation' and 'a very singular and decided boundary between the Northern and Southern districts' (Colt Hoare 1819). As such the entire Vale is presented not as an area to be studied, but the boundary between the two areas that are the actual objects of investigation. It is a matter for speculation as to what extent the Vale was explored by either Colt Hoare or Cunnington. They did identify the site of a 'British village' near Marden (Colt Hoare 1819, 5) but the henge and associated earthworks, including Hatfield barrow (since collapsed),

were already known about through the studies undertaken by Reverend Mayo in the 18th century and whose plan of the earthworks was reproduced in the second edition of Camden's *Britannia* (1806). It is possible that a number of sites seen on aerial photographs within the Vale as either cropmarks or low earthworks may have survived to a greater height in the 19th century but if so, none were identified by Colt Hoare or Cunnington. Colt Hoare's belief that the Vale was little more than a boundary is emphasised by his speculation as to the presence of an ancient trackway connecting the chalk downland across the Vale and so forming a 'line of communication between the Southern and Northern districts of Wiltshire' (Colt Hoare 1819, 4).

Although Colt Hoare relegates the Vale to the status of a boundary he then goes on to provide a detailed description of the earthworks at Marden and he discusses Marden, along with Avebury and Stonehenge in his 'Recapitulation' at the end of volume 2 of *Ancient Wiltshire*. In this he states that Wiltshire can claim pre-eminence over the rest of the British Isles 'for it possess an Abury, a Marden, and a Stonehenge' (Colt Hoare 1819, 116). He not only considers these three to be religious sites but also suggests they were physically connected; 'the intermediate circle at Marden, placed about half-way between Abury and Stonehenge, and connected with each by a track-way' (Colt Hoare 1819, 117). This is reiterated on the following page: 'the works of Stonehenge, Marden and Abury, are connected by a grand track-way' (Colt Hoare 1819, 117) Although the earthworks at Marden represented the only significant known archaeological site in the Vale of Pewsey the site was only referred to sporadically by 19th-century writers. John Rickman's paper on Avebury and Stonehenge and William Long's on Avebury do not mention Marden despite the connection that Colt Hoare made between these sites (Rickman 1840; Long 1858). Marden was referred to in Edward Duke's *The Druidical Temples of the County of Wilts* which provides a fantastical explanation for the origin of some of Wiltshire's prehistoric sites; he claimed that 'our ingenious ancestors portrayed on the Wiltshire Downs a planetarium... extending north and south, the length of sixteen miles; that the planetary temples [each represented by a prehistoric site] thus located, seven in number will, if put in motion, be supposed to revolve around Silbury Hill as the centre of this grand astronomical scheme' (Duke 1846, 7). Toward the end of the century Marden is again mentioned in association with Avebury and Stonehenge by G T Clark in his 1880 paper on earthworks (Clark 1880, 218). And at the start of the 20th century it is included, though only as a footnote in A Hadrian Allcroft's *Earthwork of England* (Allcroft 1908, 577). While Williams-Freeman's 1915 book on field archaeology, though describing the Vale of Pewsey, makes no mention of any archaeological sites within the Vale (Williams-Freeman 1915, 101). By the middle of the 20th century the archaeological gazetteer in the Victoria County History (VCH) of Wiltshire lists a number of chance finds that had been made in the Vale but very few excavations (Grinsell 1957). What may have been the first excavation in the Vale since Richard Colt Hoare and William Cunnington's work at Marden was undertaken at All Cannings Cross which was excavated in 1911 and 1921-2. This site on the northern side of the Vale was revealed by the concentration of finds being brought to the surface through ploughing. Excavations by Maud Cunnington revealed a late Bronze Age and early Iron Age settlement and produced a considerable

quantity of finds including the characteristic late Bronze Age early Iron Age pottery of southern Britain which the site gave its name to (Cunnington 1923).

In the inter-war period, the Vale of Pewsey was also included in O G S Crawford and Alexander Keiller's 1924 aerial survey, the results of which were published in 1928 in *Wessex From The Air*. There are two photographs listed that were taken over the Vale but not reproduced, possibly reflecting the unexceptional nature of the features shown and which are described as 'lynchets of the Saxon type', and 'a ring which looks like a barrow' (Crawford & Keiller 1928, 30). Subsequent flights were undertaken by Squadron Leader G S M Insall whose photographs of Woodhenge had been the impetus for the excavations there. Insall photographed the faint cropmark of an oval enclosure in the Vale on Burlinch Hill, sometimes referred to as Insall's camp.

A rebuff to any curious prehistorian interested in the Vale of Pewsey came in Maud Cunnington's *Introduction to the Archaeology of Wiltshire* (Cunnington 1934). In a paragraph-long section that covers the Vale - while correctly stating that the Vale was not formed by the actions of a mighty river - she addresses how the lack of a since vanished river affects the archaeological potential of the area, 'gravel terraces of some vanished river comparable to the Thames, with great deposits of early implements will never be found in the Pewsey Vale' (ibid 47). There also seems an implication in this statement that none of the other features identified on river gravels elsewhere in the country will be found either (M Barber pers comm). While dismissing any potential new discoveries in the Vale, she also dismisses the idea that the earthworks at Marden are prehistoric and instead suggests that they are the remains of a medieval motte and bailey (Cunnington 1934, 156). There is no mention of the prehistoric site at All Cannings Cross, which instead is discussed in a separate section devoted to that site elsewhere in the book.

Her view was certainly out of step with O G S Crawford who in writing about Durrington in 1929 compared the earthworks there to both Marden and Avebury. He comments on the similarities both in the position of the bank outside the ditch and the proximity to rivers and considers all three to be of the 'same age and character' (Crawford 1929, 58). Three years later Thomas Kendrick grouped together a number of 'prehistoric "sacred places"' under the heading of henge monuments (Kendrick and Hawkes 1932, 83). His emphasis is on standing structures and the first four of the six main sites he describes are Stonehenge, Woodhenge, The Sanctuary and Avebury. What he describes as 'apparently empty "rings"' included Durrington Walls, but not Marden, despite O G S Crawford's consideration of them both his 1929 article that Kendrick made reference to (Crawford 1929; Kendrick & Hawkes 1932, 97). In 1936 Professor Clark lists Marden as 'very probably' a henge though then highlighted the lack of internal features and went on to state that of the sites he considered uncertain, Marden (along with Durrington Walls) were more doubtful than others.

By the late 1930s the Vale of Pewsey - Colt Hoare's 'decided boundary' - had become Stuart Piggott's 'distinct barrier'. According to Piggott - who was writing on the early

Bronze Age in Wessex - although there would not have been 'true forest growth' the Vale divided 'the Wiltshire chalk into two archaeological provinces' (Piggott 1938, 53). The strong association, held by many archaeologists, between prehistoric remains and the chalk landscape is well illustrated by L V Grinsell in 1958 who describes the Marden earthworks and accepts a Neolithic date, in part due to small finds made since 1950, but claims that the 'most remarkable feature of the site is its position – on the Upper Greensand' (Grinsell 1958, 59).

There was increased archaeological investigation in the Vale during the late 1960s (Thompson 1971). Some of these were small scale excavations confirming the presence of suspected Roman buildings (ibid) but also included the larger excavation at Blacknall Field. This Iron Age settlement partly overlain by an Anglo-Saxon cemetery was excavated annually between 1969 and 1976 (Annable & Eagles 2010). Most significant of all was Geoffrey Wainwright's 1969 excavation of Marden. Wainwright had excavated Durrington Walls in 1966-8 in advance of road building and uncovered evidence of internal post-built structures (Wainwright 1971a). The similarity between the earthworks at Durrington and Marden raised the possibility that similar features existed at Marden. An excavation was undertaken to determine if this was the case and if so, to establish if they were being damaged by ploughing (Wainwright 1971b, 184). Wainwright's excavation provided a date for the enclosure, identified traces of an internal post-built structure similar to that seen at Durrington and located the approximate position of the Hatfield Barrow (Wainwright 1971b). This excavation also led to a re-evaluation of the surrounding area whereby 'The Pewsey Vale must have been accessible and inhabited in late Neolithic times at least, as the new Marden excavations have shown us' (Piggott 1971, 50).

More recent work has been carried out in the Vale which includes the photographing of cropmark sites from the air mainly by RCHME and English Heritage. There have been a small number of excavations such as the re-examination of the villa site at Manningford (Walters & Johnson 1988). Other excavations in the Vale included investigation and discovery of the exceptional 'midden sites' at All Cannings Cross and Stanton St Bernard in the 1990s (Barrett and McOmish 2009). During the 1990s as part of RCHME's archaeological survey of Salisbury Plain (McOmish et al 2002) a rapid survey of parts of the Vale was undertaken. This identified potential archaeological sites and also led to more detailed research such as the field survey of Charlton Village (Smith 1999) and the geophysical survey of a villa site also in the parish of Charlton (Corney et al 1994). Post-graduate research has explored aspects of the prehistory of the Vale (Donachie 1995, Tubb 2010). More recently, the Wiltshire Archaeological Society Field Group carried out field walking along a transect across the Vale (Gunter 2009, Amadio and Clarke 2012).

SUMMARY OF NMP RESULTS

Methods

The project scope included all archaeological features visible on aerial photographs. These ranged in date from the Neolithic period to the 20th century and included sites visible as cropmarks and/or earthworks but also structures, in particular those relating to the Second World War. All aerial photographs from the English Heritage Archive (EHA; formerly the National Monuments Record (NMR)), Cambridge University, and the Wiltshire Historic Environment Record (HER) were consulted. Online sources such as Google Earth were also reviewed. Environment Agency lidar data was used where available. All vertical photograph prints were viewed using a stereoscope. Readily available documentary sources (historic maps etc) and synthesised background information on the area (published material, NRHE and HER records) were also consulted.

Rectified and georeferenced digital images were produced by transforming scans of oblique and vertical photographs. A digital terrain model function, using OS 5m interval contour data, was used to compensate for undulating terrain.

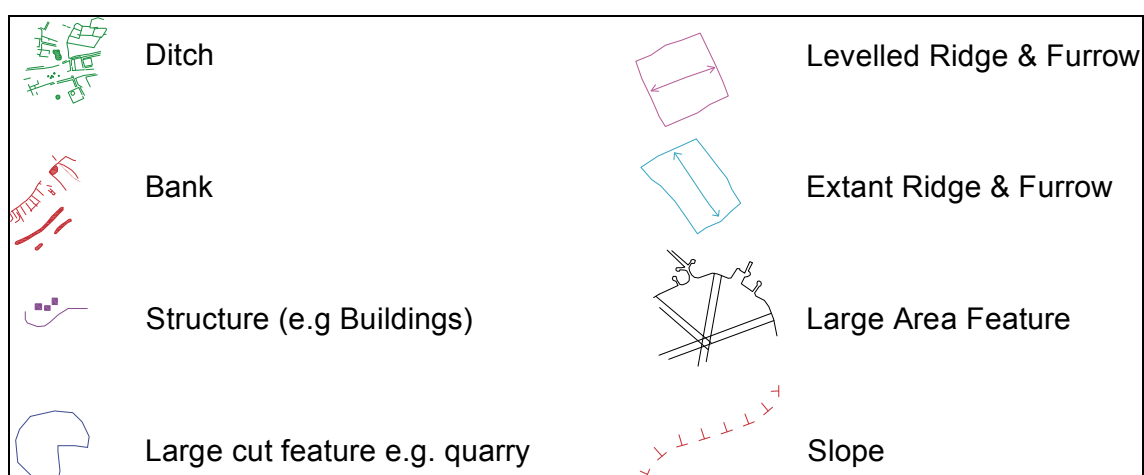


Figure 4 Mapping conventions.

Archaeological features were traced from georeferenced and rectified photographs using AutoCAD Map. Archaeological features were depicted on different layers based on the form of remains, eg bank, ditch etc (Fig 4). A monument polygon was created for each site. A unique identifier number was attached to each group of objects corresponding to the monument description in the English Heritage AMIE database (part of the National Record of the Historic Environment).

Monument records in the EH AMIE database were created or amended where appropriate. The monument record consisted of a textual description of the site linked to indexed location, period, type and form of evidence. The record also included digital cross references to other monuments and datasets (usually the HER or scheduling information) as well as a list of the main aerial photographs and other sources for the site. An Event record in the EH AMIE database was created to provide data on project scope and procedures. Event and archive records are linked to each monument record.

All data and documentation relating to the project was archived at the EHA. The mapping and parts of the monument records are available on the EH corporate GIS (for internal EH use only). Full monument records are available via Pastscape (www.pastscape.org.uk). Mapping and monument records are available on request from the EH Archive Services. All data was supplied to Wiltshire HER.

Distribution of archaeological remains visible on aerial photographs

The nature of archaeological evidence available from aerial photographs defines the distribution and type of archaeology typically recorded. This usually comprises relatively large ditched and/or embanked features which are visible above ground as earthworks, or as cropmarks of sub-surface features (Wilson 1982 and 2000). 20th-century military structures are also routinely recorded. Historic aerial photographs, taken at regular intervals from the 1940s, provide details of earthworks and structures which may have since been ploughed away or removed. A range of archaeological features were mapped and recorded as part of the Marden Environs NMP (Fig 5) and the distribution of these is summarised below.

Archaeological monuments, with a wide date range, survive as earthworks relatively well on the grasslands on the Upper and Middle Chalk downs to the north and south of the Vale of Pewsey. Archaeological earthworks on the Lower Chalk, Greensand and valley gravels that make up floor of the Vale mainly comprise medieval and post-medieval remains though some prehistoric earthworks have survived. Aerial photographs from the 1940s record many structures associated with the Second World War although many of these were removed or demolished shortly after the war.

The buried remains of prehistoric and/or Roman sites were seen as cropmarks on the gentle slopes below the chalk escarpment to the north of the Vale of Pewsey and along the river Avon to the south and east of Marden. The marked absence of cropmarks in the central part of the Vale is probably due to the underlying geology of Upper Greensand which is not conducive to cropmark formation.

There are concentrations of Neolithic or Bronze Age barrows to the east of Marden along the branches of the Avon that flow through North Newton, the Manningsfords and Woodbridge before the confluence at Rushall. Possible prehistoric settlement sites were seen as cropmarks on the lower chalk below the escarpments. For example, curvilinear

enclosures overlooked the river Avon on the slopes above Manningford Bohune, Rushall and Upavon. Rectilinear enclosures in this area included one associated with a Roman villa near Charlton. Further clusters of possible prehistoric or Roman enclosures were situated to the North West of Draycot Fitz Payne and below Woodford Hill. Sites recorded towards the north-western end of the Vale, on the Middle Chalk, include a large area of possible fields and settlement to the west of the well known late Bronze Age or early Iron Age site at All Cannings Cross. In contrast to the chalk downs, the Vale has no evidence of extensive prehistoric or Roman field systems, or so-called 'Celtic' fields but there are possible fragments near Pewsey and Rushall.

Nothing securely dated to the Anglo-Saxon period was identified on aerial photographs. However, reviewing the results of excavated early medieval sites and early medieval documents in the context of the NMP results has enabled some evaluation of the Anglo-Saxon period in the Vale of Pewsey.

There is much evidence of medieval and post-medieval agriculture throughout the Vale. The north and south facing chalk escarpments were lined with terraces created by contour ploughing (sometimes called strip lynchets) and many of these can still be seen today. Ridge and furrow, associated with medieval open fields, was scattered across the Vale. The long parishes in the Vale include a mix of downland and vale typical of parishes in chalk and limestone landscapes in England. This arrangement indicates the mixed agricultural regime, including sheep and arable farming, described in documents from the medieval and later periods. Evidence of animal husbandry, probably mostly sheep, comes in the form of extensive water meadows in the central Vale and stock enclosures and dewponds on the higher ground. A pattern of nineteenth and twentieth century enclosed fields, drains and 'ridge and furrow like' pasture improvement overlies much of the Vale, especially at the western end.

There was some shift and shrinkage of settlement in the medieval and post-medieval periods and remains of abandoned tofts and crofts can be seen in and around some of the villages, for example there are extensive well preserved earthwork remains of medieval settlement at Etchilhampton. The changes to the layout of villages and the pattern of fields in the latter half of the twentieth century are recorded on aerial photographs taken at regular intervals from the mid 1940s.

At Puckshipton the slight earthworks and faint cropmarks indicate the site of a since demolished 17th-century house. At Rushall, there are earthworks and cropmarks of the formal garden at the site of another demolished house built in the 18th century but replacing an earlier building.

The impact of the Second World War on this central part of Wiltshire is also recorded on aerial photographs. This includes anti-invasion defences and a Stop Line that extended through the centre of the Vale, along the Kennet and Avon Canal. There were also larger sites such as the RAF Relief Landing Ground at Alton Barnes and the extensive military installations at Devizes.

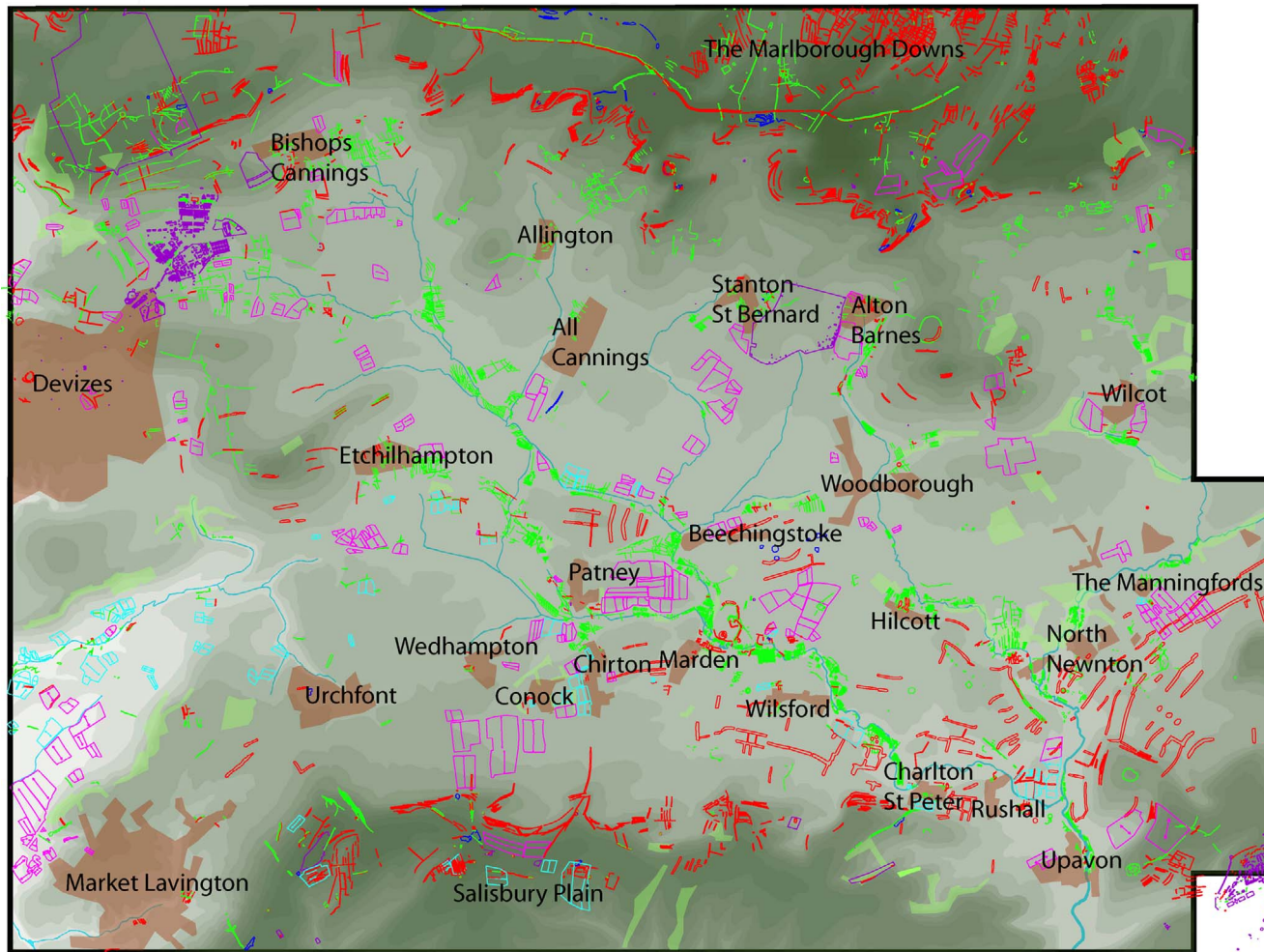


Figure 5 Map of topography and archaeological features visible on aerial photographs in the Vale of Pewsey. Base derived from 1:50,000 scale map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

PREHISTORIC

The topography of the Vale of Pewsey in much earlier periods would be largely the same as now, comprising the distinctive chalk scarps to north and south between which is a rolling landscape of low hills and the tributaries of the river Avon on the valley floor. The different nature of the soils probably meant that the land was used, or farmed, differently on the chalk and in the Vale, although this is by no means certain.

There is some evidence of the environmental conditions in the prehistoric period from excavated sites around the edges of the Vale, for example at the Neolithic causewayed enclosure at Crofton (Lobb 1995, 18-25) or at the late Bronze Age-early Iron Age middens at All Cannings, Stanton St Bernard (Barrett and McOmish 2009, Straker et al 2008, 106), Potterne (Lawson 2000) or from a peat filled palaeochannel at Market Lavington (Straker et al 2008, 106). There are a number of sites on the Marlborough Downs and Salisbury Plain with palaeo-environmental evidence, (Allen 2005, 77-86) which combined with work undertaken in the wider region suggests that the lowland areas within the chalk downlands, the river valleys and combes, were perhaps being cleared of woodland earlier than the uplands, possibly in the late Mesolithic and early Neolithic (Allen 2005, Wilkinson and Straker 2008 72-73). The data from Market Lavington suggested a 'mainly pastoral open landscape' with few trees from the late Bronze Age until the Iron Age and evidence from the midden at Potterne indicated wasteland and disturbed ground but also included evidence of arable crops and inferred evidence of livestock (Straker et al 2008, 106). Mixed farming was undertaken on the chalk downs with large areas cleared and in use from the Middle Bronze Age with increasing arable farming (Straker et al 2008, 105). There remain many questions about the nature of the central parts of the Vale in the past, for example whether the extensive area known, from medieval documents, as Cannings Marsh and inferred from place names (Patney, Cannings etc) was wetland in the prehistoric period.

The theme of a distinct and different vale that emerged in topographical and archaeological accounts over the last 200 years was mainly developed in the context of discussions of prehistoric remains. There is a difference in the nature of the archaeological evidence found in the Vale compared to the surrounding areas of chalk and there are relatively few prehistoric sites known in the Vale. This disparity is partly due to the different soils and land use of the Vale which has affected monument visibility combined with the relatively limited nature of archaeological investigation carried out there.

Aerial photography has expanded the distribution of known prehistoric monuments into the arable lands on the lower chalk along the northern and southern edges of the Vale (Fig 6). However, Marden henge and a scatter of possible barrows are the only known prehistoric monuments which could be described as located in the heart of the Vale, on the Greensand. Prehistoric small finds, including flints, pottery and metalwork, from the central Vale, although fewer than on the chalk, indicate the potential for discovery of further prehistoric sites there.

The features seen in and around the Vale which are thought to be Neolithic or Bronze Age in date are almost exclusively funerary or ceremonial monuments, such as barrows and henges. Other enclosures and boundaries are thought likely to relate to Iron Age and Roman settlements and land division, what could be termed 'functional' sites, but some may have earlier, perhaps Bronze Age, origins. The modern distinction between the 'ritual' and 'functional' categories of sites or landscapes almost certainly masks a far more complex picture as these monuments cannot always be easily subdivided.

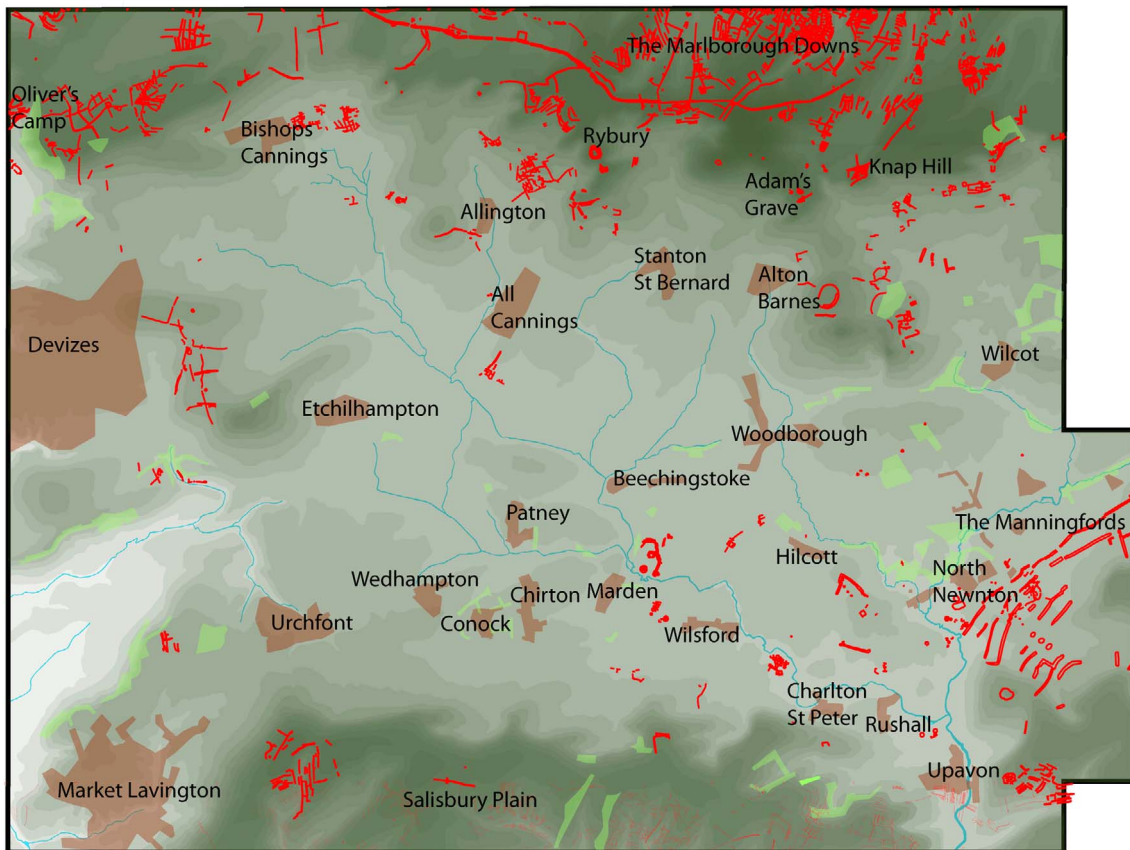


Figure 6 Distribution of possible prehistoric or Roman archaeological features seen on aerial photographs (in red) – features thought to be from other periods are not shown but the line of the Wansdyke (probably early medieval) is included near the top of the frame. Base map derived from Ordnance Survey 1:50,000 scale map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

Enclosures and barrows

There are a number of Neolithic monuments located around the edge of the Vale of Pewsey. These include the causewayed enclosures at Rybury, Knap Hill and Crofton and three long barrows: Adam's Grave, Kitchen Barrow and Giant's Grave. The construction of these monuments suggests that the people living there had long-held links with the land which were partly expressed in monument building (Pollard 2005, 104, Donachie 1998

18-22). Within the Vale of Pewsey, the only known survival of Neolithic earthworks is at Marden Henge. However aerial survey has identified some additional prehistoric sites in the Vale with a potential Neolithic or Bronze Age date.



Figure 7 Map and (inset) aerial photograph of the possible Neolithic feature at Cat's Brain. Note the location on a ridge between the two branches of the river Avon. Base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900. Photograph 26916/25 6-April-2011 © English Heritage

There is a possible Neolithic feature, perhaps a long barrow, between the two branches of the river Avon at Cat's Brain - a slightly raised area of land between the two branches of the river Avon above North Newton and Wilsford (Fig 7). It is visible as a cropmark of a U-shaped ditch defining an area approximately 26m by 20m. It is aligned east-west with the open end facing east. The U-shaped ditch is similar to the 'Cranborne Chase type' of long barrow suggested by Ashbee and seen at Thickthorn Down, Cranborne Chase, Dorset (Ashbee 1970, 1984, Barrett et al 1991, 36-37 Figures 2.9-2.11). There may also be parallels with monuments in the Thames Valley (Donachie 1998, 44-45).

Marden Henge

Henge monuments are characterised by archaeologists as curvilinear ditched enclosures with an external bank and usually one or two entrances. Development of these monuments seems to have occurred in the late fourth and early third millennium BC (Harding 2003). Marden henge and associated monuments at Marden were the subject of a survey, combining earthwork, geophysical and aerial photograph analysis. Details can be found in an English Heritage Research Report (Field et al 2009). Targeted excavation in 2010 provided significant further information on the site (Leary and Field 2010).

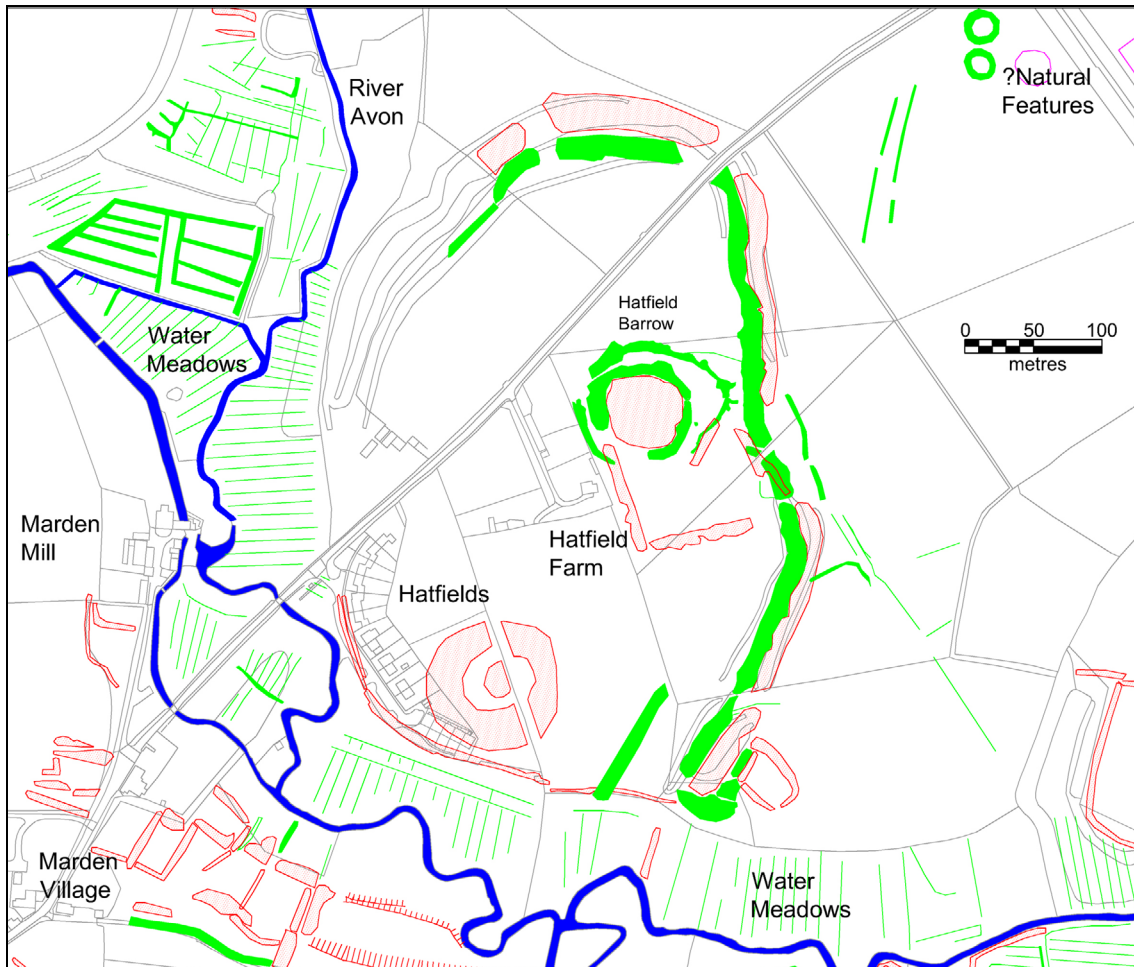


Figure 8 Plan of archaeological features visible on aerial photographs at Marden henge. The north-west part of the henge is masked by trees. 1:2500 scale base map © Crown copyright and database right 2012, all rights reserved. Ordnance Survey Licence number 100024900.

The large henge at Marden is situated centrally within the Vale of Pewsey and comprises a large roughly oval area defined by an irregular ditch and external bank on all but the south-western side where it appears to be open to the river (Fig 8). A relationship between henges and their local topography has been suggested whereby the bank of a henge recreates or somehow relates to the surrounding higher ground (Harding 2003).

The components of the enclosure at Marden could be seen as an attempt to emulate or reflect the arrangement of the escarpments of the Marlborough Downs and Salisbury Plain but it seems to have a more direct relationship with the river. It is possible that the sinuous course of the henge ditch and bank perhaps simulates the meanders of a river (Field et al 2009, 60-63). The association with water could have been further strengthened by possibility that the ditches may have seasonally held water (ibid).

Within the south-western part of the henge there is another possible henge, sometimes called the 'southern circle' (Field et al, 2009, 57). The ploughed down remains of the large Hatfield Barrow or 'Giant of Marden' are situated in the central parts of the larger henge enclosure. This is thought to be an example of a substantial Neolithic round mound, with possible parallels at the Knowlton and Mount Pleasant henges in Dorset (Barber et al, 2010). It is not clear how the Hatfield Barrow or the southern circle related to the encircling henge but the results of the 2010 excavations will provide further information to understand the chronology of these features (Leary and Field 2010).

Marden environs and the river Avon

Compared to Avebury and Stonehenge there are relatively few prehistoric monuments known in the immediate vicinity of Marden henge (Fig 9). It is possible that medieval and later remains mask some prehistoric sites. In particular, the extensive areas of post-medieval water meadows arranged along the banks of the Avon and its tributaries may obscure earlier features. The village of Marden, and ridge and furrow, may overlie prehistoric sites on the higher ground to the west and south-west.

Of the features immediately to the north-east of the henge, a prehistoric date cannot be ruled out for two parallel ditches which extend along the western side of the hill immediately to the north of the henge. Three nearby circular features were also seen as cropmarks, situated in the lee of the northern side of the hill. These have only been recorded once on aerial photographs and it is not clear if they represent genuine sub-surface features or modern agricultural marks. A feature identified as a possible henge to the north, near Beechingstoke, (Harding and Lee 1987, 287) is one of several post-medieval chalk pits.

Prehistoric finds, such as the Neolithic scraper and flints, were found on the edge of the higher ground, just west of the confluence of streams to the west of the henge (Wiltshire HER). This area appears to have been in cultivation since at least the medieval period and the remains of earlier sites may be ploughed away. Elsewhere, mainly in the midlands, prehistoric monuments survive underneath extensive areas of medieval ridge and furrow and appear as cropmarks when the rigs are ploughed level (eg Stoertz 2012, 35-37). It is therefore possible that the medieval ridge and furrow is masking earlier remains in the Vale Pewsey.

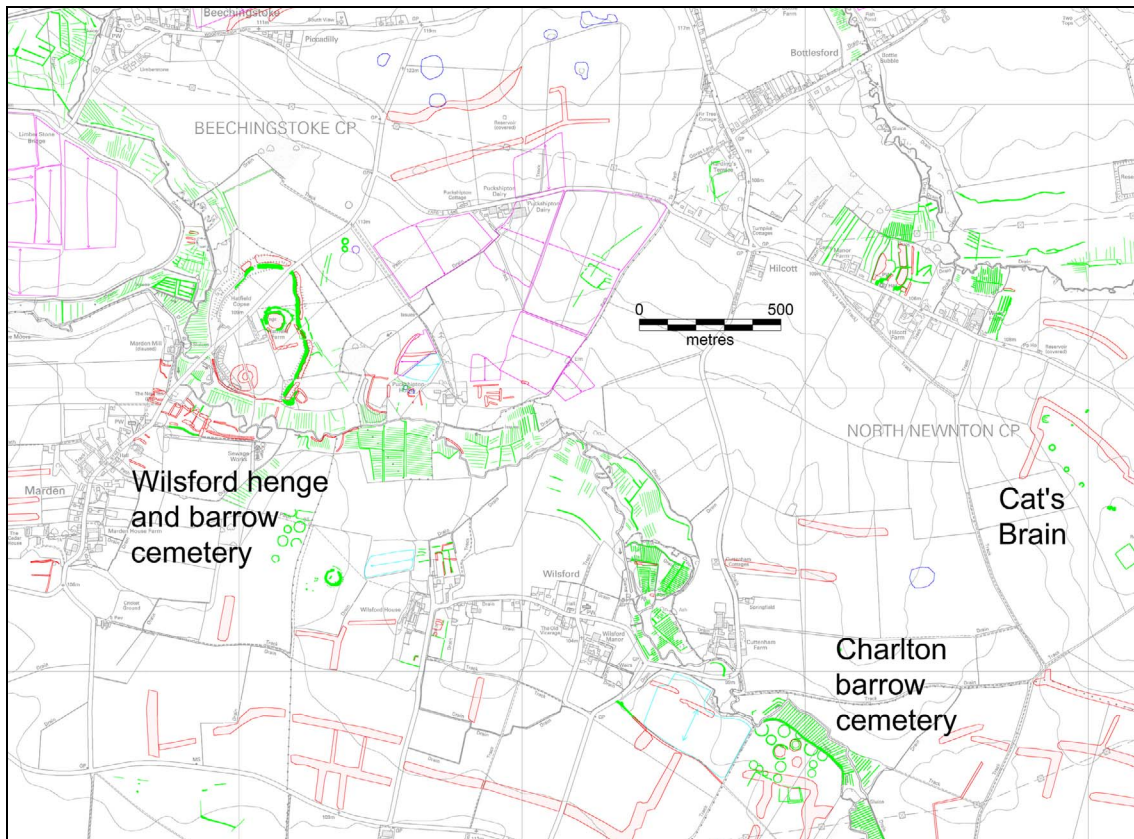


Figure 9 Archaeological map of all features visible on aerial photographs along the river Avon between Marden and Charlton. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

A significant cluster of prehistoric funerary monuments is situated on a low north-south ridge c 550m to the south of Marden henge (Figs 9 and 10). The remains of five possible round barrows are visible as cropmarks of ring ditches of varying sizes and appear to be arranged roughly parallel to the ridge. At the northern end of the barrow cemetery, perpendicular to the ridge, there are two possible oblong enclosures. These may be the remains of Neolithic features, perhaps belonging to the class sometimes described as mortuary enclosures, although there has been no evidence for a mortuary function found at any excavated examples. The cropmarks of the oblong enclosures had only been photographed once and it was unclear if they genuinely represent sub-surface remains. Geophysical Survey was therefore carried out in 2012. This confirmed the survival of all the prehistoric features and confirmed the full extent and the archaeological nature of the oblong enclosures (Linford, Payne and Linford 2013a). The enclosures subsequently showed on 2013 English Heritage aerial photographs (D Grady pers comm). The geophysical survey also identified the site of a possible Roman villa which seems to partly encroach upon the prehistoric monuments. This parallels the situation at a barrow cemetery just downstream at Charlton (see below for details).

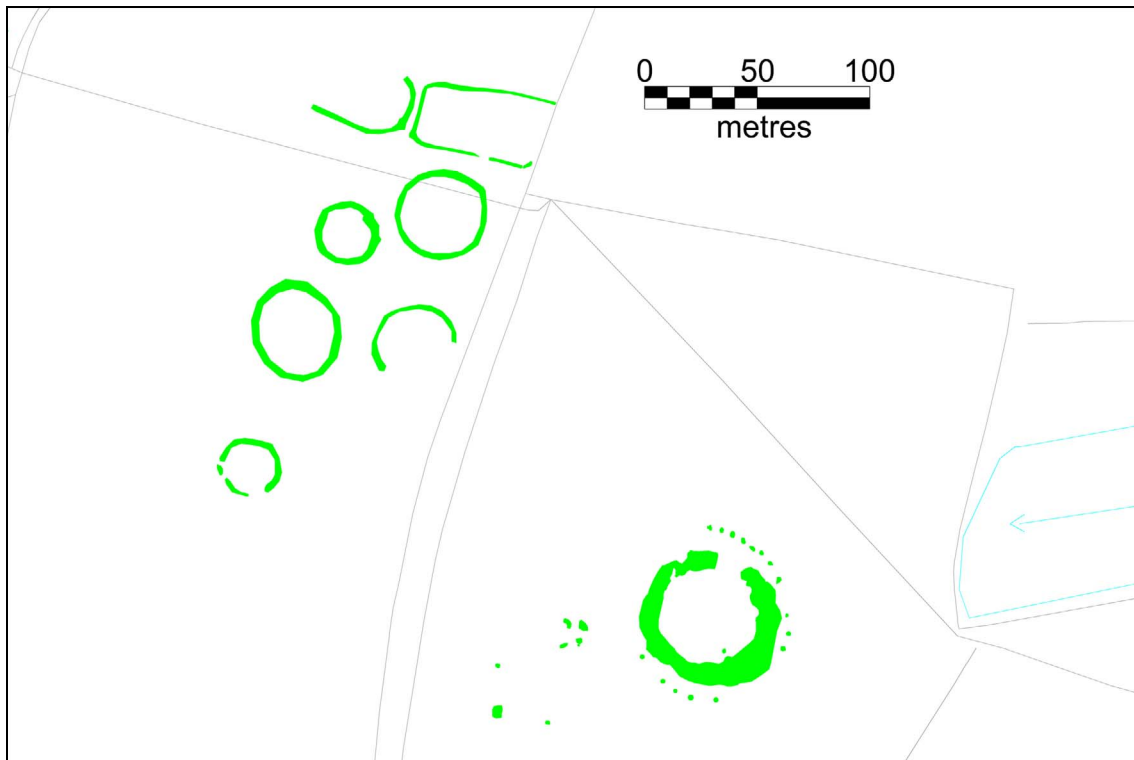


Figure 10 Plan from aerial photographs of the henge and barrow cemetery at Wilsford. 1:2500 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

To the south-east of the barrow cemetery, on the east side of the ridge and within the parish of Wilsford, there is a monument defined by a broad and very irregular penannular ditch with a gap which faces north-east, roughly in the direction of the River Avon (Fig 10). No trace of an external bank is visible. A line of pits curves around part of the enclosure, facing the possible entrance. More pits are situated on the east and south sides of the enclosure. This site has appeared regularly as a cropmark over more than fifty years and was published as Wilsford Henge (Harding and Lee 1987, 301-2).

This possible henge has certain points in common with the large henge enclosure at Marden. Both are defined by distinctly irregular ditches and both face the river. The pits are irregular and their alignment is not exactly parallel to the enclosure, indicating complex phasing in the construction of this monument. It is possible that the penannular ditch did not have an outer bank, and is perhaps an example of the so called 'formative' segmented ditched enclosures suggested by Jan Harding as a possible pre-cursor to the 'classic henge' ditch and bank arrangement (Harding 2003, 19). It is also possible that the pits represent the earliest phase of the monument, perhaps a different kind of the 'formative' phase (cf Harding 2003, 20) and that the ditched enclosure, possibly with an outer bank, was placed within and/or over the ring of pits. The idea that a henge ditch was preceded by a pit-defined enclosure has been suggested for other sites (eg at Maumbury Rings and two examples at Mount Pleasant), although in both cases a pit circuit was turned into a ditch (M Barber pers comm).

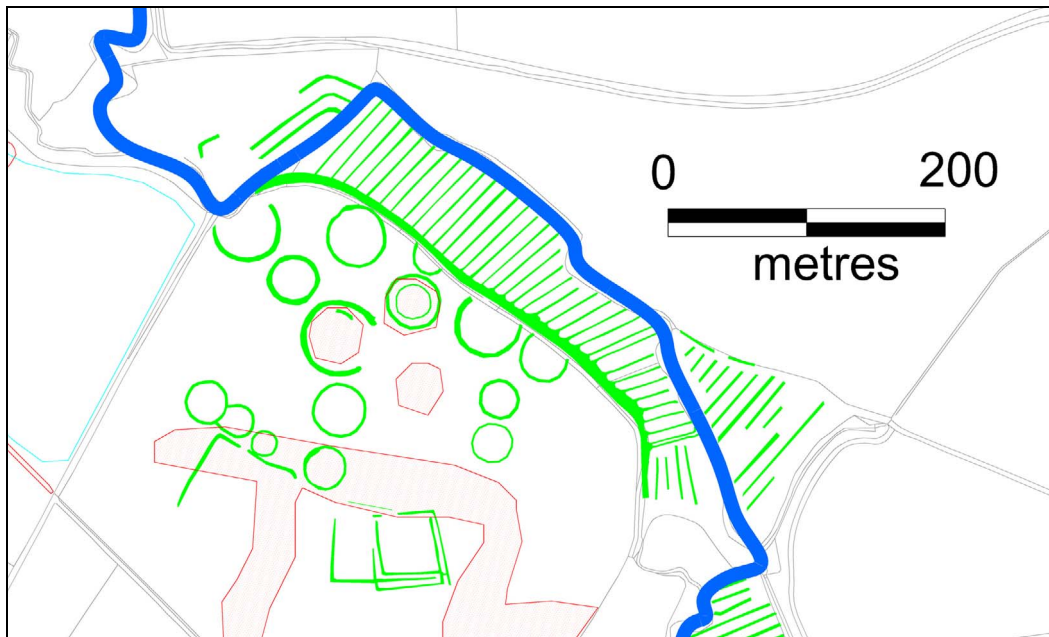


Figure 11 Plan of the barrow cemetery between Wilsford and Charlton. 1:2500 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900.

Approximately 2.5km downstream from Marden, to the south-east of Wilsford village, a large round barrow cemetery is located on the edge of the floodplain of the river (Fig 11). The water-table here may have been different in prehistory, but it is possible that the barrows were seasonally flooded. This location is comparable to the Neolithic and Bronze Age funerary monuments found in the lower Avon Valley at Fordingbridge and elsewhere in Hampshire (Young 2008, 33-35, figures 17, 18) or to the Upton Lovell barrow cemetery alongside the River Wylye in Wiltshire (Eagles & Field 2004, 61-2; Field 2008, 78). The Wilsford barrow cemetery is visible as cropmarks and some of the barrows are visible as low earthworks. A Roman villa encroaches on part of the southern extents of the cemetery, on slightly higher ground a situation paralleled upstream at the Wilsford Henge (see above). Geophysical survey was carried out at Charlton to determine sub-surface survival in 2012 (Linford, Payne and Linford 2013b).

Another group of barrows is situated on the banks of the Pewsey Avon by Woodbridge (Fig 12). These comprise a dispersed arrangement with barrows apparently in clusters on either side of the river. Examples of other possible barrows are also found on the higher ground in the south west of the project area. For example the linear arrangement at Cat's Brain (see above Fig 7), or the scattered examples found around the village of Manningford Bohune. With one exception at Woodbridge where a slight mound survives, these were all seen as cropmarks of ring ditches of varying size and completeness and some may represent the remains of late Neolithic or Bronze Age monuments which did not have a central mound.

There are some barrows, either isolated or in clusters, on the Upper Chalk towards the eastern end of the Vale above Wilsford and Pewsey. There is a line of possible round barrows on the Upper Chalk along the southern edge of the Vale on the boundary of the uplands of Salisbury Plain above Marden and Chirton. These appear to have been levelled, with the exception of Chirton Maggot which survives as a denuded mound. On Salisbury Plain the greater concentrations of barrows appear to be in the river valleys towards the south, with the Nine Mile River Valley a particular focus (McOmish et al 2002, 49-50, Figure 2.28). This is in contrast to the distribution of round barrows to the north of the Vale, where the scarp edge was heavily used (Cleal 2005, fig 11:1).

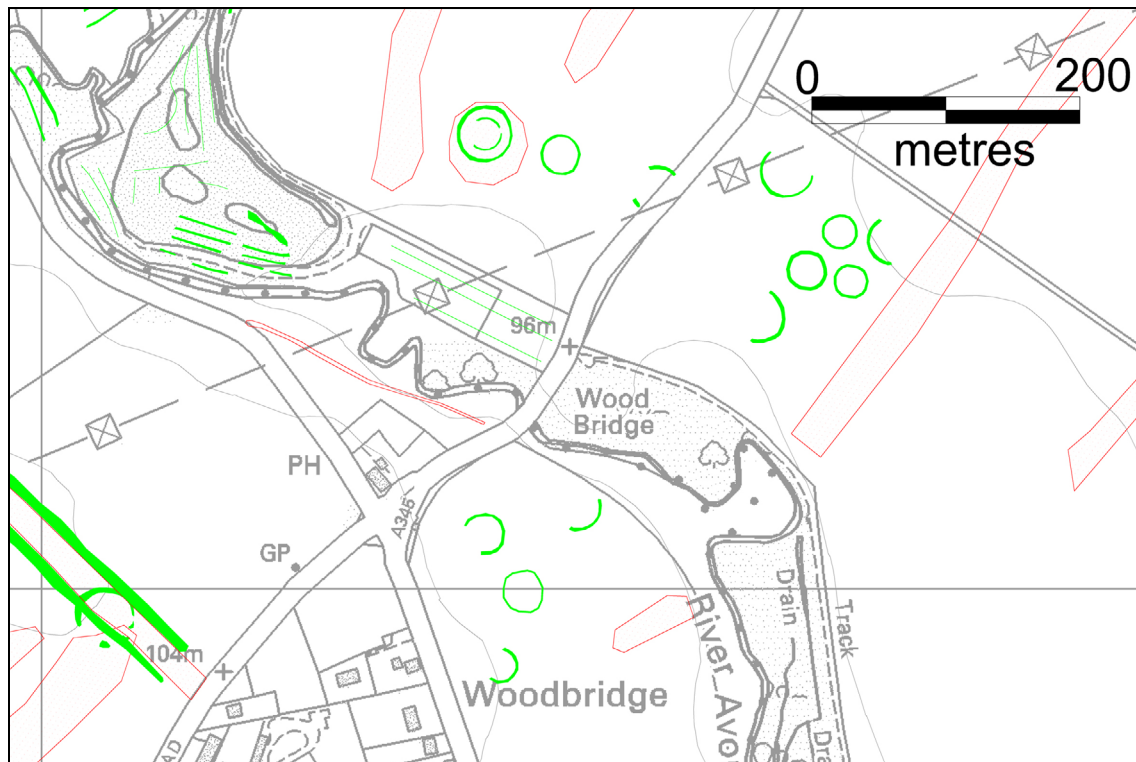


Figure 12 Plan of the barrows and other features at Woodbridge. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

The wider Vale

Aerial photography increased the number of known round barrows on the lower chalk below the northern escarpment of the Vale. These were visible as cropmarks of ring ditches and tended to be smaller than the examples on the southern side of the Vale. There were no apparent clusters or cemeteries and the known examples are widely distributed. For example, apparently isolated ring ditches are situated on the lower chalk below Rybury Fort, north and south of Allington village and east of Cannings Cross. A few possible barrows are situated on the lower chalk between Huish and Alton Priors.

There are possible examples of barrows on the Greensand in the centre of the Vale. The most notable was the Hatfield Barrow, thought to be late Neolithic, which was positioned at the centre of the Marden Henge enclosure. This barrow, once characterised as the 'Giant of Marden' collapsed during excavation in the early 19th century and has since been nearly completely levelled by ploughing (Barber et al 2010, 163-169). Cunnington's description of the collapse of the barrow may be seen to highlight the potential problems of constructing large mounds from sandy soil (Colt Hoare 1819, 6). However (though the exact composition is not known), the impressive size of the Hatfield barrow, and its survival for several millennia, may suggest that the construction of mounds on and mainly from Greensand was not a problem; the barrow's collapse was precipitated by Cunnington's excavation. It has also been suggested that sand was avoided as a material for barrow construction because of the difficulty in attaining a good profile and that subsequent weathering would obscure the form of the monument (Gerrard 1993, 18, Field 2008, 83). The process of constructing these types of monuments, often seen in the complex sequences revealed by excavation, may have been highly significant, although not completely at the expense of the final result (Field 2008, 83-84).

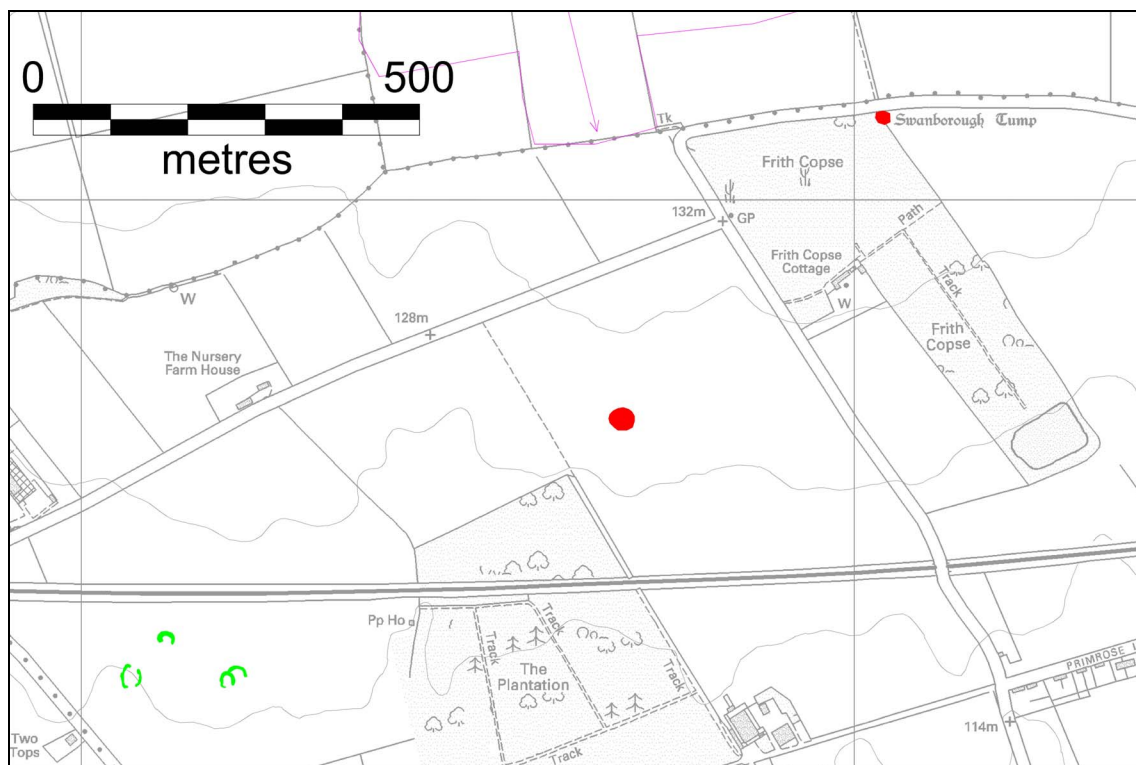


Figure 13 Swanborough Tump (top right) and possible barrows nearby. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Although its composition is not known, there is another mound situated on the Greensand at the centre of the Vale in Frith Copse. This possible prehistoric barrow (Semple and Langlands, 2001) is known as Swanborough Tump and is thought to have been used as a medieval Hundred meeting place (Mawer and Stenton, 1939 317, 320).

Swanborough Tump does fit into a small group of possible Neolithic or Bronze Age funerary monuments that appear to be aligned north-east to south-west on a south facing slope of a knoll above North Newton (Fig 13). However, some of the possible ring ditches within this group to the south of the railway line are not totally convincing, situated as they are in an area of market gardening where a number of different aerial photographs show various features which are unlikely to be archaeological in origin.

A possible lost barrow site is named as the 'Sand Barrow' in boundary charters for North Newton dated 892 and 934 and mentioned as 'Priest's Seat' in the charter for the neighbouring estate of Beechingstoke in 943 (Grundy 1919, 189, 270). The descriptions of the boundaries suggest that Sand Barrow was perhaps situated at the north-west corner of the parish of North Newton, near a kink in the North Newton parish boundary where an old track from Puckshipton meets the Broad Street-Hilcott road at the west end of Gores/Bottlesford. The barrow name implies it may be comparable in composition to the collapsed Hatfield Barrow which Cunnington described as composed of sand (Colt Hoare 1819, 6). This and the possible examples at Swanborough highlight the possibility of more 'lost' barrows on the Greensand in the Vale of Pewsey.

Dating of monuments relies on morphological characteristics and the ring ditches and mounds were mainly interpreted based on size and association with other monuments. Large mounds and ring ditches have often been found to have late Neolithic dates (Leary et al 2010). However, current evidence suggests that the size of circular monuments is not a clear indication of date because dimensions varied throughout the late Neolithic and Bronze Age (Bradley 2007) and a monument may have only reached its maximum size in the Early Bronze Age sometimes after a long process of enlargement or alteration. Given the relative lack of archaeological work in the Vale, the evidence from aerial photographs provides a framework for further work to establish dates and examine the landscape during the late Neolithic and Bronze Age.

Monuments in the landscape

Pollard illustrated a distribution of early Neolithic monuments, mainly long barrows, in and around the Kennet Valley on the Marlborough Downs (Pollard 2005, Figure 10.1). The barrows on the northern escarpment above the Vale of Pewsey are on the edge of this group. Looking south from the Vale there appears to be a different distribution. The Giant's Grave long barrow, sitting on the northern scarp of Salisbury Plain above Pewsey, in terms of location mirrors the sites on the southern scarp of the Marlborough Downs. However the Giant's Grave is generally considered to be part of a group based on Salisbury Plain. The distribution of long barrows on Salisbury Plain mainly seems to focus on valleys, spring lines and streams towards the south of the Plain (McOmish et al 2002, 22-27, Figure 2.3). Donachie notes the great variety in form and location of the long barrows around the Vale and suggests that the long barrows on the escarpments were the exception to a wider distribution based partly on natural route ways rather than on impressive locations and/or intervisibility (Donachie 1998, 26-27, 31). The Neolithic

causewayed enclosures at Rybury and Knap Hill sit in prominent locations near the wide central parts of the Vale. The causewayed enclosure at Crofton is situated near the narrow eastern end of the Vale, perhaps surrounding the confluence of two streams (Oswald et al 2001, Figure 4.21).

Pollard suggested that from the beginning of the third millennium BC a process of monument building apparently began, focussed on the Kennet valley floor, which culminated in a complex of linked monuments around Avebury henge (Pollard 2005, 103). The Vale of Pewsey appears to be lacking in linear monuments, such as avenues or cursus monuments, found elsewhere, for example, at Avebury and Stonehenge. There are, however significant numbers of circular monuments, mostly round barrows. Throughout southern England there seems to have been a gradual increase in the construction of circular monument types, in particular round barrows, from the late third and mainly through the second millennium BC (Cleal 2005, 115-116, Field 2008, 71).

On the Marlborough Downs diverse locations were noted for round barrows and the main influence was felt to be the location of other monuments, in particular Avebury Henge and associated avenues, Silbury Hill and the West Kennet palisaded enclosures (Cleal 2005, 119-122, Figure 1:1). This has also been argued at Stonehenge but an alternative view is that round barrows are focussed on natural features, principally water courses, rather than specifically referencing other monuments (Field 2008, 84-85). It is however likely that a complex combination of factors determined the location of monuments.

The choice of location for circular monuments, probably mostly round barrows, in and around the Vale is diverse. The barrows on the northern escarpment for the most part share the prominent locations of the Neolithic monuments. The few scattered barrows below the escarpment and in the central parts of the Vale occupy low lying positions and none appear to utilise prominent features, such as Picked Hill or Woodborough Hill. The dubious barrows near Frith Copse perhaps reference one another in their apparent linear arrangement. The barrows in the two river valleys draining into the Avon from Marden and Pewsey are almost exclusively in low lying positions, most near the river, most clustered in cemeteries. The exception here is the linear arrangement of ring ditches at Cat's Brain, situated on a saddle of land between the two rivers, but none appear to occupy the top of the ridge. These monuments, probably barrows, may be positioned in relation to a possible Neolithic feature, perhaps a long barrow, (Fig 7 above) but are equally likely to be deliberately located close to rivers or other topographical features.

The prehistoric monuments around Marden village are almost certainly associated with one another but it is unclear if the larger henge was constructed around the smaller henge and the Hatfield Barrow, or if they were placed within its interior. It is possible that all these monuments were constructed and used in discontinuous overlapping time frames. It may be that the river and other topographical features, or different spiritual

beliefs linked to that place, were the main focus rather than the relationships between the monuments.

Work elsewhere in the southwest suggests the process of construction, and ongoing 'use' of monuments was important and that component materials were carefully chosen (Owoc 2002, Boulden 2011). It has been argued that mound construction involved remembrance or memorialisation and that colour was used as a visual reference (Boulden 2011, 118). Therefore materials used in construction of monuments in the Vale were probably also significant. The distinctive soils and geology which make up the Vale have different textures and colours, including the hard sarsen stones, the white chalk, and the vivid tones of the Greensand.

The evidence from aerial photographs, is therefore only part of the story of late Neolithic and Bronze Age activity in the Vale of Pewsey. It is also a partial distribution, for example, other forms of funerary practice, such as Bronze Age flat graves, are not usually visible on the ground or from the air (Cleal 2005, 118-9). Many of the barrows survive only as sub-surface features with little or no mound material surviving, limiting the potential for analysis of the original composition. However, the remains in the Vale are a precious resource and important examples of monuments off the chalk downs. There is always potential for more discoveries through non-intrusive means such as aerial reconnaissance, geophysical survey and surface collection of artefacts. For example a possible Neolithic long barrow, or similar type of monument, was recently discovered during English Heritage aerial reconnaissance near the avenue at Avebury showing that new discoveries are possible even in relatively well studied areas.

There is no direct evidence of Neolithic or Bronze Age settlement within the Vale of Pewsey but the monuments discussed above, and stray finds, indicate that people were using the valley in those periods. Prehistoric settlement sites are difficult to identify from the air, either because of their ephemeral nature, lacking large enclosures ditches which could form cropmarks, or due to the difficulty in dating enclosures on morphological characteristics alone.

The nature of settlement in the Neolithic and earlier Bronze Age seems to have involved movement between locations, probably to utilise different resources and perhaps perform specialised tasks, possibly with a changing make-up of groups of people (Bruck 2000, 281). The complex constructions and careful demarcation of space found at the barrows and henges contrasted with the mobility and fluidity of groups of people (Bruck 2000, 282). The henges and funerary sites apparently performed different functions. The henges seemed to be gathering places and the barrows provided a focus for the living and the dead to deal with bereavement. The construction of both types of monument therefore seemed to be a manifestation of carefully regulated social practice at specific locales (Bruck 2000, 283-5). The structures we would expect to find at settlement sites, such as buildings, boundaries, palisades are found at these sites. For example the house like structures excavated at Durrington Walls and the similar, but larger, example with a

central hearth excavated in 2010 at the Southern Circle in Marden Henge (Parker Pearson et al 2005, 2006, 2007, Parker Pearson 2012, Leary and Field 2010). It has also been suggested that there can be links between middle Bronze Age cemeteries and settlements, although the nature of these connections seems to vary across the country (Bradley 2007, 168, 196-198). For example, a settlement and cemetery may be contemporary or there may be more direct material links such as when fragments of pottery from the same vessel turn up in a settlement and nearby cemetery .

The activities at barrows and henges were probably intermittent but the monuments seem to be part of a long lived tradition at these locations. Previous studies emphasised the importance of memory and the possibility of monument building as a manifestation of a connection to a place, perhaps through a mythologised past (Donachie 1998, Oswald et al 2001, Pollard 2005, Field 2008). Many of the Neolithic sites on the Marlborough Downs have earlier phases, prior to construction of the monument, with some locations used, although not necessarily continuously, since the Mesolithic period (Donachie 1998, Pollard 2005). D Field uses a case study in the Wylye valley, on Salisbury Plain, to suggest that long barrows could be marking parcels of land, perhaps controlling access to the river by demarcating ownership (Field 2008, 43-44, Figure 4:6). Field examined the distribution of barrows and artefacts in central southern England, to the south of the Vale of Pewsey to the sea, and suggests that this could indicate a system of access to land based around coast and the river valleys (Field 2008, 71-85).

As yet there has been no work to establish if the locations of the late Neolithic and Bronze Age monuments below the escarpments in the Vale of Pewsey were the focus of activity prior to the construction of the monuments or if they were the focus of settlement. The areas around the streams on the south-east side of the valley were certainly attractive to the monument builders. It is possible that the position of the barrows there reflect some kind of demarcation of the land and rivers as suggested elsewhere in central southern England.

Settlements, enclosures and boundaries

In Britain the evidence for settlement and land division is much greater for the mid-late Bronze Age, the period from around the mid second millennium BC (Bradley 2007, 178-225, Field 2008, 82-83). Settlement structures were more substantial and sometimes enclosed by ditched boundaries, and field systems and large scale ditched and banked land divisions were created. The reasons for the creation of enclosed settlements, a form which continued into the Roman period, is complex and cannot be explained simply in practical terms and some settlements seem to have shifted between 'open' and physically demarcated space (Bowden and McOmish 1987).

These changes have been interpreted as a response to the need for increased agricultural production (eg Yates 2007) but an alternative suggestion is that the differences in land use and settlement were the result of a change in society rather than a response to an

economic imperative (eg Brück 2000). Brück, amongst others, suggests that the settlement evidence reflects a new focus on smaller communities with households living in settlements and houses with carefully designated spaces (Brück 2000, 285-289).

In contrast, large scale endeavours requiring cooperation between groups of people are seen in the layout of large areas of field systems. These seem to be deliberately co-located with earlier monuments or perhaps were incorporating earlier belief systems. For example, the very long axes of the field systems on Salisbury Plain are laid out seemingly with disregard for topography or practical needs, but are orientated on the summer or winter solstice (Bradley 2007, 187-189, McOmish et al, 2002, 152-154). It is still not clear how settlements related to these field systems or how land was allotted between groups (Bradley 2007, 188-192). Towards the end of the Bronze Age and into the early Iron Age, long linear ditched earthworks were created, some slighting the field systems and examples can be seen on the Marlborough Downs and Salisbury Plain (Kirkham 2005, 149-155 Figure 14:1, McOmish et al, 2002 56-68 Figure 3.1)

Exploration of large midden sites in and near the Vale of Pewsey, including Potterne, All Cannings, Stanton St Bernard, and East Chisenbury, played a key role in reassessment of the development of the late Bronze Age to early Iron Age transition around the early first millennium BC (Barrett and McOmish 2009). The role of these, and similar sites elsewhere with large middens, is not entirely clear (Waddington and Sharples 2011, 55-62). It has been suggested that they were gathering places, for feasting and other communal activities, where the creation of middens perhaps symbolised the cycles of life through the deposition and accumulation of related materials (Bradley 2007, 232-234, Waddington and Sharples 2011, 60-62). The middens at All Cannings and Stanton St Bernard were identified by the excavators on aerial photographs (Barrett and McOmish 2009, 575). However, an examination of all aerial photographs of the area and the rest of the Vale, during the course of the NMP survey suggests that there is no typical or diagnostic appearance to these sites on aerial photographs. Targeted field walking would therefore be a more effective means of identification of further sites. Recent evaluation of midden sites in southern England showed the Vale of Pewsey middens are close to the interface of different environments, have extensive views and some may be associated with routeways (Waddington 2009, 158-162, Waddington and Sharples 2011, 58).

The ditched boundaries, enclosures, hut circles and pits associated with prehistoric land division and settlements are visible from the air as earthworks or where buried remains cause differential crop growth. Examples of these were recorded along the northern and southern edges of the Vale, on the Middle Chalk below the escarpments.

Unenclosed settlement is harder to identify on aerial photographs. Boundaries may have been defined by ephemeral, natural or conceptual features which leave little archaeological trace. The conditions in the Vale, especially on the Greensand, do not seem particularly conducive to cropmark formation and very dry conditions are probably required to show open settlements. Interpretation of open sites can also be difficult as

cropmarks of round houses can have a similar appearance to, for example, small round barrows, and cropmarks of pits can also be difficult to categorise without contextual information. Therefore it is possible that some of the pits and ring ditches recorded in the NMP survey indicate the sites of settlement, for example, those to the north of Manningford Bohune Common (Fig 13 above) or those on the ridge at Cat's Brain (Fig 7 above).

Bronze Age enclosures?

A possible example of a Bronze Age enclosure is situated to the east of Horton, in the lee of The Knoll, on a gentle slope overlooking a shallow dry valley which runs down to a stream. This stream meanders south-east across the Vale eventually joining the Marden branch of the Avon. The 'tear'-shaped enclosure, shows regularly as a cropmark, and is defined by a broad ditch, measuring up to 4.5m wide with opposing entrances to the north and south. There are two ring ditches, one within the enclosure (20m in diameter) and another (22m in diameter) situated against the convex side of the east end (Fig 14).



Figure 14 Prehistoric enclosure and ring-ditches at Horton Bridge 23829/06 19th February 2005 © English Heritage

These ring ditches have been interpreted as the remains of round barrows and, based on cropmark evidence alone, have been recorded on Ordnance Survey maps as the sites of tumuli. However, there is no evidence to suggest that either circle ever enclosed a mound. An alternative interpretation is that these could be the slot trenches, or drip

gullies of round houses, but these would be of unusually large circular buildings. It is possible this site had parallels to the so called ring works of the late Bronze Age found elsewhere, such as at Springfield Lyons, Thwing or South Hornchurch (Bradley 2007, 206-210, Figure 4.11). The opposed entrances of the main enclosure and its relationship to the circular features echoes the arrangement at some henges but in most respects this site does not appear to be a henge or a ringwork.

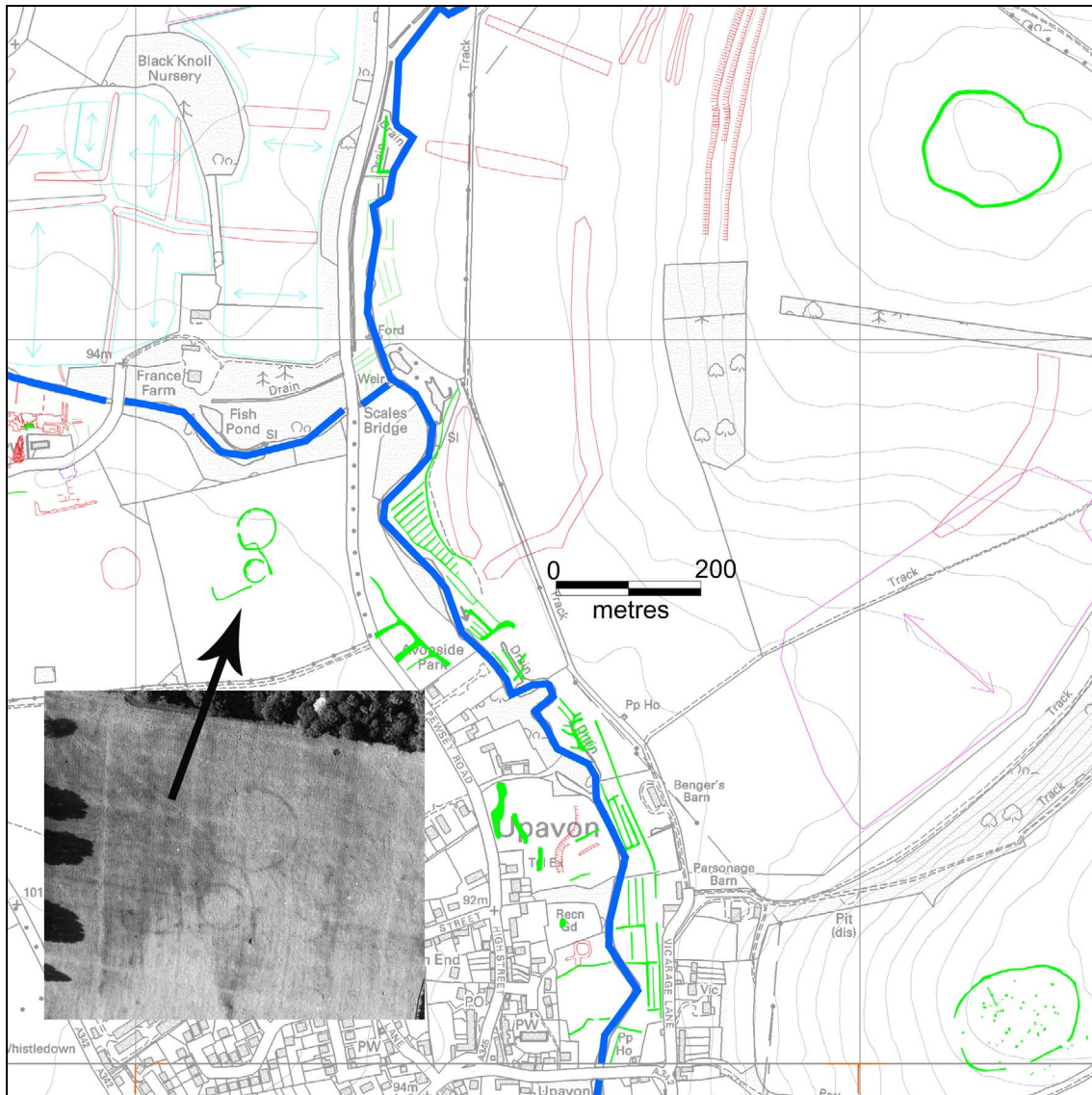


Figure 15 Map of archaeological features near Scales Bridge including possible Neolithic or Bronze ring ditches (inset and indicated) and later prehistoric settlement (right of frame). Photo extract of 312/122 26th-Jul-1971 © Crown copyright. EH. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

A potential Bronze Age enclosure is situated near the confluence of the Marden and Pewsey Avon streams, above Scales Bridge (Fig 15). A circular ditched enclosure,

measuring 55m across, sits next to a smaller ring ditch measuring 30m across. The larger circle could define an enclosure or it is possible both ring ditches defined the extent of former barrow mounds. Comparable examples include a large mound downstream near Compton, which measure 46m across and the Hatfield Barrow, within Marden henge is thought to have been about 55m in diameter (McOmish et al 2002, 39, Barber et al 2010, 267). If comparable, this perhaps indicates a late Neolithic rather than Bronze Age date for the larger ring above Scales Bridge. The large mound immediately to the west of the two ring ditches could be another barrow of similar proportions but appears to have been spread by ploughing and so its original extent is likely to have been smaller. An Iron Age coin and a brooch were found in the vicinity (Wiltshire HER) and perhaps the fragments of rectilinear enclosure and the smaller ring ditch relate to this period.

The remaining enclosures recorded from aerial photographs in the Vale probably represent remains of what can be broadly described as later prehistoric, probably Iron Age, or Roman, settlements and boundaries but some may have origins in the Bronze Age. The enclosures have a range of shapes and forms and most are on the Lower Chalk on the north and south sides of the Vale.

The north eastern Vale: Alton, Woodborough and Wilcot

Sites on the northern Vale escarpment have been relatively well explored. Antiquarian excavations suggest Iron Age and Roman settlement, possibly even a villa, in the lea of the Neolithic causewayed enclosure on Knap Hill (Cunnington 1911). Numerous finds have been recovered from the area around Golden Ball Hill and Knap Hill with a date range spanning the prehistoric and into the Roman period (Information from Wiltshire HER and EH NRHE). Some stray finds are recorded in the HER below the scarp edge, to the north of the modern villages, including Iron Age and Roman pottery and Roman tile.

Aerial photographs record a cluster of sites visible as cropmarks below the escarpment, on the Lower Chalk to the north and north-west of West Stowell (Fig 16). These enclosures are particularly diverse in terms of shape and size and present an opportunity to explore the development of the landscape including what appear to be different types of settlement and land division.

The numerous smaller enclosures situated just below the escarpment probably indicate the sites of settlements (Fig 16). It is not clear if the enclosures are broadly contemporary or if the distribution is the result of a continuous, or discontinuous, shifting pattern of land use. Some of the enclosures have superficial similarities to sites which survive as earthworks on the higher chalk just to the north near New Town. To the north west of New Town, a site called Eald Burh, has a potential date range from the Bronze Age through to the Roman period (Bowden 2005, 158). An enclosure adjacent to New Town is suggested to be medieval or post-medieval, possibly associated with sheep farming (Smith 2005, 196-197, Figure 18:5). There are similar difficulties in interpretation

of the enclosures below the scarp edge and while it is likely that they indicate later prehistoric or Roman settlements, a medieval date should not be ruled out for some.

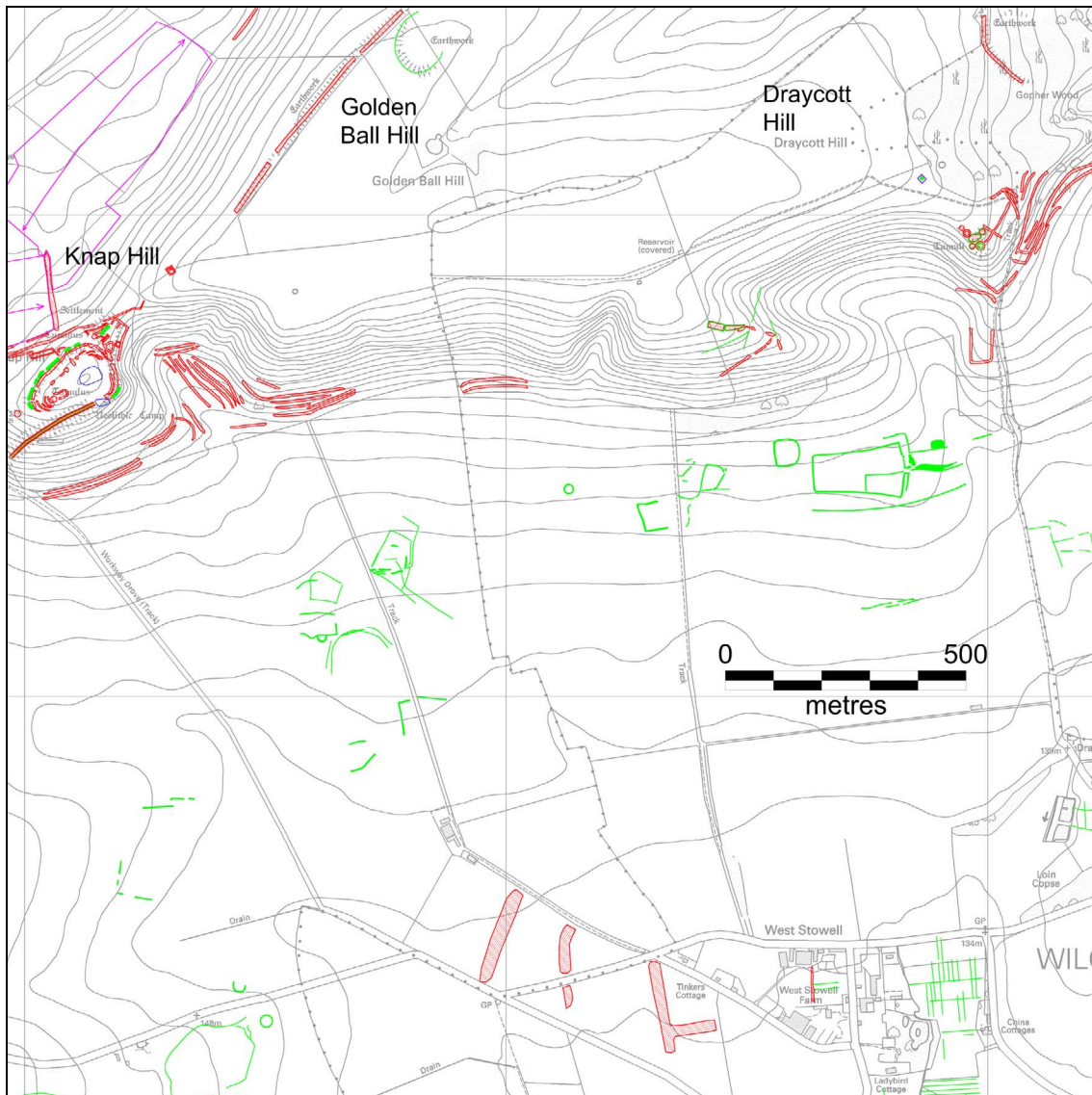


Figure 16 Map of archaeological features north and north-west of West Stowell. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

An interesting feature is situated just below the escarpment to the north of West Stowell (mid-top right Fig 16). This large rectilinear enclosure has a short broad track, approaching from the east. The enclosure's size, morphology and topographical location suggest it is likely to be a settlement although there appears to have been considerable use of the approaching trackway. The trackway and entrance imply the movement of livestock, perhaps between the Vale and the chalk downs. It is possible that this is a medieval stock enclosure like those found on the chalk to the north, but its form is different. A later prehistoric (Neolithic, Bronze Age or Iron Age) date seems most

plausible, although it is impossible to narrow it down further. There is a superficial similarity to a smaller, but similarly shaped, enclosure partially excavated at Whitchurch in Warwickshire and suggested to be later Iron Age in date. This enclosure cut into a large late Bronze Age and early Iron Age midden deposit comparable to those at All Cannings and Stanton St Bernard (Waddington and Sharples 2011, 15-16, 28-30, Figure 10).

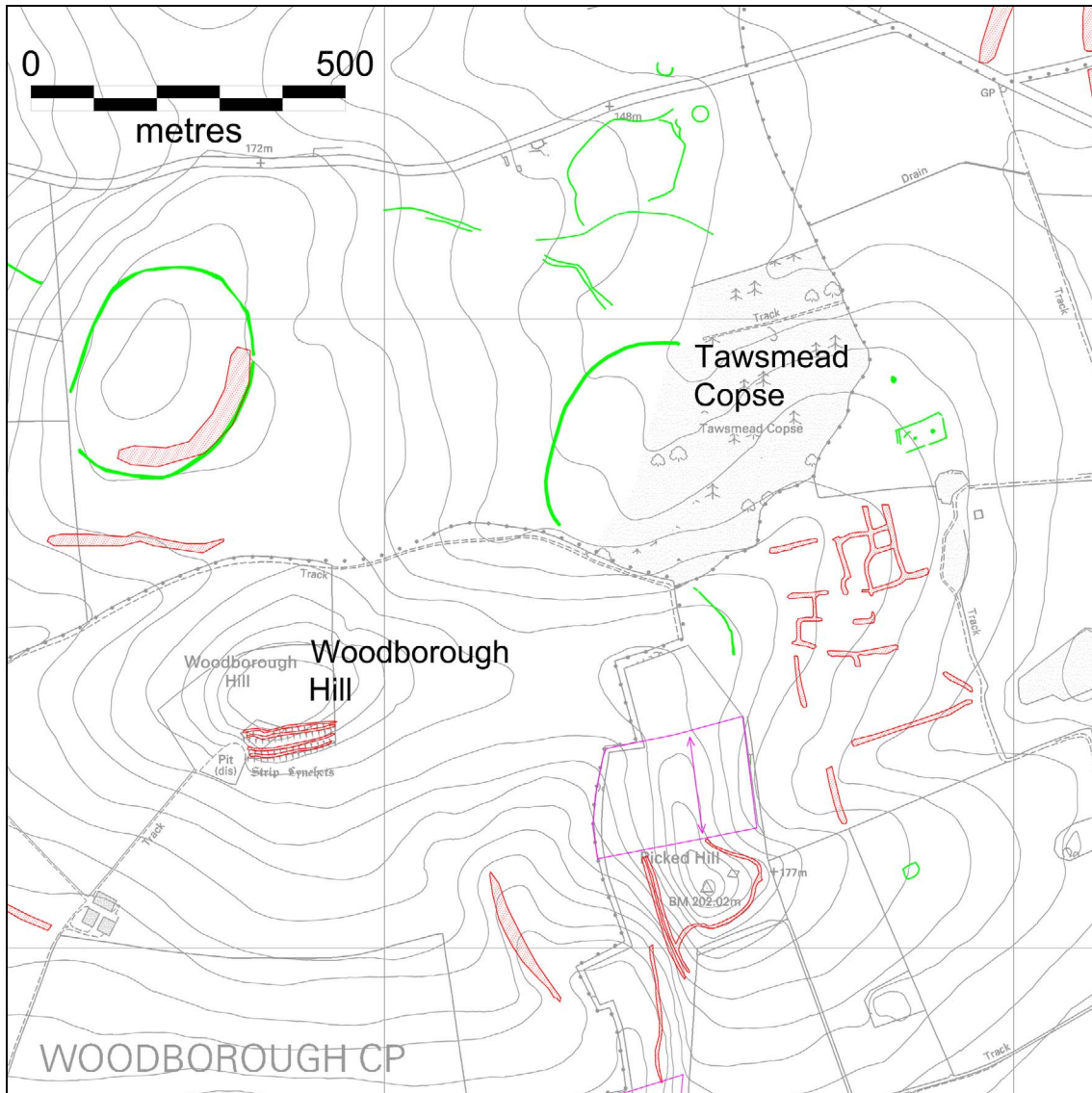


Figure 17 Map of archaeological features, including possible prehistoric enclosures and a field system, near Tawsmead Copse and Woodborough Hill. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

A site to the north of Tawsmead Copse comprises a large curvilinear ditched enclosure, with a possible funnel entrance, and a double ditched feature, perhaps a track or boundary, to the south (mid-top Fig 17). The fragments of track and the possible funnel entrance may indicate the management of livestock, perhaps related to a settlement in or

near the large enclosure. There are two other large curvilinear enclosures, one around a knoll below Woodborough Hill and another to the east abutting Tawsmead Copse (Fig 17). Bronze Age, Iron Age and Roman pottery fragments have been found on Woodborough Hill (Wiltshire HER). It is possible they are prehistoric or Roman features but alternatively they could be medieval or post-medieval in date, and perhaps once enclosed woodland, although neither is marked on the 19th-century Ordnance Survey maps. The knoll to the west of Tawsmead Copse is marked as 'Burlinch Hill' on Andrews' and Dury's map of 1773, perhaps indicating that the feature there has some antiquity (Andrews, Dury and Crittall 1952, No. 11) and prompted O G S Crawford to suggest that Insall fly there in the early twentieth century. The lynchet, plus the 'bur' perhaps shortened from 'bury', incorporated in to the place name may therefore refer to an 'ancient' enclosure. Place name evidence is rather tenuous in this context however. Tawsmead Copse is recorded in 16th-century documents and lies just outside the 13th-century bounds of Savernake Forest (British History Online). The wood has the same rectilinear form on the 1773 map, again perhaps indicating that the curvilinear feature probably pre-dates the post-medieval period at least.

Possible evidence for prehistoric farming is suggested by the fragmentary remains of fields showing as cropmarks on the slopes between Picked Hill and Tawsmead Copse. The boundaries appear to have been defined by banks and these show more clearly at the northern end where field size varies from 25m by 25m to 50m by 50m. There are ditched enclosures to the north and south which could be associated with the fields but there is no direct evidence for this. The relatively small-scale of the field system, in terms of the field size and the extent seems to contrast with the extensive systems on the chalk to the north and south of the Vale.

The northern Vale: Allington, All Cannings and Stanton St Bernard

An area of possible prehistoric or Roman fields is situated below Rybury Hill, adjacent to the excavated late Bronze Age or early Iron Age midden site at All Cannings (middle Fig 18). Here cropmarks reveal a system of fields and trackways extending over an area measuring 630m by 850m. Two circular features and a small rectilinear enclosure may indicate the sites of possible settlement around the edges of the known extents of the field system. The circles could, however, be the remains of small round barrows. Iron Age, Roman and medieval finds were found in the vicinity (Wiltshire HER). Fragmentary cropmarks of enclosures below Kitchen Barrow Hill and Clifford's Hill hint at further possible remains of settlement and fields (upper left Fig 18). The potential date range for these falls in the broad range from the Bronze Age through to the Roman period. The Wiltshire Field Group found worked flint, Bronze Age, Iron Age and large quantities of Roman and later, pottery in the area to the east and south-east of Rybury (Amadio and Clarke 2012)

Although co-location is not a guarantee, it is possible that some of the enclosures and boundaries on the lower slopes on either side of Clifford's Hill relate to the late Bronze

Age-early Iron Age midden sites excavated at All Cannings and Stanton St Bernard (Barrett and McOmish 2004, Barrett and McOmish 2009). The midden sites excavated elsewhere, at Potterne, Chisenbury and further afield at Whitchurch in Warwickshire were not isolated features (Waddington 2009, Waddington and Sharples 2011) but were co-located with evidence for settlement.

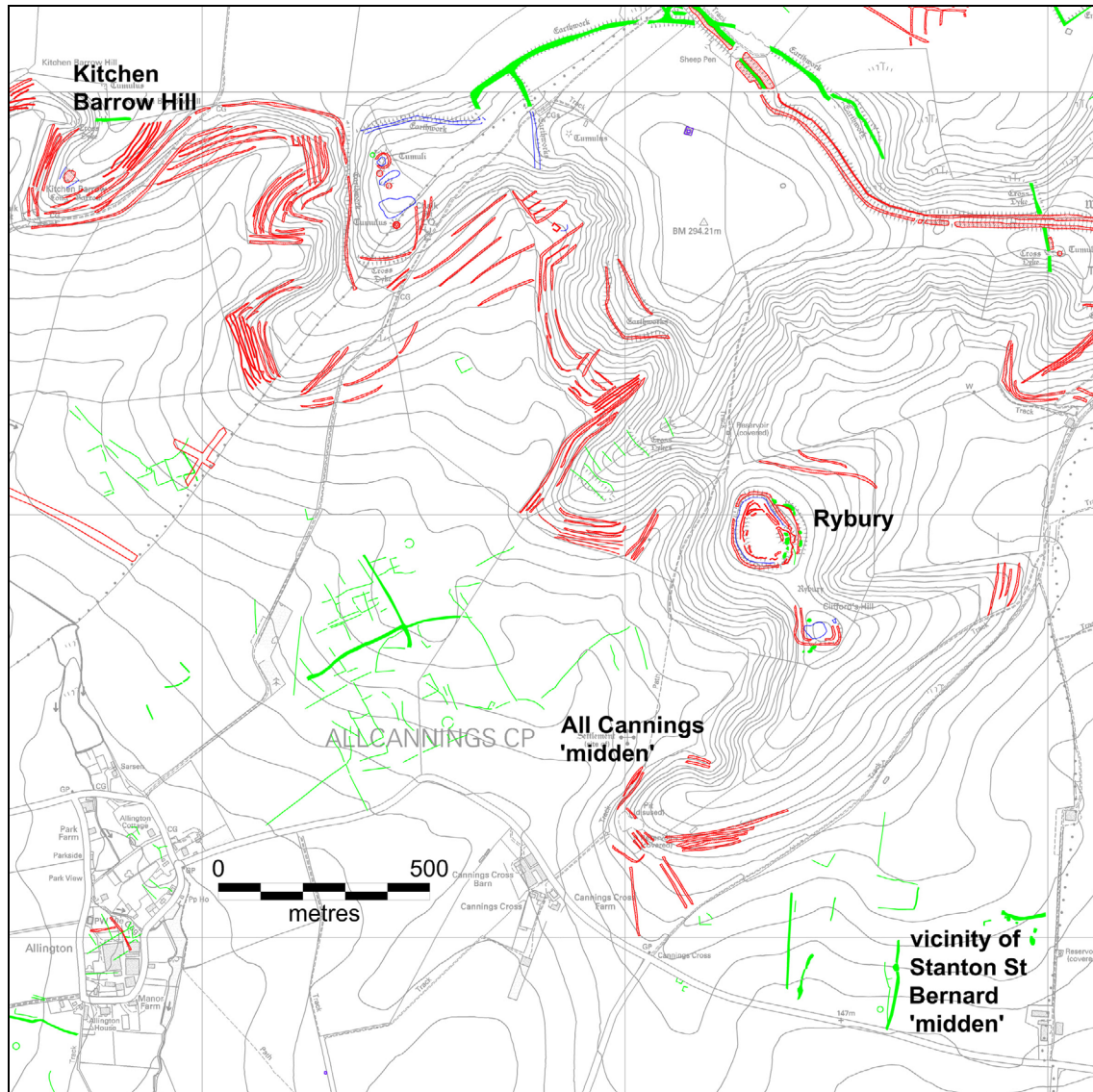


Figure 18 Map of archaeological features, including possible prehistoric or Roman enclosures and boundaries by All Cannings and Stanton St Bernard. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

The southern Vale: Urchfont and Marden

There is little evidence of prehistoric enclosures and boundaries on the Lower Chalk on the southern edge of the Vale, between the villages of Urchfont, Chirton and Marden and the escarpment of Salisbury Plain. Relatively few finds are recorded in the HER and NRHE and these have a wide date range, from the Mesolithic through to the medieval period. There is some doubt as to whether the 'unfinished hillfort' called Broadbury Banks is a prehistoric feature and it may just be the remains of curving medieval or post-medieval hollow ways (McOmish et al 2003, 81). To the north of Broadbury Banks, on the lower ground near the Devizes road, there are fragmentary cropmarks, perhaps indicating a prehistoric site. The prehistoric sites along the river Avon at Marden include the henges near Marden and numerous barrows but do not seem to include any enclosures that could directly indicate the sites of prehistoric settlements. There is plenty of archaeological evidence from later periods which may mask earlier sites. The area between the villages and the scarp edge was the site of the medieval parish open fields and traces of ridge and furrow are still visible. The medieval terraces created by contour ploughing once stretched almost continuously along the steep slopes of the escarpment punctuated by numerous medieval and post-medieval trackways. Up on the Plain there are extensive prehistoric field systems, some overlain with medieval ridge and furrow, which cover much of the grasslands on the higher ground within the military training area. An area of modern arable land between the boundary of the training area and the escarpment edge, and a similar area between the escarpment and the modern villages, offers the opportunity for discovery of buried remains as cropmarks. There is extensive and repeated aerial photographic cover of this area, taken for non-archaeological purposes, but so far only one possible prehistoric archaeological feature has been recorded as cropmarks, as mentioned above. Aerial reconnaissance in this area is restricted by the presence of the Salisbury Plain military training area, but a flight by a specialist, in optimal conditions, may yield better results.

The south western Vale: Wilsford and Pewsey

In the parishes near where the Avon cuts through the chalk at Upavon there are numerous examples of prehistoric or Roman enclosures and boundaries (Fig 19). Some survive as earthworks or cropmarks on the Upper Chalk above the scarp edge amid 'Celtic' fields. On the lower ground others are seen as cropmarks intermingled with the remains of medieval plough headlands and possible fragments of prehistoric fields. It is not clear if the distribution of enclosures represents a contemporary pattern of settlements or a group with disparate dates and functions. Numerous finds ranging in date from the prehistoric through to the post-medieval period were recovered from this area and recorded in the HER.

Most of the enclosures on the higher ground overlooking the Avon or on Pewsey Down and Milton Hill are morphologically similar. Many are circular or sub-circular and can be

arbitrarily subdivided into two groups: small (about 100m or less in diameter) or large (about 100m-170m in diameter). These are comparable to enclosures found elsewhere on Salisbury Plain which are thought to be Iron Age on comparison with excavated examples (McOmish et al, 67-87). The 'banjo' enclosure on Milton Hill is of note and is likely to be middle to late Iron Age. Other notable sites in the vicinity include Casterley Camp within which are enclosures interpreted as an Iron Age or Roman religious site (McOmish et al 2002, Figures 3.24, 3.7).

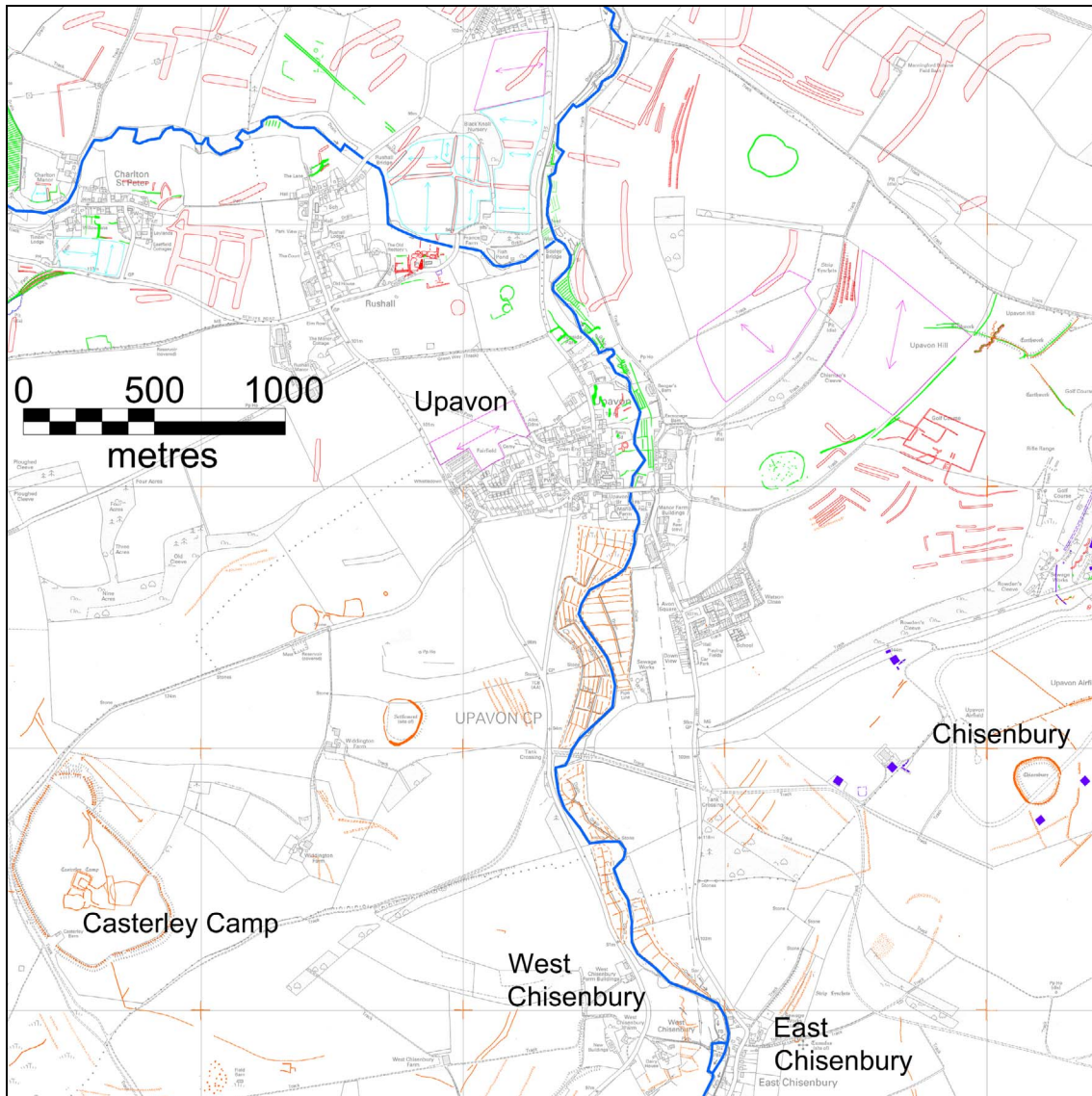


Figure 19 Map including sub-circular enclosures flanking the river Avon. Features in orange are hand drawn transcriptions from the Salisbury Plain project. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Although Iron Age dates are likely for many of these sites, comparison with excavated sites elsewhere in southern England, suggests a potential date range from the Bronze Age through to the Roman period. Evidence from sites investigated near the south-eastern edge of the Vale of Pewsey suggests a similar date-range. A partially excavated enclosure on Pewsey Hill produced Iron Age pottery (probably 4th century BC) from the lower fills of the ditch (Thompson 1971, 68). More recently, excavations at an enclosure near Widdington Farm, north east of Casterley Camp, suggested Bronze Age activity at the site and an early Iron Age date for construction of the enclosure (Fulford et al 2006, 93-97). Field walking was carried out at an enclosure on a south-west spur of Upavon Hill, above Chisman's Cleeve and Vicarage Lane. This recovered a confined spread of building material and pottery dated to the 1st-4th centuries AD but found only one Iron Age sherd (Ibid, 22, 48).

On the gentle slopes of the Lower Chalk between Manningford, Pewsey and the scarp edge, there are a number of sites visible as cropmarks, including some large elongated curvilinear enclosures. One is situated near the confluence of the Pewsey and Woodborough Avon streams, by the modern village of Manningford Bohune (mid-left Fig 20). It is overlain by the earthworks of medieval or post-medieval field boundaries and situated close to other enclosures and a Bronze Age barrow cemetery. It is superficially similar to an enclosure to the east, between Fyfield Field Barn and Southcott Field barn which was mapped from aerial photographs as part of the RCHME Salisbury Plain project (Crutchley 2000, 41). Near this enclosure the Wiltshire Archaeological Research Committee found concentrations of Iron Age and Romano-British pottery and a saddle quern (Information from the NRHE).

Another large enclosure coincides with an area where Iron Age, Roman, medieval and post-medieval pottery was recovered from the fields near Manor Farm and Drove Farm (NRHE, Wiltshire HER). This large ditched curvilinear enclosure is visible as cropmarks and measures 190m by 100m. The enclosure has a smaller enclosure appended to its east side, perhaps a small compound or perhaps an elaborate entrance to the larger enclosure (Figs 20 and 21). Pits in and around the enclosures possibly indicate settlement remains. Faint and fragmentary cropmarks of ditches to the east and south indicate associated land divisions and more enclosures.

Parts of the enclosures near the Manningfords appear to be overlain by boundaries, picked up as low spread earthwork banks on lidar and aerial photographs. The character and layout of some of these indicate they are likely to be medieval or post-medieval plough headlands and boundaries, for example those between the river, Manningford Bohune Village and the Pewsey road. However there are examples of long linear boundaries between the Pewsey road and the escarpment edge of Salisbury Plain. These could be medieval plough headlands but they are reminiscent of the remains of plough levelled 'Celtic' fields seen on the Lambourn Downs, Berkshire. Here the shorter divisions were ploughed away in the modern era leaving long linear banks. If the examples at the Manningfords are remnants of 'Celtic' fields then this suggests a date range from the

middle Bronze Age through to the Roman period, by comparison with the fields at Fyfield and Overton Down (Salisbury Plain), or on the Lambourn Downs (McOmish et al 2002, 52-53, Fowler 2004, Ford et al 1990). The earthwork banks by the Manningfords overlie some of the buried enclosures visible as cropmarks and so are later features. These enclosures may have later Bronze Age origins but are likely to be Iron Age or later in date. It is therefore probable that the long linear banks have later prehistoric or Roman origins.

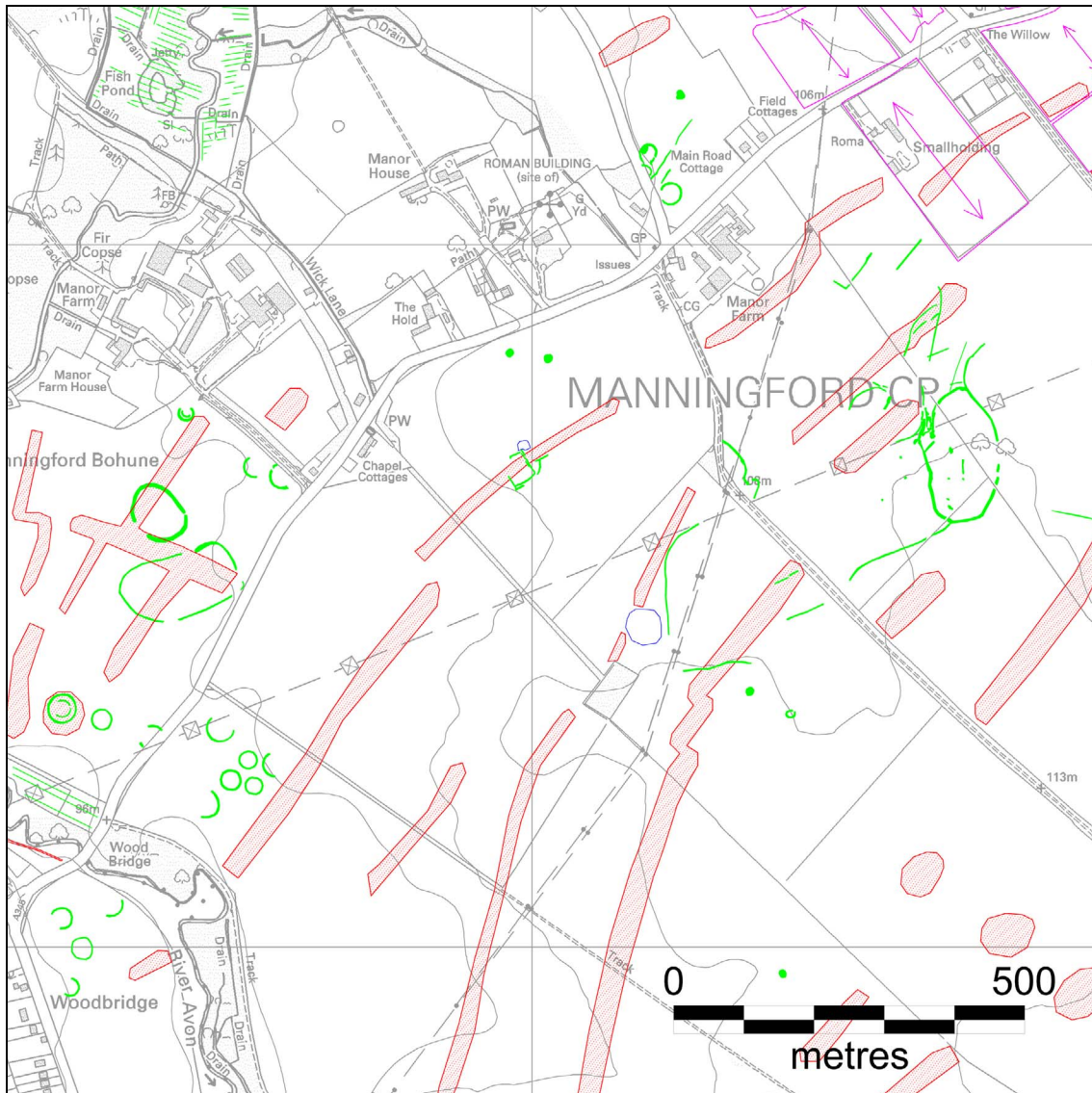


Figure 20 Map of prehistoric or Roman enclosures near the Manningfords. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900



Figure 21 Aerial photograph of the prehistoric or Roman enclosure near Drove Farm. 26655/9 28-Jun-2010 © English Heritage

Settling and dividing the Vale

The long linear ditched boundaries, thought to have been established on the chalk downs in the later Bronze Age or earlier Iron Age, seem to stop at the scarp edges of the Vale of Pewsey. Some of these boundaries do extend into other valleys on the Marlborough Downs and Salisbury Plain (Kirkham 2005, 149-155 Figure 14:1, McOmish et al, 200256-68 Figure 3.1). Excavation in Yorkshire suggested that the long boundaries on the chalk uplands continued into the Vale of Pickering (Bradley 2007, 244).

There are small stretches of boundaries visible on aerial photographs which seem to predate the current or medieval field pattern in the Vale of Pewsey. For example between Highfield and Coats Grove House on the outskirts of Devizes (Fig 22), or on the lower slopes of The Knoll by Allington, or to the west of Alton Priors. However these, and other examples associated with enclosures elsewhere in the Vale, do not seem to indicate any large scale land division similar to those on the chalk downs to the north and south. It is possible that the boundaries have been ploughed away or that a different form of land division operated in the Vale in prehistory.

On the Lambourn Downs some of the late Bronze Age-early Iron Age boundaries were followed by the medieval parish boundaries (Ford 1982, 17 Fig 8). On the Marlborough Downs near Avebury, a long linear boundary which extends north from Tan Hill across

All Cannings Down follows a sinuous path towards Beckhampton Plantation from where it appears to be followed by the Bishops Cannings-Avebury parish boundary. This continuity of use of prehistoric boundaries seen elsewhere in the region suggests that the line of some of the current lanes and boundaries in Vale of Pewsey could have pre-medieval origins. However, the parish boundaries in and around the Vale are generally thought to have originated in the early medieval and post Norman conquest periods with little regard for earlier land holdings (Chandler 2000, 35, Reynolds 2005). The sinuous nature of some of the parish boundaries extending into the Vale, while superficially similar to the prehistoric linear earthworks, seems more the result of topography and the medieval field pattern than an indication of early origins.

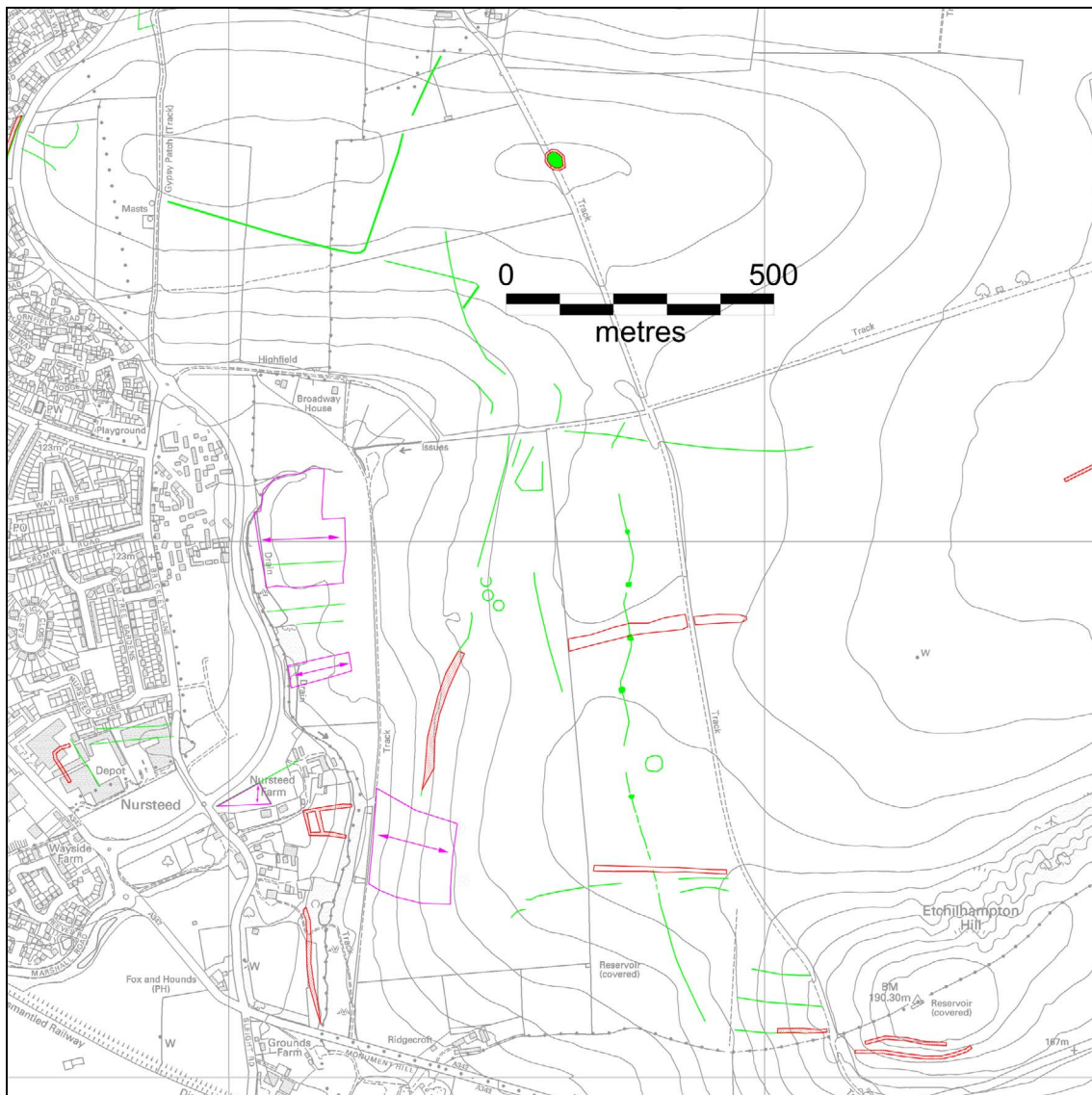


Figure 22 Possible boundaries which appear to predate the modern field pattern near Devizes. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Evidence from excavations at All Cannings Cross indicates that arable crops were grown there, or at least brought there, in the late Bronze Age- early Iron Age. Examples of possible fields near Woodbrough and at All Cannings may indicate areas of prehistoric or Roman farming (Figs 17 and 18 above). However, the evidence for pre-medieval fields and land division is scarce in the Vale compared to the surrounding chalk downlands. If the extensive 'Celtic' field systems once extended into the heart of the Vale then it is likely that all traces have been masked or removed by later cultivation.

The range of archaeological evidence for the prehistoric periods from in and around the Vale of Pewsey indicates a long history of settlement and use of the resources there. Precise dating of the many sites is difficult but the evidence from aerial photographs shows that the people living around the edges of the valley felt the need to demarcate their settlements with substantial ditched enclosures and were probably also using enclosures and fields for management of livestock and growing crops. As mentioned above, the reasons for the creation of enclosures was complex and probably involved a number of social and practical considerations. Previous studies, in particular those studying the Iron Age, illustrated the diverse range of evidence and the likely social changes which occurred in later prehistory (summarised in Bradley 2007, 226-278). The variety of possible roles and definitions of hillforts in relation to other Iron Age enclosures was revised and less emphasis placed on the interpretation of hillforts as 'elite' defensive sites. The sites usually classified as hillforts around the Vale of Pewsey include Oliver's Camp, Rybury and Martinsell on the north side and Casterley Camp in the Avon valley on the south side. The so called unfinished hillfort at Broadbury Banks, south of Marden village, is possibly not a prehistoric feature (see above). The hillforts on the Marlborough Downs and Salisbury Plain seem, through varying levels of investigation, to be a disparate group of sites with seemingly varied origins, dates and possible functions (Bowden 2005, 158-162, McOmish et al 2002, 74-86). It is likely that the 'non-hillfort' settlements in and around the Vale also had varied functions and dates.

ROMAN

It is likely that some of the enclosures, boundaries and fields discussed in the prehistoric section continued in use from the later prehistoric into the Roman period, while others may have actually originated in the Roman period. It is possible to suggest candidates for the locations of possible Roman settlement based on morphological grounds but these assumptions must be treated with caution. Based on form, there are a number of possible Roman enclosures (Fig 23) though it is possible that they have a very different range of dates and functions.

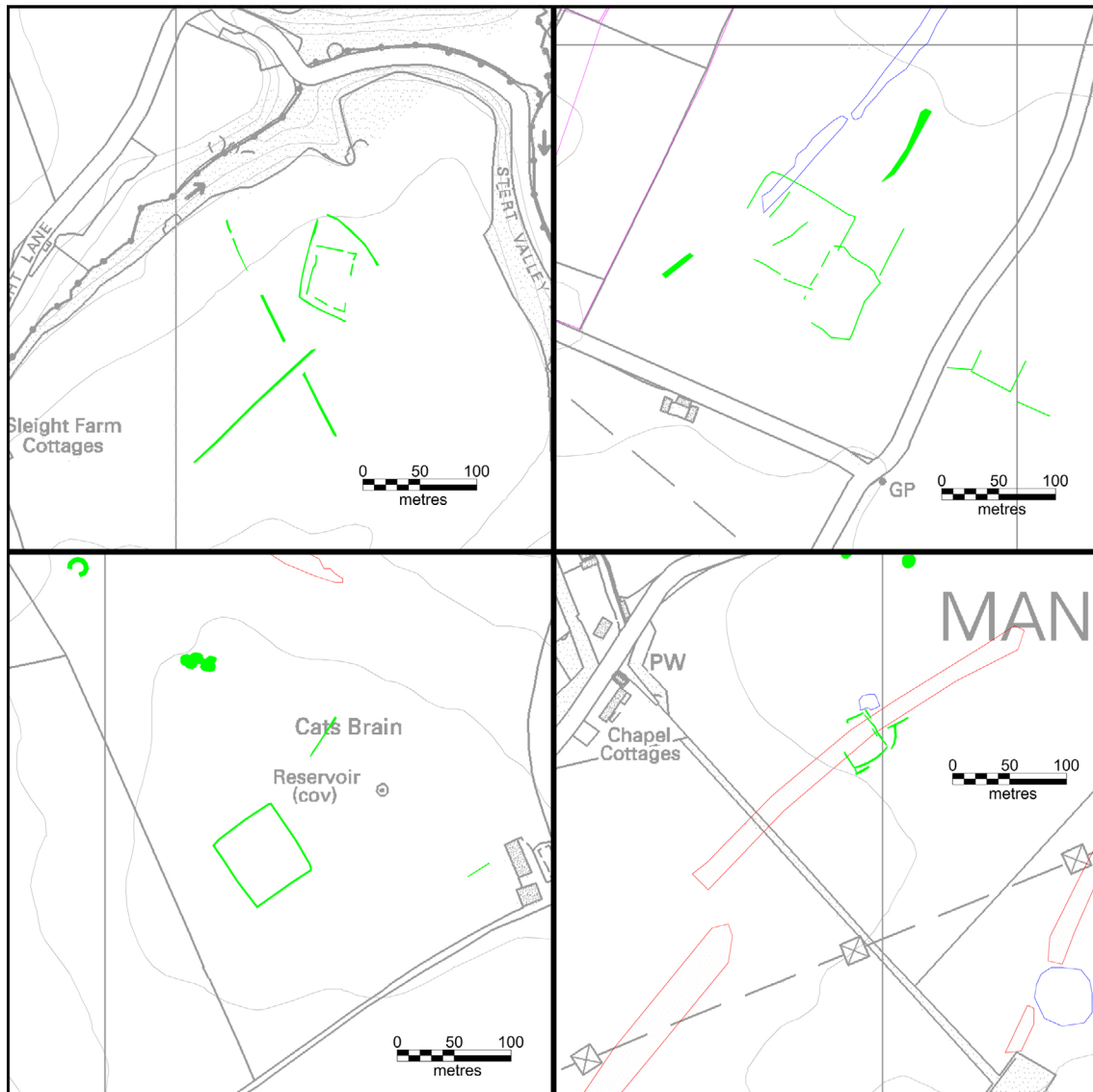


Figure 23 Examples of sub-square enclosures which could have a Roman or other date. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

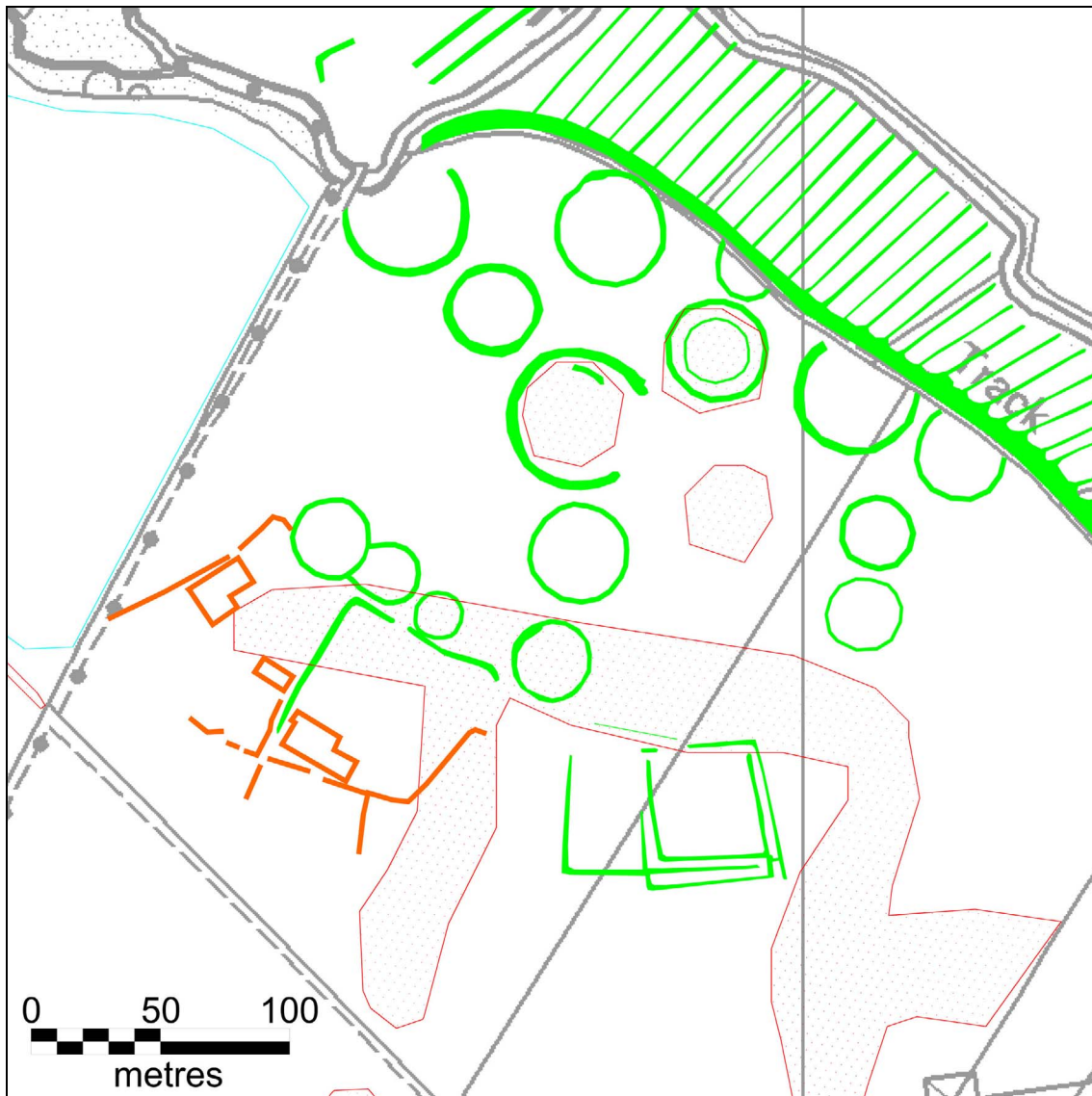


Figure 24 The Roman villa at Charlton - orange indicates the results of geophysical survey (Corney et al 1994) and green indicates information from aerial photographs. Geophysical survey in 2013 revealed more details. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

The possible Roman villa at Charlton seems to be associated with rectilinear enclosures visible as cropmarks (Fig 24). These correspond to part of the enclosure around the buildings identified through geophysical survey and there are a further two, possibly double-ditched enclosures on a slightly different alignment to the east. The villa is located on slightly higher land than the barrow cemetery to the north and seems to possibly encroach on some of the barrows. Geophysical survey in 2013 identified the location of another possible villa upstream at Wilsford near another barrow cemetery and henge (Linford, Payne and Linford 2013a). The villa at Charlton was resurveyed using

geophysical techniques in the context of a study of the barrow cemetery and found new details of the extent and nature of the site (Linford, Payne and Linford 2013b).

The identification of the villa at Charlton was initially from building material and pottery found in the field (Information from HER and Corney et al, 1994). Systematic surface collection from the plough soil on the Lambourn Downs suggested this technique could be used to assess the extent and some of the character of Roman estates (Gaffney and Tingle 1989).

Other Roman buildings known in the Vale include those near Huish that were identified in the 1880s, from cropmarks observed on the ground and subsequently dug into (Thompson 1971, 71-74). More modern investigations established the location of two Roman buildings near by (Ibid). Finds of Roman tile have been found at several locations in the Vale (Information from HER). These may indicate the former sites of buildings, for example near the South Farms in Patney parish, or below Knap Hill and Picked Hill. Roman coins, brooches and pottery have also been found throughout the Vale but it is unclear if these are stray finds, lost or perhaps spread with rubbish on fields, or if they indicate settlement sites.

The known Roman roads in the region bypass the Vale and Salisbury Plain. However this part of Wiltshire is well known for the widely distributed pottery style, known as Savernake Ware, which came from kilns in the region of Savernake Forest which included the eastern end of the Vale of Pewsey (Timby 2001, Figure 4.1). A review of material suggested this pottery manufacture had origins in the Iron Age and the industry flourished in the 1st century AD and continued into the 2nd century (ibid). There is evidence of extensive Roman settlements on Salisbury Plain, sometimes characterised as villages, and evidence of villas, or substantial buildings scattered across the Plain and around the edges of the Vale of Pewsey (Mcomish et al 2002, 87-108, Corney 2001). The evidence from aerial photographs in the Vale of Pewsey suggests further candidates for Roman settlement in this complex, if largely rural, pattern of land use in the region.

EARLY MEDIEVAL

Nothing securely dated to the Anglo-Saxon period was identified from the air. However, the prehistoric and Roman evidence derived from aerial photographs, when considered with excavation results or documentary sources, has enabled some analysis of the Anglo-Saxon period in the Vale of Pewsey.

The distribution of monuments from earlier periods is significant as Anglo-Saxon reuse of monuments for burial was a widespread and frequent phenomenon (Williams 1998, 95). The cropmark and earthwork evidence of the prehistoric burial mounds identified in the course of this project is particularly relevant as this class of monument was utilised during both the early and late Anglo-Saxon period, although in very different ways. During the early Anglo-Saxon period (5th-7th centuries) this type of monument represents 61% of all known cases of monument reuse for burial in England (ibid). However, by the late Anglo-Saxon period (8th-11th centuries) archaeological evidence and contemporary documentary evidence points to their selective use as execution sites, that they had been given supernatural associations and that these burial mounds were places to be feared (Semple 1998). Paradoxically, from the 10th century, mounds were also sometimes used to mark hundred meeting places.

Other documentary sources that can be compared with the results of this aerial survey include the numerous 8th-10th-century boundary charters for land within the Vale of Pewsey. These describe the boundaries of estates - which in most cases became the subsequent parish boundaries - by listing significant features along them. Of particular interest is their comparison with the evidence derived from air photos of the pre-Anglo-Saxon landscape.

Burial and monument reuse

The cemeteries at Blacknall Field, in the Vale of Pewsey and at Market Lavington immediately to the west of the Vale, dominate the evidence of Anglo-Saxon burial in the project area. Blacknall Field is situated to the south-west of Pewsey at the foot of Salisbury Plain. As well as the remains of an Iron Age settlement, to which the initial finds belonged, a total of 124 graves and one cremation were located which were dated to the 5th and 6th centuries (Annable and Eagles 2010). To the west, the cemetery at Market Lavington and its associated settlement was situated on a Greensand ridge immediately north of the parish church. The excavation revealed 42 inhumations, many with grave goods, which were dated to the late-5th to 7th centuries (Williams & Newman 2006). In addition to these excavated examples, the 10th-century charters for Stanton St Bernard note two 'heathen' burial places (Grundy 1919, 212). Two early Anglo-Saxon skeletons were also uncovered by workers in the course of road widening in 1935. They were found at the crossroads (now a roundabout) by the Woodbridge Inn at the southern end of the Vale, approximately 100m to the west of the river Avon. The remains were of one male, aged between 35-50 with shield and spear and a juvenile 10-14 years of age of indeterminate

gender (Cunnington 1935, 265). The contemporary report referred to dark patches and areas of taller grass in nearby fields and suggested that these may indicate other graves (ibid) although this aerial survey could not identify any. Aerial photographs have provided evidence that the burials at Woodbridge were placed in close proximity to a Bronze Age barrow cemetery (Fig 25). The Anglo-Saxon burials were situated on the western edge of a group of barrows positioned either side of the Avon. Most of these have been identified by the cropmarks of the ring ditches, but one barrow survives as a very low earthwork.

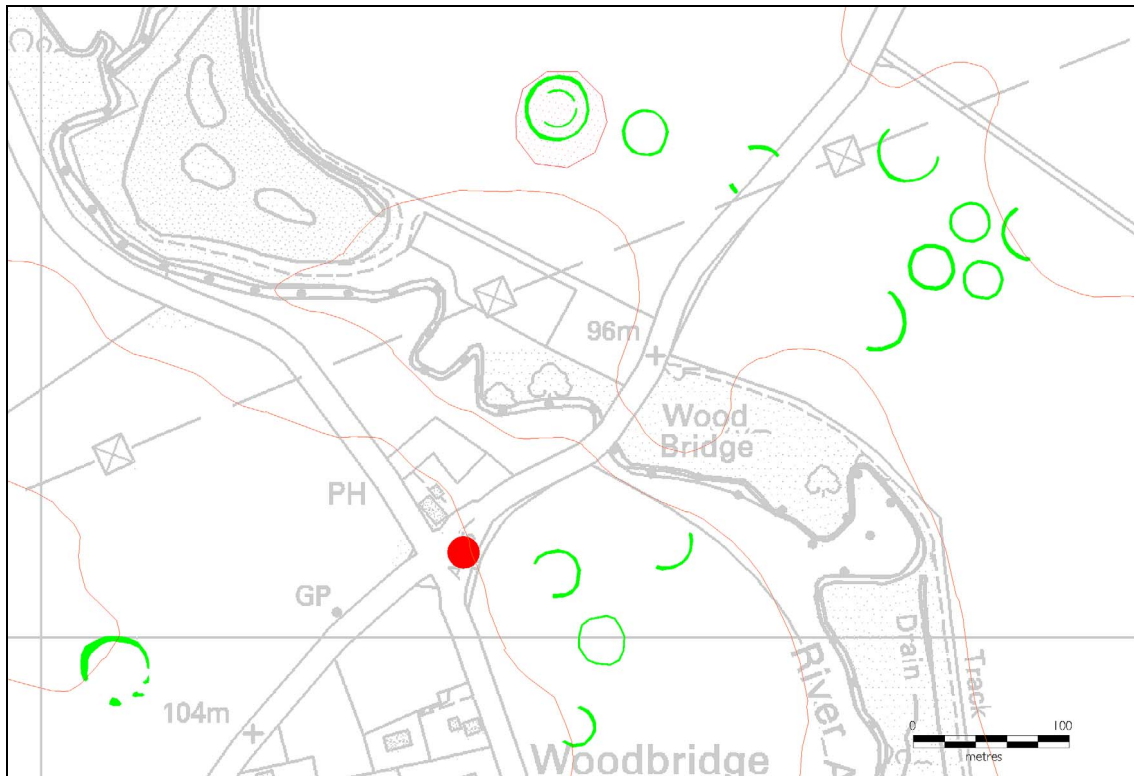


Figure 25 This figure shows the relationship between the ring ditches (thought to be Bronze Age) mapped from aerial photographs and the location of the two Anglo Saxon burials excavated in 1935 at the location marked by the red dot. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Fearful places and hundred meeting places

In contrast to the earlier Anglo-Saxon period, by the 8th century barrows appear to have become places to avoid. Andrew Reynolds has demonstrated that a significant number of Late Anglo-Saxon execution sites are associated with burial mounds (both of prehistoric and Anglo-Saxon construction) and the vast majority of these lie on boundaries (Reynolds 1999, 108). These sites may have been chosen both for the negative associations of these earthworks, which may have been seen as haunted and a desire to push those condemned to the edge of territories (Reynolds 1999, 109). The negative view of barrows has also been identified in documentary sources (Semple 1998) such as the two

late Anglo-Saxon poems, *Beowulf* (8th century) and *The Wife's Lament* (950-1000). *Beowulf* offers a view on both barrows and boundaries. The barrow is the dwelling of an 'evil' dragon while the monster Grendel is, among other things referred to as a 'boundary walker' (Semple 1998, 114). In *The Wife's Lament*, the protagonist has been forced to live in exile in a barrow and one interpretation is that she is a ghost confined in her afterlife to the barrow that may have been the place of her execution and burial (Semple 1998, 110-111). A third document, *Felix's, Life of Saint Guthlac* presents a barrow as a haunted place. Guthlac sought solitude on an island in the Lincolnshire fens in about the year 700 where he built a house on one side of a burial mound because it was the 'most fearful, horrible and haunted place he could find' (Semple 1998, 113).

Not all mounds were considered sinister as mounds were also used to mark some hundred meeting places from the 10th century onwards. Some of these mounds were purpose built while other meeting places utilised prehistoric barrows (Adkins & Petchey 1984). A mound does mark one of the meeting places of a hundred within the Vale. This is the undated and poorly preserved mound called Swanborough Tump, meeting place of Swanborough Hundred; a site now covered by trees and not visible from the air.

The reference to a barrow in Anglo-Saxon charters may offer another clue to how some of these burial mounds in the Vale were perceived. A mound called 'Sand Barrow' was situated at the north-west corner of the parish of North Newnton (named as such in charters dated 892 and 934). This site is also mentioned in the charter for the neighbouring estate of Beechingstoke (dated 943) but by which time was called 'Priest's Seat'. It is tempting to see this change of name reflecting the Christian appropriation of a barrow in a similar vein to that recounted in the story of St Guthlac. However there may be other explanations and it must be remembered that the barrow was not originally given a name suggestive of supernatural associations but instead one that was merely descriptive of the local material used to construct it, situated as it is on Greensand.

Creating estates

Seven of the parishes that fall within the project area have surviving Anglo-Saxon charters with boundary clauses. These documents establish the course of estate boundaries by noting certain landmarks along their length and some of these features, such as the pond named Oxna Mere in the Stanton St Bernard charter dated 903, still exist today. In addition to the identification of specific sites, these charters allow the relationship to be made between Anglo-Saxon estates boundaries and earlier earthworks identified from the air and this is best demonstrated at the south-eastern end of the project area within the parishes of Manningford and Pewsey.

The parish of Manningford was created in 1934 as an amalgam of the three parishes Manningford Abbots, Manningford Bruce and Manningford Bohune. The first two were ancient parishes, Manningford Abbots parish is identified with the estate granted in 987 by King Ethelred while Bohune was a detached tithing of Wilsford until 1871 (Stevenson

1975c, 204). The parish of Pewsey is thought to have approximately the same boundary as that of the Pewsey estate documented in 940. The boundaries of these parishes are typical of many in Wiltshire in defining long and narrow stretches of land that incorporate both parts of the Vale, scarp and downland. Although there have been some minor boundary changes - the boundary between Bohune and Bruce was straightened when the open fields were enclosed in 1805 (Stevenson 1975c, 206) - they are considered to generally follow the same line as when they were laid out.

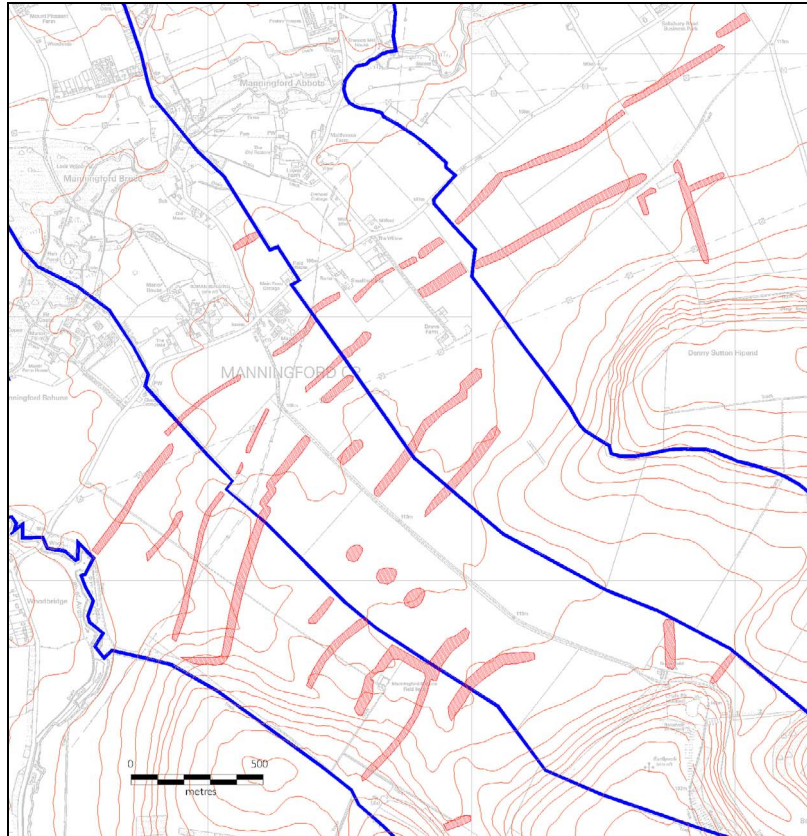


Figure 26 The relationship between possible ‘Celtic’ fields (in red) and the parish boundaries of the three Manningfords. Manningford Abbots’ boundary was first described in the boundary clause of the estate dated 987. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

To the south-east of the Manningfords there are a series of denuded banks arranged roughly parallel and aligned south-west/north-east (Fig 26). While some can be identified on aerial photographs, they can be most clearly seen on lidar and ploughing has reduced these banks to low wide spreads of earth that survive intermittently for approximately 3km; the longest uninterrupted bank is about 1km long. They are similar to the remains of ‘Celtic’ fields on both Thornham Down (Wiltshire) and on the Lambourn Downs (Berkshire) where only the long banks survive; the cross-divisions having been ploughed away (McOmish et al 2002, 111; Small 2002, 25). Later ploughing in the Vale of Pewsey is

the best explanation for the complete absence of cross-divisions as well as the incomplete remains of the longer banks.

The long thin Manningford parishes are aligned north-west/south-east and cut across the south-west/north-east aligned earthworks. This relationship, while providing confirmation that the earthworks pre-date the 10th century also shows how these earlier landscape features affected the creation of estates. In places the boundaries do change direction by following a number of right-angles that suggest they are following the edges of fields. However, for much of their length the boundaries between the scarp edge and the Pewsey to Devizes road are relatively straight and it is likely that these ignored existing earthworks or that they had already been ploughed away by this date.

While the prehistoric or Roman arrangement of fields seems to have had little effect on the exact course of the boundaries of Anglo-Saxon estates they do seem to have influenced their internal arrangement. The 1722 estate map of Manningford Abbots shows a mixture of enclosed and open fields in existence. When compared to the air survey evidence there appears to be a similarity between the position of the banks of the prehistoric or Roman field system and the boundaries of the medieval furlongs. Similar examples of continuity in field pattern have been identified elsewhere in the country though usually in the form of Roman ditches underlying medieval headlands (Upex 2002).

Discussion

Monument reuse was not only 'to create a sense of place and history in the landscape' (Williams 2006, 181) but also can be seen as a means with which dominant groups legitimise their position (Williams 1997, 25). Elite families demonstrated their status and control through 'high-status' burial and a number of factors determined 'high-status' including the placing a burials in a significant position in the landscape. The identification of a group of ring ditches at Woodbridge near the Anglo-Saxon graves not only indicates that the Anglo-Saxon burial within the Vale was not entirely restricted to cemeteries but also raises the possibility that some of the other barrows within the Vale, all of which are only known of through aerial survey, may have also been reused in this period.

Late 7th-century burials were increasingly placed near routes that ensured their visibility to the community (Semple 2003). The Woodbridge burials are not only associated with Bronze Age burial mounds but are also located close to the Avon and an east-west route that follows the foot of the scarp which is possibly of some antiquity and is first mentioned in a 9th-century boundary charter.

With the possible exception of the Woodbridge burials, the apparent emphasis on cemetery burial in the Vale can be compared with the evidence from the Marlborough Downs to the north and Salisbury Plain to the south. On the Marlborough Downs Sarah Semple has identified 16 Anglo-Saxon burial sites most of which are single isolated burials associated with prehistoric monuments – predominantly round barrows and date from

the 6th to 8th centuries (Semple 2003). The NRHE monument records for part of Salisbury Plain immediately south of the project area indicates little monument reuse. However, despite the relatively good earthwork preservation there appears to have been little excavation on the northern part of Salisbury Plain. Only one of the c 21 barrows in this area has been excavated (by Dr John Thurnam (Thurnam 1869, 196)) and this had been reused. The position of the barrow on a hundred boundary and the possible sword cut to the skull suggests that this is a late Anglo-Saxon execution site.

While much of the evidence from the documentary sources relates to isolated barrows or those positioned on the edge of territories this aerial survey has shown there were numerous burial mounds within the Vale that are likely to have occupied less isolated areas of the Anglo-Saxon landscape which were not on hundred or shire boundaries. It can be argued that it was a barrow's position in the landscape that affected how it was perceived, with negative associations sometimes being attributed to those in liminal positions. Ruined or abandoned places can attract supernatural associations and these feelings can be heightened by the remoteness, real or perceived, of a site. In contrast, barrows nearer settlements, a category into which most of the ring ditches seen in this project probably fall into, may not have provoked the same uncanny feelings as those in more isolated locations.

MEDIEVAL AND POST-MEDIEVAL

Introduction

Most of the medieval and later features identified from the air in the Vale of Pewsey are remnants of the various farming practises carried out in this part of Wiltshire. The productivity of the Vale has long been emphasised in a variety of written sources, the earliest being a favourable description by John Leland in the 1540s (Chandler 1993, 500), and many works refer to the Vale as 'rich' or 'fertile' (Duck 1730, 146; Davis 1794, 10; Colt Hoare 1819, 2; Anon 1884; Anon 1911; Barron 1976, 89).

In 1810 William Cobbett not only commented on the fertility of the Vale but also on its appearance; It was from the edge of the downs that Cobbett first saw the Vale, 'and a most beautiful sight it was!' (Cobbett 1830, 297). But much of this landscape's appearance was the result of hard physical labour and this is described in the poem *The Thresher's Labour* (first published in 1730) written by Stephen Duck, a farm worker from the Vale village of Charlton (Duck 1730, 7). In the poem he not only describes the hard work involved in threshing, haymaking and harvesting but also emphasises the lack of respite from this labour; as each job is completed another takes its place as the year turns.

Although probably equally as arduous, one of the tasks not described by Stephen Duck is ploughing. Ploughing is however responsible for much of the evidence of arable farming in the Vale. The evidence on aerial photographs comes in a variety of forms and generally the remains are poorly preserved and fragmentary so can only offer a partial picture of earlier farming regimes, although on the steeper slopes strip-lynchets generally survive well. The poor survival of earthworks in the Vale is in itself a testament to the years of ploughing that have undertaken there. In places this was quite intensive; in the 18th century the topsoil around the Lavingtons was ploughed very deep and often a second plough followed along the furrow of the first (Davis 1794, 73). This can be contrasted to some areas of downland where little or no ploughing has taken place and where earthwork preservation is good.

While the action of the plough may gradually create earthworks such as ridge and furrow other features were created in one episode and relate to the keeping of sheep. Although up until the early 14th century Wiltshire was well known for raw wool, during the post-medieval period sheep were primarily kept to be folded on the fields. The Wiltshire breed was perfectly adapted to the long climb between field and downland, to feed on the downs and to drop manure only at night when in the sheep fold (Kerridge 1959, 54). Cereals had become the main commodity and it was not uncommon for the corn crop to be worth double that of the 'sheep with all their wool and lambs' (ibid). Some of the best preserved and widespread remains that indicate the presence of sheep are of the numerous post-medieval water meadows made to provide both early grass and an abundant hay crop for the flocks. Other evidence seen on aerial photographs includes the

remains of a number of animal enclosures and the circular or square dewponds that were dug to provide water for the livestock on the downs.

The dynamic nature of settlement within the Vale is also apparent with air photos revealing evidence of settlement shrinkage and shift. Significant changes to the wider landscape took place with inclosure and evidence of this change to the layout of the land, which included the creation of isolated farms, has been identified. Cropmark and earthwork evidence of the network of lanes and roads that connected this landscape has also been mapped. The earthworks are most noticeable for abandoned routes on the slopes of the downs though many current roads and lanes pass through substantial hollow ways. The evidence from aerial photographs has been complemented by map evidence, in particular Andrews' and Dury's 1773 map of Wiltshire which was produced at a scale of approximately 1:30,000 (Andrews, Dury and Crittall 1952).

Water meadows

A water meadow is an area of pasture where the fertility is improved by periodic and controlled flooding. There are a number of different ways in which this was achieved, usually involving the digging of channels and drains, which resulted in a variety of different forms. Those identified in the course of this project are known as bedworks and they consist of a series of channels and drains fed from a main carrier which took water from the nearest watercourse. These earthworks and their associated sluices are designed to allow a meadow to be flooded, a process known as floating or drowning, and equally as importantly to then be completely drained of water as and when required. The introduction of water onto grassland encourages grass growth and drowning in the early months of the year provided an 'early bite' of grass in March and April thereby overcoming this difficult period - traditionally referred to as the 'hunger gap' - when winter fodder supplies were low. The meadows first act as pasture after the initial drowning when flocks were grazed on them to take advantage of this early growth, while subsequent drowning was undertaken to improve the hay crop later in the year. Although water meadows benefited the flocks, it was the arable fields that were the ultimate beneficiaries as sheep played a crucial role in downland farming by manuring the fields; the amount of land able to be brought into cultivation was determined by the size of the flock that could be folded on them.

While early forms of water meadows were in use during the middle ages (Taylor 2007, 31) the greatest popularity of this form of land improvement was from the 17th to the early 19th centuries. Bedworks were constructed in a number of counties across Britain but the vast majority are found on the chalkland of southern England (Betty 2007, 5) and this strong association between water meadows and the chalk is highlighted in the various Board of Agriculture reports from the late 18th and early 19th centuries. The volume for Hampshire notes that the county was 'particularly famous for water meadows' (Vancouver 1810, 268) while other authors claimed pre-eminence in the construction and use of water meadows for their respective counties. The Dorset volume states that the

'proportion of water meadows is nowhere so great, or anywhere better managed' (Claridge 1793, 34); while for Wiltshire there is 'perhaps no part of this kingdom, where the system of watering meadows is so well understood, and carried to so great perfection' (Davis, 1794, 30).



Figure 27 The earthworks of water meadows at Charlton. The winding river is flanked by trees and the ridges which carried water across the meadow extend at right angles from this where they meet the main water channels for the meadows which run roughly parallel to the river (to the south of the river on the left of the photo, and to the north on the right). NMR OS/76184 115 21-Aug-1976 © Crown copyright Ordnance Survey

The great advantage of converting low lying land to water meadows was such that they were described in a number of publications including *A Way To Get Wealth* (Markham & Lawson 1668) and William Smith's *Observations on the utility, form and management of water meadows...* (Smith 1806). William Smith may be better known as 'Strata' Smith, the engineer and geologist who produced the first geological map of England and Wales in 1815. His book provides an impassioned argument for water meadows, often citing Wiltshire examples and his enthusiasm extends to the inclusion of poetic verses at the start of each chapter extolling the virtues of floated meadows:

The verdant meads by labour form'd
With genial streams thro' winter warm'd,
Put forth their March and April shoots;
To vie with May's luxuriant roots.
(Smith 1806, 19)



Figure 28 Water meadows at Wilsford. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Aerial photographs taken in the mid-1940s record the earthworks of bedwork water meadows along both branches of the Avon as well as the stream that joins the eastern branch of the Avon at North Newton. These earthworks appear to fall into one of two categories. The most straightforward can be seen at Charlton (Fig 27) where the main carrier runs parallel to the river at a distance of 40m-80m with the drains arranged at right angles that appear to empty straight back into the river. This right-angled arrangement of drains seems typical for the Vale in contrast to examples further south where a herringbone arrangement has also been noted (McOmish et al 2002, 132). An alternative arrangement can be seen at Wilsford (Fig 28) where an area up to c 200m across was utilised. This area is fed by a number of carriers from which the drains are also arranged at right angles and are between 20m-50m long. At Wilsford the drains are often positioned on both sides of the carrier and some empty into a main drain before the water is eventually returned to the river. The different orientation of carriers and drains at Wilsford probably reflects subtle changes in the drainage pattern of this area.

All of these meadows appear to have fallen out of use by the 1940s and the photos show a variation in both the condition of the earthworks and the covering vegetation by this date. While the meadows at Charlton are well preserved and appear to be used as pasture in the 1940s the earthworks of the meadows north-east of Wilsford are less clearly defined, and the vegetation is more varied and in places appears overgrown.

Further evidence of the degradation of these meadows can be seen on maps. By 1939 the water meadows between Wilsford church and Cuttenham Farm were depicted by the Ordnance Survey as rough pasture and a water meadow at Manningford Bruce was shown as marsh. Map evidence also offers further clues as to the date of abandonment. Six sluices are marked along the main carrier on the Charlton water meadow on the 1924 1:2500 map. The following edition of 1939 no longer marks these sluices and conclusively, shows a disconnection between the river and the main carrier. Across southern England water meadows started to go out of use from 1870 (Betley 2007, 20) and the meadows mapped may have stopped being floated during this period. However, there is evidence from William Smith that many Wiltshire bedworks were poorly constructed and quickly abandoned after construction (Smith 1806, 37, 57, 64) and it remains a possibility that some of the water meadows identified may represent failed attempts at irrigating the land.

When the mapping from this project is considered it is clear that despite the entreaties of Smith, Davis and others, not all watercourses were utilised for the creation of water meadows and even along the Avon where many bedworks have been mapped, they are not continuous. There is a complete absence of bedworks on the western side of the project area and there are a number of possible explanations for this variable distribution. As can be seen in a review of William Smith's work in *The Eclectic Review* (Anon 1807, 163-165) it should not be thought that his degree of enthusiasm for water meadows (or indeed for poetry on this subject) was shared by all in Georgian England. The reviewer, while seeing the advantage of water meadows, felt that Smith showed an 'undue partiality for this system' and if allowed to would 'not only drain and irrigate bogs and barren wastes, but... would convert most of our arable land into luxuriant meadows' (Anon 1807, 163-164). However, the reviewer did recommend Smith's book despite the above reservations and the disapproval 'in such a work, [of] the addition of poetical mottos' not least because, 'as we have not understood them all, it is the less surprising that we should not see their beauty or aptitude' (ibid, 164). Other criticisms, probably unfounded, included the belief that water meadows made the land unhealthy by making the water stagnant (disputed by Davis 1794, 34) and that they produced poor quality grass or hay 'of a foggy nature', particularly unsuitable for cavalry horses (Pembroke 1762, 112). Pembroke does however concede that hay from water meadows may be good for 'carthorses, and for such troop-horses... who are meant for no other use, but to roll on slowly with a fat fellow, full of beer, upon them; who, to the shame of the service, with a badge of soldiership on his back, is a more stupid and lazy animal, than what he is mounted on' (ibid).

Even if water meadows were considered desirable there were still obstacles to the landowner, not least of all, the cost of construction and operation which for some may have been prohibitively expensive. Access to a suitable sized area of land may have also been an issue. What may be an example of co-operation between landowners in the construction and operation of a water meadow can be seen by the Avon south-east of Puckshipton House (Fig 29). This riverside land is divided between the parishes of Beechingstoke and Wilsford but the earthworks of the water meadow have been laid out

irrespective of the parish boundary and as a result the whole area has been converted as part of a single scheme.

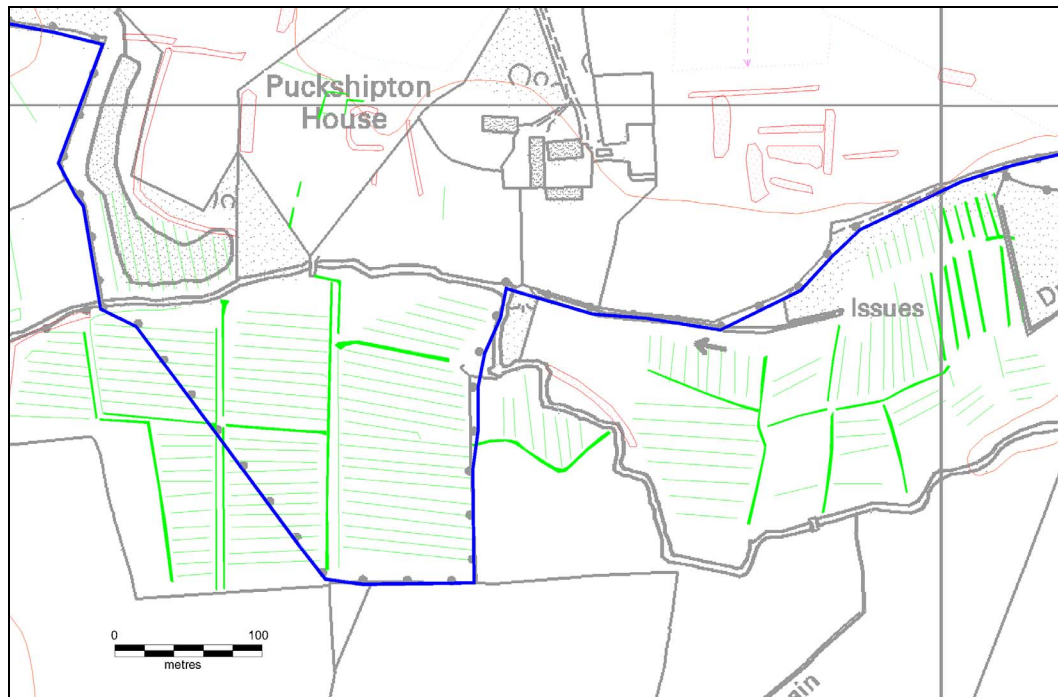


Figure 29 Co-operation in the construction and operation of the water meadows along this part of the Avon is implied by the arrangement of channels and drains that take no account of the parish boundary between Beechingstoke and Wilsford (marked in blue). 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Other obstacles to the construction of water meadows related to the supply of water and in particular the problem of watermills monopolising the water supply. Thomas Davis felt that there were too many old and inefficient watermills and gives the example of nearly one watermill for every one of the 20 miles of the River Wylve between Salisbury and Warminster (Davis 1794, 160). One of his recommendations was a significant reduction in watermills (ibid) or, as William Smith put it in verse:

By moving mills make meadows green
(Smith 1806, 79)

Despite the potential incompatibility of water meadows and water mills, when the evidence from this project is combined with the distribution of water mills as shown on Andrews' and Dury's 1773 map it can be seen that in the central and eastern areas of the project area mills and meadows were not mutually exclusive (Andrews, Dury and Crittall 1952, No. 8, No. 11). In 1773 the western branch of the Avon had four water mills, two of which (Marden Mill and Wilsford Mill) were within areas of water meadows. A similar situation can be seen on the eastern branch of the Avon with two of the three mills situated by water meadows (Sharcott Mill and North Newton Mill). For mills and

meadows to coexist, Davis advocated cooperation so that a sufficient water supply could be utilised by both parties at the required times and a number of agreements to this effect have survived for sites in Wiltshire (Cowan 2005, 108). The close proximity of water mills and water meadows within the Vale of Pewsey is a clear indication that agreements were achieved. It is interesting to note that despite this dislike of watermills, a water meadow named 'Rickwood's Mead', considered by both Thomas Davis and William Smith as one of the best examples of a water meadow they had seen, was situated downstream of a mill and was fed with water both from the mill tail and the mill pond! (Smith 1806, 73).

The western side of the project area offers a contrasting picture with no water meadows on the watercourse that passes eastwards by Stert before heading south-west. There were five watermills along this c 3.5km of watercourse all but one of which has some earthwork remains visible on aerial photographs. These mills are named on a 1773 map from north to south: Neck Mill, Witchly Mill, Byde Mill, Cooks Mill and Crookwood Mill (Andrews, Dury and Crittall 1952, No. 11). All of these mills had long leats taking the water to the mill that ran roughly parallel to the main watercourse and as a result these mills controlled c 2km of the c 3.5km of water. This arrangement suggests that there was a poor flow here and long leats were required to maintain a sufficient supply of water. Notwithstanding the examples of the coexistence of watermills and water meadows to the east, the long leats required for these five mills makes it difficult to see how bedworks could have been made along this stretch of the stream.

At Little Shelford, Cambridgeshire a meadow with the remains of ditch along its lowest part is situated between the River Cam and a mill leat. It has been suggested that this ditch was used to drain the meadow after water from the river and the leat had flooded the area in a crude form of irrigation (Taylor 2007, 33). This example does raise the possibility that the arrangement of stream and leats on this Wiltshire watercourse could have been adapted to allow some form of irrigation. It also may offer an explanation for the subsidiary channel downstream of Crookwood Mill that runs parallel to the main water course for over 700m which although similar to the mill leats upstream does not appear to be a mill race. Despite the potential for some form of irrigation here, it must be emphasised that no earthworks of a drainage ditch like that seen at Little Shelford have been identified from aerial photographs.

While it was the central and eastern parishes of this project area that benefited from water meadows the general advantage gained by artificial irrigation makes it probable that there were practical reasons (rather than prejudice) for why they were not present in certain areas. It is likely that the long leats of the numerous watermills monopolised this slow flowing watercourse and prevented the construction of water meadows; as Thomas Davis observed 'very few spots of land *capable* of being watered, remain otherwise' (Davis 1794, 43 my emphasis). And certainly it was concluded that further south, beyond this project area, water meadows are well represented on both sides of the Avon with as much suitable land as possible having been utilised in this way (McOmish et al 2002, 132).

Arable farming

While the action of the plough has resulted in the levelling of many earthworks within the Vale ploughing has also created earthworks. These remains, whether seen as cropmarks or earthworks provide the main evidence for arable farming within the project area and include ridge and furrow, plough headlands and strip lynchets. Some of these features have themselves suffered from subsequent ploughing but the substantial strip lynchets arranged on the steeper slopes have survived well in comparison and constitute the most prominent remains of medieval and post-medieval arable farming within the project area.

Evidence of ploughing on the level ground within the Vale is in the form of plough headlands, field boundaries and ridge-and-furrow. These are generally seen on the Lower Chalk within the Vale, but there is some survival on the Greensand as at Patney where the slight earthworks of field boundaries and the cropmarks of ridge-and-furrow have been seen.

The plough headlands are long earthwork banks that formed at the ends of the furrows where the plough team turned. Some of these do survive as substantial earthworks but others have been reduced in height and spread by later ploughing but show up well on lidar as low wide banks. Some of the banks identified in the parish of North Newton show a close relationship with the medieval field boundaries of this parish. Two banks in the west appear to be the remains of the northern boundary of North Field and the northern boundary of Middle Field. In the east of the parish is a bank with flanking ditches seen as cropmarks aligned approximately north-south. This divides Home Field in the east from South Clay Field in the west and Bush Field in the south-west (Roseaman 1991, 73, Fig 1).

In various parts of the country during the late medieval period narrow lands were allowed to grass over to be used as rights of way (Hall 1982, 6) and this can be seen in North Newton (Fig 30) where this north-south headland in the east of the parish coincides with the line of a track marked on an 18th-century map. This is no longer a right of way and the earthwork now barely exists but some other rights of way in the Vale also follow banks and the survival of these routes is likely to be a factor in the survival of the corresponding earthworks.

The earthworks, or more commonly the cropmarks, of ridge and furrow have also been identified in the Vale. While some remains are reminiscent of medieval ridge and furrow such as the slightly curving broad earthworks in Patney, the majority is narrow and straight and likely to date to the post-medieval period. The coverage is not extensive and there are many isolated examples, but in some areas a greater concentration of field remains can be seen. Evidence of the open field system in Urchfont includes soilmarks of ridge and furrow occupying an area known as Wedhampton Fields. There is extensive evidence for arable farming in the small parish of Patney (Fig 31), one of the central parishes in the Vale that had no direct access to downland. Patney contains two areas of slightly higher ground

not occupied by water meadows and these contain the cropmarks of a number of fields of ridge and furrow to the east of the village and a series field boundaries to the north seen as slight earthworks.



Figure 30 The earthwork remains of a headland bank, later used as a track in North Newnton. Detail of RAF CPE/UK/1821 5150 4-Nov-1946 English Heritage RAF Photography

The earthworks, or more commonly the cropmarks, of ridge and furrow were also identified in the Vale. While some remains are reminiscent of medieval ridge and furrow such as the slightly curving broad earthworks in Patney, the majority is narrow and straight and likely to date to the post-medieval period. The coverage is not extensive and there are many isolated examples, but in some areas a greater concentration of field remains can be seen. Evidence of the open field system in Urchfont includes soilmarks of ridge and furrow occupying an area known as Wedhampton Fields. There is extensive evidence for arable farming in the small parish of Patney (Fig 31), one of the central parishes in the Vale that had no direct access to downland. Patney contains two areas of slightly higher ground not occupied by water meadows and these contain the cropmarks of a number of fields of ridge and furrow to the east of the village and a series field boundaries to the north seen as slight earthworks.

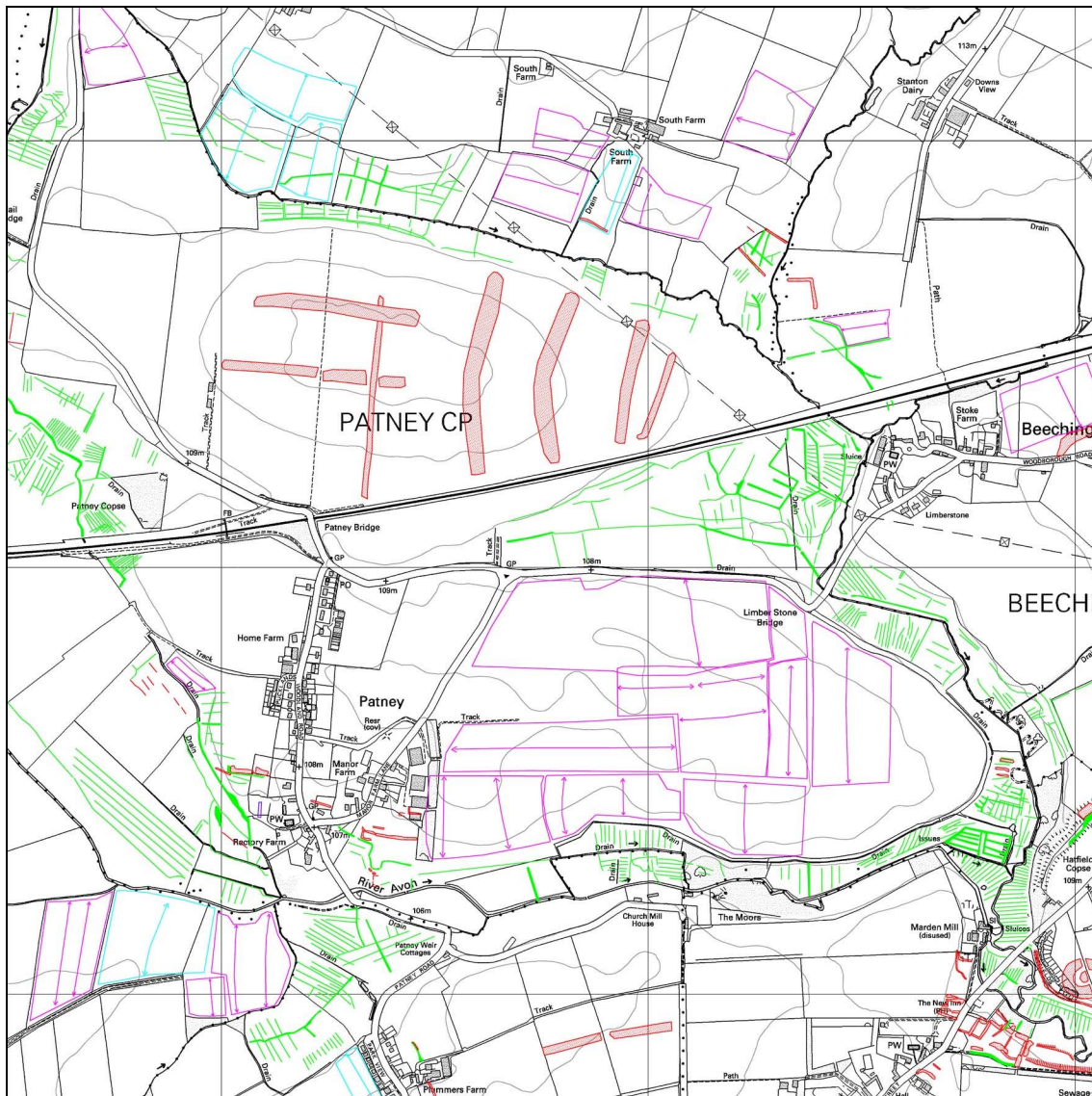


Figure 31 Different evidence for open fields – low spread remains of plough headlands north of Patney (from lidar) and ridge and furrow north and east of Patney (from aerial photographs). Note also the water meadows along the streams. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

Another area with a greater concentration of fields, seen as cropmarks, is to the south and south-east of Manningford Abbots in the parishes of Manningford and Pewsey. These fields of ridge-and-furrow, small in comparison with those at Wedhampton, appear to be to all of one scheme. Although one modern field is divided by the parish boundary, this division is not reflected in the pattern of ridge-and-furrow. The creation of a field across a parish boundary suggests some form of cooperation but although Manningford Abbots and Pewsey had shared a common lord until the later 18th century, each had a separate economic identity to that date (Crittall 1975, 109). However by 1755 much of Manningford Abbots parish was worked with Pewsey Farm and following the sale of land

in the late 18th century the arable land was rearranged (ibid 109-110); it is possible that these fields straddling the parish boundary were laid out during this reorganisation.

On the slopes of the Vale there is good evidence for arable farming in the form of strip-lynchets (Fig 32). Nationally, strip-lynchets have an uneven distribution and 75% of all the examples across lowland England found in just four counties: Wiltshire, Dorset, Somerset and Gloucestershire (Whittington 1962, 115). There are 17 parishes within the project area whose land extends onto downland and all of these have some evidence of strip lynchets on the slopes that define either Salisbury Plain or the Marlborough Downs. There are eight parishes within the project area that do not extend onto either the Marlborough Downs or Salisbury Plain but where there is steep ground such as at Etchilhampton Hill and Woodborough Hill, strip-lynchets are present. This concentration makes the slopes of the Vale of Pewsey one of the most heavily lynched areas in England (Whittington 1962, 123).



Figure 32 Strip lynchets at Charlton. Detail of RAF 106G/UK/942 4126 19-Oct-1945 English Heritage RAF Photography

There is some variation in numbers and survival of strip-lynchets and in places they appear almost continuous such as along the northern slope of Salisbury Plain from Urchfont to Marden, although none of the individual earthworks actually extend across the parish boundaries. In part this relates to topography making the continuation of strip-lynchets impossible, as at the boundary between Urchfont and Chirton. But further eastwards in Chirton what appear to be very short strip-lynchets end at the parish boundary with Marden, though topographically there appears to be no reason why they could not have been continued. Ploughing on these slopes must have been a difficult undertaking and it is generally thought that the expansion of arable onto these marginal areas was the result of population pressures during the 13th and early 14th centuries (Muir 2004, 247). Some parishes in the south-west of the project area such as Market Lavington or Easterton have very little trace of these earthworks. In part this is because the scarp slope is not as steep here so few were formed and even where they were, more recent ploughing was easily

undertaken across the area resulting in the levelling of the earthworks. At the opposite end of the Vale some of the strip-lynchets seen on aerial photographs on the north western slope of Upavon Hill have been ploughed away. This ploughing pre-dated 1887 as they were not substantial enough to be depicted on the OS map of that date, unlike the examples further south on the same hill which still survive.

Although the presence of strip-lynchets indicates the utilisation of land of a marginal nature the scarp slopes did not mark the edge of the area of arable farming and parts of the chalk uplands were also used for crops. In some places this is demonstrated by the remains of ridge and furrow and in others it is inferred from the levelled or partially levelled remains of earlier monuments. The variation in monument survival on the Plain can be seen between parishes in the west and those in the east. In western parishes such as West Lavington, Market Lavington and Easterton medieval and post-medieval ploughing has resulted in poor monument survival whereas good survival in the east such as in Charlton and Rushall indicate less ploughing took place here (McOmish et al 2002 12).

It has been suggested that the ridge and furrow recorded on Salisbury Plain overlying the 'Celtic' fields could be dated to the 13th or early 14th century (McOmish et al 2002 114). This aerial survey has also identified ridge and furrow on the northern edge of the Plain which is thought to be post-medieval in origin. Most of this ploughing represents arable farming but some may relate to land improvement undertaken in the early 1800s as the existing pasture was not suitable for the newer breeds of sheep then being kept (Crittall 1975, 73).

There are fewer remains of ridge-and-furrow north of the Vale of Pewsey on the Marlborough Downs. While extensive 'Celtic Fields' like those on Fyfield and Overton Down cannot be seen as clearly on the edge of the scarp the fragmentary remains identified there suggest that this area was subsequently ploughed (McOmish 2005, 136).

Ploughing on the downs has not escaped the attention of various writers who visited the area. In 1724-6, Daniel Defoe commented that 'the downs or plains, which are generally called Salisbury Plain, were formerly left open to be fed by the large flocks of sheep...but now, so much of these downs are ploughed up' (see Rogers 1971, 264). Thomas Davis stated in the 1794 edition of the General View of the Agriculture of Wiltshire that anyone who had observed the husbandry of the county for 'the last thirty years' would have been struck by 'the rage there has been for late years for ploughing-up the sheep-downs' (Davis 1794, 20). In describing the edge of the Vale in 1830, William Cobbett wrote 'sometimes the slope is very gentle, and the arable lands go back very far' (Cobbett 1830, 298). Ploughing of the downs was a cause for concern for W H Hudson who wrote 'The greatest change of the last hundred years is no doubt that which the plough has wrought in the aspect of the downs (Hudson 1910, 15). In the Wiltshire volume of 'The County Books' series Edith Olivier wrote of the 'sudden conversion of all those acres of virgin down into arable' during the First World War and noted that the 'same thing

happened between 1939 and 1945' (Olivier 1951, 22). With the exception of Cobbett, all these writers present the ploughing-up of the downs as a new and unusual event. Thomas Davis saw the ploughing up as a phenomenon that had started in the c 1760s and yet this was c 40 years after Defoe had described similar events. The archaeological evidence points to both medieval, prehistoric and Roman ploughing of this landscape and when this is combined with the written evidence it is clear that arable farming on the chalk uplands was a periodic event and not the dramatic change in husbandry that it was sometimes presented as.

Sheep

Some of the best evidence for sheep husbandry comes in the form of the water meadows in the Vale (see above) and the enclosures and dewponds on the higher ground.

Two possible sheep enclosures are in Chirton parish (Fig 33), they are defined by low banks, are generally rectangular or trapezoidal in shape and are similar to other sheep enclosures seen on the Marlborough Downs. That they were used for livestock is suggested by their position on the sheltered south facing slope across a coombe that could be used to funnel the flock into the enclosure - although this is not very pronounced in the eastern example. Immediately next to each enclosure is a dewpond, something that can also be seen on the Marlborough Downs (Smith 2005, 198).



Figure 33 Chirton sheep enclosures. Detail of RAF CPE/UK/1894 4084 12-Dec-1946 English Heritage RAF Photography

Another possible sheep enclosure is in Urchfont parish. This is five sided and, as with the Chirton examples, is on a south facing slope across a coombe, though here the dewpond is situated within the enclosure. This enclosure matches the position but not the shape of

one depicted on Andrews' & Dury's 1773 map, most notably in its utilisation of the coombe Andrews, Dury and Crittall 1952, No. 8). It is more accurately depicted in on the Ordnance Survey map of 1817. The enclosure on the 1773 map it is marked as Sir William's Croft which is likely to be a reference to one of the two Sir William Pynsents of Urchfont Manor (d.1719 and d.1765) (Stevenson 1975b).

A sheep enclosure, that was also recorded as part of the SPTA survey is situated on Upavon Hill (McOmish et al 2002, 114). In common with the previous examples this is also situated on a south facing slope and utilises a coombe to help manage livestock movement. Within the enclosure are the earthworks of a sheepcote but there is no dewpond in the immediate vicinity.

Dating evidence for these enclosures is limited; the best evidence comes from the excavation of an enclosure on the Marlborough Downs which produced pottery of the 13th and 14th centuries (Smith 2005, 194). There is also evidence from Salisbury Plain that prehistoric enclosures were re-used in the medieval or post-medieval period (McOmish 2002, 116). The western enclosure and dewpond at Chirton are situated over ridge-and-furrow suggesting a possible post-medieval date; this enclosure may corresponds to one depicted in 1773. The eastern enclosure is not shown on this map indicating that it could date to the late 18th or early 19th century, but the map evidence is problematic as neither enclosure is marked on the subsequent 1817 map. Both are on the 1886 edition. Though both enclosures still survive as earthworks, only the eastern one is depicted by the Ordnance Survey after this and by 1900 it is shown defining a plantation of trees, possibly planted as a result of the purchase of this land by the War Department.

While the evidence suggests that some of these sheep enclosures appear to be post-medieval in date and to have continued in use until the late 19th century it is notable that the Board of Agriculture's 1794 report on Wiltshire makes no mention of sheep enclosures (Davis 1794).

The provision of water for livestock on the downs can be seen in two ways. Eighteenth century map evidence shows a considerable number of wells while evidence from aerial photographs shows numerous dewponds on the edge of the Plain. The ponds are either round or square and the square examples are thought to have been built within the last 200 years (Smith 2005, 199). They were expensive to build and needed constant maintenance; in 1794 a pond could cost £25 to £40 to make (in comparison, a water meadow would cost £12 to £20 per acre to construct) (Davis 1794, 98; 34). Some ponds appear isolated but others were associated with farms or field barns, most of which were built after parliamentary inclosure.

Although sheep were daily driven from pasture to arable fields as part of the sheep and corn regime there was still a requirement to water them on the downs particularly during the summer months when they were restricted to the pasture until the harvest was over (Davis 1794, 16). By the 19th century sheep, known as 'grass sheep', were kept permanently on the downs to be fattened for meat (Smith 2005, 199).

Settlement

For much of its course the Avon has attracted settlement. However the breadth of the Vale of Pewsey and the numerous watercourses meant that unlike further south in the Avon valley there is no pairing of villages either side of this river or the other watercourses in the Vale. The majority of villages in Pewsey Vale show evidence of a regular linear arrangement and this is well illustrated in the 1773 map of the county. Many settlements within the Vale of Pewsey have undergone change and villages have gradually shifted or shrunk in size over time. For many villages within this project the evidence for these changes is in the form of earthwork remains of former building plots. For some sites these are relatively extensive as at Etchilhampton, Alton and Charlton. Charlton was surveyed by the RCHME (Smith 1999) and a number of these shrunken villages have been discussed by John Chandler (Chandler 2000, 43-56) such as Marden. Earthworks are visible on aerial photographs on the edge of this village and these may in part represent the shift of settlement to the centre as Marden's wide village green was gradually encroached upon during the 19th century (Chandler 2000, 47). Earthworks of crofts terraced into the slope north-east of the village along with part of the lane that connected them to the road through Marden have also been mapped. These buildings and the lane were still in existence in 1773 but had gone by 1817.

At Market Lavington a Greensand ridge runs between and roughly parallel to the main street (High Street/Church Street) and a brook. Terracing of this ridge can be seen at right angles to the road towards the north-eastern end of the village and appears to define property boundaries that vary in width, two measuring c15m, one c18m and the remaining two c30m. This part of the village is thought to have been laid out in the mid-13th century and coincided with the granting of a market charter (Chandler 2003, 123). While much has changed - unlike on the southern side, there is no trace of a back lane to the north - it is possible that these earthworks reflect the original medieval boundary plots. The subsequent post-medieval redevelopment of this area appears to have ignored these boundaries; the total width defined by the eastern three plots is now occupied by eight houses and their property boundaries do not extend as far as the stream. This may have taken place by 1773 as no properties are marked extending as far as the stream by this date. A similar increase in the number of properties may have also taken place elsewhere along the high street but some existing boundaries also reflect the 15m or 30m interval.

At the opposite end of the village are what may be the earthwork remains of at least one pond. The remains are not clear but the stream has been moved southwards and at the south-western end is retained by an earthwork bank. The earthworks to the east are more irregular and although low-lying it is less clear if a pond was here. The evidence is better to the west although no dam earthwork can be identified. The site is crossed at the centre by two banks which possibly define a lane also may have formed a division between two ponds. These may be the remains of a fishpond.

Evidence for settlement shrinkage at North Newton can be seen on aerial photographs, lidar and old maps (Fig 34). North Newton is situated within a low-lying area where the Avon was once joined by two branches of a brook. Both these branches are depicted on maps dated 1773 and 1817 but the northern branch (which also defined the parish boundary) was no longer present in the 1870s although drainage ditches now follow some of this course.

The gradual, though not complete abandonment of this site must in part be a response to the flooding that this low-lying area suffered (Crowley 1975, 127 VCH). An attempt to alleviate the problem of flooding was undertaken in the 1530s when the course of the brook that fed into the Avon was altered. The Victoria County History states that the northern branch of the brook was moved westward (ibid). The present water course does consist of a number of straight sections which may be the result of this realignment though elements may be associated with the later construction of water meadows here presumably in the 18th or 19th centuries.

The realignment carried out in the 1530s is likely to have coincided with the enclosure of the land named the Doles, which took place sometime before 1567 (Crowley 1975, 131 VCH). This area of wood and pasture is situated between the original and redirected courses of the brook and was divided into narrow strips of .5 of an acre. These strips are defined by drainage ditches aligned north south which drain in to these channels.

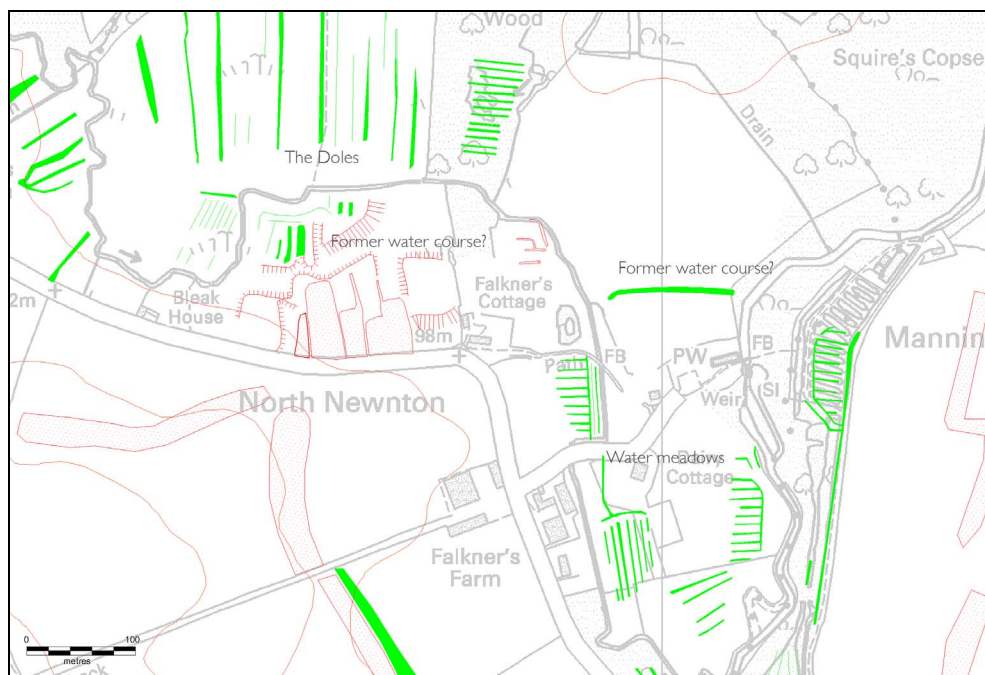


Figure 34. Remains of settlement and water management at North Newton. 1:10,000 scale base map © Crown copyright and database right 2013, all rights reserved. Ordnance Survey Licence number 100024900

The course of the stream south of the Doles may reflect a post-medieval realignment, its original course marked by the earthworks to the south of the stream. This realignment may have originally joined the Avon to the north of the church. The relatively straight channel taking the stream to the south may be part of the work to convert this area to water meadows. It was also during the 1530s that the manor house burnt down and was rebuilt, not in the village of North Newton but in the south-west of the parish next to the lord's fields (Chandler 2003, 150). It is a matter for speculation as to whether the risk of flooding was also a factor in the repositioning of this building or indeed if it can account for any of the further abandonment of property in North Newton. The building plots seen on air photos and lidar are not represented on the 1773 map and both this map and the 1817 Ordnance Survey map depict other buildings that no longer exist. No trace of these can be seen on aerial photographs but in places this is due to the conversion of parts of the village to water meadows where the bedworks will have either obscured or destroyed them.

The creation of these bedworks on low-lying land formerly occupied by buildings appears to coincidentally reflect the outcome of a proposal by William Smith to further increase the already high number of Wiltshire water meadows. Smith felt that one of the main obstacles was the presence of villages in otherwise suitable valleys. His recommendation was to plan water meadows for these areas and then (he observed) as most of the buildings of this county were composed of mud walls, when they became dilapidated, they should be rebuilt elsewhere gradually freeing the valley from buildings and ultimately allowing the water meadow to be built. (Smith 1806, xvi-xvii). While the proposal that villages should be moved to allow the construction of water meadows may seem extreme, this was a period when villages were demolished in the creation of parkland as happened within the project area at Puckshipton, Wilcot and Rushall (Chandler 2003, 16, 190, 241). In comparison Smith's proposals seem more measured as he did not propose to demolish villages but to allow a gradual change; 'it must be a work of time to remove them' (ibid xvi) which may suggest a greater concern for those affected than shown by many landowners intent on creating parkland.

The Gentry

In 1890 it was observed that the number of gentry resident in Wiltshire had during the 18th and 19th centuries been reduced to almost nothing (Medlicott 1890, 280). In some cases the houses themselves have also disappeared through demolition or neglect but evidence relating to two demolished houses were identified on aerial photographs. While both these houses probably replaced earlier buildings neither survived for more than 100 years.

From the 16th century until 1953 the estate of Puckshipton in Beechingstoke was held by Corpus Christi College, Oxford and during this time was let to a number of families. One of these tenants, Charles Raymond (d. 1716) built a house there known as New House, probably about 1690 and this, along with a second smaller house and farm buildings are

depicted on a map of 1726 (Fig 35; Stevenson 1975a, 16; map facing page 33). New House was demolished by 1790 and the current, predominantly 19th-century, Puckshipton House was thought to contain the remains of the house that was situated to the west of New House (Stevenson 1975a, 16 VCH).

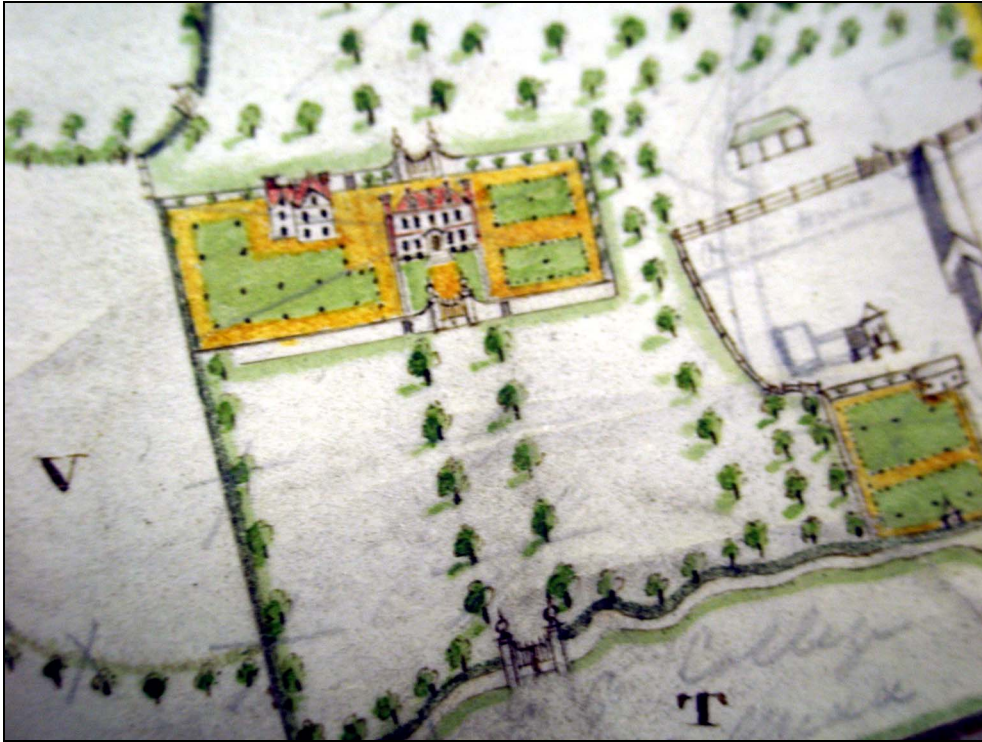


Figure 35 New House at Puckshipton, built c 1726, it and probably also the smaller house to the left was demolished by 1790. Reproduced by permission of the President and Fellows of Corpus Christi College, Oxford.

Comparison of aerial photographs and lidar with the 1726 map and the 1887 Ordnance Survey 1:2500 scale first edition map suggest that cropmarks visible on 1976 aerial photographs, which correspond with a slight depression seen on lidar, mark the site of New House. A remaining tree to the south of this site may be a remnant of the 18th century avenue of trees. Comparison of the maps and photos also suggest that the Grade II listed barn, thought to have been built pre-1720, is that shown on the 1726 map (bottom right Fig 35) and the curving boundary, which extends north leads to the current Puckshipton House. This indicates that the present Puckshipton House is almost certainly to east of the former site of New House and not to the west. Therefore the earlier work contained within Puckshipton House is unlikely to be the in-situ remains of the western house shown on the estate map (contra Stevenson 1975a, 16).

The bridge at the southern end of the avenue crossed the Avon to another part of Beechingstoke parish on the south side of the river. The boundaries of this area are primarily defined by straight lines in contrast to the remainder of the historic parish. The boundary of Beechingstoke is first recorded in 941 and the southern boundary then

followed the river. Despite the continuation of the parish across the river and the presence of a bridge, the map shows gates erected on the south side restricting access and no evidence of any formal garden layout in this part of the parish. Much of the area is not delineated and is labelled Wilsford meadow. Map evidence seems to militate against this southern area having anything to do with the New House and despite the inclusion of this area into the parish to the north the water meadows here ignore the boundary. The bridge however seems significant and possibly marks the original crossing point connecting Puckshipton to the southern part of the parish. Puckshipton is thought to have been included in Beechingstoke in Domesday but is first mentioned in the 14th century. Earthworks identified on aerial photographs may be part of the earlier settlement here.

Some of the best evidence for a now lost house, along the Avon at Rushall, comes in the form of garden remains (Fig 36). The manor was purchased by Edward Poore in 1749 and a new house built near the church, presumably on the site of an earlier manor house.



Figure 36 Cropmarks and earthworks at the site of Edward Poore's manor house in Rushall. North is to the bottom of the photo. Detail of I5368/22 9-Aug-1995 © Crown copyright. EH

Approximately 60m to the west of the church are the earthwork remains of a sunken square parterre approximately 40m square (on right of Fig 35). This area has stepped sides and there are traces of pathways which would have divided it into four with a depression at the centre where these paths met. This square parterre is depicted on Andrews' and Dury's 1773 map. To the east of this feature is a large irregular mound of earth that has been thought mark to site of the house (Chandler 2003, 190).

Immediately to the west of the church are the remains of an elaborate geometric parterre revealed as cropmarks. This is incomplete, the north-east corner interrupted by the churchyard boundary. This is not on the same alignment as either the square parterre or the church which, though partially rebuilt in 1803, did retain the late medieval tower. This difference in alignment may indicate that these are the remains of a garden associated with the earlier house.

Roads, tracks and lanes

Routes through the Vale have been identified in a number of ways. Some of these have left no upstanding remains such as the trackway in the parish of North Newton which has been identified by the cropmarks of parallel ditches which flanked it. Other routeways can be substantial and also in North Newton and at Wilsford some trackways are raised up on earthwork banks. In some places the passage of traffic gradually cuts through into the ground and these lanes are become lower than the surrounding fields. On the Greensand this can be particularly pronounced and to the north of Market Lavington and Urchfont exceptionally deep cuttings have been formed. Hollow ways have also formed on the chalk slopes of Salisbury Plain and the Marlborough Downs. Many of the routes that have created deep cuttings are still in use today either as roads or by-ways and were not mapped as part of this project. Other routes, such as the lanes that were created or realigned during inclosure are also still in use and these are discussed with their associated inclosure fields below.

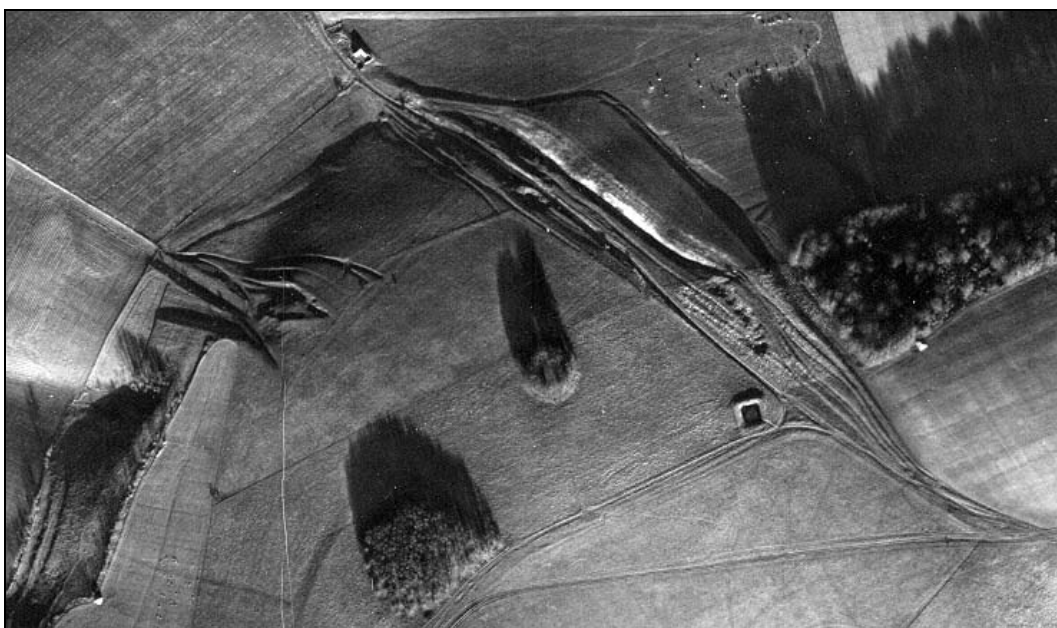


Figure 37 Hollow ways on Urchfont Hill. Detail of RAF CPE/UK/1894 4091 12-Dec-1946 English Heritage RAF Photography

According to the map evidence there was a change in the number and course of routes from the Vale onto Salisbury Plain between 1773 and 1817. These routes provided access

to a village's fields and pasture but also connected up with other tracks and so could be used when travelling greater distances. In some examples this change may be due to parliamentary inclosure and at Marden a curving path leading up to Salisbury Plain in 1773 had been replaced by a straighter route by 1817. No remains of the earlier track can be seen though it may have passed through the break in the strip lynchets that coincides with the parish boundary. A little to the west are earthworks of a hollow way cutting through the lynchets. This represents one of the three alternative courses taken by the lane from Chirton as it meets the northern scarp of the Plain. Other routes onto the Plain are defined by numerous hollow ways running roughly parallel with each other. Each of these represents an alternative path that could be taken up or down the scarp and good examples of this can be seen to the south of Urchfont where two lanes connected the village to the Plain. Where ground conditions could become particularly bad successive hollow ways would be formed (Fig 37).

'There are few counties in this kingdom in which turnpike roads are so numerous as in Wiltshire' (Davis 1794, 156) and though Wiltshire did have a high density of these roads they were concentrated in the textile area in the north-west of the county (Pawson 1977, 152). During the 18th century some routes within the Vale became turnpikes and two of these headed southwards over the scarp to Salisbury. The western road passed through Market Lavington, the other just to the east of Urchfont joining the Plain at Redhorn Hill. Both these routes are now metalled but near the top of Redhorn Hill the earthworks of a slightly different course of this road can be seen. Both these roads joined each other on Salisbury Plain at a point between Rushall Down and East Down marked by a 19th-century finger post. Omissions from the 18th and early 19th-century maps can be inferred from the example of Market Lavington which only show the village connected to the Plain via the turnpike. Other routes for farm labourers and livestock must have existed, some of which may survive in the various paths still in use that connect the village to the Plain.

Most Wiltshire turnpikes were abolished during the 1860s and 1870s and those that passed across Salisbury Plain were eventually closed with the purchase of this land by the War Department and the route of main road from Devizes to Salisbury shifted westwards.

Inclosure

A number of episodes of inclosure were undertaken within the Vale of Pewsey, prior to the late 18th and early 19th century parliamentary inclosure. The earliest were carried out in the 16th century and included land in North Newnton (by 1567) and the neighbouring parish of Manningford Bohune, then a tithing of Wilsford (c 1558) (Crowley 1975, 131; Stevenson 1975c, 210). The area at North Newnton, known as the Doles consists of pasture and woodland subdivided into a number of narrow plots defined by ditches reflecting the need for good drainage in this area. Aerial photographs have also revealed the cropmarks of ditches immediately to the north in Manningford Bohune defining small

irregularly shaped fields and which may relate to the inclosure of Manningford common in the 16th century.

Within the parish of Stert the fields are irregular in shape. Part of the parish was inclosed between 1573 and 1599 (Crittall 1975, 157 VCH) and some of the small irregular fields seen on the 1886 Ordnance Survey map are likely to have been the result of this episode of inclosure. While some of these field boundaries have subsequently been removed others still remain, defined by ditches which are needed to drain the area. At the far east of the parish there is a pattern of larger fields, though still with irregular outlines. While this has the appearance of post-inclosure amalgamation of smaller plots they may equally reflect the original inclosure pattern of larger fields and a great pasture of c 80 acres was recorded at Hatfield soon after inclosure in 1623.

These examples can be contrasted with the northern part of Urchfont, an area thought to have been inclosed in the later 17th century (Stevenson 1975b, 183). This part of the parish has a uniform layout of relatively regular, straight-sided fields access through which was via wide, well defined and sometime quite straight lanes (Fig 38). On closer inspection there is some variation suggesting more than one episode of inclosure. The evidence from the 1773 map demonstrates that either the whole area was not inclosed in the later 17th century (contra Stevenson 1975b, 183), or that if it was, the area north of Wedhampton underwent further modification in the late 18th or early 19th century.



Figure 38 Area of inclosure north of Wedhampton. The lanes follow relatively straight courses and are wide, measuring circa 15m across. Detail of RAF 458/3021 73 4-Jul-1959 English Heritage RAF Photography

The lanes within the parish of Urchfont generally follow a straight course though there are exceptions. Marsh Lane is of variable width and makes slight changes of direction and as such may pre-date inclosure, though not in its entirety as a cropmark at one end of Marsh Lane indicates that it originally extended further westwards. This can be contrasted with the three lanes heading north from Marsh Lane with the two western examples in particular following very straight courses. At circa 10m across these lanes are notably wide. Wide lanes are also a feature of the lanes in the north of Urchfont parish, something which is emphasised when they meet the parish boundary with Stert, south of Hatfield Farm. Here, as the lane crosses the parish boundary, the width of the lane is reduced from circa 13m to circa 7m. Some of the lanes north of the hamlet of Wedhampton are nearer 15m than the 10m seen further west in the parish. This difference in width suggests a separate episode of inclosure and this may be confirmed when the current arrangement of fields and lanes is compared with the 1773 map. This 18th-century map illustrates the different road network that existed prior to the inclosure of this area. The close association between the present fields and lanes indicate that they are part of one scheme.

As a result of inclosure a number of farms were built within the fields that they worked. The farms created through the early inclosure of land are depicted on the 1773 map and many of these survive to this day. However even before inclosure some areas were served by field barns. In Stephen Duck's early 18th-century poem he refers to threshing in 'distant barns' and according to map evidence there were five such field barns on Salisbury Plain in 1773 (McOmish et al 2002, 117). In addition to individual farms there was a hamlet named Marsh to the north of Urchfont depicted on 1773 and 1817 maps. The name itself is likely to be a reference to Cannings Marsh. The settlement at Marsh had gone by the time the first edition Ordnance Survey map was produced in 1886. The nucleus of this settlement may have shifted north and be represented by Marsh Farm which had moved again to its present location by 1901. No trace of Marsh hamlet has been seen on aerial photographs.

Another farm on the 1773 map was Harris Farm renamed Little Crookwood on the 1886 Ordnance Survey map. The maps provide evidence of the gradual demolition of various buildings at this site through the 19th and early 20th centuries and all the buildings had been removed by 1939. These sites have been incorporated into the fields and no earthworks or cropmarks are visible on aerial photographs, although the pond associated with Marsh Farm was visible in the 1940s.

The farms and field barns on the northern edge of Salisbury Plain were built as a result of the parliamentary inclosure that took place in the later 18th and 19th centuries. The purchase of parts of Salisbury Plain for military training commenced in 1897 and additional land was purchased in the first half of the 20th century. This ultimately resulted in the end of farming on much of the Plain and the abandonment of these farm buildings. On aerial photographs taken in 1946 some sites such as Eastcott Hill Farm had been demolished by this date but can be located from the surviving dewpond and the trees that had been

planted around the site. A dewpond almost half a kilometre to the east is all that survives by this date of a second (un-named) group of farm buildings although these, unlike Eastcott Hill Farm, had been demolished before 1939. This abandonment of the Plain may also explain the appearance of two new dewponds outside the training area that were dug between 1924 and 1939.

To the east in the parish of Urchfont a similar pattern of abandonment can be seen with Urchfont Hill Farm which had been demolished by the mid-1940s. Also visible on the air photos are a number of field boundaries and areas of ridge and furrow that were associated with this farm. Other probably associated earthworks can be seen to the west. There are dewponds and field boundaries, which overlie the earthworks of 'Celtic' fields and occupy an area known as Penning Down. Visible at the eastern end of Urchfont Hill on air photos taken in 1946 is a group of earthworks that may also mark the site of farm buildings, also closely associated with a dewpond (Fig 39). In contrast to the other examples, no farm buildings are marked here by the Ordnance Survey. This may indicate a more dynamic post-inclosure settlement pattern on the Plain as seen in the Vale with the repositioning of Marsh Farm (see above), although if so this occurred in a much shorter period.



Figure 39 The earthworks of a dewpond and an enclosure, possibly marking the site of farm buildings on Salisbury Plain. Detail of RAF CPE/UK/1894 4089 12-Dec-1946 English Heritage RAF Photography

COMMUNICATIONS AND THE EARLY 20TH-CENTURY VIEW

Major roads have avoided the Vale of Pewsey. The A4, the main pre-motorway east-west London to Bristol road passes to the north and the main north-south routes are further to the west (now represented by the A360) and the east (A346/A338). The first major east-west route to utilise the Vale was the Kennet and Avon canal completed 1810 and the Vale was subsequently used by the railway, completed in 1841. Although the presence of a canal and a railway with their associated wharfs and stations demonstrate that the Vale was not isolated from the rest of the country, for much of the 20th century various published works on Wiltshire emphasise the low numbers that visited the county. In 1910 it was claimed that Wiltshire was mainly known 'from the windows of a railroad carriage as they passed through' (Hudson 1910, 7). This point was reiterated nearly 40 years later: 'There is no denying that to many motorists Wiltshire is a rather uninteresting belt of country happily provided with good, straight roads that enable travellers to speed through it' (Whitlock 1949, 9). In Bradley's *Round About Wiltshire* first published in 1907 the county is described as 'little known' and one which 'strangers...cultivate a quite peculiar vagueness' (the exception to this rule - he notes - are antiquaries), (Bradley 1945, vii). W H Hudson also observed that as a county Wiltshire 'never appears to be a favourite one to those who go on rambles in the land.' (Hudson 1910, 7) while Nikolaus Pevsner notes in his introduction to *The Buildings of England: Wiltshire* that to 'most people, if Wiltshire is mentioned, just think of Salisbury Plain' (Pevsner 1963, 15). This repeated emphasis on a general ignorance of the county is no doubt made due to the inverse relationship with the considerable number of people who passed through the county 'on their flight to Bath and to Wales ... and to the west country' (Hudson 1910, 7). Almost unbelievably, between the wars, the volume of traffic could be so great that it often meant a wait of 15 minutes before being able to cross one of Wiltshire's main roads (perhaps the A303, the London to west country route) (Whitlock 1949, 9).

The perceived remoteness of Wiltshire and the Vale of Pewsey in particular can also be seen as a reason why the Vale was selected for a linguistic study carried out there in the early 1900s by the Swedish academic John Kjedervist. He chose the Vale in the belief that a distinct idiom could have survived there his work was published in 1903 (Kjedervist 1903).

The perception of Wiltshire as a remote and by inference, an unchanging landscape does suggest that parts of Wiltshire and especially the Vale of Pewsey would, like many other areas of rural England, be seen to embody essential values of Englishness. Wiltshire was the subject for a number of authors such as Richard Jefferies (1848-1887) and Edward Thomas (1878-1917). Although the Vale does not feature prominently in these writings it is the setting for Edward Thomas' 1915 poem *Lob*. Various themes have been identified in this poem which ostensibly recounts the search for an old countryman named Lob. These include the metaphor of a traditional way of life now vanished (Hayman 2003, 196) and seen as central to Thomas's exploration of Englishness (Longley 2008, 212). The character Lob also represents the land itself as well as the 'spirit of England' (Motion 1980,

103, 106). Andrew Motion notes that not only are these qualities elusive, but they cannot be understood through scientific investigation (ibid, 103) and highlights the following lines from Thomas's poem to illustrate this point:

'You see those bits
Of mounds – that's where they opened up the barrows
Sixty years since, while I was scaring sparrows.
They thought as there was something to find there,
But couldn't find it, by digging, anywhere'

Thomas 1964, 31

It should be noted that it is specifically archaeological investigation (digging) that fails to provide understanding. It can be countered that in addition to archaeology's 'scientific' approaches to investigation, landscapes are also understood through experience and observation and that this empirical approach is part of scientific curiosity (Fleming 2007). This aspect of landscape archaeology does have something in common with Thomas's ideas of how landscape could be understood.

Andrew Motion also suggests that the 'geographical complexities' of the Vale (Motion 1980, 104) were used by Thomas to illustrate the elusiveness of what is being sought:

There were three Manningfords, - Abbots, Bohun, and
Bruce:
And whether Alton, not Manningford, it was,
My memory could not decide, because
There was both Alton Barnes and Alton Priors.
All had their churches, graveyards, farms, and byres,
Lurking to one side up the paths and lanes,
Seldom well seen except by aeroplanes;

Thomas 1964, 31

Somewhat contradictory to Thomas' earlier dismissal of scientific investigation, but apposite to this project is his evocation of the view from an aeroplane to make sense of a landscape otherwise difficult to understand. The aerial view often contains tangible evidence of past activity and enables the identification of sites that are rarely noticed from any other vantage point. For this area of Wiltshire an analysis of these aerial views captured either on film or as lidar data has produced evidence of a past that in many cases has otherwise proved elusive.

SECOND WORLD WAR

In Britain during the 1930s the threat of war manifested itself in a number of ways. These included the creation of an Air Raid Precautions (ARP) department in 1935 and more tangibly, the construction of various military installations across the country. For those living in or around Devizes preparation for war was represented by the massive expansion of the barracks at Devizes that was undertaken during the summer of 1939 to train the newly formed militia. While there appears to have been more activity at Devizes than elsewhere within the project area physical evidence of the war can also be seen in parts of the Vale of Pewsey, some of which reflect the significant military presence nearby in and around Salisbury Plain. A number of wartime themes that were played out in this central part of Wiltshire have been revealed by aerial photographs and in addition to the pre-war militia these include, anti-invasion defences, contingencies for fighting air-raid fires, the billeting and training of allied troops and the housing of prisoners of war.

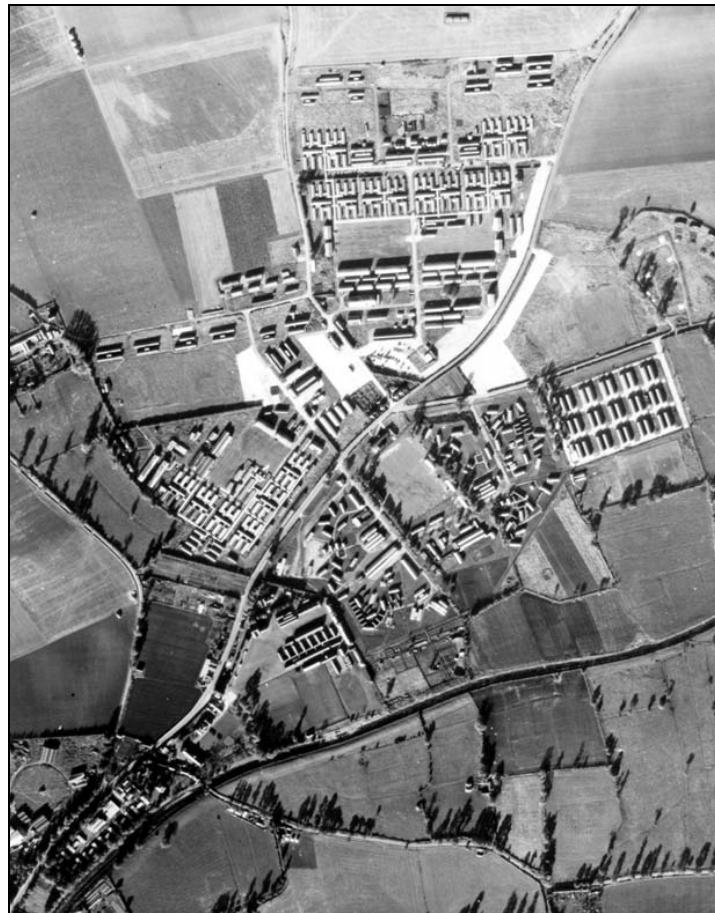
Devizes and the Militia

The militia was created in May 1939 with the passing of the Military Training Act (1939) - notable for introducing conscription in peacetime - whereby all single men between the ages 21-22 were to serve for 6 months. The camp at Devizes was built adjacent to Le Marchant barracks, home of The Wiltshire Regiment and whose depot was built in 1878. Le Marchant barracks were situated to the north-east of the town centre on the south side of the London road. The militia camp was constructed opposite on the north side of the London road and consisted of regularly arranged, near-identical buildings around three parade grounds (Fig 40). The militia camp consisted of three barracks named after Waller, Hopton and Prince Maurice, three of the protagonists in the civil war battle on Roundway Down fought in 1643 just outside Devizes (EHA MD95/9820).

According to a note on the ground plan of the camp held in the EHA, the site was constructed between May and June 1939. Although this may have been the intention the camp was still 'far from complete' as late as 16th August 1940 (EHA MD95/09820; Anon 1939f).

While this area was no doubt chosen due to its proximity to the original Victorian barracks it was a contentious choice for at least one person. Edward Coward wrote to *The Times* in May 1939 to complain about the site chosen for the camp as it involved building on good quality pasture instead of on the significant acreage of second-class land, much of it crown property, that was to be found immediately to the north-east (letter in *The Times* 22 May 1939 page 8, column C). The complaint may reflect a vested interest and it is possible that Edward Coward owned this land; he certainly had a connection with this area and had built a reading room in the nearby village of Roundway (VCH Wilts 1953, 194).

The objects of this compulsory military service were summarized by *The Times* as follows: '(i) To provide a permanent force for the partial manning of the Air Defence of Great Britain (A.D.G.B). (ii) To assist in the mobilization of the Regular Army. (iii) To improve the efficiency and ensure the strength of the Territorial Army. (iv) To provide immediate trained reserves.' (Anon 1939b). The inter-war concern with the threat of air attack in a future war is clearly reflected by the specific mention of air defence in this outline. One quarter of the yearly intake into the militia were to be allotted to the anti-aircraft forces, the remainder to the Field Army (Anon 1939a) and Devizes was one of 12 camps that were to train militiamen for air defence (Anon 1939b). After three months at the camp the remaining three months were to be spent with the new anti-aircraft and searchlight regiments (Anon 1939c).



**Figure 40 Devizes barracks in 1946. Detail of RAF CPE/UK/1821 4060 4-Nov-1946
English Heritage RAF Photography**

Over 30,000 militiamen arrived at various camps across the country on 16th July 1939 and those at Devizes 'passed under a banner across the road with the words: "Devizes welcomes you and will endeavour to make it a home from home for you."' (Anon 1939d). Reports at the time emphasize the friendly welcome given by the army to the militiamen across the country. In a message to the press, Hore-Belisha the Minister for War commented that the recruits were 'agreeably surprised at the *charming* way in which they

were being treated' (Anon 939d my emphasis). *Country Life* also commented on the friendly nature of the welcome offered to the first militiamen, it considered it to 'be wise as well as kindly to make welcome these young men...to show them that the Army is glad to hail them as brothers' (Anon 1939e). The nature of the reporting suggests that the army's treatment of militiamen was markedly different from that given to regular recruits. The emphasis on this friendly welcome would appear to be part of a concerted effort to distinguish service in the militia from that in the regular army, something that may have been seen as desirable for peacetime conscription.

Just over a month after the recruits had arrived, a report from Devizes camp was published in *The Times* on August 19th 1939. This first month had been 'troublesome' and blamed in part on the bad weather, inadequate preparation and inexperience. Much of the camp must have still consisted of tented accommodation as the 'hatted camp into which it was hoped to move the depots a few days back is far from complete'. However, the tenor of the article was positive and claimed that the various problems were being overcome (Anon 1939f). Britain's militia was however short-lived and was absorbed into the regular army at the outbreak of war with the passing of the National Service (Armed Forces) Act 1939 less than a month after *The Times* report was published.

Devizes Barracks and the transition to war

The outbreak of war saw a second phase of building at Devizes with the Wiltshire regiment expanding east with the building of irregularly laid out buildings and a parade ground constructed between 16th October 1939 and November 27th 1940 and known as Le Marchant Camp (MD95/09823).

Devizes continued to provide air defence training during the first years of the war and many of those trained were women of the Auxiliary Territorial Service (ATS). The head of AA command, Major-General Pile, introduced mixed batteries to overcome the shortage of personnel and the first mixed battery became operational in August 1941 (Dobinson 2001, 312). Although women of the ATS were not trained to fire the guns (to maintain a gender divide), they operated all the equipment - such as radar, predictors, heightfinders and kine-theodolites - providing the information that enabled the guns to be fired accurately (Dobinson 2001, 314). With these roles being undertaken by the ATS, women would outnumber men at mixed batteries and by the end of 1944 there were more women than men serving with AA Command (Dobinson 2001, 313). Separate accommodation at Devizes for the ATS was in the planning stage during 1940 (EHA MD95/09823) but this pre-dates their role in air defence and so these buildings were (at least initially) unconnected to this role. It is possible that with the introduction of mixed batteries additional areas of the militia camp were also occupied by the ATS.

Devizes is mentioned, often in passing, in numerous entries to the BBC WW2 People's War project. Betty Rankin was one of those posted to Devizes:

'I did enjoy my time there. We learned about electricity and wireless signals and how to work the sets which were in a revolving hut in an open area surrounded by wire mesh (for reflecting any signals from the planes). We were divided into sections of 6, No.1 in charge, No. 2 for range, No. 4 for bearing, No. 5 for angle of the plane we picked up. It appeared like a dark mark moving towards us. We had to keep it accurately on the cross wire of a cathode ray tube by winding the handle of the respective tubes. The information these tubes gave went through cables to the Command Post where the officer in charge interpreted the information and, according to the weather, gave the fuse to men on the 4.5 gun. I was sometimes No 4 for bearing or No. 5 for angle and occasionally I helped in the Transmitter as the No.3 who with No.6 started the generator and sent out signals to search for planes. It all sounds very complicated but really it was quite efficient and exciting for us. We had to learn all about this at Devizes, how it worked and what all the equipment was used for and even how to replace it and if necessary how to put it out of action.' A2514737

Development of Devizes Barracks and arrival of the Americans

Air defence training was just one of many roles undertaken at Devizes during the war and some of the changes in function are implied by the changing layout of the site. This is particularly apparent where later buildings and earthworks partially cover some of the air-raid trenches. A few tents are visible at various locations around the camp and these may be seen to reflect both the changing demands on the camp infrastructure that could not be met by existing buildings as well as the temporary nature of some the roles they carried out. Some of these changes may have been made to meet the requirements of the American units that were station at Devizes from 1943. These troops formed part of the enormous build-up of men and equipment that took place in advance of the invasion of mainland Europe on D-Day, 6th June 1944. Those at Devizes included a transport regiment, the 344th Engineer Regiment, the 37th Tank Battalion and the 22nd Armored Field Artillery Battalion – these two battalions formed part of the 4th US Armored Division (de Normann 1997, 39-40). This build-up is clearly seen in the large number of vehicles and equipment that occupy much of the camp including parade grounds that were photographed from the air in April 1944 (Figs 41 and 42).



Figure 41 American tanks at Devizes Barracks 1944. Detail of US/31GR/LOC50 5129 30-Apr-1944. English Heritage USAAF Photography



Figure 42 Two games of baseball being played at Devizes Barracks on Sunday 31st April 1944 confirm that these troops are American. Detail of US/31GR/LOC50 512x 30-Apr-1944 English Heritage USAAF Photography



Figure 43 The framework is visible of a building under construction at Devizes Barracks. At the western end is a wooden tower. Detail of US/31GR/LOC50 5129 30-Apr-1944. English Heritage USAAF Photography



Figure 44 New buildings at Devizes barracks, part of the southern hospital (with rounded roofs and a wooden tower) connected to the existing barrack buildings (pitched roofs) by a network of covered walkways, in the foreground. Detail of US/31GR/LOC50 5125 30-April-1944. English Heritage USAAF Photography

These aerial photographs taken in 1944 (Figs 43 and 44) also show building work being carried out in two areas of the site, one to the north the other to the south. These are being built on two of the camp's parade grounds and further indicate the changing requirements of this site. On each parade ground are seven buildings and of varying designs. The same seven designs are seen on each parade ground although the exact arrangement is different. Also under construction is a network of covered walkways that connect many of the pre-existing barrack blocks to three of the new buildings on each parade ground.

This building work was being carried out as part of the conversion of the site into two American hospitals, the 141st and the 128th and they were to become operational in July and August of 1944 respectively (de Normann 1997, 43). The group of seven buildings are labelled on a plan of the site as Reception Block, Operating Room Hut, Massage and X-Ray (all linked by covered walkways) as well as Laboratory, Dental Centre, EEN and T Clinic and Boiler House (EHA MD95/09813)

The northern hospital had 1251 beds, the southern 845 (Fig 45). From the air photos evidence the southern site appears to be nearer completion than the northern and judging by the staggered dates they came into use it may be assumed that the southern site is the 141st the northern the 128th. However plans of the site give the same date range of construction for both: November 1943 to September 1944 (EHA 95/9817, 85/9820).



Figure 45 The completed hospital site (southern). Seven buildings were constructed on a parade ground and three of these are linked by the covered walkways that connect much of the site. The entrance building has two doorways and is highlighted in this photo by the lighter coloured tapering forecourt. Detail of RAF/106G/UK/1661 3164 12- Jul-1946 English Heritage RAF Photography

Prisoners of War at Devizes Barracks

The final significant wartime change at Devizes barracks can be identified in the aerial photographs taken in 1946. Part of the site was converted to operate as a Prisoner of War camp (camp number 23, though confusingly, this number was given to more than one POW camp during the war (Thomas 2003, 23)). An area of the barracks on the south side of the road has clearly been fenced off, in places by a double line of wire, and this perimeter is guarded by a number of watchtowers. Within this compound additional

buildings have been constructed that were not present in 1944 and it is possible but not certain that these may have been built for the prisoner of war camp (Fig 46).



Figure 46 The prisoner of war camp at Devizes Barracks. Many pre-existing buildings were used for this camp but some buildings seen in 1946 were not present in 1944 (marked in blue) and it is likely that these were built specifically for the PoW camp. Detail of I06G/UK1661 3163 12-Jul-1946. English Heritage RAF Photography

The story of Devizes prisoner of war camp and in particular a plan for a mass breakout is told in de Normann's *For Fuhrer and Fatherland*. With no actual escape having taken place, the exaggerated claims made about the prisoners' plans (secret agents, arms caches and formation of a fighting force by the escapees) have gained some currency but appear to be fiction (de Normann 1997).

Emergency Water Supplies

Within Devizes, five circular Emergency Water Supply (EWS) reservoirs have been identified and they were intended to provide a supply of water for fighting fires in the event of the water mains being ruptured during an air raid. The reservoirs, which measured *c* 7m in diameter, provide the only evidence seen on air photos of the air-raid precautions in the town. There are no obvious public air-raid shelters visible in Devizes as many, if not all, occupied cellars such as in the Corn Exchange in the Market Place.

The threat of attack from the air was a major concern for British pre-war military planners though the problems with fighting the resultant fires had not been anticipated. These problems became apparent during the Blitz in 1940 and early 1941. Some were due to the incompatible equipment and the different ranking of men between the numerous fire

brigades in Britain and overcoming these led to the creation of the National Fire Service (NFS) in 1941. One of the results of this was the nationwide provision of EWS, the size of the urban population determining the number of reservoirs provided. While initially it was thought that major cities - London in particular - would be the target for these attacks, as the war continued, air raids became more widespread with a greater range of places becoming targets (for example the Baedeker Raids of April-June 1942 which targeted historic cities in response to British bombing of the German city of Lübeck, and the Tip-and-Run raids of March 1942-June 1943 which targeted militarily insignificant towns on the south coast). It is likely that raids such as these demonstrated that very few places could be considered immune from air attack which made these precautions a sensible and legitimate precaution in towns such as Devizes. The reservoirs in Devizes, referred to as 'static water supplies' in a local newspaper article had been constructed by December 1942, the date from which they became the responsibility of the NFS (Anon 1942).

Anti-invasion

Running through Devizes and the entire length of the project area are the remains of Britain's main east-west anti-tank defensive line, part of the General Headquarters (GHQ) line. This line ran from the defences that encircled London in the east to the defences protecting Bristol in the west and along with a north-south line that ran from London parallel with the east coast, formed the spine of the anti-invasion defences devised by General Ironside Commander-in-Chief, Home Forces. These lines were constructed in the spring of 1940 when invasion seemed likely in the wake of the invasion and subsequent surrender of France and the Low Countries. These defences were intended to slow the enemy's advance and were often formed by lines of concrete anti-tank cubes or anti-tank ditches. Wherever possible natural or pre-existing obstacles were incorporated into these defensive lines and this was the case for this part of Wiltshire where the Kennet and Avon canal was used. Pillboxes were built at intervals along the canal and anti-tank blocks and steel rails were provided to block the bridges. All but three of the pillboxes associated with the canal were positioned on the north bank. The remaining three were close to the southern side of the canal and were protected by a (dry) ditch. Two of these were next to the barracks, the buildings of which may have necessitated placing the pillboxes to the south. The ditch of the third pillbox also included a roadblock.

Much of this is likely to have been built or at least planned in the relatively short period that General Ironside was Commander-in-Chief (28th May - 21st July 1940). However, this form of static defence was unpopular with many in the British army, and most significantly with Ironside's successor Alanbrooke, who wrote: 'This static rear defence did not fall in with my conception of the defence of the country...our defence should be of a far more mobile and offensive nature' (Danchev & Todman 2002, 94). The tactic of defending certain towns or villages, known as Area Defence was established (Foot 2006, 9) and the roadblocks and pillboxes elsewhere in the town suggest that Devizes was one

such site. The defences at Devizes were not restricted to the line of the canal and concrete blocks were also seen on the bridges that crossed the railway line on the southern side of the town. Other pillboxes have also been recorded in Devizes but the restricted coverage of the aerial photographs meant that these could not be seen, but a gun emplacement near the green was identified.

Airfields

Within the Vale of Pewsey there were two Relief Landing Grounds (RLG) for the Central Flying School at Upavon. One of these was at Manningford, the other at Alton Barnes. The ground at Manningford was on Bohune common and the only indication that the field was a RLG was a white cross marked out on the grass (Priddle 2003, 196), but this was not seen on the earliest photographs taken in July 1946, 9 months before the site was closed. Alton Barnes (Fig 47) was transferred to No.29 Elementary Flying Training School Clyffe Pypard and a number of buildings were erected. These included accommodation buildings, aircraft hangars and pillboxes; the runways remained grass.



Figure 47 Alton Barnes airfield in 1946. The majority of buildings, including blister hangars can be seen on along the road on the right Detail of RAFI06G/UK/1661 3152 12-JUL-1946 English Heritage RAF Photography

To the north-east of the barracks at Devizes there was a small landing strip (Fig 48). There are no permanent buildings and tents were used instead. Two light aircraft can also be seen on the aerial photographs. This is likely to be an American landing strip for light aircraft that would've been operated in conjunction with the troops who were based at

the barracks and used for a variety of roles including observation. The Americans used Piper Cub aircraft for this role and these sites were often referred to as cub landing strips.



Figure 48 American temporary landing strip north-east of Devizes barracks. There are two aircraft, one top-mid frame, the other near to bottom left close to some tents. Detail of US 3 IGR/LOC50 57 30-APR-1944 English Heritage USAAF Photography

From the perspective of contemporary aerial photographs within the project area it was Devizes that was affected most by the war. Specifically the expansion of the camp and the resultant influx of people, first from different parts of the country (militia, regular army and ATS) then American troops and finally prisoners of war. The photos from the only wartime sortie in this area has been invaluable in identifying features within the town such as road blocks and EWS that had been removed by the time the first post-war photographs were taken. The combination of oblique and vertical photos not only aid interpretation but provide some arresting images of the activity at the barracks immediately prior to D-Day.

In contrast the impact of the war on the Vale of Pewsey seems slight. From the air the significance of Britain's main east-west defensive line appears diminished as it follows the Kennet and Avon canal and the widely spaced pillboxes that indicate the defensive role of this waterway appear small and are not always easy to identify. While in parts of the country defensive lines must have imposed some restrictions on movement for the population here the impact of the defences may not have been as great as in places where completely new obstacles were created. Curiously, if all the bridges had been blocked this defensive line would have made a reality of the often supposed north/south division of Wiltshire along a line through the Vale (see the chapter *History of Previous Enquiries* above).

The relief landing ground at Alton, despite evolving into a training school also had a relatively modest impact on the landscape, particularly as it remained a grass landing strip. However other effects of the war such as agricultural intensification are less easily identified from the air for this area while activities such as the use of prisoners of war as farm labour are completely invisible. As such, the degree of impact on the landscape will not equate to the impact of the war on the local population; as Angus Calder has shown, all sections of society were affected by what is termed the 'People's War' (Calder 1969).

CONCLUSION AND RECOMMENDATIONS FOR FURTHER WORK

The results described above provide an overview of the main themes emerging from the project. These highlight the potential of archaeological aerial survey in the valleys off the relatively well studied chalk downs in Wiltshire. The monument records and mapping should feed directly into local planning and research in this region of Wiltshire, through the Wiltshire Historic Environment Record and the National Record of the Historic Environment.

There is now continuous archaeological mapping, to NMP standards, for an area stretching from north of Avebury to the south of Stonehenge. This provides consistent information from aerial photographs for both components of the World Heritage Site and a wide contextual area. This information should inform work within these internationally designated areas, including boundary revisions and management plans, as well as informing research on the wider landscape.

The archaeological landscape recorded in the Vale of Pewsey ranges in date from the Neolithic period through to the modern era. This provides opportunities to explore period specific themes and inform studies of landscape change over a long time frame.

The work at Marden henge and the NMP project on the environs should raise awareness of the importance of the Vale of Pewsey in the prehistoric period. The complex of Neolithic and Bronze Age monuments which flank the streams and the confluence of the two branches of the Avon to the east of Marden highlight the potential for research into the early development of the physical and man-made landscapes in the Vale of Pewsey. Further work will firmly place this area into a wider landscape, physically linked by the river Avon but also conceptually linked to other significant and relatively well studied prehistoric landscapes in the region, such as those around Avebury and Stonehenge.

Aerial photographs also revealed potential Bronze Age sites on the northern side of the Vale, in particular the enclosure and ring ditches at Horton. There are also potential features related to the late Bronze Age – Early Iron Age 'midden' sites at All Cannings and Stanton St Bernard. Aerial photographs recorded a hidden landscape of prehistoric or Roman settlements and boundaries, in particular on the hills below the escarpment of the Marlborough Downs. The area between Woodborough Hill, Walkers Hill and Draycott Hill has a remarkable range of enclosure and boundary types with a wide potential date range. This would be an excellent study area to explore the development of settlement, land use and potential interactions between use of the Vale and the downs from the prehistoric period onwards.

The increased knowledge of the type and distribution of prehistoric sites has helped us to better understand subsequent periods, particularly those in which significant monument reuse was undertaken. The results of this project have provide a landscape context for early medieval burials in Woodbridge as well as for Roman villa sites such as Wilsford and

Charlton, all of which have some been shown to have some association with prehistoric remains.

Many of the medieval and post-medieval earthworks relate to farming, in particular medieval strip lynchets and post-medieval water meadows. Both of these monument types are synonymous with southern England. Nationally strip-lynchets have an uneven distribution and 75% of all examples across lowland England are found in just four counties: Wiltshire, Dorset, Somerset and Gloucestershire. The concentration of strip-lynchets makes the slopes of the Vale of Pewsey one of the most heavily lynched areas in England.

The water meadows within the Vale, a type known as bedworks, though constructed across Britain, are concentrated on the chalkland of southern England. This strong association between water meadows and chalkland is apparent in various late 18th and early 19th-century Board of Agriculture reports with Dorset, Hampshire and Wiltshire volumes all claiming pre-eminence in the construction and use of water meadows. The water meadows mapped in this project complement the known distribution of meadows further south on the river Avon.

The project also highlights the well preserved garden earthworks and cropmarks of a formal garden associated with Rushall Manor. These may relate to either the new house built in the 18th century (since demolished) or its predecessor. This site is a strong candidate for more detailed survey and production of detailed plans to better understand these remains and their sequence. This could also help to establish their significance in a local, regional, or even national context. Other high status houses in the project area such as the 17th-century New House, Puckshipton (demolished) or the 18th-century Urchfont, both of which based (on air photo evidence), appear to have no significant garden remains surviving.

The historic aerial photographs show the varied impact of the Second World War on this part of Wiltshire with Devizes more obviously affected than the Vale. Little remains in Devizes of the extensive military barracks, hospitals and POW camp or the anti-invasion defences such as pillboxes. Features such as pillboxes survive better in the Vale, generally along the canal which formed the Stop Line. For communities where few physical remains survive historic air photos can provide a meaningful link to the Second World War.

The area corresponding to the Greensand in the heart of the Vale of Pewsey still has few known prehistoric monuments. Despite repeated archaeological and non-archaeological aerial reconnaissance, cropmarks have only been seen on the Lower and Middle Chalk around the edges of the Vale. However, the results of the aerial and geophysical survey, of the Hatfield barrow at Marden show that, although a 'difficult' geology, there is the possibility that these survey techniques may yet yield results on the Greensand. Other techniques, such as artefact collection from the plough zone, are more likely to yield results in the meantime.

Paleoenvironmental work will also be a key to understanding the distribution of archaeological sites and in particular to better understand the origins and extent of Cannings Marsh.

Aerial Reconnaissance, along with the subsequent evaluation and recording of sites, undertaken in 2010-2011 was productive in the south-east end of Vale (outside the project area). Further work could focus on the areas above and below the southern escarpment edge in mid-western parts of Vale. The generally unresponsive Greensand could be targeted, perhaps in drought conditions. The Greensand could also be used to test the potential of airborne multi-spectral remote sensing, especially using wavelengths outside of the usual visible range..

A number of sites are of special interest and their significance needs to be considered in a regional and national context. These include the Neolithic henge at Wilsford, the Bronze Age barrow cemetery at Charlton, possible Bronze Age enclosures at Horton and Rushall, midden sites at All Cannings Cross and Stanton St Bernard (not identified on aerial photographs), a possible Neolithic long barrow at Cat's Brain, possible prehistoric or Roman enclosures at Huish, Tawsmead Copse, Drove Farm and Manningford Bohune and the post-medieval garden remains at Rushall.

REFERENCES

Adkins, R & Petchey, M 'Secklow Hundred Mound and Other Meeting Place Mounds in England'. *Archaeol. J.* **141** 243-251

Allcroft, AH 1908 *Earthwork of England*. London: Macmillan

Allen M J 2005 *Considering Prehistoric Environmental Change on the Marlborough Downs* in Brown G, Field, D and McOmish, D 2005 *The Avebury Landscape, Aspects of the Field Archaeology of the Marlborough Downs*. Oxford: Oxbow

Amadio L and Clarke B 2012 Vale of Pewsey: field walking Wiltshire Archaeological and Natural History Society Archaeological Field Group. Unpublished report

Annable, F & Eagles, B 2010 *The Anglo-Saxon Cemetery at Blacknall Field, Pewsey, Wiltshire*. WANHS Monograph 4. Devizes

Andrews J, Dury A and Crittall E 1952 *Andrews' and Dury's map of Wiltshire, 1773* reduced facsimile edn in atlas form with an introduction by Crittall, E Wilts Record Society Devizes

Anon 1807 *The Eclectic Review* Vol 3 part 1. London: Longman, Hurst, Rees and Orme

Anon 1884 'The Harvest' in *The Times* 21 Aug 1884 10A

Anon 1911 'Agriculture' in *The Times* 11 September 1911 4B

Anon 1939a 'Training of the Militia' in *The Times* 8 May 1939, 9B

Anon 1939b 'Militia and Reservists' in *The Times* 31 May 1939, 14B

Anon 1939c 'Training of the Militia' in *The Times* 13 June 1939, 13B

Anon 1939d 'First Days in Camp' in *The Times* 17 July 1939, 12A

Anon 1939e 'Country Notes' in *Country Life* 22 July 1939

Anon 1939f 'Militia "Shaking Down" in Camp' in *The Times* 19 August 1939, 12D

Anon 1942 *Wiltshire Gazette* 23 December 1942

Atkinson, RJC, Piggott, CM and Sandars, NK 1951 *Excavations at Dorchester, Oxon*. Oxford: Ashmolean

Barber, M, Winton, H, Carpenter, E, Stoertz, C and Martin, L 2010 'The brood of Silbury? A remote look at some other sizeable Wessex mounds' in *Round Mounds and Monumentality* in Leary et al, Neolithic Studies Group Monograph **10**, Oxbow

Barrett, J and McOmish, D 2004 All Cannings Cross Diary 2003-2004 and John Barrett and David McOmish outline their exploratory work at All Cannings Cross in Wiltshire <http://www.wiltshire.gov.uk/artsheritageandlibraries/museumhistoryheritage/worldheritagesite/archaeologicalexavationsintheaveburyarea.htm> Accessed 2013

Barrett, J and McOmish, D 2009 'The Early Iron Age in Southern Britain: Recent Work at All Cannings Cross, Stanton St Bernard and East Chisenbury, Wiltshire' in M-J Roulière-Lambert 2009 *De l'âge du Bronze à l'âge du Fer en France et en Europe occidentale (Xe-Viie siècle avant J.C. - La Moyenne vallée du Rhône aux âges du Fer*: Revue archaéologique de L'Est

Barrett J, Bradley R and Green M 1991 *Landscapes, monuments and society: The prehistory of Cranborne Chase* Cambridge: Cambridge University Press

Barron, R S 1976 *The Geology of Wiltshire: a Field Guide*. Bradford-on-Avon: Moonraker Press

Betty, J 2007 'The Floated Water Meadows of Wessex: A Triumph of English Agriculture', in Cook and Williamson *Water Meadows History, Ecology and Conservation*. Bollington: Windgather Press 8-21

Bewley, R 2001 'Understanding England's Historic Landscapes: An Aerial Perspective'. *Landscapes* **2.1** 74-78

Boulden K 2011 Construction, colour and aesthetics of Bronze Age barrows on Wyke Down, Cranborne Chase, *Dorset Proceedings of the Dorset Natural History and Archaeological Society* **132**, 111-119

Bowden, M and McOmish, D 1987 The Required Barrier *Scottish Archaeological Review* **4**, 76-84

Bowden, M 2005 The middle Iron Age on the Marlborough Downs in Brown et al *The Avebury Landscape Aspects of the field archaeology of the Marlborough Downs*. 156-163. Oxford: Oxbow

Bradley 1907 *Round About Wiltshire*. 1945 edn London: Methuen

Bradley, R 2007 *The prehistory of Britain and Ireland*. Cambridge University Press. Cambridge

British History Online 'Royal forests: Appendices', *A History of the County of Wiltshire: Volume 4* (1959), pp. 433-457. URL: <http://www.british-history.ac.uk/report.aspx?compid=102826&strquery=tawsmead> Date accessed: 16 September 2013.

Brown G, Field, D and McOmish, D 2005 *The Avebury Landscape, Aspects of the Field Archaeology of the Marlborough Downs*. Oxford: Oxbow

Bruck, J 2000 Settlement, Landscape and Social Identity: The early-middle bronze Age transition In Wessex, Sussex and the Thames valley *Oxford Journal of Archaeology* Volume 19 No. 3 August 2000

Calder, A 1969 *The People's War Britain 1939-45*. London: Jonathan Cape

Camden, W. 1806. *Britannia* (Trans. R Gough) Vol 1. J Stockdale & J Nichols, London

Chandler, J 1993 *John Leland's Itinerary: Travels in Tudor England*. Stroud: Sutton

Chandler, J 1998 *Printed Maps of Wiltshire 1787-1844* WRS 52

Chandler, J 2000 *The Vale of Pewsey* Ex Libris Press

Claridge, J 1793 *General View of the Agriculture, in the County of Dorset, with observations on the means of its improvement*. London: W. Smith

Clark, JGD 1936 'The Timber Monument at Arminghall and its Affinities'. *Proc Prehist Soc* 2, 1-51

Cleal, R 2005 'The small compass of a grave: Early Bronze Age burial in and around Avebury and the Marlborough Downs' in Brown et al *The Avebury Landscape, Aspects of the Field Archaeology of the Marlborough Downs*. 115-132 Oxford: Oxbow

Cobbett, W 1830 *Rural Rides*. 1967 edn Middlesex: Penguin

Colt Hoare, R 1819 *Ancient Wiltshire*, North. London: Lackington, Hughes, Harding, Mavor & Jones

Comey M, Gaffney CF and Gater JA 1994 'Geophysical Investigations at the Charlton Villa, Wiltshire (England)' in *Archaeological Prospection* 1(2) 121-128

Comey M 2001 in Ellis P, 2001 *Roman Wiltshire and After: Papers in Honour of Ken Annable* Wiltshire Archaeological And Natural History

Crawford, OGS 1929 'Durrington Walls'. *Antiquity* 9 49-59

- Crawford, OGS & Keiller A 1928 *Wessex from the Air*. Oxford: Clarendon Press
- Crittall, E (ed) 1959 *The Victoria County History of Wiltshire IV*. London: OUP
- Crittall, E (ed) 1975 *The Victoria County History of Wiltshire X*. London: OUP
- Croad, S 1989 'Architectural Records in the Archive of the Royal Commission on the Historical Monuments of England'. *Transactions of the Ancient Monuments Society* 33, 23-44
- Crowley, D 1975 'Rushall' in Crittall, E (ed) 1975, *The Victoria County History of Wiltshire X* 136-145. London: OUP
- Crutchley, S 2000 *Salisbury Plain Training Area NMP*. English Heritage Survey Report
- Crutchley, S 2005 Recent Aerial Survey Work in the Marlborough Downs Region 34-42 in Brown G, Field, D and McOmish, D 2005 *The Avebury Landscape, Aspects of the Field Archaeology of the Marlborough Downs*. Oxford: Oxbow
- Cunnington M.E. 1911 'Knap Hill Camp'. *The Wiltshire Archaeological And Natural History Magazine*, 37, 42-65
- Cunnington, M 1923 *All Cannings Cross*. Devizes: George Simpson
- Cunnington, M 1934 *Introduction to the Archaeology of Wiltshire, From the Earliest Times to the Pagan Saxons*. Devizes
- Cunnington, M 1935 'A Saxon burial of the pagan period at Woodbridge, North Newnton'. *The Wiltshire Archaeological and Natural History Magazine*, 47, 265-267
- Cunnington, RH 1955 'Marden and the Cunnington Manuscripts'. *The Wiltshire Archaeological and Natural History Magazine*, 56, 4-11
- Danchev A & Todman D 2002 *War Diaries 1939-1945 Field Marshal Lord Alanbrooke*. London: Phoenix Press
- Davis, T 1794 *General View of the Agriculture of the County of Wilts. With observations on the means of its improvement*. London
- Defoe, D 1724-6 *A Tour Through the Whole Island of Great Britain*. 1986 edn *Middlesex: Penguin*
- Defoe, D (P Rogers ed) 1971 *A Tour Through the whole island of Great Britain*. London: Penguin

- De Norman, R 1997 *For Fuhrer and Fatherland*. Stroud: Sutton
- Dobinson, C 2001 *AA Command*. London: Methuen
- Donachie, J 1998 *A Landscape Prehistory: A Study of Sites and Monuments in the Vale of Pewsey, Wiltshire*. Unpublished dissertation (M.A.) - University of Reading, Department of Archaeology
- Draper, S 2004 'Roman Estates to English Parishes? The legacy of Desmond Bonney reconsidered', in Collins and Gerrard *Debating Late Antiquity in Britain AD300-700*. 55-64. Oxford: BAR Brit Ser 365
- Draper, S 2006 *Landscape, Settlement and Society in Roman and Early Medieval Wiltshire*. Oxford: BAR Brit Ser 419
- Duck, S 1730 *Poems on Several Occasions*. 1753 edn London
- Duke, E 1846 *The Druidical Temples of the County of Wilts*. London: John Russell Smith
- Eagles, B and Field, D 2004 'William Cunnington and the long barrows of the River Wylde' in R Cleal and J Pollard (eds) *Monuments and Culture: papers in honour of an Avebury archaeologist: Isobel Smith*, 47-69 Salisbury: Hobnob Press
- Farmer, D 1987 *The Oxford Dictionary of Saints*. Oxford: OUP
- Field, D 2008 *Use of land in Central Southern England during the Neolithic and Early Bronze Age* BAR British Series 458
- Field, D, Martin, L and Winton, H 2009 *The Hatfield Earthworks, Marden, Wiltshire: survey and investigation* English Heritage Research Department Report Series 96-2009
- Fleming, A 2007 'Don't Bin Your Boots!' *Landscapes* 8 (1) 85-99
- Flower, TB 1859 'Flora of Wiltshire: No. 2'. *The Wiltshire Archaeological and Natural History Magazine*, 5, 114-126
- Foot, W 2006 *Beaches, Fields, Street, and Hills the Anti-Invasion Landscapes of England, 1940*. CBA Research Report 144. York: CBA
- Ford 1982 Linear Earthworks on the Berkshire Downs *Berkshire Archaeological Journal* 71
- Ford, S Bowden, M, Gaffney, V, Mees, G 1990 'Dating Ancient Field Systems on the Berkshire Downs in England' *Expedition* volume 32 No. 2 44-51.

- Fowler, P 2004 East of Avebury: Ancient Fields in Local Context in Cleal, R and Pollard, J 2004 *Monuments and Material Culture Papers in Honour of an Avebury Archaeologist: Isobel Smith* 130-137
- Fulford M G, Powell A B, Entwistle R, & Raymond F 2006 *Iron Age and Romano-British Settlements and Landscapes of Salisbury Plain*. Wessex Archaeology Report 20: Salisbury
- Gaffney, V and Tingle, M 1989 The Maddle Farm Project : an integrated survey of prehistoric and Roman landscapes on the Berkshire Downs BAR British Series **200**
- Geddes I 2000 *Hidden Depths, Wiltshire's Geology and Landscapes* Bradford on Avon: Ex Libris Press
- Gerrard S 1993 *New Forest Barrows* Archaeology in Hampshire Annual Report for 1992 Hampshire County Council
- Gover, J G B, Mawer, A and Stenton, F M 1939 *The Place-names of Wiltshire* (English place Name Soc 16). Cambridge
- Griffiths D, Reynolds A, Semple S 2003 *Boundaries in Early Medieval Britain Anglo-Saxon Studies in Archaeology and History* 12. Oxford: Oxford University School of Archaeology
- Grinsell, LV 1957 'Archaeological Gazetteer' in Pugh, R and Crittall, E (eds) *The Victoria County History of Wiltshire* 1 pt 1, Victoria County History. London: OUP, 21-279
- Grinsell, LV 1958 *The Archaeology of Wessex*. London: Methuen
- Grundy G B 1919 'The Saxon land charters of Wiltshire (first series)' *Archaeological Journal*, **76**, 143-301
- Gunter, J 2009 *Project Design for a Field-Walk Survey in the Vale of Pewsey, Wiltshire* Wiltshire Archaeological and Natural History Society Archaeological Field Group unpublished document
- Hall, D 1982 *Medieval Fields*. Aylesbury: Shire
- Harding, A F and Lee, G E 1987 *Henge monuments and related sites of Great Britain : air photographic evidence and catalogue* British
- Harding J 2003 *Henge Monuments of the British Isles* Tempus
- Hayman, R 2003 *Trees: Woodlands and Western Civilization*. London: Hambledon and London

Home, P 2009 A Strategy for the National Mapping Programme English Heritage Internal report <http://www.english-heritage.org.uk/professional/research/landscapes-and-areas/national-mapping-programme/nmp-future/>

Hudson, W 1910 *A shepherd's Life*. 1979 edn London: Futura

Johnson, P and Walters, B 1988 'Exploratory Excavations of Roman Buildings at Cherhill and Manningford Bruce'. *The Wiltshire Archaeological and Natural History Magazine*, **82**, 77-91

Kendrick, T & Hawkes, C 1932 *Archaeology in England and Wales 1914-1932*. London: Methuen

Kerridge, E 1959 'Agriculture 1500-1793' in Crittall, E (ed) *The Victoria County History of Wiltshire IV*, Victoria County History. London: OUP, 43-64

Kderqvist 1903 *Dialect of Pewsey*. Philological Society

Kirkham, G 2005 Prehistoric Linear Ditches on the Marlborough Downs in Brown et al *The Avebury Landscape Aspects of the Field Archaeology of the Marlborough Downs* 149-155

Lawson, A 2000 *Potterne 1982-5: Animal Husbandry in Later Prehistoric Wiltshire*. Wessex Archaeology Report 17

Leary, J, Darvill, T and Field, D (eds) 2010 *Round Mounds and Monumentality* Neolithic Studies Group Monograph 10, Oxbow

Leary, J and Field, D 2010 Recent Work at Marden Henge, Wiltshire *English Heritage Research News Number 15 Autumn 2010* 10-13

Linford P K , Payne A W, and Linford, N T 2013a *Marden Barrow Cemetery and Wilsford Henge, Wiltshire: Report on Geophysical Surveys* English Heritage Research Report 8/2013

Linford P K , Payne A W, and Linford, N T 2013b *Charlton Barrow Cemetery and Roman Villa, Wiltshire: Report on Geophysical Survey, July 2012* English Heritage Research Report 9/2013

Lobb, S 1995 'Excavation at Crofton Causewayed Enclosure'. *The Wiltshire Archaeological and Natural History Magazine*, **88**, 18-25

Long, W 1858 Abury. *The Wiltshire Archaeological and Natural History Magazine*, **4**, 309-363

- Longley, E 2008 *Edward Thomas The Annotated Collected Poems*. Bloodaxe Books
- Markham & Lawson 1668 *A Way to get Wealth*. London: John Streater
- Martin, L 2008 *Marden Henge, Wiltshire Report on Geophysical Survey, April 2008* English Heritage Research Department Report Series 70-2008
- Mawer, A and Stenton, F 1939 *English Place Names Society vol 16: Wiltshire*
- McMahon, P 2004 *The Archaeology of Wiltshire's Towns: an extensive urban survey. Market Lavington..* Trowbridge: Wiltshire County Archaeology Service
- McOmish D, Field D & Brown G 2002 *The Field Archaeology of Salisbury Plain Training Area*. Swindon: English Heritage
- McOmish, D 2005 'Bronze Age Land Allotment on the Marlborough Downs' in Brown et al *The Avebury Landscape Aspects of the Field Archaeology of the Marlborough Downs*. 133-136 Oxford: Oxbow
- Medlicott, H 1891 'Notes on Places visited by the Society in 1890'. *The Wiltshire Archaeological and Natural History Magazine*, **25**, 280-282
- Motion A 1980 *The Poetry of Edward Thomas*. London: Routledge & Kegan Paul
- Muir, R 2004 *Landscape Encyclopaedia*. Bollington: Windgather Press
- Olivier, E 1951 *Wiltshire*. London: Robert Hale
- Oswald, A, Dyer, C and Barber, M 2001 *The Creation of Monuments* Swindon: English Heritage
- Owoc M A 2004 A Phenomonology of the Buried Landscape, soil as a material culture in the Bronze Age of south-west Britain in Boivin N and Owoc M A (Eds) *Soils, Stones and Symbols: Cultural Perceptions of the Mineral World* pp 107-122 UCL Press
- Pantos, A 2003 'On the Edge of Things': The Boundary Location of Anglo-Saxon Assembly Sites', in Griffiths et al 2003
- Parker Pearson M 2012 *Stonehenge: Exploring the greatest Stone Age mystery* London
- Parker Pearson, M, Pollard, J, Tilley, C, Thomas, J, Richards, C, and Welham, K 2005 *The Stonehenge Riverside Project Summary Interim Report*
<http://www.shef.ac.uk/content/1/c6/02/21/27/PDF-Interim-Report-2005-summary.pdf>

Parker Pearson, M, Pollard, J, Richards, C, Thomas, J, Tilley, C, Welham, K, with Allen, M, Bennett, W, Field, D, French, C, Linford, N, Payne, A, Robinson D, and Ruggles, C 2006 *The Stonehenge Riverside Project Summary Interim Report On The 2006 Season* <http://www.shef.ac.uk/content/1/c6/02/21/27/summary-interim-report-2006.pdf>

Parker Pearson, M 2007 'The Stonehenge Riverside Project: excavations at Durrington Walls', in L Larsson and M Parker Pearson (eds) *From Stonehenge to the Baltic* British Archaeological Reports International Series 1692 Oxford: Archaeopress

Pawson, E 1977 *Transport and Economy The Turnpike Roads of Eighteenth Century Britain*. London: Academic Press

Pembroke, H 1762 *A Method of Breaking Horses and Teaching Soldiers to Ride Designed for the Use of the Army*. London: J Hughs

Pevsner 1963 *The Buildings of England: Wiltshire*. Middlesex: Penguin Books

Piggott, S 1938 'The Early Bronze Age in Wessex'. *Proc Prehist Soc* **4**, 52-106

Piggott, S 1971 'An Archaeological Survey and Policy for Wiltshire Part III: Neolithic and Bronze Age'. *The Wiltshire Archaeological and Natural History Magazine*, **66**, 47-57

Pollard, J and Reynolds, A 2002 *Avebury The Biography of a Landscape*. Stroud: Tempus

Pollard, J 2005 Memory, Monuments and Middens in the Neolithic landscape in Brown et al *The Avebury Landscape Aspects of the field archaeology of the Marlborough Downs*. 103-114. Oxford: Oxbow

Poulett Scrope, G 1859 'Geology of Wiltshire'. *The Wiltshire Archaeological and Natural History Magazine*, **5**, 89-113

Priddle, R 2003 *Wings Over Wiltshire An Aeronautical History of Wiltshire*. ALD Design and Print

Pugh, R 1953 *The Victoria County History of Wiltshire VII*. London: OUP

Reynolds, A 1999 *Later Anglo-Saxon England: Life & Landscape*. Stroud: Tempus

Reynolds, A 2002a 'Burials, boundaries and charters in Anglo-Saxon England: a reassessment', in Lucy, S and Reynolds, A *Burial in Early Medieval England and Wales*. London: Society for Medieval Archaeology Monograph 17, 171-194

Reynolds, A 2002 'Burials, Boundaries and Charters' in Lucy, S & Reynolds, A *Burial in Early medieval England and Wales*. London: The Society for Medieval Archaeology

Reynolds, A 2005 From pagus to parish: Territory and Settlement in the Avebury Region from the Late Roman Period in Brown et al *The Avebury Landscape Aspects of the Field Archaeology of the Marlborough Downs* 164-180

Rickman, J 1840 'On the Antiquity of Abury and Stonehenge'. *Archaeologia* **28**, 399-419

Roseaman, J 1991 'An archaeological study of field and parish boundaries in North Newnton'. *The Wiltshire Archaeological and Natural History Magazine*, **84**, 71-82

Semple, S 1998 'A Fear of the Past: The Place of the Prehistoric Burial Mound in the ideology of Middle and Later Anglo-Saxon England' *World Archaeology* **30(1)** 109-126

Semple, S and Langlands, A 2001 'Swanborough Tump'. *The Wiltshire Archaeological And Natural History Magazine*, **94**, 239-242

Semple, S 2003 'Burials and Political Boundaries in the Avebury Region, North Wiltshire' in Griffiths et al 2003

Small F 1999 *Avebury World Heritage Site Mapping Project, Wiltshire*. English Heritage Survey Report

Small, F 2002 *The Lambourn Downs Report of the Aerial Photographic Transcription and Analysis*. AER/13/2002. Swindon: English Heritage

Smith, AC 1884 *The Wiltshire Archaeological and Natural History Magazine*, **19**?

Smith, N 1999 'Charlton, Wiltshire – the development of a chalkland settlement', in Pattison et al *Patterns of the Past Essays in Landscape Archaeology for Christopher Taylor*. Oxford: Oxbow

Smith, N 2005 'Medieval and Later Sheep Farming on the Marlborough Downs' in Brown et al *The Avebury Landscape Aspects of the field archaeology of the Marlborough Downs*. 191-201. Oxford: Oxbow

Smith, W 1806 *Observations on the Utility, Form and Management of Water Meadows, and the Draining and Irrigating of Peat Bogs with an Account of Prisleys Bog*. London: John Harding

Stevenson, J 1975a 'Beechingstoke' in Crittall, E (ed) *The Victoria County History of Wiltshire* X, Victoria County History. London: OUP, 14-19

Stevenson, J 1975b 'Urchfont' in Crittall, E (ed) *The Victoria County History of Wiltshire* X, Victoria County History. London: OUP, 173-801

- Stevenson, J 1975c 'Wilsford' in Crittall, E (ed) *The Victoria County History of Wiltshire X*, Victoria County History. London: OUP, 204-213
- Straker V, Brown A, Fyfe R, Jones J and Wilkinson K 2008 Later Bronze Age and Iron Age Environmental Background in C J Webster (Ed) *The Archaeology of South West England, South West Archaeological Research Framework Resource Assessment and Research Agenda* pp 103-116 Online document Last Accessed July 2013
http://www.l.somerset.gov.uk/archives/hes/downloads/swarf_3.pdf
- Stoertz C 2012 The North Cotswolds. A Highlight Report for the National Mapping Programme <http://www.english-heritage.org.uk/professional/research/landscapes-and-areas/national-mapping-programme/north-gloucestershire-cotswolds-nmp/>
- Taylor, C 2002 'The Seventeenth Century Water-Meadows at Babraham', in *Proceedings of the Cambridge Antiquarian Society*, **91** 103-118
- Taylor, C 2007 'The Archaeology of Water Meadows' in Cook and Williamson *Water Meadows History, Ecology and Conservation*. Bollington: Windgather Press 22-34
- Thomas, R J 2003 *Prisoner of War Camps (1939-1948)*. Swindon: English Heritage
- Thomas, RS (ed) 1964 *Selected Poems of Edward Thomas*. London: Faber and Faber
- Thompson, F 'Agriculture since 1870' in Crittall, E (ed) 1959 *The Victoria County History of Wiltshire X*. London: OUP
- Thompson, N P 1971 'Archaeological Research in the Pewsey Vale'. *The Wiltshire Archaeological and Natural History Magazine*, **66**, 58-77
- Thurnam J 1869 'On Ancient British Barrows especially Those of Wiltshire and the Adjoining Counties (Part I Long Barrows)'. *Archaeologia* **42**, 161-244
- Timby, J in Ellis P, 2001 *Roman Wiltshire and After: Papers in Honour of Ken Annable* Wiltshire Archaeological And Natural History
- Tingle, M 1991 *The Vale of the White Horse Survey*. Oxford: BAR Brit Ser 218
- Tubb P 2009 *The Bronze Age-Iron Age Transition in the Vale of Pewsey, Wiltshire*. University of Bristol: Unpublished PhD Thesis
- Upex, S 2002 'Landscape Continuity and the Fossilization of Roman Fields'. *Archaeol. J.* **159** 77-108
- Vancouver 1810 Board of Agriculture Hants

- Waddington, K and Sharples, N 2011 *The excavations at Whitchurch 2006-2009, An Interim Report*. Cardiff Studies in Archaeology Specialist Report 31. Department of Archaeology School of History Archaeology and Religion, Cardiff University.
- Waddington, K.E. 2009 *Reassembling the Bronze Age: exploring the southern British midden sites*. Cardiff University: unpublished PhD thesis.
- Wainwright, GJ 1969 'A Review of Henge Monuments in the Light of Recent Research', in PPS 35 112-133
- Wainwright, GJ 1971a *Durrington Walls Excavations 1966-1968*. London: The Society of Antiquaries
- Wainwright, GJ 1971b 'The excavation of a Late Neolithic enclosure at Marden, Wiltshire'. *The Antiquaries Journal* 51 177-239
- Whitlock, R 1949 *Wiltshire*. London: Paul Elek
- Whittington, G 1962 'The distribution of strip lynchets'. *The Institute of British Geographers Transactions and Papers* 31 115-130
- Wilkinson K and Straker V 2008 Neolithic and Early Bronze Age Environmental Background in C J Webster (Ed) *The Archaeology of South West England, South West Archaeological Research Framework Resource Assessment and Research Agenda* pp 63-74 Online document Last Accessed July 2013
http://www1.somerset.gov.uk/archives/hes/downloads/swarf_3.pdf
- Williams, H 1998 'Monuments and the past in early Anglo-Saxon England' in Bradley, R & Williams, H *The Past in the Past*. London: Routledge
- Williams, H 2006 *Death and Memory in Early Medieval Britain*. Cambridge: CUP
- Williams, P and Newman, R 2006 *Market Lavington, Wiltshire: An Anglo-Saxon cemetery and settlement*. Wessex Archaeology Report 19
- Williams-Freeman, JP 1915 *An Introduction to Field Archaeology as Illustrated by Hampshire*. London: Macmillan
- Williamson, T and Cook, H 2007 'Introducing Water Meadows', in Cook and Williamson *Water Meadows History, Ecology and Conservation*. Bollington: Windgather Press 1-7
- Yates D T 2007 *Land, power and prestige : Bronze Age field systems in southern England* Oxford: Oxbow

Young, A 2008 *The Aggregate Landscape of Hampshire, Results of NMP Mapping* English Heritage/Cornwall Council Project Report <http://www.english-heritage.org.uk/professional/research/landscapes-and-areas/national-mapping-programme/hampshire-alsf-nmp/>

APPENDIX METHODS

The Marden environs NMP and lidar assessment project was carried out using standard National Mapping Programme (NMP) methodology as specified in the NMP Manual (2007).

Sphere of Interest

All archaeological features, visible on aerial photographs or lidar, dating from the Neolithic to the twentieth century were mapped and recorded. This included sites visible as cropmarks and earthworks but also structures, in particular those relating to early twentieth century military activities.

Sources

All aerial photographs from the English Heritage Archive, Cambridge University, and Wiltshire HER collections were consulted. All vertical photographic prints were viewed using a stereoscope. Environment Agency 1m and 2m resolution lidar jpegs were used. Online sources used were Google earth and Microsoft live local. Readily available documentary sources (historic maps etc) and synthesised background information on the area (published material, NRHE and HER records) were consulted.

Photo rectification

Rectified and georeferenced scans or digital images were produced by transforming oblique and vertical photographs using the University of Bradford AERIAL5 programme. Control information was taken from digital 1:2500 scale Ordnance Survey mastermap data. The relevant scanned photograph(s) were usually rectified to an average level of accuracy of 2m or less to the map. This gives an overall accuracy of plotted features, to true ground position, dependent on the accuracy of the Mapbase, usually guaranteed by the OS to be within $\pm 5-15\text{m}$. A digital terrain model function, using OS 5m interval contour data, was used to compensate for undulating terrain. Georeferenced static jpeg 1km tiles were sourced from the Environment Agency and covered the southern parts of the vale – these were a mix of 1m and 2m resolution. The jpegs were manipulated in Photoshop to highlight potential archaeological features.

Digital mapping

Archaeological features were traced from georeferenced and rectified photographs or lidar tiles using AutoCAD. Archaeological features were depicted on different layers based on form (e.g. bank, ditch etc). A monument polygon was created for each site. Basic indexing information (e.g. period and type) was attached to groups of objects, in

AutoCAD, to aid analysis of the mapping. A unique identifier number was attached to each group of objects corresponding to the monument description in AMIE. The mapping is available on the EH corporate GIS (for internal EH Use only).

Database recording

NRHE monument records were created or enhanced for each site mapped and/or analysed as part of the project. The monument record consists of a textual description of the site linked to indexed location, period, type and form of evidence. It also includes digital cross references to other monuments and datasets (usually the HER) as well as a list of the main aerial photo, and other, sources for the site. An NRHE 'Event' record was created for this component of the English Heritage projects on Marden to provide contextual meta-data during and after the project. NRHE archive records were created for each quarter sheet. The event and archive records are linked to each monument record.

Monument Statistics

The statistics provided here provide a broad overview of the evidence for archaeology in the project area. Therefore features which cover a much larger physical area, such as settlement and cultivation remains are statistically under represented, in terms of monument records, compared to smaller, more discrete archaeological remains, such as round barrows or isolated enclosures. The nature of archaeological survey from aerial photographs means, generally speaking, it is relatively large earthworks, cropmarks and structures which are recorded. In total, 304 new monument records were created and 101 records were amended during the project.

In the area resurveyed, covered by quarter sheets SU 05 NW, SU 05 NE and SU 15 NW, 258 records were created and 63 amended out of 169 records already covering this area. Therefore new information was added to 37% of existing records which mainly comprised evidence for 'monumental' structures. New information was not generally added to records which mainly described buildings, finds, or other archaeological structures not visible from the air or within the remit of the project.

New NMP survey	SU 05 NW	SU 05 NE	SU 15 NW
New	46	95	117
Amended	10	24	29
Unaltered	25	23	58
Total	81	142	204

The area in and around Marden Henge had a relatively 'low monument density' but the NMP survey resulted in a significant increase, by just over 150%, in numbers of NRHE

monument records, for the newly surveyed project area. More significantly these monument records now have accompanying accurate and detailed digital depictions of the archaeological features described.

46 new records were created and 38 records amended in the NMP areas revised using aerial photographs available subsequent to the Avebury WHS mapping project.

Revised NMP areas	SU 05 SE	SU 06 SW	SU 06 SE	SU 15 NE	SU 15 SW	SU 15 SE	SU 16 SW
New	5	10	10	1	1	0	14
Amended	1	15	12	2	0	1	9

Archive

The main repository for all material is the English Heritage Archive, the National Monuments Record, and digital or hard copy are available on request. The mapping is stored on the EH corporate GIS (internal use only). The monument records are also accessible online via the Pastcape website www.pastscape.org.uk. This project report is available as a PDF on the English Heritage website www.english-heritage.org.uk. The NMP mapping, monument records and the report were supplied to the Wiltshire HER.



ENGLISH HERITAGE RESEARCH AND THE HISTORIC ENVIRONMENT

English Heritage undertakes and commissions research into the historic environment, and the issues that affect its condition and survival, in order to provide the understanding necessary for informed policy and decision making, for the protection and sustainable management of the resource, and to promote the widest access, appreciation and enjoyment of our heritage. Much of this work is conceived and implemented in the context of the National Heritage Protection Plan. For more information on the NHPP please go to <http://www.english-heritage.org.uk/professional/protection/national-heritage-protection-plan/>.

The Heritage Protection Department provides English Heritage with this capacity in the fields of building history, archaeology, archaeological science, imaging and visualisation, landscape history, and remote sensing. It brings together four teams with complementary investigative, analytical and technical skills to provide integrated applied research expertise across the range of the historic environment. These are:

- * Intervention and Analysis (including Archaeology Projects, Archives, Environmental Studies, Archaeological Conservation and Technology, and Scientific Dating)
- * Assessment (including Archaeological and Architectural Investigation, the Blue Plaques Team and the Survey of London)
- * Imaging and Visualisation (including Technical Survey, Graphics and Photography)
- * Remote Sensing (including Mapping, Photogrammetry and Geophysics)

The Heritage Protection Department undertakes a wide range of investigative and analytical projects, and provides quality assurance and management support for externally-commissioned research. We aim for innovative work of the highest quality which will set agendas and standards for the historic environment sector. In support of this, and to build capacity and promote best practice in the sector, we also publish guidance and provide advice and training. We support community engagement and build this in to our projects and programmes wherever possible.

We make the results of our work available through the Research Report Series, and through journal publications and monographs. Our newsletter *Research News*, which appears twice a year, aims to keep our partners within and outside English Heritage up-to-date with our projects and activities.

A full list of Research Reports, with abstracts and information on how to obtain copies, may be found on www.english-heritage.org.uk/researchreports

For further information visit www.english-heritage.org.uk

