

STONEHENGE WORLD HERITAGE SITE LANDSCAPE PROJECT THE CURSUS BARROWS & SURROUNDING AREA

ARCHAEOLOGICAL SURVEY REPORT

Lynn Amadio and Sharon Bishop



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STONEHENGE WORLD HERITAGE SITE LANDSCAPE PROJECT

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Lynn Amadio and Sharon Bishop

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SUMMARY

The area between the A344 and the Fargo Plantation, to the north-west of Stonehenge, was surveyed by English Heritage in April 2009 as part of the Stonehenge World Heritage Site (WHS) Landscape Project. Further details were added in 2010. The survey area contains the earthworks of part of the Cursus Barrow Group, sections of a post-medieval road and two dewponds, and early 20th-century military training facilities. The Cursus Barrow Group comprises a linear arrangement of late Neolithic and Early Bronze Age round barrows, 10 of which are described here (Amesbury 43 to Amesbury 52). The group continues west through Fargo Plantation, where the trees prevented full survey, and includes the 'Monarch of the Plain' (Amesbury 55) and several other barrows, which are the subject of a separate report (Komar and Bishop 2010).

CONTRIBUTORS

Lynn Amadio (MSc in Professional Archaeology student, Oxford University), Mark Bowden, David Field (Archaeological Survey & Investigation) and Anna Komar (EPPIC Placement in Archaeological Survey & Investigation) carried out the analytical field survey. Lynn Amadio initiated this report, which was completed by Sharon Bishop (Archaeological Survey & Investigation).

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FRONT COVER

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DATE OF SURVEY

The survey was conducted from April to May 2009 and in June 2010.

ARCHIVE LOCATION

The project archive is held at:

National Monuments Record Centre (NMRC),
English Heritage
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Swindon
SN2 2GZ

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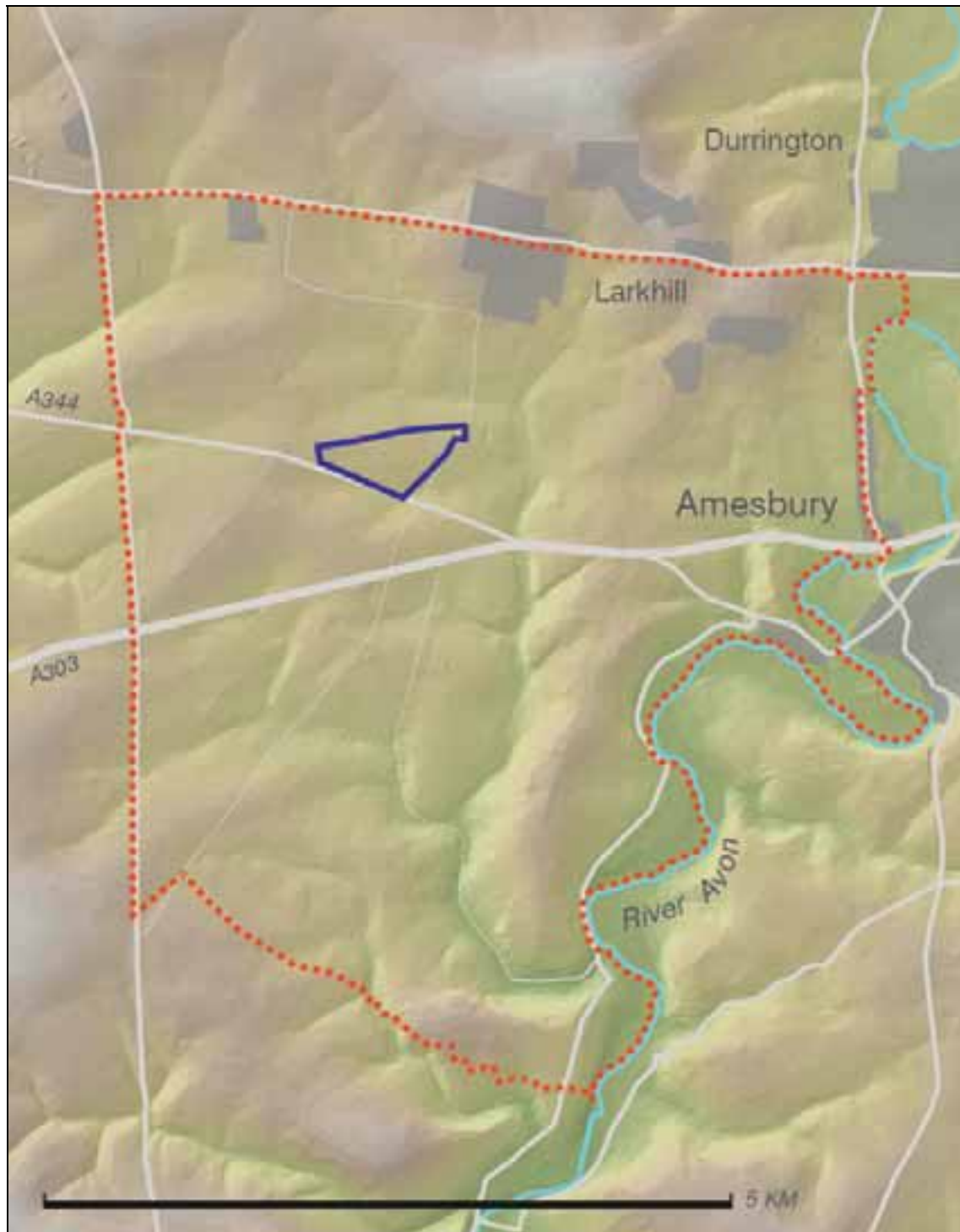
INTRODUCTION

The area between the A344 and the western end of the earthwork known as the Stonehenge Cursus, to the north-west of Stonehenge, was surveyed in April 2009 and June 2010 by English Heritage. The survey is part of the Stonehenge World Heritage Site (WHS) Landscape Project, which is designed to provide fresh information and up to date mapping for the planned new Stonehenge visitor centre; to improve understanding of the WHS necessary for its appropriate management (Young *et al* 2009, Aim 6), and to supplement information from recent university interventions in the area.

The main survey area discussed in this report comprises an irregular quadrilateral centred at NGR SU 1175 4272 which measures a maximum of 1.1km east to west by 600m north to south. It is bounded by the A344 to the south, Fargo Plantation to the west, the earthworks known as the Stonehenge Cursus to the north and a by-way to the east. A small area immediately east of the by-way is also described here. The surveyed area is located c 13km north-north-west of Salisbury, within the parish of Amesbury, Wiltshire (Fig 1) and occupies a ridge of Upper Chalk which extends eastwards from the watershed of the River Till, mostly at a height of between 100m and 110m. The overlying soil is shallow and well drained.

The survey area is situated within the Stonehenge WHS boundary and is subject to an Article 4 direction removing normally permitted development rights (Young *et al* 2009, Maps 4-6). It is open access land owned and managed by the National Trust, who purchased the land in 1927-1928 after a national appeal (Ashbee 1978, 1) and is well known for its well preserved round barrow cemetery that visitors find easily accessible from the current Stonehenge car park.

The round barrows are Scheduled Ancient Monuments and are referred to here by their Grinsell numbers, which are generally accepted in the literature (Grinsell 1957). Table 1 provides a concordance of the various numbering systems applied to each monument. It includes the National Monuments Record's (NMR's) archaeological database, the county Historic Environment Record (HER) and the Register of Scheduled Monuments (RSM) number for each round barrow. The appendix presents the measurements of the surveyed barrows (Table 3).



*Fig 1: The location of the survey area within the WHS.
The survey area is outlined in blue, within the dashed orange line of the WHS boundary.*

Table 1: Concordance.

	NMR's Archaeological Database		Scheduled Monument Number (RSM)	Wiltshire HER	Hoare's Barrow number (1812)	Goddard's number (1913)	Grinsell's number (1957)
Monument Type	NMR Number	Monument Number					
ROUND BARROWS							
BARROW CEMETERY	SUI4SW87	219681					
BARROW CEMETERY	[SUI4SW133]	[219815]		(previously used for Amesbury 43 to Amesbury 48)			
ROUND BARROW	SUI4SW420	942659	10341	SUI4SW733	34	Amesbury 49	Amesbury 49
HENGIFORM / CAUSEWAYED RING DITCH / PIT CIRCLE / TIMBER CIRCLE	SUI4SW421	942661	10340	SUI4SW734	35	Amesbury 50	Amesbury 50
ROUND BARROW / CAUSEWAYED RING DITCH	SUI4SW422	942662	10339	SUI4SW735	36	Amesbury 51	Amesbury 51
BOWL BARROW	SUI4SW423	942672	10338	SUI4SW736	37	Amesbury 52	Amesbury 52
BELL BARROW	SUI4SW425	942691	10452	SUI4SW744	28	Amesbury 43	Amesbury 43
BELL BARROW	SUI4SW426	942696	10452	SUI4SW745	29	Amesbury 44	Amesbury 44
BELL BARROW	SUI4SW427	942703	10342	SUI4SW746	30	Amesbury 45	Amesbury 45
BELL BARROW	SUI4SW428	942705	10342	SUI4SW747	31	Amesbury 46	Amesbury 46
BELL BARROW	SUI4SW429	942709	10342	SUI4SW748	32	Amesbury 47	Amesbury 47
CAUSEWAYED RING DITCH / SAUCER BARROW	SUI4SW430	942712	10342	SUI4SW749	33	Amesbury 48	Amesbury 48
	NMR's Archaeological Database		Scheduled Monument Number (RSM)	Wiltshire HER	Goddard's number (1913)	Grinsell's number (1957)	RCHME (1979)
Monument Type	NMR Number	Monument Number					
POSSIBLE BARROWS							
ROUND BARROW	SUI4SW29	219507		SUI4SW740		Amesbury 48a	
ROUND BARROW	SUI4SW184	219938		SUI4SW750			
ROUND BARROW / MILITARY EARTHWORK	SUI4SW551	1119431	10341	SUI4SW60A			Amesbury 114
ROUND BARROW / CAUSEWAYED RING DITCH	SUI4SW552	1119671		SUI4SW60B			Amesbury 115
SEMI-CIRCULAR CROPMARK	SUI4SW553	1119679		SUI4SW62G			
	NMR's Archaeological Database		Scheduled Monument Number (RSM)	Wiltshire HER			
Monument Type	NMR Number	Monument Number					
OTHER FEATURES							
TOLL ROAD	SUI4SW225	959704			SUI4SW61Y		
PRACTICE TRENCH / MINEFIELD	SUI4SW668	1363186					
PISTOL RANGE	SUI4SW670	1363208					
WOOD BANK	SUI4SW735	1518869					
DEWPOND	SUI4SW741	1527390					
DEWPOND	SUI4SW742	1527397					

LANDSCAPE HISTORY

Environmental evidence suggests large natural clearings or glades of grassland, scrub and some trees were a natural part of an extensive open forest that stretched across the southern English chalklands in the early post-glacial period (Allen & Scaife 2007). This openness, with the opportunities for hunting and gathering it provided, attracted Mesolithic communities who constructed what is perhaps the first monument in the Stonehenge landscape: the post holes in what was later to become the Stonehenge car park (Vatcher & Vatcher 1973; Young *et al* 2009, 155).

This early open landscape may be a contributing factor to the accumulation and density of later, Neolithic and Bronze Age monuments. Localised clearance of existing woodland is thought to have taken place in the early Neolithic around monuments such as causewayed enclosures and long barrows. The large number of round barrows constructed in an open established downland landscape indicates that much of the remaining woodland was probably cleared by around 2000BC (Allen & Scaife 2007).

More diverse activities are evidenced in the wider Stonehenge landscape by the Middle Bronze Age. Large areas of Salisbury Plain were converted to agriculture and 'Celtic' fields became widespread (McOmish *et al* 2002, 52). The early soils were fertile and easily tilled but subject to erosion through rainsplash, soil creep and occasional recurrent mass erosion events (Allen & Scaife 2007, 29). Erosion changes the soil and the shape of the landscape, eroding hilltops and infilling valleys.

Throughout the Iron Age farming, based on the Till and Avon valleys, appears to have been the predominant activity in the Stonehenge landscape (Young *et al* 2009, 156) although it has left little evidence immediately around the survey area other than perhaps re-use and modification of nearby 'Celtic' fields (Yates 2007). The impressive hillfort known as Vespasian's Camp was constructed near the River Avon but tree cover has prevented its full archaeological investigation (Young *et al* 2009, 156). Roman period farmsteads and small unenclosed villages, which also reused earlier fields, are known across Salisbury Plain. The nearest are those to the west along the Till, with one to the north of Robin Hoods Ball causewayed enclosure (McOmish *et al* 2002, 88-104). Little is known of corresponding activity along the Avon valley in this period and Amesbury itself might be expected to mask traces of Roman settlement.

By the early medieval period Amesbury had become the centre for a widespread royal estate, although little is known of how the surrounding landscape was used (Young *et al* 2009, 156). The large round barrow known as the 'Monarch of the Plain' (Amesbury 55; Komar and Bishop 2010) was used as a marker when defining the parish boundary between Amesbury and Winterbourne Stoke, incorporating the survey area into the parish of Amesbury at an early date. Sheep and corn husbandry dominated Amesbury from the medieval period to the 20th century. The parish comprised extensive downland pasture at either end, arable on the chalk nearest the settlements and meadows beside

the River Avon (RCHME 1979; Crowley 1995, 13). The survey area formed part of Amesbury Countess Down in the far west of the parish (Bond 1991, fig H1).

Its continued pastoral use in the post-medieval period is confirmed by the presence of two dewponds for watering livestock and by land-use details on tithe and other maps. The turnpike road along the southern side of the survey area is depicted by dashed lines on Andrews & Drury's 1773 map (WANHS 1952), which suggests that it passed through an unenclosed landscape. Small portions of the downs had started to be broken up as temporary arable fields, known as 'bumbake', during the 18th century. Hoare observed that Amesbury 54, his Barrow 39, had 'been some years under tillage' (1812, 163) and in 1823 blocks of arable were located south of the turnpike road and immediately to the west of the survey area (RCHME 1979, map 3). The 1846 Tithe Award lists the survey area as pasture known as 'Countess Court Down', with a plantation flanking its western side (WHC TA Amesbury; Bond 1991, H5). The Fargo Plantation occupies one of the former arable plots and takes its name from the adjacent field to the west, located in the far north-eastern corner of Winterbourne Stoke parish (Gover *et al* 1939, 490).

During the early 20th century the survey area was used for military training associated with Larkhill Camp. It was also cultivated on a regular basis and after the Second World War the military sites were incorporated into the arable fields. They were removed from cultivation in the 1970s, converted back to pasture (Richards 1990, 7) and became the site of the free Stonehenge rock festival between the early 1970s and 1985. In 2009 and 2010 the field was used for grazing cattle.

The by-way along the eastern side of the main survey area is the former public highway between Lake and Netheravon, which passed within the bank and ditch of Stonehenge very close to the stones but was diverted after the First World War (Chippendale 1978, 115). Its route between the Cursus and the A344 was diverted further west again in the later 20th-century to make way for the new Stonehenge visitors' car park.

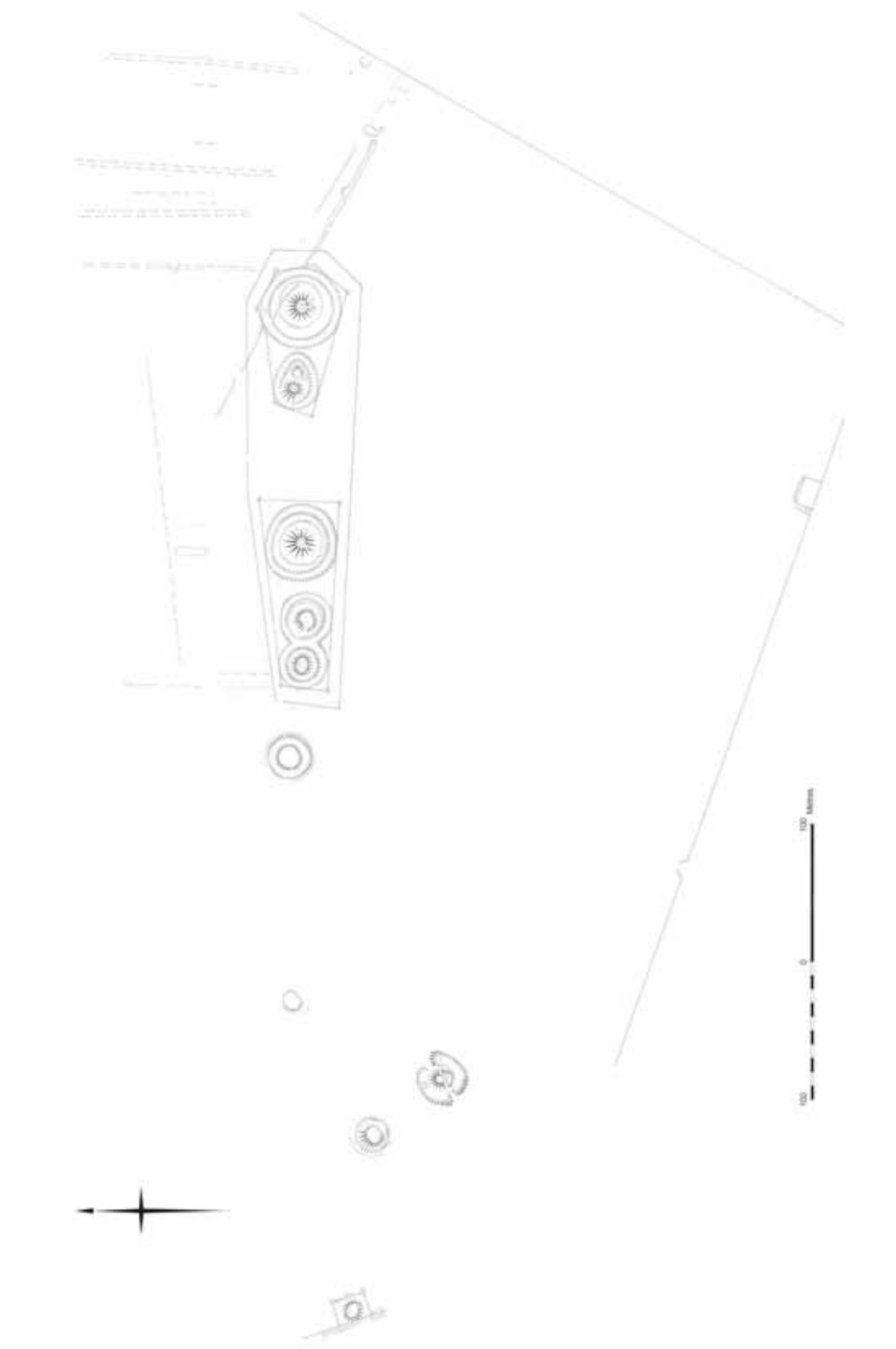


Fig 2: The surveyed earthworks
 The survey plan is reduced to fit A4 from the original 1:1,000 scale.

THE EARTHWORKS

The earliest earthworks within the survey area are the round barrows that form part of the Cursus Barrow Group, which continues to the west through Fargo Plantation, beyond the surveyed earthworks described here (Fig 2; see Komar and Bishop 2010). The Cursus itself is discussed elsewhere (Pearson forthcoming). Later earthworks surveyed comprise one of the post medieval dewponds, an abandoned mid-18th century turnpike road, part of the 19th-century Fargo Plantation wood bank and early 20th-century military training features associated with Larkhill Camp.

At the time of survey the fences surrounding the easternmost groups of round barrows (Amesbury 43-47) closely followed the outer lip of the ring ditches. In addition to the damaging activity of digging the postholes, animals grazing in the adjacent field had eroded hollows around each of the fence posts. In early 2010 the fences were moved further away from the round barrows to enhance their management. The location of former fence posts, gates and stiles can be traced as slight earthwork hollows and a corresponding change in vegetation. Some of these hollows may have been dug during the free rock festivals. Additional features were surveyed to the east of the by-way in 2010 (Fig 7).

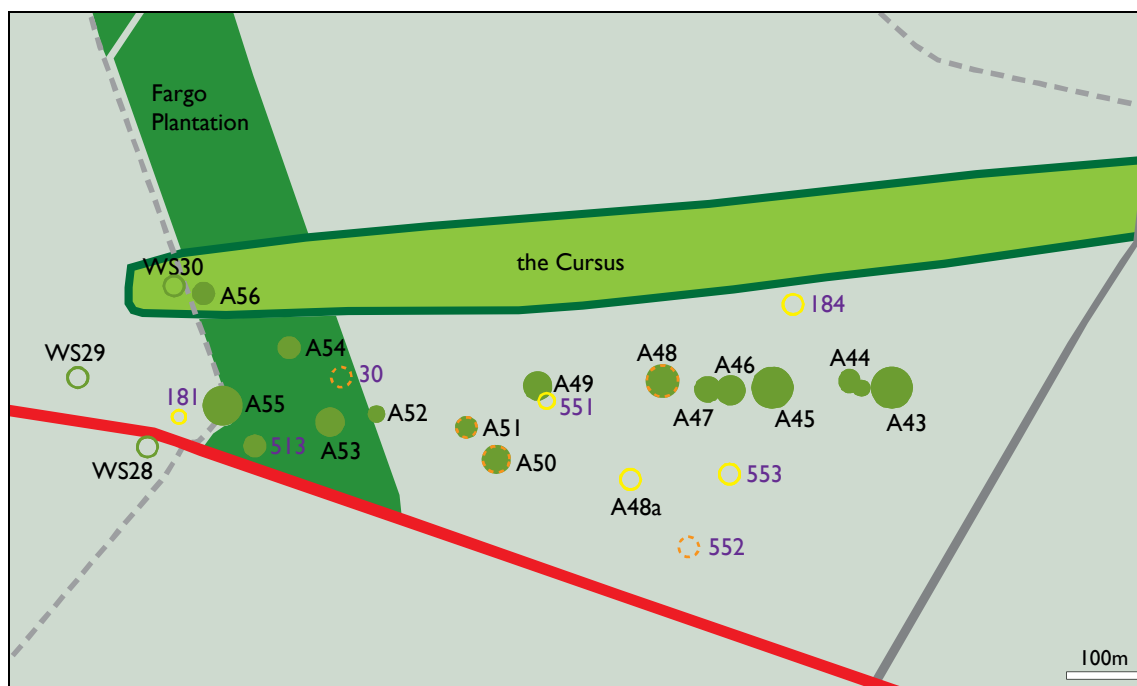


Fig 3: The Cursus Barrow Group.

Grinsell's (1957) numbers are prefixed with initials for the parish (Amesbury and Winterbourne Stoke) and the grey dashed lines mark the parish boundaries. The purple numbers represent the NMR's archaeological database index number (prefixed by SU14SW; see Table 1) where Grinsell numbers have not been allocated. Destroyed barrows are shown as green rings; segmented or causewayed ditched barrows, including the Fargo hengiform, are shown with dashed orange rings and other possible barrows, identified from cropmarks, as yellow rings.

The Cursus Barrows

The Cursus Barrow Group is one of a number of Bronze Age round barrow cemeteries in the landscape around Stonehenge. It extends over an area measuring approximately 1 km long by 0.5 km wide, along a chalk ridge roughly parallel with the earlier, mid-3rd Millennium BC Greater Stonehenge Cursus (Thomas *et al* 2009, 49). Ten of its extant round barrows are described here (Amesbury 43 to Amesbury 52); Amesbury 56 and Amesbury 55 are described elsewhere (Pearson forthcoming; Komar and Bishop 2010). Vegetation within Fargo Plantation prevented full survey of those in between. The surveyed round barrows are described from west to east.

Amesbury 52

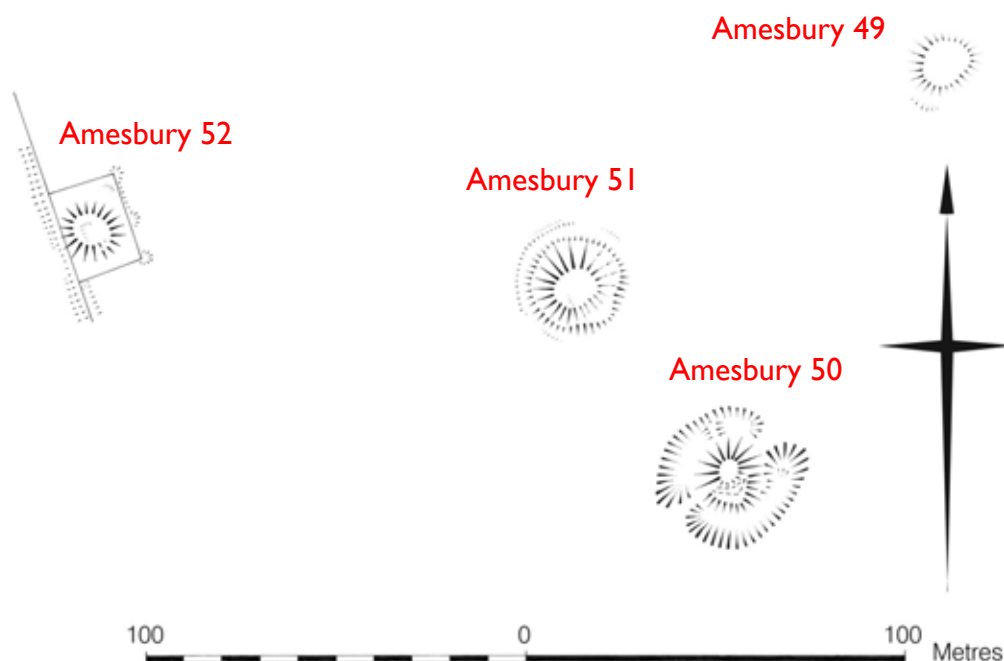
Amesbury 52 lies adjacent to the Fargo Plantation boundary, at the western edge of the survey area. The mound stands c 0.7 m high: its base measures 17 m in diameter and the top is oval, measuring 11 m long by 8 m wide and orientated roughly north-west to south-east. Very slight traces of a ditch, which probably once surrounded the mound, are visible to its north-east. Any surrounding ditch to the west is probably overlain by the 19th-century wood bank of Fargo Plantation, which deviates very slightly to avoid the barrow mound. The posts of the surrounding fence are each within a hollow worn down by the animals grazing in the adjacent field. A slight rectangular hollow on top of the mound may relate to Hoare's early 19th-century excavations (1812, 163) and damage to the southern side of the mound could perhaps be an associated access ramp. Although the barrow was not ploughed in the mid-20th century it is now threatened by scrub vegetation, which obscured subtle detail at the time of survey.

Amesbury 51

Amesbury 51 was reconstructed by the National Trust after complete re-excavation by Ashbee in 1960 (1978). The reconstructed barrow mound stands 1 m high, is roughly circular and measures c 28 m in diameter (Fig 4). The surrounding ditch measures c 5 m wide, with slight traces of an outer bank, c 2 m wide and just 0.15 m high, visible to the north-west. There is a slight platform on the south-eastern side of the mound.

Amesbury 50

Amesbury 50 comprises a central slightly oval mound flanked by two asymmetric side ditches which have opposing causeways to the south-west and north-east, orientated along the 105 m contour on which the barrow sits. The barrow mound stands c 0.5 m high and measures between 19 m and 21 m in diameter. Its southern side shows recent animal damage. The flanking ditches measure c 0.1 m deep and a maximum of 12 m wide. A small causeway inside the northern ditch could perhaps indicate that the ditches were dug in segments.



*Fig 4: The survey plan of Amesbury 49 to 52
Extract from survey plan shown at 1:2000.*

Amesbury 49

Amesbury **49** was severely damaged by ploughing in the mid-20th century, when it was also visible as a cropmark on aerial photographs. What survives of the sub-circular mound stands only c 0.2m high and measures 18m to 19m in diameter, with slight traces of a ditch visible to its south-west.

Amesbury 48

Amesbury **48** comprises a roughly circular mound surrounded by a concentric ring ditch, with a very slight outer bank (Fig 5). It measures c 38m in overall diameter. The bank is clearly visible as a white chalk ring on aerial photographs showing it under cultivation (Fig 9): it now stands just 0.2m high. The mound was also ploughed in the 1960s and stands 0.3m high. Its top measures c 15m in diameter and the ditch measures c 0.1m deep and 9m wide. The analytical survey suggests a slight causeway across the ditch to the north of the mound. The surviving earthworks suggest the central mound was relatively broad with no berm between the barrow mound and the surrounding ditch.

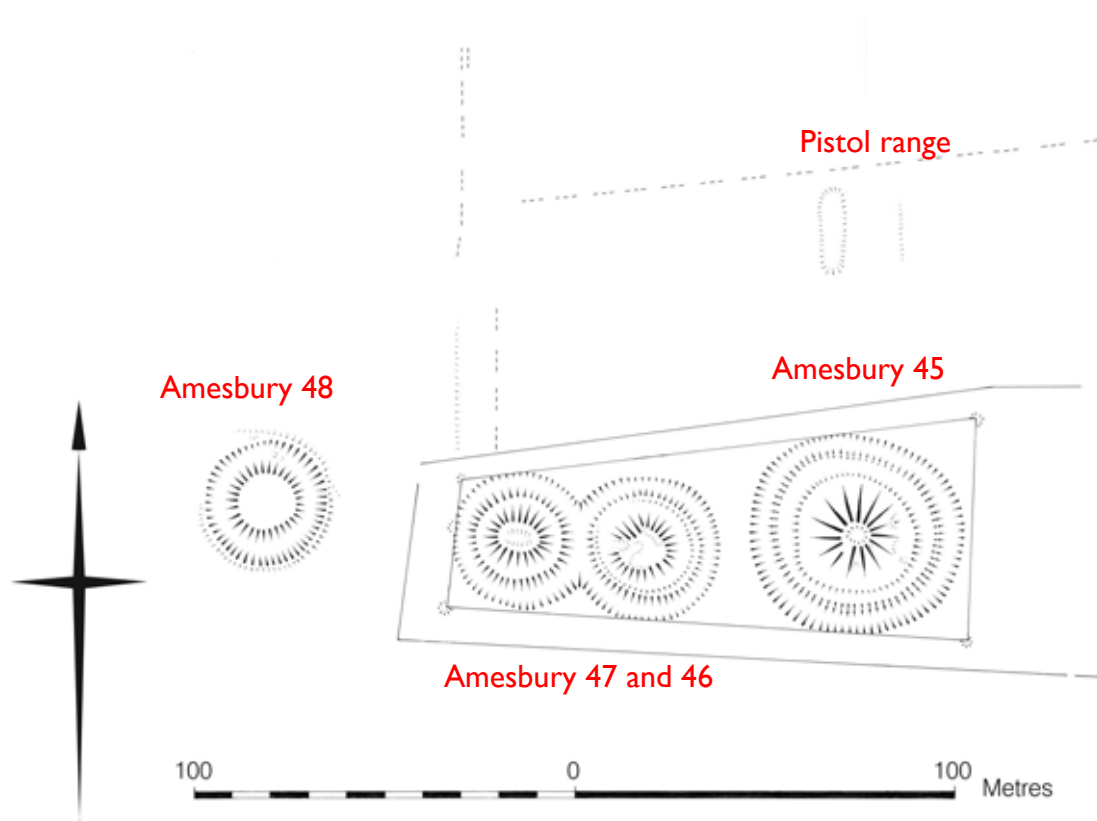


Fig 5: Amesbury 45 to 48.
Extract from survey plan shown at 1:2000.

Amesbury 47

Amesbury **47** measures c 36m in diameter and comprises an oval mound which is surrounded by a roughly concentric ditch. The mound stands 1.6m high and measures c 19m in diameter. It is separated from the ditch, which measures c 0.3m deep and 7m wide, by a berm measuring between 1m and 2.5m wide. The ditch joins that surrounding the next round barrow to the east (Amesbury **46**). An oval hollow on top of the mound may relate to Hoare's excavations in the early 19th century (1812, 162).

Amesbury 46

The ring ditch surrounding Amesbury **46** is conjoined with that around Amesbury **47** (Fig 5). Amesbury **46** measures 40m in overall diameter and comprises a roughly circular central mound which sits on a plinth surrounded by the ring ditch. The mound measures 1.7m high and 19m in diameter and the ring ditch measures c 0.4m deep and between 5m and 8m wide. Berms separate the bottom of the mound and the edge of the plinth (between 1.3m and 4m wide) and the bottom of the plinth and the ditch (between 0.1m

and 1.7m wide). The presence of the plinth implies the barrow is of at least two construction phases. The western side of the barrow has erosion scars from a recent visitor footpath and there are several slight scarps and hollows on top of the mound that perhaps relate to Cunnington's excavations (Hoare 1812, 162).

Amesbury 45

Amesbury **45** is one of the largest round barrows that form the Cursus group (Fig 5). It measures c 56m in total diameter and comprises a central mound which sits on a roughly concentric but sub-circular plinth and is completely surrounded by a ditch. The mound stands 3.5m high and its base measures c 26m in diameter. Berms separate the bottom of the mound and the edge of the plinth (between 1m and 5m wide) and the bottom of the plinth and the ditch (between 2m and 5m wide). The ditch measures 0.5m deep and between 5m and 7m wide. The presence of the plinth indicates that the round barrow is of at least two phases of construction. There are some modern erosion scars on the eastern and southern sides of the mound and the plinth appears to have spread to the south-west, which could be a result of disturbance either through excavation or scrub vegetation. A hollow in the top of the mound may relate to Cunnington's excavation in 1805 (Devizes Museum, Cunnington MSS, Book 5, 42).

Amesbury 44

Amesbury **44** is a twin round barrow, comprising two mounds which are completely surrounded by an oval ditch. The western mound stands 2.3m high and the eastern mound is 1.6m high. The ditch measures c 7m wide and 0.4m deep and encloses an area measuring 31m east to west by a maximum of 20m wide. The analytical survey suggests several phases of construction: the larger western mound was constructed, then the smaller eastern barrow mound added and the ditch perhaps re-dug around both mounds. Hollows on top of each mound probably represent early excavation trenches.

Amesbury 43

Amesbury **43** comprises a roughly circular central mound which sits on a plinth surrounded by a ditch and measures c 60m in overall diameter. The mound stands 3.4m high and its base measures c 14m in diameter. Berms separate the mound from the edge of the plinth (3.5m to 5m wide) and the plinth from the ditch (between 1m and 6m wide). The ditch measures c 8m wide and 0.7m deep. The plinth is clearly a deliberate structural feature and indicates at least two construction phases. The slight north-eastern skew of the plinth could be the result of damage during construction of the mid-18th century turnpike road, which cuts across the northern side of the barrow mound. A corresponding rise is visible where the route crosses the ditch to the north-west. Two Bronze Age pottery sherds were found on the lower berm during the survey, suggesting that cremation burials are likely to be found there. Scarring damage on the southern side

of the barrow mound could be due to recent scrub vegetation and the roughly circular depression in the top of the mound probably relates to an early excavation.

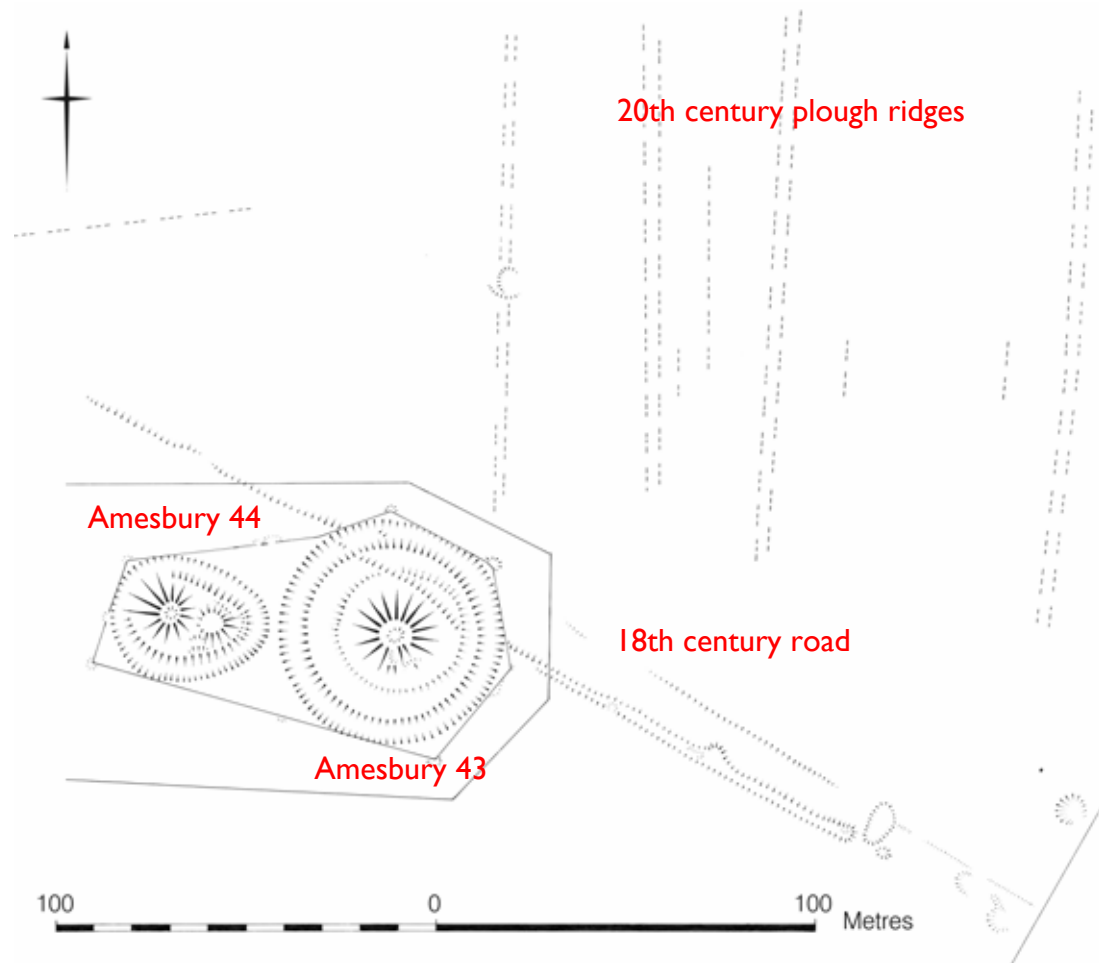


Fig 6: Amesbury 43 and 44.
Extract from survey plan shown at 1:2000.

Later features

The turnpike road

Two remarkably straight parallel linear banks, c 10m apart, extend for 235m north-west to south-east between SU 1192 4287 and SU 1220 4271 (Fig 6). Corresponding cuts into the north-eastern side of the mound of Amesbury **43** continue the alignment, which can also be traced as a rise in the bottom of the surrounding ditch to its north-west. The linear earthworks probably represent an unfinished turnpike road constructed in the mid-18th century (RCHME 1979, 31-2).

Agricultural features

Dewpond

One post-medieval dewpond survives immediately north of the A344, at SU 1190 4241, within a small fenced area. Separate banks, c 6m wide and 0.3m high, flank the northern and western sides of the dewpond and may continue around the eastern side, where any earthworks are obscured by vegetation within the fenced area. The pond is marked as semi-circular on Ordnance Survey maps.

Fargo Plantation wood bank

Only part of the wood bank defining the eastern extent of Fargo Plantation was surveyed due to vegetation within the plantation. It comprises a linear bank measuring between 2m and 5m wide with slight traces of an outer ditch flanking the eastern, outer side. The wood bank extends NNW/SSE for c 50m and deviates very slightly to the west to avoid the barrow mound of Amesbury 52, but may overlie any ditch surrounding the mound (Fig 4).

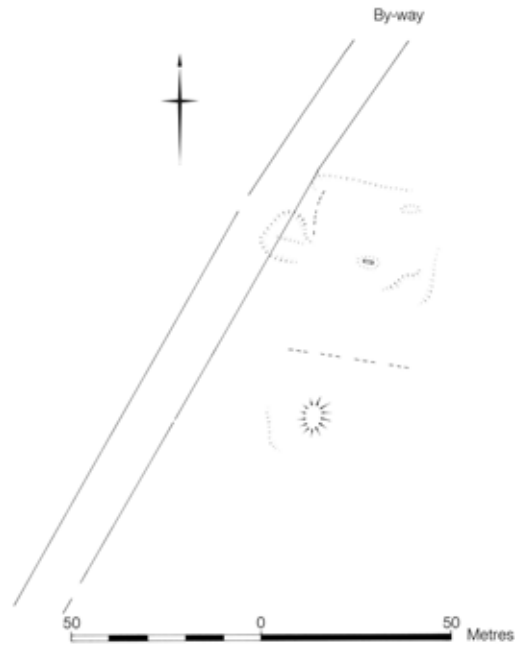
Straight lines

Several narrow and remarkably straight hollows, c 2.5m wide, extend north to south across the area between the five easternmost round barrows (Amesbury 43 to Amesbury 47) and the Cursus (Fig 6). An east to west line within this area corresponds with ploughing along the northern edge of the early 20th-century pistol range.

A linear bank extends roughly west-north-west / east-south-east between Amesbury 48 and the Cursus. Its southern end is within a few metres of a water trough and it is likely that the bank marks the route of the water pipeline.

East of the by-way

Very subtle earthworks were surveyed to the east of the by-way in 2010 (Fig 7). Scarps centred around SU 1232 4286 suggest a rectangular hollow c 35m long by 30m wide, which appears to correspond broadly with mid-20th century agricultural buildings shown on Ordnance Survey maps and on aerial photographs until the 1970s. A previously unrecorded oval mound, less than 0.3m high, was found at SU 1231 4281. It measures 11m long by 9m wide and is orientated north / south. The mound occupies the end of the east-west ridge on which the Cursus Barrow Group lies, with the ground dropping away gently to north, east and south. This location, coupled with the faint suggestion of a surrounding ditch to the south-west, could be taken to indicate that this is a small barrow and an outlier of the Cursus Group. However, its close proximity to the agricultural buildings and proximity to the previous line of the droveway suggest it is probably a result of recent agricultural activity.



*Fig 7: Features surveyed to the east of the by-way.
Extract from survey plan shown at 1:2000.*

Military features

A slight rectangular hollow is situated north of Amesbury **45**, with a corresponding scarp facing it c 15m to the east (Fig 5). The hollow extends north to south, is just 0.1m deep and 20m long by nearly 9m wide. The earthworks are the ploughed remains of an early 20th-century pistol range which was identified by the Stonehenge WHS NMP project (Crutchley 2002).

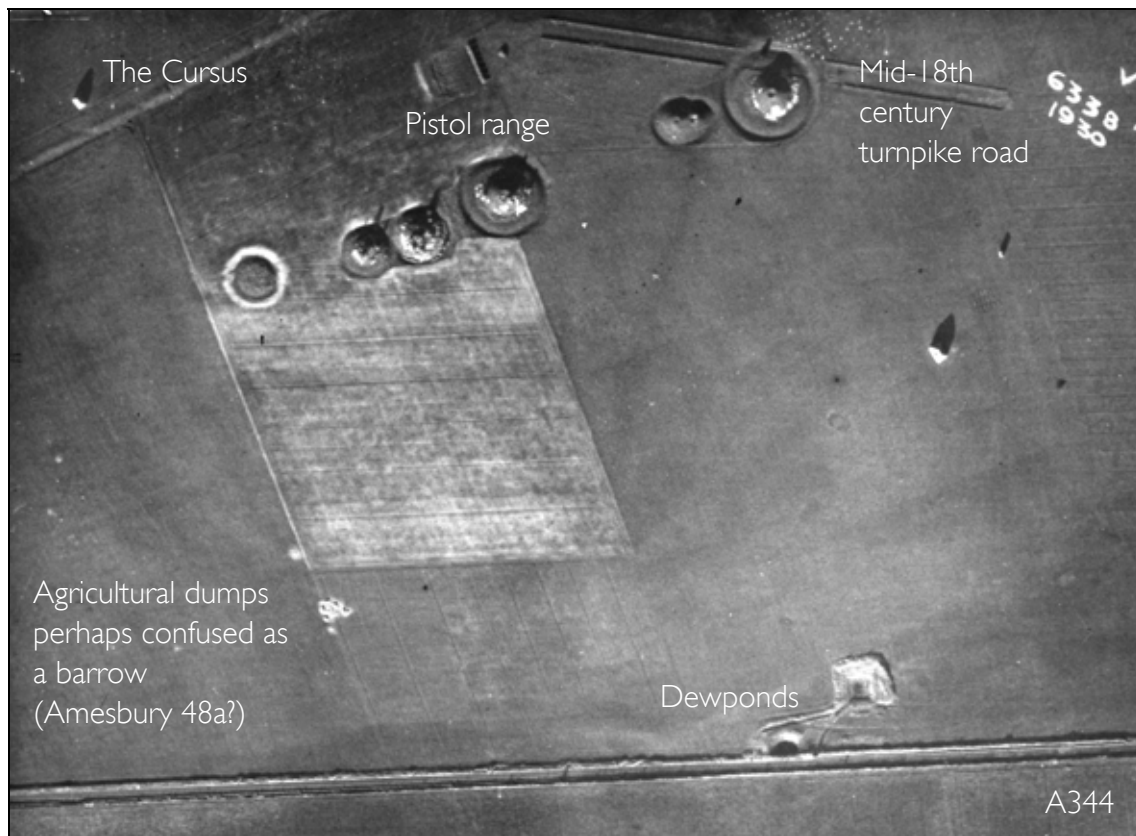


Fig 8: The Cursus Barrow group (east) and other features from the air in 1930.

The surrounding area is already being ploughed, including the outer bank of Amesbury 48 (the white ring). From left to right: Amesbury 48, Amesbury 47, Amesbury 46, Amesbury 45, the twin barrows of Amesbury 44, and Amesbury 43. NMR SU 1142/15 CCC 6338 1930 English Heritage (NMR). Crawford collection.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

John Aubrey noted in 1666 that 'round about Stonehenge one may count 43, or 45 barrows, some much bigger than others' (Aubrey *et al* 1980, 83) and the first recorded excavations took place around fifty years later. William Stukeley, who discovered or at least first recorded the Cursus, which he considered to be for racing chariots, noted that 'the northern group of barrows [from Stonehenge] is drawn along its side at a convenient distance and their heights must afford a fine prospect of the races' (Burl & Mortimer 2005, 90).

By an agreement of 1803 Sir Richard Colt Hoare would carry out surface fieldwork and the description of earthworks while William Cunnington undertook the excavations (Simpson 1975). Their results were published in *Ancient Wiltshire* (Hoare 1812), a series of volumes of huge importance in the development of British archaeology. Over a century later, in 1913, Maud Cunnington considered all of the barrows (Amesbury 43 to 52) to be in good condition, having never been ploughed. Her notes accompanied the Rev E H Goddard's list of the barrows (1913, 168-9) which was later revised by Leslie Grinsell (1957).

A desk based assessment of military installations was conducted by Wessex Archaeology (1998) and pre-1945 military features were included in the scope of the Stonehenge WHS National Mapping Project, which used historic aerial photographs to map the archaeology (Winton 2000, 5). Archaeological field inspections were conducted for Ordnance Survey mapping revision between 1969 and 1971, and the barrows were appraised as part of the Monuments Protection Programme for Scheduled Monuments in 1995. Unfortunately, the survey area was not fieldwalked as part of the Stonehenge Environs Project because grassland had already been reintroduced (Richards 1990, 7).

Although the round barrows and the earthworks of an abandoned road were included in the Royal Commission's review of monuments around Stonehenge (RCHME 1979), they had not been subjected to detailed analytical or geophysical survey. Recent excavation has also been limited, with only Amesbury 51 producing a radiocarbon date (Ashbee 1978, 24). This pattern applies to many of the round barrow cemeteries in the Stonehenge landscape, which have been highlighted as a research priority ideal for thorough non-invasive investigation (Darvill 2005, objective 10).

The excavations

In 1722 Lord Pembroke made a cross-shaped cut into the top of Amesbury 43 but was hampered by violent rains (Burl & Mortimer 2005, 96-7). By his order Stukeley continued the excavations on 27th August 1723. Stukeley's men dug to a depth 10ft [3m] and found a heap of 'coggles or flints' at 6ft [1.8m] but nothing beneath them. Stukeley noted that the composition was the same as the first barrow opened by Lord Pembroke two years before on the far side of Stonehenge [Wilsford South 15W], in that the chalk was a

yard [0.9m] thick and taken from the large ditch encompassing it and the 3 feet [0.9m] 'fat mold taken from the surface' (ibid).

Stukeley then excavated both mounds of the adjacent twin bell barrow later known as Amesbury 44 (Burl & Mortimer 2005, 96-100). In the smaller eastern mound he found an urn containing small and very friable pieces of cremated bone. He attributed these to a girl aged about 13 years old and 'had fine amusement in picking up the trinkets & little utensils found among the ashes' (Burl & Mortimer 2005, 98). These included a variety of beads of different shapes, sizes and materials, a sharp bodkin and a spear or javelin -head, which prompted him to describe her as 'an heroine or Amazon' (ibid). He then re-interred her ashes, leaving visible marks on top of the barrow to show it had been opened.



*Fig 9: Amesbury 43 (left) and 44 (right) from the north.
The banks of the 18th-century road are visible outside the fence, towards the bottom left.
NMR SU 1142/107 NMR 24142/13 8th February 2006 © English Heritage (NMR)*

In the western barrow Stukeley found the skeleton of a young male aligned with the head to the north and the feet towards Stonehenge, rather than directly south. The burial was just 14 inches [0.36m] below the surface (ibid, 100). Later, Cunnington was convinced that this was a subsequent deposit and so dug a section to the south of centre of the mound in November 1803 (Devizes Museum, Cunnington MSS, Book 3, 2; Hoare 1812, 161-162). At a depth of 6ft [1.8m] Cunnington's men encountered the floor of the barrow, which was covered with ashes. On digging further to the south they found an oblong cist containing burnt bones and horn beads. Grinsell concurred with Cunnington's

interpretation of the skeleton found by Stukeley that it was a secondary deposit and suggested it was perhaps a Roman or Saxon intrusion (1957, 213).

In 1805 Cunnington had the 'beautiful bell barrow' of Amesbury **45** excavated (Devizes Museum, Cunnington MSS, Book 5, 42). His men dug fifteen feet [4.5m] down to find only a simple interment of burned bones. The bones were piled up in a little heap 'upon the floor where the body had been burned' and close to a small circular cist, which Hoare calls a 'cinerarium', containing black ashes and a few bits of burnt bone (1812, 169).

Cunnington had some of the remaining barrows of the Cursus Group opened in 1807 (Devizes Museum, Cunnington MSS, Book 12, 6-10). A farmer had told him that a Mr Waltere had opened one of the barrows (Amesbury **46** or **47**) before but Cunnington dismissed this information as incorrect since the primary interments were undisturbed. In Amesbury **47** his workmen located a simple interment of burned bones and in Amesbury **46** the burnt bones were accompanied by a small spear head on the floor (Hoare 1812, 162). Hoare described Amesbury **46** as a 'bowl-shaped barrow' although Grinsell later listed it as a bell barrow (1957, 207).

Amesbury **48** was listed as a 'kind of Druid Barrow' by Hoare, who noted that it had 'a fine vallum without the ditch' but no elevation in the centre to help locate the interment (1812, 163). The workmen 'luckily hit on the very spot' and at a depth of 2ft [0.6m] discovered a circular cist containing burned bones and a great many beads. The barrow has subsequently been listed as a disc shaped barrow with no mound in the centre by Goddard (1913, 169) and as a bowl barrow with outer bank by Grinsell (1957, 205), although this was after the site had been ploughed.

Neither Cunnington nor Hoare make any comment on the physical form of Amesbury **49** or Amesbury **50**, in which they found no interments, but they did note that Amesbury **49** had been opened before (Hoare 1812, 163). The contents of Amesbury **51** compensated for these earlier disappointments. It contained three human skeletons laid north to south 'immediately one over the other' (ibid). The first was found at a depth of 2ft [0.6m], the second level with the adjoining soil and the third 6ft [1.8m] below. A Beaker was found near the head of the second skeleton, together with what appeared to be decayed leather. A Beaker was also found with the third skeleton, whose bones were considered particularly well preserved since when throwing them out they 'would bear being thrown for a considerable distance without breaking'. A separate piece of this individual's skull was found, apparently sawn off. Amesbury **52** contained a large oblong cist containing black ashes and burnt bone (ibid).

Over a century later unusual potsherds brought to the surface by rabbits prompted J F S Stone's excavation in Fargo plantation, which revealed the presence of a small henge or hengiform monument (1939). Later, the Ministry of Works funded examination of the western end of the Cursus and the round barrow contained within it (Winterbourne Stoke 30), which had suffered extensive damage from military activity and subsequent levelling for agricultural use (Christie 1963).

Damage from arable agriculture was also the main reason for the excavation of Amesbury 51 in 1960, again for the Ministry of Works (Ashbee 1978). It was selected for re-excitation because of the series of seemingly stratified burials uncovered by Cunnington (Hoare 1812, 163). Ashbee noted how the height had been reduced to less than 3ft [0.9m], the skirts of the barrow mound spread and the ditch filled in (1978, 1). His excavation showed that Amesbury 51 was constructed in four phases and contained two additional inhumations, each of the latter also accompanied by a Beaker.

Hoare's third skeleton was the primary burial. It comprised a contracted adult male with a trephined skull in a wooden mortuary house within a central grave cut. The grave cut showed some weathering and the timber mortuary house may have stood partly exposed for some time before the waste material from the grave was used to create a small mound over it. The second phase was the setting out and digging of a causewayed ring ditch in five segments, each dug as a series of straight lengths. The waste material was used to increase the size of the central mound, which was then covered with an envelope of chalk rubble bringing the height of the mound to perhaps 5 feet [c 1.5m]. A pronounced berm separated the enlarged mound from the causewayed ring ditch.

After some silt had accumulated Burial B, a young adult male accompanied by an early Beaker, was placed in an oval grave cut into the bottom of the eastern ditch. Later burials were inserted into the crown of the barrow: Hoare's second burial, then Burial A with a late Beaker and finally Hoare's first skeleton at the top of the mound. A carbonised oak board covering Burial A (another adult male) produced a radiocarbon date of 1788 ± 90 bc (BM-287; Ashbee 1978, 24), which calibrates to 2459-1926 Cal BC (using curve IntCal09 in OxCal 4.1; Bronk Ramsey 2009). Circular ploughing had been used to reduce the barrow and both Burials A and B had been compressed by heavy agricultural vehicles. A Second World War slit trench was also uncovered on the western side of the barrow (Ashbee 1978).

Aerial survey

Historic aerial photographs have been used to map the archaeology of the survey area as part of two National Mapping Programme (NMP) projects: Salisbury Plain Training Area (Crutchley 2000) and the Stonehenge WHS National Mapping Project (Crutchley 2002). Prior interpretation of archaeological features from aerial photographs was piecemeal (eg RCHME 1979). The NMP projects mapped the extant round barrows and an early 20th century pistol range, a system of practice trenches and an overlying practice minefield. Cropmarks and soilmarks mapped in the cultivated area indicate at least five other possible round barrows in the vicinity.

The historic aerial photographs allowed the identification of the early 20th century military training features and document changes to the agricultural regime. By 1930 most of the survey area was being ploughed for arable agriculture, including some of the round barrows (Fig 8). The survey area was cultivated on a regular basis throughout the early

and mid-20th century, with a changing pattern of agricultural sub-divisions within the large, polygonal field.

After the Second World War the military sites were incorporated into the arable fields. Where they can still be traced in the field the earthworks are very slight. At the far eastern end of the survey area, around SU 1226 4291, an area of amorphous undulations represent the practice minefield and trenches. These were felt to be too indistinct to survey in the field. Similarly, the aerial photographs clearly show a square dewpond located at SU 1195 4242, which was ploughed almost completely level by the mid-1970s. During the field survey the bank flanking its northern and eastern sides could be recognised as an area of slight parching.

Geophysical survey

In July 2010 work started on a three year Stonehenge Hidden Landscapes Project, which aims to map 14 square kilometres of the Stonehenge Landscape using a range of the latest geophysical techniques (Howarth 2010). Initial results suggest the area within the two side ditches of Amesbury 50 was occupied by perhaps two concentric oval timber structures (Vince Gaffney, pers comm).

DISCUSSION

Although not the only earthworks within the area surveyed, the round barrows of the Cursus Barrow Group clearly dominate the landscape in both size and number (Fig 10). In comparison, the later features form a disparate group mostly relating to post-medieval and 20th-century agricultural and military activity.

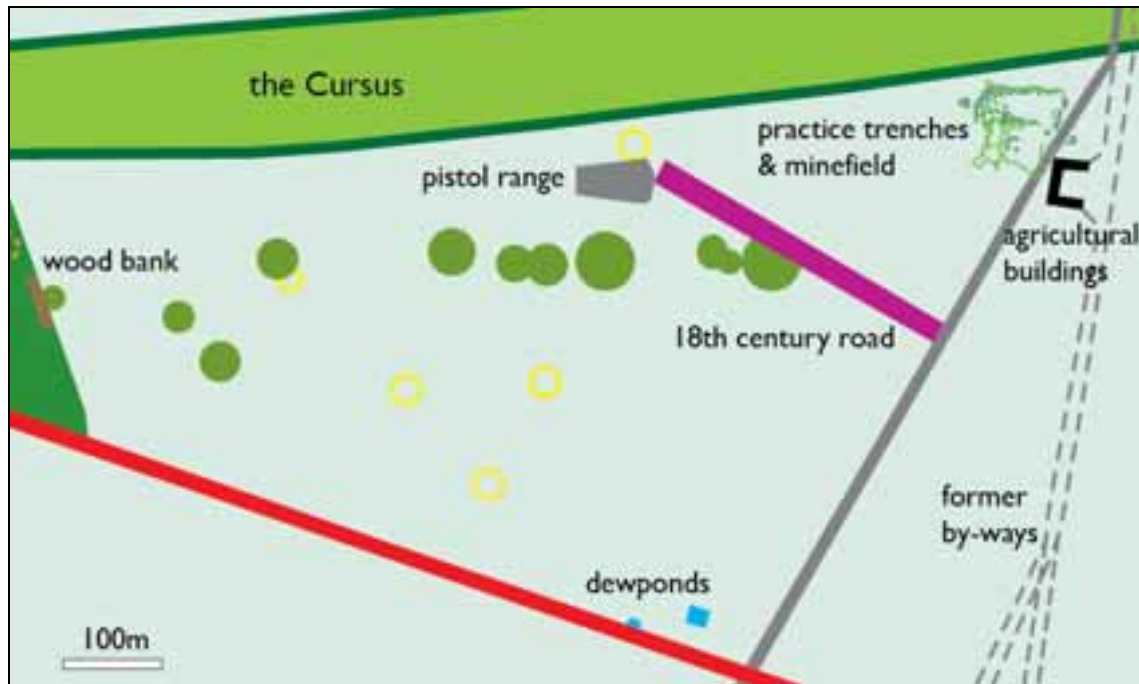


Fig 10: An interpretation of the earthworks

Extant round barrows are shown as green dots and possible barrows identified from cropmarks and soilmarks as yellow rings. The mapping of the practice trenches and minefield is taken from the NMP mapping (Crutchley 2002).

The Cursus Barrows

The Cursus Barrows form one of the discrete clusters of round barrows in the Stonehenge landscape which are usually identified as cemeteries (eg Richards 1990, 273). The whole of the Cursus Barrow Group is discussed here, although the Cursus itself and the round barrows at the western end of the Group are described elsewhere (Pearson forthcoming; Komar and Bishop 2010). The barrows in Fargo Plantation could not be surveyed fully due to the vegetation but were observed in November 2010. Cropmarks and soilmarks mapped by the NMP projects indicate at least five other possible round barrows in the vicinity (Crutchley 2000; 2002).

Architecture

Antiquarian records usually provide little information on the physical form of the individual barrows and their internal structure, with most attention focussed on the interments and associated finds. Stukeley did remark that Amesbury **43** was similar to Wilsford South 15W in composition, however, and on the bell form of the double barrow of Amesbury **44** (Burl & Mortimer 2005, 97). Additional detail on the internal structure is provided by the three Cursus Barrows excavated in the 20th century: the small hengiform in Fargo Plantation (Stone 1939), Winterbourne Stoke 30 (Christie 1963) and Amesbury **51** (Ashbee 1978).

Only two of these include any details of the mound. Although Stukeley noted that Amesbury **43** had chalk and soil components (Burl & Mortimer 2005, 97), his description implies a straightforward single phase of construction, which the surviving earthworks suggest was more complex. Ashbee's excavation of Amesbury **51** provides a more complex picture (1978). Weathering suggests the initial grave may have stood open for perhaps a winter, before a rectangular timber plank-lined mortuary house was constructed in the grave cut. The spoil appears to have been kept nearby, as chalk from it was used to pack around the timber structure and the remaining chalk rubble used to cover it, forming an oval mound. This first mound probably stood no more than 3ft [0.9m] high and had no surrounding ditch. It was later increased in size by the addition of loam and weathered material from a newly dug causewayed ditch mixed with soil or turf from elsewhere. It was then covered by an envelope of chalk rubble to form a larger mound perhaps 5ft [1.5m] high and separated from the ditch by a berm.

A roughly rectangular arrangement of four stake holes immediately next to the central cremation pit at Winterbourne Stoke 30 could suggest a similar timber shelter or platform, perhaps for the cremated bones in their container before burial (Christie 1963, 378). One of the posts may have been used as a peg to mark out the later ring ditch, as seen at Snail Down and elsewhere (Thomas 2005, 95; Lawson 2007, 245). Timber was also used to revet the near vertical sides of the ditches at Amesbury **51** (Ashbee 1978, 10). Individual circular and D-shaped post-holes were found within the Fargo hengiform (Stone 1939, 360) and recent geophysical survey of Amesbury **50** suggests possibly two concentric oval timber rings occupied the berm (Vince Gaffney, pers comm).

The Fargo Plantation hengiform comprised a grave bounded by a pair of asymmetric ditches with the spoil placed outside. No barrow mound appears to have been erected. Instead, the interior declined gradually to a level platform 6inches [0.15m] below the surrounding chalk (Stone 1939, 360). The earthworks of Amesbury **50** suggest a similar form of two flanking ditches, although caution is necessary here as they have been spread by ploughing. Very slight earthwork causeways suggest the two ditches were cut in segments and in the geophysical survey they each appear to have been dug as a series of four large pits (Fig 11). It is unclear, however, whether the pits were dug in an existing ditch or each ditch simply joined earlier pits together.

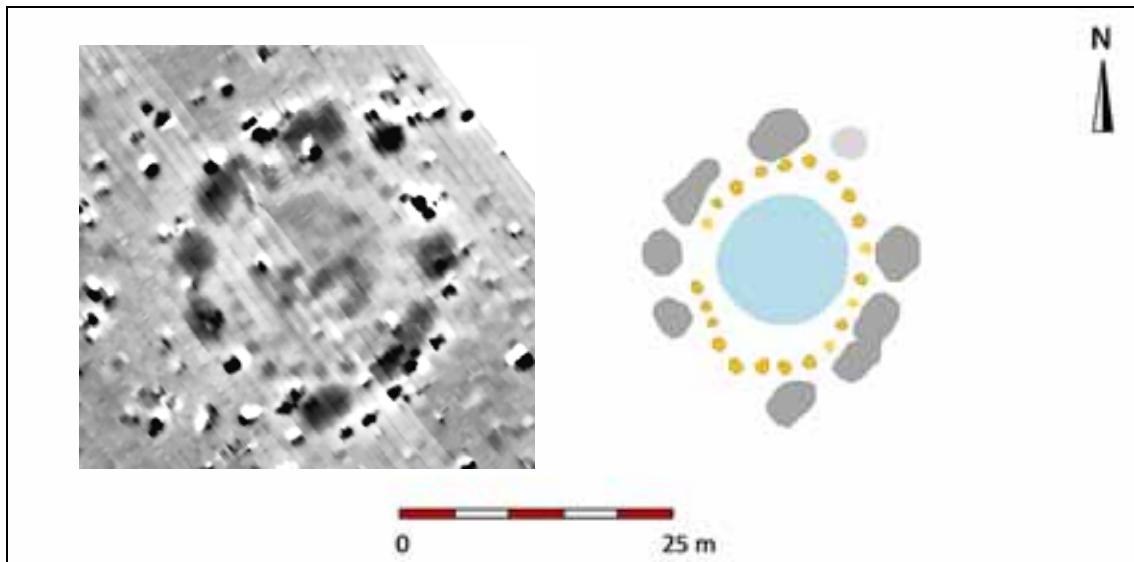


Fig 11: Initial interpretation of the geophysical results for Amesbury 50. The innermost of the two timber circles is very faint and is not marked in the illustration to the right. Courtesy Professor Vince Gaffney, University of Birmingham.

These pits, and the irregularity of the ditch, have led to the site's recent re-interpretation as another small henge, or hengiform, monument (Vince Gaffney, pers comm; Howarth 2010). There is no sign of any outer banks in the surviving earthworks or in the recent geophysical survey, however, and the presence of an internal mound implies that the spoil was placed inside the ditches, rather than outside. The earthwork mound is slightly elongated north to south but does not have the same orientation as the two ditches, which are aligned south-west to north-east along the contour. Although its sloping location and the ditch alignment, along the contour, are typical of Neolithic long barrows (Field 2006) Amesbury 50 does not therefore appear to form an example of this monument type either.

The mound also appears to have a remarkably circular footprint in the geophysical survey, perhaps indicating that its current shape is due to plough damage rather than design. Beyond the central circular feature the geophysical response is much lighter in colour, in contrast to the very dark responses of the large pits in each ditch. With further enhancement of the data Gaffney has suggested that this area was occupied by a second post hole circuit, both circuits probably containing a free-standing timber structure (pers comm), but this contrast could also suggest a compaction of chalk, perhaps forming a kerb or crust to the central circular mound. Any berm is barely visible in the surviving earthworks. The angular shape of the outer post-hole circuit is unusual and it may have been artificially straightened by late 20th-century fences, although on aerial photographs taken in 2000 (see front cover) the square fenced enclosure appears to be further out, containing the mound and most of the ditch.

Amesbury 50 lacks a single axis: the axes of the timber circles (north-north-east / south-south-west), the pair of causewayed ditches (north-east / south-west) and the mound (north / south) are all slightly different and disentangling their sequence is difficult. Cunnington and Hoare hardly mentioned the barrow, having been unable to find an interment (1812, 163), so we have no direct dating evidence. Geophysical surveys of round barrows on Stonehenge Down indicate a remarkable variety of incomplete and causewayed ring ditches and possible hengiform monuments (David & Payne 1997). It is probable that other round barrows, when examined in this way, will prove as complex.

Amesbury 50 is not the only barrow in the Cursus Barrow Group with a causewayed ditch: a northern causeway was also observed in the earthworks of Amesbury 48 and excavation of Amesbury 51 showed the ditch comprised five segments, each cut in a series of straight sections with pitted bottoms (Ashbee 1978). Possible causeways have also been observed at Amesbury 53, in Fargo Plantation (Komar and Bishop 2010). The digging of ditches in sections or pits could imply digging parties working in defined circumstances, or may have other, perhaps even supernatural, significance (Field 2008, 50). It may also have been a conscious reference to the episodic creation of earlier, Neolithic monuments such as causewayed enclosures (Ashbee 1978, 43; Oswald *et al* 2001), long barrows (Field 2006), cursuses (eg Tilley 1994) and even Silbury Hill (Leary 2008). In contrast, the ditch surrounding Winterbourne Stoke 30 was continuous, regular in plan and had a flat bottom (Christie 1963, 377).

Probable entrances appear to have a range of orientations, providing access and controlling movement in different directions at each monument. The opposed entrances of the Fargo hengiform are roughly north and south (Stone 1939, 359), whereas at Amesbury 50 they are to the south-west and north-east, along the 105m contour on which the barrow sits and on approximately the same summer solstice alignment as Stonehenge and other later Neolithic monuments (RCHME 1979, 8; Tilley *et al* 2007, 189). The south-western end of the timber oval appears more angular than the north-eastern end, perhaps emphasising this orientation (Fig 11). Amesbury 51, in contrast, appears to have had a north-west / south-east axis which is suggested by the spacing and relative sizes of the ditches and causeways, emphasising both the north-western side and the central position of the grave (Ashbee 1978, 8).

Outer banks are not exclusively found around henges, but are also a frequent component of round barrows. Amesbury 48 once had an outer bank and is perhaps a good candidate for a saucer barrow. To Hoare its most prominent feature was the 'vallum', or bank, surrounding 'a kind of druid barrow' which had no elevation in the centre (1812, 163). In contrast, the mound is now the most prominent earthwork, albeit at just 0.3m high. Hoare's description suggests that the central mound was very low and that the outer bank was more clearly discernible. The barrow was ploughed during the 20th century, when aerial photographs show a clear white ring from the ploughed outer bank around the mound (Fig 8). The mound itself does not appear to have been ploughed as

intensively, which probably accounts for its marginally better survival. Although not definitive proof, it is therefore possible that Amesbury 48 was a saucer barrow.

Cunnington and Hoare described Amesbury 45 as a 'beautiful bell-shaped barrow' (Devizes Museum, Cunnington MSS, Book 5, 42; Hoare 1812, 169) but noted the outward form of only a few of the other barrows. Their comments were usually restricted to the presence or absence of a cist, the interment(s) and any finds (ibid). Goddard (1913) noted a bell or disc form for a few of the round barrows, but in most cases the first indication of form is found in Grinsell's various lists (1941; 1957) after Amesbury 48 to Amesbury 51 had suffered several decades of ploughing. This must have significantly altered their outward appearance. That these four barrows were ploughed when other barrows in the group were not could suggest that they were originally lower in height or less massive constructions. Amesbury 52 was not ploughed as it abuts the Fargo Plantation and neither were the five large bell barrows of Amesbury 43 to Amesbury 47, presumably because of their size.

Amesbury 47 appears to be the simplest in form of the bell barrows in the easternmost group. Plinths beneath the mounds of Amesbury 45 and Amesbury 46 clearly indicate more than one constructional phase and the surviving earthworks of the double barrow of Amesbury 44 suggest at least four. Towards the western end of the cemetery a slight ridge of chalk indicated the edge of the otherwise demolished mound of Winterbourne Stoke 30, with a berm between it and the surrounding ring ditch implying a bell form (Christie 1963, 377). Recent field investigation of Amesbury 53 and 54, within Fargo Plantation, shows that these too are more complex multiphase monuments (Komar & Bishop 2010).



Fig 12: Amesbury 45-47 from the north.

There is some erosion from a footpath crossing the three barrows

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Burials

A range of funerary deposits have been found. Inhumations appear to cluster west of centre within the group, although a secondary inhumation was uncovered near the top of the larger mound of Amesbury 44 (Burl & Mortimer 2005, 98). Hoare uncovered three inhumations in each of Amesbury 51, Amesbury 54 and Amesbury 56 (1812). Stone uncovered a Beaker grave in the Fargo hengiform (1939, 360) and the skeleton of a child was found in the ditch of Winterbourne Stoke 30 (Christie 1963, 378). Ashbee found two more inhumations at Amesbury 51 and clarified the burial sequence (1978; see above). Four of the barrows were stated to have been opened before: Amesbury 43 by Stukeley who found only a pile of flints on the floor (Burl & Mortimer 2005, 96), and others by Cunnington's men who did not find an interment (Hoare 1812, 160-165). Most of the other barrows contained cremations.

The primary inhumations were in roughly central rectangular grave cuts or cists dug into the chalk. At Amesbury 51 the primary burial was also covered by a timber mortuary house (Ashbee 1978, 5). Subsequent inhumations were found on the floor of the barrows, in the covering mounds and in oval cuts in the primary silts of the surrounding ditches. Notable amongst the grave goods from the whole cemetery are several Beakers, a whetstone (Amesbury 54; Hoare 1812, 164), a curious pebble, and a metal dagger (Amesbury 56; *ibid* 165). These are probably broadly contemporary (Needham *et al* 2010, table 1) with an oak board covering the secondary Burial A at Amesbury 51, which provided a radiocarbon date of 2459-1926 Cal BC (using curve IntCal09 in OxCal 4.1; Bronk Ramsey 2009).

The primary cremations were also usually interred in oblong or circular 'cists', chalk cut grave pits roughly central to the barrow in plan, although in several cases Hoare reported only a simple interment of burnt bones on the floor of the barrow (1812). It is likely that further burials lay beneath the latter and that other satellite burials were present but not recognised due to the excavation methodology employed (Simpson 1975; Grinsell 1978). The cremations usually comprised a small heap of pieces of burnt bone and occasional other finds of beads or metalwork. Sometimes the bones were mixed with black ashes or charcoal. Only those in Winterbourne Stoke 28 were contained in an urn (Hoare 1812, 164). A Food Vessel was discovered in the Fargo hengiform grave but could not be directly associated with either cremation (Stone 1939, 361).

The separation of burnt bone fragments from ash and charcoal is a common practice in early Bronze Age cremation burials (Thomas 2005, 289). Where these materials are interred together suggests that it may also have been important, on occasion, to include at least a token of other pyre material with the burnt bones (*ibid*, 290). Charred wood on the floor of the 'Monarch of the Plain' (Amesbury 55) suggested burning to Hoare (1812, 164) and under Amesbury 45 he described the small pile of burned bones as located 'where the body had been burned' (*ibid*, 162). Some pink and grey discoloration from fire was noted on the upper edge of the roughly circular central pit at Winterbourne Stoke 30 (Christie 1963, 377). In general, the burnt bones and ash were deliberate,

selective deposits made once cooled, rather than *in situ* burning. Some corpses were cremated within the area of the cemetery, alongside the barrows, while others were burnt elsewhere and their burnt bones brought to the burial site in a container (Thomas 2005, 287).

The Fargo hengiform is unusual in that the central roughly rectangular grave cut contained both a Beaker inhumation (A1) and two cremations (A2 & A3), apparently all contemporary and sealed by a layer of chalk rubble (Stone 1939, 369). Both of the cremations were deposited in discrete shallow scoops cut into the bottom of the grave. A2 comprised burnt bone and charcoal and A3 just burnt bones, again illustrating the deliberate selection of burnt material for burial. Similar scoops have been noted at other barrows; for example at Snail Down, and their small scale perhaps reflects one of the most personal episodes in the burial sequence (Thomas 2005, 292; Lawson 2007, 212).

The incomplete nature of many of the interments, cremation and selection of cooled material for burial, possible temporary structure at Winterbourne Stoke 30 and weathering of the grave pit and mortuary house at Amesbury 51 all suggest that there was an extended pre-burial practice, including burning and perhaps the exposure or lying in state of corpses (Ashbee 1978, 5; Thomas 2005, 284; Lawson 2007, 212). Ceremonies, burials and the associated round barrow construction episodes may have been drawn out affairs, possibly conducted as seasonal community activities. The construction of the barrow mound effectively sealed the interred remains but subsequent burials suggest it was not necessarily the final act at each barrow; the new mound and surrounding berms perhaps providing a new platform for ceremonial use as an interface between physical and spiritual worlds (Field 1998, 323).

Spatial patterning - cemetery plan

The round barrows of the Cursus Barrow Group were sensitively placed with an element of respect for each other, a common feature of the round barrow cemeteries around Stonehenge and across the wider region (Richards 1990, 273; Field 1998, 315). The choice of architecture and siting for each barrow reflects a number of choices made against a range of ideologies. These were not linear or static but changed over time, perhaps to the point where additions were simply 'following tradition' (Field 1998, 315). Each burial or new round barrow was placed deliberately with consideration for existing burials, other monuments and natural features, in locations that were in harmony with the values and significances perceived at that particular time (Field 1998, 322; Lawson 2007, 210). Their arrangement may reflect degrees of allegiance, ancestry or family relationships, or spiritual belief, although this is yet to be proven (Lawson 2007, 207).

Most of the Cursus round barrows are not close enough to each other for the analytical survey to suggest a relative chronology solely from the earthworks. The circular ditches around Amesbury 46 and Amesbury 47 are joined together between the barrows; however, the join is so equally distributed that it is not possible to suggest which barrow

was constructed first. The excavated burials and architecture of other individual barrows can shed some light on chronology within the cemetery. The hengiforms, segmented ditched monuments and Beaker burials outlined above suggest that the round barrows west of centre in the Cursus Barrow Group are the earliest of the circular and oval monuments in this particular area. Over time these were enhanced by the addition of burials and new barrows, forming a linear round barrow cemetery during the early Bronze Age. A pre-barrow oval hollow at Winterbourne Stoke 30 was suggested as contemporary with construction of the Cursus (Christie 1963, 379). The Cursus is now known to be much older (Thomas *et al* 2009, 49), but both it and the hollow illustrate how the circular monuments were not necessarily the earliest use of this space.

Amesbury **43** is the largest round barrow in the cemetery group in terms of diameter (60m) but Amesbury **45** stands slightly higher, at 3.5m. It was the slightly smaller bell barrow of Amesbury 55 (58m in diameter and 2.8m in height), however, that captured Hoare's attention as 'evidently the largest barrow' on Salisbury Plain (1812, 164), perhaps because of its ridge top location at the western end of the cemetery (Komar & Bishop 2010). Together these very large round barrows almost bracket the cemetery group and in this context it is interesting that neither Amesbury **43** nor Amesbury 55 appear to contain an interment (Burl & Mortimer 2005, 96-97; Hoare 1812, 164). It is possible that they each provided a focal point on the ridge top, as cenotaph or 'ritual' barrows which have been suggested at other round barrow cemeteries (Jones 2005; Thomas 2005).

Within Fargo Plantation a ring ditch recorded as Amesbury 112 by the RCHME (1979, 2) was Scheduled as a possible disc barrow because of the apparent lack of any central mound. A slight outer bank and some mounding along the southern edge of the interior have recently been noted (Komar and Bishop 2010), suggesting that it may have had a broad central mound rather than the small tump usually found in disc barrows. Its original form is therefore wide open to interpretation, but the fact that it was not recognised by Cunnington or Hoare suggests that it was not of great height.

As a group the Cursus Barrows comprise a variety of forms, including bell, potential disc and saucer 'fancy' barrows, but no pond barrow. Open 'arena' monuments, such as pond barrows, provided stark contrast to the sealed or 'closed' burial mounds. They appear to have been designed as stages for ceremonial performances, with little or no evidence of formal burial (Garwood 2007, 34). Although long past its initial use, the enormous defined open space of the Cursus may have been used as an arena for ceremonial activity associated with the nearby barrows. The presence of two round barrows within the Cursus imply that its use was considered acceptable and even appropriate at this point in time (Loveday 2006, 193). Ceremonial activity perhaps included the storage of corpses and cremated remains prior to burial, in the same way that pond barrows have been suggested as being used elsewhere (Thomas 2005, 283). The timber oval structures of Amesbury **50** may have physically defined other components of the ceremonies, while the open areas between the barrows could have been used in less archaeologically visible, and perhaps less formal, ways.

Other round barrows may have once filled the gaps between the surviving examples. Several possible ring ditches have been suggested from cropmarks and soilmarks (Crutchley 2000; 2002). Perhaps the most convincing is Amesbury 115, where aerial photographs appear to show a segmented or causewayed ring ditch, visible as a soilmark in the 1940s, with two larger pits in the circuit perhaps defining an entrance to the south-west. Ploughing around and over the extant barrows had already started by the time the first aerial photograph of the survey area was taken in the 1920s and the barrows are likely to be severely truncated. Other roughly circular cropmarks could be caused by 20th-century agriculture – feeding troughs or fertilizer dumps – or military disturbance or activities associated with the free festivals. Geophysical survey may help determine their real nature and the survival of any sub-surface features.

Three additional features were observed during the survey that may have had significance: a high point on the ridge was noted between Amesbury 48 and Amesbury 49, around SU 1159 4278, and a small oval mound surveyed at SU 1231 4281, 250m east of the main group but sharing approximately the same alignment. They could represent severely plough damaged barrows; however, the former is perhaps only a slight natural rise, which nevertheless may have had a role within the cemetery. Alternatively, the easternmost mound is close to the location of the 20th-century agricultural buildings and could be disturbance associated with their use or removal. A semi-circular vegetation mark was noted in 2009 abutting the western side of Amesbury 48, although this too could be the result of recent agricultural practices or disturbance from the free festivals.

Spatial patterning – the wider landscape

The Cursus Barrows were deliberately placed with consideration regarding earlier monuments and the local topography. They were constructed along a ridge that extends east of the watershed between the Till and the Avon, in a highly visible and therefore conspicuous location (Exon *et al* 2000, 93; Peters 2000). The barrows apparently containing the earliest burials, west of centre in the Group, appear to cluster near the western end of the mid-3rd millennium BC Greater Stonehenge Cursus (Thomas *et al* 2009), with additions around them and to the east developing into a linear cemetery roughly parallel to the southern side of the Cursus.

The Cursus Barrow Group is therefore raised on the skyline when viewed from a distance (Lawson 2007, 198). Several authors have noted that the Cursus Barrows are one of four linear cemeteries silhouetted on the immediate horizon around Stonehenge, perhaps defining a *cordon sanitaire* within a sacred geography (eg Richards 1990; Woodward & Woodward 1996; Darvill 1997). The visual focus of Stonehenge changed with each phase, however, and after the final phase round barrow cemeteries were located both in relation to the margins of this visibility envelope and further afield but still within visual 'reach' of Stonehenge (Tilley *et al* 2007, 203). The arcs and curves found in the cemetery patterning reflect the topography and the principal of circularity embodied in the barrows themselves (Woodward & Woodward 1996). The visual setting and spatial relationships

with other burials and earlier monuments were clearly important in choosing a new barrow or burial location.

It is also interesting to note that the Cursus Barrow Group appears to be mirrored by another linear cemetery of round barrows which extends parallel to the northern side of the eastern end of the Cursus (Durrington 60-62b & 73). Of course there are several other linear barrow cemeteries in the landscape around Stonehenge (Grinsell 1978), but this patterning could imply that the Cursus, and particularly either end, was also a major initial monumental focus in placement of these barrows, not just the often assumed Stonehenge. The linear arrangement of these barrows almost mimics the linear form of the earlier earthwork, perhaps deliberately making a physical link with what has gone before and in so doing legitimising new belief systems (Field 2001; 2008). The long barrow at the eastern end of the Cursus (Amesbury 42) appears to have escaped such attention, however, and the apparent preference given to the open Cursus rather than the closed long mound may also be significant.

Later features

The linear earthworks of the mid-18th century turnpike road correspond with two parallel lines marking its route on the 1877 Ordnance Survey map. Historic aerial photographs have allowed the alignment to be mapped by the NMP projects (Crutchley 2000; 2002). It extends for a further 810m to the south-east, to where a causeway crosses Stonehenge Bottom, and the gap between the surviving earthworks can be explained by ploughing in the mid-20th century.

Construction of the mid-18th century road was prompted by the enlargement of the Duke of Queensbury's park in Amesbury. The Duke set out to improve the roads across Stonehenge Bottom and had a controlling interest in the Amesbury Turnpike Trust, which was created in 1761 (Bond 1991, 421; Crowley 1995, 15). The road was designed to maintain a gradient suitable for wheeled traffic, especially coaches, by building up a causeway across Stonehenge Bottom and sinking the route in cuttings to either side. The surviving earthworks are testament to a significant engineering commitment which was not completed. The lack of hollowing between the banks attest to its lack of use and no cuts were made through the Cursus on the projected route north-west (RCHME 1979, 31).

According to an Amesbury grocer, the Duke decided against connecting Amesbury with Shrewton after finding the workmen drunk at the Shrewton fête on Trinity Monday (Newall 1966, 93). The unfinished road appears to have been aligned on Tilshead to the north-west, however, missing Shrewton altogether. An alternative turnpike road was constructed by 1773 on a completely new route south of the Cursus Barrows, along the line of the present A344 (Crowley 1995, 15; Bond 1991, 422). This is shown complete with milestones on Andrew's & Drury's map of 1773 (WANHS 1952).

Agriculture

Dewponds are a characteristic feature of chalk downland (eg Smith 2005; Carpenter 2008), where the porous rock means a general absence of surface water. They are an essential part of the sheep-and-corn husbandry which dominated the parish of Amesbury from the medieval period to the 20th century (Crowley 1995, 13). Although some dewponds may date to the medieval or even earlier periods, many new examples were dug in the 19th and early 20th centuries and lined with clay, concrete, pitch or rammed chalk (Hey 1998; Smith 2005, 199). Despite their name, dewponds were mostly fed by rainwater and run-off from the surrounding slopes. They therefore had to be placed carefully to maximise the collection of rainfall but reduce evaporation (Rackham 1986, 368).

Two dewponds were observed during the survey: a semi-circular pond survives as earthworks and a nearby square pond is clearly visible on historic aerial photographs and maps but has been ploughed almost level. Each was flanked upslope by a bank which may have served dual functions: to widen their catchment when it rained whilst protecting the pond lining from getting trampled. Circular and rectangular dewponds are known across Salisbury Plain (McOmish *et al* 2002, 118). The unusual semi-circular shape of the southernmost dewpond could suggest that it was truncated by the turnpike road, now the A344, when it was constructed in the mid-18th century. The square pond to its north-east may have been constructed to supplement its reduced capacity, providing extra water for the large flocks of sheep kept on the downs. Its shape is characteristic of those created by the Cruse family of Imber, who constructed a number of square dewponds on Salisbury Plain (*ibid*, 11; Bowden 1998, 12), perhaps including this example. It was clearly constructed some time before the late 19th century when both dewponds are marked on Ordnance Survey maps.

Trees were planted at Fargo by the mid-19th century to provide a shelterbelt, game covert and to ornament the landscape (Darvill 2006, 261) and at least part of the plantation's eastern boundary was marked by a small linear bank flanked by an outer ditch. The bank deviated westwards slightly to avoid the barrow mound of Amesbury 52 and probably overlies its surrounding ditch.

By 1930 most of the survey area was being ploughed for arable agriculture, including some of the round barrows (Fig 8). Ordnance Survey maps and historic aerial photographs show the changing pattern of agricultural sub-divisions within the large, irregularly shaped field. Together with field drains they can be traced as remarkably straight linear earthwork banks and hollows, most noticeably between the Cursus and the round barrows known as Amesbury 43 to Amesbury 47. The westernmost division is aligned on a breach in the Cursus bank, implying that the monument may have been damaged by agricultural practices in the 20th century.

The agricultural buildings on the eastern by-way, around SU 1232 4285, formed three sides of a rectangle which opened onto the by-way to the east. They are first marked on

the 1924 Ordnance Survey map but were removed in the late 20th century. They are not labelled as a farm and appear to have been a field barn, closely linked with mid-20th century cultivation in the surrounding fields. Although subsequently ploughed they can be recognised as slight earthworks immediately east of the by-way (Fig 7), which was diverted to the west to accommodate the Stonehenge car park.

Military features

By the end of the 19th century much of the open downland to the north of the survey area had been acquired for military training (Wessex Archaeology 1998; Darvill 2006). Numerous ranges and practice areas were established in the early 20th century, associated with the nearby camps at Larkhill. Within the survey area these comprise a pistol range with a group of practice trenches to their east, which are overlain by a Second World War minefield. Ploughing between the mid-1940s and the early 1970s has reduced all of these to very slight earthworks.

The pistol range located north of Amesbury **45** was recorded from historic aerial photographs by the Stonehenge NMP project (Crutchley 2002). It comprised a line of six conjoined shooting pens, forming a line north to south, with parallel earthen butts to absorb the bullets placed just over 20m to their west. These were removed and the site was being ploughed by late 1945. The rectangular hollow observed during the field survey appears to be the site of the targets and the scarp facing it relates to the western side of the shooting pens.

CONCLUSION

The combined analytical field survey and excavation evidence shows that the Cursus Barrows had a wide variety of original forms, comprising combinations of barrow mounds, timber structures, causewayed and complete ring ditches, plinths, berms and outer banks. To some extent this has been masked by Grinsell's simple division of the group into bell and bowl barrows (1957), which appears to have misled subsequent authors into observing that the Cursus Barrow Group appears anomalous, without the full range of fancy barrows (Richards 1990, 273; Exon *et al* 2000, fig 8.12). In reality the Cursus Barrows are a series of complex circular and oval monuments with multiple phases ranging from the late Neolithic to the middle Bronze Age. This is hinted at in the earthworks by the segmented or causewayed ditches and the plinths beneath barrow mounds. Continued archaeological investigation through geophysical survey and targeted excavation can be expected to provide further information on their construction and phasing, potentially including material that could provide absolute dates.

The analytical field survey has also helped to explain the more recent earthworks. These include the previously overlooked dewponds, which were essential parts of the survey area's history of land use as sheep pasture, and early 20th-century military features once thought to have been ploughed level.

METHODOLOGY

A Level 3 detailed analytical survey (Ainsworth *et al* 2007) was carried out by Lynn Amadio (an MSc in Professional Archaeology student of Oxford University), David Field and Mark Bowden. Survey control and outline archaeological and topographical detail was recorded using a Trimble 5700 Global Positioning System (GPS) and the survey data processed using GeoSite Office 5.1 and AutoDesk Map 2007 software.

Archaeological detail was added using standard graphical techniques of offset and radiation and a plane table and Wild RKI self-reducing alidade. These were referenced to a temporary network of control points previously located with the GPS. Further detail was added using the same GPS system and plane table in 2010; the earthworks immediately east of the by-way (Fig 7) were surveyed by Mark Bowden and Anna Komar. The measurements were plotted on to polyester drawing film at a scale of 1:1000. The hand-drawn archive plan was produced by Deborah Cunliffe. This report was initiated by Lynn Amadio and completed by Sharon Bishop.

Monument records for each site surveyed have been added to English Heritage's archaeological database (AMIE) and existing records enhanced. The main elements of the monument record comprise location, indexed interpretation, textual description and main sources.

Table 2: AMIE records.

Event:	UID: 1518117	Stonehenge WHS Landscape Project
Archive Collection:	AF00338	

AMIE Monument Records			
Existing	Amended	New	Revised total
15	15	4	19

In compliance with English Heritage guidelines (Dickinson 2008), the project archive has been deposited in English Heritage's National Monuments Record, Kemble Drive, Swindon SN2 2GZ, where it can be consulted.

REFERENCES

- Ainsworth, S, Bowden, M, McOmish, D & Pearson, T 2007 *Understanding the Archaeology of Landscapes: a guide to good recording practice*. Swindon: English Heritage.
- Allen, M J & Scaife, R 2007 'A new downland prehistory: long term environmental change on the southern English chalklands' in Fleming, A & Hingley, R (eds) *Prehistoric and Roman Landscapes*. Landscape History after Hoskins Volume 1. Macclesfield: Windgather.
- Andrews and Drury 1952 *Map of Wiltshire 1773*. Devizes: Wiltshire Archaeological and Natural History Society.
- Annable, FK & Simpson, DDA 1964 *Guide Catalogue of Neolithic and Bronze Age Collections in Devizes Museum*. Catalogue 4. Devizes: Wiltshire Archaeological and Natural History Society.
- Ashbee, P 1960 *The Bronze Age Round Barrow in Britain*. Phoenix House: London
- Ashbee, P 1978 'Amesbury Barrow 51: Excavations 1960' *Wiltshire Archaeol Natur Hist Mag* **70/71** (1975-1976) 1-60
- Aubrey, J, Fowles, J (ed) & Legg, R 1980 *Monumenta Britannica. John Aubrey (1626-97), parts one and two*. Milborne Port: Dorset Publishing Co.
- Aubrey, J, Fowles, J (ed) & Legg, R 1982 *Monumenta Britannica. John Aubrey (1626-97), part three and Index*. Milborne Port: Dorset Publishing Co.
- Barclay, A & Halpin, C 1999 *Excavations at Barrow Hills, Radley, Oxfordshire. Vol 1 The Neolithic and Bronze Age Monument Complex*. Oxford Archaeological Unit Thames Valley Landscapes 11. Oxford University Committee for Archaeology.
- Bond, J 1991 'Appendix H: landscape regression', in Darvill, T *Stonehenge conservation and management project: environmental statement*. For Debenham, Tewson and Chinnocks on behalf of English Heritage and the National Trust.
- Bowden, M 1998 *Barbury Castle Archaeological Survey Report* NMR no: SU17 NW 8. Swindon: Royal Commission on the Historical Monuments of England
- Bronk Ramsey, C 2009 'Bayesian analysis of radiocarbon dates' *Radiocarbon*, 51(1), 337-360.
- Burl, A & Mortimer, N 2005 *Stukeley's Stonehenge: an unpublished manuscript, 1721-1724*. New Haven: Yale University Press.

Chippendale, C 1978 'The Enclosure of Stonehenge' *Wiltshire Archaeol Natur Hist Mag* **70/71** (1975-1976) 109-123

Christie, P M 1963 'The Stonehenge Cursus' *Wiltshire Archaeol Natur Hist Mag* **58**, 370-382.

Crowley, D A 1995 'Parishes: Amesbury' in Crowley, D (ed) *The Victoria History of the Counties of England: A History of Wiltshire* volume **15**: Amesbury hundred, Branch and Dole hundred. Oxford University Press/University of London Inst Hist Res. 13-55.

Crutchley, S 2000 *Salisbury Plain Training Area: a report for the National Mapping Programme. Aerial Survey Report Series*. Swindon: English Heritage

Crutchley, S 2002 *Stonehenge World Heritage Site Mapping Project: Management Report. Aerial Survey Report Series AER/14/2002*. Swindon: English Heritage

Cunnington, W 1801-1809 *Books 1-13 bound in three volumes*. Devizes Museum. DZSWS: MSS 2594-2596.

Darvill, T 2005 *Stonehenge World Heritage Site: an archaeological research framework*. London and Bournemouth: English Heritage and Bournemouth University.

Darvill, T 2006 *Stonehenge: the biography of a landscape*. Stroud: Tempus.

David, A & Payne, A 1997 'Geophysical Surveys within the Stonehenge Landscape: a review of past endeavour and future potential' *Proc Brit Acad* **92**, 73-113.

Dickinson, R 2008 *Guidance for archiving Archaeological Survey and Investigation archive outputs at the National Monuments Record*. Internal document. Swindon: English Heritage.

Exon, S; Gaffney, V; Woodward, A & Yorston, R 2000 *Stonehenge Landscapes*. Oxford: Archaeopress.

Field, D 1998 'Round barrows and the harmonious landscape: placing Early Bronze Age monuments in south east England' *Oxford J Archaeol* **17**, 309-26

Field, D 2001 'Place and memory in Bronze Age Wessex' in Brück, J (ed) *Bronze Age Landscapes: tradition and transformation*. Oxford: Oxbow Books.

Field, D 2006 *Earthen long barrows: the earliest monuments in the British Isles*. Stroud: Tempus.

Field, D 2008 *Use of land in Central Southern England during the Neolithic and early Bronze Age*. BAR Brit Ser **458**. Oxford: Archaeopress.

- Garwood, P 2007 'Before the hills in order stood: chronology, time and history in the interpretation of Early Bronze Age round barrows' in Last, J (ed) *Beyond the grave: new perspectives on barrows*. Oxford: Oxbow.
- Goddard, E H 1913 'A list of Prehistoric, Roman and pagan Saxon antiquities in the county of Wiltshire' *Wiltshire Archaeol Natur Hist Mag* **58** (1913-1914) CXX, 150-378.
- Gover, J E B; Mawer, A & Stenton, F M 1939 *The place-names of Wiltshire*. English Place-Name Society: the survey of English place-names. Cambridge: Cambridge University Press.
- Grinsell, L G 1941 'The Bronze Age round barrows of Wessex' *Proc Prehist Soc* **7**, 73-113.
- Grinsell, L V 1957 'Archaeological Gazetteer' in Pugh, R B (ed) *Victoria County History: Wiltshire I* part 1. Oxford: Oxford University Press. 21-279.
- Grinsell, L V 1953 *The Ancient Burial-Mounds of England*. London: Methuen
- Grinsell, L V 1978 *The Stonehenge Barrows Groups*. Salisbury: Salisbury and South Wiltshire Museum.
- Hey, D 1998 *The Oxford Companion to Local and Family History*. Oxford.
- Hoare, R C 1812 *The Ancient History of Wiltshire*. vol 1. London: William Miller (Facsimile edition 1975 EP Publishing/Wiltshire County Library).
- Howarth, J 2010 *A new henge discovered at Stonehenge*. University of Birmingham press release: 22nd July 2010.
- James N D G 1987 *Plain Soldiering: a history of the armed forces on Salisbury Plain*. Salisbury: The Hobnob Press.
- Jones, A M 2005 *Cornish Bronze Age Ceremonial landscapes c2500-1500 BC*. BAR Brit Ser **394**
- Komar, A & Bishop, S 2010 *Fargo South Stonehenge World Heritage Site Landscape Project*. Archaeological Survey Report. RDRS 96-2010. Swindon: English Heritage.
- Last, J 2007 *Beyond the Grave: New perspectives on Barrows*. Oxford: Oxbow.
- Lawson, A J 2007 *Chalkland: an archaeology of Stonehenge and its region*. Salisbury: Hobnob Press.

Leary, J 2008 'The Silbury Sequence: seeing past tunnel vision', in *Research News* 10: Winter 2008-09. Newsletter of the English Heritage Research Department. Portsmouth: English Heritage.

Loveday, R 2006 *Inscribed across the landscape: the cursus enigma*. Stroud: Tempus.

Needham, S, Parker Pearson, M, Tyler, A, Richards, M & Jay, M 2010 'A first "Wessex I" date from Wessex' *Antiquity* 84, 363-373.

Newall R S 1966 'Notes: Megaliths once near Stonehenge' *Wiltshire Archaeol Natur Hist Mag* 61, 93.

Oswald, A; Dyer, C & Barber, M 2001 *The creation of monuments: Neolithic causewayed enclosures in the British Isles*. Swindon: English Heritage.

Pearson, T forthcoming *The Greater Stonehenge Cursus*. Stonehenge World Heritage Site Landscape Project. Archaeological Survey Report. RDRS. York: English Heritage

Peters, F 2000 'Two traditions of Bronze Age Burial in the Stonehenge landscape.' *Oxford J Archaeol* 19(4), 343-358.

RCHME 1979 *Stonehenge and its environs: monuments and land use*. Royal Commission on the Historical Monuments of England (RCHME). Edinburgh: Edinburgh University Press.

Rackham, O 1986 *The History of the Countryside*. London: Dent.

Richards, J 1990 *The Stonehenge Environs Project*. London: English Heritage.

Simpson, D D A 1975 'Introduction', in Hoare, Sir R C *Ancient Wiltshire* 1975 facsimile edition.

Smith, N 2005 'Medieval and later sheep farming on the Marlborough Downs', in Brown, G; Field, D & McOmish, D *The Avebury Landscape: aspects of the field archaeology of the Marlborough Downs*. Oxford: Oxbow, 191-201.

Stone, J F S 1939 'An early Bronze Age grave in Fargo Plantation near Stonehenge' *Wiltshire Archaeol Natur Hist Mag* 48, 357-70.

Thomas, J, Marshall, P, Parker Pearson, M, Pollard, J, Richards, C, Tilley, C, & Welham, K 2009 'The date of the Greater Stonehenge Cursus' *Antiquity* 83, 40-53.

Thomas, N 2005 *Snail Down, Wiltshire. The Bronze Age barrow cemetery and related earthworks, in the parishes of Collingbourne Ducis and Collingbourne Kingston: Excavations 1953, 1955 and 1957*. Wiltshire Archaeological and Natural History Society Monograph number 3. Devizes: WANHS.

Tilley, C 1994 *A phenomenology of landscape: places, paths and monuments*. Explorations in anthropology [series]. Oxford: Berg.

Tilley, C; Richards, C; Bennett & Field, D 2007 'Stonehenge – its landscape and architecture: a reanalysis' in Larsson, M & Parker Pearson, M (eds) *From Stonehenge to the Baltic: living cultural diversity in the third millennium BC*. BAR Int Ser 1692.

Vatcher, F de M & Vatcher, H L 1973 'Excavation of three postholes in Stonehenge car park' *Wiltshire Archaeol Natur Hist Mag* **68**, 57-63.

Woodward, A B & Woodward, P J 1996 'The Topography of some Barrow Cemeteries in Bronze Age Wessex' *Proc Prehist Soc* **62**, 275-291.

Yates, D T 2007 *Land, Power and Prestige: Bronze Age field systems in southern England*. Oxford: Oxbow Books.

Young, C, Chadburn, A & Bedu, I 2009 *Stonehenge World Heritage Site: management plan 2009*. London: English Heritage.

Maps

Consulted at the Wiltshire History Centre (WHC)

Tithe Award (TA)	Amesbury 1846
	Winterbourne Stoke 1841

Enclosure Award	Winterbourne Stoke 1812	[EA104]
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Aerial Photographs

National Monuments Record – oblique aerial photographs

SU 1142/17	NMR 881/430-431	27th July 1975
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SU 1142/74	NMR 18559/23	9th January 2000
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National Monuments Record – vertical aerial photographs

RAF/106G/UK/915 4023-4024 11-OCT-1945

APPENDIX

Table 3: Measurements of the surveyed barrows.

Name	overall diameter	mound height	mound base (diameter)	mound top (diameter)	plinth base (diameter)	berm (diameter)	ditch (width)	ditch (depth)	ditch (diameter)	outer bank (width)	outer bank (height)
Amesbury 43	60m	3.4m	14m	9m	38m	45m	8m	0.7m	60m		
Amesbury 44 (twin)	34m by 42m	2.3m & 1.6m	17m & 11m	6m & 6m		20m by 31m	7m	0.4m	34m by 42m		
Amesbury 45	56m	3.5m	26m	8m	36m	41m	7m	0.5m	56m		
Amesbury 46	40m	1.7m	19m	12m	26m	28m	8m	0.4m	40m		
Amesbury 47	36m	1.6m	19m	11m		23m	8m	0.3m	36m		
Amesbury 48	38m	0.3m	22m	15m			9m	0.1m	33m	3m	0.2m
Amesbury 49	[26m]	0.2m	19m	13m			6m	0.2m	[26m]		
Amesbury 50	41m	0.5m	22m	6.5m			10m	0.1m	41m		
Amesbury 51	[36m]	1m	28m	12m			5m	0.25m	[33m]	2m	0.15m
Amesbury 52	[25m]	0.7m	17m	11m			4m	0.1m	[25m]		

Square brackets indicate estimated figures, for example where the surviving ditch does not completely surround the mound. Figures may appear not to add up, where the mound extends into the bottom of the ditch.



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