Report No: 2011R019

The National Mapping Programme

Hampshire South Downs Mapping Project

English Heritage Project Number
5174

Project Report

Historic Environment Projects

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Client	**English Heritage**
Report Number	**2011R019**
Date	**15th February 2011**
Status	**Final**
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Approved by	**Peter Rose**

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Acknowledgements

This study was commissioned by English Heritage and carried out by the projects team of Historic Environment, Cornwall Council. Most of the mapping was carried out by Carolyn Royall, Emma Trevarthen and Megan Val Baker.

Archaeological data and advice was provided by David Hopkins and Alex Godden of Hampshire County Council Environment Department.

Effective running of the project was greatly assisted by the help and support provided by Archive staff at the English Heritage National Monuments Record Centre in arranging and supplying photograph loans. Particular thanks are due to Luke Griffin.

The project was carried out in collaboration with Cambridge University's Unit for Landscape Modelling, their contribution being the loan of material from their Air Photo Library.

Access to Hampshire County Council's air photographic collection was greatly facilitated by Mike Proctor and other staff at the Environment Department.

Comments and advice on draft versions of this report were provided by Peter Rose, Helen Winton and David Hopkins.

Geological data for the project was provided by the British Geological Survey Licence 2010/065

Within the Historic Environment, the Project Manager was Andrew Young.

The views and recommendations expressed in this report are those of the Historic Environment projects team and are presented in good faith on the basis of professional judgement and on information currently available.

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Cover illustration

A late Iron Age and Romano-British enclosure complex at No Man's Land, Winnall Down. Photo SU 5129/29 3rd December 2007. © English Heritage. NMR.

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Abbreviations

ADS	Archaeology Data Service
AHBR	Hampshire Archaeology and Historic Buildings Record
ALGAO	Association of Local Government Archaeological Officers
AONB	Area of Outstanding Natural Beauty
CC	Cornwall Council
CUCAP	Cambridge University Committee for Aerial Photography
EH	English Heritage
GIS	Geographical Information System
HCC	Hampshire County Council
HECC	Historic Environment Cornwall Council
HEEP	Historic Environment Enabling Programme
HLC	Historic Landscape Character
IUCN	World Conservation Union
NMP	National Mapping Programme
NMR	National Monument Record
PDF	Portable Document Format
OS	Ordnance Survey
RCHME	Royal Commission on the Historical Monuments of England
SDNPA	South Downs National Park Authority

1 Summary

This report presents the background, methodology and results of the Hampshire South Downs Mapping project. The project was funded by English Heritage through the Historic Environment Enabling Programme and was carried out between early 2007 and May 2010 by the Projects Team at Historic Environment, Cornwall Council, supported by Hampshire County Council Environment Department.

The project consisted of an analytical survey of all archaeological features visible on aerial photographs within the Hampshire portion of the South Downs National Park and forms part of English Heritage's National Mapping Programme (NMP).

The South Downs National Park covers an area of approximately 525 square kilometres in southeast Hampshire, between the Itchen Valley and the county boundary with West Sussex. In order to conform to NMP guidelines the survey was based on complete kilometre squares and consequently the project area totalled 621 square kilometres and included some parts of the landscape outside the National Park boundary. The area is flanked by several relatively large urban areas including Winchester, but is predominantly rural, the largest town being Petersfield.

Broadly speaking the project area can be divided into two principal geological zones. The predominant feature is a broad band of chalk running east-west, but in the northeast there are extensive deposits of Greensands marking the western edge of the Weald. The chalklands are characterised by a central ridge of downland, dissected by the river Meon. Along the southern dip slope and especially on higher ground in the north, the chalk is capped by substantial deposits of clay-with-flints. Where the chalk meets the Greensand there are dramatic escarpments known locally as hangers.

Substantial parts of the chalkland contained former open field systems or remained open downland until the late eighteenth century when they were enclosed with straight-sided fields as a result of the Parliamentary Enclosure Act. Elsewhere, particularly on the Greensand and in areas capped by clay, the present day field pattern reflects earlier informal enclosure and extensive assarting dating from the late medieval period onwards.

There is extensive aerial photographic cover of the Hampshire South Downs dating from the 1920s to the present day and 15,250 photographs were consulted during the project. The main photographic collection was that at English Heritage's archive in Swindon, but those at Hampshire County Council's Environment Department and Cambridge University's Unit for Landscape Modelling were also consulted.

As a result of the project 3,509 archaeological sites were interpreted, mapped and recorded in the project database (but see section 8.1, table 2): 87% of these were newly identified, having not been recorded previously. The high percentage of new sites can partly be explained by the fact that the scope of the project was wider than the past remit of Hampshire's Archaeology and Historic Buildings Record (AHBR), particularly with reference to post medieval features, such as chalk pits and drainage features. However, when this is taken into account there remain 2,282 new records of the types of site which form the traditional core of the AHBR. For instance 77% of all prehistoric and Roman sites mapped during the project were newly identified.

More than 70% of the sites were plough-levelled and only visible as cropmarks or soilmarks, reflecting the long history of intensive agriculture over much of the project area.

Few monuments from the Neolithic period were identified but those that were include a possible cursus monument. More research is needed to confirm the interpretation of the cursus but, if proven it will be the first such feature recorded in Hampshire.

Many Bronze Age barrows were mapped, of which more than half were newly identified during the project. Many of the previously known barrows are sited in prominent positions

on high ground, whereas some of the newly identified sites are on lower lying land such as in the coombes and valleys.

Extensive Celtic fields are a feature of the prehistoric landscape and again more than half of those mapped were previously unrecorded. Their distribution is overwhelmingly centred on the chalklands and virtually all are plough-levelled.

The survey revealed much evidence for Iron Age and Romano-British settlement in the form of enclosures and enclosure complexes. There is a much greater range of settlement types on the chalk; elsewhere settlement is characterised by infrequent small discrete enclosures not obviously associated with fields.

Twelve deserted or shrunken medieval settlements and a further six possible settlements were recorded. For the most part these are located in the eastern part of the project area, including on the Greensand landscape. Far more evidence of the medieval fieldscape was mapped in the form of plough-levelled boundaries but, typically for Hampshire, there was little evidence for terraced lynchets or ridge and furrow.

The post medieval agricultural landscape is characterised by extensive water meadows throughout the valleys of the Itchen and Meon and at a few locations in the northeast. A number of dewponds were also identified in the form of cropmark or soilmark pits or hollows. One important finding was a large number of small circular cropmarks interpreted as possible post medieval charcoal burning platforms in the heavily wooded area around East Tisted. Although there is no well documented charcoal industry in Hampshire these features suggest that charcoal production was more extensive than previously realised.

A relatively small number of twentieth century military and defensive sites were recorded compared with previous NMP projects in Hampshire. The most notable aspect is a series of large camps in the Itchen valley dating from the First World War and the identification of training trenches associated with these camps on the nearby downland is an important finding.

Copies of Arcview shapefiles of the mapping produced by the project with attached summary record data have been deposited with Hampshire County Council where the mapping can be viewed in the county GIS system. Copies of the database records have also been deposited with Hampshire, where they will be incorporated into the AHBR. Copies of the mapping and database have been deposited with English Heritage's National Monuments Record in Swindon where they can also be consulted.

2 Project background

The South Downs National Park was constituted in 2010 and covers 1,641 square kilometres of Sussex and Hampshire, extending for roughly 90 miles from Winchester in the west to Eastbourne in the east.

The South Downs National Park Authority (SDNPA) has a statutory purpose to conserve the historic environment and the cultural heritage of the South Downs. The Authority is currently developing a statutory Management Plan to support its countryside management strategies.

As part of its published strategy for historic environment research in protected landscapes (English Heritage 2009) one of English Heritage's main goals is to support those charged with managing protected landscapes through the provision of applied and carefully-targeted baseline research to underpin the development and delivery of Management Plans.

One of English Heritage's major research programmes is the National Mapping Programme (NMP) which aims to map, interpret and record all archaeological features (from the Neolithic to the twentieth century) visible on aerial photographs.

As part of a wider programme designed to assess the archaeological resource and identify previously undetected features in the historic landscape, a series of NMP pilot projects within the National Park have been carried out by the English Heritage (EH) Aerial Survey team based in Swindon (Carpenter 2008). These pilots covered a number of transects in Sussex; the only part of the National Park in Hampshire to have been mapped was done so coincidentally as part of the Hampshire Aggregate Landscape project (Young *et al* 2008). Consequently there was no complete or consistent record of the archaeology visible on aerial photographs for the Hampshire South Downs. The incomplete knowledge of the extent, condition and evolution of the historic landscape is identified as a key issue in the South Downs Management Plan consultation draft, (South Downs Joint Committee, 2006, Ambition 2, Issue 2).

The Cornwall NMP team have previously mapped parts of Hampshire (Young *et al* 2008; Young 2008; Trevarthen 2010) and have established effective working relationships and data exchange mechanisms with Hampshire County Council Environment Department (HCC).

Following discussions between the Cornwall NMP team, David Hopkins (Hampshire County archaeologist), the EH Aerial Survey team and Richard Massey (the EH Inspector), EH provided resources through the Historic Environment Enabling Programme (HEEP) for the Cornwall team to carry out NMP mapping of the Hampshire portion of the South Downs National Park.

The mapping began early in 2007 and was completed in May 2010. This report describes the project area, outlines the methodology used, presents an overview of the results and sets out the management implications arising from the work.

3 Aims and objectives

The overarching aim of the National Mapping Programme is

'*to enhance our understanding about past human settlement, by providing information and syntheses for all archaeological sites and landscapes (visible on aerial photographs) from the Neolithic period to the twentieth century*' (Bewley 2001, 78).

Further aims and objectives specific to this project are set out below

3.1 Aims

1. To facilitate decisions regarding strategic planning, management, preservation and research of archaeological sites and historic landscapes within the Hampshire South Downs.
2. To assist the implementation of the historic environment elements of the South Downs Management Plan.
3. To inform the presentation of the historic environment and increase public awareness of the archaeology of the Hampshire South Downs.

3.2 Objectives

To achieve these aims the following objectives were identified.

- Digital mapping of the archaeological landscape within the Hampshire South Downs to current standards adopted by the NMP.
- Production of baseline data, and incorporation of this data into the Hampshire Archaeology and Historic Buildings Record (AHBR) to inform strategic and individual planning decisions within the Hampshire South Downs.
- Publication and dissemination of the results of the project.
- Integration of the data resulting from the project into the National Monuments Record (NMR).

4 Method statement

The project was carried out to current standards adopted by the NMP (English Heritage 2006). A detailed account of current NMP methodology is contained in the Project Design (Young 2007) in Appendix 2 and is summarised below.

4.1 Transcription

4.1.1 Mapping Blocks

The project area covers 621 km² which is roughly equivalent to 25 OS quarter sheets. To facilitate effective management of the project the area was divided into four separate mapping blocks. Work proceeded one block at a time, although there was some overlap where work on one block would begin at the same time as another was being completed.

4.1.2 Transcription

Mapping of the Hampshire South Downs was undertaken entirely in digital format using AutoCAD Map3D 2009 and 2010. Transcription consisted of the following processes.

- Information was derived from the photographs available in the various collections (Section 7).
- Oblique and vertical photographs were scanned.
- Digital transformations of archaeological features visible on the photographs were produced using AERIAL.529. Digital copies of current OS 1:10,000 maps were used for control information and as a base for mapping in AutoCAD. All digital transformations were therefore within a level of accuracy within 5m to true ground position, but typically less than 2.5m to the base map. The rectified images were imported into the AutoCAD drawing for the appropriate kilometre square.
- Archaeological features were digitally transcribed in AutoCAD according to a nationally agreed layer structure and using agreed line and colour conventions as specified by EH Aerial Survey and Investigation (EH 2006).
- Object data was attached to the AutoCAD drawing in a table recording basic interpretative information and consisting of four fields: period, type, form, and photo as well as a comment field.
- Polygons were drawn around each separate monument to define its extent.

4.2 Data recording

4.2.1 The Project Database

Data was entered into a Microsoft Access database for each archaeological site mapped. The database automatically generated unique Project ID numbers and contains fields enabling monument indexing to be carried out to NMR and ALGAO standards, including fields for cross referencing to existing AHBR and NMR records.

5 Project scope

All archaeological features were recorded, both plough-levelled and upstanding remains, dating from the Neolithic period to the twentieth century (pre-1946), including industrial and military features. Archaeological or historically significant sites appearing on OS base maps which have not been photographed, or which are completely obscured by vegetation, were not recorded.

Plough-levelled features and earthworks
All cropmarks and soilmarks representing buried "negative" features (i.e. ditches and pits), earthworks or stonework were recorded. All earthwork sites visible on aerial photographs were recorded, whether or not they have been previously surveyed (including those marked on the OS maps), and whether or not they are still extant on the most recent photography.

Ridge and furrow
All areas of medieval and post medieval ridge and furrow were mapped using a standard convention to indicate the extent and direction of the furrows.

Water meadows
Areas of extensive water meadows thought to pre-date 1945 were transcribed and recorded. The lines of the main drains and leats were mapped in full, plus a sufficient sample of the minor water courses to give a true feel for the extent and pattern of the whole.

Buildings and structures
The foundations of buildings and structures which appear as ruined stonework, earthworks, cropmarks, soilmarks or parchmarks were recorded. Standing roofed or unroofed buildings and structures were not recorded unless there was no other adequate map record. However, in specific archaeological contexts (e.g. industrial and military complexes and country houses), or when associated with other cropmark and earthwork features or when buildings have been demolished since the photography, then they were mapped in order to make an association explicit.

Industrial features and extraction
Areas of industrial archaeology were recorded using the appropriate conventions where they were recognised as pre-dating 1945. Twentieth century industrial remains were only mapped when of particular interest, or when associated with earlier features.

All extractive features believed to pre-date 1945 were mapped. These include large-scale features such as quarries, pits, etc, as well as small-scale extraction of resources for local use (e.g. chalk pits, minor stone quarries).

Twentieth century military features
Twentieth century military features were recorded to an appropriate level of detail. The extent of larger military complexes such as airfields and camps were depicted using the 'extent of area' symbol. The major buildings and structures within military complexes as well as isolated military structures (e.g. pillboxes or buildings associated with searchlight batteries), were mapped and recorded.

Field boundaries and field systems
All removed field boundaries and field systems were plotted if interpreted as predating the OS First Edition map (c.1880) and not recorded on any later Editions. Where post medieval field boundaries plotted by the OS may be misinterpreted (e.g. within complex areas of archaeological features), these were sometimes mapped.

Transport features
Major transport features (i.e. disused canals and main railways) are included in the OS sphere of interest and appear on OS mapping; these were therefore not mapped. Lesser features, such as trackways, pathways and roads considered to be post medieval or earlier in origin and not already recorded by the OS, were plotted.

Natural features
Geological and geomorphological features visible on aerial photographs were not normally mapped. In exceptional circumstances they were plotted if their presence helped to define the limits of an archaeological site.

6 The project area

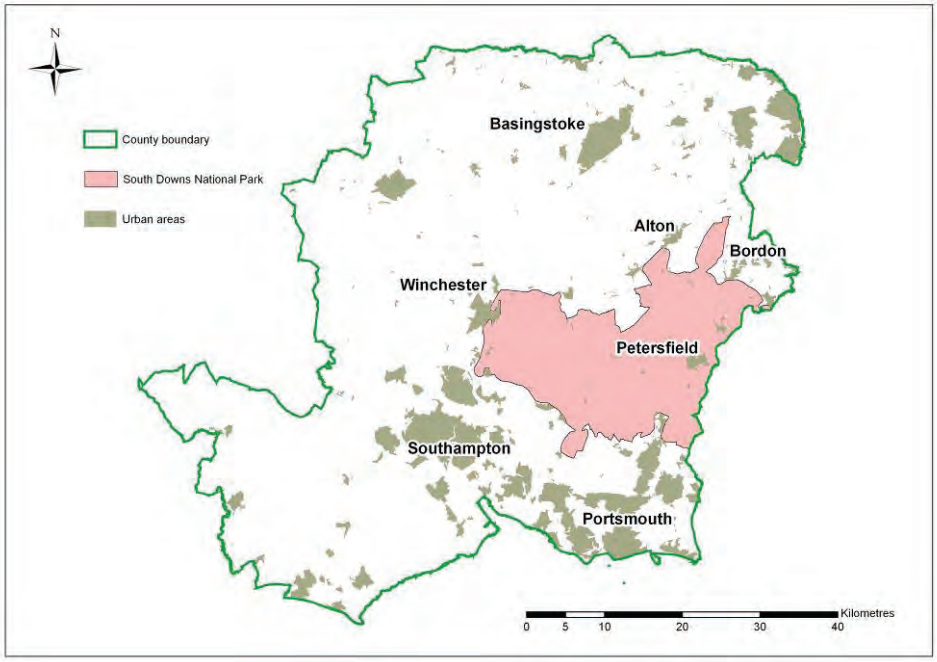

Fig 1 Extent of the South Downs National Park in Hampshire

Under the National Parks and Access to the Countryside Act 1949, the South Downs are recognised as nationally important for their natural beauty and the rich heritage of human activity over the centuries. The landscape is of international importance being recognised as a Category V Protected Landscape by the World Conservation Union (IUCN).

The landscape was designated in 1960 as two Areas of Outstanding Natural Beauty (AONBs) and its National Park status was confirmed in 2010. Within Hampshire the National Park covers approximately 525 square kilometres (Fig 1). It includes all of the former East Hampshire AONB and in places includes areas of landscape outside the AONB.

Part of the National Park (comprising 27 square kilometres to the north of Liss) has already been mapped as part of the Aggregate Landscape of Hampshire project (Young *et al* 2008) and was therefore excluded from the current project area. The mapping of the remainder of the National Park within Hampshire was based on kilometre squares so that some parts of the landscape outside the National Park boundary were included in the project. In total the project area covers 621 square kilometres (Fig 2).

The project area is bounded by the Itchen Valley in the west and by the county boundary (and the limit of previous NMP mapping) in the east. The area is flanked by several relatively large urban areas – Winchester, Alton, Bordon, Purbrook, Eastleigh and Chandler's Ford - but is predominantly rural, the largest town being Petersfield. This is particularly true in the chalklands, where settlement consists mainly of small villages in the valley floors.

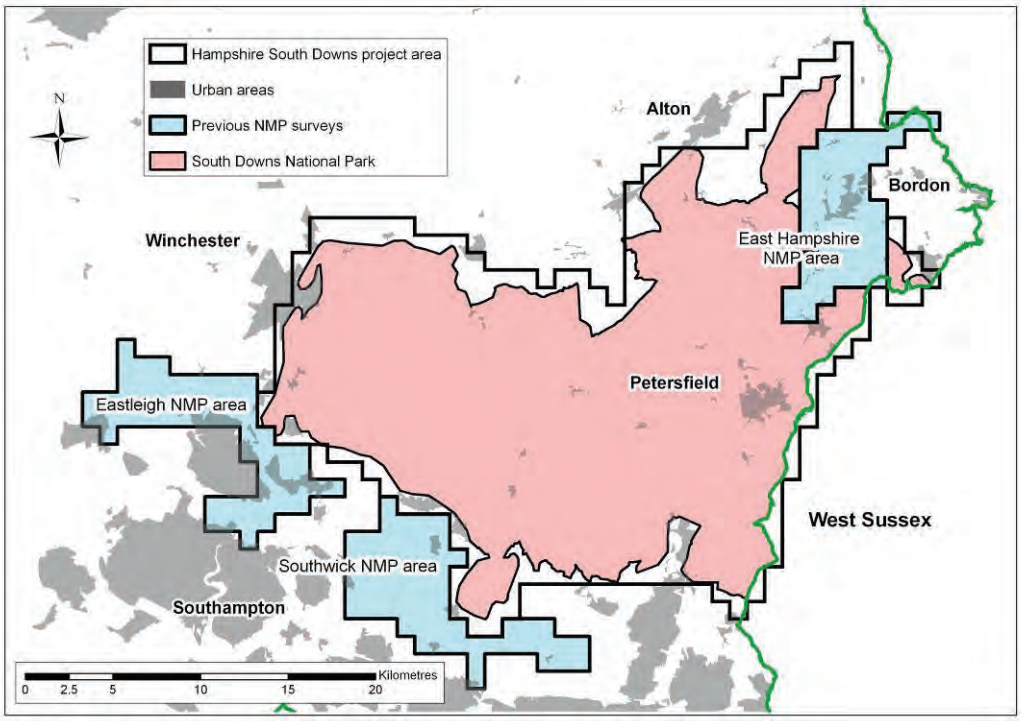

Fig 2 The project area and the limit of previous NMP surveys

6.1 Geology and topography

Underlying geology determines the physical landform, local climate and vegetation cover and there is a complex sequence of geological history in the Hampshire South Downs. The oldest rocks are the clays of the Wealden Vale which were laid down over 130 million years ago when south east England was a low-lying area of marshes and lakes. These clays form undulating lowlands drained by a network of small streams, which characterise the eastern fringe of the project area.

During the Cretaceous period 110 million years ago, the mud flats and marshes were encroached by a warm sea and the majority of rocks underlying the South Downs comprise marine sediment laid down over the next 40 million years. The earliest are the Hythe Beds of the Lower Greensand which form a horseshoe of rugged Greensand Hills encircling the Wealden Vale.

To the west of the Greensand Hills is a sequence of Lower Greensand deposits which give rise to distinctly different landscapes in close proximity. The Sandgate beds form a rolling landscape of sandy, well-drained soils which are largely under arable, whilst the Folkestone Beds form a low heathland plateau with poor sandy soils to the east of Petersfield. These in turn give way to the later Gault Clay deposits which form a clay vale to the west of the heathlands. Later in the sequence the sandy sediments of the Upper Greensand were deposited. These are relatively hard rocks which form a bench with a secondary scarp at the foot of the chalk scarps.

The dominant geological feature of the Hampshire South Downs is a prominent spine of chalk running roughly west–east and dissected by the river Meon. The chalk formations are the youngest rocks in the geological sequence and they form an expansive rolling upland with little surface drainage. The chalk ridge has a gentle dip slope in the south and breaks into a series of hills that merge with the undulating chalk plateau of the Hampshire Downs to the north. Coombes interrupt the scarp and extensive dry valley systems carve the dip slope. Large areas of superficial Quaternary deposits overlie the chalk bedrock,

the most extensive of which are the clay-with-flints that cap the upper slopes of the chalk hills and the periglacial head which lies within its coombes and dry valleys.

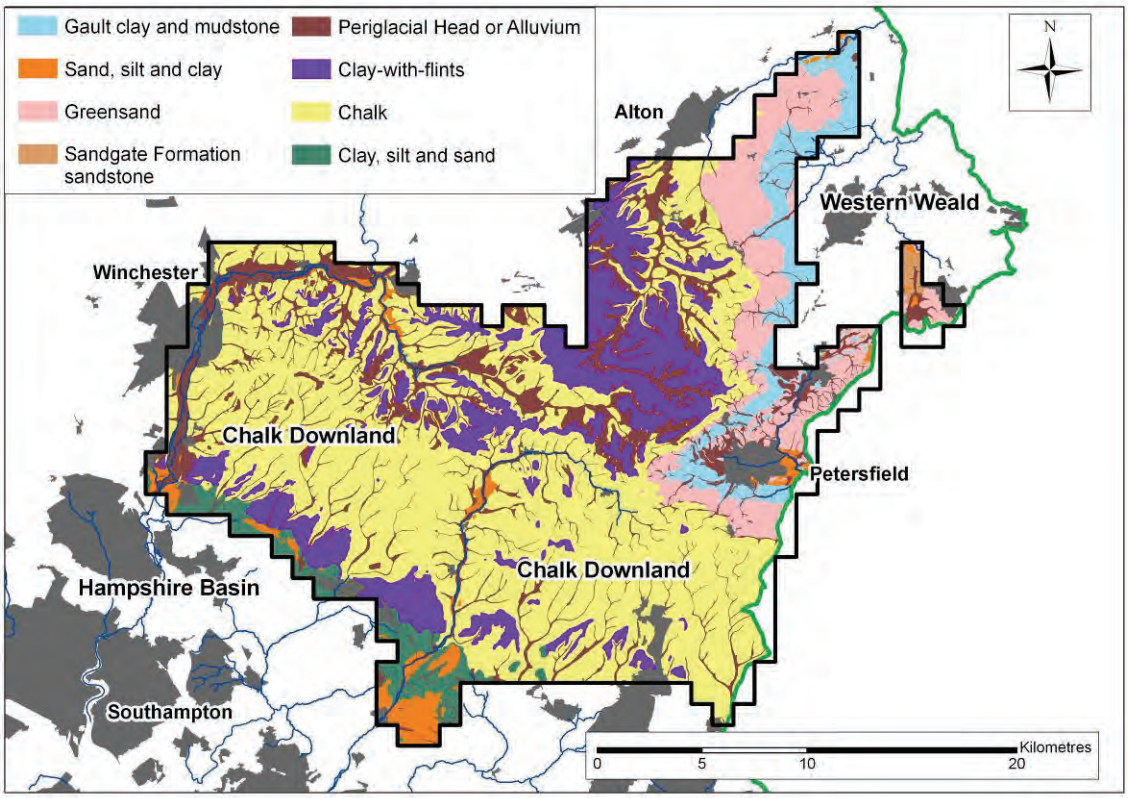

Fig 3 Geology of the Hampshire South Downs.

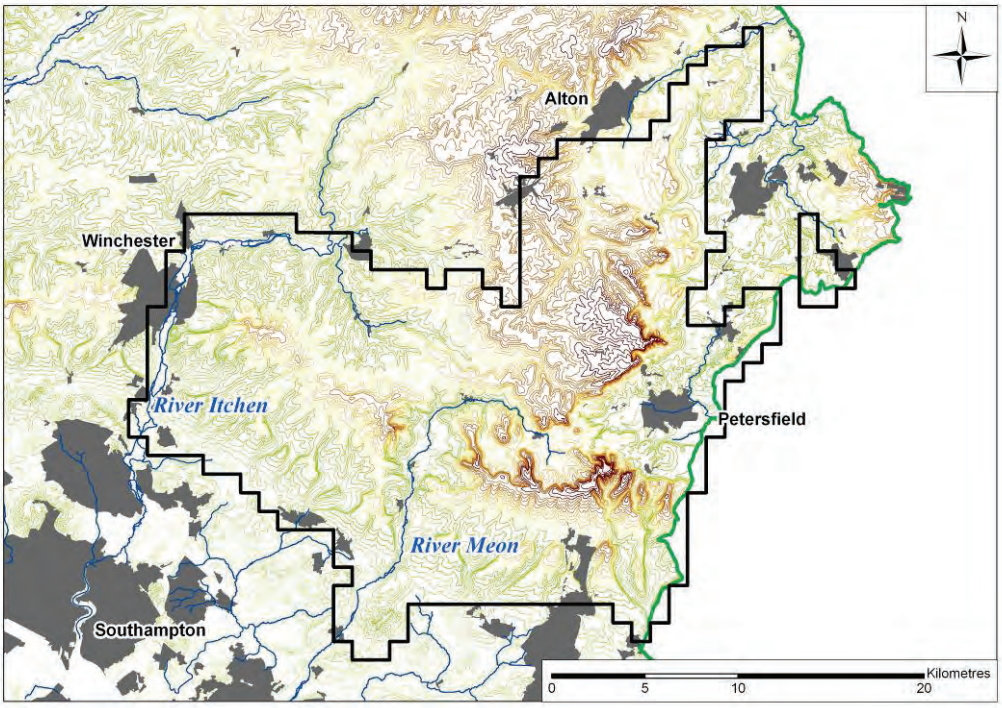

Fig 4 Topography of the Hampshire South Downs

The downs run from the Itchen Valley in the west and end in a dramatic, east-facing scarp to the west of Petersfield. Here a prominent outcrop of Upper Greensand forms an escarpment below that of the chalk. As these escarpments run northwards, they gradually diverge and the Upper Greensand escarpment becomes more distinctive than the chalk escarpment above it. Together these escarpments are known locally as the 'Hangers'. They form a prominent feature of the landscape between Alton and Petersfield and are one of the most distinctive features within the National Park.

Along the southwest edge of the project area the chalk dip slope gives onto the younger sediments of Tertiary clay and silts which overlie the chalk as it drops beneath them. These comprise the Lambeth and Thames Groups, including London Clay Formation, which make up the predominant underlying rocks in the Hampshire Basin.

6.2 Soils

Most of the soil in Hampshire South Downs has developed since the end of the last Ice Age and is the result of complex interactions between geology, land use and climate. The result is a wide variety of soil characteristics and types. These can be divided into three soil zones (Hampshire County Council 2004).

- **The Chalk Downland.** The soils over the Cretaceous chalk are characteristically shallow, lime-rich topsoils directly overlying chalk rubble. Where uncultivated, these are dark and humus-rich soils which support herb-rich downland and chalk woodland plant communities. Over much of the area however, these soils are under cultivation and have been converted to a rubbly light brown mixture of topsoils and ploughed chalk.

  Freely draining, slightly acidic and heavier soils have developed on the wider plateaux overlain by deposits of clay-with-flints, and more base-rich soils over Head lying in the dry valleys and coombes. In the larger valley of the River Itchen alluvial and fen peat soils occur.

- **The Western Weald.** The soils on the Western Weald closely reflect the underlying geology with fertile free draining slightly acidic loamy soils over the sandstone beds of the Upper and Lower Greensand and more slowly permeable, seasonally wet basic loams and clays over the mudstones of the Gault Formation. Further to the east these soils give way to freely draining very acidic sandy heathland soils interspersed with less acidic sandy soils which overlie the Hythe Beds of the Lower Greensand.

- **The Hampshire Basin.** To the southwest of the chalk the land is flat and floored by soft Tertiary clays. Most of the soils are difficult to farm because of their low natural fertility and slow drainage. Slow permeable, seasonally wet, clay loam soils with impermeable sub-soils are widespread.

6.3 Landscape Character types

The landscape character of the South Downs is determined to a large extent by geology and soils. The western and southern parts of the project area, overlying chalk, are dominated by downland character types, whereas the landscape in the northeast includes a variety of types reflecting the sands, mudstones and Gault clay of the Wealden Edge. The East Hampshire chalk scarps form a boundary between the downland and Wealden types. Overall 14 of the Landscape Character types listed in Hampshire's Integrated Character Assessment (Hampshire County Council 2010) are found in the project area (Fig 5).

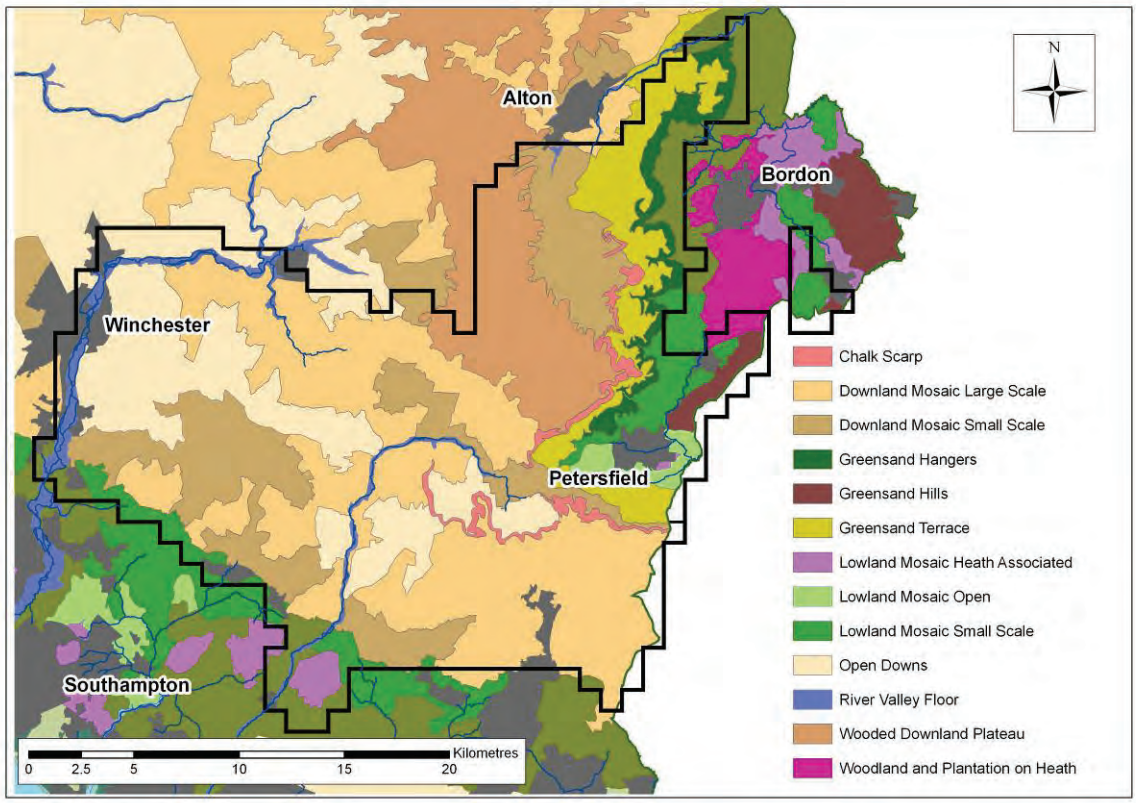

Fig 5 Landscape Character Types within the Hampshire South Downs.
Source: Hampshire Integrated Character Assessment (HCC 2010).

6.3.1 Downland types

Downland Mosaic Large Scale

This is a downland landscape overlying Upper and Middle Chalk formation. The soils have a higher clay content than those found in Open Downs landscapes. There are clay-with-flints deposits, particularly on the south-facing chalk dip-slope. The large scale character of the landscape is influenced by its rolling topography, medium to large fields and by large blocks of ancient woodland. There are also dry valleys or coombes and mini scarps. The landscape is characterised by a mosaic of land uses, but predominantly agricultural - mostly arable but with some permanent pasture. Field boundaries are defined by hedgerows which form a generally well defined and quite dense network although in places there has been recent hedgerow removal. In terms of historic landscape character (section 6.4) there are blocks of assarted woodland but assart fields and open downland appear to have been reorganised by eighteenth and nineteenth century Parliamentary enclosures.

Downland Mosaic Small Scale

The underlying geology of this landscape type is Upper and Middle Chalk formation with frequent patches of clay-with-flints. There is a strong hedgerow network formed by mature, well-treed hedges, a much greater prevalence of small fields than other downland types and numerous small woodlands (with a high proportion of woodland under 2ha in extent). This, coupled with the frequently undulating nature of the landscape (with fairly steep slopes and occasional scarps), heightens the sense of enclosure compared with Downland Mosaic Large Scale. It is an agricultural landscape; predominantly arable and improved grassland with interconnected woodland strips. Enclosure of the landscape probably began at a relatively early date. Small to medium assart fields and woodland and small fields with sinuous or wavy boundaries predominate. Fields of this type are

associated with late medieval to seventeenth/eighteenth century informal enclosure processes.

Open Downs

This is a large scale open, rolling landscape with dry valleys and few woods and trees. The underlying geology is Upper Chalk, with clay deposits predominantly confined to the dry valley bottoms. Shallow chalk soils dominate and are generally less flinty than the Downland Mosaic types. The landscape is characterised by large or very large fields defined by low trimmed hedges. In places there is coniferous shelter belt planting. Land use is predominantly arable; intensively farmed with improved grassland generally limited to river valley sides. Only a few fragments of chalk downland now survive (unimproved chalk downland makes up only 1% of the total project area). The field pattern is associated with large scale Parliamentary enclosure during the eighteenth and nineteenth centuries. In places twentieth century reorganisation has resulted in boundary removal and the creation of very large 'prairie' type fields.

Wooded Downland Plateau

Although the underlying bedrock formations are Seaford and Newhaven Chalk, a deep overlying deposit of clay-with-flints determines the character of the landscape. It is a gently undulating plateau (heavily wooded in places) with poorly drained fine silty or clayey soils. There is a much higher proportion of improved grassland and much less arable than the other downland types, and land use is dominated by pasture and horse grazing. The settlement pattern consists of dispersed farmsteads and a few nucleated villages and hamlets. The hedgerow network, which contains many mature oaks, is very dense in paces (especially around the settlements), but elsewhere has been reduced to create larger areas of improved grassland. Generally the fieldscape evolved during the post medieval period from a mosaic of woodland, some earlier enclosure and open fields (near nucleated settlement), and large areas of common wood pasture.

Chalk scarp

The East Hampshire Chalk Scarps are a dramatic landscape feature, formed by exposed chalk bedrock, including the Holywell and Zig Zag formations. They are a narrow, linear landscape comprising the highest and steepest slopes in the county, overlain by very shallow Rendzina soils. The scarps forming the East Hampshire Hangers are clothed in ancient and semi-natural woodland but elsewhere the Chalk Scarp is predominantly an open landscape; hedges are rare and the scarp face is divided up by blocks of scrub and woodland.

6.3.2 Wealden Types

Greensand Terrace

The Greensand Terrace is a narrow, linear landscape bounded in the west by the chalk scarp and in the east by the Greensand Hangers. It is a distinct terrace forming a dip slope of the Upper Greensand escarpment. It is formed from Upper Greensand, a calcareous sandstone and siltstone, and is overlain by rich brown earth soils. Historically the Greensand Terrace is associated with orchards and hop growing. It is an open agricultural landscape with a mixture of arable land and improved grassland. The fields are variable in size and are enclosed by a network of hedgerows, with only limited woodland cover (mainly isolated very small patches and strips). The field patterns indicate that the enclosure process was relatively early: the fields are predominantly defined by sinuous boundaries characteristic of informal enclosure dating from the late medieval period to the seventeenth and eighteenth centuries. In places elements of the medieval open field system are retained in the field pattern.

Greensand Hangers

The Greensand Hangers form the scarp face of the Upper Greensand escarpment. The scarp is generally not as high or as steep as the chalk scarp to the west. The scarp is overlain by very thin shallow, stony soils with little agricultural potential. It is a heavily

wooded landscape with some improved grassland and a little arable land. In terms of Historic Landscape Character the predominant type is Hanger woodland, interspersed with assart fields.

Greensand Hills

A small area of this Landscape Character Type occurs along the county boundary with West Sussex above Petersfield. This forms the western extremity of a series of prominent hills formed from sandstones and cherts of the Lower Greensand Group overlain by well drained coarse loamy and sandy soils. Generally this type is heavily wooded and characterised by a mosaic of woodland types. Within the project area the Greensand Hills include hangers, conifer plantation and assarted woodland. Within woodland clearings there is marginal agricultural land – an irregular pattern of fields supporting rough grazing. The field pattern consists of assarts and irregular fields with wavy boundaries indicative of late medieval/early post medieval informal enclosure.

6.3.3 Lowland Types

Lowland Mosaic Small Scale

This Landscape Character Type is found in three locations: along the southern boundary of the project area, in a belt to the north of Petersfield, and in a small pocket around Liphook. North of Petersfield the underlying geology is mudstone inter-mingled with Marehill Clay; around Liphook it is Sandgate Formation sandstone, siltstone and mudstone: along the southern edge of the project area the bedrock is formed by London Clay. These geologies give rise to silty clay soils supporting predominantly improved grassland and permanent pasture. In the main the field size is small (less than 3-4ha) and the fields are defined by thickly wooded and treed hedges. There is little wooded cover apart from belts of mature trees and semi-natural and ancient woodland copses. The fieldscape is composed of a mixture of recent (Parliamentary) enclosure of former common land, small scale earlier informal enclosures, and small assart fields with little remaining woodland.

Lowland Mosaic Medium Scale

This Landscape Character Type occurs in a narrow belt to the west and north of Bordon. Here the bedrock consists of Gault Clay and is generally overlain by heavy clay soils which are poorly drained and seasonally waterlogged. A second area characterised by this type is found in the south, around Swanmore and Wickham, where the underlying bedrock is London Clay. It is a wooded agricultural landscape with some large ancient woodlands and a higher proportion of grazing land to arable and with some unimproved grassland. Typically the field size is larger than other Lowland Mosaic Types and the fields are defined by thick treed hedges, copses and assart woods. In broad terms the landscape has evolved from woodland and common and has been subject to piecemeal enclosure. The fieldscape has resulted from informal enclosure processes and a high proportion of assarts, with little formal Parliamentary enclosure.

Lowland Mosaic Open

There is a small area of this Landscape Character Type around Petersfield. It overlies Gault Clay giving rise to seasonally waterlogged fine loam soils. This landscape is low-lying and relatively flat, agricultural in character with improved grassland, arable, unimproved grassland and limited woodland. The area was formerly afforested and the Historic Landscape Character is dominated by assarts and fields with wavy boundaries resulting from relatively early informal enclosure processes.

Lowland Mosaic Heath Associated

This Landscape Character Type occurs in small pockets around Liphook in the east and around Swanmore and Wickham in the south. In the east the underlying geology is sandstone of the Sandgate Formation: in the south the geology is London Clay and Wittering Formation sands. These geologies give rise to acidic sandy and clay soils and typically low agricultural grade land. Where the type occurs in the project area it is heavily

wooded: in the east the type is associated with nineteenth century conifer plantations and in the south with assarted woodland.

6.3.4 Other types

Woodland and Plantation Heath

A small pocket of this Landscape Character Type occurs in the east around Liss. The underlying geology is Folkestone Formation sands giving rise to light sandy soils. The landscape is dominated by woodland: in the main nineteenth century conifer plantations and assarted woods.

River Valley Floor

The Itchen and Meon are the two main rivers in the Hampshire South Downs. Both rivers have their origins in the chalk downland and cut through chalk bedrock for most of their length apart from their southern reaches - here the Itchen cuts through London Clay and Lambeth Group sand and the Meon cuts through London Clay and Wittering Formation sand. The bedrock is overlain by superficial deposits of Periglacial Head consisting of undifferentiated clay, silt, sand and gravel. The Landscape Character Type includes the river bed and floodplain but not the valley sides. It is a pasture dominated landscape with field boundaries frequently orientated to maximise access to the water's edge. Both the Itchen and Meon valleys are characterised by extensive and nationally important relic water meadows. Most date from the sixteenth century onwards and were an intrinsic part of the sheep corn system that underpinned Hampshire's agriculture.

6.4 Historic Landscape Character

Historic Landscape Characterisation (HLC) is a tool used to interpret physical remains and other historical attributes of the present day landscape as indicators of how that landscape character has developed. HLC facilitates analysis of change and continuity in the landscape through time; for instance distinguishing between those areas where the present landscape character owes much to pre-nineteenth century components and those which show substantial later change. It is particularly relevant in a county such as Hampshire, which has seen major changes to its landscape over the last 150 years.

Eighty five Historic Landscape Types were identified during Hampshire's HLC (Lambrick and Bramhill 1999), of which 53 are found in the South Downs project area. These can be grouped to provide a generalised land use division of the South Downs landscape. Table 1 below indicates the proportions of the broad land use groups making up the South Downs landscape and compares these with the proportions for Hampshire as a whole.

Land use	% of project area	% of Hampshire
Fields (including commons)	73	52
Woodland and heathland	12	23
Settlements	6	13
Valley floor	4	3
Parkland	3	3
Others	2	6

Table 1. Proportion of HLC broad groups in the project area.

This illustrates the extent to which the Hampshire South Downs is a predominantly agricultural landscape with three quarters of the land area covered by fields (considerably more than for Hampshire as a whole). The area is considerably less wooded than other parts of the county and the area taken up by towns, villages and urban areas is also relatively small. These broad groups can be sub-divided into a series of main types.

6.4.1 Fields

Assarts

Assart fields usually contain scattered small woods and copses and were cut out of woodland or heathland. They are closely associated with the HLC type assarted woodland. The enclosures are often of very irregular form with no discernable major common boundaries. Assarting is documented in the late medieval period and continued into post medieval times. Later assarted fields are generally more regular in shape and are characterised by straight boundaries whilst medieval assarts are typically irregular with sinuous or 'wavy' boundaries. Irregular assarts are further sub-divided by size and classed as large, medium or small. Assarted fields within the project area are predominantly the earlier irregular type. They occur across the project area but particularly to the north and west of Petersfield.

Wavy-edged pre-Parliamentary type fields

These fields are characterised by their generally sinuous boundaries which frequently consist of mature well-treed hedgerows. They reflect late medieval and post-medieval informal enclosure or a rationalisation of earlier field patterns prior to the Parliamentary enclosure movement of the late eighteenth and early nineteenth centuries. In some cases they probably fossilise the enclosure of former strips and furlongs. They are one of the most widespread landscape types found within the project area but are closely associated with the spread of clay-with-flints and with the Greensand and Gault clay of the Wealden Edge. They are characteristic of the Downland Mosaic, Wooded Downland Plateau and Greensand Terrace Landscape Character Types.

Ladder type fields

These are defined by long unbroken wavy parallel boundaries (often tracks, roads or footpaths) with the area between them sub-divided into fields by regular straight boundaries (the 'rungs' of the ladder). This field pattern usually follows the grain of the topography up chalk spurs or dry valleys on the chalk. The long parallel boundaries represent early, informal enclosure (probably of medieval strip fields) and the sub-divisions represent later additions. Ladder type fields are found in two areas to the southwest of New Alresford.

Parliamentary-type fields

These field patterns are characterised by straight surveyed boundaries and usually regular shapes. In many cases they do derive from the nineteenth century Parliamentary Enclosures Act, but this is not always the case. This is the most widespread landscape type within the project area. It is widely distributed across all geologies although is less common on the older sands and clays in the east. It is particularly characteristic of the Open Downs and Downland Mosaic landscape character types.

Prairie fields

These are Parliamentary-type fields that have undergone extensive twentieth century boundary loss. They are not widespread, with the most extensive examples being Longwood Warren, southeast of Chilcomb; Worthy Park, Kings Worthy; West Meon and Clanfield. All of these fields are in the Open Downs or Downland Mosaic Landscape Character Types, but prairie fields also occur in Wooded Downland Plateau around Colemore.

Commons

Commons are here included in the fields land use group although technically they are not enclosed fields. There are a few widely scattered small areas of common, together making up less than 1% of the total project area. The most notable examples are Selborne, Bramdean and Wickham Commons and Conford Moor near Liphook.

6.4.2 Woodland.

Assarted woodland

This is woodland that has been partially eaten into by the encroachment of agriculture and is closely associated with assart fields. Assarted woodland is scattered across the project area but with greater concentrations over the clays associated with the Thames and Lambeth Groups and the Gault Formation geologies. The largest area is located around Wickham where it probably represents a remnant of the Forest of Bere. Assarted woodland is also found on the chalk in the Downland Mosaic Landscape Character Type – most notably Hyden Wood, Clanfield.

Hangers
These are identified on the basis of their topography, being generally linear irregular features on steep sided hills and slopes. They run north-south in the eastern part of the project area associated with the escarpments formed by the chalk and Upper Greensand Formations, although smaller discrete areas also occur on steep sided slopes within the chalk itself. An extensive area of Hangers also occurs in the Downland Mosaic around Buriton.

Pre 1810 woodland
These woodlands are almost exclusively confined to the chalkland although some are found to the north on the mudstone and clays of the Gault Formation.

Plantations and Heathland woods and Plantations
Heathland Woods and Plantations lie exclusively on the north-eastern fringe of the of the project area around Liss and Liphook. Nineteenth century plantations are scattered throughout the project area but particularly in the Wooded Downland Plateau.

Heathland
Two pockets of heathland occur in the east on the Lower Greensand around Petersfield and Liphook.

6.4.3 Other types

Settlements
These are differentiated into three categories: pre 1810 hamlets and villages, post 1810 village expansion, and post 1810 scattered settlement with paddocks. The post 1810 settlements cover the largest areas and are concentrated around the fringes of the project area. The earlier settlements are more widely scattered across the region. A notable feature of the distribution is the concentration of riverine settlements along the valleys of Itchen and Meon.

Valley Floor
The HLC Group Valley Floor is sub-divided into six HLC types all of which are most extensive in the Itchen valley:

- Marsh and rough grazing
- Miscellaneous valley bottom paddocks and pastures
- Unimproved hay meadows or pasture
- Valley floor woodlands
- Water meadows
- Watercress beds (especially around New Alresford)

Parkland
Parkland is differentiated into three categories: pre-1810 parkland, post-1810 parkland and deer parks. There are nine post-1810 parks and all but two are located west of the Meon. Pre-1810 parks (19 in total) are more evenly scattered across the project area. Three deer parks are recorded – at Worthy Park, Kings Worthy (first recorded in 1611), Avington Deer Park (1306) and Rotherfield deer park, East Tisted (1564).

Downland

Areas of unimproved grassland associated with chalk downland are included in this type. Only 7.5 km^2 of downland now survive in the Hampshire South Downs – only a tiny remnant given that the underlying chalk bedrock covers 472 km^2. Chalk downland covers only 1% of the project area and is widely scattered in small tracts throughout the southern half of the area. The most extensive survival occurs on Butser Hill and Ramsdean Down in the southeast.

Horticulture
There are two areas of orchard, between them covering less than 1% of the project area. These are at Swanmore in the southwest and Selborne in the northeast (this latter area is historically a renowned hop growing area).

Recreation
There are nine golf courses within the project area and one racecourse or gallop on the chalk at Stephen's Castle Down.

Industry
This HLC group comprises three types

- ***Reservoirs and water treatment.*** There is one sewerage farm on the outskirts of Winchester.
- ***Industrial complexes and factories.*** There are three small industrial complexes all of which lie on the southern fringe of the project area close to the large urban centres of the coastal plain.
- ***Active and disused chalk quarries.*** There are four small quarries, all in the east of the project area.

Defence
The only defence areas are the hillforts at Old Winchester Hill and St Catherine's Hill and a Romano-British enclosure on Twyford Down.

6.4.4 HLC and time depth in the landscape

Looking at the pattern of HLC Types some broad conclusions regarding landscape change and time depth in the South Downs landscape can be drawn.

Firstly, field systems reflecting informal, pre-Parliamentary enclosure occur extensively across the area. These are the so-called 'wavy' fields and assarts and they are concentrated particularly in the Greensand areas in the east, on the chalk where it is capped by clay-with-flints and on the Tertiary clay and silts in the southwest. These are the areas retaining the greatest feeling of time depth and where there is less evidence for recent change. Much of the field enclosure still present in the current landscape in these areas might potentially date to late medieval times.

Secondly, substantial parts of the chalkland remained open downland until the late eighteenth century (Fairclough *et al* 2003). Much of the chalkland, including large areas of open downland were enclosed (or re-enclosed) with medium to large straight-sided Parliamentary fields during the nineteenth century. These are the areas of greatest recent change and in places further alterations in the twentieth century led to the creation of very large prairie fields.

Fig 6 illustrates this patterning of early, informal enclosure generally concentrated on the Greensand and clay-with-flints in contrast to the more recent enclosure which occurs most extensively on the chalk in the southern part of the project area, particularly in the Open Downs Landscape Character Type.

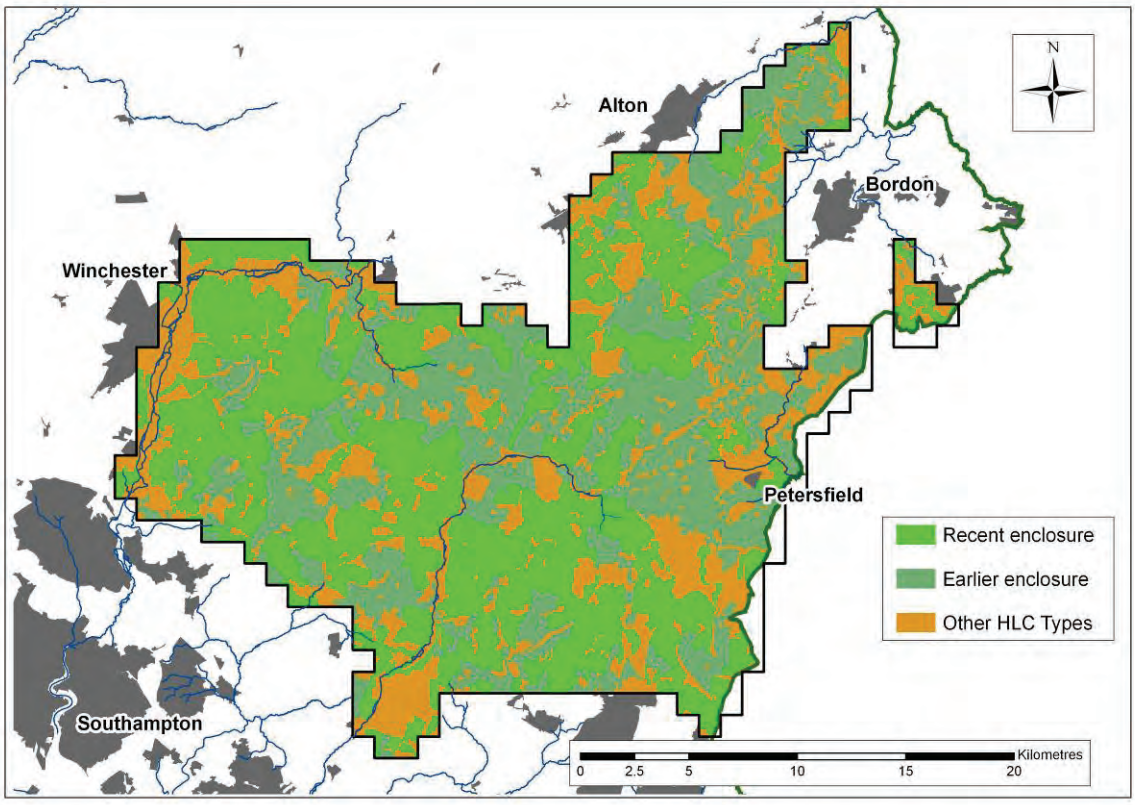

Fig 6 Time depth in the Hampshire South Downs landscape.
Recent enclosure includes HLC Types Parliamentary type fields, Ladder fields and Ex-Downland fields. Earlier enclosure includes HLC Types Wavy fields, Assarts and Assarted fields.

6.5 Landscape Character Areas

In addition to classifying the county's Landscape Character Types the Hampshire Integrated Character Assessment (HICA [Hampshire County Council 2010]) also identified a series of Landscape Character Areas (LCAs). Each LCA (identified by numeric code as well as by name) contains a mixture of Landscape Character Types but at the same time retains its own distinctive character (Fig 7). The typical topographical and physical characteristics of each LCA are described in the Assessment, along with the historic character, including archaeology. These descriptions are summarised here and the NMP mapping in each LCA is considered in section 15 within the context of the archaeological summaries published in the Assessment.

Western Weald Forest and Farmland Heath (1D)

A small portion of this character area lies in the easternmost part of the Hampshire South Downs project area and follows the county boundary with West Sussex as far south as Petersfield.

It covers 14.7 km^2 (2.4% of the project area).

Component Landscape Character Types are Lowland Mosaic Small Scale, Lowland Mosaic Heath associated and Greensand Hills.

The Historic Landscape Character is very mixed, with heathland plantation, assarts, hangers, Parliamentary fields and wavy fields.

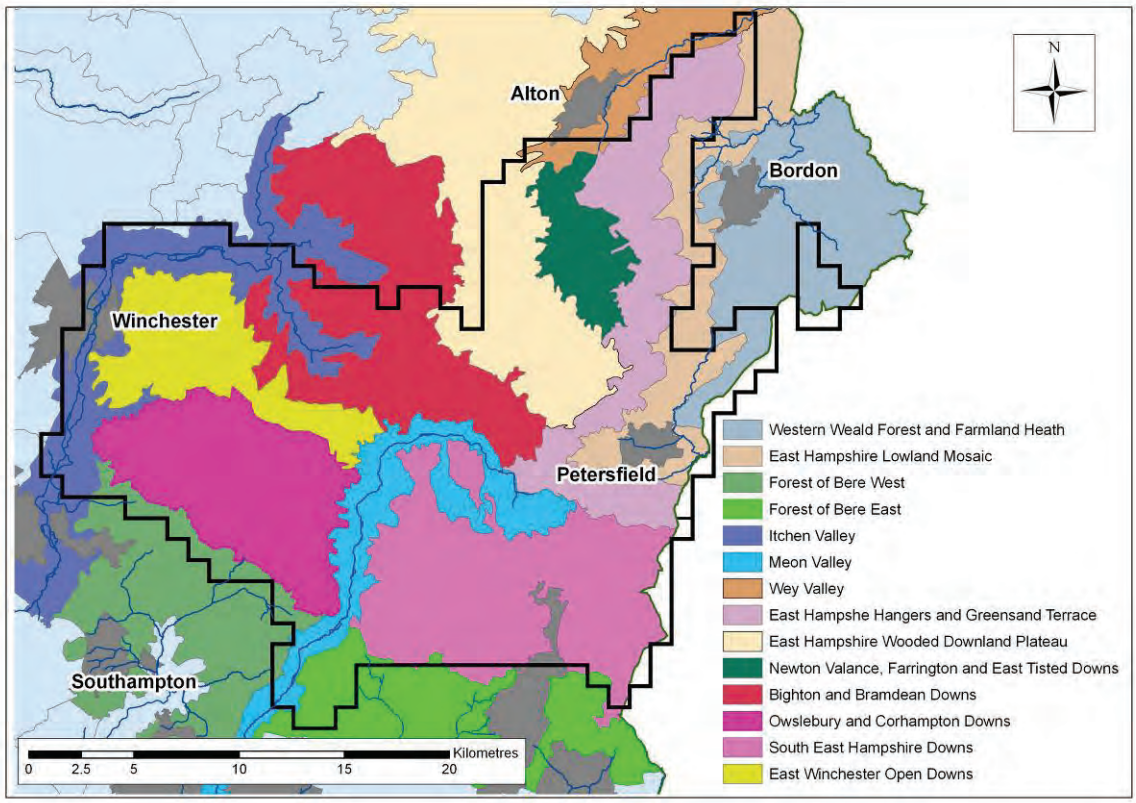

Fig 7 Landscape Character Areas in the Hampshire South Downs.
Source: Hampshire Integrated Character Assessment (HCC 2010).

East Hampshire Lowland Mosaic (2C)
The western half of this character area lies within the Hampshire South Downs and forms a narrow, low lying clay vale running up the in the north eastern edge of the project area. It is bounded by the Greensand escarpment in the west and the Weald to the east. It includes the towns of Liss and Petersfield.

It covers 37.3 km^2 (6.2% of the project area).

Component Landscape Character Types are Lowland Mosaic Small Scale, Lowland Mosaic Medium Scale and Lowland Mosaic Open.

The Historic Landscape Character is formed mainly by wavy fields and assarts with some assarted woodland, valley floor types and some areas of Parliamentary fields.

Forest of Bere West (2E)
This character area encompasses the lowlands of the Hampshire Basin, but only a narrow strip of its northernmost part is included in the Hampshire South Downs project area, where it runs along the southwest edge of the project area between the Meon Valley in the east and Colden Common in the west.

It covers 12.8 km^2 (2.1% of the project area).

Component Landscape Character Types are Lowland Mosaic Medium Scale and Lowland Mosaic Small Scale.

The Historic Landscape Character is formed mainly by wavy fields with some areas of Parliamentary fields, assarts and woodland types.

Forest of Bere East (2F)
This character area falls within the Hampshire Basin, but only a small portion of its northernmost part is included in the Hampshire South Downs project area, where it

borders the southeast edge of the project area between the Meon Valley in the west and the county boundary in the east.

It covers 11.8 km^2 (2% of the project area).

Component Landscape Character Types are Lowland Mosaic Medium Scale, Lowland Mosaic Small Scale and Lowland Mosaic Heath Associated.

The Historic Landscape Character is formed predominantly by assarted woodland with some Parliamentary fields and an area of ex-downland fields in the east near Horndean.

Itchen Valley (3C)

Most of this character area is included in the project area. It includes the valley floor and its sides. The valley tops are defined approximately where there is a break/slackening in slope angle. The Itchen Valley runs up the western border of the project area and along the north western border as far east as New Alresford. It includes part of the town of Winchester.

It covers 51.5 km^2 (8.5% of the project area).

Component Landscape Character Types are Open Downs, Downland Mosaic Large Scale, Downland Mosaic Small Scale, River Valley Floor, Lowland Mosaic Small Scale, Lowland Mosaic Medium Scale and Lowland Mosaic Heath Associated.

The Historic Landscape Character is formed mainly by valley floor types and Parliamentary fields, with some wavy fields in the east around New Alresford.

Meon Valley (3E)

The northern part of the Meon Valley lies within the Hampshire South Downs, from where it rises near East Meon, westwards to Warnford where the river then runs south as far as Wickham in the far south of the project area. The Meon is a significant topographical feature of the Hampshire South Downs, in effect dissecting the west-east central chalk ridge. In HICA the upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom. It incorporates the settlements of Wickham – in the lowland landscape – and Droxford, Corhampton, Meonstoke, Exton, and West and East Meon in a downland setting.

It covers 42.2 km^2 (7% of the project area).

Component Landscape Character Types are River Valley Floor, Open Downs, Downland Mosaic Large Scale, Downland Mosaic Small Scale, Chalk Scarp, Lowland Mosaic Small Scale and Lowland Mosaic Medium Scale.

The Historic Landscape Character is formed mainly by valley floor types and Parliamentary fields, with some wavy fields around East and West Meon. There are also areas of assarted woodland around Wickham and parkland around West Meon (Warnford Park, Westbury Park and Corhampton Park).

Wey Valley (3F)

A small portion of this LCA falls within the Hampshire South Downs. The character area comprises the valley of the river Wey where it runs along the northernmost edge of the project area from Four Marks to Bentley. Its boundaries are defined by the tops of the valley sides where they extend into the surrounding chalk downs and Greensands.

It covers 5.2 km^2 (0.9% of the project area).

Component Landscape Character Types are River Valley Floor, Downland Mosaic Large Scale, Downland Mosaic Small Scale, Greensand Terrace and Lowland Mosaic Medium Scale.

The Historic Landscape Character is formed by valley floor types and Parliamentary fields, with some wavy fields to the north and assarts around Chawton in the south.

East Hampshire Hangers and Greensand Terrace (5B)

This character area marks the eastern edge of the Hampshire chalk downs and its junction with the Wealden landscapes to the east. It extends southwards in a narrow band from the County boundary near Farnham to Petersfield, where it turns eastwards to encompass the north-facing scarp of the South Downs. In the central and lower northern section it is characterised by a distinctive double scarp, with the chalk to the west and the greensand hangers to the east, separated by an undulating terrace. The largest settlements are the villages of Selborne, Hawkley and East Worldham.

It covers 70.8 km^2 (11.7% of the project area). As such it is one of the largest character areas in the Hampshire South Downs.

Component Landscape Character Types are Greensand Terrace, Greensand Hangers, Chalk Scarp and Downland Mosaic Small Scale.

The Historic Landscape Character is formed predominantly by wavy fields, interspersed with Hangers, occasional tracts of Parliamentary fields with a large area of assarts to the northwest of Petersfield, a small area of Horticulture to the east of Selborne and some river valley floor to the southeast of Chawton.

East Hampshire Wooded Downland Plateau (6A)

The southern third of this character area lies within the Hampshire South Downs. It is located towards the north eastern part of the project area, stretching from close to Alton in the north, to the top of the chalk escarpment north west of Petersfield. The boundaries of this high, gently undulating plateau are closely related to the extent of a deep clay cap over the chalk.

It covers 51 km^2 (8.4% of the project area).

Component Landscape Character Types are Wooded Downland Plateau and Downland Mosaic Large Scale.

The Historic Landscape Character is formed predominantly by wavy fields, and assarts in the south and predominantly by Parliamentary fields interspersed with Plantations and some areas of ex-Downland fields in the north around Four Marks. There are two significant areas of parkland at Basing Park and Rotherfield Deer Park.

Newton Valence, Farringdon and East Tisted Downs (7C)

This character area is located to the south of the Wey Valley between the Greensand hangers to the east and the more elevated clay plateau to the west. As such it forms an intermediate elevated downland landscape which forms a transition between the steep slopes of the hangers and the wooded plateau.

It covers 23.4 km^2 (3.9% of the project area).

Component Landscape Character Types: Downland Mosaic Small Scale.

The Historic Landscape Character is formed predominantly by Parliamentary fields interspersed with pre-1810 woodland. There are areas of wavy fields in the south of the LCA. There are two deer parks at Farringdon and Rotherfield

Bighton and Bramdean Downs (7D)

The southern half of this character area is located in the central north part of the project area. It is bounded in the west by the upper reaches of the Itchen Valley at New Alresford and in the east by the East Hampshire Wooded Downland Plateau. To the north the LCA runs along the boundary of the project area while to the south the land drops into the Meon Valley.

It covers 57.2 km^2 (9.5% of the project area).

Component Landscape Character Types are Downland Mosaic Large Scale, Downland Mosaic Small Scale and Open Downs.

The Historic Landscape Character is varied, with a large area of wavy fields interspersed with assarted and other woodland in the centre around Bramdean, with a mixture of Parliamentary fields and assarts in the east around West and East Meon, with wavy fields, Parliamentary fields, assarts and assarted woodland in the north and with wavy fields, woodland and ladder fields in the northwest around Tichborne. There are two areas of parkland – Brockwood Park and Woodcote Park, Bramdean.

Owslebury and Corhampton Downs (7G)

The whole of this character area is located in the south western part of the project area. It comprises the dip slope of the South Downs chalk landscape and is bordered to the east and west by the distinctive river valleys of the Meon and Itchen respectively. To the north lies the more elevated chalk ridge of the South Downs and to the south is lower lying land which slopes towards the coast. This LCA comprises a mixture of open and enclosed chalk landscapes.

It covers 73.3 km^2 (12.1% of the project area) and is one of the largest LCAs in the Hampshire South Downs.

Component Landscape Character Types are Downland Mosaic Large Scale, Downland Mosaic Small Scale and Open Downs.

The Historic Landscape Character is very mixed with a large area of assarts and wavy fields in the centre and north, in Upham parish and the upper parts of Tichborne, Cheriton and Beauworth parishes. There are also areas of assarts and wavy fields in the southwest and, especially in the southeast around Bishop's Waltham and Swanmore. Much of these areas had probably been enclosed by the seventeenth century through a pattern of woodland clearance and informal field enclosure. In the more open areas – e.g. to the north of Bishop's Waltham and north of Owslebury - the predominant HLC Type is Parliamentary fields. In the east there are significant tracts of ex-downland fields in Exton parish, again suggesting early, informal enclosure and in the north there are blocks of woodland suggesting the piecemeal removal of woodland from what had formerly been an enclosed landscape.

South East Hampshire Downs (7H)

Almost the whole of this character area is located in the south eastern part of the project area. The central chalk ridge is the predominant northern boundary feature. In the south the area meets the boundary of the project area. To the west and northwest it abuts the Meon Valley and to the east the County Boundary.

It covers 103.6 km^2 (17% of the project area) and is the largest LCA in the Hampshire South Downs.

Component Landscape Character Types are Downland Mosaic Large Scale, Downland Mosaic Small Scale and Open Downs.

The Historic Landscape Character is mixed, but over much of the area the predominant types are Parliamentary fields and ex-downland fields. The areas covered by thee types were open downland until quite recently and the enclosure of this landscape only took place in the nineteenth century. There is a substantial area characterised by wavy fields around Hambledon resulting from earlier informal enclosure and along the southern edge of the project area, on the chalk dip slope, the predominant types are wavy fields and assarts. In the north eastern part of the LCA there are extensive areas of Hangers. Westbury Park in the north and Ditcham Park in the east are the two principal areas of parkland.

Mid Hampshire Open Downs (8E)

Only a tiny portion (the south eastern tip) of this character area, which is located on the elevated chalk landscape above the Test and Dever valleys, is included in the project area. It borders the upper part of the Itchen Valley LCA in the northwest of the project area.

In the Hampshire South Downs the LCA covers 1.2 km^2 (0.2% of the project area).

The component Landscape Character Type is Open Downs.

The Historic Landscape Character is exclusively Parliamentary fields.

East Winchester Open Downs (8G)

The whole of this character area is located in the north western part of the project area, to the east of Winchester. Its western boundary is defined by the M3. To the north it is flanked by the Itchen Valley while to the south it undergoes a transition into the more wooded downland landscape of the Owslebury and Corhampton Downs LCA. Its eastern edge is delineated by the Meon Valley.

It covers 49.4 km^2 (8.2% of the project area).

Component Landscape Character Types are open Downs and Downland Mosaic Large Scale.

The predominant Historic Landscape Character Type is Parliamentary fields, but there is a relatively large area of wavy fields with some assarts around Chilcomb Down, Fawley Down and Longwood Warren. There are smaller areas of wavy fields around Beauworth and an extensive area of ex-downland fields in the east at Wheely Down. There are also blocks of woodland around Avington

7 Overview of the aerial photographs

There is extensive aerial photographic cover of the Hampshire South Downs, dating from the 1920s to the present day. A total of 15,250 photographs were available to the project, housed in three collections – the NMR Archive in Swindon, the Environment Department of Hampshire County Council and Cambridge University Unit for Landscape Modelling. The photographic resource comprised specialist oblique photography, extensive programmes of vertical photography carried out from the 1940s onwards and oblique photographs taken by the Ministry of Defence in the years during and after the Second World War.

7.1 Specialist oblique photography

Specialist oblique photographs are taken specifically for archaeological purposes. Archaeological reconnaissance flights are usually carried out at those times of the year (and times of day) when lighting conditions are most favourable and are made at low altitudes, so that the resulting images are generally much clearer than vertical photos and they usually contain more detail.

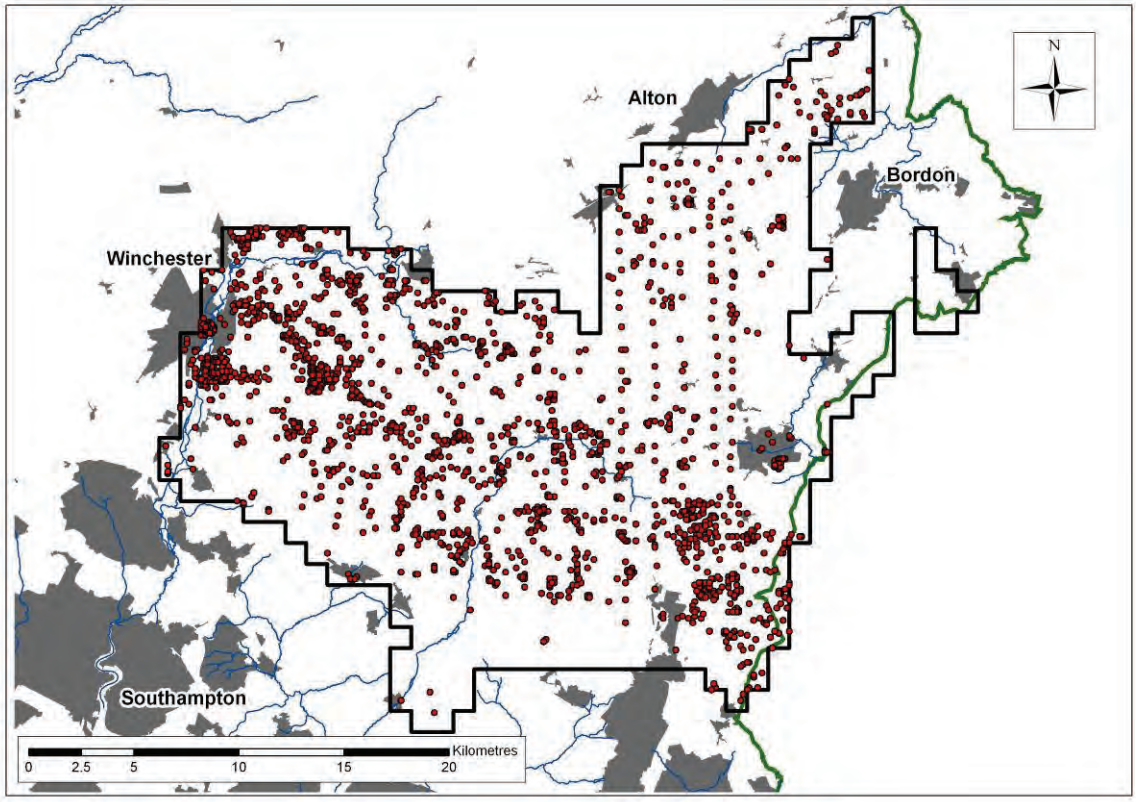

Fig 8 The pattern of specialist aerial photography in the Hampshire South Downs.

During the project 5,632 specialist oblique photographs were consulted. The pattern of specialist archaeological reconnaissance is shown in Fig 8. The bulk of the photography is focused on the chalk areas with few photographs over the Tertiary clays and silts in the southwest, the Greensand in the east or the Wooded Downland Plateau. Although the proximity of Southampton airport (and consequent restricted airspace) is a factor limiting reconnaissance in the southwest, the distribution most obviously reflects the favourable conditions for cropmark and soilmark production provided by chalk compared with the other geologies.

The earliest oblique aerial photographs consulted during the project are from the Crawford collection. Whilst exact dates are not available for all of these prints, most were taken by O.G.S Crawford or his colleagues in the 1920s and 1930s. As well as being of

considerable historic interest, these photographs provided information on 53 sites, of which 38 were previously unrecorded features. The sites identified on these early photographs are concentrated around Ramsdean Down, to the southwest of Petersfield, and on Petersfield Heath. They comprise Bronze Age barrows, linear features, fragments of field systems, and extractive pits.

Flights undertaken by Cambridge University Committee for Air Photography (CUCAP) from the 1940s onwards are a valuable source and include some photographs recording sites or details of sites not visible on any other images. The sites include prehistoric or Romano-British settlements, banjo enclosures, Bronze Age barrows and prehistoric field systems. In total 848 CUCAP photographs were available to the project; 79 sites were transcribed from them, of which 51 were not previously recorded in the AHBR.

More systematic programmes of reconnaissance have been carried out by the NMR from the 1960s to the present day and these provide the bulk of the oblique coverage (4,524 oblique photographs from the NMR collection were loaned to the project team). Given the large volume of NMR oblique photography it is not surprising that more than 95% of the sites recorded from specialist photographs were transcribed from these photos.

Although oblique photographs taken in slanting sunlight during the winter months are an ideal medium for defining earthwork monuments, most of the coverage for the Hampshire South Downs has been flown during spring and summer. Consequently the sites mapped and recorded from specialist oblique photography are almost exclusively levelled features visible as cropmarks (92% of features transcribed from oblique photos). As much as anything this reflects the agricultural nature of much of the project area, characterised as it is by a long history of widespread intensive ploughing. Nonetheless the high numbers of cropmark remains demonstrate the survival of a very rich below ground archaeological landscape.

7.2 Vertical photography

Vertical photographs provide coverage of all parts of the project area and were taken at regular intervals over the last 65 years. Vertical photographs are not usually taken for archaeological purposes but for reasons such as military and cartographic reconnaissance and civil engineering projects. The most important series of vertical photography are

- RAF photography taken during the 1940s and 1950s
- Sorties undertaken by the Ordnance Survey between the 1960s and 1990s
- Photography taken by Meridian Airmaps Ltd (MAL), a commercial company which operated during the latter part of the twentieth century
- Photographs commissioned by HCC for Census purposes in 1971, 1984, 1991 and 1995/6.

Usually vertical photographs are taken at 1:10,000 scale (MAL photography is sometimes at a larger scale and the 1995/6 HCC photos are at 1:20,000). As part of the routine NMP process all the vertical photographs were examined using a stereoscope to provide a three-dimensional view of the landscape, including any extant archaeological features. The advantage of vertical photography is that large areas are surveyed; a potential disadvantage is that they are not always taken at the most favourable times of day or year to maximise the visibility of archaeological features. Nonetheless the value of vertical photography to the project cannot be overstated; 76% of all sites recorded in the project database were identified and transcribed from vertical photographs.

In total 11,106 vertical photographs were consulted during the project. The majority – 9,357 – were loaned to the project team from the NMR Archive collection; 600 prints from the CUCAP collection were also loaned. The remaining 1,149 photographs are housed at

HCC's Environment Department where they were consulted *in situ* by the project team at regular intervals. In addition copies of 1km tile digital imagery taken in 2005 and covering the entire project area, was supplied by HCC and these provided the most recent vertical images of the South Downs.

A large number of archaeological sites were recorded from vertical photography. RAF photographs from the 1940s were the principal source of information for sites relating to twentieth century military features. Verticals were also the main source for the identification of earthwork remains – 92% of all sites with surviving upstanding remains recorded during the project were transcribed from verticals, in particular from 1940s and 1950s RAF photographs. Seventy per cent of the cropmark and soilmark features were also transcribed from vertical photography. A wide range of cropmark features are visible on the verticals but the most notable are the soilmarks of extensive Celtic field systems appearing on OS and MAL photographs taken during the months March to October between the 1970s and 1990s.

8 Overview of NMP mapping

8.1 The project database and analysis of results

The analysis of the archaeology mapped and recorded during the project was carried out by querying the project Microsoft Access database and by spatial analysis of shapefiles in the project's Arcview 9.2 GIS. These shapefiles were created from the AutoCAD drawings and were then joined to the Access database via the Site ID attribute field.

Before reviewing the results of the NMP mapping a brief comment on the project database is necessary because its format has a bearing on the analysis of the results set out in the following sections. In particular, the database allows multiple entries to be input in the site type and period fields for any one record and this produces unavoidable duplication or double-indexing of some site records, making it difficult to provide precise figures in the analysis.

This is best explained by presenting a typical example. A circular plough-levelled mound might be identified and plotted. Although its date and function are uncertain, a Bronze Age barrow is a favoured possible interpretation. Therefore this feature will be entered in the database as 1) Mound: Uncertain date. 2) Barrow: Bronze Age. When the database is queried on the period field this particular site will be counted twice – firstly as a site of uncertain date and secondly as Bronze Age. If the database is queried on site type the site will appear once as a mound and secondly as a barrow. In other words it will be counted as two database records even though it is a single site.

There are four main circumstances which led to double-indexing of database records.

1. There are a number of frequently occurring combinations of alternative site type interpretations producing double-indexed records. This is particularly widespread among records for post medieval archaeology: common examples are field boundary/trackway and dewpond/chalk pit.
2. Frequently occurring combinations of alternative period interpretations include Iron Age/Roman, Prehistoric/Roman, Prehistoric/medieval (for instance when describing lynchets), and medieval/post medieval.
3. Double-indexing occurs when a site consists of several constituent features and each is entered in the site type field in the database. For instance when a field system contains traces of ridge and furrow and both 'field system' and 'ridge and furrow' are input to the site type field. Another example might be enclosure/trackway/pit, which would be listed as three records.
4. The database allows more than one source photograph reference to be entered and double-indexing frequently occurs when a site has been transcribed from more than one set of photographs. If a site is transcribed from, say, four sets of photographs, then when any query is run on the database this site will be listed as four separate records.

In addition to the period field the database also contains fields for start date and end date, in order to make it more compatible with Hampshire's Archaeology and Historic Buildings Record (AHBR). The issue of double-indexing caused by alternative period interpretations (scenario 2 above) was circumvented to a degree by querying the database on the start date and end date fields rather than the period field. Thus the date range for a Prehistoric/medieval lynchet should be entered as 2200BC – AD1539. However, over the course of the project the entering of start date and end date has not always been applied consistently so that in some cases this example might have been input as 2200BC – AD409 and AD410 – AD1539. The extent of this type of double-indexing was not quantified during the preparation of this report.

Double-indexing caused by multiple photo source references (scenario 4) was satisfactorily dealt with by using the dissolve tool in GIS. By creating a dissolved shapefile which omits the photo source field any double-indexing of this type was removed.

There is no satisfactory method of avoiding the double-indexing resulting from either scenario 1 or 3. The extent of these types of double-indexing was quantified during the preparation of this report. In total 569 individual sites were double-indexed and, because this sometimes involved more than one alternative interpretation, between them these 569 sites accounted for 1,164 site records. The extent of these types of double-indexing is summarised in Appendix 1.

The overall scale of the double-indexing of site records is summarised table 2 below. This shows the total number of database records including all double-indexed records (row 1), the number of database records with photo source double-indexing removed (row 2), and the number of records after using the dissolve tool in GIS to remove all fields except Site ID - in other words the actual number of individual sites rather than site records (row 3).

Query type	No. of records
All database records	5,212
Database records with photo source field removed	4,206
Actual number of sites	3,509

Table 2. Summary of double-indexed site records in the project database.

Ideally the analysis of results ought to be based on the 3,509 actual sites but to do so would necessitate arbitrary decisions such as (from the examples quoted above) whether the lynchet is prehistoric or medieval, or whether the field system containing ridge and furrow should be listed as 'field system' or 'ridge and furrow' rather than both. Clearly the 5,212 total database records is an inflated figure and many sites will be listed more than once simply because they have been transcribed from more than one set of photographs. Taking this into account, the most satisfactory dataset on which to base the analysis is that containing 4,206 records. Whilst this dataset includes 1,006 double-indexed records the double-indexing arises from valid archaeological considerations involving multiple site interpretations.

8.2 Results of NMP mapping

In total the project database contains 4,206 site records. Of these 554 are for sites previously recorded in Hampshire's AHBR and 3,652 are for sites newly identified and recorded as a result of NMP. Thus 87% of the sites identified during the project are new sites, not previously recorded in the AHBR.

This very high percentage of new sites can partly be explained by the fact that the scope of NMP is considerably wider than the past remit of the AHBR, particularly with reference to post medieval features. For instance there has been no systematic audit of chalk pits for the AHBR, whereas NMP mapped and recorded all visible chalk pits (including small agricultural chalk pits) and other extractive pits. The same can be said for dewponds and for post medieval/early modern drainage features. In the northeast (and elsewhere to a lesser extent) large numbers of features interpreted as charcoal burning platforms were identified by NMP and no such features had previously been recorded in the AHBR. As a result the ratio of new to previously recorded post medieval sites is 49:1 as opposed, for instance, to the ratio of 3:1 for sites with a start date of 2,200BC. The mapping of these types of sites accounted for 1,370 of the new site records made during the project. Even when this is taken into account there remain 2,282 new records for the types of site which form the traditional core of the AHBR. As an example: 77% of all prehistoric and Roman sites mapped during the project were previously unrecorded and were newly identified by

NMP. This represents a substantial enhancement of baseline data contained in the AHBR for the South Downs area.

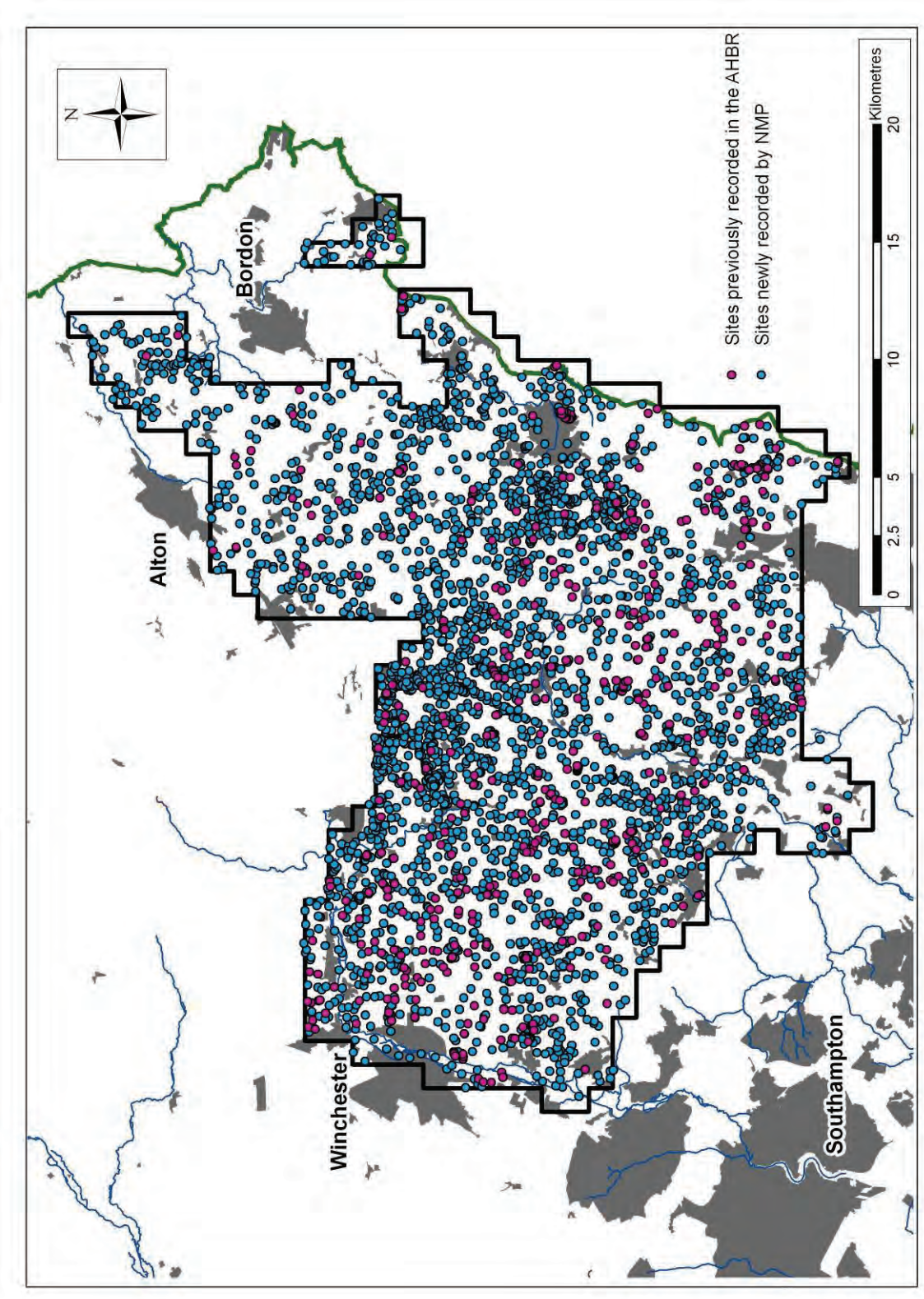

Fig 9 Distribution of all sites mapped and recorded during the project.

Another notable feature is the very high ratio of sites recorded as cropmarks or soilmarks to those with extant above-ground remains. Roughly 71% of all sites were recorded as cropmarks or soilmarks, but the ratio of plough-levelled to extant sites varies according to

period. For prehistoric and Roman sites the percentage of cropmarks is 88.5%, whereas for sites dating from the early medieval onwards this figure shrinks to 56% and from the post medieval period onwards there are more extant than plough-levelled sites. Nonetheless the overall predominance of cropmark sites clearly reflects the history of intensive agriculture over large parts of the project area.

A breakdown of the 4,206 site records is shown in table 3 below. This categorises the sites by start date, detailing the total number of sites, the number of new and previously recorded sites as well as the number of cropmark and extant records for each start date. The following sections (8.2.1 to 8.2.8) set out on a broad level the types of site recorded for each start date. The start and end dates used during the project are based on those adopted by the Hampshire AHBR and are as follows.

Period	Start	End
Neolithic	4,000BC	2,201BC
Bronze age	2,200BC	801BC
Iron Age	800BC	AD42
Roman	AD43	409
Early medieval	410	1065
Medieval	1066	1539
Post medieval	1540	1900
Modern	1901	1945 or 2007

Start date	New records	Existing records	Cropmarks	Extant sites	Total
4,000BC	91	8	95	4	**99**
2,200BC	1,029	344	1,183	190	**1,373**
801BC	312	78	371	19	**390**
AD43	36	16	45	7	**52**
410	22	18	25	15	**40**
1066	736	50	579	207	**786**
1540*	1,368	28	657	739	**1,396**
1901**	52	10	15	47	**62**
9999***	6	2	8	0	**8**
Total	**3,652**	**554**	**2,978**	**1228**	**4,206**

Table 3. Overview of the project database.

* This also includes a small number of site records with start dates of 1701 and 1801.

** This also includes site records with start dates of 1914 and 1939.

*** These sites are interpreted as possible linear features but more likely to be dry rivers.

8.2.1 Neolithic (4,000BC – 2,201BC)

The project database contains 99 site records with a start date of 4,000BC. However, only 12 of these are interpreted as definitely or probably Neolithic, two are considered to be Neolithic or Bronze Age, two are dated as prehistoric (Neolithic to Iron Age) and the other 83 are interpreted as of uncertain date. Only eight of the sites were previously recorded in the AHBR, with 91 newly identified during the project. Four of the sites have extant

earthwork remains; the other 95 are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 4 below.

End date	2201BC	801BC	AD42	1900	1900+	Total
Site type						
Cursus	1	0	0	0	0	1
Ditch	0	0	0	1	1	2
Enclosure	2	0	2	3	1	8
Long barrow	6	0	0	0	0	6
Mound	0	0	0	1	0	1
Oval barrow	3	2	0	0	0	5
Pit	0	0	0	39	37	76
Total	**12**	**2**	**2**	**44**	**39**	**99**

Table 4. Site records with a start date of 4,000BC.

Six long barrows were mapped, one of which was newly identified as a possible long barrow. Two were double indexed as enclosures: AHBR 24158 because the barrow mound is set within a previously unrecorded ditched enclosure and ID 174386 – the newly identified barrow - interpreted as an enclosure of uncertain date, but potentially a long barrow. A possible seventh long barrow (ID 171169) consists of a ditched enclosure with internal mound and was listed as a mound, double indexed as an enclosure.

Of the five oval barrows, two were previously recorded in the AHBR (although one of these – AHBR 24644 – is listed as a Bronze Age barrow). Two of the newly identified barrows were double-indexed as enclosures; one as prehistoric and the other as of uncertain date. A possible sixth oval barrow (ID 174060) was interpreted as an enclosure of uncertain date, but its dimensions suggest it is potentially an oval barrow.

Six of the enclosures are double-indexed as long barrows or oval barrows. The remaining two records for enclosures refer to a single site, a curvilinear enclosure with an interrupted enclosing ditch (ID 170324) which was double-indexed as either Neolithic or prehistoric (end date AD42) in date.

The possible cursus monument (ID 170325), newly identified during the project, was double-indexed as a ditch of uncertain date.

All the other site records are interpreted as being of uncertain date (with end dates from 1900 or later). One, ID 173994, is a curious linear feature at Hall Farm, West Meon. It is visible as a cropmark ditch, 60m long, which follows an undulating or rolling zigzag line and is interrupted, with four gaps along its route ranging from 2.5m to 5m in length. Whilst the date and function of this linear feature can only be guessed at the fact that it appears to be overlain by prehistoric field boundaries (ID 173089), raises the possibility that it may potentially be Neolithic in origin.

Seventy six features are interpreted as pits, all are visible only as cropmarks, and none were previously recorded in the AHBR. Some of the records refer to single pits whilst others describe groups of forty or more and the pits in question vary in size from 1m diameter to ‘a large pit or hollow’ (ID 171638) measuring 38m x 28m. From aerial photo evidence alone it is impossible to ascribe a precise date to these features: some may be Neolithic; others may be much more recent; others may, in fact be natural features.

In total eight sites were double-indexed in the database. When allowance is made for this the inventory of sites with a start date of 4,000BC comprises 92 individual sites, summarised as follows:

Long barrow or possible long barrow	7
Oval barrow or possible oval barrow	6
Possible cursus monument	1
Possible interrupted enclosure	1
Ditch of uncertain date	1
Pit of uncertain date	76
Total	**92**

The identification of possible new long barrows, oval barrows, a cursus monument and an interrupted enclosure are all archaeologically important outcomes of the NMP survey and are discussed in detail in section 9.1 below.

8.2.2 Bronze Age (2,200BC – 801BC)

The project database contains 1,373 site records with a start date of 2,200BC. However, only 347 of these are interpreted as exclusively Bronze Age: 147 are considered to be Bronze Age or Iron Age, 228 are dated as Bronze Age to Roman, two are considered Bronze Age to early medieval and 57 Bronze Age to medieval. Five hundred and nine are interpreted as Bronze Age to post medieval and the remaining 83 are interpreted as uncertain in date (end date 1945 or 2007).

Only a quarter of the sites – 344 - were previously recorded in the AHBR, with 1,029 newly identified during the project. One hundred and ninety (14%) of the sites have extant earthwork remains; the other 86% are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 5 below.

End date	**801BC**	**42**	**409**	**1065**	**1539**	**1900**	**1945/ 2007**	**Total**
Site type								
Bank (earthwork)	0	1	4	0	0	37	4	**46**
Barrow	324	1	0	0	0	0	0	**325**
Boundary	0	0	0	0	1	2	0	**3**
Boundary bank	1	0	0	0	0	1	1	**3**
Cultivation marks	0	0	0	0	2	2	1	**5**
Ditch	2	0	4	0	0	24	2	**32**
Drainage ditch	0	0	0	0	0	1	0	**1**
Dyke	0	2	0	0	0	0	0	**2**
Earthwork	0	1	1	0	0	1	0	**3**
Enclosure	2	42	47	0	3	38	8	**140**
Extractive pit	0	0	0	0	0	4	0	**4**
Field boundary	0	4	20	1	16	180	13	**234**
Field system	0	48	115	1	18	64	1	**247**
Hollow	0	0	0	0	0	2	3	**5**
Hut circle	0	7	0	0	0	0	0	**7**
Linear earthwork	0	0	0	0	0	3	0	**3**
Lynchet	0	0	8	0	10	3	0	**21**
Mound	0	0	0	0	0	34	25	**59**
Path	0	0	0	0	0	1	1	**2**

Pit	2	3	1	0	1	37	8	**52**
Ridge and furrow	0	0	1	0	0	2	0	**3**
Ring ditch	16	25	7	0	0	0	1	**49**
Round house	0	2	2	0	0	0	0	**4**
Settlement	0	4	7	0	0	0	0	**11**
Spoil heap	0	0	0	0	0	2	0	**2**
Trackway	0	7	11	0	6	71	15	**110**
Total	**347**	**147**	**228**	**2**	**57**	**509**	**83**	**1373**

Table 5. Site records with a start date of 2,200BC.

One hundred and forty seven of the sites are double-indexed and between them these account for 308 database records. The most frequent forms of double-indexing are barrow/mound (33 cases), field boundary/trackway (17) and barrow/ring ditch (11). A list of all the instances of double-indexing is contained in Appendix 1.

Barrows comprise the most numerous site type with 325 records (including those double-indexed). In addition a further 62 sites can be interpreted as potential barrows. These include 33 ring ditches, 26 mounds (these were not double-indexed as barrows but the fact their start date is suggested as 2,200BC indicates that 'barrow' is one possible interpretation), a feature double-indexed as a ditch/ring ditch (ID 174249) and two sites double-indexed as an enclosure/mound (AHBR 38586 and ID 170336). Therefore the total number of barrows and potential barrows identified during the project comes to 387. Fifty six per cent of the barrows were newly identified during the project and 300 (77%) have no surviving above-ground remains and were only visible as cropmarks. This is summarised below and the South Downs barrows are discussed in more detail in section 9.2.

Barrow records	**Cropmark**	**Earthwork**	**Total**
New records	204	13	**217**
Existing records	96	74	**170**
Total	**300**	**87**	**387**

In total 502 field systems, field boundaries and lynchets were recorded. Of these, 466 (93%) were visible only as cropmarks and 76% of the features (384) were newly identified during the project. The vast majority of these records were for Celtic fields which over much of central southern England are recognised as first appearing in the Middle Bronze Age (e.g. Cunliffe 1993, 129–146). None of the field systems were interpreted as exclusively Bronze Age, however, with 195 considered Bronze Age–Roman, 46 as Bronze Age–medieval, 247 as Bronze Age–post medieval and 14 of uncertain date. Celtic fields are discussed in more detail in section 10.

In addition to the 11 sites interpreted as settlements, evidence for potential settlements was recorded in the form of round houses, hut circles, enclosures and ring ditches not double-indexed as barrows. In total this comes to 177 potential settlement sites, of which virtually all (171) are plough-levelled and 148 (84%) were newly identified during the project. None of these sites were interpreted as exclusively Bronze Age (the two enclosures listed in table 5 above were both double-indexed as mounds and are most likely to be barrows and are therefore not included in the list of potential settlements). Seventy three of the potential settlements are interpreted as Bronze Age–Iron Age, 63 as Bronze Age–Roman, three as Bronze Age–medieval, 38 as Bronze Age–post medieval and nine as uncertain in date. These features are included in discussions of settlement and the development of the prehistoric and Romano-British landscape in section2 11 and 12.

Among the records for sites with a start date of 2,200BC are 198 for linear features of various types, including bank (earthwork), boundary, boundary bank, ditch, dyke, linear earthwork, path and trackway. Only 48 of these features (24%) have extant remains and in total 86% of them (171 features) were newly identified during the project. The trackways are widely distributed throughout the chalklands but the other types were mainly recorded around Butser Hill and Ramsdean Down. Linear features in general are discussed further in section 12.2.

8.2.3 Iron Age (800BC – AD42)

The project database contains 390 site records with a start date of 800BC. However, only 45 of these are interpreted as exclusively Iron Age: 107 are considered to be Iron Age or Roman, two as Iron Age-medieval and 226 Iron Age-post medieval. Ten sites are interpreted as of uncertain date (end date 1945 or 2007).

Only a fifth of the sites – 78 - were previously recorded in the AHBR, with 312 newly identified during the project. Only 19 (5%) of the sites have extant earthwork remains; the other 95% are plough-levelled and were recorded as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 6 below.

End date	**42**	**409**	**1065**	**1539**	**1900**	**1945/ 2007**	**Total**
Site type							
Banjo enclosure	8	1					**9**
Bank (earthwork)					2		**2**
Boundary					2		**2**
Enclosure	24	50			15	2	**91**
Extractive pit					2		**2**
Field boundary	1	5			96	2	**104**
Field system	1	24			67	1	**93**
Hollow					1		**1**
Hillfort	2						**2**
Lynchet		1		1			**2**
Pit		4			15	3	**22**
Ridge and furrow					1		**1**
Settlement	8	15					**23**
Temple		1					**1**
Town				1			**1**
Trackway	1	6			25	2	**34**
Total	**45**	**107**	**0**	**2**	**226**	**10**	**390**

Table 6. Site records with a start date of 800BC.

Forty one of the sites are double-indexed and between them these account for 87 database records. The most frequent form of double-indexing is field boundary/trackway with 17 sites, where 'field boundary' and 'trackway' are alternative interpretations for a linear feature. Other sites where double-indexing reflects alternative interpretations are bank (earthwork)/trackway, boundary/trackway and enclosure/temple. This latter site consists of a square enclosure, 13m x 13m, on Twyford Down interpreted in the NMR as an Iron Age or Roman temple (UID 230836). Two of the double-indexed records are for enclosures in which alternative date ranges have been entered. All the other double-

indexed records are for sites in which more than one component has been entered in the database; for example, three settlements with associated field systems and three settlements which contain banjo enclosures among other elements. A list of all instances of double-indexing is contained in Appendix 1.

The most numerous site types are agricultural features – field systems, field boundaries and lynchets - comprising 199 records. Of these, 191 (96%) were visible only as cropmarks; 90% of the features (179) were newly identified during the project and most of the records were for Celtic fields. Only two of the field systems were interpreted as exclusively Iron Age, with 30 considered to be Iron Age or Romano-British, one lynchet as Iron Age-medieval, 163 as Iron Age–post medieval and three of uncertain date. Celtic fields are discussed in more detail in section 10.

Roughly a third of the records are for settlement features in the form of enclosures, banjo enclosures and more extensive sites containing a range of components. There are two hillforts in the project area (Old Winchester Hill and St Catherine's Hill, Winchester) and the Roman and Saxon phases of the town of Winchester were recorded from aerial photographs taken during the course of excavations in 1987. In total this comes to 126 potential settlement sites, of which virtually all (121) are plough-levelled – only the two hillforts and three of the enclosures have above-ground remains surviving. Seventy nine (63%) of the settlements were newly identified during the project. Forty two of these sites were interpreted as exclusively Iron Age, 66 are interpreted as Iron Age or Romano-British, 15 as Iron Age–post medieval and two as uncertain in date. These features are included in discussions of settlement in section 11.

8.2.4 Roman (AD43 –409)

The project database contains 52 site records with a start date of AD43. Forty nine of these are interpreted as exclusively Roman: the other three are considered to be Roman–post medieval. Sixteen sites were previously recorded in the AHBR, with 36 (69%) newly identified during the project. Only seven (13%) of the sites have extant earthwork remains; the other 87% are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 7 below.

End date	**409**	**1900**	**Total**
Site type			
Bath house	1	0	**1**
Building	0	1	**1**
Enclosure	31	0	**31**
Field boundary	0	1	**1**
Field system	5	1	**6**
Road	2	0	**2**
Settlement	8	0	**8**
Villa	2	0	**2**
Total	**49**	**3**	**52**

Table 7. Site records with a start date of AD43.

One record is double indexed as an enclosure with associated field system and the bath house is double-indexed as a villa. Forty two of the records for Roman archaeology are for settlements of one type or another and of these enclosures are the most numerous. Only three of the sites interpreted as 'settlement', one of the villas and one of the enclosures have above-ground remains surviving; all the others were recorded as cropmarks or soilmarks.

All these sites are included in discussions of settlement in section 11.

8.2.5 Early medieval (410 - 1065)

The project database contains 40 site records with a start date of AD410. Only nine of these are interpreted as exclusively early medieval. Of the others 13 are considered to be early medieval or medieval, 16 are early medieval–post medieval and two are considered to be early medieval or later in date.

Eighteen sites were previously recorded in the AHBR, with 22 (55%) newly identified during the project. Fifteen (37.5%) of the sites have extant earthwork remains; the other 25 are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 8 below.

End date	1065	1539	1900	1945	Total
Site type					
Bank (earthwork)	1	0	0	0	**1**
Boundary bank	0	1	0	0	**1**
Dyke	3	0	0	0	**3**
Earthwork	1	0	1	0	**2**
Field boundary	0	2	8	1	**11**
Field system	1	3	3	1	**8**
Holloway	0	1	1	0	**2**
Lynchet	0	4	2	0	**6**
Ridge and furrow	0	0	1	0	**1**
Settlement	3	1	0	0	**4**
Strip field	0	1	0	0	**1**
Total	**9**	**13**	**16**	**2**	**40**

Table 8. Site records with a start date of AD410.

Three sites are double-indexed in the database. One is a field boundary alternatively interpreted as a lynchet, one is interpreted as ‘earthwork’ and ‘settlement’ and the other is a field system containing ridge and furrow entered in the database as field system/ridge and furrow.

Most of the records are for agricultural features (27 in total) and these are discussed in section 13.

8.2.6 Medieval (1066 - 1539)

The project database contains 786 site records with a start date of 1066. However, only 94 are interpreted as exclusively medieval: most – 648 - are considered to be medieval and/or post medieval whilst 44 are interpreted as medieval or later (end date 1945 or 2007).

Only 6% of the sites – 50 - were previously recorded in the AHBR, with 736 newly identified during the project. Two hundred and seven (26%) of the sites have extant earthwork remains; the other 74% are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 9 below.

End date	1539	1900	1945/ 2007	Total
Site type				
Abbey	1	0	0	**1**
Assart	0	3	1	**4**
Castle	1	0	0	**1**
Chalk pit	0	4	0	**4**
Chapel	2	0	0	**2**
Charcoal burning	0	0	1	**1**
Cultivation marks	1	17	4	**22**
Dewpond	0	3	0	**3**
Ditch	0	2	0	**2**
Drainage	0	10	0	**4**
Earthwork	1	5	0	**6**
Enclosure	1	5	2	**8**
Extractive pit	1	16	0	**17**
Field boundary	21	379	21	**421**
Field system	17	102	5	**124**
Fishpond	2	0	0	**2**
Hollow	0	2	1	**3**
Holloway	0	3	0	**3**
House	1	0	0	**1**
Linear feature*	3	19	0	**22**
Lynchet	5	0	1	**6**
Manor	1	0	0	**1**
Moat	1	0	0	**1**
Mound	0	4	0	**4**
Park pale	0	1	0	**1**
Palace	1	0	0	**1**
Pillow mound	0	1	0	**1**
Pit	3	5	0	**8**
Pond	0	2	0	**2**
Priory	1	0	0	**1**
Quarry	0	4	0	**4**
Ridge and furrow	18	19	1	**38**
Settlement	10	4	0	**14**
Spoil heap	0	2	0	**2**
Trackway	1	35	7	**43**
Tree ring	0	1	0	**1**

Water meadow	0	1	0	**1**
Windmill	1	1	0	**2**
Total	**94**	**648**	**44**	**786**

Table 9. Site records with a start date of 1066.

* Linear feature includes site types Bank (earthwork), Boundary, Boundary bank and Ditch.

Sixty four sites are double-indexed and between them these account for 132 database records. More than half (33) of the double-indexed sites are linear features where various combinations of 'field boundary', 'trackway', bank (earthwork), drain, drainage ditch and ditch are suggested as alternative interpretations. Seven are settlements where associated field boundaries, field systems and ridge and furrow have also been entered in the database. Three records are for areas of disturbed ground interpreted as possible evidence for medieval chalk extraction – these were double-indexed as 'earthwork' and 'extractive pit'. A list of all instances of double-indexing is contained in Appendix 1.

The most numerous site types are agricultural features – field systems, field boundaries, ridge and furrow, cultivation marks and lynchets, comprising 611 records (78% of the medieval records). Of these, 492 (81%) were recorded as cropmarks and 96% of the features (584) were newly identified during the project. Only 62 of the field systems and associated features were interpreted as exclusively medieval, with the great majority (517) considered medieval and/or post medieval. Linear features, including hollow-ways and trackways (68 sites in total) also figure large in the medieval archaeology mapped during the project. Another important aspect of the medieval resource is represented by the 14 settlements identified during the project. These elements of the medieval landscape are discussed more fully in section 13.

8.2.7 Post medieval (1540 - 1900)

The project database contains 1,330 site records with a start date of 1540, 25 records with a start date of 1701 and 41 with a start date of 1801, giving a total of 1,396 post medieval sites. Of these 1,324 are interpreted as exclusively post medieval; the remaining 72 are considered to be post medieval and/or modern (with end dates of 1945 or 2007).

Only 2% of the sites – 28 - were previously recorded in the AHBR, with 1,368 newly identified during the project. Seven hundred and thirty nine (53%) of the sites have extant earthwork remains; the other 47% are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 10 below.

End date	**1900**	**1945/ 2007**	**Total**
Site type			
Assart*	50	3	**53**
Boundary	1	0	**1**
Brickworks	1	2	**3**
Building/building platform	3	1	**4**
Chalk pit	410	10	**420**
Charcoal burning platform	47	0	**47**
Cultivation marks	21	1	**22**
Dewpond	219	2	**221**
Ditch	14	0	**14**
Drainage	99	14	**113**

Earthwork	1	0	**1**
Enclosure	9	1	**10**
Extractive pit	230	12	**242**
Field boundary	58	1	**59**
Field system	16	2	**18**
Fishpond	1	0	**1**
Garden	4	1	**5**
Gravel pit	4	3	**7**
Hedge	2	0	**2**
Hollow	2	0	**2**
Holloway	1	0	**1**
Leat	1	0	**1**
Maze	1	0	**1**
Mound	1	1	**2**
Path	3	0	**3**
Pit	16	3	**19**
Pond	6	0	**6**
Quarry	34	3	**37**
Ridge and furrow	6	0	**6**
Settlement	1	0	**1**
Spoil heap	3	3	**6**
Spring	1	0	**1**
Trackway	12	8	**20**
Tree ring	1	0	**1**
Water meadow	43	1	**44**
Watercress bed	1	0	**1**
Works	1	0	**1**
Total	**1324**	**72**	**1396**

Table 10. Site records with a start dates of 1540, 1701 or 1801.

* Assart is the interpretation given to groups of cropmark hollows which could be charcoal burning platforms or tree removal and burning features (see section 13.3.3).

Three hundred and four sites are double-indexed and between them these account for 611 database records. Most (213) of the double-indexed sites are possible dewponds which have been interpreted alternatively as chalk pits, extractive pits, pits or, in one case, as an enclosure. Forty nine sites were double-indexed as charcoal burning platforms, extractive pits or assarts. These features were thought most likely to be charcoal burning platforms but might, alternatively, be the result of woodland clearance and burning (see section 13.3.3) and ‘assart’ seemed the best available site type for this alternative interpretation. Most of the remaining 42 double-indexed sites are linear features or linear systems where various combinations of ‘cultivation marks’, ‘drainage system’, ‘trackway’, ‘drain’, ‘drainage ditch’ and ‘ditch’ are suggested as alternative interpretations. A list of all instances of double-indexing is contained in Appendix 1.

More than half (53%) the records for post medieval archaeology are for extraction features – quarries, gravel pits, pits and, most notably, chalk pits. Possible dewponds make up 16% of the sites and features associated with drainage, including water meadows make up 11%. There are 100 records for 'assarts' or charcoal burning platforms. The remaining 13% of the sites in the main comprise field boundaries, field systems, cultivation marks and ridge and furrow. Elements of the post medieval landscape are discussed more fully in section 13.

8.2.8 Modern (1901-2007))

The project database contains 21 site records with a start date of 1901, 11 with a start date of 1914 and 30 with a start date of 1939, giving a total number of records for twentieth century sites of 62. Forty four (70%) are military or defensive features; 18 are non-military and include a wide range of site types.

Ten of the sites (16%) were previously recorded in the AHBR, with 52 newly identified during the project. Forty seven (76%) have extant earthwork remains; the other 15 are plough-levelled and were only visible as cropmarks or soilmarks. A breakdown of the site types and their dating is set out in table 11 below.

Non-military sites		**Military sites**	
Site type	**No**	**Site type**	**No**
Allotment	1	Airfield	1
Assart	1	Anti-aircraft battery	1
Building	1	Barrage balloon mooring	2
Chalk pit	2	Bomb crater	13
Enclosure	1	Firing range	1
Garden feature	1	Gun emplacement	1
Graffiti	1	Military base	2
Hollow	1	Military camp	8
Pit	1	Military site	4
Pond	1	Pillbox	3
Quarry	1	Radar station	1
Ridge and furrow	1	Radio station	1
Sports site	1	Searchlight battery	1
Structure	1	Slit trench	5
Telecommunication station	1		
Trackway	1		
Watercress bed	1		
Total	**18**	**Total**	**44**
Grand total			**62**

Table 11. Site records with a start dates of 1901, 1914 or 1939.

The military sites recorded during the project are discussed in section 14.

9 The Neolithic and early Bronze Age monumental landscape

9.1 Neolithic monuments

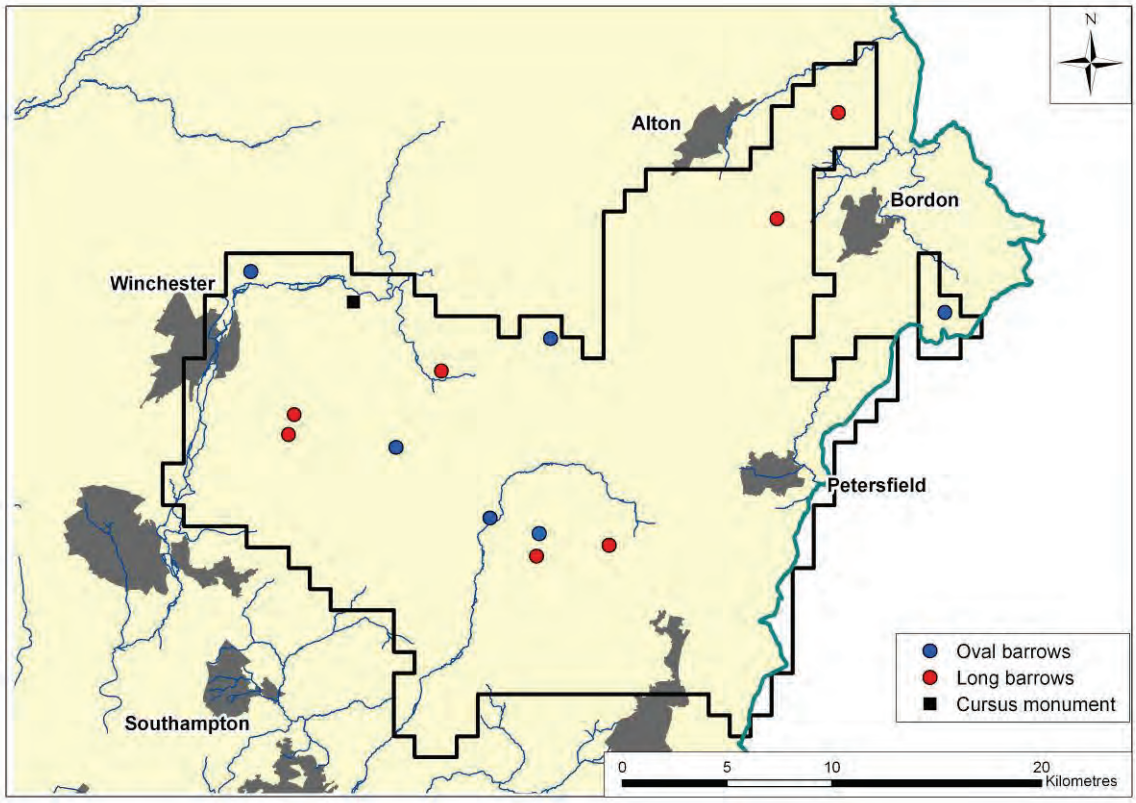

Fig 10 Distribution of Neolithic sites mapped and recorded during the project.

There is little direct evidence for Neolithic and early Bronze Age settlement in Hampshire (Gardiner 2008) and there is a more limited range of Neolithic communal monuments in Hampshire than in neighbouring counties. There are no known cursus monuments or causewayed camps and only a single henge, recently identified in the northwest (D. Hopkins, pers. comm.). The most visible field remains of Neolithic communities are earthen long barrows. Forty three of these monuments are recorded in the county AHBR, of which 39 are included in an RCHME survey (RCHME 1979).

NMP mapping in the South Downs identified 15 sites which are Neolithic or possibly Neolithic in date (Fig 10). Of these four are long barrows previously recorded in the AHBR (AHBR 18102, 24158, 26001 and 18812) and published by the RCHME. A possible long barrow previously recorded in the AHBR (AHBR 39707) was also mapped, although this site is somewhat unusual. Although situated on a prominent hilltop ridge entirely consistent with the typical topographic siting of long barrows elsewhere in Hampshire, it is located on Upper Greensand to the immediate southeast of Binsted. All the proven long barrows in Hampshire occur on chalk, although there are a small number of possible or potential barrows on different geologies.

The long barrow at Warren Farm, Morestead (AHBR 24158) is of particular interest. The barrow is described in the AHBR as an earthwork mound measuring 62m x 22m. On 1940s RAF vertical photography this mound can be seen to be sited within a newly identified elongated enclosure measuring 135m x 40m which appears as a cropmark ditch on the photographs. The enclosure is not visible in its entirety as it is cut by the lane leading to Warren farm (Fig 11).

Fig 11. The Neolithic long barrow and surrounding enclosure at Warren Farm, Morestead. Although the long barrow mound is not clear on this photograph, the ditch of the cigar-shaped enclosure shows as a dark cropmark. Photo: RAF CPE/UK/1750/3044. 21st September 1946. © English Heritage. NMR (RAF Photography).

In addition to these previously recorded long barrows two new potential barrows were identified. The first (ID 174386) is a little to the southwest of the Binsted barrow, also on Upper Greensand at Wick Hill Hanger, some two kilometres northeast of Selborne. Like the Binsted barrow this feature is sited on a prominent hilltop location. It is visible as an elongated enclosure, 109m x 26m, defined by a cropmark ditch on RAF photographs from 1947 and a MAL photograph from 1960 (Fig 12). The second possible barrow (ID 171169) is located on chalk at Longwood Warren, to the northeast of Morestead in the western part of the project area. This feature consists of an elongated ditched enclosure, 32m x 13m, aligned northwest–southeast and containing an internal mound measuring 23m x 6m. This site is less than a kilometre to the north of the Warren Farm long barrow mentioned above but, although similarly sited on the 100m contour it occupies a much less prominent position in the landscape, situated as it is on a slope between two small coombes. The site was transcribed as a cropmark from HCC colour vertical photographs taken in 1995 and it is possible that it is a medieval pillow mound – Longwood Warren was a major medieval warren (Hare 1994, 164). Whilst the discovery of new long barrows in the Hampshire South Downs is not implausible, they are relatively rare monuments and the interpretation of these two candidate sites should be treated with caution until further archaeological investigation provides more compelling evidence.

As a result of NMP it is suggested that two features previously recorded in the AHBR as Bronze Age barrows may, in fact, be oval barrows or 'short long barrows' dating from the late Neolithic (Fig 13). These are located at Worthy Park (AHBR 38389) and at Old Winchester Hill (AHBR 24644). This latter feature is interpreted in the AHBR as one of a group of seven Bronze Age round barrows to the immediate west of the Iron Age hillfort, but is listed in the NMR as a Neolithic oval barrow (UID 239429).

Fig 12. A possible Neolithic long barrow at Wick Hill Hanger, Selborne.
The flanking ditches of the possible barrow are visible as dark cropmarks aligned roughly right–left. Photo: RAF CPE/UK/2006/3050. 16th April 1947. © English Heritage. NMR (RAF Photography).

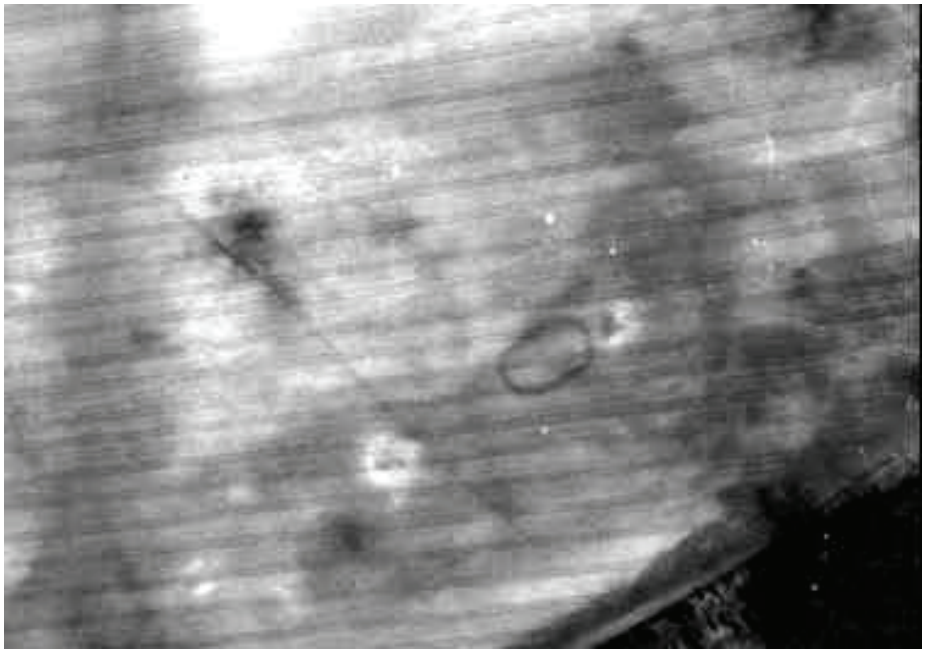

Fig 13. A Neolithic oval barrow at Worthy Park, Kings Worthy.
Photo: NMR 911 SU5032/3. 23rd March 1976. © Crown copyright. NMR.

Four previously unrecorded features were also interpreted as oval barrows. These are at Ropley, to the immediate north of West Tisted (ID 171227), at Millbarrow Farm near Beauworth (ID 171885), at Bohunt Manor just to the west of Liphook (ID 174060) and at Manor Farm, Exton (ID 173938).

The Ropley barrow appears as a cropmark ditch 39m x 27m, on chalk. It is aligned southwest–northeast and is situated on a northwest-facing slope. The barrow at

Millbarrow Farm, also on chalk, is aligned in a more east-west axis and is situated towards the head of an east-facing coombe. It measures 20m x 11m and is overlain in the southwest by a later (now plough-levelled) field boundary. To the immediate south and southwest are two conjoined rectilinear enclosures interpreted as Late Iron Age or Romano-British and it is possible that the 'barrow' may, in fact, be associated with these features. The feature at Bohunt Manor is the least convincing of the four. It is considerably larger than the others, measuring 58m x 29m, it is located on Lower Greensand rather than chalk, on a gentle west-facing slope. It appears as a rather indistinct cropmark bank on RAF photographs from 1947 and it is possible that the cropmark does not result from archaeological activity. The Exton barrow is arguably the most interesting of the four. It is located on low-lying ground on river terrace gravel close to the flood plain of the Meon. It is aligned southwest–northeast, measures 40m x 26m (an almost identical alignment and size to the Ropley barrow), and appears as a very clear cropmark ditch on 1966 OS photographs. Although most of the oval barrows recorded from Hampshire are located in the chalklands, this example is similar in size to a barrow recorded from river terrace gravel at Upper Burgate in the Avon Valley (Young *et al* 2008, fig 11).

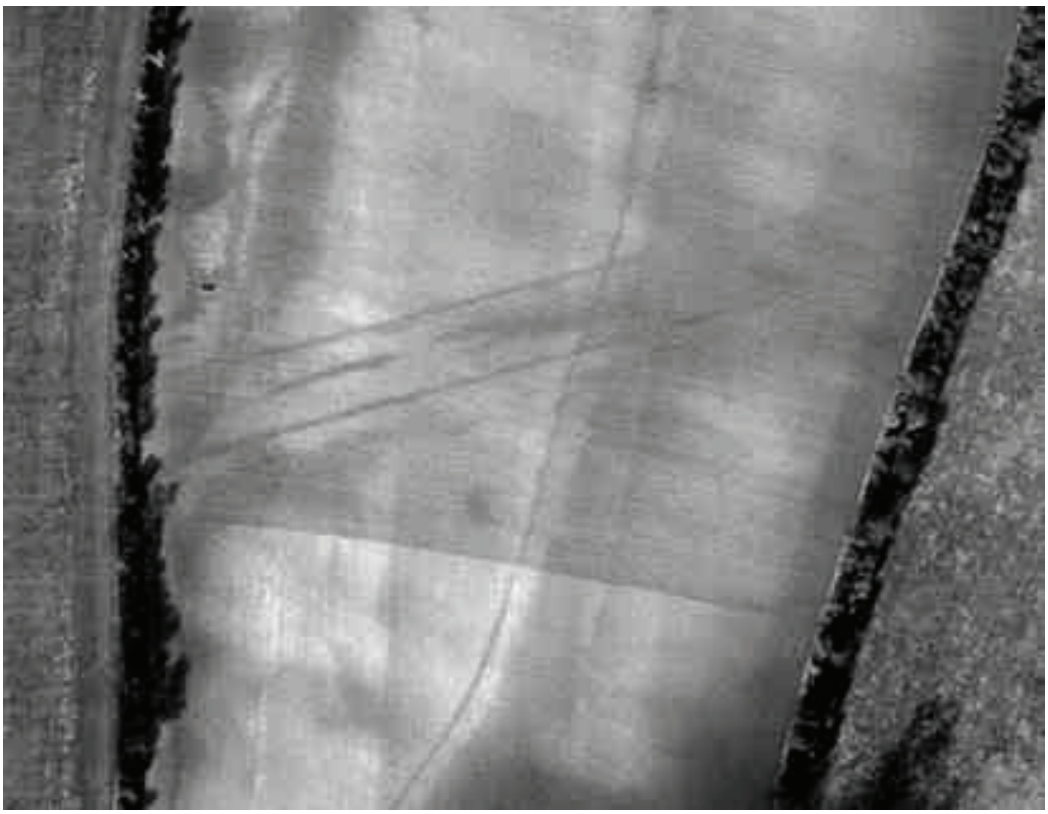

Fig 14. The possible cursus monument at Lovington, Itchen Valley.
Photo: NMR 473 SU5531/5. 7th March 1973. © Crown copyright. NMR.

The most important features interpreted as potentially Neolithic are at Lovington, some 2.5km west of New Alresford. Here two parallel ditches, 21m apart, run north eastwards from high ground (between the 90 and 100m contours) for 650m towards Ovington on the southern bank of the river Itchen (ID 170325). The ditches are visible as fine but distinct cropmarks on NMR specialist photography (Fig. 14). It is possible that these ditches are a fragment of a cursus monument which presumably continues uphill towards the southwest where it is either not visible or no longer survives. This interpretation would be more compelling if there was evidence of a terminal, which there is not, but there are no fully convincing alternative interpretations. Avington deer park (emparked in 1306) lies a short distance to the west and a series of linear features in the vicinity are associated with the park. It might be that the parallel ditches of the 'cursus' are further parkland features but the cursus ditches are much less substantial than the earthworks associated with the deer

park and are very different in character. Another alternative is that the ditches are a fragment of Roman road. This is possible as the stretch of the Winchester to London road between Four Marks and Avington Manor (Margary section 339) is uncertain. However this uncertain section of road is projected to run more than one kilometre to the south of the possible cursus so if the ditches are part of the road this would imply a major reappraisal of the line of the road. Furthermore NMP mapping has identified probable traces of this road close to its projected line in the south (ID 170308) and this would appear to rule out this possibility (see section 12.2). Overall this feature can be considered to be a potential cursus monument and is a significant finding as no cursus monuments have yet been identified in Hampshire. Clearly more archaeological investigation is needed to provide more information about the site.

The possible cursus monument overlies a curvilinear enclosure (ID 170324) measuring c43m x 36m (Fig 15). This enclosure, photographed during the drought of 1975, is defined by a faint but distinct cropmark ditch whose circuit is not completely visible (part of its eastern side does not show on the photographs). The enclosing ditch is segmented or interrupted, with six gaps in its circuit, and it is possible that the missing portion of ditch in the east actually represents a seventh, albeit much larger gap in the circuit. Some 20m to the northwest are traces of a possible concentric outer ditch, also interrupted. Because the interpretation of the cursus monument is tentative this enclosure was dated as 4,000BC – AD42 (Neolithic to Iron Age). However, due to the fact that it is overlain by the possible cursus and given its segmented form, it is reasonable to suggest that this feature is a causewayed enclosure dating from the earlier Neolithic.

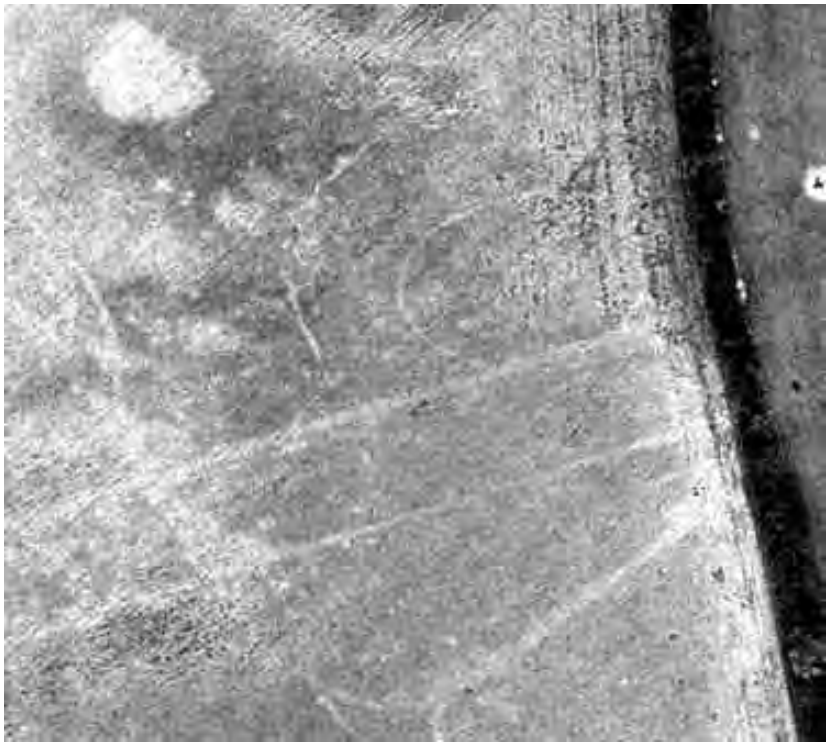

Fig 15. A possible Neolithic causewayed enclosure at Lovington, Itchen Valley.
Photo: NMR 888 SU5530/9. 22nd July 1975. © Crown copyright. NMR.

9.2 Bronze Age barrows

The Early Bronze Age landscape presents a marked contrast to that of the Neolithic. Bronze Age monuments are numerous and widespread, with 387 barrows or possible barrows mapped (Fig 16). Nearly 80% of the barrows are plough-levelled and were recorded as cropmarks or soilmarks. Most of these were ring ditches but their number includes 49 cropmark mounds of uncertain date (with end dates of 1900 or later) interpreted as potential barrows. It should be noted that in general the interpretation of mounds as barrows is less secure than that of ring ditches.

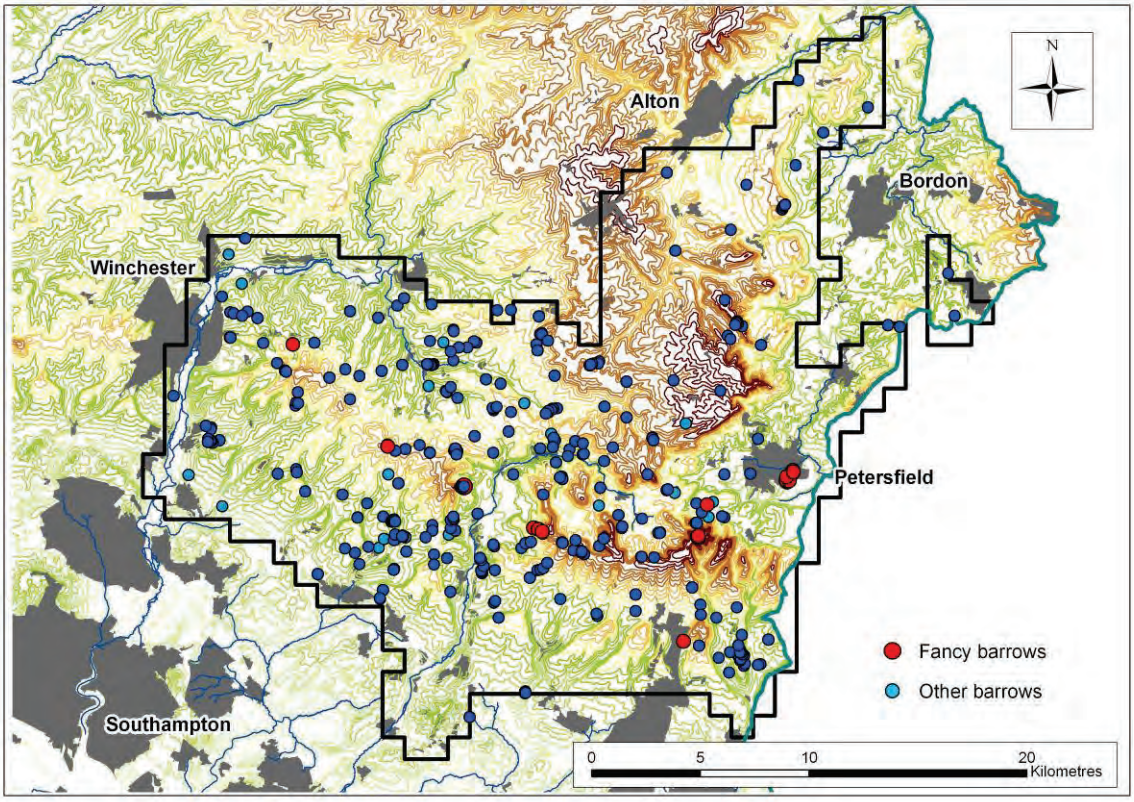

Fig 16. Distribution of Bronze Age barrows in the Hampshire South Downs.
'Fancy' barrows include bell barrows, disc barrows, pond barrows and saucer barrows, as opposed to simple circular mounds surrounded by a ditch.

The list includes records for seven saucer barrows, four disc barrows, three bell barrows and two pond barrows; the remaining records are interpreted as 'barrow', 'ring ditch' or 'mound'. Some 10% of the 'simple' barrows contain internal features such as central pits or mounds (see Fig. 17) and it is possible that further investigation of these might lead to their re-interpretation as fancy barrows of one type or another.

9.2.1.1 Barrow cemeteries

Two thirds of the barrows occur in groups or 'cemeteries' of three or more, approximately 30% occur singly and 5% occur in pairs. There are 32 barrow cemeteries and they each contain between three and 21 individual barrows, but those containing three or four are by far the most common. There appear to be three broad patterns regarding the layout of the cemeteries. In some the siting of individual barrows seems random, with no definable pattern; in others the barrows are tightly clustered, sometimes with adjacent barrows overlapping; in others there is a clear and deliberate linear arrangement with the barrows usually (but not always) close together. The large cemetery at Petersfield Heath is a good

example of an apparently random layout, as is that at Twyford, where eight previously unrecorded barrows were transcribed during the project. Examples of clustered cemeteries are Rooksgrove Farm, Warnford, Corhampton Down (Fig 17) and Hawkley Hanger. Of the many linear cemeteries, those at Old Winchester Hill (Fig 54) and Cheriton (Fig 23) are illustrated in one form or another in this report.

Fig 17. The barrow cemetery at St Clair's, Corhampton Down.
The cemetery is overlain by a later banjo enclosure and associated settlement features.
Photo: NMR 910 SU5720/23. 23rd June 1976. © Crown copyright. NMR.

In some of the larger cemeteries more than one type of layout co-exists, suggesting that these cemeteries developed over time. An example of this is at Chalton Down, where three (or possibly four) barrows are sited close together in a roughly north-south line on the summit of the down. Other barrows, including four newly identified during the project (ID 172573 – 172576) are located around the upper ridge and slopes of the down (Fig 18). It seems that in its initial phase this was a carefully laid out linear cemetery which acted as a focus for later barrow construction in the near vicinity.

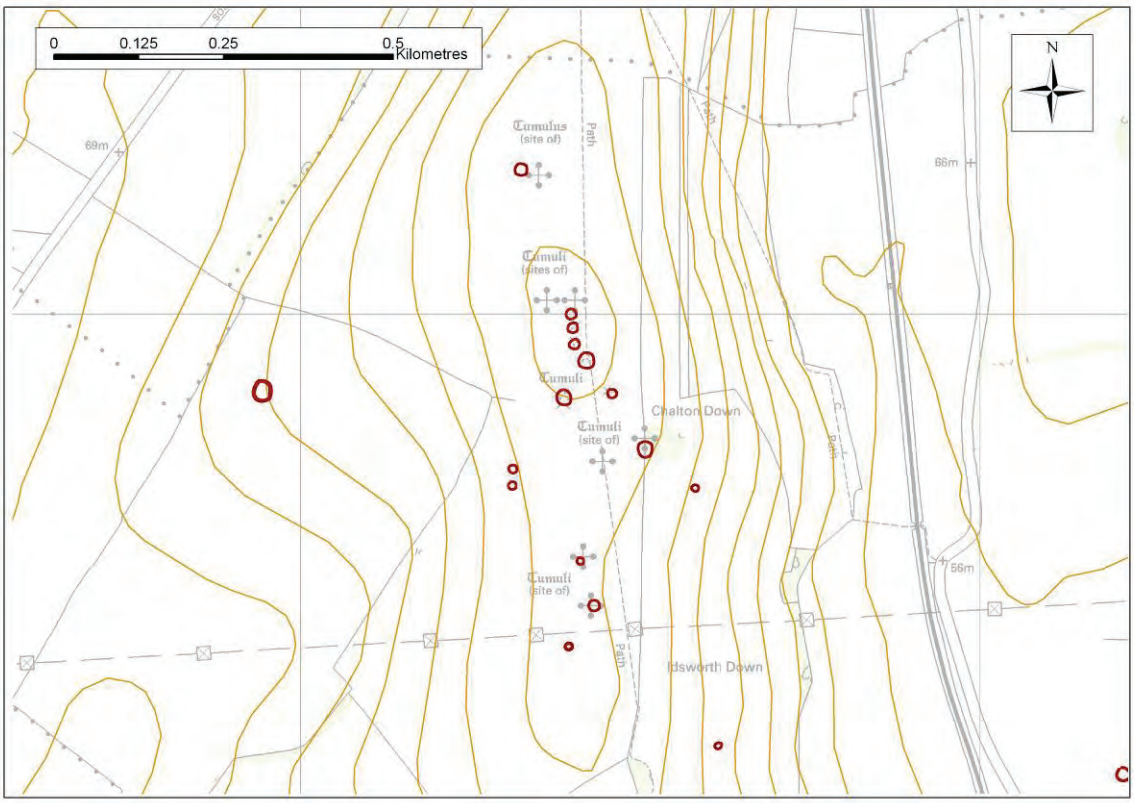

Fig 18. NMP mapping of the barrow cemetery on Chalton Down.

9.2.1.2 Distribution of barrows

The barrows are distributed widely throughout the project area (Figs16 and 19) but are found predominantly on the chalk (87% are located in the central chalk zone). There is a far sparser distribution on the Greensand and Gault clay in the east and only two were recorded from the tertiary clays and silts in the southwest. The one significant exception to this pattern is the large cemetery on Petersfield Heath, where 21 barrows are recorded in the AHBR. Fifteen of these are visible on aerial photographs (the remainder are masked by trees and mature vegetation) and the group is notable for its high proportion of fancy barrows – the mapping included two disc barrows, three saucer barrows and a bell barrow. Within the chalk areas barrows are particularly plentiful in the Downland Mosaic Large Scale and Open Downs landscape types, less so in the Downland Mosaic Small Scale, and only 10 were identified in the Wooded Downland Plateau landscape.

Where the barrows are found, they are sited in a wide range of topographical settings. Many of the previously known barrow sites are on higher ground, above the 100m contour (Fig 19). There is a focus on the chalk ridge running roughly east–west through the central chalklands, particularly east of the Meon Valley, where the ridge is more pronounced. And this is reinforced by the distribution of fancy barrows, with examples on Butser Hill and Old Winchester Hill in the east, and on Millbarrow Down and Chilcomb Down in the west. Away from the central ridge there is an extensive cemetery on Chalton Down (Fig. 18), which forms a promontory overlooking Rowlands Castle in the very far southeast. Elsewhere the barrows are scattered to the north and, more frequently, to the south of the chalk ridge.

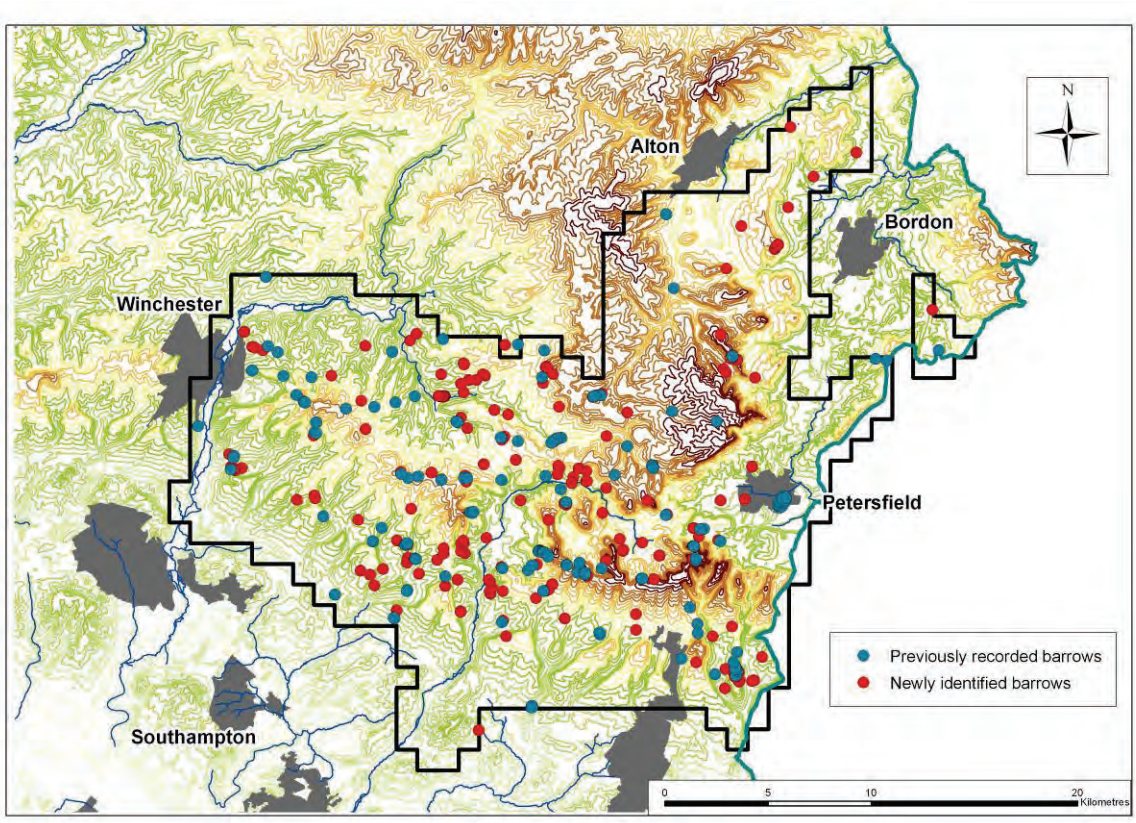

Fig 19. The distribution of Bronze Age barrows differentiating between newly identified and previously recorded barrows.

In places the distribution of the newly identified barrows underscores the apparent importance of the central chalk ridge, with new barrows recorded at Butser Hill, Tegdown Hill, Chidden Down and Kilmiston Down (Fig. 19). However the main foci in the distribution pattern of the new barrows is away from the ridge, with many recorded to the south around Corhampton and Droxford, and to the north around West Meon and Cheriton in the Upper Itchen Valley. The known distribution of barrows has also been extended into the Greensand and clay area between Alton and Bordon where no barrows were previously known, although quite a high proportion of these Greensand sites are cropmark mounds whose interpretation, as mentioned earlier, is less secure than that of ring ditches.

Barrows on the central chalk ridge

It is of interest to look in more detail at the central chalk ridge running from Telegraph Hill, Chilcomb in the west to Butser Hill in the east. The ridge is dissected at roughly its mid point by the river Meon. To the east of the Meon the ridge rises to 260m and is more pronounced than in the west.

In the east (Old Winchester Hill to Butser Hill), it is clear that although the ridge forms a distinctive linear feature in the landscape the barrows are not arranged as a linear cemetery, but rather are sited at various prominent locations along its length with clusters (including fancy barrows) at either end. The ridge can be divided into two sections with the spur at Salt Hill marking the division between the two (Fig 20). Eleven barrows are clustered on Old Winchester Hill, including two saucer barrows (AHBR 24642 and 24647) and a pond barrow (AHBR 24573), and are all aligned on a Neolithic oval barrow (AHBR 24644). The barrows form two separate linear groups some 110m apart. The first group is situated immediately outside the western rampart of the Iron Age hillfort and is arranged in

a north-south line; the second group lies within the interior of the hillfort and is aligned roughly east-west (Fig 54). Three barrows incorporated into the southern rampart of the hillfort are recorded in the AHBR but were not visible on the aerial photographs available to the project. Two barrows, including one of the saucer barrows (AHBR 24647) are located to the immediate east of the hillfort.

Between Old Winchester Hill and Salt Hill there is a scattered cemetery on Teglease Down and Chidden Down. Two barrows (AHBR 26396 and 26370) occupy the saddle of land at the 90m contour between Teglease Down and Old Winchester Hill; two barrows (AHBR 18820 and 26437) overlook a small coombe to the north; five barrows, including a newly identified site (ID 172748) overlook a coombe to the south. Extant or cropmark remains of four further barrows in this group are no longer visible.

At Salt Hill, a newly identified barrow (ID 173155) was mapped close to the Salt Hill Neolithic long barrow (AHBR 18812). Between Salt Hill and Butser Hill barrows overlook the coombe known as Tegdown Bottom at two locations. The first (to the west of the coombe) is Hyden Hill, where there is a linear cemetery comprising four closely spaced bowl barrows (AHBR 2361, 2363, 2364 and 2365). On the other side of the coombe, at Tegdown Hill, a newly identified barrow (ID 172684) consisting of a ring ditch with a central pit or hollow, was mapped. On Butser Hill a newly identified barrow visible as a ring ditch (ID 174630) is sited close to two bell barrows (AHBR 18567 and 18568). Just to the north, between the 240m and 250m contours on Ramsdean Down three barrows are arranged in an east-west line (AHBR 18554, 18555 and 18556).

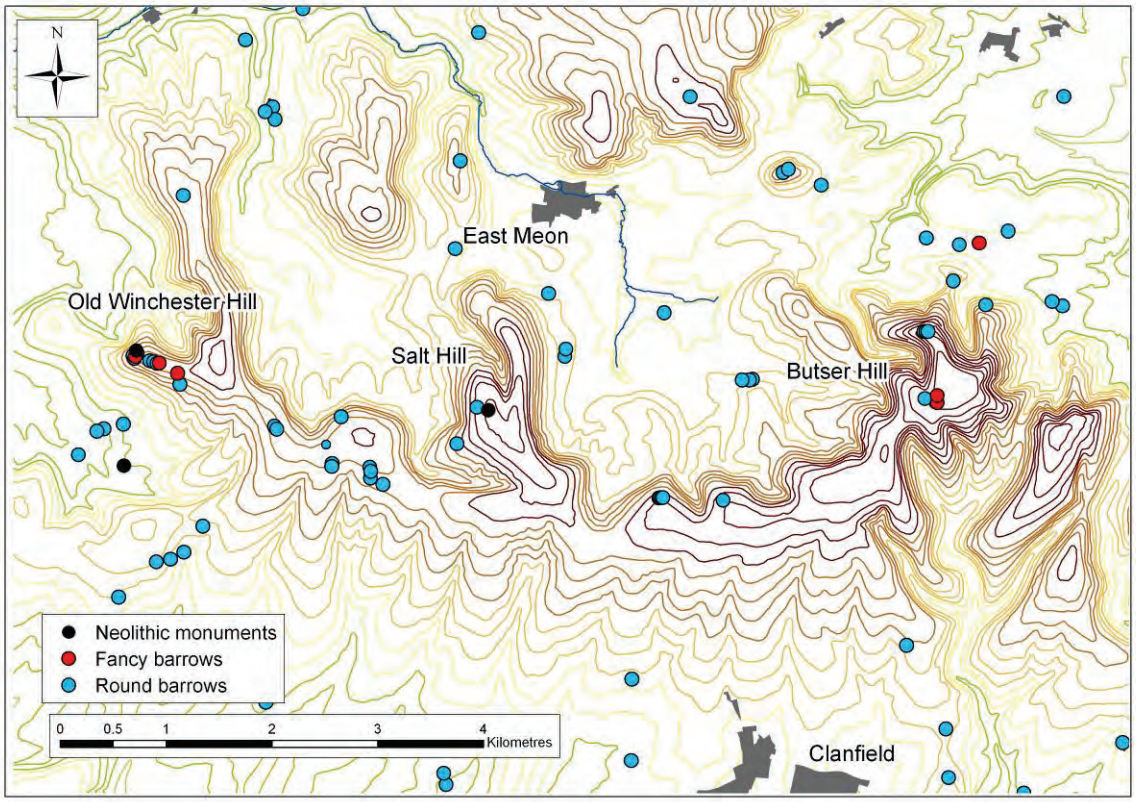

Fig 20. The distribution of Bronze Age barrows and Neolithic monuments on the central chalk ridge east of the Meon Valley.

The central chalk ridge is not so pronounced nor as continuous to the west of the Meon. However the pattern of barrow location on the ridge is broadly similar to that in the east. Again the barrows are concentrated on a number of prominent landscape features along

the length of the ridge, most notably at Beacon Hill and Rooksgrove, Warnford, where there are clustered cemeteries. The cemetery at Beacon Hill consists of four previously recorded barrows (AHBR 24473, 24474, 24476 and 24478), including a saucer barrow (AHBR 24473). NMP mapping suggests that this saucer barrow has a previously unrecorded barrow appended to its southern side. The mapping also suggests that barrow 24476 might be a disc barrow as the mound, which is 9m in diameter, appears to be enclosed by a large partially visible ring ditch some 25m in diameter. Other concentrations of barrows occur at Millbarrow Down, Kilmiston and Lomer.

Barrows in other locations

By contrast some barrow cemeteries appear to be deliberately sited on slopes or lower ground in places where higher, more prominent locations are available. A good example of this is at Marlands, to the north of West Meon (Fig. 21).

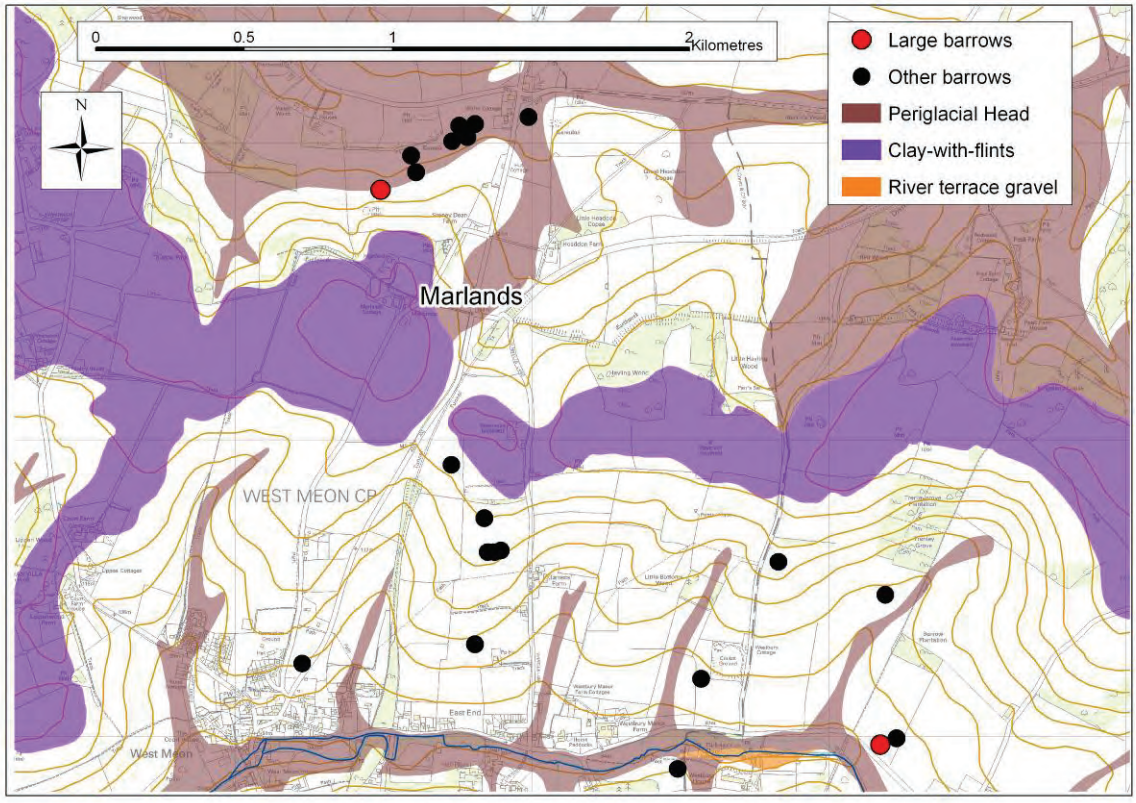

Fig 21. The location of barrows around Marlands, West Meon.
Large barrows are those with a diameter in excess of 35m. Reproduced from the British Geological Survey Map data at the original scale of 1:50,000 and 1:100,000 Licence 2010/065 British Geological Survey. NERC. All rights reserved. © **Crown Copyright 2006HCC 100019180**. Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's Stationery Office

Here there are quite distinct hilltops and plateaux capped by clay-with-flints on the 150m contour but the barrow cemeteries are sited between the 130 and 140m contours to the south, and between the 130m and 110m contours to the north. In the north 11 barrows (including one newly identified site, ID 171097) are all visible as cropmarks in a roughly linear arrangement running downslope to the head of a dry valley. In the south a group of four newly identified barrows (ID 174002 – 174005) are located between the 130 and 140m contours. Three of these form a close-spaced linear alignment running east-west and the easternmost of the three contains a central hollow or feature and may be a possible fancy barrow. Further down this slope another newly identified barrow (ID 174007) is partially visible as a cropmark ring ditch. It appears that in this part of the Meon

valley each slope between the coombes is occupied by at least one barrow and in some cases they are sited only a little way above the river.

Another example is the landscape around Brockbridge near Meonstoke (Fig 22). Here there are no barrows recorded from the prominent hilltop (140m contour) and plateau which dominates the eastern part of the landscape (130m contour). The barrows are sited on the lower southwest and northwest slopes and deep into the Meon valley itself, at heights ranging from 120m to as low as 70m.

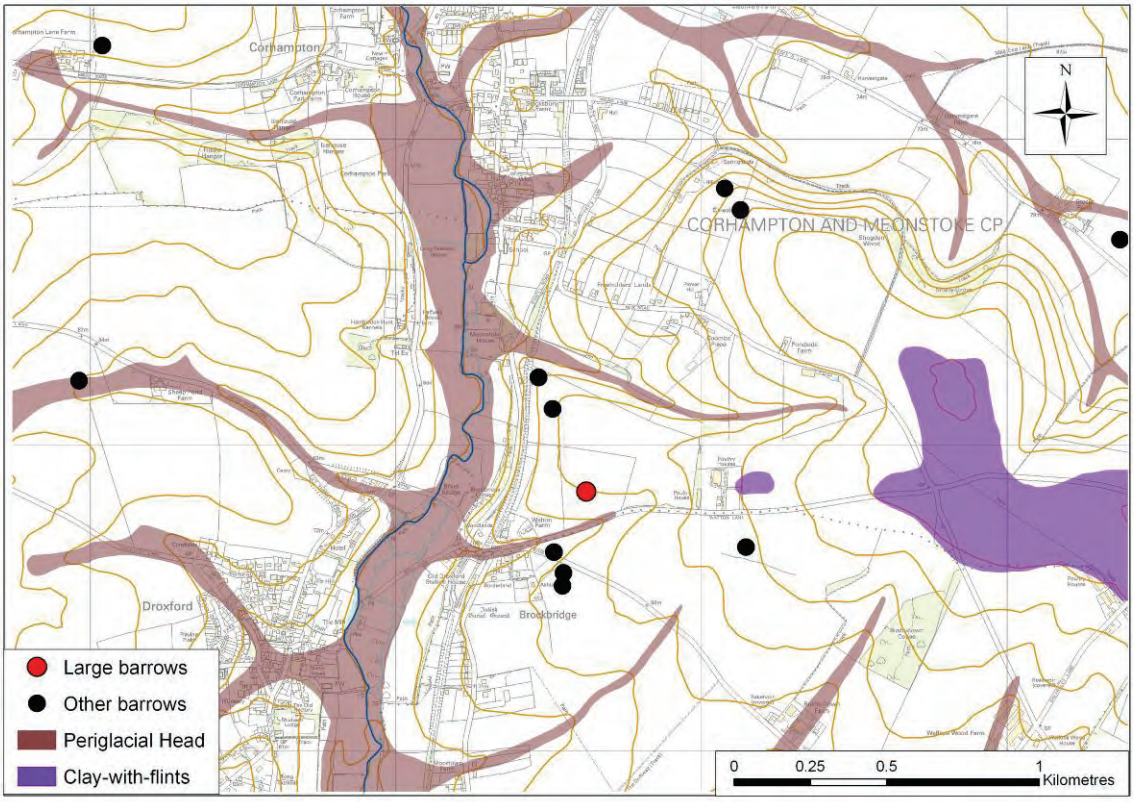

Fig 22. The location of barrows around Brockbridge, Meonstoke.
Large barrows are those with a diameter in excess of 35m. Reproduced from the British Geological Survey Map data at the original scale of 1:50,000 and 1:100,000 Licence 2010/065 British Geological Survey. NERC. All rights reserved. © **Crown Copyright 2006HCC 100019180**. Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's Stationery Office

In some locations there is the suggestion of a relationship between barrow location and river valleys (including dry valleys). Elsewhere in Hampshire barrow cemeteries have been recorded from the flood plains of the Avon and Test (Young *et al* 2008, 34) but no truly comparable examples were recorded in the South Downs. The closest parallel is at Cheriton, where a newly identified linear cemetery was recorded near a tributary of the Upper Itchen (Fig 23). This cemetery consists of five ring ditches (ID 170764, 170766, 170767, 170768 and 170770) and two mounds (ID 170765 and 170769) all plough-levelled and visible as cropmarks. Four less distinct mounds here may be further barrows. This cemetery is also of interest because of its proximity to the Lamborough long barrow, which lies approximately 290m up slope to the north.

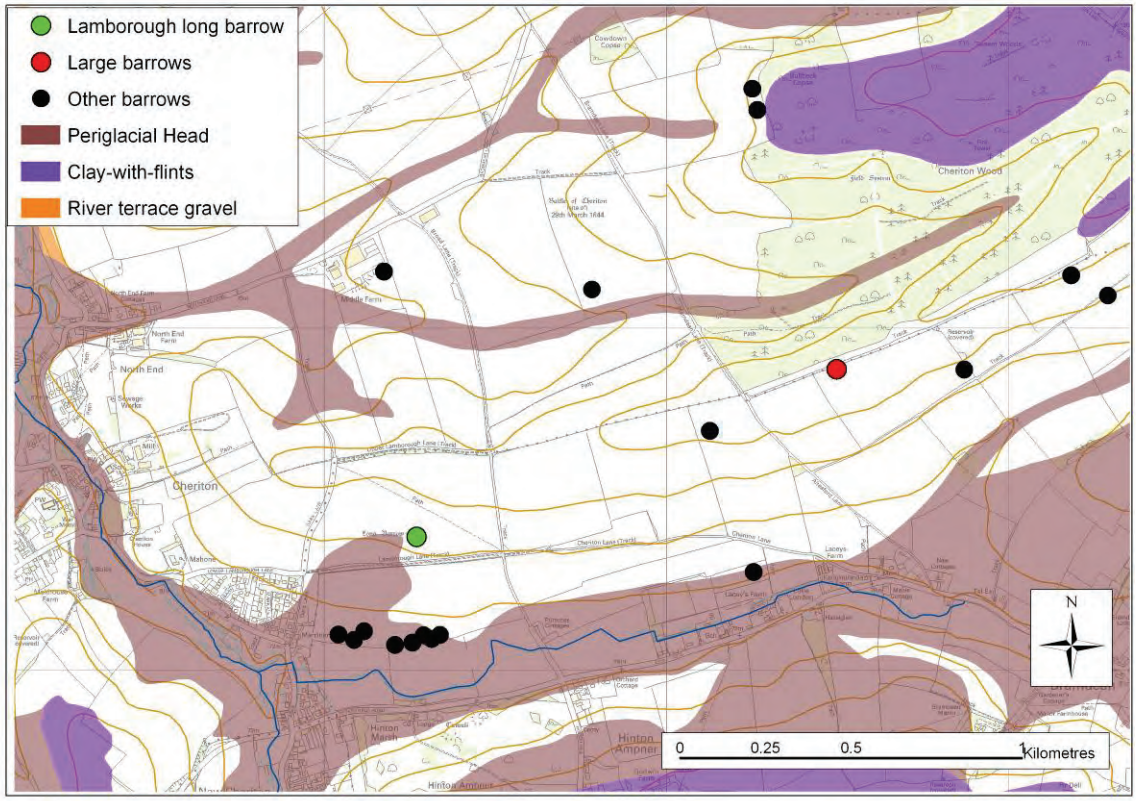

Fig 23. The location of barrows around Cheriton.
Large barrows are those with a diameter in excess of 35m. Reproduced from the British Geological Survey Map data at the original scale of 1:50,000 and 1:100,000 Licence 2010/065 British Geological Survey. NERC. All rights reserved. © **Crown Copyright 2006HCC 100019180**. Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's Stationery Office

9.2.1.3 Large barrows

The barrows range in size from 7m to 47m diameter (excluding the disc barrow at Snell's Corner, Clanfield [AHBR 26544] which measured 63m in diameter, but which was destroyed during the A3 road widening operations). A rapid review of the barrows mapped and recorded during the project indicates that more than three quarters are 25m or less in diameter and that 15m – 25m can be regarded as the typical size range. Nineteen barrows (5%) have a diameter in excess of 35m and are classed here as 'large'. It is possible that these barrows were of special importance but the definition of size here refers only to the diameter of the outer ditch and does not imply that large barrows had correspondingly higher mounds or were more prominent landscape features than other barrows. It is not suggested that the large barrows be seen as a separate type of barrow but, nevertheless, when looked at as a group some distinctive characteristics emerge.

All are plough-levelled and were visible as cropmark ring ditches. One – AHBR 18568 on Butser Hill – is classed as a bell barrow and it is possible that some of the other large barrows might be fancy barrows. In fact internal features are visible in three of the barrows, including two forming part of the Corhampton Down cemetery (Fig. 17).

In contrast to the South Downs barrows as a whole (see section 9.2) only six large barrows are located within cemeteries. These include two barrows (AHBR 22553 and 17996) in the Corhampton Down cemetery, the bell barrow on Butser Hill, AHBR 38527 in the Marlands cemetery (Fig 21) and AHBR 17372 in the Hawkley Hanger cemetery. Ten of the barrows occur singly as apparently isolated features in the landscape, one (AHBR 27118) is paired with a smaller barrow (AHBR 26982) and another pair are located at

Hartley Mauditt where a newly recorded large barrow (ID 174422) lies 380m to the south of a smaller barrow (AHBR 17106: this barrow is situated in woodland and is not visible on aerial photographs). Finally a newly identified large barrow (ID 173097), measuring 39m in diameter, is one of three conjoined ring ditches at Riplington, West Meon.

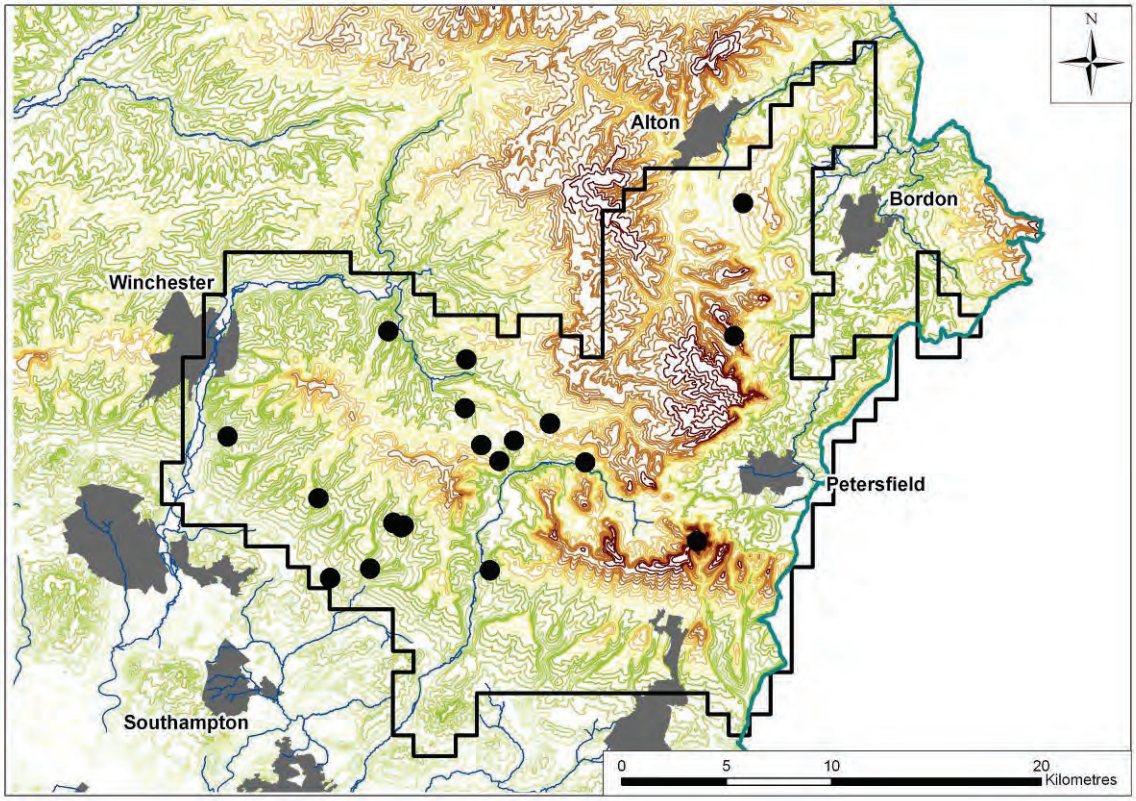

Fig 24. The distribution of large barrows in the Hampshire South Downs.
Large barrows are those with a diameter in excess of 35m. Reproduced from the British © **Crown Copyright 2006HCC 100019180**. Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's Stationery Office

There is a strong western bias to the distribution of large barrows, with 13 of them situated to the west of the Meon valley (Fig 24). Only one – the bell barrow on Butser Hill - is sited on the central chalk ridge and only three in the Open Downs landscape. In fact the large barrows are almost exclusively found in the Downland Mosaic landscape types (10 in Downland Mosaic Large Scale and five in Downland Mosaic Small Scale). The Hartley Mauditt barrow is located in the Greensand Terrace.

Most of the large barrows are sited in non-prominent, often relatively low-lying locations (12 lie below the 100m contour). Only those on Butser Hill and Hawkley Hanger can be said to be in truly prominent positions; those on Corhampton Down and Cheriton Hill (Figs 17 and 23) are on spurs lying below higher ground; the barrow at Greenhill House, Upham (AHBR 35444) is situated high up a slope (but not on the hilltop) overlooking a coombe. All the others are in notably low-lying locations (for example Figs 21 and 22).

10 Celtic fields

Before 1500BC agricultural regimes and accompanying settlements left little mark on the landscape. The period between then and 600BC saw a major transformation with the Hampshire South Downs becoming an enclosed landscape with permanent settlements. The most obvious manifestation of this change is the very extensive network of rectilinear fields defined by lynchets – so-called Celtic fields. In Hampshire evidence dating Celtic fields to the Bronze Age comes from the Danebury survey (e.g. Palmer 1984, 70; Cunliffe and Poole 2000) and a number of sites including, within the project area, Barnet Copse, Chalton (Rudkin 1980). However the fields should not be dated exclusively to the Bronze Age as it seems certain that they were in use throughout the Iron Age and into the Roman period. In fact many of the Celtic field systems mapped and recorded during the project appear to consist of more than one phase of development or to have undergone alterations and the final form of many of the field systems probably dates from the late Iron Age or Romano-British period.

During the project 700 database records for prehistoric or prehistoric/later field systems, field boundaries or lynchets were created (with start dates of 2200 or 800BC). Of these 226 were interpreted as definitely prehistoric or Romano-British, whilst 474 were considered to be possibly prehistoric or Romano-British but maybe later in date. The records were re-appraised during preparation for this report and an assessment made of the field systems assigned end dates later than AD409. Fourteen of the fields of uncertain date were reinterpreted as likely to be prehistoric or Romano-British based on their morphology, alignment and relationship with other features. Forty nine of the records for fields were double-indexed (with more than one end date) and during the re-appraisal the double indexed records were aggregated.

Having refined the data in this way the outcome is 651 individual prehistoric or possibly prehistoric field systems, 240 of which were confidently interpreted as prehistoric or Romano-British and 411 of which are likely to be of this date but which might be later. These numbers give a somewhat misleading picture because many of the *bona fide* prehistoric field systems form extensive blocks (for instance the field system on Westend Down [ID 172532] covers more than 3km^2), whilst the undated fields are generally more fragmentary and frequently consist of only a few boundaries (this is one reason for their uncertain interpretation).

The mapping and recording of these field systems is an important result of NMP. Of the 240 prehistoric fields 146 (61%) are newly identified sites which were not previously recorded in the AHBR and 374 (91%) of the uncertainly dated fields are new sites. All the field systems are shown in Fig 25 which illustrates how the prehistoric fields cover a much larger area than the undated fields. Almost all the prehistoric field systems are Celtic type fields (and most of the undated fields are similar), although there is a small number of ditched field systems. Their distribution is centred overwhelmingly in the chalklands, predominantly in the Open Downs and Downland Mosaic Large Scale landscapes. There are fewer in Downland Mosaic Small Scale and very few in the Wooded Downland Plateau or Greensand landscape types. This is particularly true for the *bona fide* prehistoric fields – the undated fields extend the distribution pattern somewhat into the Downland Mosaic Small Scale and Wooded Downland Plateau.

10.1 Survival and form of Celtic fields

Some earthwork remains of Celtic fields were transcribed from RAF vertical photography from the late 1940s, but even by that date the vast majority of the fields were plough-levelled and only visible as cropmarks or, more often, as soilmarks. In fact most were already levelled by the early part of the twentieth century (Crawford 1923, 348). Of the 240 prehistoric field systems identified during the project only nine (4%) had earthwork remains and 93% of the uncertain date fields were transcribed as cropmarks. The only

sizeable tracts of earthwork fields are those at Twyford Down (Fig 26), Kilmiston Down, Butser Hill and War Hill, Froxfield.

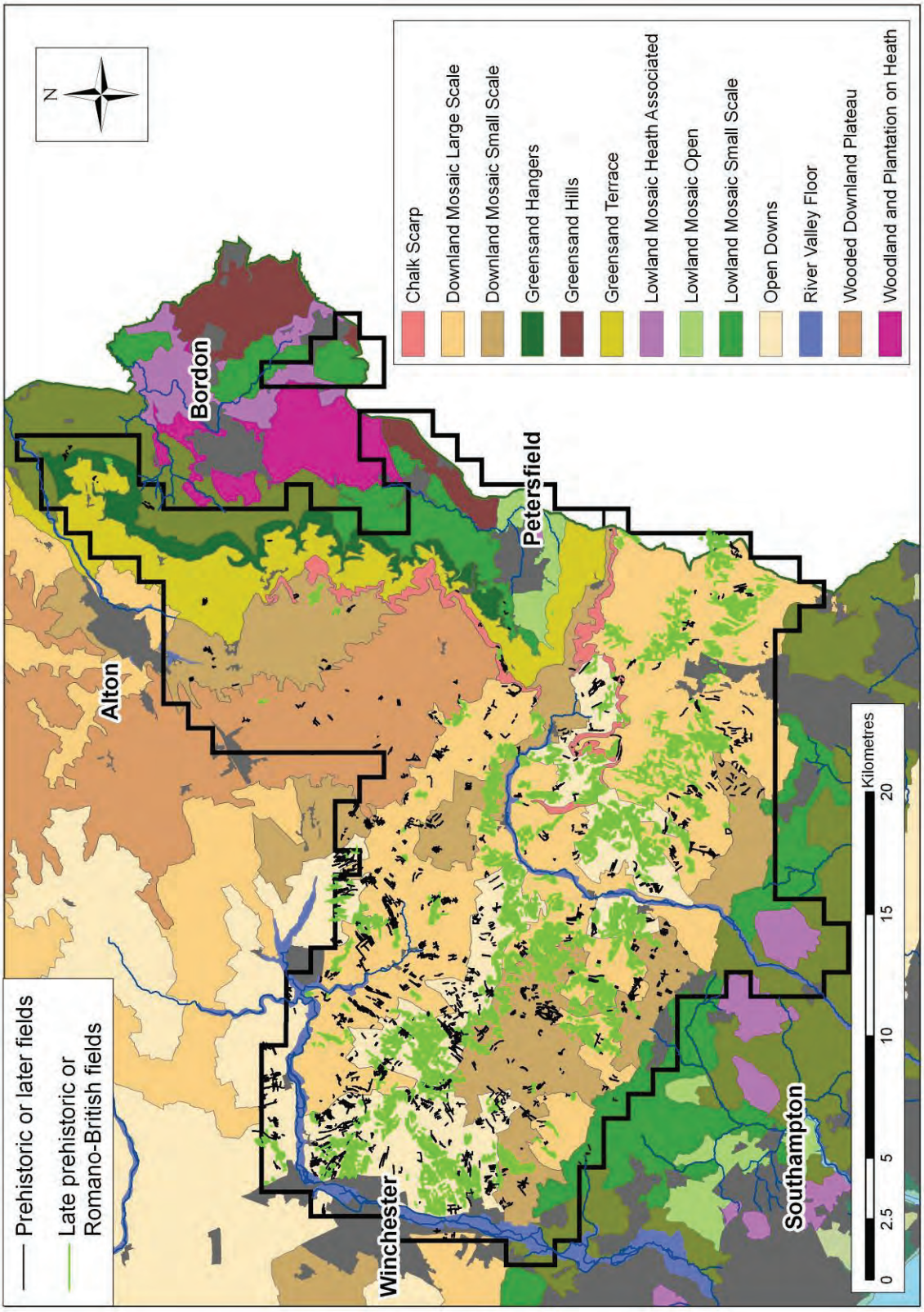

Fig 25. NMP mapping of Celtic fields in the Hampshire South Downs.
Source: Hampshire Integrated Character Assessment (HCC 2010).

Fig 26. The remains of Celtic fields on Twyford Down.
A rare example of earthwork survival of Celtic fields in the Hampshire South Downs (lower right). Plough-levelled fields (upper left) are visible as soilmarks. Photo: RAF CPE/UK/1750/4051. 21st September 1946. © English Heritage. NMR (RAF Photography).

Celtic fields were originally described as 'varying in size from 0.1ha to 0.5ha and in shape ranging from approximately square to a rectangle about six times as long as broad' (Bowen 1961). Those in the Hampshire South Downs fit broadly into this generalised morphology but tend towards the higher end of the size range. The extensive blocks of plough-levelled fields on Westend Down (Fig 27) and on the southern slopes of Old Winchester Hill (ID 172532), for example, contain a number of fields between 0.5 and 1ha and include a few in excess of 1ha. The field systems at both Twyford Down (AHBR 35650) and Kilmiston Down (AHBR 18163), which were the best surviving earthwork fields in the 1940s, tend to fit Bowen's morphology more closely. Generally the field systems do not conform totally to Bowen's definition of shape range, and similarly differ slightly from those around Danebury mapped by Palmer, in that they are often less rectangular and contain a number of irregular shaped fields. Typical examples (e.g. Figs 27 and 29) are those on Wheely Down (ID 171655), Beacon Hill, Warnford (AHBR 38541) and Westend Down (ID 172532).

Celtic fields are defined by well developed lynchets and intensive ploughing has resulted in the lynchet material becoming widely spread (in many cases up to 10m or more); the width of many of the lynchets suggests a long period of ancient cultivation. The plough spreading has obscured details of the field systems so that features such as gaps in the boundaries providing access to the fields are simply not detectable. Nor is it possible to accurately gauge the likely original width of the boundaries. For the same reason it is difficult to know the original form of the field boundaries prior to the build up of lynchet material. Typically the site of the boundaries is marked by parallel linear cropmarks containing dark topsoil material and pale chalk subsoil (Figs 26 and 27), although single

linear cropmarks made up of either topsoil or subsoil are by no means uncommon. It is probable, however, that many of the field systems were originally defined by banks, possibly flanked by a ditch or by a ditch on either side. Certainly the extant field systems at Kilmiston Down and Twyford Down (Fig 26) appear to be bounded by banks.

Fig 27. Plough-levelled Celtic fields visible as soilmarks on Westend Down.
Circular mounds within some of the fields may be Bronze Age barrows or, possibly, hut platforms contemporary with the fields. Some of these fields are relatively large, enclosing more than 1ha. The conspicuous curvilinear boundary in the centre of the photograph is likely to be a later alteration. Photo: NMR MAL/8203/237. 23rd March 1982. © English Heritage. NMR.

The South Downs fields are similar to those surveyed and mapped elsewhere in southern England which are classified into two types, aggregate and cohesive (Bradley and Richards 1978). Cohesive systems are laid out in coaxial blocks whose straight axes bear no relationship to topography, whilst aggregate systems are irregularly developed by accretion. There are examples of both types in the Hampshire South Downs. The fields on Gander Down (AHBR 37845, 38597 and ID 171162, 171173) are dissected by trackways and linear ditches and appear to have undergone phases of alteration, with some fields becoming sub-divided, but the overall layout forms an extensive cohesive system with the main axis aligned southwest–northeast (Fig 28).

The field systems on Wheely Down and Beacon Hill are more irregular (Fig 29). The Wheely Down fields (ID 171655) in the northwest contain aggregated elements and may have undergone alterations with some of the fields sub-divided (A). To the immediate east the nature of the system changes (B) and is characterised by long narrow fields roughly 30m wide (possibly reflecting Roman or even medieval alteration). To the south on Beacon Hill (C) the field system (AHBR 38541) is set out coaxially on a roughly northwest–southeast axis but also includes accreted elements in the north. Further to the east is a cohesive field system at Warnford (ID 173895) arranged on a north–south axis (D).

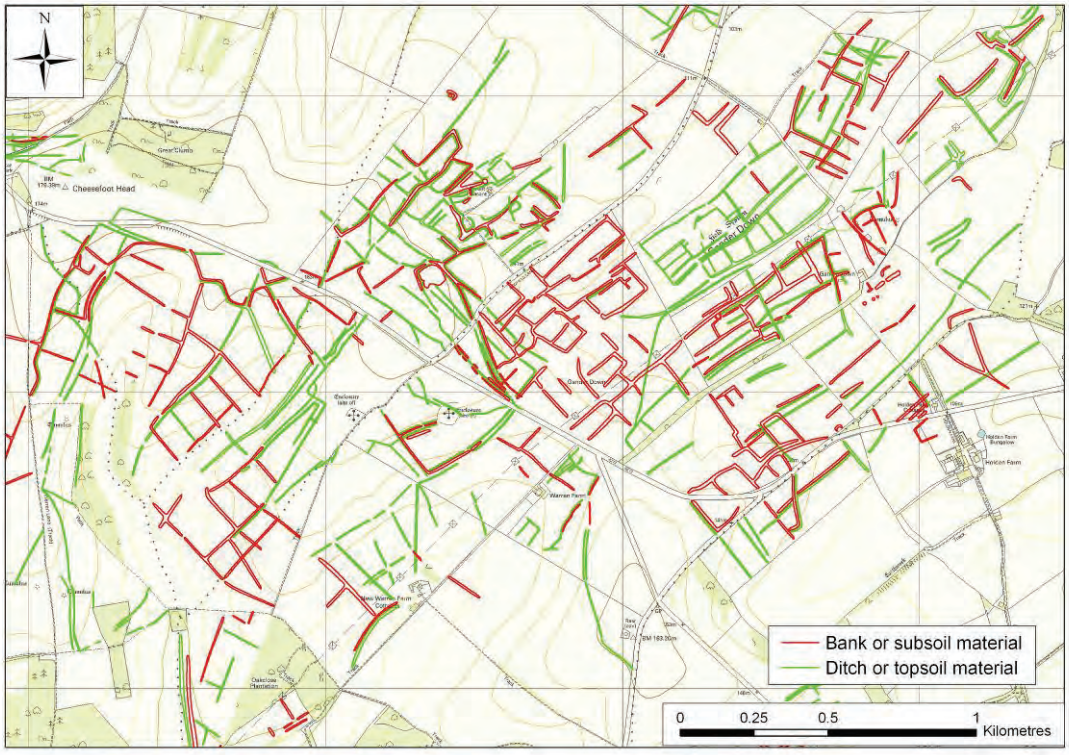

Fig 28. Cohesive field systems on Gander Down.

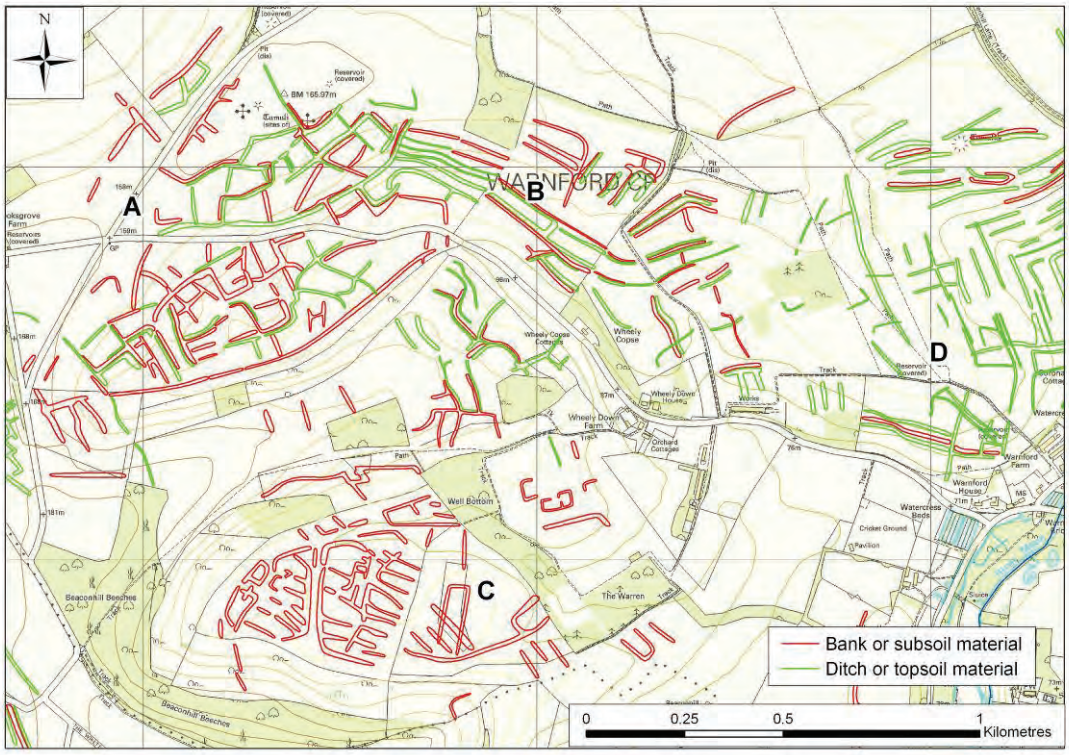

Fig 29. Mixed field systems on Beacon Hill and Wheely Down.

On the whole it is difficult to precisely define the extent of individual blocks of fields. In some cases the systems are not completely visible as in the vicinity of Hambledon (Fig 30). Here NMP has mapped fragments of what originally were probably several field systems. The fields at A (AHBR 38495) are aligned coaxially northwest–southeast and their eastern limit appears to be defined by a long boundary. At B fragments of a cohesive system with a strong southwest–northeast alignment (AHBR 26420) can be regarded as a separate system bounded in the east by a strong linear (AHBR 56723). The fields at C (AHBR 37510) and D (AHBR 26417) may be part of one system or might be two separate systems. The extent and relationships of the field boundaries (AHBR 37511) situated between B, C and D are uncertain. The fields at E (AHBR 37507) appear to form a small system bounded by strong linears in both the north and south, but their relationship to the field system at D is uncertain.

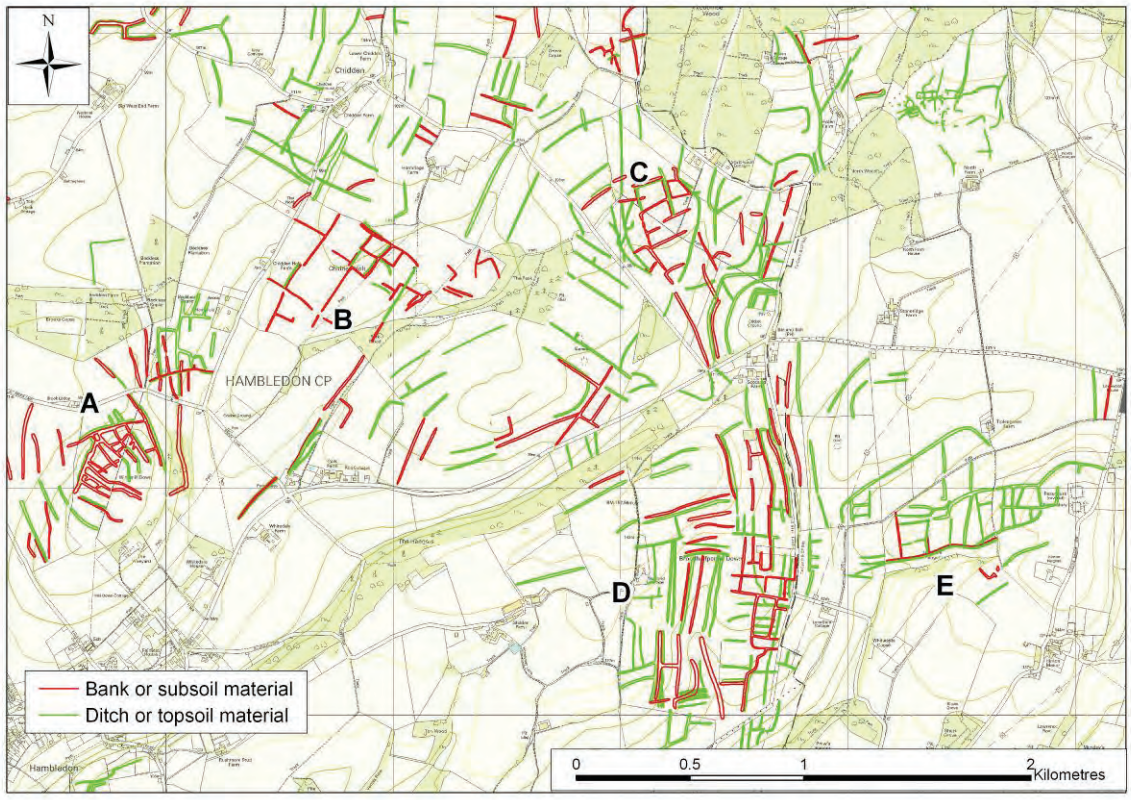

Fig 30. Celtic field systems around Hambledon.

In other cases the fields form very extensive systems which seem to be virtually continuous. At Westend Down (Fig 31) there are two major field systems. That in the south has a strong coaxial element aligned northwest–southeast and its northern limit is defined by a long and continuous lynchet (A). The field system to the north is more irregular and accreted in form (although it does have cohesive elements in the northwest), and this too appears to be bounded by a strong linear at B, which follows the line of a dry valley. However, between these two seemingly well defined field systems are a number of boundaries at C which suggest that further boundaries linking the two systems may be present but are masked by deposits of colluvium in the dry valley. Further boundaries at D underline the possibility that this is a continuous field system which is only partially visible on aerial photographs.

At a few locations the field systems utilise dry valleys as their defining boundaries, although this is by no means the norm. One of the best examples is at Cockscomb Hill, Owslebury (Fig 32) where the fields are clearly delineated in the east by a dry valley. To

the immediate west of the mapped fields is an extensive deposit of clay-with-flints and it is unclear whether this marks their western extent or whether the fields continue westwards but are not visible as cropmarks in the clay soils.

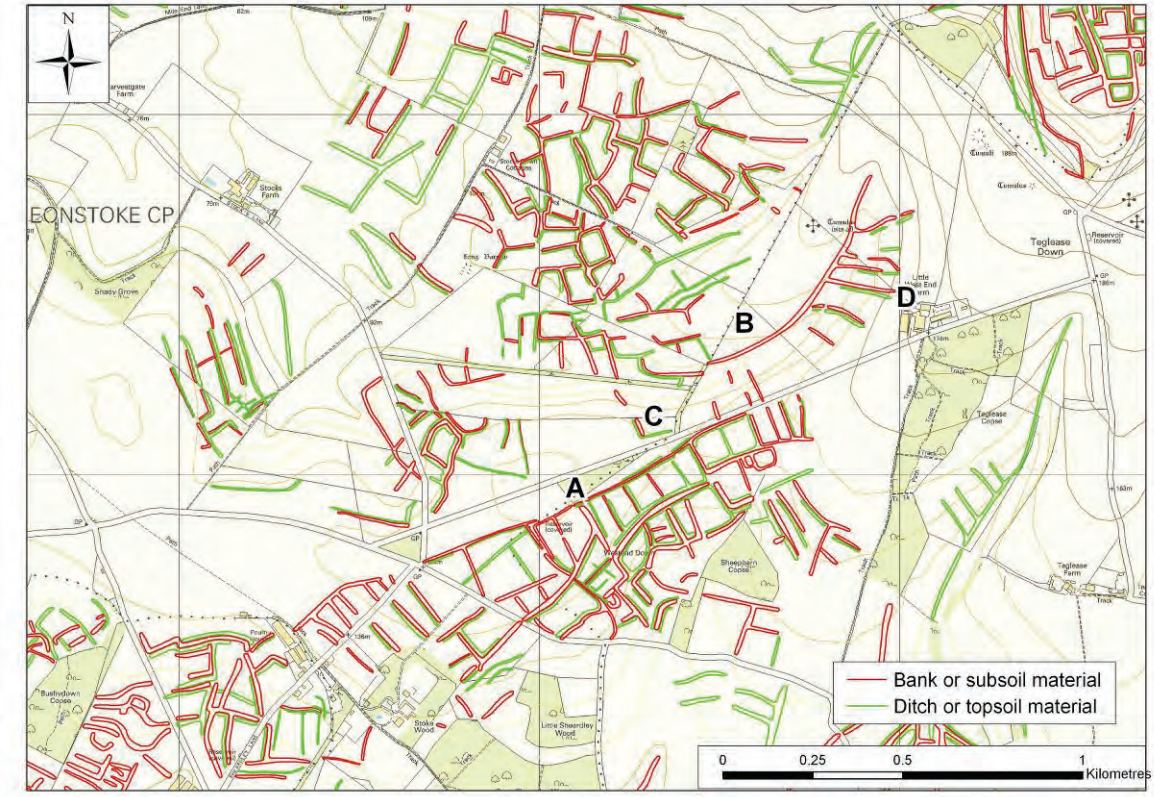

Fig 31. Celtic field systems on Westend Down, Meonstoke.

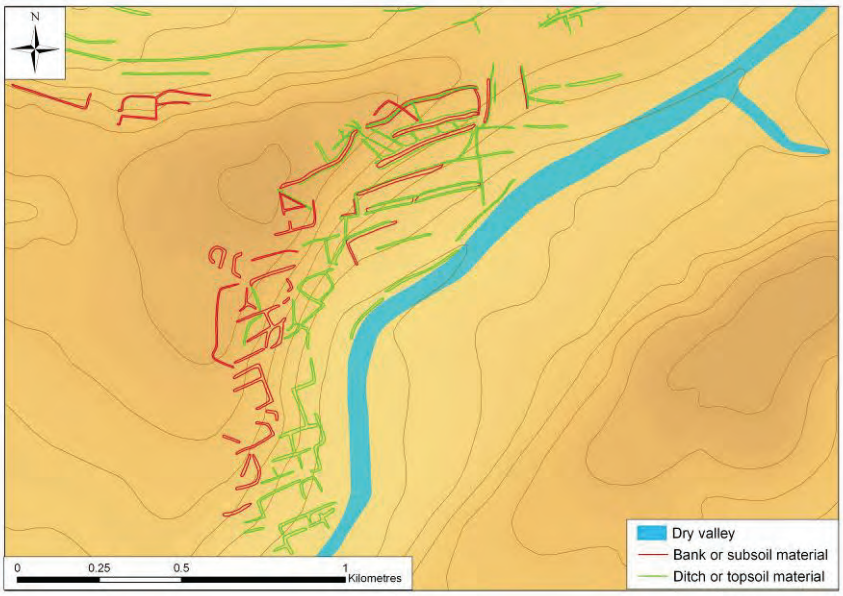

Fig 32. Celtic field systems and dry valley at Cockscomb Hill, Owslebury.

10.2 Distribution of Celtic fields

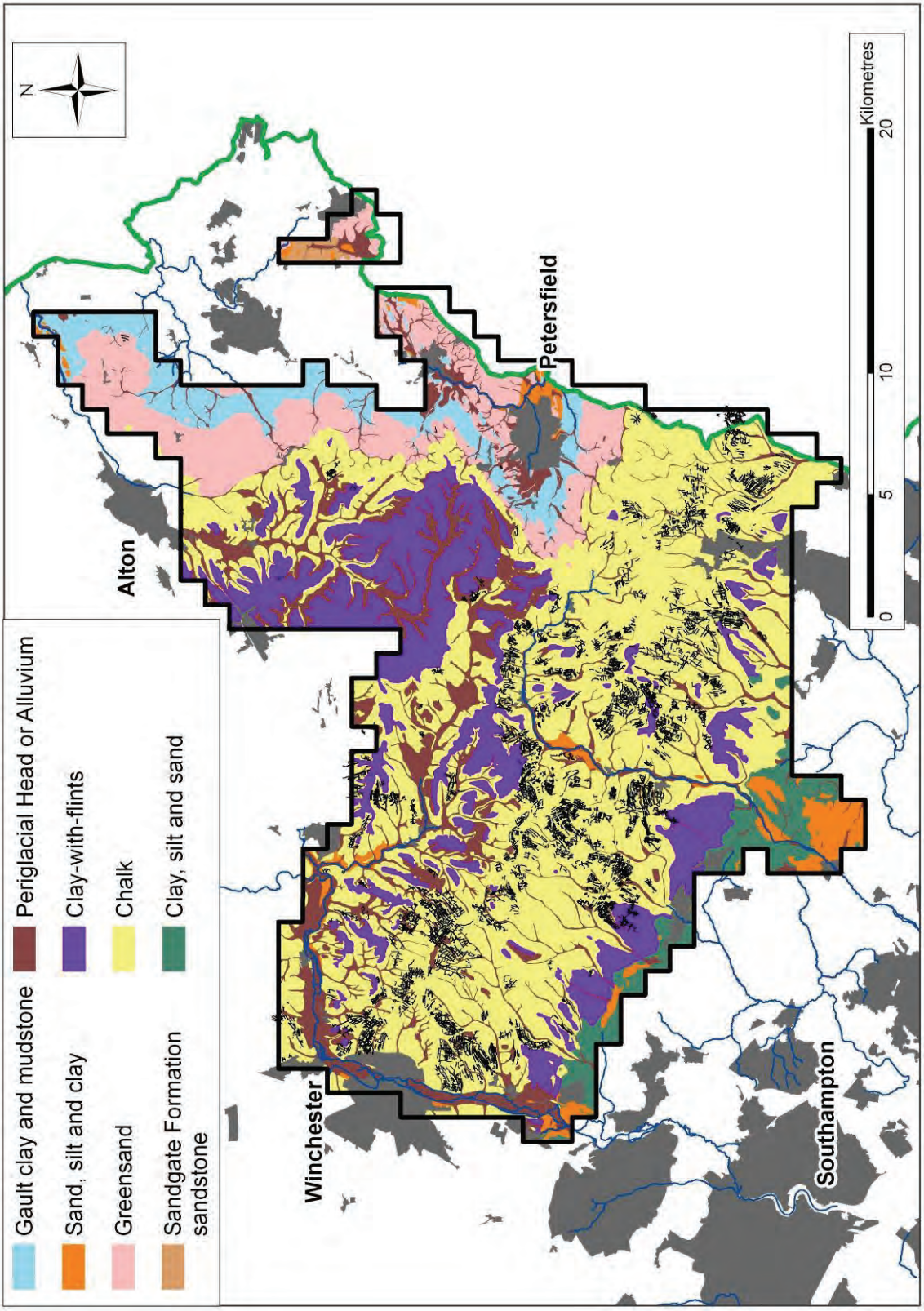

Fig 33. Celtic field systems and geology in the Hampshire South Downs.
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As outlined earlier the fields are found predominantly in the chalklands. Within this generalised distribution pattern there are, however, a number of gaps, some of which can be explained with reference to geology and recent land use. Compared with chalk, most other geological deposits in the South Downs are unresponsive to aerial photography (in that they are less conducive than chalk to the formation of cropmarks). This is clearly illustrated in Fig 33.

Within the chalklands, areas capped by clay-with-flints are also largely devoid of Celtic fields. It is uncertain whether this is due to the clay not being conducive to cropmark formation or whether the less fertile clay lands were not used for arable cultivation. Probably it is a combination of both factors and in many places the lack of fields in areas of clay-with-flint in contrast to adjacent chalk areas is striking (Fig 34).

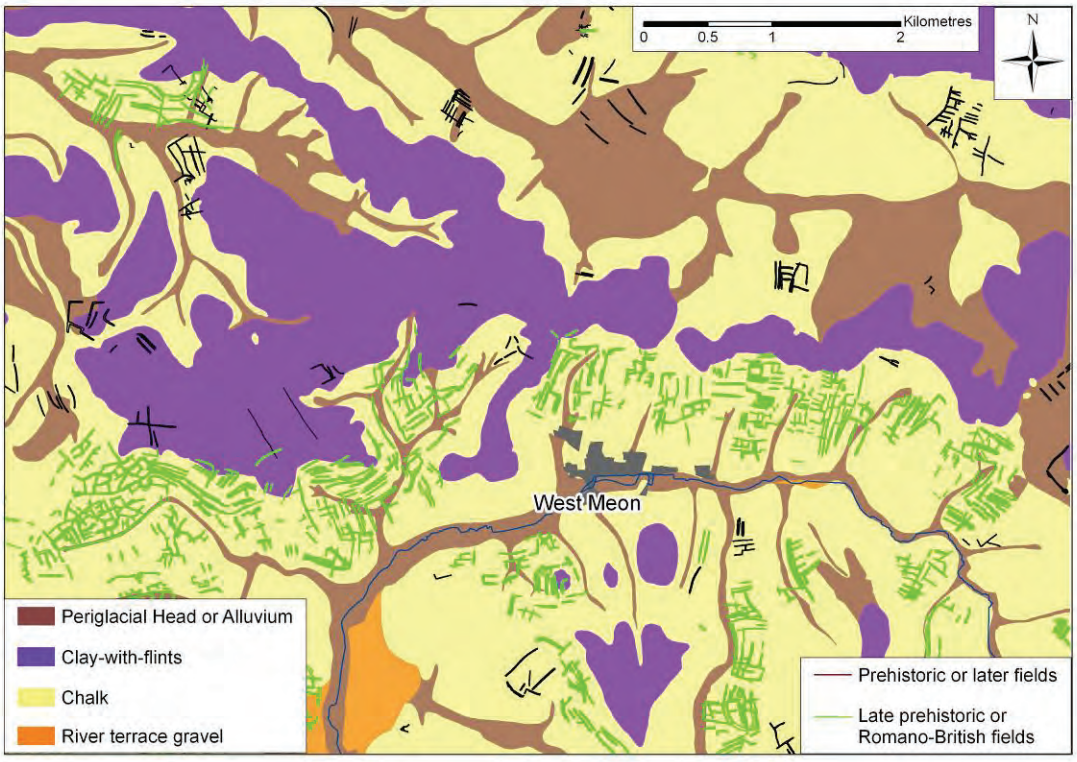

Fig 34. Celtic field systems and clay-with-flint deposits around West Meon.

It is also true that the areas of present day arable cultivation are determined by the presence of well-drained chalk soils. The clays, sands and silts support a more mixed pastoral and arable regime with consequent fewer opportunities for cropmark production. Another important 'negative' zone, unresponsive to aerial photography is woodland. Figure 35 shows how extensive in places the masking effect of woodland cover can be – in this instance it is almost certain that the field systems to the north of Clanfield and in the Upper Meon valley continue into neighbouring woodland, where they cannot be detected by aerial photography.

Another consideration is historic land use and landscape development. Roughly 40% of the fieldscape in the Hampshire South Downs project area was only enclosed in recent times (in the late eighteenth and nineteenth centuries). Prior to this it would have been open downland or relict open fields (Fairclough, Lambrick and Hopkins 2003). Fields derived from this recent enclosure are classed in the Hampshire HLC as Parliamentary type fields of various sorts and, whilst they have undergone intensive ploughing over the last 100–150 years, prior to their enclosure any below ground prehistoric remains are

likely to have remained relatively unscathed (the lack of evidence for widespread ridge and furrow suggests that medieval cultivation methods on the downs may not have been particularly intrusive). Other HLC types which are likely to be derived from open field systems or open downland, and which may have similarly intact subsurface archaeology, are ladder fields and irregular fields bounded by roads, tracks and paths (ex-downland fields). Conversely those areas where the field types (especially irregular assarts and small wavy fields) are indicative of late medieval or early post medieval enclosure, are likely to have undergone more complex enclosure processes and this may have affected the survival, or at least the visibility, of below ground prehistoric features.

Whatever the reasons there seems to be a strong relationship between the distribution pattern of Celtic fields in the Hampshire South Downs and Historic Landscape Character. Based on the (albeit somewhat simplistic) distinction between recent and earlier enclosure discussed in section 6.4.4 and shown in Fig 6, analysis of Celtic field distribution indicates that 80% of the fields lie within those areas defined as recent enclosure, 18% in earlier enclosed areas and the remaining 2% within other HLC types, such as parkland and valley floor (Fig 36).

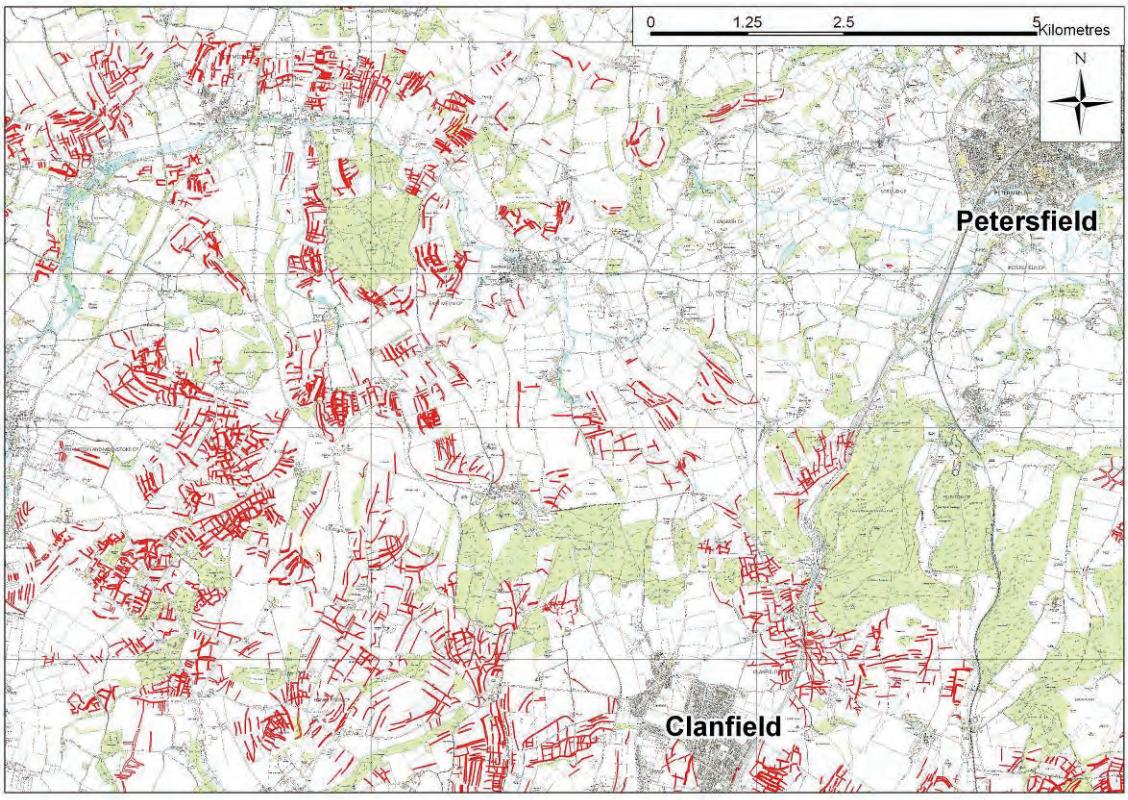

Fig 35. Celtic field systems and woodland to the east of the Meon Valley.

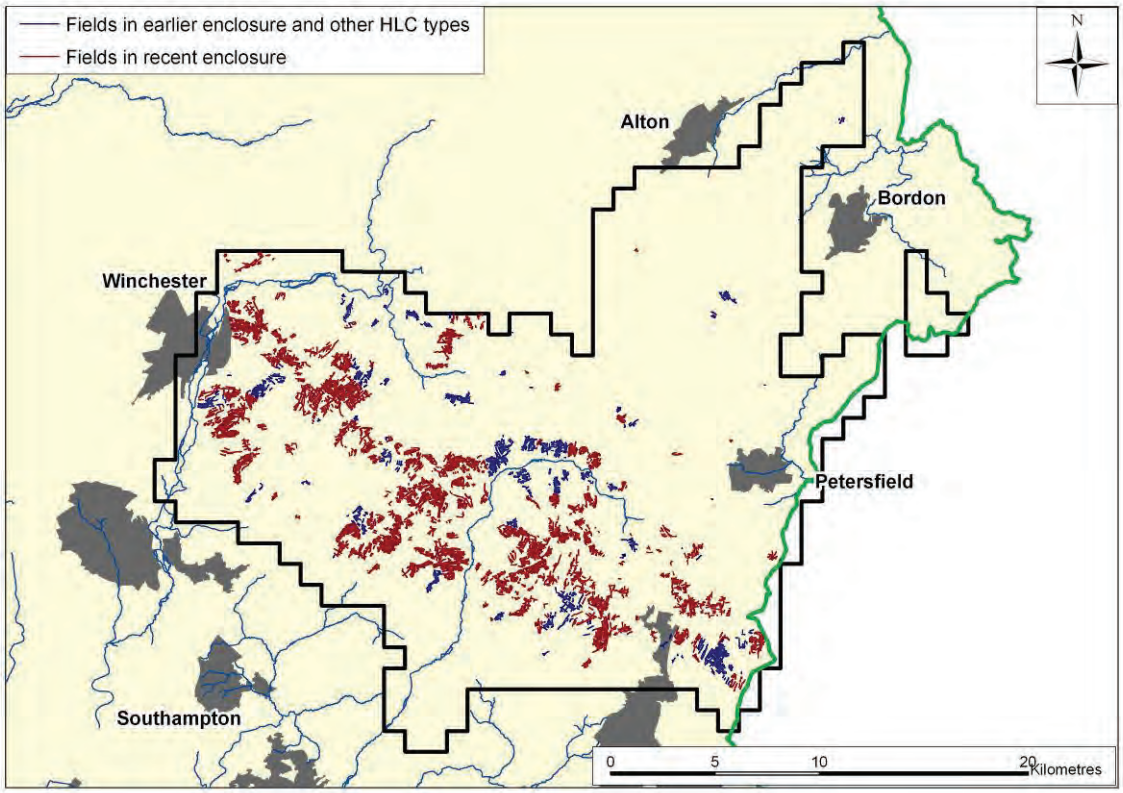

Fig 36. Distribution of Celtic fields in areas of recent and earlier enclosure.

11 Iron Age and Romano-British settlement

11.1 Bronze Age antecedents

Direct evidence for Bronze Age settlement in the Hampshire South Downs is sparse. The most extensive settlement is at Easton Lane, Winnall Down (AHBR 23767), where post-built round houses, other buildings, pits, ditches and burials from the Middle and Late Bronze Age preceded Iron Age and Roman phases (Fasham *et al* 1989). Late Bronze Age houses and other structures as well as earlier burials were found at Twyford Down (Walker and Farwell 2000). At Chalton two small circular buildings from the Middle Bronze Age were terraced into the hill slope (Cunliffe 1970). At Westbury, West Meon, settlement evidence of a similar date comprised a series of pits and a house platform (Lewis and Walker 1977). All these sites are on the chalk but at Grooms Farm, Kingsley, on Greensand just outside the project area (to the north of Bordon) possible round houses, gullies and a large number of pits dating to the Late Bronze Age and Early Iron Age have been found (Wessex Archaeology 2003).

All of these sites are open settlements, not defined by enclosure ditches. In the Hampshire South Downs there are no settlements comparable with the large rectangular ditched enclosure from the Late Bronze Age at New Buildings, nor are there any large hilltop enclosures such as Balksbury, or the large ditched enclosures, such as that which preceded the hillfort at Danebury during the Late Bronze Age (Cunliffe 1993, 141-143). The widely acknowledged difficulties of detecting unenclosed settlements which have been levelled (e.g. Palmer 1984, 54; Whimster 1989, 16) goes a long way to explaining why so few sites are known and it is certain that many settlements await discovery. In fact some of the newly identified unenclosed round houses recorded by NMP (section 11.2) may well be Bronze Age in date.

11.2 Unenclosed settlements

Appraisal of NMP data suggests that 28 sites, of which 20 were newly identified during the project, may be interpreted as unenclosed settlements or potential unenclosed settlements. They are found exclusively on the chalk and to a large extent their distribution replicates that of the Celtic fields (Fig. 37). There are, however, some differences: there is a strong western bias in their distribution and only two of the settlements are situated to the east of the Meon valley; three are located in the general area between Owslebury and Preshaw where the there is a significant gap in the Celtic field distribution; and there is a concentration of settlements at the head of the Itchen Valley where the pattern of fields is less dense than elsewhere.

Whilst some may date from the Bronze Age this is not certain; unenclosed settlements were in use throughout the Iron Age and probably into the Roman period (Palmer 1984, 54). The sites mapped during the project fall into two categories.

Small ring ditches lying outside enclosures or not associated with enclosures

Those in the first category are the most numerous, comprising 21 sites. They include the previously known round house settlements at Winnall Down and Twyford Down (the Chalton and West Meon settlements are not visible on aerial photographs). One other previously known site interpreted as a possible round house is a ring ditch at Scrubb Farm, Tichborne Down (AHBR 38416). This measures 16m in diameter and, although probably more likely to be a barrow (and was double-indexed as such in the database), is comparable with some of the larger round houses at Winnall Down (one of which is 14m in diameter).

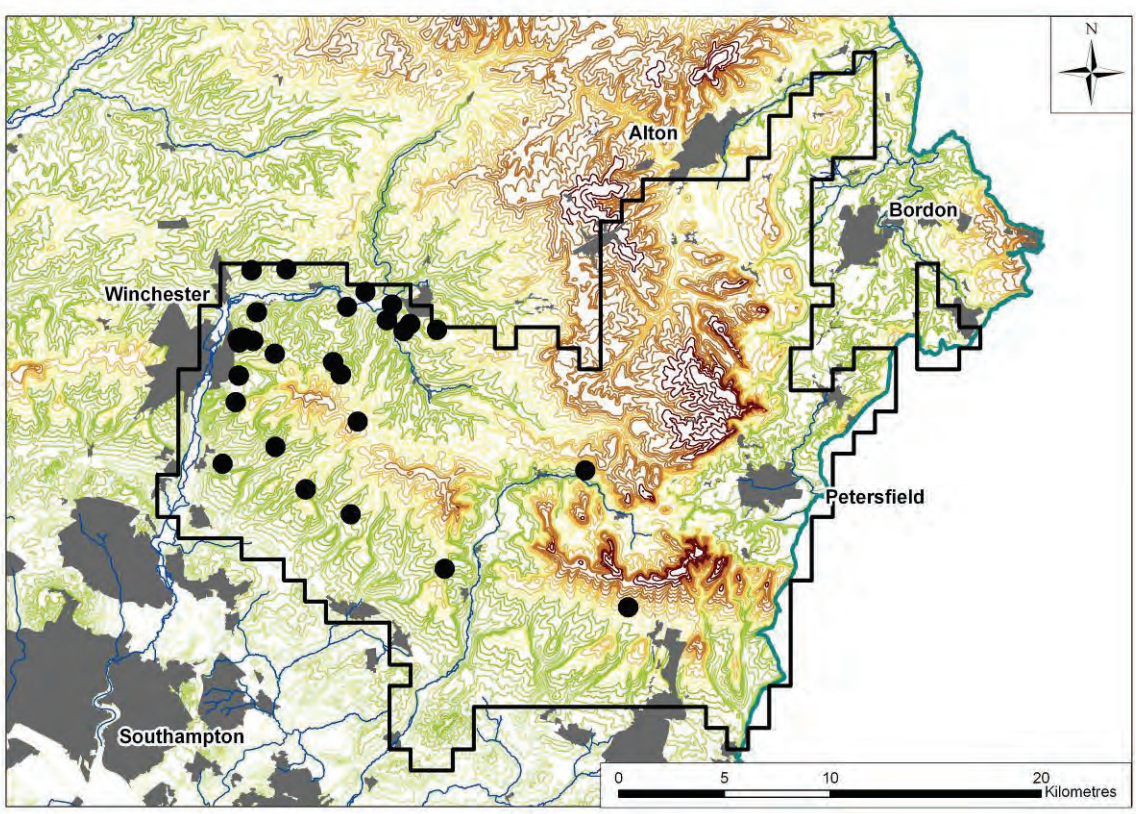

Fig 37. Distribution of unenclosed settlements and potential unenclosed settlements.

Of the newly identified sites, five are ring ditches double-indexed as barrows. One of these (ID 173081) is 15m in diameter and lies in a field adjacent to the excavated Middle Bronze Age settlement at West Meon mentioned above, raising the possibility that it extends the previously known area of the site.

Small ring ditches set within Celtic fields or associated with linear features can be most securely interpreted as round houses. Examples set within Celtic fields were recorded from Droxford Down (ID 172144); Matterly Farm, Tichborne (ID 171364); Ovington Down Farm, Tichborne (ID 171140) and Tichborne Down (ID 170383). This latter site is one of several around the head of the Itchen valley (Fig 37). The others include ring ditches associated with ditched field systems at Lovington (ID 170362) and Borough Farm, New Alresford (ID 170350), and ring ditches associated with ditched linear features at Lovington (ID 170321) and Itchen Stoke (170331).

Ring ditches and other features associated with enclosure complexes

Three of the potential unenclosed settlements comprise round houses or pits associated with enclosure complexes but which might represent a pre-enclosure settlement phase. A model for this is provided by the complexity of phasing at Easton Lane where in the Middle and Late Bronze Age the settlement consisted of unenclosed groups of round houses. In the Early Iron Age the settlement was bounded by a large ditched enclosure. In the earlier part of the Middle Iron Age the main occupation shifted a little way to the northwest and was unenclosed. At a slightly later date the main focus of the settlement had moved back to the site of the enclosure but was now an open settlement, the enclosure ditch having silted up some time earlier (Fasham *et al* 1989). It is very likely that such complex patterns of use and re-use of extensive sites such as these over time are the norm rather than the exception.

The most convincing of these settlements comprises two round houses forming part of a previously recorded enclosure complex at Warren Farm, Morestead (AHBR 37835). Here one of the houses lies outside the enclosed area and it is possible that the round houses

predate the development of the settlement as an enclosure complex (Fig. 38). The other sites are north of the Itchen at Graces Farm (AHBR 18066) and Bridgets Farm (AHBR 36896) just to the west of The Worthies. Both settlements are extensive enclosure complexes and as at Warren Farm, it is possible that round houses at the sites predate the enclosed phases.

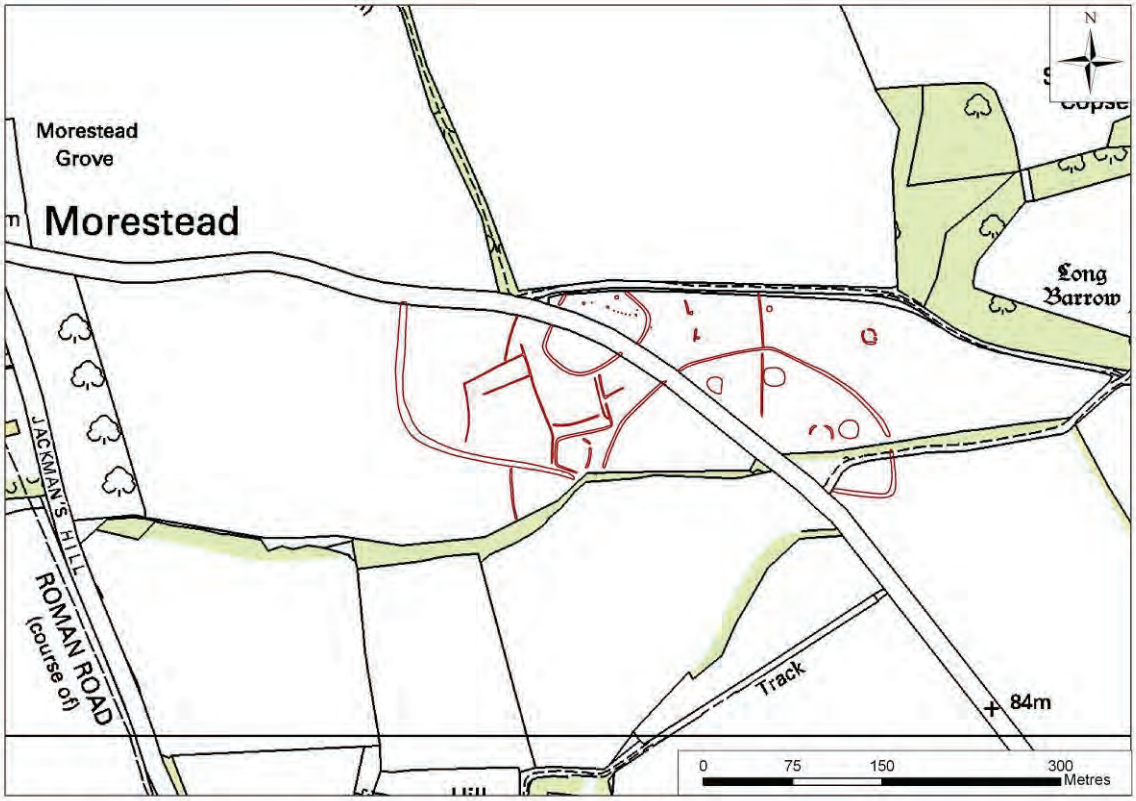

Fig 38. Enclosure complex at Warren Farm, Morestead, with a cropmark round house situated to the northeast of the enclosed area.
The Winchester to Wickham Roman road runs a short distance to the west of the site. The Warren Farm long barrow (see section 9.1) lies immediately to the west.

Four potential unenclosed settlements are characterised by pits and/or linear features lying outside enclosure complexes: at North Farm, Clanfield (AHBR 37504), Riplington (ID 173099), Easton (AHBR 36368) and No Man's Land at the foot of Winnall Down (AHBR 36886). The site at Riplington consists of a double ditched trackway, linear features suggesting rectilinear enclosures and several pits, all quite similar in appearance to the Grooms Farm settlement.

Although they are not included in this list of unenclosed settlements, it is possible that the mounds set within Celtic fields at Westend Down (Fig 27) may be round houses rather than barrows, as suggested in section 12.1. The mounds may represent structures, like those at Chalton, terraced into the hill slope and appearing on aerial photographs as circular areas of disturbed bedrock. Middle Bronze Age houses terraced into bedrock and set within fields are found elsewhere on the southern England chalk (Woodward 1991, 41 - 47) and might be expected from the Hampshire South Downs.

11.3 Enclosed settlements

The relatively substantial ditches of prehistoric and Romano-British enclosures produce clear cropmarks in favourable conditions and are readily detectable on aerial photographs.

Unsurprisingly, the most prevalent settlement types from this period mapped and recorded by NMP were enclosures of one form or another. The enclosures are considered below in four categories; hillforts, simple discrete enclosures, banjo enclosures and enclosure complexes.

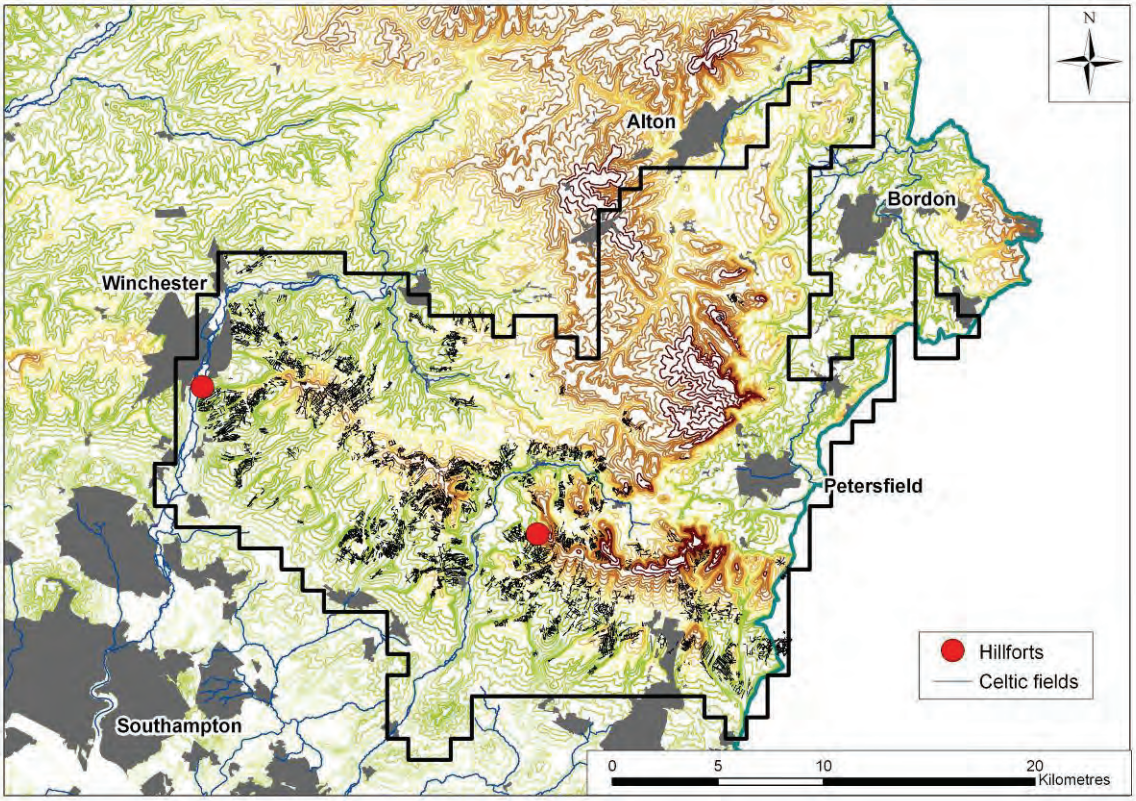

Fig 39. Map showing the relationship between the two hillforts and Celtic fields.

11.3.1Hillforts

There are two hillforts in the project area, both in the Open Downs landscape; St Catherine's Hill, Winchester (AHBR 26913) and Old Winchester Hill, Exton (AHBR 24565). The hillforts are similar in a number of ways: both are univallate, both are contour type hillforts in prominent locations, both overlook river valleys, both are set on the edge of extensive Celtic field systems but border areas where there are no fields (Fig 39), and both became developed hillforts, in which the intensity of activity increased after c 300BC (Cunliffe 1996, 29). Excavations at St Catherine's Hill showed that the settlement began around 550–450 BC and the fortifications were added between 250–200 BC (Hawkes *et al* 1930). The simple design of the Old Winchester Hill defences suggest an Early Iron Age date, and evidence of intensive occupation is provided by many depressions and pits within the interior which are thought to be round house platforms (NMR UID 239439).

Developed hillforts are generally seen as focal points or important centres for a range of activities (e.g. Cunliffe1996, 29) and the two hillforts dominate remarkably similar blocks of landscape – the area between the Itchen and Meon rivers and the area to the east of the Meon – both in terms of approximate size and range of available resources. Superficially, then, it could be suggested that the hillforts are the centres of two comparable economic 'territories'. However the two areas differ in that the identified density of Iron Age settlement is far greater between the Itchen and Meon valleys than to the east of the Meon (Fig 40) so the suggestion is probably over-simplistic.

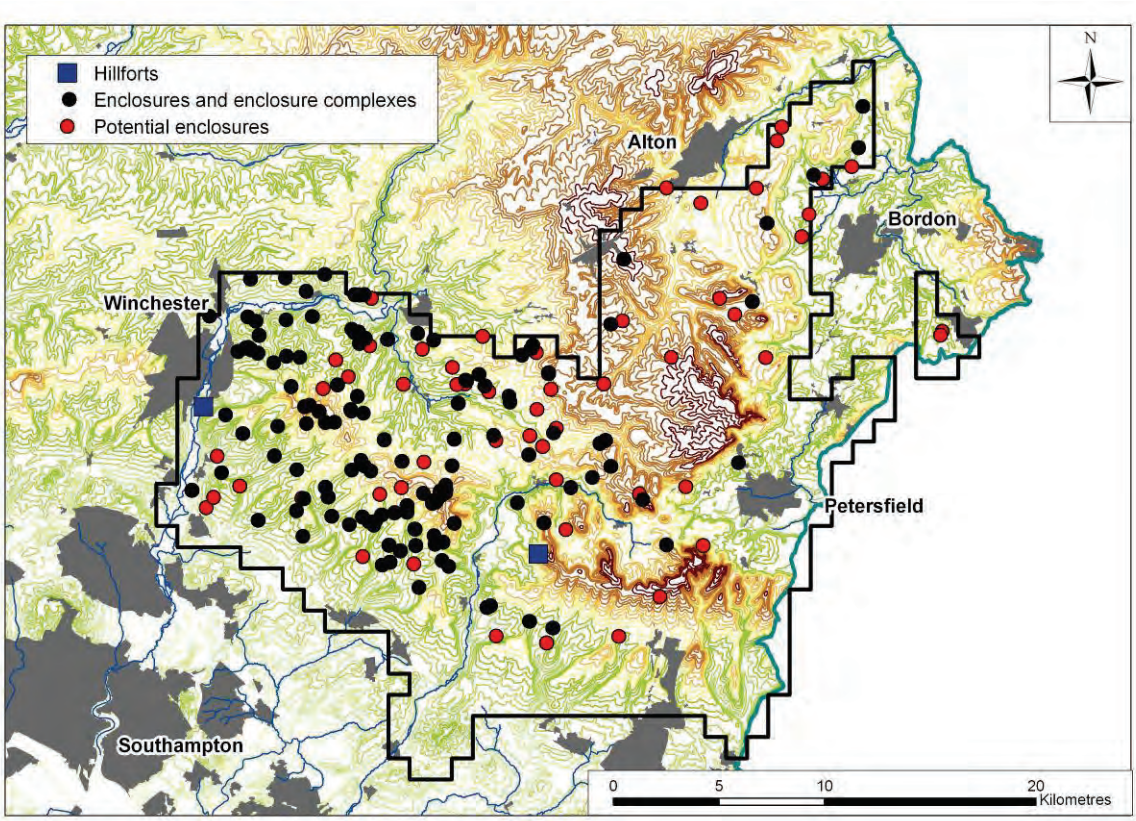

Fig 40. Distribution of enclosures and hillforts in the Hampshire South Downs.

11.3.2 Simple discrete enclosures

Simple, discrete enclosures are by far the commonest type of settlement from this period, with 108 mapped and recorded[1]. Most of the enclosures were recorded in the database as prehistoric or Roman (i.e. with a start date of 2,200 BC) but most (or all) are likely to be Iron Age or Roman in date.

Eighty seven of the enclosures (80%) were newly identified as a result of NMP; the remaining 21 were previously recorded in the AHBR. An additional 58 potential enclosures were identified. Doubts over the provenance of these enclosures arose either because the cropmarks were too faint or indistinct to allow a more confident interpretation or because it was difficult to determine whether the cropmarks resulted from recent agricultural rather than archaeological activity.

Only three of the enclosures and two of the potential enclosures have extant above ground remains surviving; 98% were recorded as cropmarks. The great majority (80%) are defined by a ditch; 13 are enclosed by a ditch and bank and nine by a bank only. Three of the enclosures are double-ditched and three are possibly double-ditched, but the large majority (94%) are univallate.

The distribution of the enclosures is largely centred on the chalk (Fig. 40), predominantly within the Open Downs and Downland Mosaic large scale (less so on the Downland Mosaic small scale). Only four enclosures were recorded from the Greensand landscape and only two in the Wooded Downland Plateau.

[1] This figure excludes enclosures recorded twice because of double-indexing.

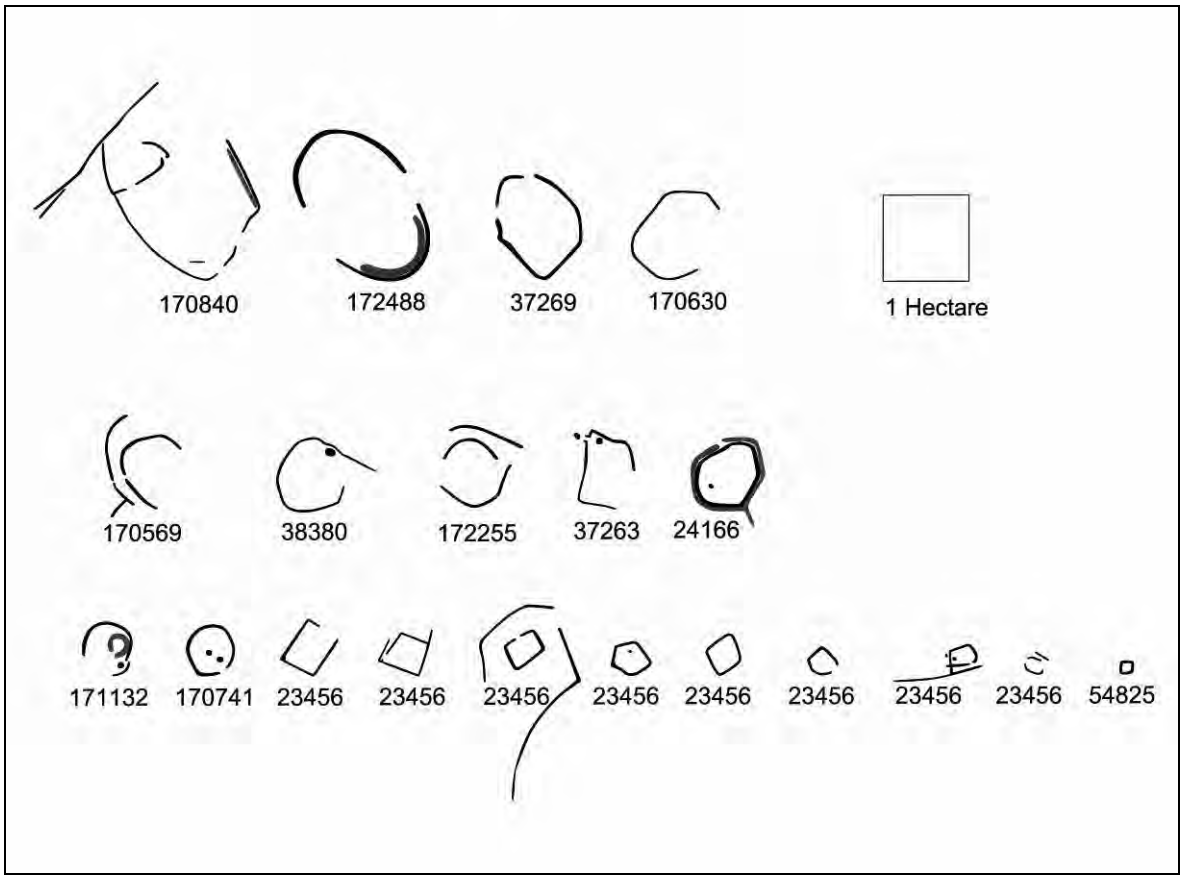

Fig 41. Sample of the simple discrete enclosures mapped in the Hampshire South Downs.

As elsewhere in southern England there is a wide range of enclosure forms and a representative sample is shown in Fig. 41. One widely occurring form of enclosure from the Early and Middle Iron Age in southern England is the Little Woodbury type; these are ditched enclosures covering up to 1ha and usually containing one or more round houses, storage pits, granaries, drying racks and 'working hollows' (Cunliffe 1993, 180-181). Within the project area there is an excavated Little Woodbury type enclosure at Winnall Down (Fasham 1985) which was mapped during the project (AHBR 53403). The Winnall Down settlement enclosed an area of just over 0.5ha and whilst several other enclosures identified during the project may be of the Little Woodbury type the majority are considerably smaller than is usual for this settlement type.

In fact one marked characteristic of the South Downs enclosures is their small size and in this regard it is of interest to compare the enclosures with those recorded from elsewhere on the Hampshire chalklands. The area mapped during the Danebury Environs Survey, for instance, was 450km^2, which is approximately the same as the area of chalk in the Hampshire South Downs. The two survey areas are only 25km apart and were surveyed to a similar level of detail.

During the Danebury survey Rog Palmer classified all the enclosures he transcribed according to their size (i.e. area enclosed). If hillforts and banjo enclosures are removed from Palmer's list of simple enclosures (Palmer 1984, 37-41) this leaves 113 enclosures - a reasonably close match to the 108 from the South Downs. Palmer used seven categories of size to classify the enclosures and these same categories are used here to classify the South Downs enclosures. A comparison of the enclosure size from the two areas is set out in table 12 below.

Size category	Danebury enclosures	South Downs enclosures
3ha+	2 (1%)	0
2-3ha	8 (7%)	1 (1%)
1.4-1.9ha	14 (12.5%)	3 (3%)
0.7-1.4ha	21 (19%)	6 (5%)
0.4-0.7ha	16 (14%)	13 (12%)
0.25-0.4ha	14 (12.5%)	17 (16%)
Less than 0.25ha	38 (34%)	68 (63%)
Total	**113**	**108**

Table 12. Comparison by size of the South Downs and Danebury simple enclosures.

A striking difference is that there are far fewer large enclosures and far more small enclosures in the South Downs than in the Danebury area. Whereas 40% of the Danebury enclosures cover more than 0.7ha, fewer than 10% of the South Downs enclosures are this size and in the South Downs the predominant type are those enclosing less than 0.25ha. The size range where there is the closest correspondence is those between 0.25 – 0.7ha, with 30 enclosures in each survey area.

There are also differences in the predominant form of the enclosures. The criteria used by Palmer to define form are 'constructed of curved ditches', 'constructed of straight ditches' and 'constructed of curved and straight ditches'. A comparison between the two sets of enclosures is contained in table 13 below.

Form	Danebury enclosures	South Downs enclosures
Straight ditches	34 (30%)	57 (52%)
Straight and curved ditches	49 (43%)	25 (23%)
Curved ditches	30 (27%)	27 (25%)
Total	**113**	**108**

Table 13. Comparison by form of the South Downs and Danebury simple enclosures.

Although categorising the form of enclosures in this way is a somewhat subjective process the differences between the two sets of enclosures are sufficiently wide to be meaningful even allowing for the subjective element of the analysis. Whilst the percentages of curvilinear enclosures are similar in both areas, there is plainly a far higher proportion of rectilinear enclosures in the South Downs and comparably fewer 'mixed' enclosures than in the Danebury Survey area. It is interesting that Palmer notes (*ibid*, 27) that at Danebury 'the straight ditched enclosures are generally of smaller size range than the other two forms and that this is a trend discernible over a wider area of Wessex'. In the South Downs two thirds of the straight ditched enclosures cover less than 0.25ha. This is particularly true of rectangular and square enclosures: there are 46 of these of which 70% enclose less than 0.25ha.

Within the Hampshire South Downs a gap in the settlement pattern appears to be the large enclosures (0.7–2ha) which are generally portrayed as characteristic of the Hampshire chalklands – sites such as Meon Hill, Little Somborne or Old Down Farm. The South Downs landscape is characterised by some Little Woodbury type enclosures (perhaps some of those enclosing 0.4-1ha) and large numbers of small enclosures, frequently straight sided in form, interspersed with occasional large enclosures.

The fact that there are seven hillforts within the Danebury area and only two in the South Downs does suggest that there might be economic or cultural differences between the two areas. Even so it is interesting that whilst some generalisations can be made regarding Iron Age and Roman settlement patterns in the Hampshire chalklands, there are significant local variations. It is possible that the major rivers acted as territorial or cultural boundaries, explaining why there might be differences between Danebury – to the west of the Test - and the South Downs – to the east of the Itchen. And within the South Downs project area itself the density of enclosed settlement is markedly greater to the west of the Meon Valley than to the east.

11.3.3 Banjo enclosures

Banjo enclosures are essentially a type of simple enclosure, albeit of highly distinctive form. The classic banjo enclosure is roughly circular, covering about a quarter of a hectare, is defined by a single ditch, and is approached via a narrow double-ditched trackway whose ditches open out, antennae-like, at right angles to the trackway. The elaborate entrance arrangement, coupled with the fact that banjo enclosures are often associated with complex systems of trackways and linear ditches, has always suggested a function associated with stock control (e.g. Cunliffe 1975, 175). However, excavated examples at Owslebury (Collis 1968), Bramdean (Perry 1974), Micheldever Wood (Fasham 1987) and Nettlebank Copse (Cunliffe and Poole 2000) produced evidence of domestic occupation sometimes over a considerable time span. These excavations suggest that banjo enclosures appeared towards the end of the Middle Iron Age and continued through the Late Iron Age and in some cases occupation continued into the Roman period (e.g. Owslebury, Grateley South).

Nine banjo enclosures and two banjo type enclosures were identified during the South Downs NMP, as well as an additional two possible banjos. This number includes two conjoined banjos at Bridgets Farm, Itchen Abbas, listed in the AHBR under a single record (AHBR 36896) but counted here as two sites (Fig 47, no. 36896). The enclosures are all located on the chalk: seven are in the Open Downs landscape and three in each of the Downland Mosaic landscape types. All the enclosures are in the western part of the downs, with none to the east of the Meon (Fig 42). Within this broad distribution pattern there appears to be a central cluster of enclosures in the area between Gander Down in the west and Corhampton Down in the east. The enclosure at Bramdean (the easternmost in Fig 42) is an outlier to this main grouping, whilst it is suggested here that the enclosures on the northern side of the Itchen valley might more satisfactorily be seen as part of the Mid Hampshire Open Downs landscape to the north rather than the South Downs.

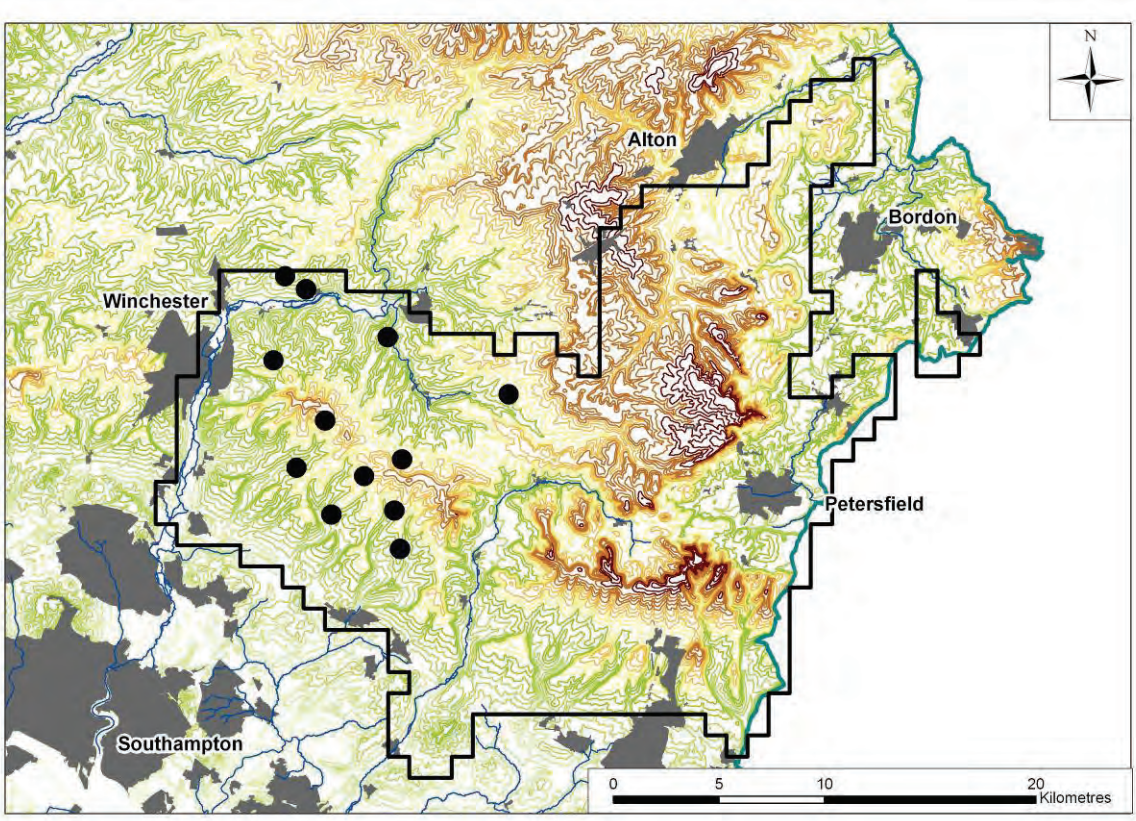

Fig 42. Distribution of banjo enclosures in the Hampshire South Downs.

Fig 43 shows a sample of the enclosures to give an idea of the variety of their form and size. The enclosure at Warren Farm, Gander Down (AHBR 31070) is of archetypal circular form. Those at Yew Tree Farm, Beauworth (ID 170698) and Well Copse, Upham (ID 172424) are rectilinear in form, but can be classed as banjo type enclosures because of their distinctive entrance arrangements. The enclosure at St Clair's, Corhampton Down (AHBR 37273), also shown in Fig. 17, is more irregular in shape. Of the two possible banjo enclosures identified by NMP, that at Itchen Abbas (ID 170657) is roughly circular whilst that at Godwin's Farm, Tichborne (ID 170369) is more irregular. The Godwin's Farm enclosure is considerably smaller than the others, covering just under 0.1ha (Fig 43) which is why it is suggested only as a possible banjo enclosure. The enclosure at St Clair's is the largest of the sample, enclosing 0.54ha and generally the rectilinear enclosures tend to be larger than the others – Well Copse encloses 0.48ha and Yew Tree Farm 0.38ha compared with the average size in the South Downs of 0.28ha. The banjo enclosures at Bridgets Farm are unusual not just because they are a conjoined pair, but because their entrances face southwest. Entrances are discernible at nine of the other enclosures and these all face either east or southeast.

The enclosure at Yew Tree Farm can be regarded as a variant on the more typical form of banjo enclosure, and not just because of its rectilinear plan. The trackway approaching the enclosure appears to stop short of the enclosure entrance (Fig 43). In the gap between the enclosure and the terminal of the trackway are two linear ditches at right angles to the trackway. In one of these ditches a causeway corresponds to the line of the trackway, but the other linear is continuous and presumably belongs to a different phase of the site, otherwise it would have acted as a barrier to anyone approaching the enclosure via the trackway. There is a somewhat similar arrangement at the possible banjo at Godwin's Farm (Fig 43), where the approach trackway again stops short of the enclosure. This enclosure, however, has no visible entrance facing east towards the trackway but does have an entrance in its west side opening into a small rectilinear enclosure. It is possible that this site was initially a banjo enclosure but at a later date the

approach trackway was abandoned, an original entrance facing the trackway was infilled (and is therefore not visible on aerial photographs) and the focus of the settlement shifted to the rectilinear enclosures in the west.

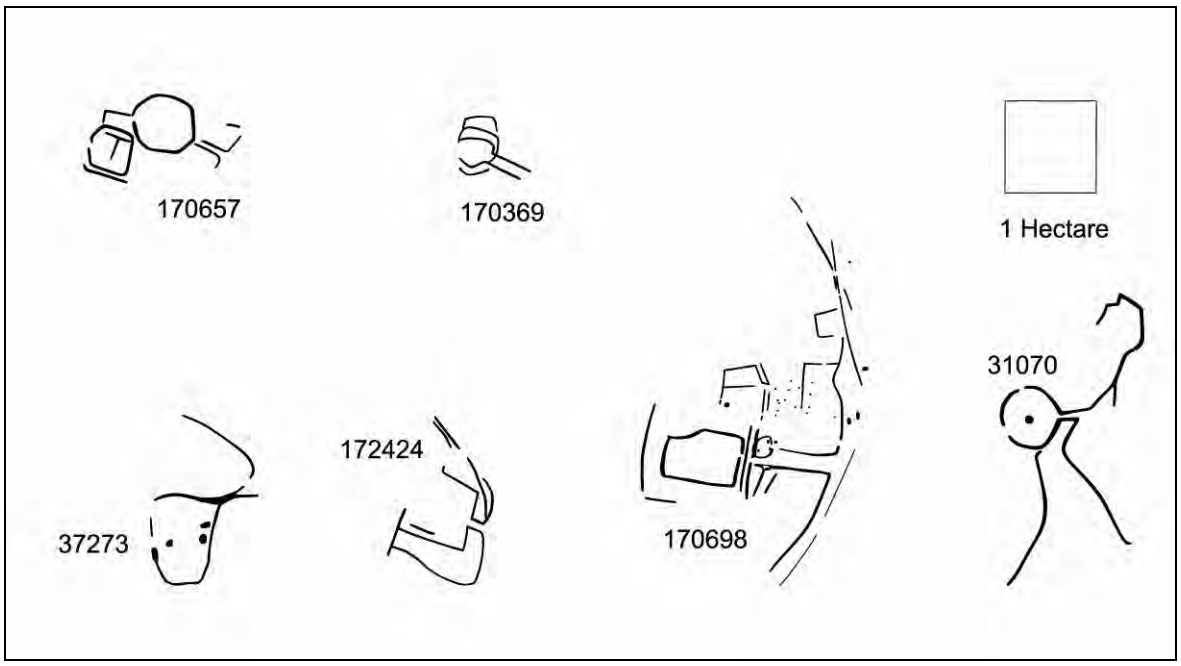

Fig 43. Sample of the banjo enclosures mapped by NMP in the Hampshire South Downs. AHBR or ID nos.: 170657 – Itchen Abbas. 170369 – Godwin's Farm, Tichborne. 37273 – St Clair's, Corhampton Down. 172424 – Well Copse, Upham. 170698 – Yew Tree Farm, Beauworth. 31070 – Warren Farm, Gander Down.

The suggestion that banjo enclosures were associated with stock control appears particularly attractive when considering the position in the landscape of the South Downs banjos. Broadly speaking the enclosures are located towards the margins of the arable or on the boundary between areas of arable and grazing land. Seven are sited in open areas apparently free of fields - which might reasonably be supposed to have provided grazing land - or on the edge of blocks of fields (Fig 44). However, two of the enclosures on the edge of field systems, at Greendowns and Preshaw House, have their entranceways facing the fields rather than the open areas as might be expected if they functioned as stock enclosures.

On the other hand excavation evidence appears to indicate that banjo enclosures were high status settlements, with long term domestic occupation and that some evolved into small Roman villas (Bramdean, Grateley South). More generally there is a high incidence of banjo sites developing into enclosure complexes, some of which are extensive. In addition to Bramdean, mentioned above, ten of the South Downs banjo enclosures evolved into more extensive settlements, of which Bridgets Farm, No Man's Land, Warren Farm and Owslebury could be described as major complexes. The latter site was described by its excavator as 'a villa without the buildings' (Johnston 1981). Enclosure complexes evolved into their final form during the Late Iron Age and Roman periods and are considered in section 11.4 below.

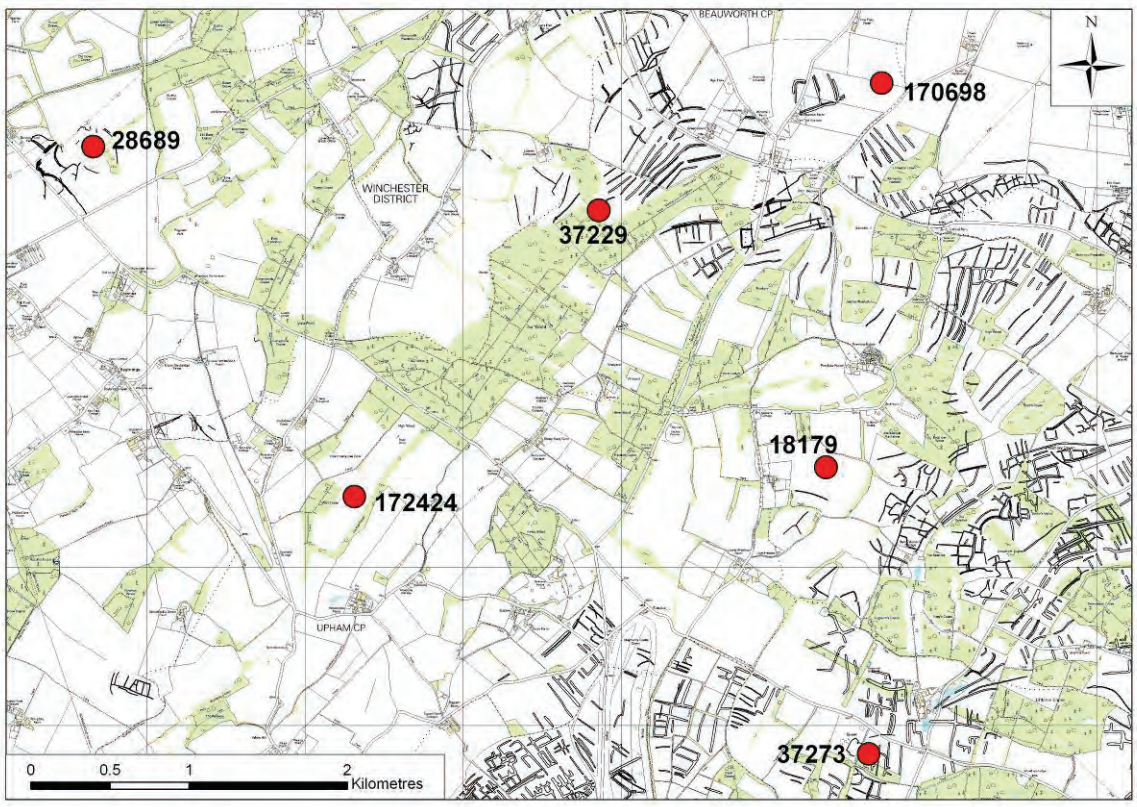

Fig 44. Distribution of banjo enclosures in the Owslebury and Corhampton Downs landscape.
AHBR or ID nos.: 28689 – Owslebury. 172424 – Well Copse, Upham. 37229 – Greendowns, Beauworth. 170698 – Yew Tree Farm, Beauworth. 18179 – Preshaw House, Exton. 37273 – St Clair's, Corhampton Down.

11.4 Enclosure complexes

The years from 100BC to AD43 have been described as a 'period of reformation' (Cunliffe 1996, 29), with the hillfort-centred settlement pattern of the previous centuries giving way to a new socio-political and cultural system. It is probable that many of the simple enclosures discussed in section 11.3.2 are from this period, but the change is represented most obviously in the aerial photographic record through the appearance of new settlement types in the form of ditched enclosure complexes.

During the project 47 enclosure complexes were mapped and recorded, of which 13 cover more than 5ha in extent and are classed here as 'major' complexes (Fig 45). Twenty three of the settlements are newly identified sites, not previously recorded, including three of the major complexes.

The enclosure complexes are not distributed as widely as simple enclosures but their distribution is not as localised as that of banjo enclosures. They are all on the chalk, mostly on the Open Downs and Downland Mosaic Large Scale landscape types but with a few in the Downland Mosaic Small Scale landscape. No examples were identified from the Greensands and clay of the northeast. Whilst there is a western bias to the distribution pattern this is not as pronounced as for simple enclosures or (in particular) banjo enclosures, with ten settlements including two major complexes, located to the east of the Meon in the South East Hampshire Downs landscape. The importance of the Roman town of Winchester and the probable *oppidum* which preceded it appears to be reflected by the

location of nine of the major complexes within a 10km radius, and there are clusters of settlements around the Roman roads leading north, east and southeast from Winchester.

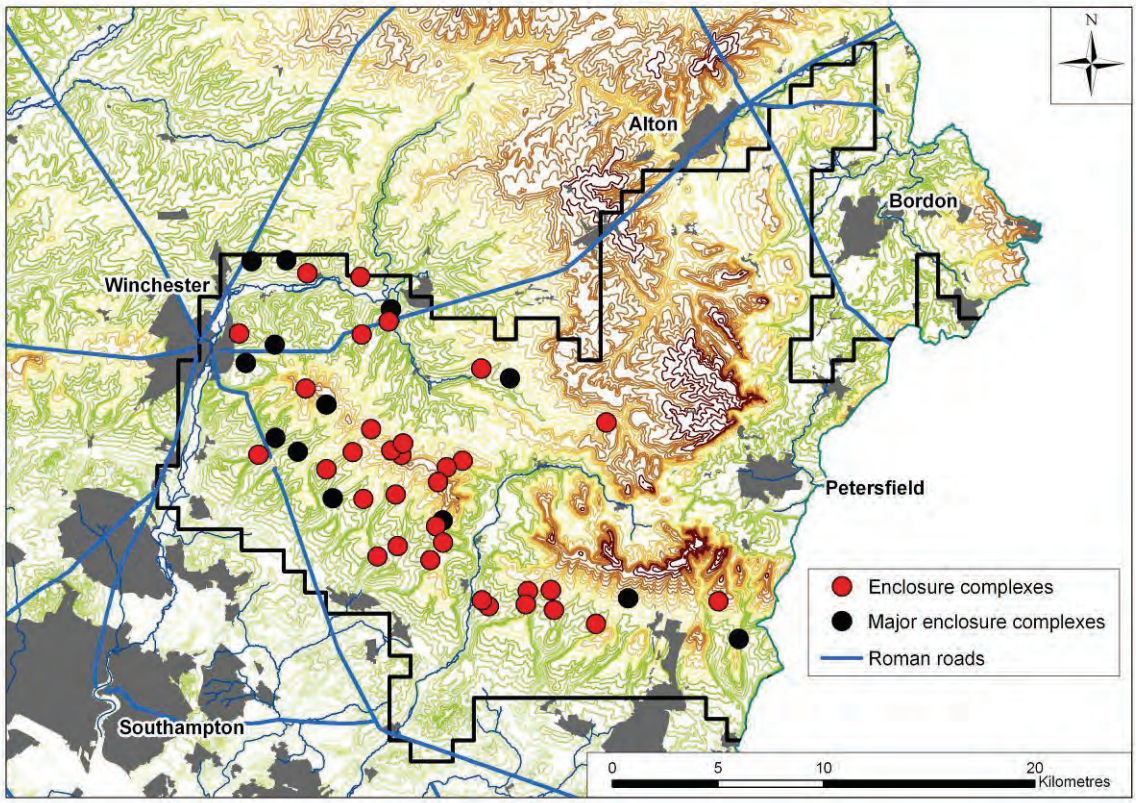

Fig 45. Distribution of enclosure complexes in the Hampshire South Downs.

Two broad types of enclosure complexes have previously been defined – cluster complexes and superimposed complexes (Palmer 1984, 9-10). Cluster complexes are systems in which the enclosures and other features are related but not superimposed (e.g. Fig 46, nos. 172461 and 37258). These are likely to represent settlement expansion, where additions have been made to features which were still in use. Superimposed complexes comprise systems in which later additions take no account of existing features (e.g. Fig 47, no. 36886 and Fig 49, no. 28689). The overlaying of earlier features in this way suggests a break in continuity of occupation or a change of function. In some cases the complexes seem to have started out as simple enclosures with later enclosures appended to the original large one (e.g. Fig 46, no. 37848 and Fig 47, nos. 23853 and 36886).

Some of the major complexes can be further subdivided into those bounded by or containing compounds and those with a strong linear character. Compounds are large irregular enclosures which appear to encompass the whole settlement (e.g. Fig 47, no. 10866) or part of the settlement (e.g. Fig 47, no. 37504). None of these compounds are complete, or at any rate none are completely visible.

Linear complexes comprise series of small enclosures and other features arranged along one or both sides of a trackway or lane and are shown in Fig 48, nos. 35895, 171128 and 38412. The latter site, at East Lane Down, just north of Tichborne, is truncated in the west by the A31 and may have been considerably more extensive than shown here. It is central to a string of settlements, linear ditches and fields running north–south along the west bank of the Itchen, all of which are included in the illustration. In the south these include the possible banjo enclosure at Godwin's Farm (ID 170369) and associated curvilinear

enclosure (AHBR 38411). To the north of the complex there are ditched fields and a probable unenclosed settlement (ID 170350).

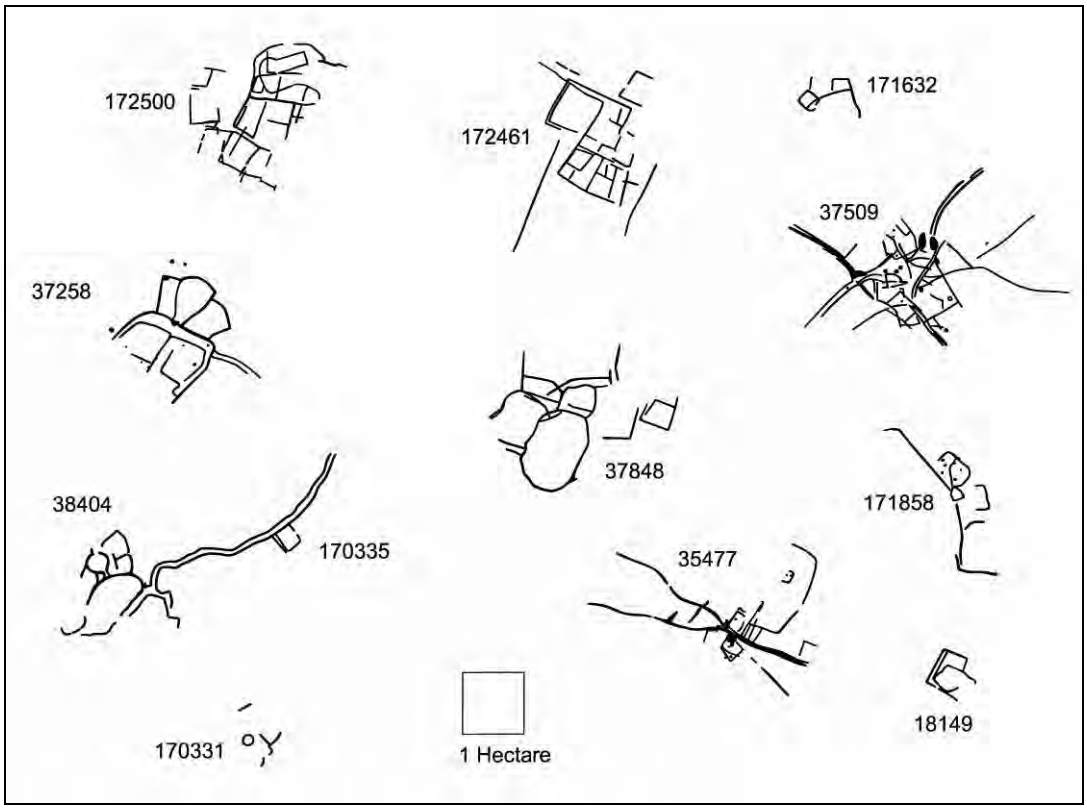

Fig 46. Sample of smaller enclosure complexes (those covering less than 5ha).

In a number of cases the complexes include combinations of these characteristics. For instance the eastern part of the settlement at North Farm, Clanfield (Fig 47, no. 37504) comprises a large compound enclosing at least 3ha whilst the western area consists of a cluster of conjoined small rectilinear enclosures typically covering 0.1ha or less. At Owslebury (Fig 49, no. 28689) a cluster complex of small rectangular enclosures (the latest phase of the settlement) is superimposed on earlier features. The Worthy Down complex (Fig 47, no. 10866) has two main components – a large compound, at least 15ha in area which encompasses the whole northeast part of the site, and a cluster of small rectilinear enclosures in the southwest outside the compound. Superimposed features are located in both areas of the settlement.

These few examples serve to illustrate the variety and complexity of this type of settlement. The major complexes offer evidence of long term occupation (regardless of whether this occupation is continuous or interrupted) and nucleation of the population. They are also likely to be high status settlements representing the emergence of a Late Iron Age social elite. This might particularly be the case at Bramdean (Fig 47, no 23853) and similar settlements elsewhere in Hampshire which evolved into villa sites.

Rog Palmer has suggested (e.g. Palmer 1984, 10) that both the compounds and the small rectangular enclosures (which he interprets as paddocks) found within some enclosure complexes are associated with stock rearing. He supports this assertion by pointing out that the paddock type complexes are most common in eastern Hampshire where 'ancient fields are comparatively rare'. NMP has shown that ancient fields are more widespread on the eastern chalk than perhaps previously realised (Fig 25), but has also identified a particular type of cluster complex in the east that is consistent with Palmer's suggestion. This type comprises dense clusters of conjoined rectangular enclosures, all smaller than 0.1ha, sometimes accompanied by a larger rectangular enclosure. The best examples are shown in Fig 46 (nos. 172461 and 172500). This type of complex appears to have a quite

localised distribution, centred on parts of the South East Hampshire Downs - two complexes of this type were identified between Soberton and Brockbridge along the east bank of the Meon, and a further three 1–2km to the east at Wallops Wood.

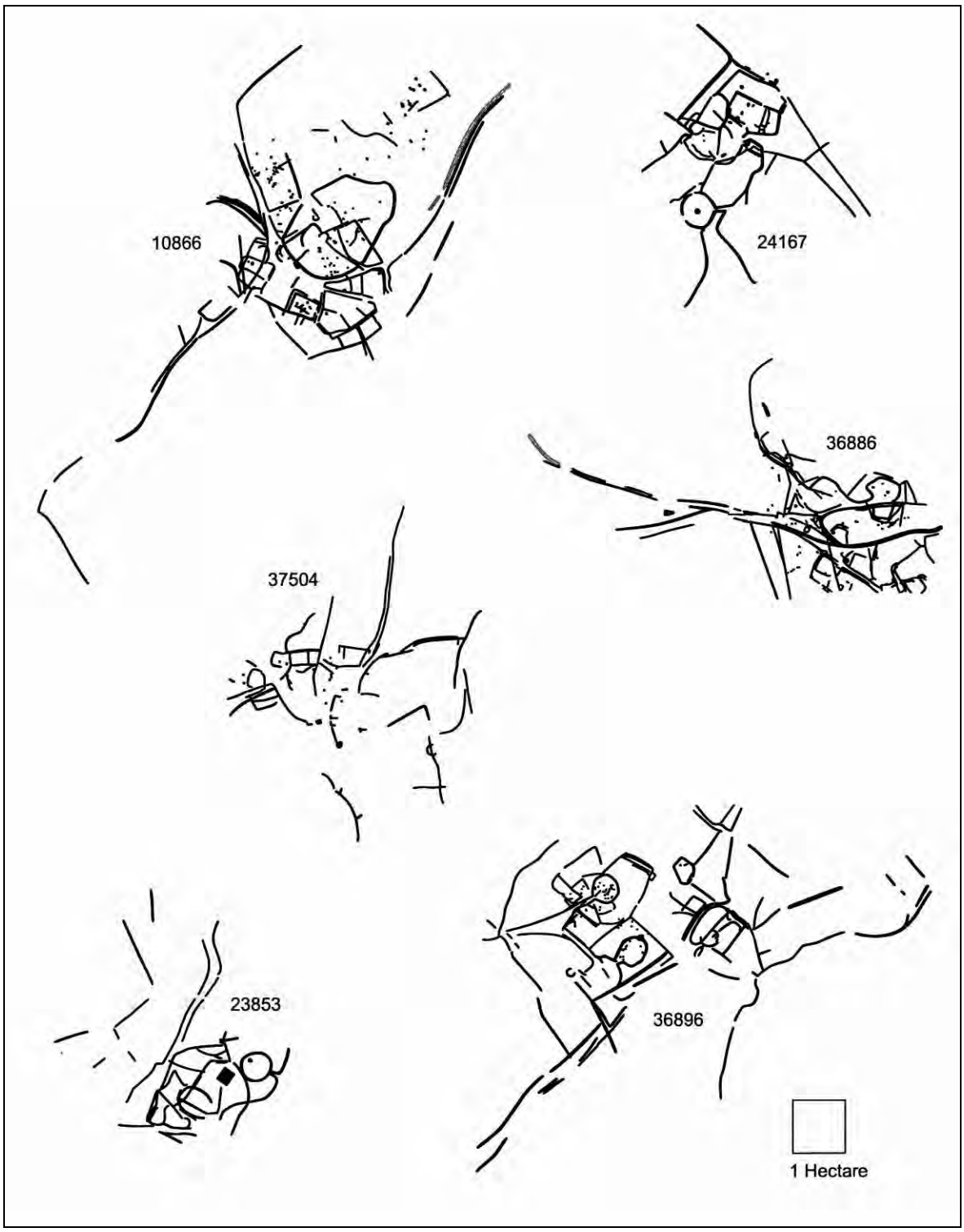

Fig 47. Sample of major enclosure complexes which are bounded by or which contain compounds.

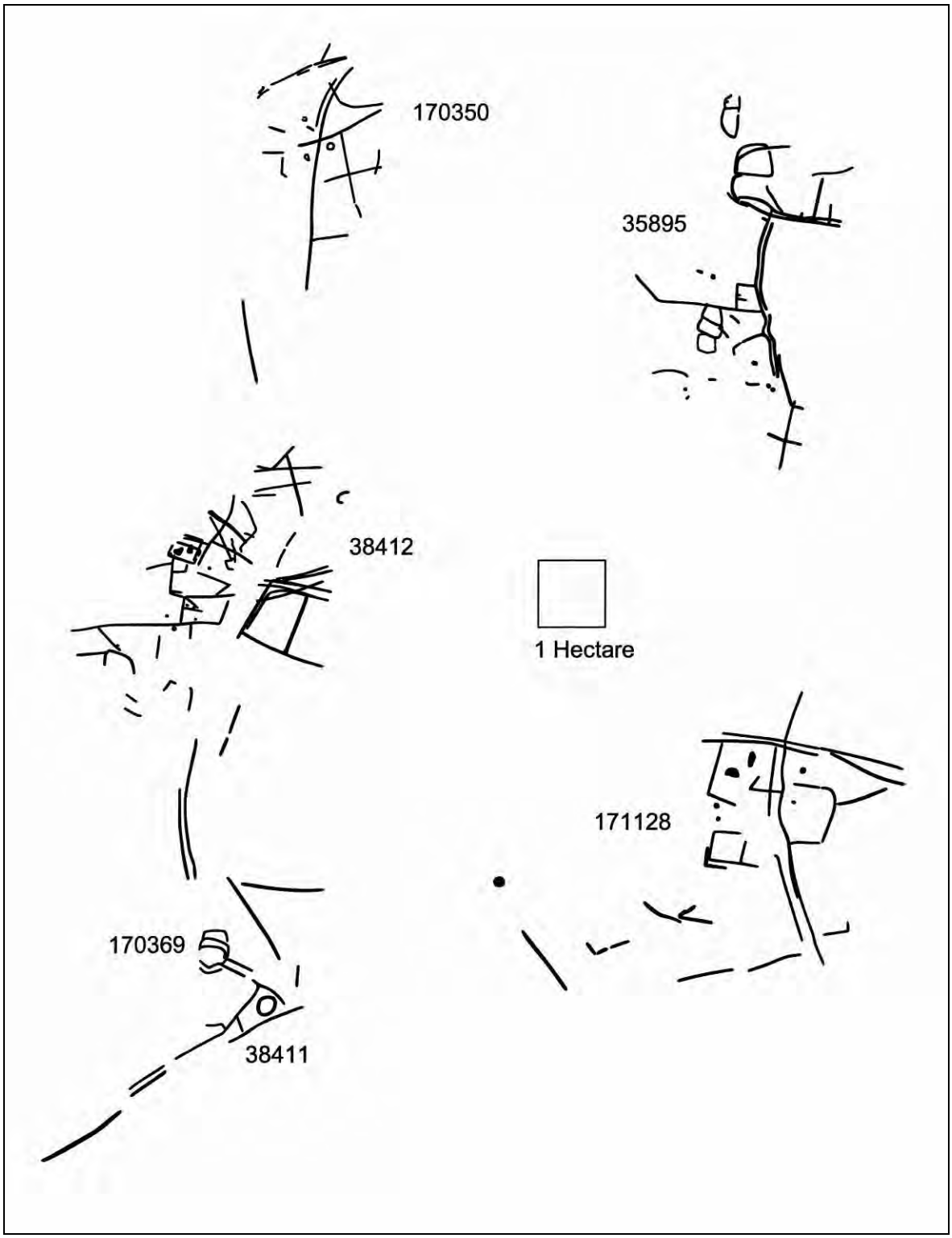

Fig 48. Sample of major 'linear' enclosure complexes.
Nos. 35895, 171128 and 38412 are linear complexes; the other numbered features are likely to be associated with complex no. 38412.

The morphology of some of the enclosure complexes is distinctive and unique within the sample. At Well Copse, Upham (ID 172424) for instance, a rectilinear banjo type enclosure appears to be linked to an irregular enclosure (with a second enclosure appended to its southwest side) by a double ditched trackway (Fig 49). This enclosure is unusual because it is defined by a bank as well as a ditch and more so because the bank

is outside the ditch. A Roman villa is recorded (AHBR 28704) immediately outside the southeast corner of this enclosure.

At Stony Hard Farm, Upham (Fig 46, no. 37258) a double ditched trackway leads from the southeast into an irregular rectilinear enclosure which covers at least 1.4ha (the southwest portion of the enclosure is obscured by a road and woodland). Set within the enclosure are two smaller conjoined enclosures which appear to contain internal partitions and pits, and appended to the northeast side of the enclosure are three wedge-shaped conjoined enclosures. This complex is unusual because each of its elements appear to be carefully and deliberately planned.

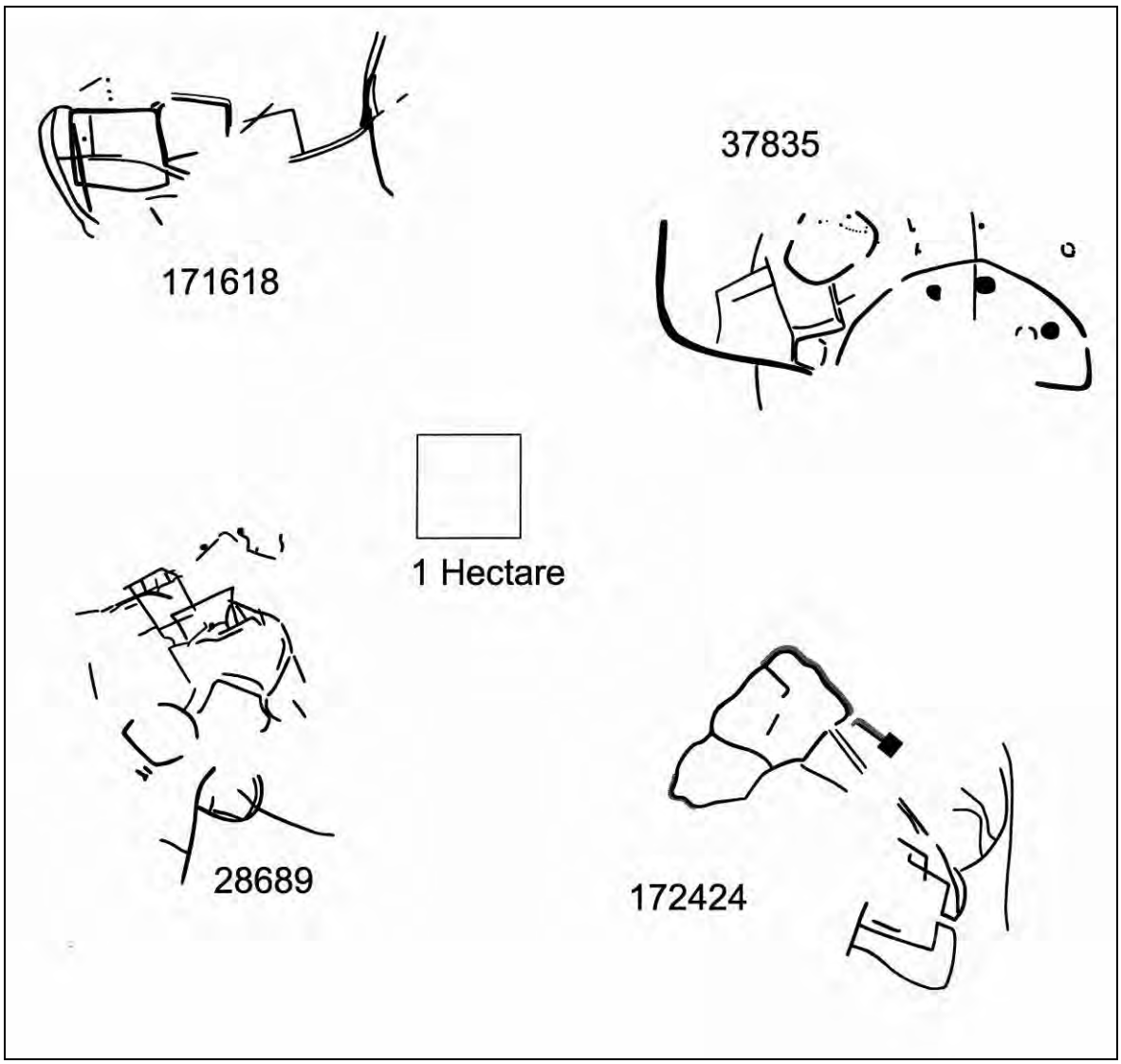

Fig 49. Sample of enclosure complexes without compounds.

A third example is at Itchen Stoke (Fig 46, no. 38404). Here a circular enclosure, 32m in diameter, flanked by a series of smaller enclosures or paddocks, gives onto an irregular shaped enclosure 0.5ha in extent which is entered via a sinuous double-ditched trackway running from the northeast and visible for 460m. Halfway along the trackway a small rectangular enclosure with a northeast facing entrance (ID 170335) is built into the southern ditch of the trackway. Some 270m to the southeast is a probable unenclosed settlement in the form of a ring ditch, 15m in diameter and associated linear features (ID 170331). A disused railway runs through the area between these features and the enclosure complex, obscuring the relationship between the two. However the trackway branches to the southeast when it reaches the complex and it is possible that it continued

in this direction and linked the two sites. This in turn suggests that the ring ditch and the complex may be part of a larger dispersed settlement, the remainder of which is no longer visible.

11.5 Other settlement types

Excavations at Chalton (Cunliffe 1977) produced evidence of another type of settlement from this period (AHBR 27830). This site began in the Late Iron Age as a small ditched enclosure and continued to develop into the fourth century AD, when it had grown into an elongated village consisting of regularly laid out plots, some of which contained rectangular timber buildings (Fig 50). Pottery spreads indicated the site of two similar villages in the Chalton area, one to the south and one to the west of the excavated settlement. No traces of the westerly village were visible on the photographs consulted during NMP but at the site of the southern 'village' a linear complex (Fig 48, no. 35895) was mapped from a range of photographs. Two further possible village type settlements are tentatively suggested, at Corhampton Down (ID 171565) and Wallops Wood, Soberton (ID 172499). Both sites consist of a series of amorphous soilmark mounds set either within or on the edge of extensive Celtic field systems, in areas recently cleared of woodland. The mounds may simply be the result of ground disturbance associated with clearance operations but the possibility that they are linear plots should not be ruled out.

Fig 50. The Roman village (towards the top right of the photograph) and associated fields at Chalton.
Photo: RAF 58/2860/F44/0227. 14th May 1959. © English Heritage. NMR (RAF Photography).

At both Corhampton Downs and Chalton Roman settlements are set within regular systems of elongated Celtic fields, often approximately five times longer than they are wide (Fig 51), and it seems that fields of this type are typical of this period, rather than the more square-shaped fields of the Bronze Age and earlier Iron Age. It is likely that these

narrow fields represent modification of earlier field systems but this is difficult to demonstrate from the photographic evidence alone. Fields of this type were recorded elsewhere, for instance in Exton and to the northeast of Twyford.

Fig 51. Celtic fields in an area of recently removed woodland on Corhampton Downs.
Photo: RAF 58/2860/F44/0281. 14th May 1959. © English Heritage. NMR (RAF Photography).

NMP has provided an incomplete picture of the Roman settlement pattern in that only two villas or masonry buildings were conclusively identified on the photographs. Two further possibilities are firstly, a small rectangular feature (ID 171568), 14m square, situated on the edge of an extensive field system at Corhampton Downs. An excavated Late Iron Age and Romano-British enclosed settlement (AHBR 18149) is located nearby and a villa (AHBR 18200) is recorded some 1.5km to the northeast. The second possible building is contained within a large polygonal enclosure (155m x 128m) in Hartley Park, near West Worldham (Fig 52). Although Roman coins have been found at two localities near this site it might, alternatively, be associated with the nearby deserted medieval settlement of Hartley Mauditt (AHBR 17130). It is also possible that it is an ornamental feature associated with the park.

For completeness the distribution of villas and buildings listed in the AHBR is shown in Fig 53. This is of interest because most are outside the main zone of non-villa rural settlement. Half the villas are in the Downland Mosaic landscape and only three are located in the Open Downs landscape type: this is in contrast to the other settlement types discussed above, which are predominantly located in these landscape types. Thirteen of the villas are on non-chalk geologies, mainly on Greensand, and they are found in the Lowland Mosaic landscape as well as on Greensand Hangers and the Greensand Terrace.

Fig 52. A possible Roman building set within a large enclosure at Hartley Park, West Worldham.
Photo: RAF CPE/UK/2006/3050. 16th April 1947. © English Heritage. NMR (RAF Photography).

The siting of many of the villas and more modest buildings is clearly influenced by the road network, for instance in the Itchen valley alongside the Winchester to Southampton road (Margary 42b) and in the south along the Chichester to Southampton road (Margary 421). In the northeast corner of the project area the concentration of villas is probably explained by the proximity to the Roman town at Neatham (at the cross roads just northeast of Alton) and to the nearby Alice Holt pottery industry. Alternatively their proximity to the Alice Holt hunting forest may reflect wealth acquired either locally or from elsewhere. The cluster of villas in the far southeast suggests a possible continuation of the Havant to Rowlands Castle road (Margary 425) northwards towards Alice Holt, perhaps linking the pottery industry with the coast, although no evidence of this was identified during the project. Elsewhere the villas appear to be in areas not previously exploited, such as in the south around Hambledon. This could suggest that there was no room for these new villas in areas with extensive Celtic fields supported by pre-existing settlement.

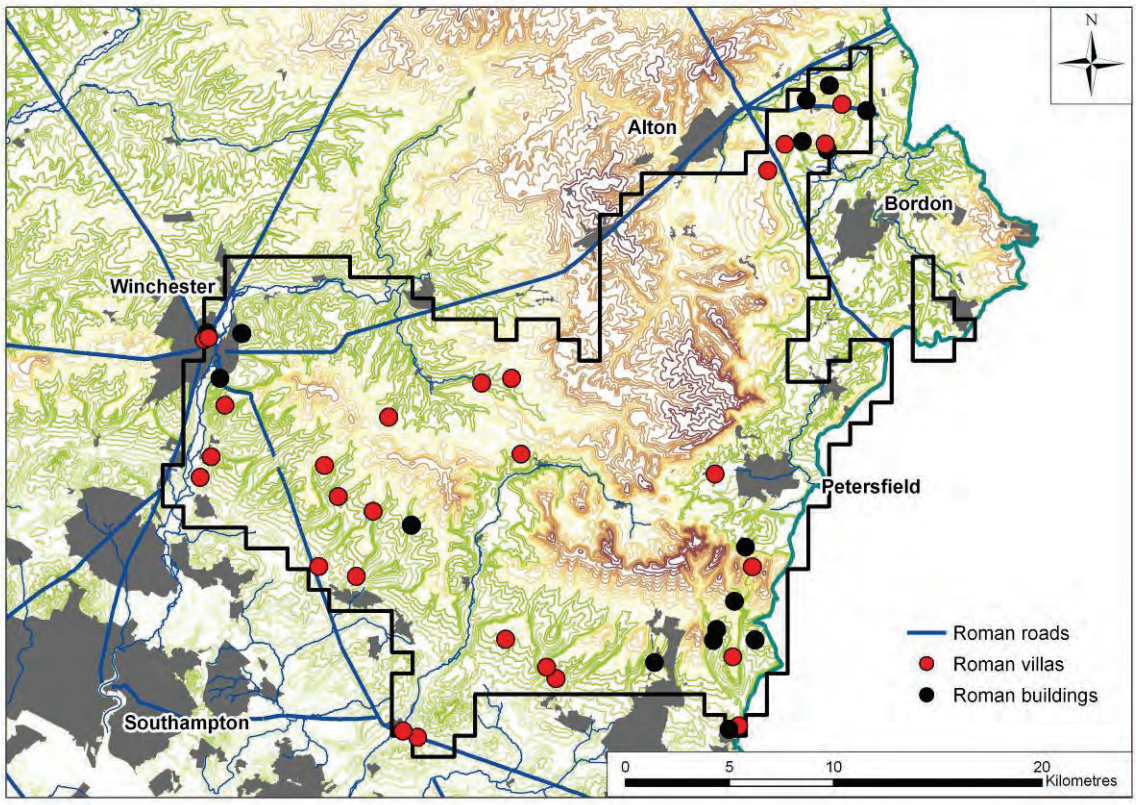

Fig 53. Distribution of Roman villas and buildings in the Hampshire South Downs.

12 Development of the prehistoric and Romano-British chalkland landscape

Previous sections have considered the Neolithic and Bronze Age ceremonial monuments and the nature and form of late prehistoric and Romano-British fields and settlement. Away from the chalk there are relatively few Neolithic and Bronze Age monuments and the settlement pattern in the main is characterised by only a small number of discrete enclosures with little evidence for associated fields or other landscape features. In the chalklands the evidence is far more abundant. Here it is possible to look at how the various settlement features and other elements, such as trackways and linear boundaries, relate to each other and to local topography; in effect how the landscape fitted together.

12.1 Relationship between Neolithic and Bronze Age monuments with later features

NMP mapping portrays a complex multi-phase landscape with the earliest features dating from the Neolithic period. Elsewhere in southern England Neolithic monuments can be seen to mark culturally significant locations in the landscape and became foci around which Bronze Age ceremonial monuments were clustered or on which they were aligned. On the whole this is not so clear in the Hampshire South Downs, although there are some exceptions. At Cheriton, for instance, the siting of the Bronze Age linear barrow cemetery may be influenced by the nearby Lamborough Lane long barrow (Fig 23), whilst some of the Bronze Age barrows on the chalk ridge to the east of the Meon might be positioned with reference to the Salt Hill long barrow (Fig 20). At the western end of the chalk ridge the barrow cemeteries in and around the hillfort at Old Winchester Hill are aligned on a Neolithic oval barrow (Fig 54).

The siting of the hillfort at Old Winchester Hill is of interest in that it is not unusual for hillforts to be positioned in locations that were important during the Bronze Age (Cunliffe 1993, 167). Four barrows are within the area enclosed by the ramparts, there are further barrows immediately outside the hillfort – both in the east and the west – and three barrows are incorporated into the southern rampart of the hillfort. Some later settlement sites are also closely associated with Bronze Age barrows. The banjo enclosure at St Clair's, Corhampton Down (Fig 17) is adjacent to a clustered barrow cemetery and a further barrow (not visible on the photo) is located within the enclosure. Three of these barrows are marked as *tumuli* on recent OS maps and they would certainly have been substantial earthwork mounds when the enclosure was constructed. There is a similar scenario on Wheely Down, where an enclosure complex (ID 171657) is adjacent to and partially overlies a clustered barrow cemetery.

Fig 54. The Iron Age hillfort at Old Winchester Hill from the north.
Four barrows are contained within the hillfort (the circular feature close to the eastern entrance is probably a post medieval dewpond), and there is a clustered barrow cemetery beyond the western rampart (the northernmost of these barrows is a Neolithic oval barrow). Photo: NMR 15393 SU6420/54. 23rd June 1976. © Crown copyright. NMR.

The relationships between Celtic fields and earlier ceremonial monuments are varied. The Warren Farm long barrow (AHBR 24158) is in an area free of fields; the Salt Hill barrow (AHBR 18812) is in an isolated position on high ground with field systems on the lower slopes to its north and west; the Lamborough barrow (AHBR 18102) is contained within or perhaps on the southwest edge of a field system (ID 170777); finally the Stock's Down barrow (AHBR 26001) is located within the Westend Down field system and is respected by the field boundaries.

The relationships between Celtic fields and Bronze Age barrows are more ambiguous. In some cases, for instance the saucer barrow on Chilcomb Down (AHBR 24147), barrows are clearly respected by the fields. At Westend Down (Fig 27) a number of mounds interpreted as barrows are contained within individual fields. This is not uncommon and other locations where barrows are contained within fields include Clanfield Down, Kilmiston Down, Lomer and Warnford Plantation. At Twyford (Fig 55) two barrows are incorporated into the boundaries forming a field system (ID 171401). These include a large barrow (AHBR 27118) discussed in section 9.2. On Wheely Down the clustered barrow cemetery mentioned above is partially overlain by a Celtic field system but is respected by some of the boundaries – the junction of two boundaries is fitted around one of the barrows (AHBR 24472). To the south of the main cemetery a possible barrow (ID 171663) is incorporated into one of the field boundaries.

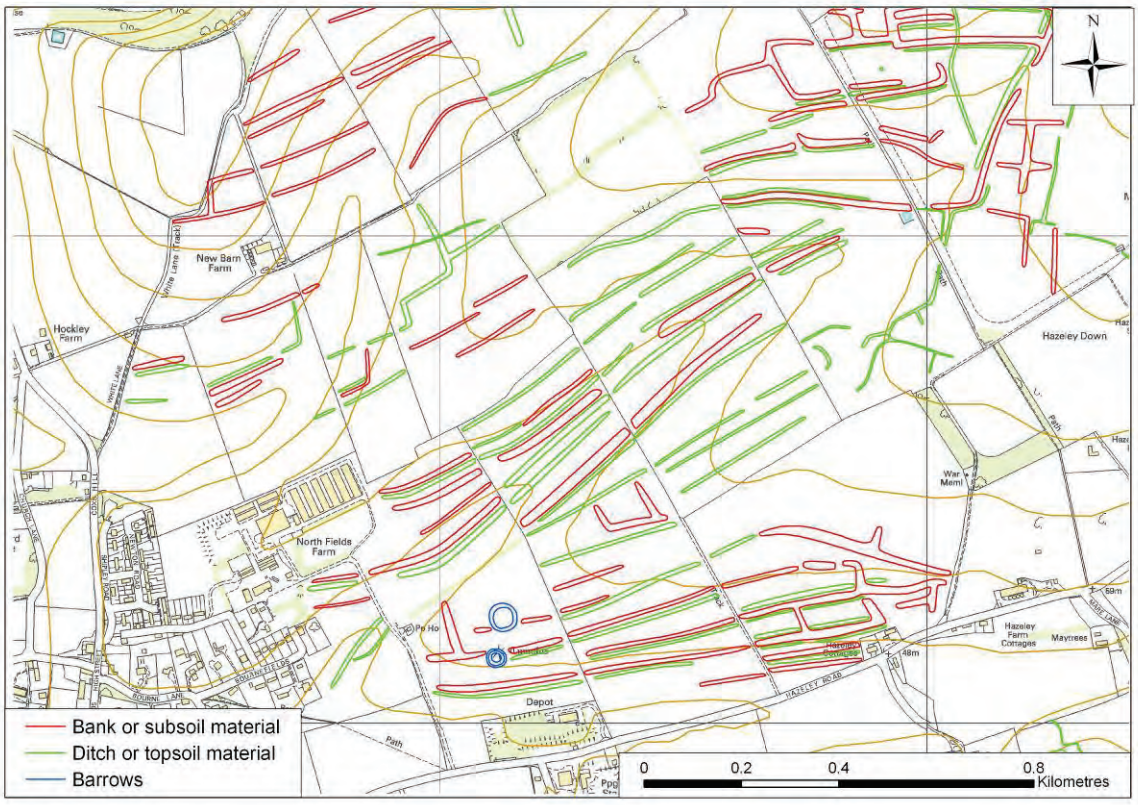

Fig 55. Celtic fields and Bronze Age barrows at Twyford, showing the barrows incorporated into two field lynchets.

12.2 Linear features

One type of feature associated with Late Bronze Age land division on the chalk is the ranch boundary. Ranch boundaries (sometimes referred to as Wessex linear ditches) form linear ditch systems dividing the landscape into territorial blocks. They are often associated with field systems – in some cases they separate pasture from arable - but the relationships are often difficult to define (Cunliffe 1993, 143-144).

Although a large number of linear ditches were mapped during the project, the majority were interpreted as trackways or isolated field boundaries, usually of uncertain date. However in the area between Winchester and Cheriton several linear ditches can be suggested as possible ranch boundaries (Fig 56). Three of these (nos. 37785, 170659 and 38392) are at the northernmost edge of the project area, are likely to run for a considerable distance beyond, and should be seen as relating to the Mid Hampshire Open Downs to the north rather than the South Downs. Two ditches (no. 170615) south of the Itchen Valley run through an open area apparently devoid of fields. Of the remainder, the two on a roughly northwest–southeast alignment (nos. 171120 and 37850) are double-ditched for some of their length and may be trackways associated with fields and associated settlements (see Figs 64 and 65). The others can be seen to a greater or lesser degree as dividing pasture from arable – especially nos. 170557 and 171133.

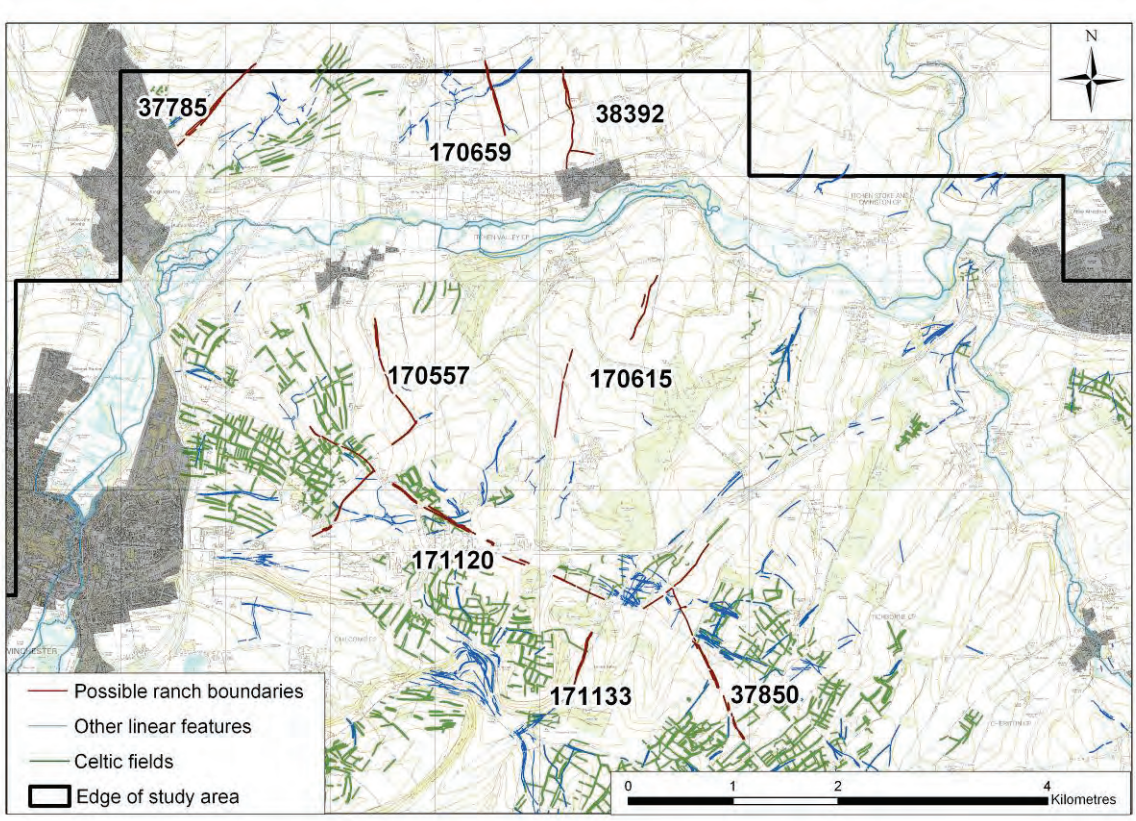

Fig 56. Possible ranch boundaries, other linear features and Celtic fields in the Winchester to Cheriton area.

Another noteworthy group of linear features mapped in the Hampshire South Downs are known locally as 'dongas'. Dongas are downland trackways or droveways which have become deeply eroded and sunken through centuries of use. The best examples are on Twyford Down, Ramsdean Down and Butser Hill (Fig 57). It is impossible to be sure of their date but it is very likely that many have their origins in prehistory.

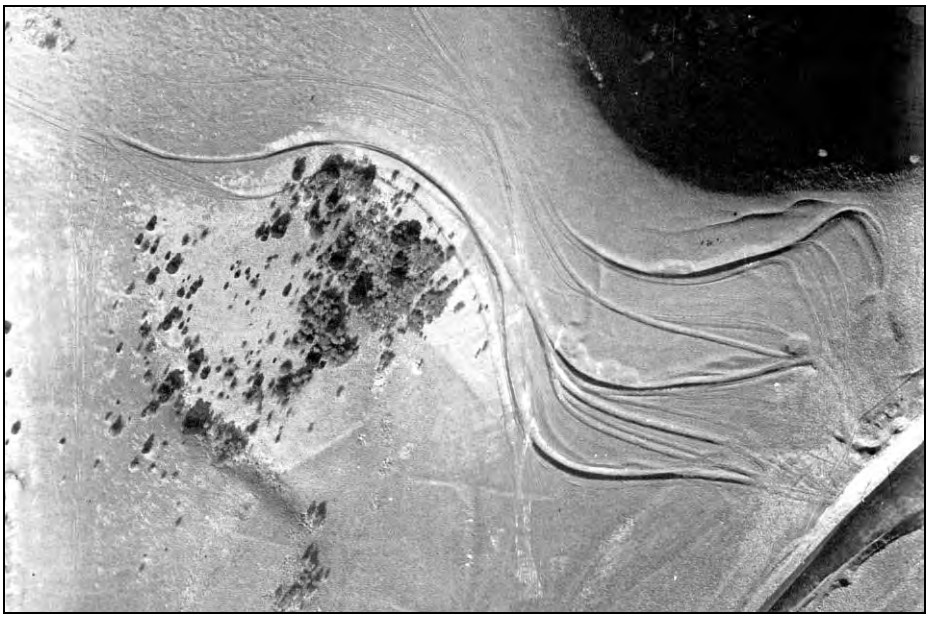

Fig 57. Dongas – ancient routeways – at Butser Hill.

Photo: NMR SU7220/1 CCC11784/681. 10th December 1925. © Crown copyright. NMR.

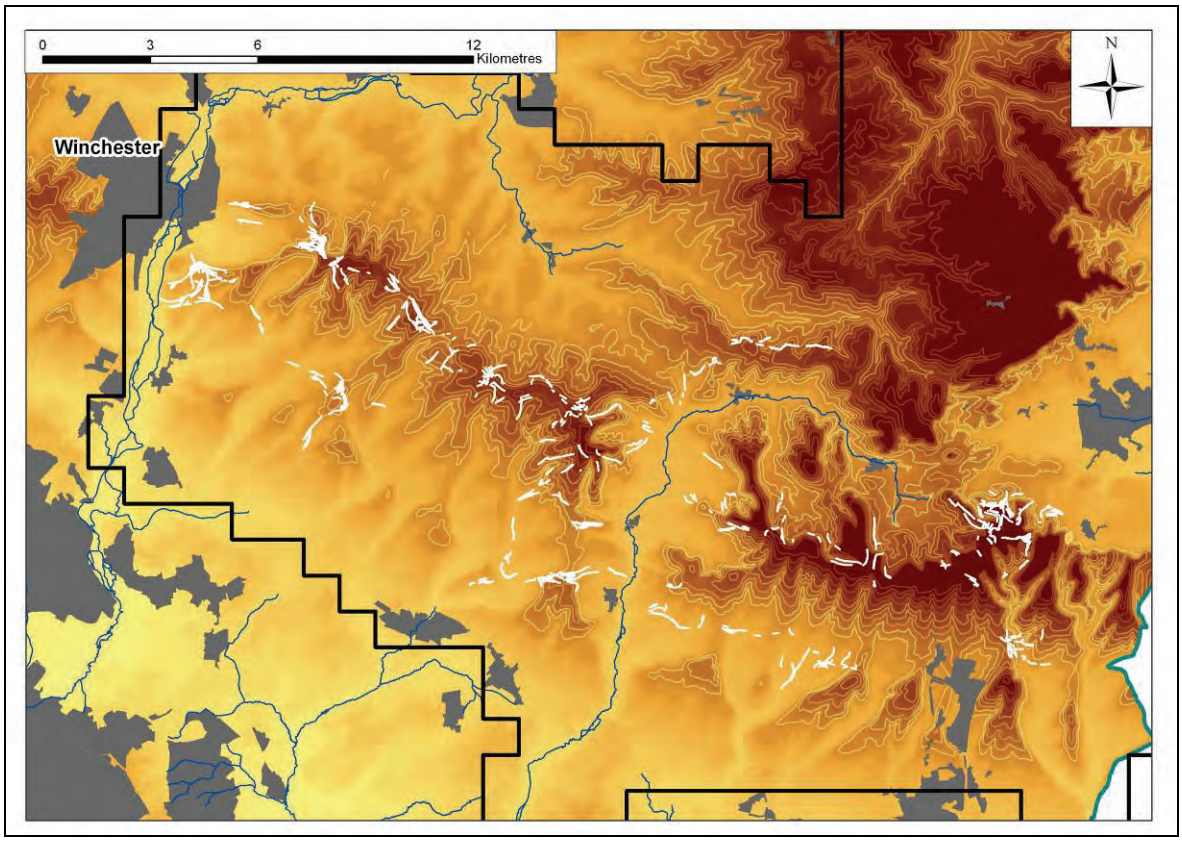

Fig 58. Major routeways over and around the central chalk ridge which may be prehistoric in origin.

NMP mapping of the dongas and other major trackways shows how there were clear routeways over the central chalk ridge, to the south of the chalk ridge and diverting around the ridge to the north of the Meon Valley (Fig 58).

Roman roads are another type of routeway which have left a clear imprint on the landscape in places (Fig 53). Some sections of the Winchester to Wickham Roman road (Margary 420) were mapped and recorded, including in the area to the east of St Catherine's Hill where the road follows the line of one of the dongas. Around Upham the line of the road is projected (AHBR 27125) and here a kilometre stretch of the road is visible on aerial photographs as banks and ditches. Around Tichborne the line of the Winchester to London road is uncertain and a series of linear features mapped here (ID 170308, 170363 and170592), some of which were initially interpreted as possible field boundaries, are likely to be remnants of the road. The features can be traced for approximately 2.5 kilometres.

12.3 Zones of settlement and arable, pasture and marginal land

An overview of how the prehistoric and Roman landscape was managed is provided by the distribution of Celtic field systems. Gaps in the distribution may indicate areas not used for arable farming but which provided grazing land or were left as woodland for the provision of timber and fuel or for hunting. Soils, geology, and current land use are non-archaeological factors influencing the visible distribution of Celtic fields, and these are discussed in section 10.2. However some of the gaps appear to be genuine and probably reflect past land use.

On a broad level it is noticeable how the fields cover the chalk slopes and coombes but appear to deliberately avoid the highest ground, such as the central chalk ridge (Fig 59).

This seems to be a genuine gap as much of this ridge today is open ground not obscured by woodland or capped by clay which might impede the formation of cropmarks. It is also likely that much of this ridge was not wooded in later prehistory: the ridge was a focus for Bronze Age barrows (9.2) and it is widely accepted that barrows in this sort of prominent location probably served as territorial or cultural markers and that visibility was an important factor in their siting. It seems likely, then, that the highest ground on the ridge was used as grazing land.

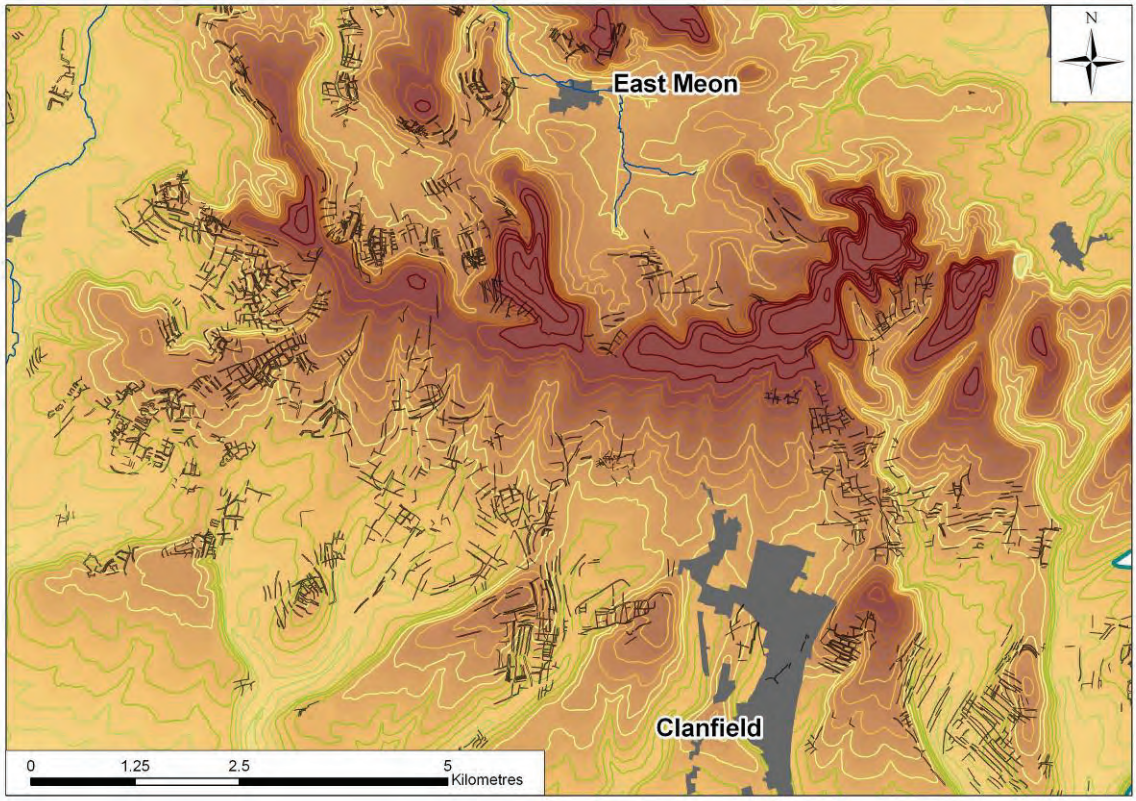

Fig 59. The distribution of Celtic fields around the central chalk ridge between Butser Hill and Old Winchester Hill. The higher ground is shown by darker shading.

One of the largest gaps occurs in Owslebury and Upham parishes. This area is illustrated in Fig 44 and, whilst free of fields it contains a number of banjo enclosures. In addition to the banjos there are several prominent trackways, 12 simple discrete enclosures and two small enclosure complexes. One of these – Stony Hard Farm (AHBR 37258) – is shown in Fig 46 and is of interest because of its unusual arrangement with a series of small conjoined enclosures appended to the main enclosure. The appended enclosures are consistent with the needs of stock management and it is possible that the economy in this entire area was based on a pastoral regime.

Another large area which appears to be free of fields lies to the north of the central chalk ridge in the Bighton and Bramdean Downs landscape. Here, roughly following the northern scarp of the ridge, there is a relatively well-defined edge to extensive field systems (Fig 60). A series of settlements are laid out along the fields' edge, including the small enclosure complex on Wheely Down (ID 171657), the banjo type enclosure at Yew Tree Farm (ID 170698), small rectangular enclosures on Kilmiston Down and Millbarrow Down (ID 171858 and 171884 and AHBR 37297) and a large rectilinear enclosure at Lane End, Beauworth (ID 170688). As with the Owslebury/Upham area there are a small number of simple discrete enclosures within the open area.

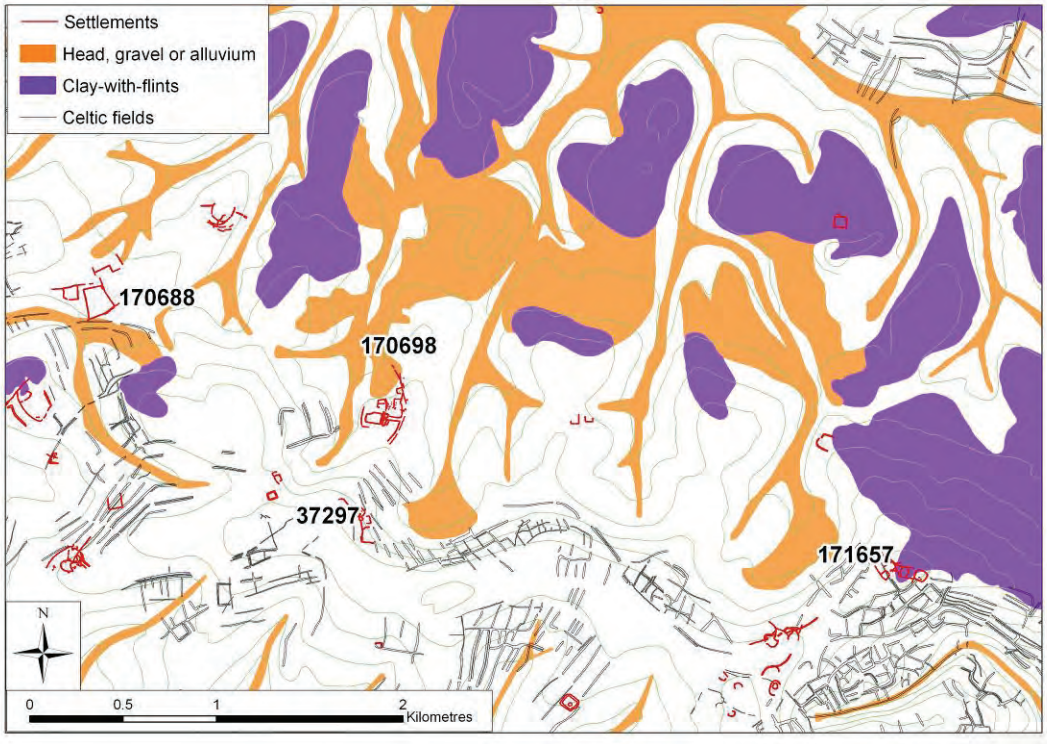

Fig 60. The distribution of Celtic fields and settlements along the northern scarp of the chalk ridge between Wheely Down and Millbarrow Down.

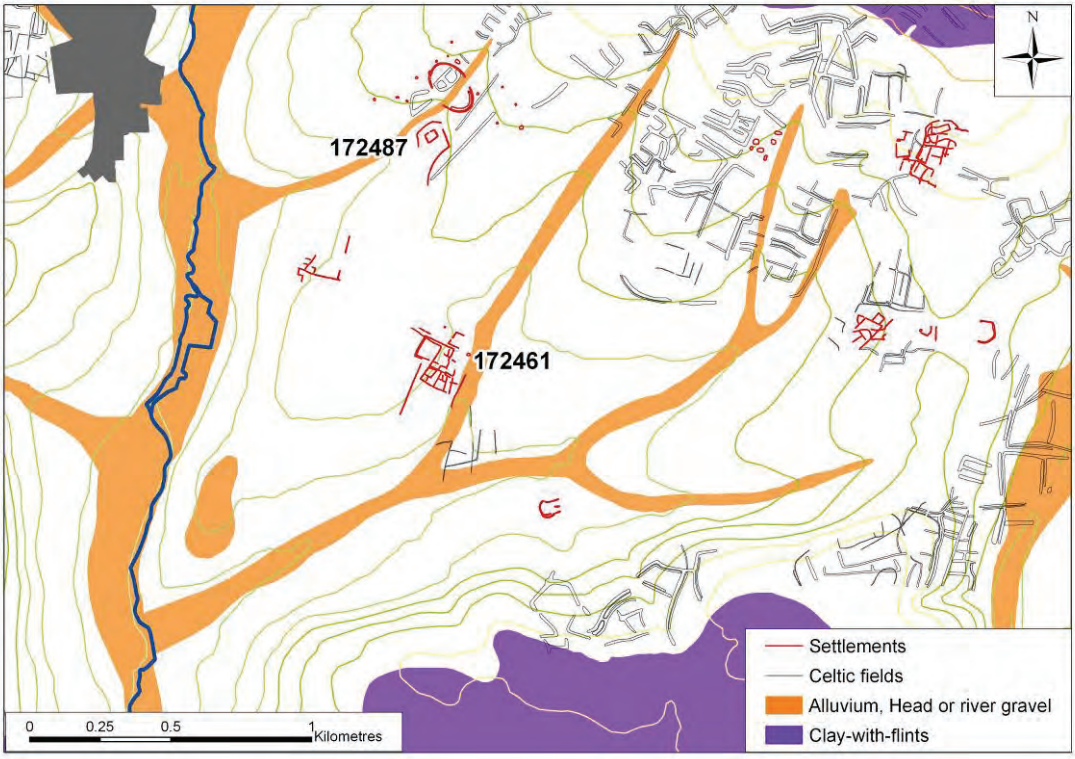

Fig 61. The distribution of Celtic fields and settlements in the vicinity of Soberton.

Elsewhere within parts of the landscape that were predominantly arable there are less extensive open areas, with good examples immediately to the east of the river Meon. The first of these is in the vicinity of Soberton (Fig 61). The lower lying ground is free of fields but is bounded by field systems above the 90m contour. Within the open area is an enclosure complex at Little Down Cottage (ID 172461) formed by a series of small rectangular enclosures or paddocks. To the north a small rectangular enclosure (ID 172487) lies at Little Common Down (Figs 61 and 62), on the boundary between the fields and the open landscape. These settlement forms are of interest: the type of complex at Little Down Cottage has already been identified as likely to be associated with stock control (see section 11.4) and there are a number of instances in the Hampshire South Downs where small rectangular enclosures like that at Little Common Down occur at the boundary between field systems and open areas (those in Fig 60 are a case in point). It is possible that small rectangular enclosures in this sort of location may be associated with stock control.

Fig 62. The rectangular enclosure at Little Common Down, Brockbridge (ID 172487). The field boundaries visible as cropmarks around the enclosure are post medieval in date.
Photo: NMR SU6118/6 LIBRARY. 13 July 1989. © Crown copyright. NMR.

The second example lies just to the north and comprises the landscape around the Old Winchester Hill hillfort. There are very extensive Celtic fields to the south, east and north of the fort but in the northwest and southwest the land sloping down to the Meon is free of fields (Fig 63). This appears to be a genuine gap in the field pattern and is in contrast to the western side of the Meon Valley, where the fields reach almost to the flood plain in the vicinity of Droxford. It is also notable that this area is devoid of settlements, whilst the surrounding landscape is densely populated.

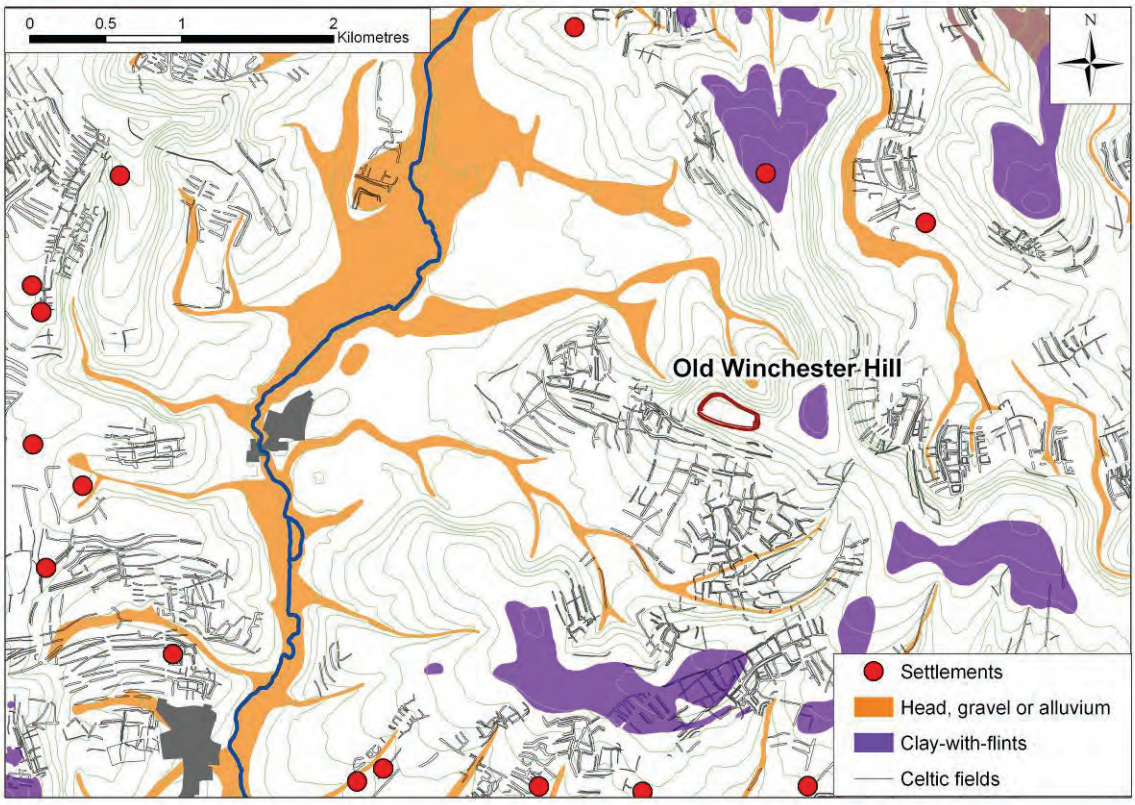

Fig 63. The distribution of Celtic fields and settlements in the vicinity of Old Winchester Hill.

The Iron Age and Romano-British landscape is most fully developed in the open downland and downland mosaic in an area lying broadly between Winchester and Cheriton. Two examples serve to illustrate this.

The first is Winnall Down (Fig 64). Here there is a long history of settlement with occupation from the Bronze Age into the Roman period at Easton Lane Interchange (in the far left of the illustration). Immediately to the east several enclosures are set within the extensive Celtic field system. The main focus of Late Iron Age and Roman settlement, however, seems to be the large enclosure complex at No Man's Land (AHBR 36886) towards the bottom of the illustration. Trackways lead from this settlement up towards the fields. Possible ranch boundaries are dividing up the landscape, including one (the most northerly) which appears to be separating the arable land from an open area in the east. The density of settlement, including the major enclosure complex, coupled with the excavation evidence from the Easton Lane interchange, suggests that this whole landscape was a focus for settlement and farming over a long period.

The second example, from Gander Down and Cheesefoot Head, again shows another area reserved for pasture. Here the landscape is divided up by possible ranch boundaries with a small open area in the centre of the illustration surrounded by Celtic fields (Fig 65). A number of simple discrete enclosures are scattered among the fields, whilst the main centres of settlement are the hilltop enclosure complex at Cheesefoot Head (AHBR 37848), in the centre left of the illustration, and the enclosure complex at Warren Farm (AHBR 24167) towards the lower centre. Networks of trackways, including fan-like dongas in the west, link the settlements and the fields.

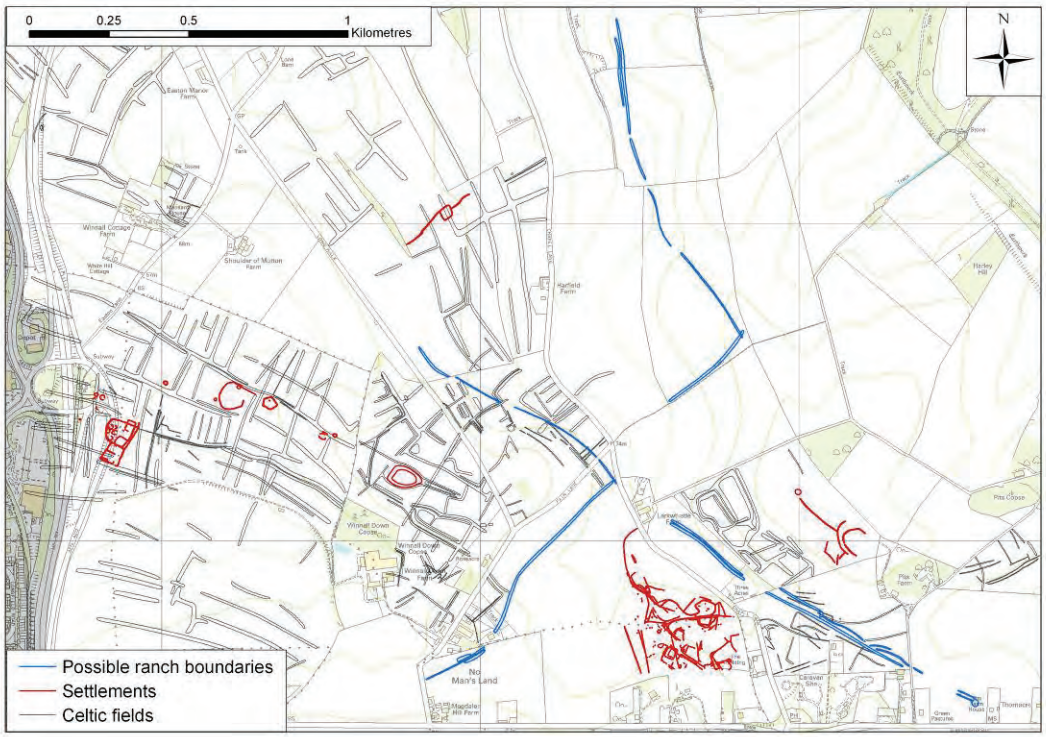

Fig 64. The later prehistoric and Romano-British landscape around Winnall Down, Winchester.

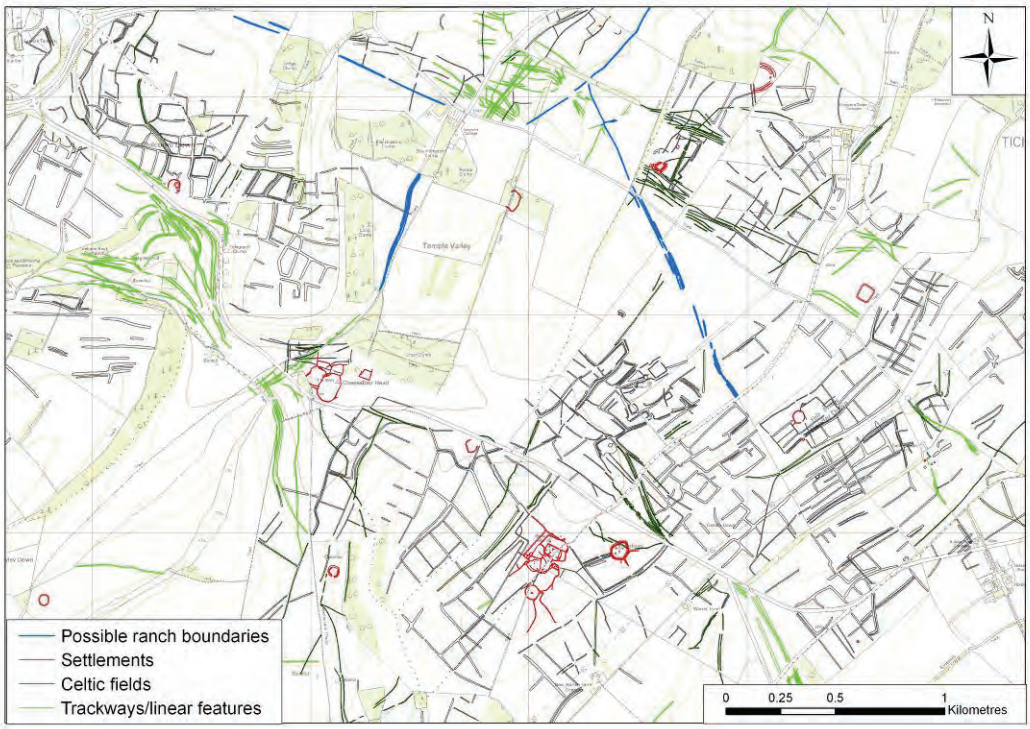

Fig 65. The later prehistoric and Romano-British landscape around Cheesefoot Head and Gander Down.

13 The medieval and post medieval landscape

13.1 Settlement

Few early medieval sites were recorded during the project and of the 40 ascribed a start date of AD410 only nine can be regarded as exclusive to this period. The other 31 should be seen as early medieval/medieval in origin. The nine sites are mostly linear features and include the Froxfield entrenchments (AHBR 18716, 18729, 18730 and ID 174101) which are a series of (probably defensive) ditches with accompanying banks to the northwest of Petersfield, a 2.5km long tree-covered earthwork bank at Colemore (AHBR 19032) and a bank following the parish boundary between Cheriton and Beauworth for 220m at Lane End Farm, Beauworth (ID 170685). The most important early medieval site is the Saxon settlement at Chalton (AHBR 37754) which consists of numerous rectangular post-built halls (Cunliffe 1993, 290-291). Some of these buildings are visible on CUCAP photographs taken in 1972 during one season's excavations at the site and were transcribed during the project.

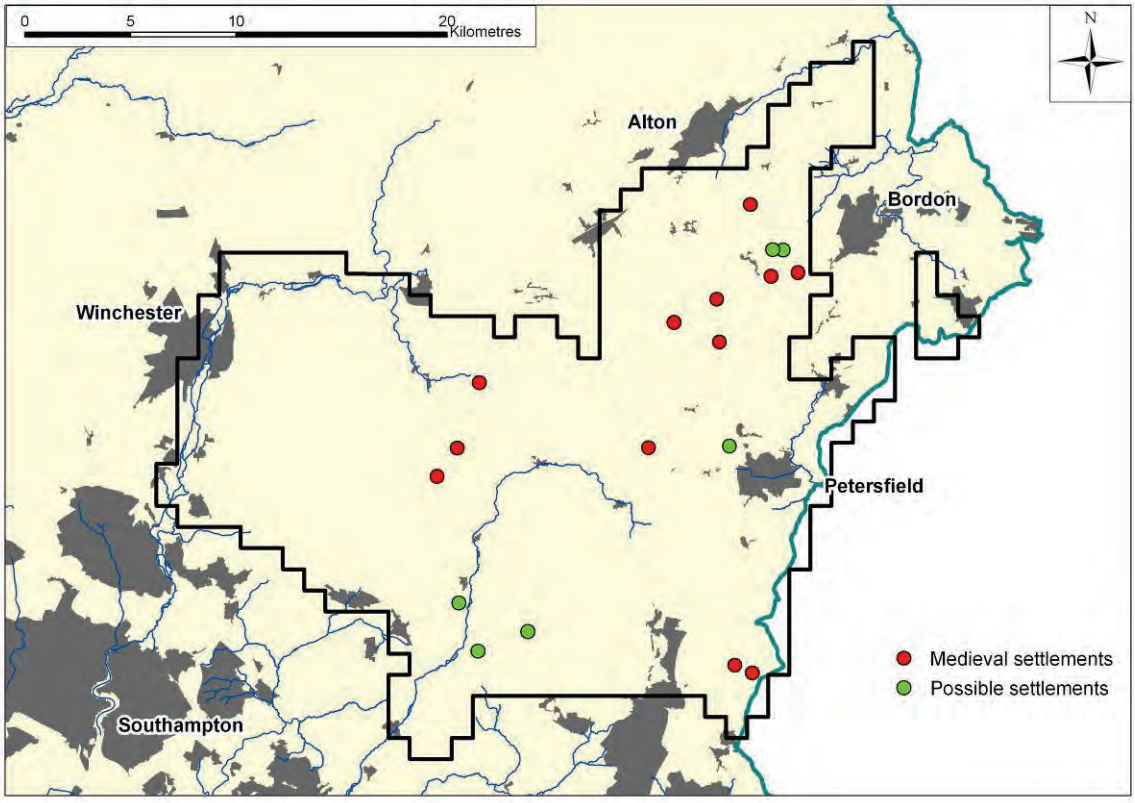

Fig 66. The distribution of deserted or shrunken medieval settlements in the Hampshire South Downs. The map includes the Saxon settlement at Chalton.

Twelve deserted or shrunken medieval settlements were recorded as well as a further six possible settlements (Fig 66). For the most part the settlements are located in the eastern part of the project area, with six in the Greensand landscape. One is situated on the edge of the wooded downland plateau, one is in open downs and the remaining 10 are located in the downland mosaic landscape types. Fifteen of the settlements survive as earthworks and the best surviving example is the scheduled site at Lomer, Exton (Fig 67). This settlement was actually established in the ninth or tenth century and comprises sunken paths, house platforms and a church platform. Previously unrecorded field boundaries (ID 171843 and 171845) to the south and west, probably associated with the settlement, were transcribed during the project. The settlement was abandoned in 1551 (source AHBR).

Fig 67. The deserted medieval settlement of Lomer.
Photo: NMR SU5923/34 15385. 21st August 1995. © Crown copyright. NMR.

Two of the possible settlements, at Rhode Farm (ID 174231) and New Barn Farm (ID 174233) are located close to the remains of Selborne priory (AHBR 17373) and are similar and distinctive in form (Fig 68 and Fig 70 respectively). Both comprise a linear arrangement of earthworks. Although these earthworks are substantial, they are amorphous and ill-defined and both sites are bounded on at least one side by a belt of woodland or a well-treed hedge. It is possible that the earthworks are the result of woodland clearance rather than being settlement remains: this area is heavily assarted and it may be that ground disturbance associated with tree removal has left more of an imprint in the underlying Gault Formation mudstone than in other, harder types of bedrock. Another alternative is that Rhode farm and New Barn Farm were settlements which became tree covered after their abandonment and that the settlement remains were revealed by woodland clearance. This sequence of events is evident at Cuckoo Copse, Newton Valence, where settlement remains are visible on photography from 1978 following recent tree removal. This settlement (ID 174829) consists of a linear arrangement of tofts associated with fields to the south all surviving as low earthworks (Fig 69).

Fig 68. The earthwork remains of Selborne Priory (centre left) and possible deserted settlement at Rhode Farm (lower right).
Photo: RAF CPE/UK/1750/4269. 21st September 1946. © English Heritage. NMR (RAF Photography).

Fig 69. The deserted medieval settlement at Cuckoo Copse, Newton Valence.
Photo: MAL 7804/137. 7th March 1978. © English Heritage. NMR.

Fig 70. The possible deserted medieval settlement at New Barn Farm, Selborne.
Photo: NMR 24795. SU7534/19. 29th October 2007. © English Heritage. NMR.

13.2 The fieldscape

A large amount of previously unrecorded evidence for the medieval and post medieval agricultural landscape is contained on aerial photographs. In total 611 site records for field systems, field boundaries, lynchets, ridge and furrow or cultivation marks with a start date of 1066 were created during the project. A further 27 site records for a similar range of features with a start date of 410 were created. Out of this total of 638 sites, only 34 had been previously recorded: 95% were newly identified as a result of NMP. However, only 20% of the fields have upstanding earthwork remains and generally these are to be found in the north-eastern part of the project area – including the Greensand landscape (Fig 71). The remainder are plough levelled and are only visible as cropmarks or soilmarks.

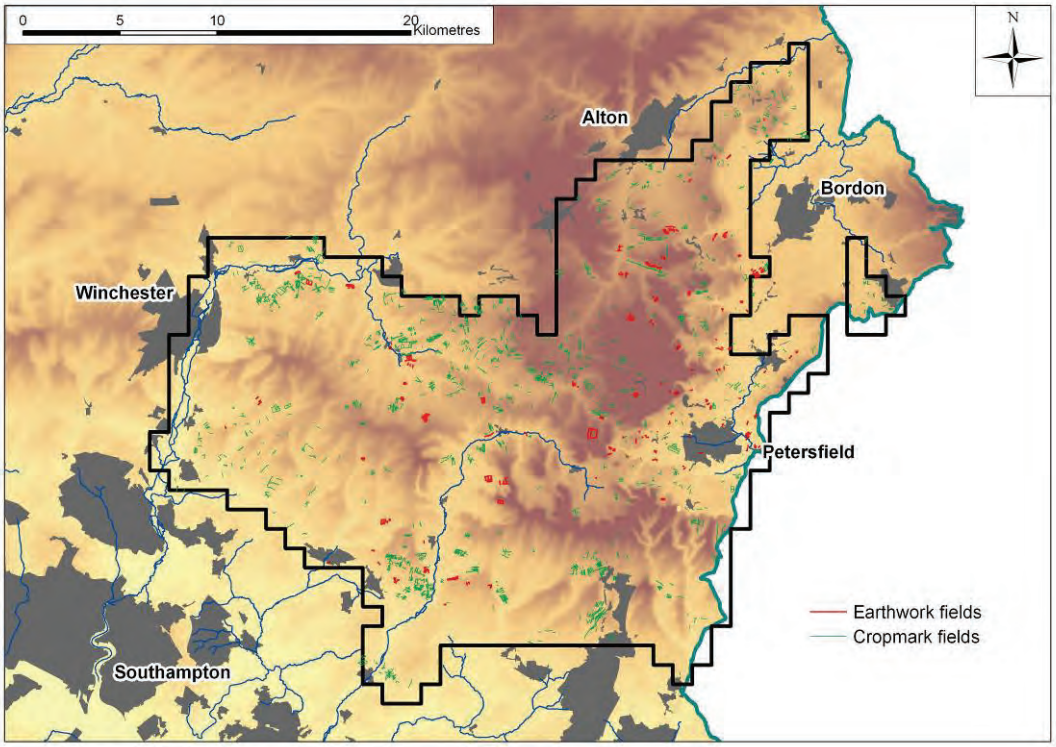

Fig 71. The distribution pattern of medieval fields distinguishing between those with earthwork survival and those visible only as cropmarks.

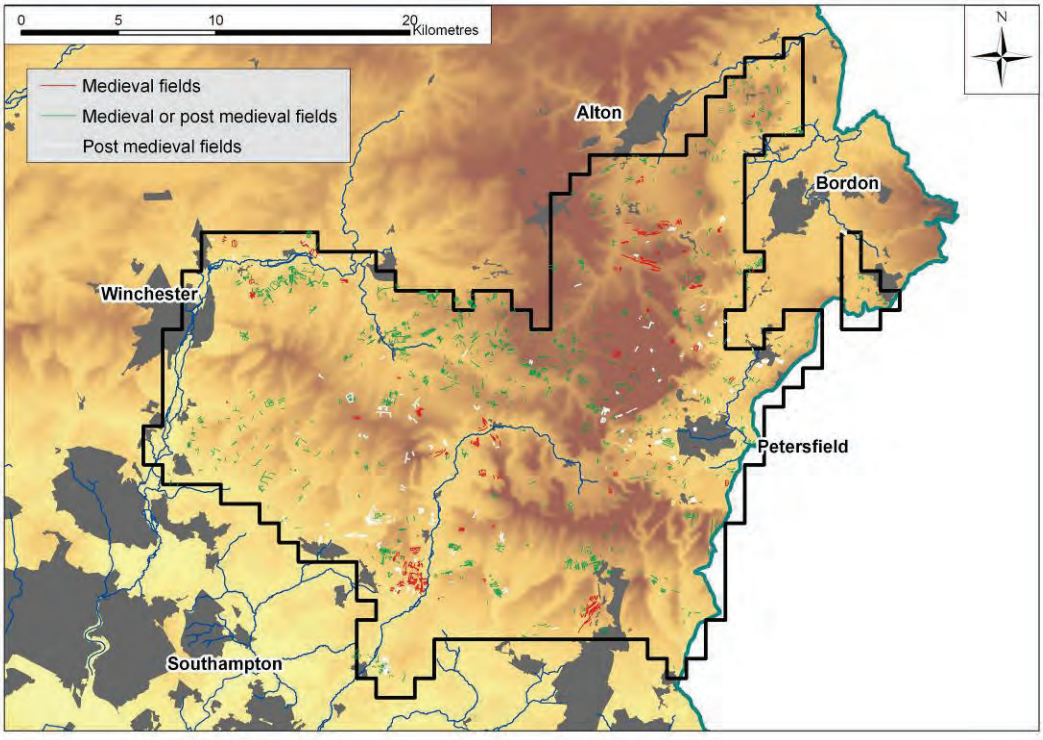

Fig 72. The distribution pattern of medieval fields distinguishing between those exclusively medieval and those interpreted as medieval or later.

Only 11% of the field systems and field boundaries with an early medieval or medieval start date were interpreted as belonging exclusively to this period (with an end date of 1539). The vast majority – 531 – were interpreted as medieval or post medieval (Fig 72). This uncertainty over dating arises from the fact that whilst in places the enclosure of open field systems had begun by the fourteenth century and increased during the sixteenth century (Hare 1994), much of the enclosure and the extension of arable onto the downs took place at a later date. As a result many of the actual field boundaries transcribed from aerial photographs are probably post medieval in date, although they are likely to be fossilising the medieval field pattern. In addition to the 638 field systems and associated features listed above, a further 107 were interpreted as definitely post medieval. Adding to the complexity of the landscape are the 477 field systems and other agricultural features interpreted as prehistoric or later (section 10). Although many of these may be prehistoric some are doubtless medieval in origin or at least were in use in medieval or post medieval times (Fig 73).

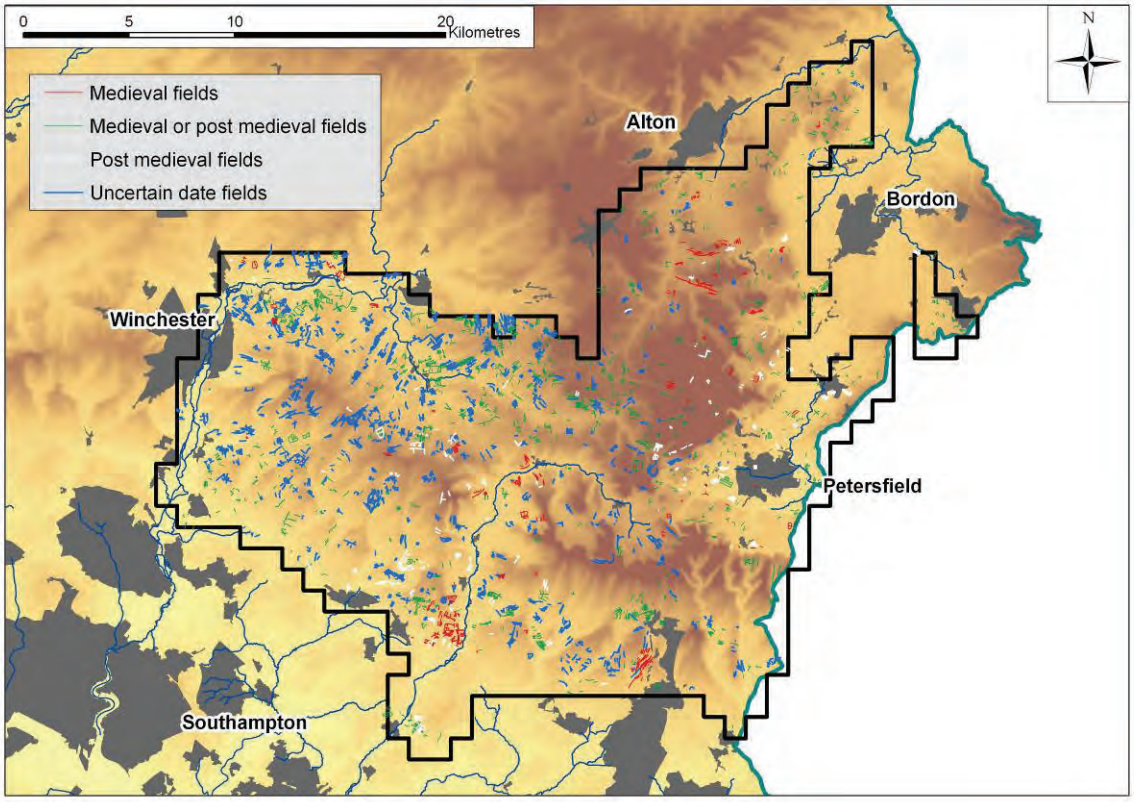

Fig 73. The distribution pattern of medieval and post medieval fields and those interpreted as of uncertain date.

The medieval landscape is most recognisable where the enclosure of open fields has resulted in the construction of field boundaries that encapsulate former strips and furlongs. One of the best preserved tracts is the area around Selborne where some of the field hedges in the present day landscape clearly fossilise groups of two or three strips and where the recent removal of similar hedges is evident on aerial photographs (Fig 74). Here and there in other parts of the project area there are fragments of strip field systems surviving as earthworks (Fig 75) but the sites with extensive remains are, for the most part, plough levelled.

Fig 74. Enclosed strips and furlongs in today's landscape around Selborne.
Photo: RAF /58/8182/ F21/370. 17th July 1967. © English Heritage. NMR (RAF Photography).

Fig 75. Earthwork survival of medieval strip fields at Bramdean.
Photo: NMR 24567 SU6127/4. 16th March 2007. © English Heritage. NMR.

A typical example is West Meon (Fig 76) where, on either side of the river Meon, the imprint of former open field systems is reflected in the sinuous, north-south pattern of present day field hedges and lanes. Within this fossilised framework groups of parallel banks forming medieval strips were identified as cropmarks and soilmarks (AHBR 38545 and ID 173912 and 173917). Another good example of the medieval landscape was mapped around Newton Valence (Fig 77). Towards the top right of Fig 77 are remnants of strip fields; in the bottom left are the earthwork remains of East Tisted manor and fragments of an associated field system; in the centre is a series of contour lynchets running approximately east–west. Short boundaries set at right angles to the contour lynchets are probably post medieval sub-divisions.

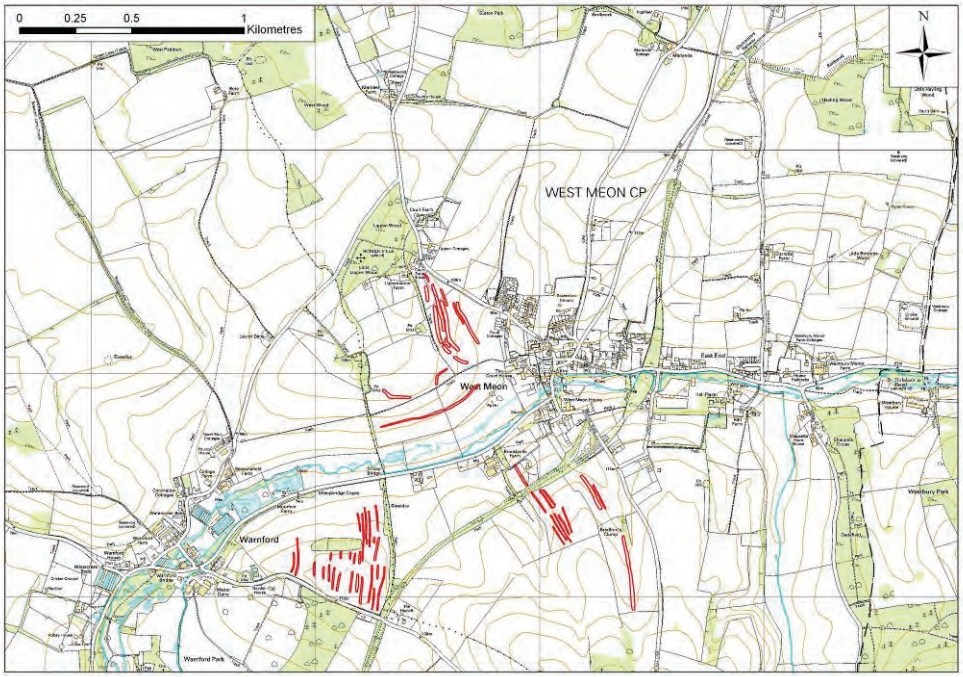

Fig 76. Medieval strips in the West Meon area.

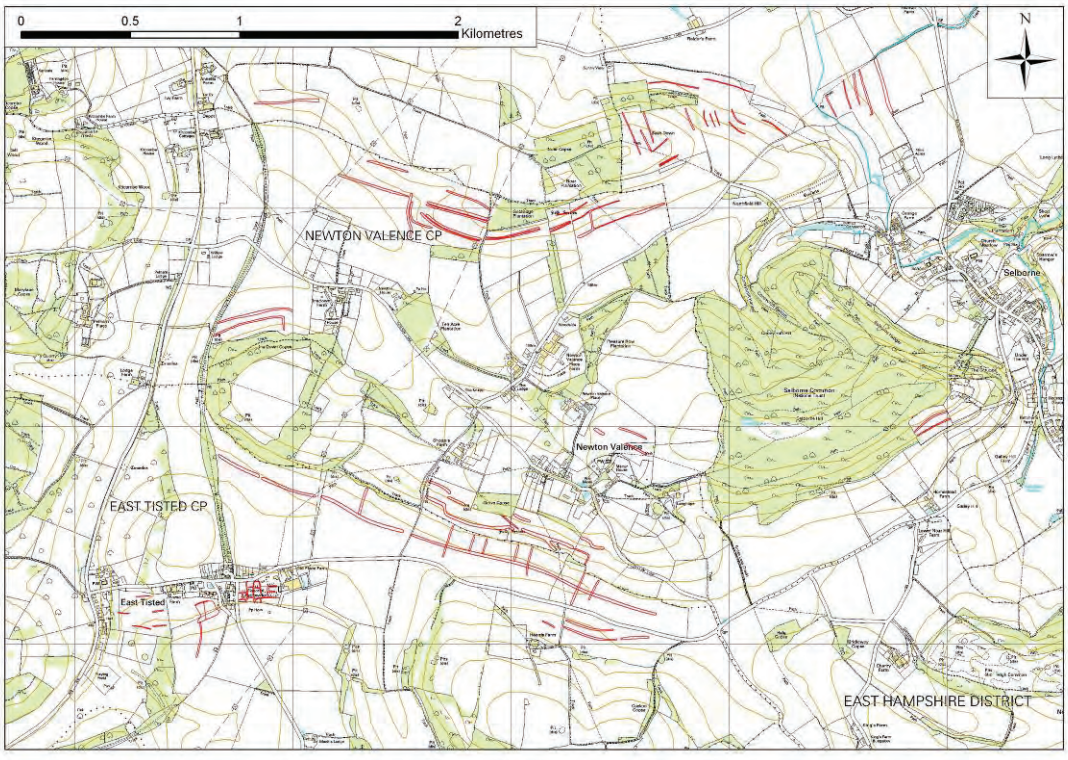

Fig 77. Strip fields and contour lynchets around Newton Valence.

These contour lynchets are unusual as, unlike other parts of southern England, terraced lynchets are rare in Hampshire (Hinton 1996) and this is true of the South Downs, with only 12 medieval lynchets (or lynchet systems) recorded during the project. The most extensive is at Horndean, where cropmark lynchets were transcribed from 1960 Meridian

Airmaps photography (Fig 78). Another unusual aspect of Hampshire's medieval landscape is the rarity of ridge and furrow (only 39 examples recorded). This supports the suggestion that the light, well-drained soils, especially on the chalk, did not require this type of cultivation (Hughes 1994).

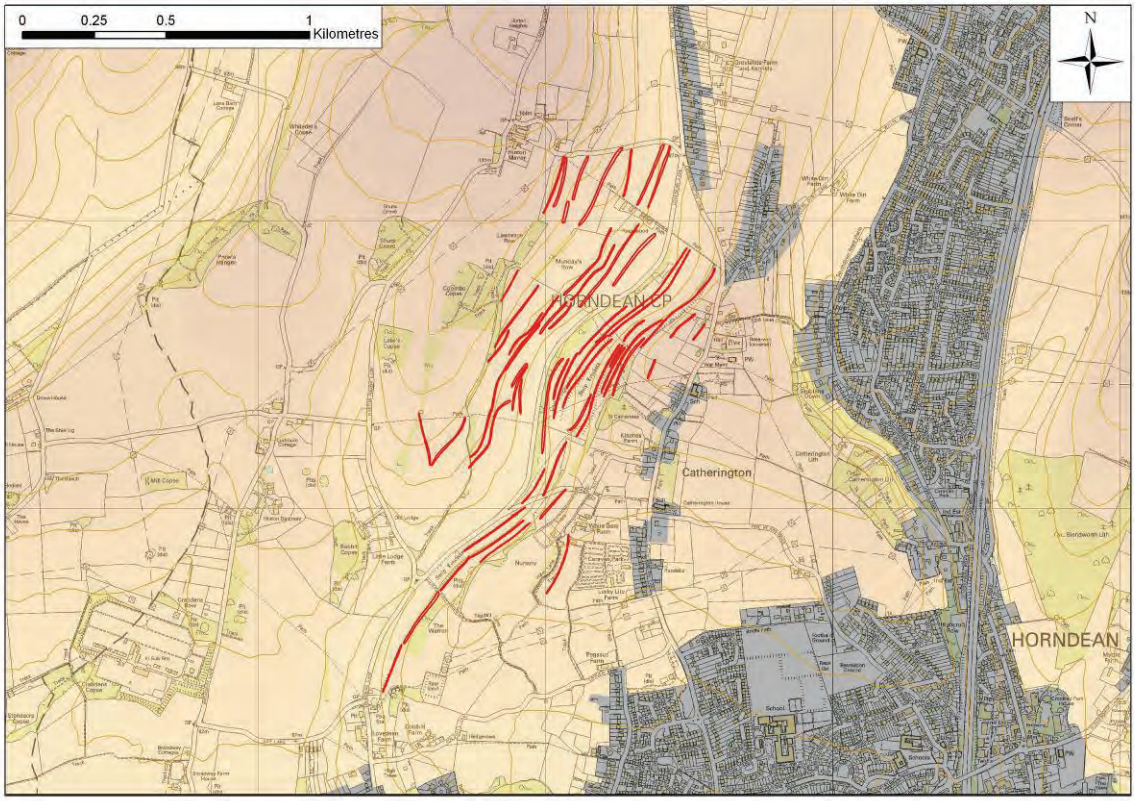

Fig 78. Medieval contour lynchets at Horndean.

Remnants of open fields are most widespread in the Open Downs and Downland Mosaic Large Scale landscapes. The downland economy was based on sheep/corn husbandry, with sheep being grazed on the downland by day and penned by night in the arable fields where their manure served to fertilise the soil. Some of the flocks were very large, with over 2,000 sheep at the manors of Twyford and Meon, and over 1,000 at Hambledon (Hare 1994, 160). Despite this no large rectangular sheep pens such as that at Morton Down, Wiltshire (Hare 1994, 161) were identified during the project.

Over large parts of Wessex the archetypal downland landscape is dominated by long narrow tithings and parishes running up onto the downland from the river valleys. The parishes typically included a settlement in the river valley, a portion of meadowland (between the settlement and the river), fertile arable land above the settlement and beyond that the poorer arable on the downland. However in the Hampshire South Downs parishes of this type are only found around the head of the Itchen Valley: the parishes of Itchen Stoke and Ovington, Tichborne, and Cheriton. In Tichborne coaxial sinuous field boundaries and lanes running roughly southwest-northeast clearly replicate the pattern of former open field landscape (Fig 79). Above the village of Tichborne itself a series of parallel cropmark features were interpreted as field systems of prehistoric or medieval date (ID 170368 and ID 170813). Although these features are most likely to be the remnants of medieval strips, the fact that they have been much spread by ploughing (some are almost 10m wide) and are on the same alignment as the prehistoric lynchetted fields higher up the downs (shown in green in Fig 79) suggests that they might be prehistoric.

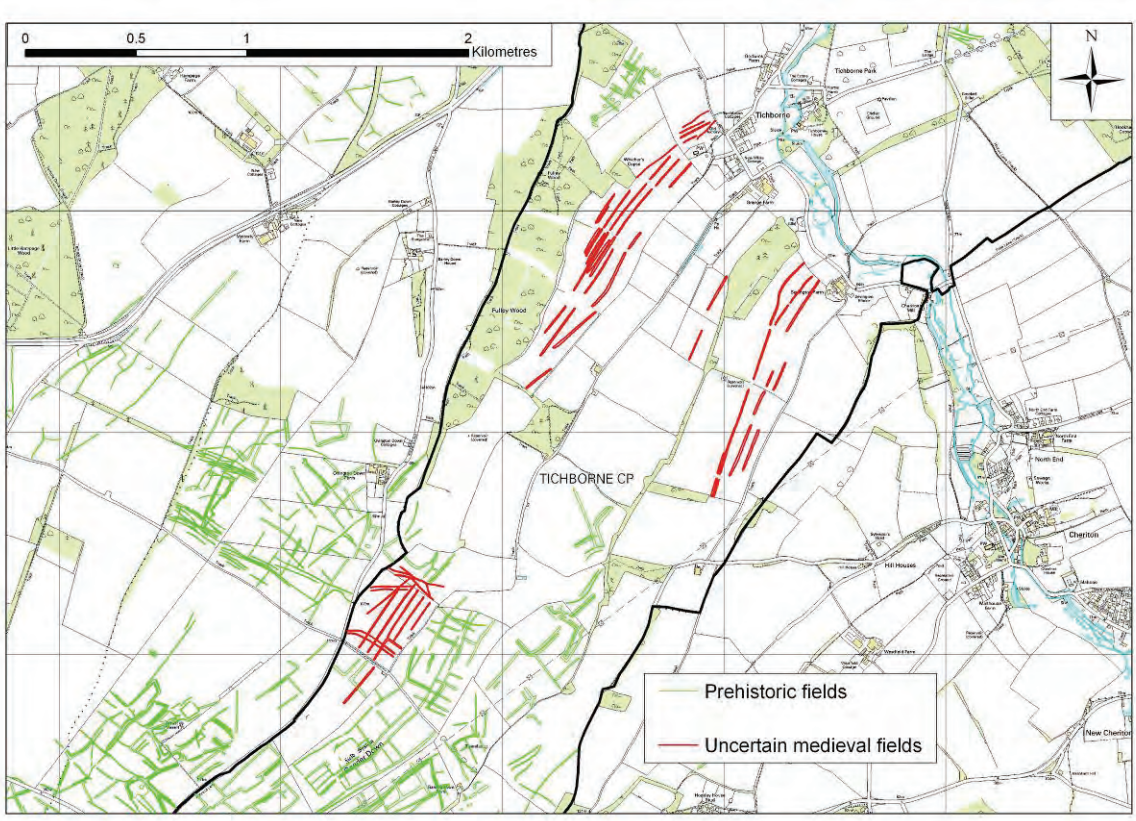

Fig 79. Possible medieval strip fields in the parish of Tichborne. The parish boundary is shown as a solid black line.

An interesting possibility is that in Tichborne the prehistoric field pattern was later used as a template, with the main lines of the medieval fields laid out on the same alignment. Other examples where this might also be the case include Exton and Chalton (Figs 80 and 81). At Exton the field pattern has been substantially altered in recent times but a series of sinuous parallel features are roughly aligned with the line of the parish boundary, which follows the road towards the top right of the illustration. At Chalton there are extensive field systems which are probably Roman in date (towards the upper left in Fig 81) and are associated with a number of nearby settlements. The Roman fields are typically around five times longer than wide (see section 11.5). Towards the bottom right of the Fig 81, however, is a series of sinuous boundaries running southeast–northwest and forming long, narrow strips apparently without sub-dividing cross boundaries. It is possible that these boundaries were laid out in the Roman period (or maybe earlier) and the medieval open fields have re-used the existing field pattern. The most developed instance of this possible sequence is on Winnall Down (Fig 82) where the pattern of fields and lanes appears to have been established at an early date by coaxial Celtic fields containing settlements, and has been perpetuated into the medieval period. In fact it is impossible from aerial photographic evidence alone to disentangle the medieval fields from those which are earlier in this particularly complex landscape.

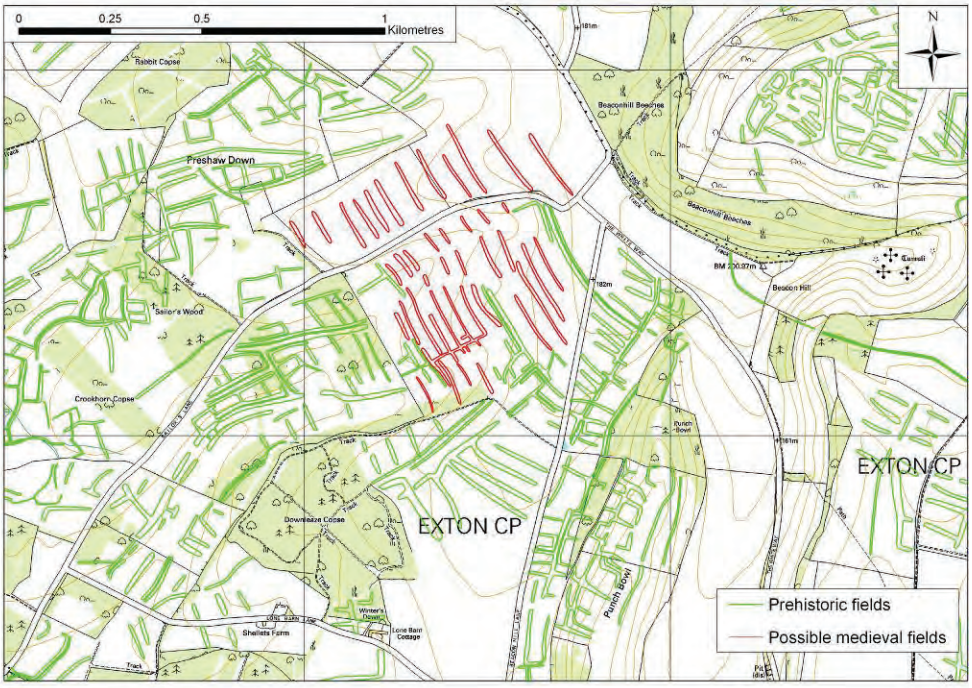

Fig 80. The field pattern around Exton.

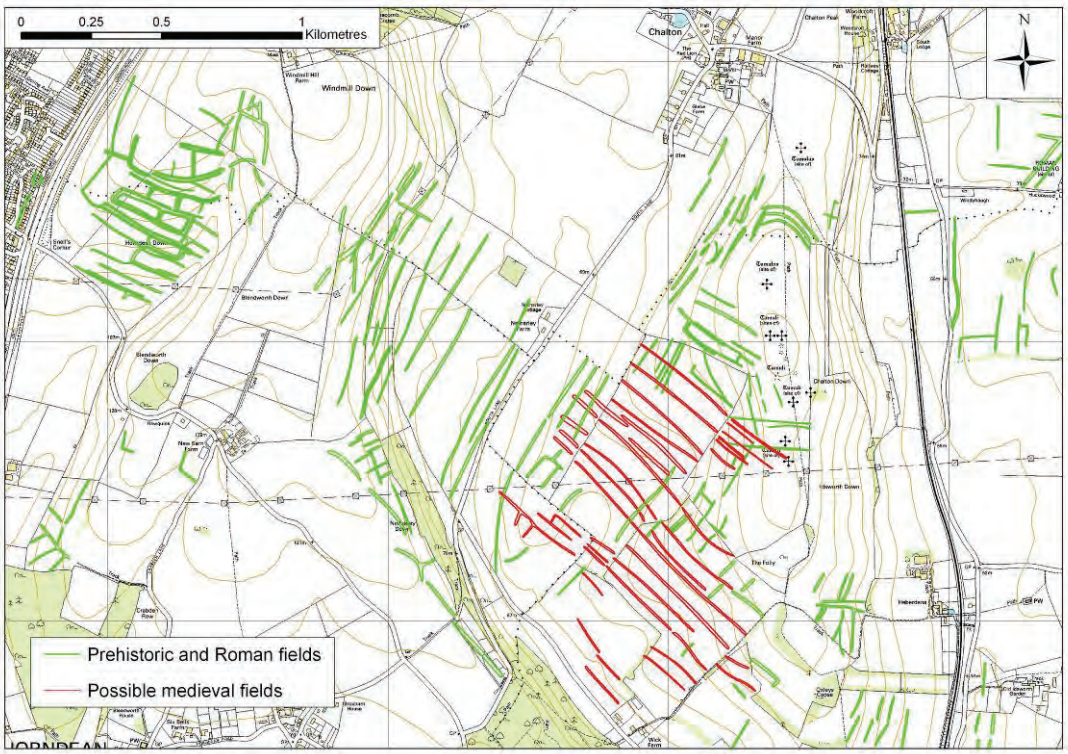

Fig 81. The field pattern around Chalton.

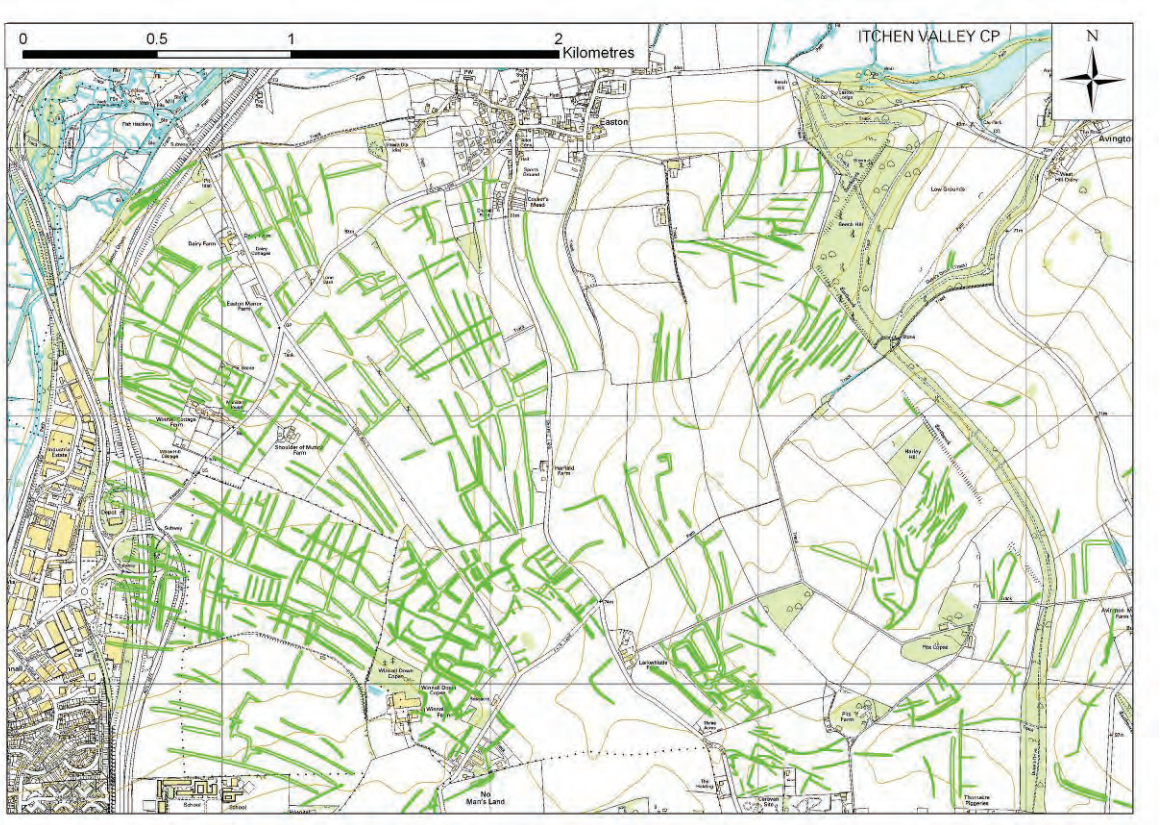

Fig 82. The field pattern at Winnall Down.

In many places the pattern of former strips and furlongs is much less clear in the present day landscape and where field systems have been mapped in these areas their dating is more uncertain. The landscape to the north of Swanmore, for example, is classed in the HLC as small wavy fields where the process of informal piecemeal enclosure probably began in the late medieval period and continued beyond that date to produce a dense network of small irregular fields (Fig 83). Field boundaries mapped here by NMP fit into this overall irregular pattern and probably belong to more than one phase of enclosure. To the east of Swanmore the creation of orchards and a large market garden has resulted in much recent boundary removal. NMP mapping here reveals possible traces of open fields intermingled with smaller rectilinear fields similar to those in the west; again the features probably reflect more than one phase of enclosure between the late medieval and eighteenth or nineteenth century.

At Binsted, in the north eastern corner of the project area, the landscape is one of large wavy fields (where there has been significant recent boundary removal) interspersed with assarts (Fig 84). To the north of Binsted village (top centre in Fig 84) very fragmentary remnants of enclosed furlongs are reflected by a number of curved boundaries but to the south of the village a series of straight boundaries are most likely to result from post medieval enclosure. The fieldscape around the village of Kilmiston is one of nineteenth century Parliamentary enclosure and field boundaries mapped here by NMP fit into the pattern of small straight-sided rectangular fields (Fig 85). Two kilometres to the east, in Bramdean parish, the fields are of the small wavy type. Although the line of former open strips can be traced possibly running northwest–southeast the enclosed strips have been broken up and sub-divided into small irregular rectangular fields and it is uncertain whether this sub-division was part of the original late medieval enclosure process or whether it represents a later (post medieval) rearrangement.

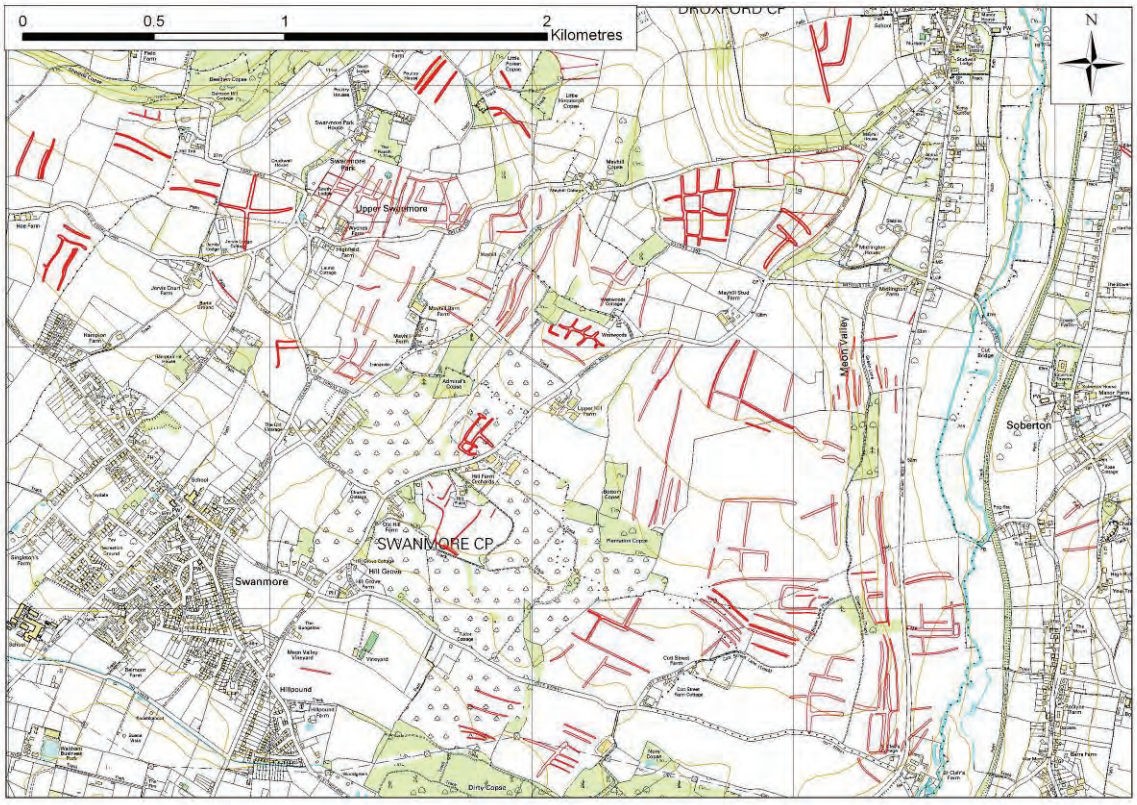

Fig 83. The medieval and post medieval field pattern around Swanmore.

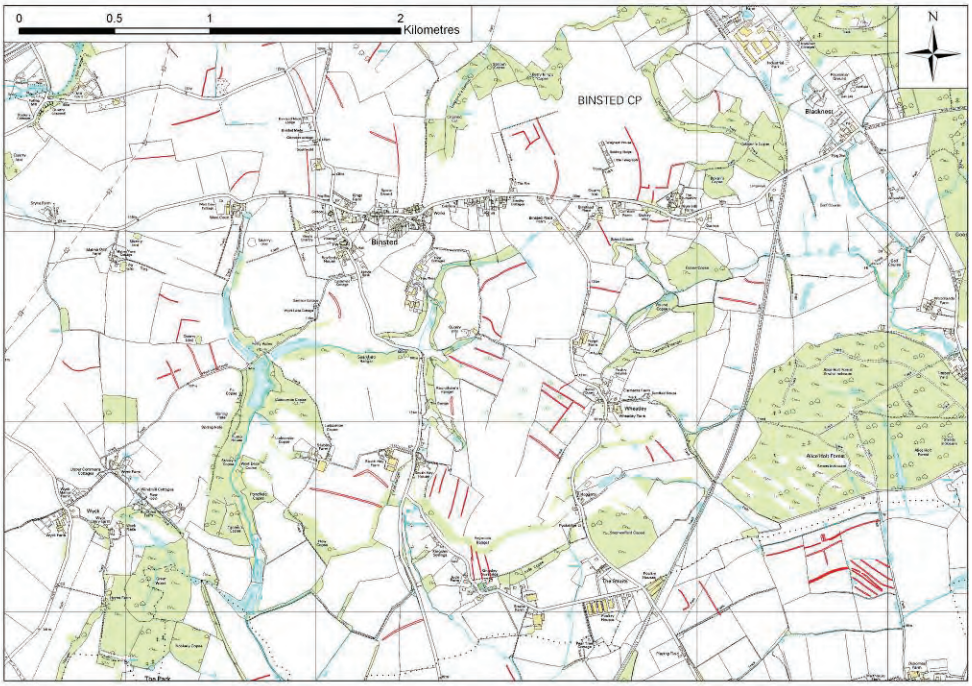

Fig 84. The medieval and post medieval field pattern around Binsted.

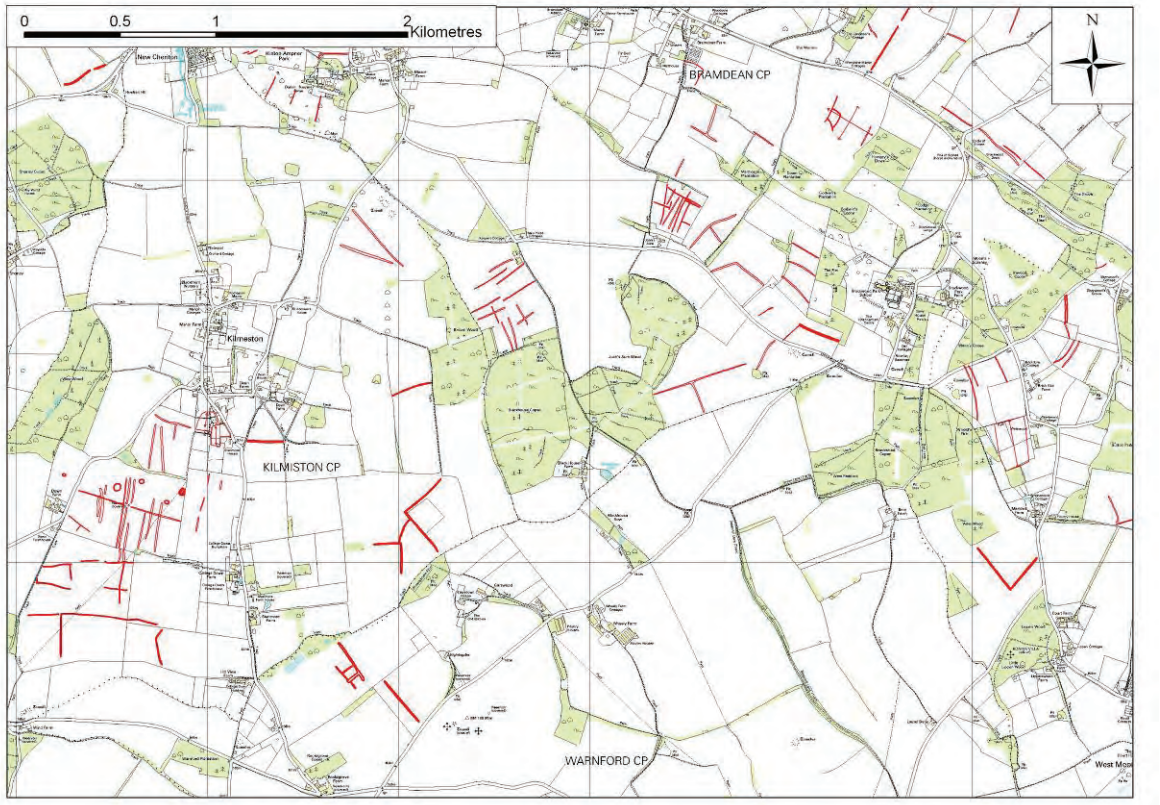

Fig 85. Post medieval fields around Kilmiston.

13.3 Other elements of the landscape

13.3.1 Dewponds

Given the importance of sheep to the medieval and post medieval downland farming regime and the relative lack of reliable water supplies in some parts of the downs, it is likely that substantial numbers of dewponds were dug to sustain the flocks. These were typically circular, or sometimes rectangular, clay-lined hollows designed to collect rainwater. Prior to the NMP project only one dewpond was recorded in the AHBR (at Hazeley Copse, Twyford: AHBR 25646). During the project 224 possible dewponds were identified, the majority recorded as cropmarks. It was impossible in most cases, however, to distinguish between the cropmark remains of dewponds and small scale chalk extraction. As a result almost all the possible dewponds were double indexed as dewpond/chalk pit. The overall distribution of these double indexed features to some extent replicates that of chalk pits (Fig 97) with a considerable number located in areas of clay-with-flints. Only 14 sites were interpreted definitely as dewponds (not double indexed as chalk pits) and their distribution is shown in Fig 86. Two of the dewponds, at Gander Down (ID 170740) and Durden Lodge, Cheriton (ID 170843), are rectangular; all the rest are circular. Six of the ponds have earthwork remains and one of the best examples (ID 173984) is that just inside the eastern entrance to the hillfort on Old Winchester Hill (Fig 54). Twelve of the records are for single ponds, two in close proximity were mapped at War Hill, East Meon (ID 171744) and at Bramdean Common seven dewponds were recorded (ID 171239). In these instances it is likely that fresh ponds were dug to replace existing ones nearby whose clay lining had become damaged by trampling.

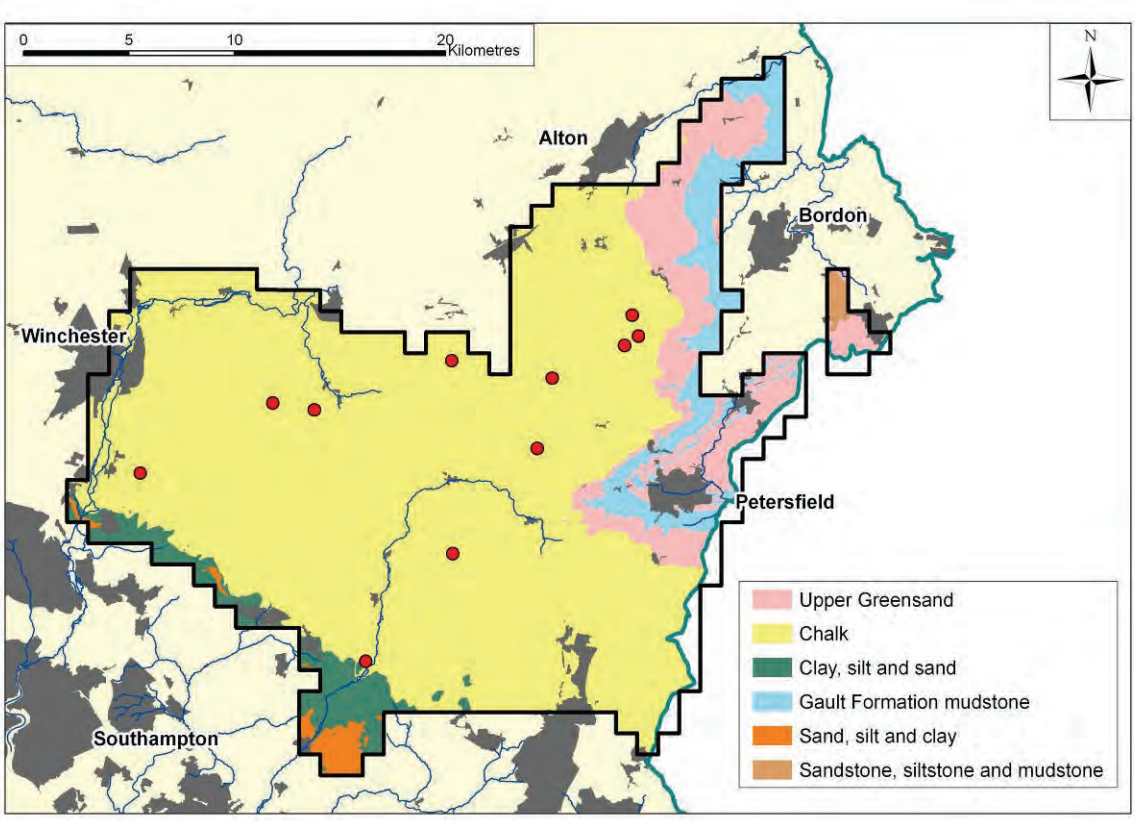

Fig 86. The distribution of post medieval dewponds.

13.3.2Water meadows

In Hampshire water meadows are a regionally important and distinctive historic landscape from the post medieval period. They are pasture irrigation systems designed either to increase total grass production or to bring the growth of grass forward in the agricultural year. The operation of water meadows – known as 'floating' - required a considerable degree of management, distinguishing them from grazing marshes and flood meadows, which are naturally floodable areas. During the project extensive water meadows were mapped throughout much of the Itchen valley, the lower part of the Meon valley and at a few locations in the northeast.

Two basic types of water meadow were identified during the project. The first are frequently complex and extensive bed systems in the flood plains of the major rivers, especially the Itchen. They consist of networks of parallel ridges and channels often covering many hectares. Water was diverted from the river through leats or 'carriers' from which it was then fed into gutters cut into the tops of grass ridges. Floating of the meadows by opening sluices was carried out in winter or early spring, after which the meadows were drained before being grazed.

The second type consists of a far simpler arrangement with few channels (sometimes with just one main channel) and floating the meadow was achieved by allowing the channels to overflow. Water meadows of this type were mapped along a tributary of the Wey at Liphook, where the meadows are recorded on a covenant document from 1690 (AHBR 35032) and along the Wey near Bentley (ID 173675 and 173676). At Oakhanger a drainage system along the Oakhanger Stream (ID 174837) may in fact represent the re-use of a former water meadow (Fig 87).

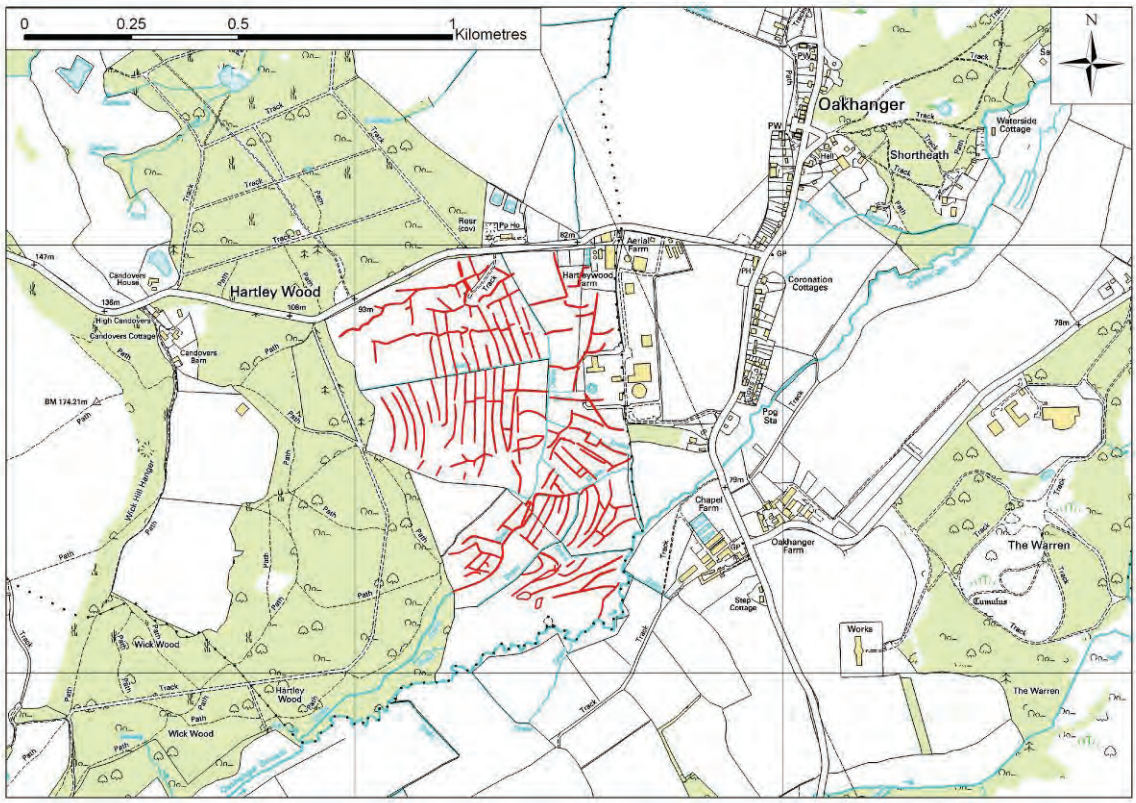

Fig 87 Post medieval drainage system and possible water meadow at Oakhanger.

The process of floating made early growth possible by warming the soil and it boosted fertility through the deposition of nutrient-rich sediments from the river water. After the early crop had been grazed the meadows were rewatered to produce a hay crop. Water meadows were an effective means of producing a reliable hay crop and they spread rapidly from the sixteenth century. They also served to increase the productivity of cereal crops: livestock grazing on the meadows by day were herded overnight in the arable land where their manure provided fertiliser for the crops.

Bed systems are most extensive and well developed around Winchester (Fig 88) but there are well preserved examples at Itchen Abbas and Itchen Stoke, and in the Meon at Meonstoke and Warnford Park (Fig 89), where the meadows may be associated with the sixteenth century manor house (AHBR 54015) or, possibly with St John's House, a thirteenth century hall (ID 173922).

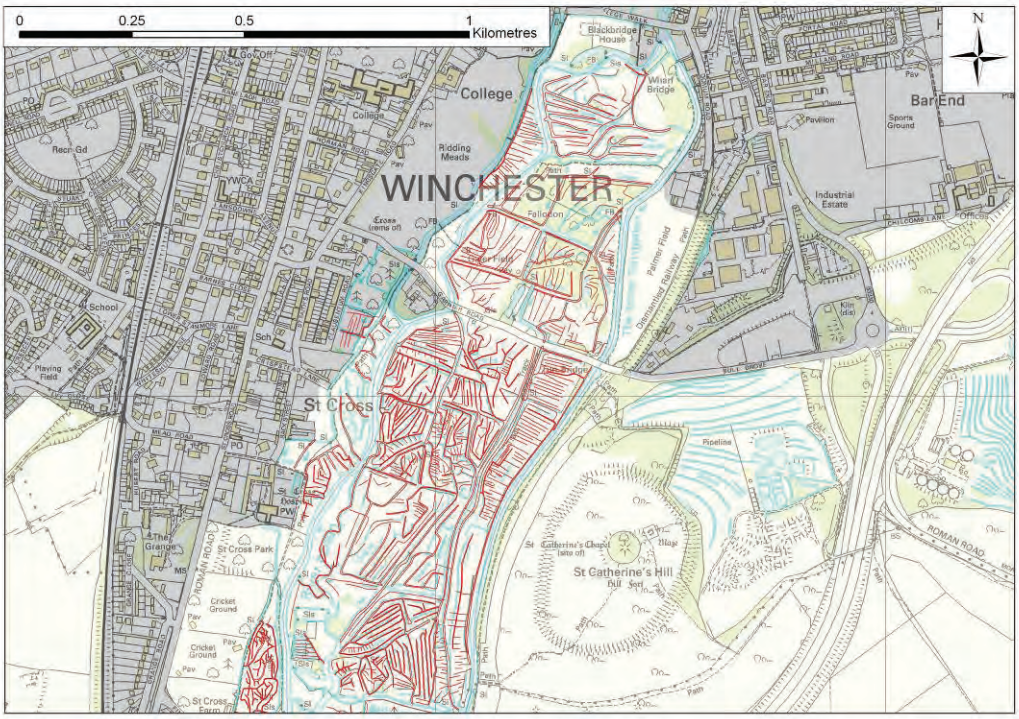

Fig 88. Post medieval water meadows at Winchester.

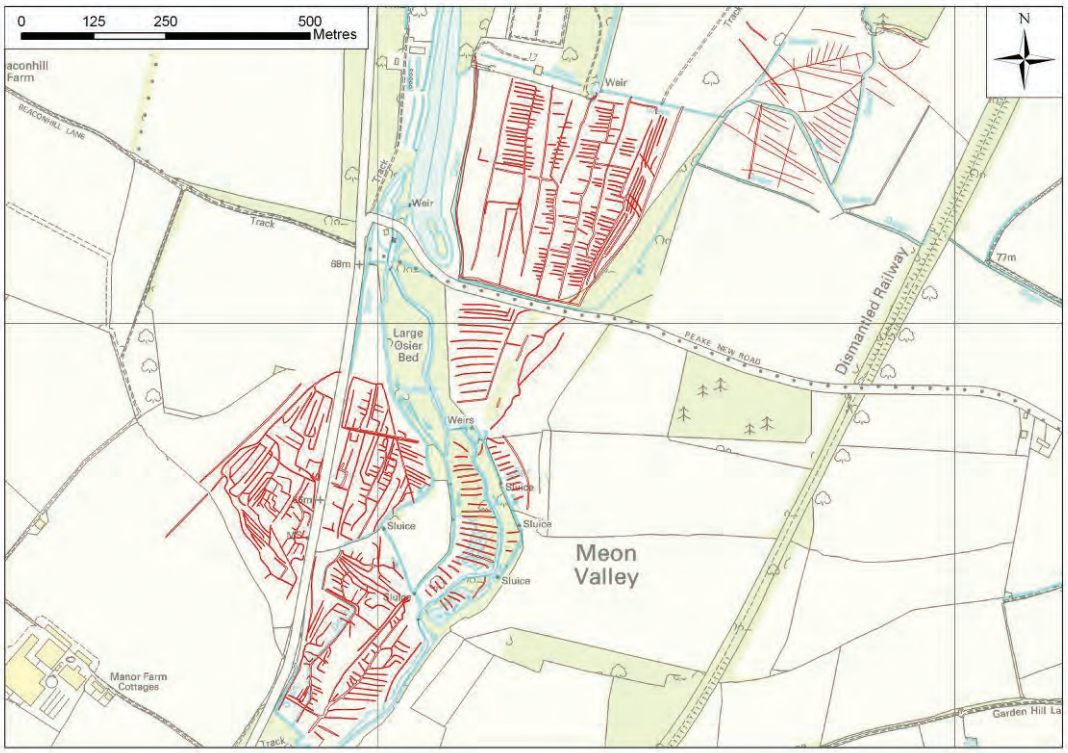

Fig 89. Post medieval water meadows at Warnford Park.

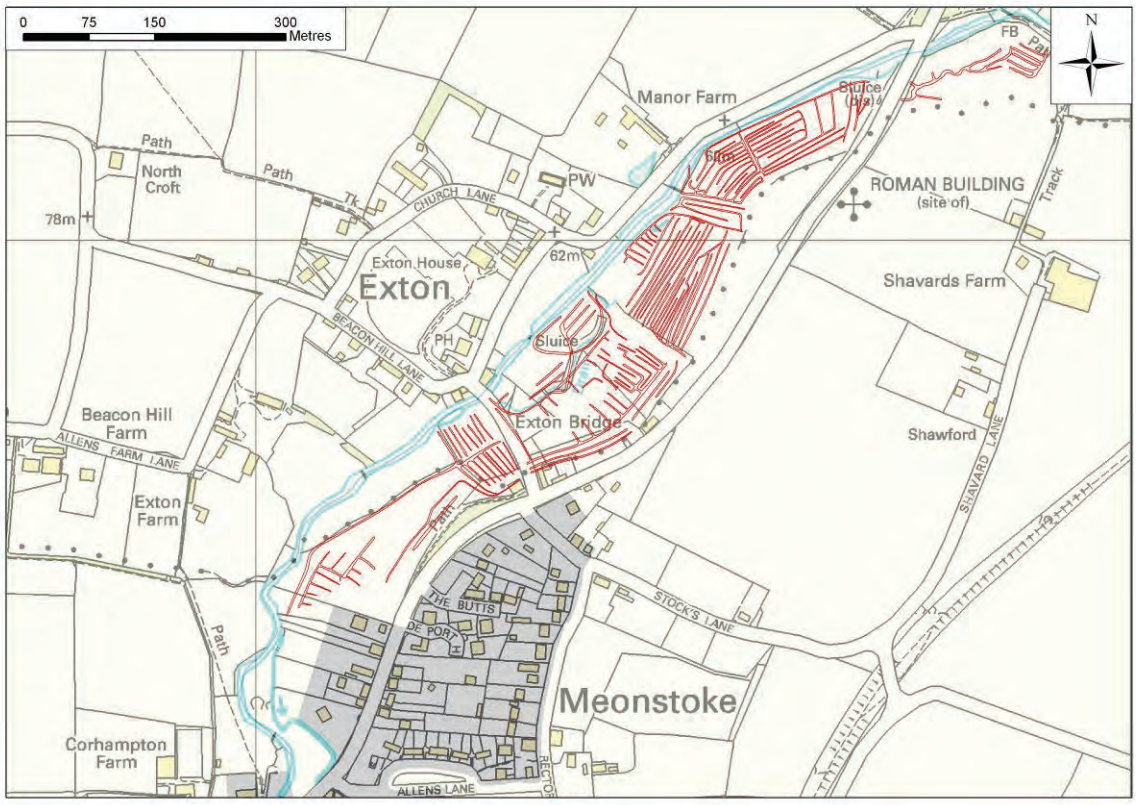

Fig 90. Post medieval water meadows at Meonstoke.

13.3.3Woodland features

Hampshire was the most extensively afforested county in England (Bond 1994) and as well as the New Forest there were at least ten other royal forests. The southern fringe of the project area includes part of the Forest of Bere Portchester, the easternmost parts of the area include a portion of Woolmer Forest and in the northeast the project area includes part of Alice Holt Forest. As well as being valued for the hunting of deer and providing pannage for pigs the forests were a source of timber and wood production.

Coppicing was practiced from the late thirteenth century (Bond 1994, 129), whereby a stand of trees was enclosed by a bank for protection against grazing animals. Underwood was cut for fuel, fencing and charcoal production; standard trees were used for structural timbers. The practice of coppicing was replaced in the late seventeenth century by the establishment of timber plantations in which no underwood was grown (Smith 1999, 50).

Medieval wood boundaries were often irregular and rambling, whereas later wood banks were progressively smaller; from the eighteenth century onwards they were usually straight-sided. The boundaries consisted of a substantial stock-proof (and deer-proof) bank with an external ditch. Woodland enclosures can vary in size from a few hectares to many tens of hectares (Smith 1999).

A small number of woodland enclosure boundaries were identified during the project: the best example is that in Rookesbury Park, Wickham (Fig 91) where a number of linear banks were mapped (AHBR 35423). Some or most of these are likely to be the remains of post medieval woodland enclosures – those towards the bottom right are forming rectangular enclosures roughly 3ha in area. An example of a later plantation enclosure is that at Shepherds Down, Droxford (Fig 92), where a straight-sided enclosure covering 7ha is visible as a cropmark ditch and bank (ID 172133).

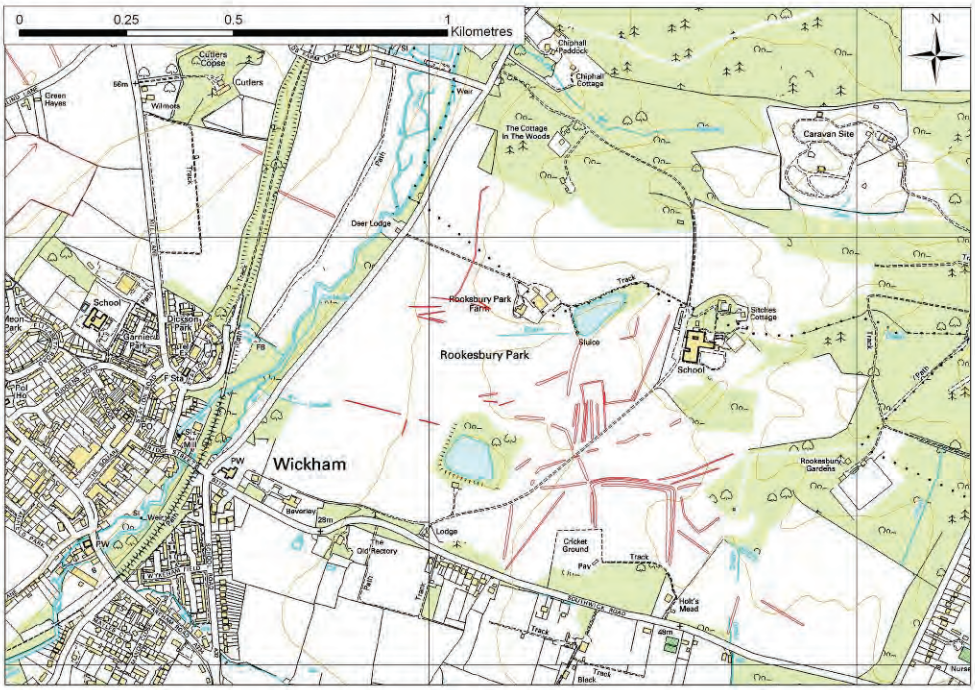

Fig 91. Woodland enclosure boundaries at Wickham.
© **Crown Copyright 2006HCC 100019180**. Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's Stationery Office

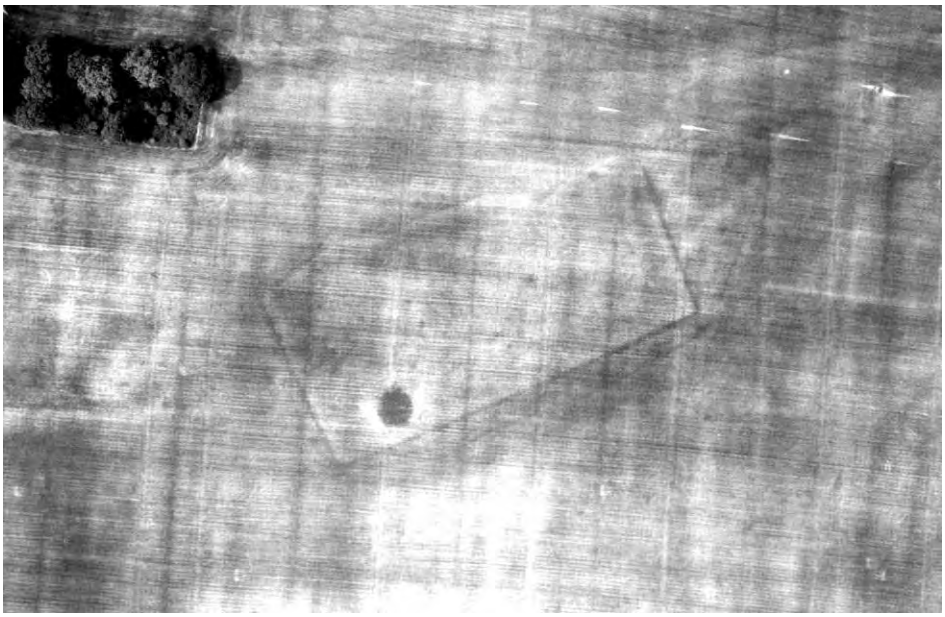

Fig 92. A woodland enclosure at Shepherd's Down, Droxford.
Photo: NMR 954 SU5819/7/254. 2nd June 1976. © Crown copyright. NMR.

Although there is no well documented charcoal industry in Hampshire a large number of features were mapped during the project that suggest charcoal production was far more extensive than previously realised. These features consist of small dark circular cropmarks and are always associated with woodland (Fig 93). Whilst their precise function and origin are open to conjecture there are two alternative most likely interpretations. Firstly they could result from woodland clearance where, following the removal of standard trees for timber, the underwood and brush was stashed in a series of piles and then burnt. The second alternative is that the cropmarks are caused by charcoal burning platforms. The charcoal making process typically covered a large roughly circular area of ground. It

involved building a large woodpile from the centre outwards, covering the completed woodpile with earth or turfs and using a central flue to maintain the burning process. In either alternative the 'cropmarks' result from the deep staining of the soil caused by burning.

Fig 93. Cropmarks of possible charcoal burning platforms at Monkwood, East Tisted (ID 171019.
Photo: MAL 8202/085. 3rd March 1982. © English Heritage. NMR.

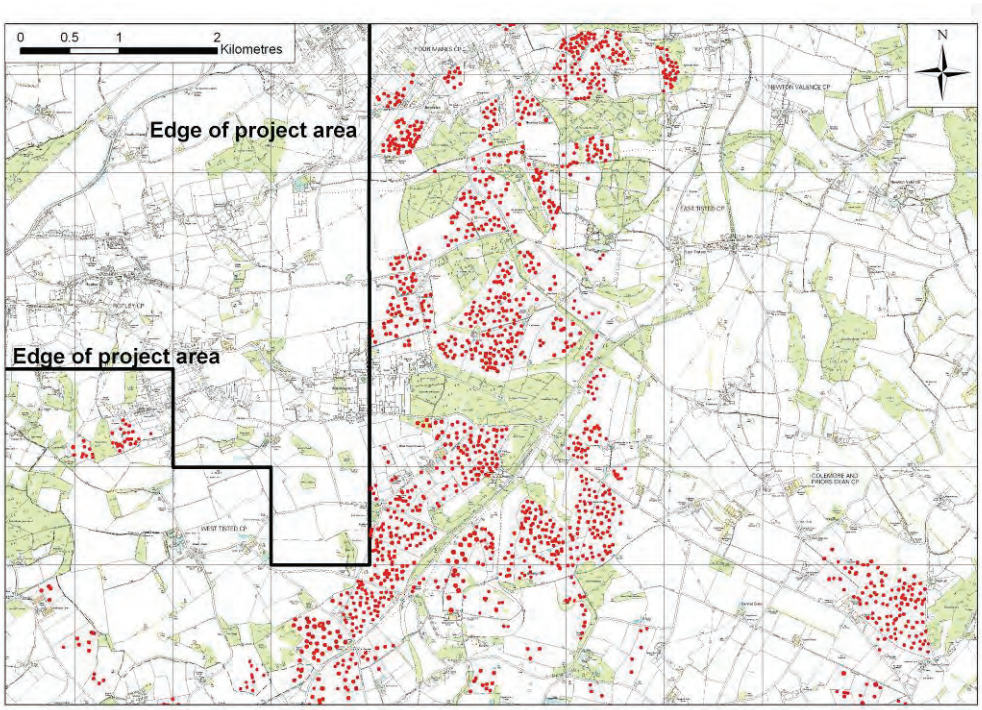

Fig 94. Distribution of possible charcoal burning platforms around East Tisted.

Because of the uncertainty over interpretation these features were entered into the project database as 'assarts'. In total 106 records for assarts were created and each record usually describes a large number of individual features. Some idea of the density of the features can be gained from Fig 94 which shows a 70 km^2 area around East Tisted, some of which is outside the project area. Within this area there are more than 1,500 individual cropmark features. The assarts are centred on East Tisted but they have been recorded elsewhere (Fig 95). Their overall distribution, however, is concentrated in the wooded downland plateau landscape, where 70% are located.

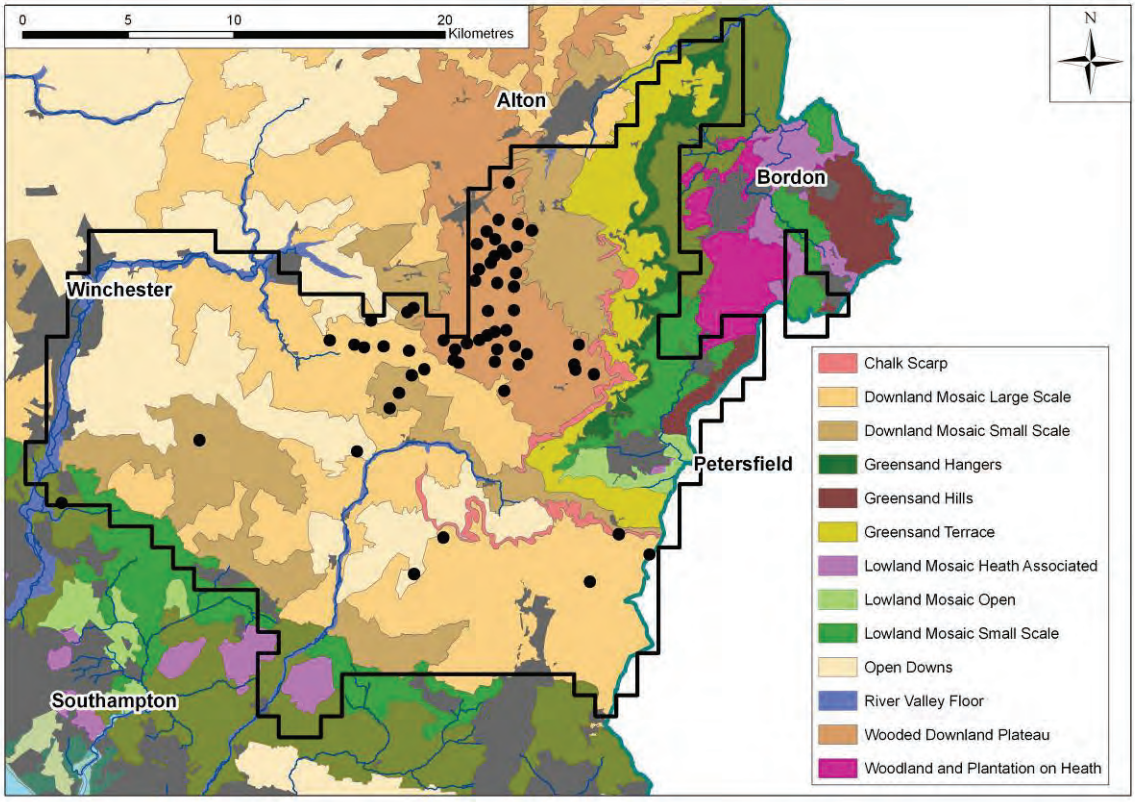

Fig 95. Distribution of possible charcoal burning platforms in the Hampshire South Downs.

13.3.4Chalk pits

A large number of quarries, extractive pits and chalk pits were mapped during the project. Most of the sites interpreted as quarries and extractive pits are located in the chalklands and they form a widespread and distinctive element of the chalk landscape. In total 652 chalk pits (including those interpreted as quarries) were mapped, 62% or which were recorded as earthworks and 38% as cropmarks. Only eight of the pits were previously recorded in the AHBR and four of these were mistakenly listed as Bronze Age barrows (AHBR 18234, 26220, 26276 and 37268 – this latter was listed as a possible ring ditch). Six of the pits were ascribed an uncertain date, 19 were interpreted as possibly medieval or later, two date from the twentieth century and the remaining 625 were interpreted as post medieval.

None of the quarry sites is extensive; the larger ones being typically up to 80m across. The largest, at Noar Hill, Newton Valence (ID 174850), is also the most interesting in that it consists of extensive surface workings which are likely to date back to the medieval period or possibly earlier (Fig 96).

Fig 96. Medieval chalk quarrying at Noar Hill, Newton Valence.
Photo: RAF CPE/UK/1750/3270. 21st September 1946. © English Heritage. NMR (RAF Photography).

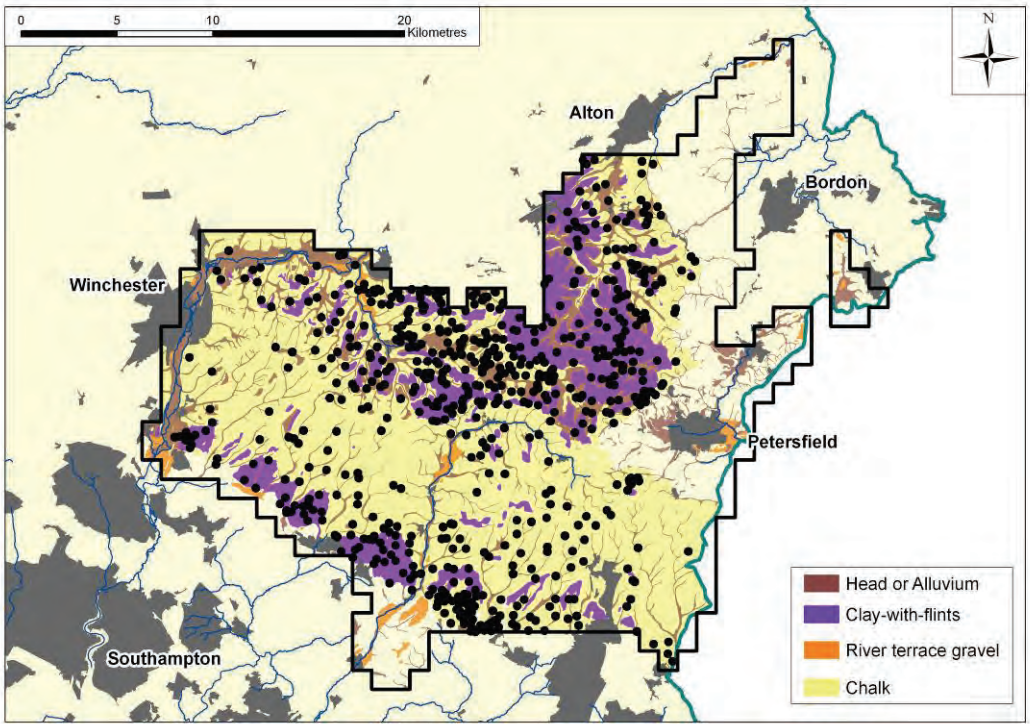

Fig 97. The distribution of post medieval chalk pits in the Hampshire South Downs.

The vast majority were small scale workings to extract agricultural chalk and their distribution bears this out, with the pits tending to be located in areas of clay-with-flints (Fig 97). Chalk would have been excavated from beneath the clay in order to improve the

soil texture and fertility. Whilst some appear to be simple, shallow workings, others would have been considerably deeper excavations, such as the denehole (NMR 235201) revealed by excavations at Corhampton Down. The two densest concentrations of chalk pits occur to the south of Hambledon in the south and around West Meon, Bramdean and Froxfield to the north of the Meon (Fig 98).

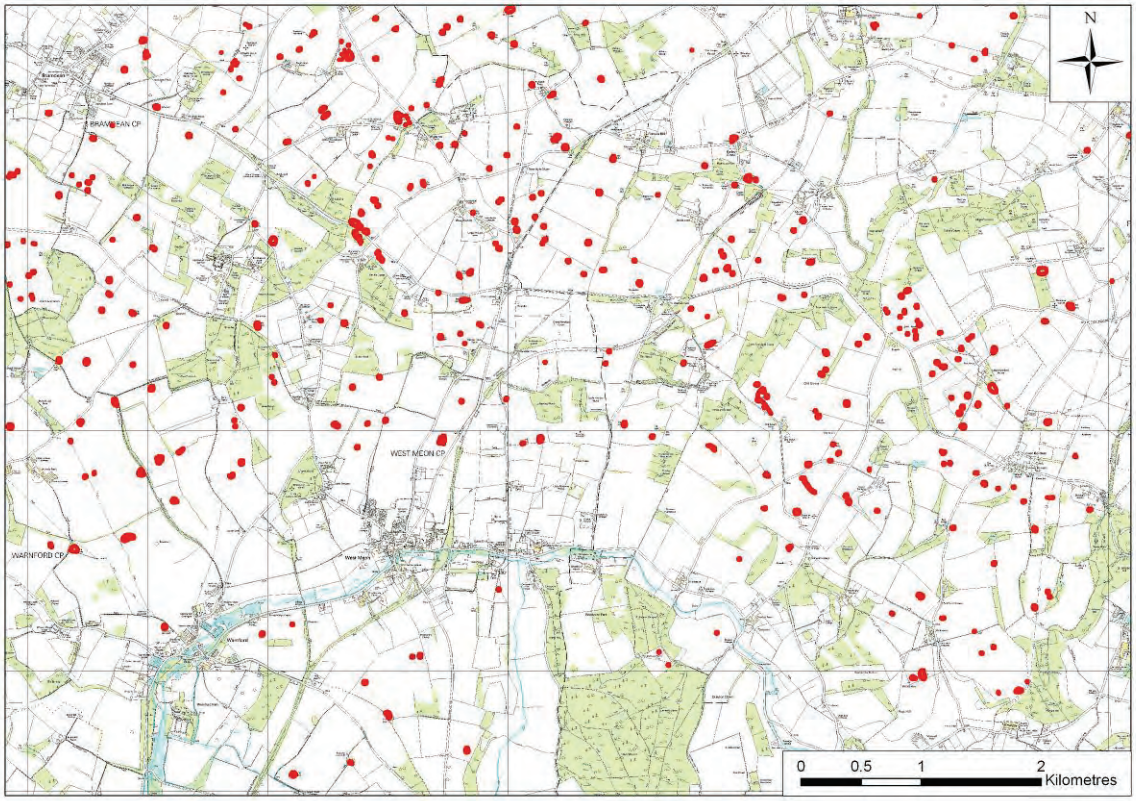

Fig 98. The distribution pattern of chalk pits to the north of the river Meon.

14 Twentieth century military and defensive features

A total of 62 sites dating from the twentieth century were identified and mapped by NMP, most of them in the south and west of the project area (Fig 99).

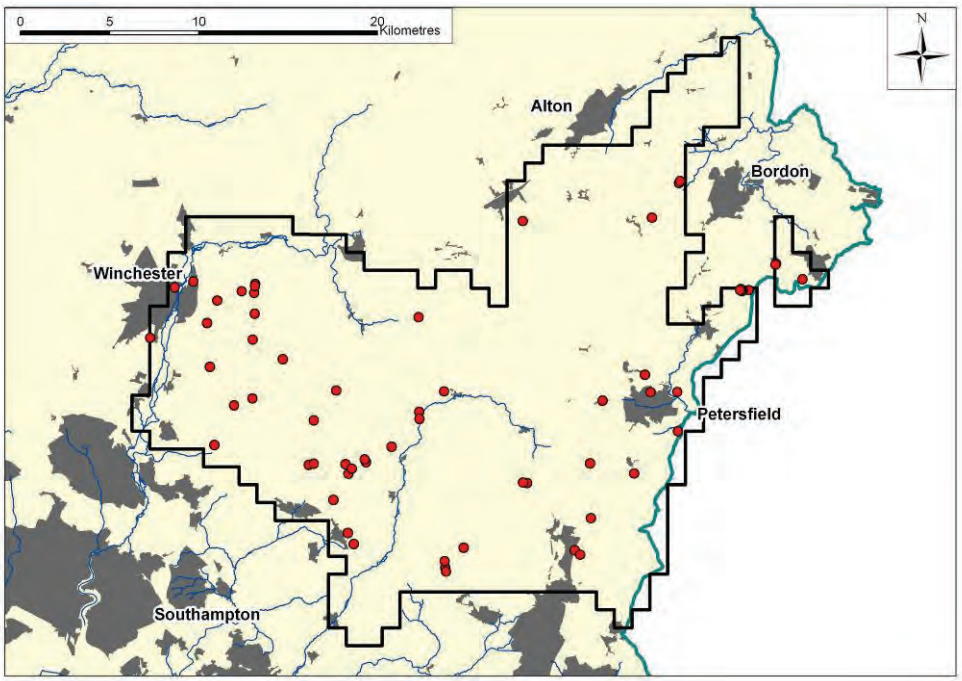

Fig 99. The distribution of twentieth century archaeological sites in the Hampshire South Downs.

More than two thirds of these are military and/or defensive installations associated with the two World Wars. There is a typical range of sites from the Second World War, including a radar station, pillboxes, an anti-aircraft battery, a gun emplacement, a searchlight battery and a number of military camps and bases. Although the precise function of the military camps and bases is often difficult to determine, one of those mapped – at Droxford Down (ID 172129) - is clearly a storage depot of some sort, with clusters of three identical buildings set equidistantly alongside concrete roadways (Fig 100). The entire site is set in woodland in an attempt to provide some cover and it is possible that it was an ammunition store associated with the D-Day invasion forces, some of which embarked from the Hampshire coast.

Most of the larger camps are located in the Winchester area (Fig 101) and, although all were in use during the Second World War, at least three of them – Hazely Down (AHBR 50478), Magdalen Down (AHBR 50482) and Avington Park (AHBR 50483) – were established in 1915. Earthwork and parchmark remains of the camp on Magdalen Down are shown in Fig 102. The firing ranges at nearby Chilcomb were also in use during the First World War and a purpose-built railway was constructed in the Itchen Valley to link these and other First World War installations in the area. Hampshire was used as a training area during the First World War and there are traces of this activity on the downs to the east. The most extensive are on Longwood Warren (AHBR 53890) and consist of a series of characteristically crenellated trenches (Figs 103 and 104). The trenches are designed to replicate a typical front line layout with fire trenches linked to support trenches and reserve trenches by meandering communications trenches.

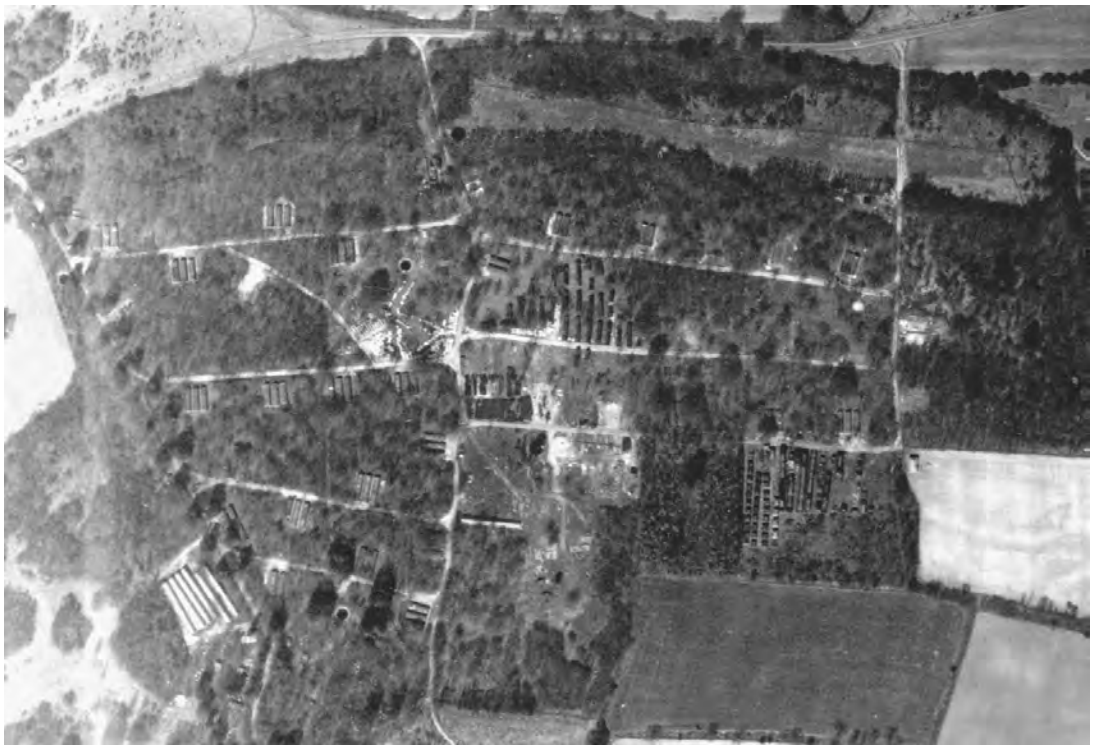

Fig 100. A Second World War depot in woodland at Droxford Down.
Photo: RAF CPE/UK/1992/4193. 13 April 1947. © English Heritage. NMR (RAF Photography).

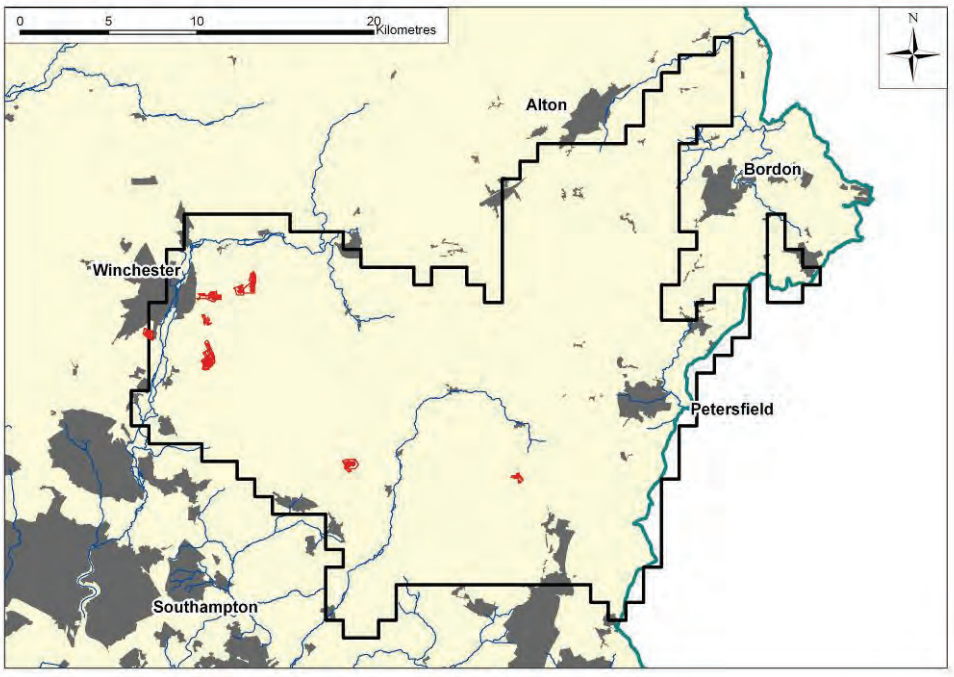

Fig 101. The distribution of twentieth century military camps in the Hampshire South Downs.
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Fig 102. Earthwork and parchmark remains of the First World War military camp on Magdalen Down, Winchester.
Photo: RAF CPE/UK/1992/4047. 13 April 1947. © English Heritage. NMR (RAF Photography).

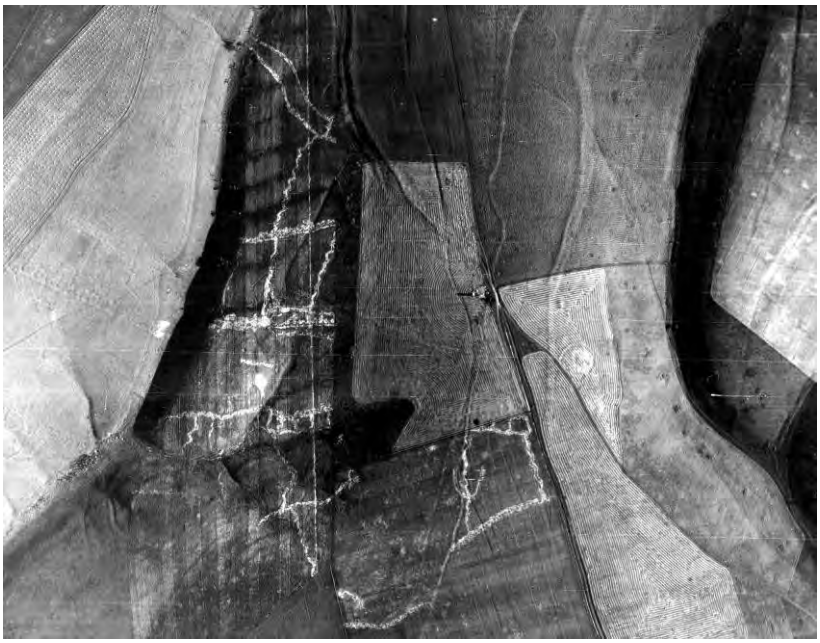


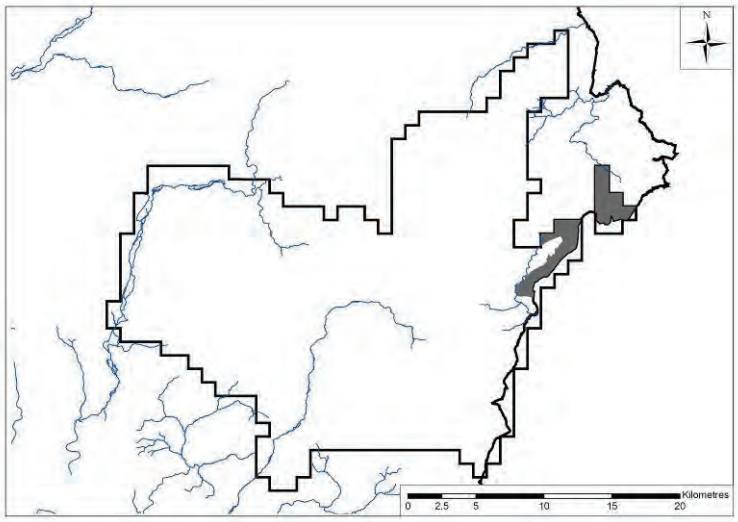
Fig 103. Probable First World War training trenches on Longwood Warren.
Photo: RAF CPE/UK/1992/3046. 13 April 1947. © English Heritage. NMR (RAF Photography).

Fig 104. Detail of the First World War training trenches on Longwood Warren.
Photo: RAF CPE/UK/1992/3046. 13 April 1947. © English Heritage. NMR (RAF Photography).

15 NMP and Landscape Character Areas

The results of the NMP survey in each of the Landscape Character Areas (LCAs) are considered in this section within the context of the archaeological summaries for each published in the draft Hampshire Integrated Character Assessment (HICA).

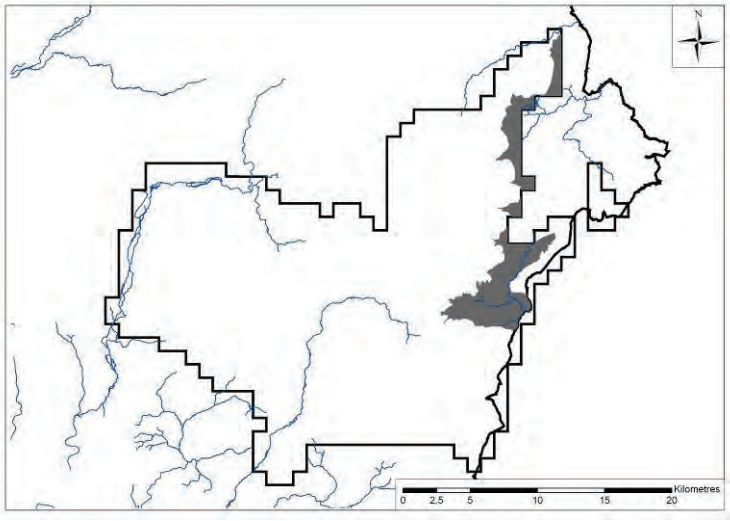
Western Weald Forest and Farmland Heath (1D)



There is a low density of archaeological sites in this area. The NMP survey recorded 63 sites, including a possible Neolithic oval barrow, four Bronze Age barrows and seven Second World War features, including trenches and two possible barrage balloon sites. Most of the archaeology mapped here consists of medieval or post medieval field boundaries, although two possible prehistoric or Roman-British enclosures were identified.

The possible oval barrow is a significant finding because in the archaeological summary in HICA this area is characterised by non-intensive exploitation in the Neolithic period. Otherwise the findings are consistent with the HICA summary, which notes a considerable number of Bronze Age barrows, but little evidence of prehistoric field systems and settlements. In this regard the two possible enclosures are of interest. It is likely that the military trenches are associated with the army training areas around Bordon a little to the north.

East Hampshire Lowland Mosaic (2C)

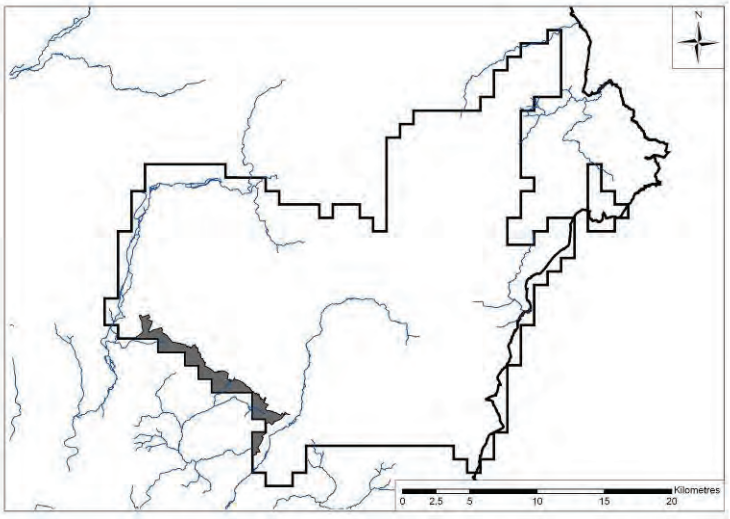


There is a slightly above average density of archaeological sites in this LCA. The NMP survey recorded 294 sites including 20 Bronze Age barrows (the important barrow

cemetery at Petersfield Heath lies in the LCA), a Roman villa (West Liss), a medieval priory, two rectilinear Iron Age or Romano-British enclosures and a field system of the same date, as well as five prehistoric or later enclosures and a small number of prehistoric or later field boundaries and linear features. There are also 74 medieval or post medieval field boundaries, a large number of post medieval sites – mainly drainage features - and a Second World War military base.

These findings are entirely consistent with the HICA summary, which concludes that apart from the Petersfield Heath cemetery there is no evidence for intensive use of the landscape in the Bronze Age and little evidence for the Iron Age other than in the north of the area which became quite developed in the Roman period as a result of the pottery industry at Alice Holt. It is pertinent that most of the enclosures are in the northern part of the area (the two rectilinear enclosures are at Oakhanger). The large number of medieval or post medieval field boundaries is consistent with the piecemeal enclosure in much of the area reflected in the assarts and wavy fields which are the predominant HLC types. Most of the field boundaries are in the southern part of the area which supports the observation that this landscape was on the fringe of the Alice Holt and Woolmer Royal forests (by contrast to the northern part of the area which was once part of the forests) and evolved a more organised pattern of field enclosure than the area to the north. Another factor influencing the high number of medieval or post medieval field boundaries recorded in the south is the fact that this area has suffered greatest boundary loss since the time of the OS First Edition map.

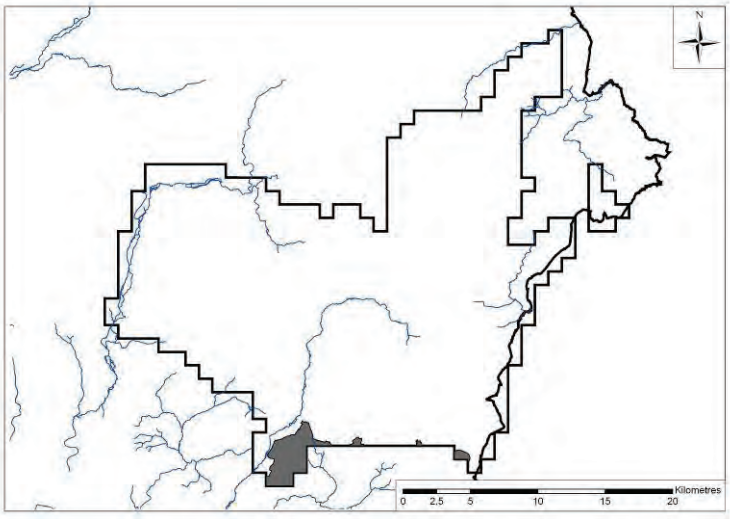
Forest of Bere West (2E)



The NMP survey recorded 30 sites in this LCA including 2 Bronze Age barrows a medieval palace and fishpond (Bishops Waltham), two prehistoric or later field systems, a small number of medieval or post medieval field boundaries, a number of other post medieval sites – mainly drainage features and extractive pits - and a Second World War airfield (Marwell). There is a concentration of medieval and/or post medieval features in Rookesbury Park in the east.

Although only a very small portion of this LCA was mapped NMP appears to corroborate the archaeological summary contained in HICA. Generally there is a very low density of sites in the area, Bronze Age exploitation seems not to have been intensive (despite the identification of a possible new barrow) and the same goes for the Iron Age and Roman periods, despite the presence of the Winchester to Wickham Roman road. One interpretation suggested in the HICA summary is that the area was a Roman hunting estate with some industrial activity.

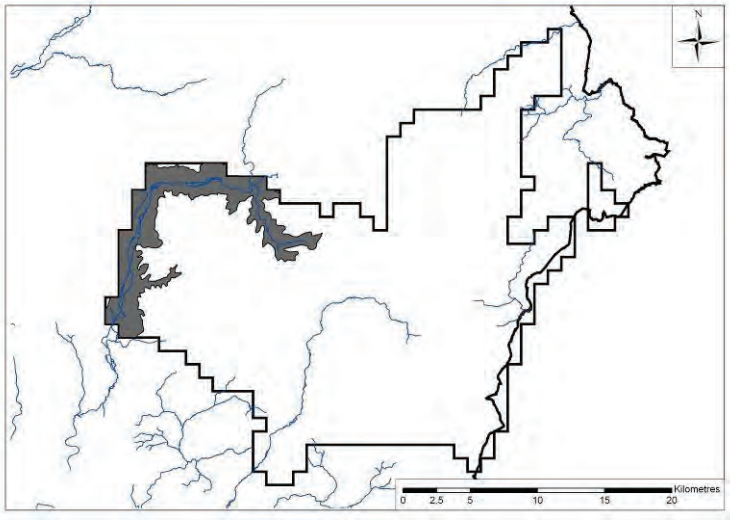
Forest of Bere East (2F)



The NMP survey recorded 15 sites in this LCA. For the most part these were post medieval and were predominantly extractive pits. Two possible newly identified barrows were mapped.

Only a very small portion of this LCA was mapped but the results broadly concur with the HICA summary – the area seems not to have been settled during prehistory but was exploited by communities from adjacent settled areas. In fact this LCA has the lowest site density of all those in the project. The two possible barrows are, however, significant because no barrows were previously known in this area. Although the Chichester to Bitterne Roman road runs across the southern tip of the project area no Roman features were identified during the mapping.

Itchen Valley (3C)



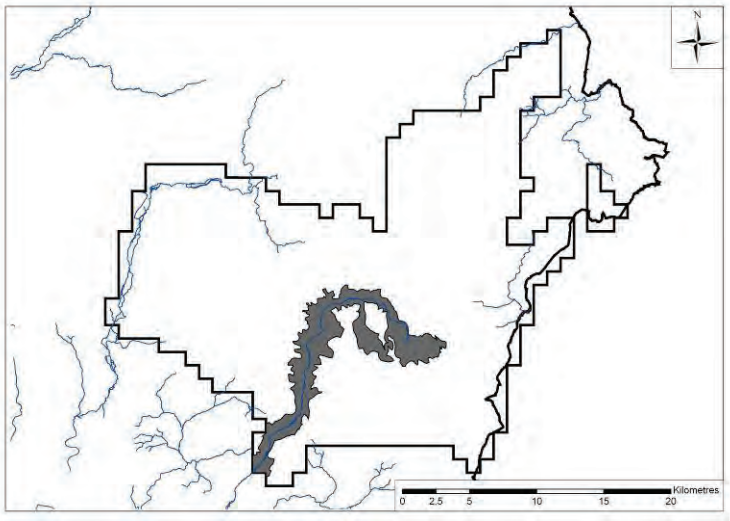
The NMP survey recorded 315 sites in this LCA, which has a slightly below average site density for the Hampshire South Downs. Two hundred and sixty six of these are new site records. The archaeology of the valley floor is represented predominantly by post medieval water meadows, which are very extensive around Winchester, Itchen Abbas and New Alresford.

Because of the way the Itchen Valley LCA is defined many of the features mapped are extending into the valley from the neighbouring chalkland areas, particularly the East Winchester Downs and the Mid Hampshire Open Downs. Most of these features are in the

northern part of the valley around Twyford Down, Winnall Down, The Worthies and Cheriton. There are potentially significant features from the Neolithic in the form of a possible cursus, a possible interrupted enclosure and an oval barrow, and 23 Bronze Age barrows. There is extensive evidence for prehistoric and Roman settlement and fields, with 19 settlements, 16 field systems and a further 40 field systems which may be prehistoric or later. The settlements include enclosures, enclosure complexes and the unenclosed settlement at Easton Lane Interchange. Four Roman roads run through the area. There are high status medieval sites – Wolvesey Castle and the moat at Compton Palace as well as a deserted settlement and a few field systems, some with traces of ridge and furrow. There are 49 medieval or post medieval field systems and a large number of post medieval features – apart from the water meadows these are mainly small scale chalk pits. Twentieth century sites include Chilcomb firing range and Bushfield Camp, dating to the First World War.

The potential Neolithic monuments recorded by NMP support the conclusion in the HICA summary that the portion of the valley that runs through the chalk forms part of a wider settled and farmed landscape in this period. The same is true for the Bronze Age – some of the field systems in the valley are likely to date from this period. It is interesting that the archaeological summary in HICA emphasises the importance of the valley between Winchester and the lowland belt (to the south) in terms of Bronze Age activity. Fifteen newly identified barrows were mapped by NMP, all of which are located to the north of Winchester, including the cemetery at Cheriton, suggesting that the northern part of the valley was also intensively exploited. The NMP findings for the Iron Age and Roman periods are entirely consistent with the HICA summary, which notes that the Iron Age settlements reflect the pattern of the wider chalk hinterland and points to the obvious importance of the *Civitas Capital* at Winchester. All the medieval and medieval or post medieval field systems and field boundaries were mapped in the upper valley, at or to the east of Itchen Abbas, and it may be significant that this area of the valley underwent formal field enclosure at an early date.

Meon Valley (3E)



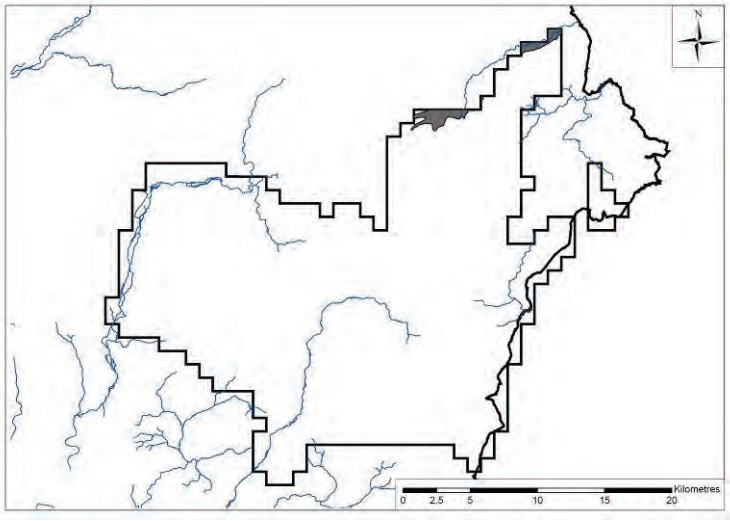
The nature of the archaeology mapped in the Meon Valley is similar to that in the Itchen in that in the valley floor itself the predominant features are post medieval water meadows but many of the sites mapped reflect the archaeology of the surrounding chalk hinterland. This is especially true of the areas around Droxford, West Meon, East Meon and at the eastern edge of the LCA at Ramsdean Down, including a cross ridge dyke and other linear features.

The NMP survey recorded 212 sites in this LCA, which has a slightly below average site density for the Hampshire South Downs: 182 of these are new site records.

There is a significant finding in the form of a previously unrecorded Neolithic oval barrow at Exton. There are 29 barrows (26 of which are newly identified) and a cross ridge dyke and other linear banks on Ramsdean Down. There is also good evidence for later prehistoric and Roman settlement and agriculture, with 10 possible settlement sites (mostly enclosures) and 25 field systems. There are 12 medieval sites including a shrunken settlement and some field systems (and traces of ridge and furrow at two locations), the most extensive of which is immediately south of Droxford, and a further 18 medieval or post medieval features – mostly field systems. Thirty eight post medieval features were mapped, predominantly water meadows and some small scale chalk extraction. There was also a Second World War military camp at Warnford Park.

These findings are consistent with the HICA summary which includes Neolithic settlement in the upper valley and evidence for the Bronze Age farmed landscape where the valley is flanked by chalk downland, with a similar pattern continuing into the Iron Age. The summary also notes that early informal field enclosure fieldscapes are located south of Droxford – where an extensive medieval field system was mapped during the project.

Wey Valley (3F)

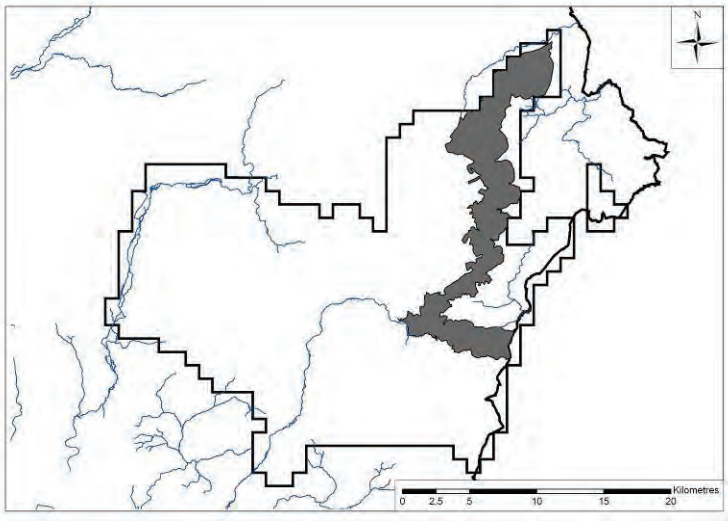


The NMP survey recorded 23 sites in this LCA, which has a below average site density for the Hampshire South Downs: all but one of these are new site records.

Apart from a series of undated pits and an undated earthwork bank, all the sites are medieval or later in date, and consist of a possible woodland boundary, field boundaries and a small number of chalk pits.

Only a very small portion of this LCA was mapped and NMP has not added any new information to that contained in the HICA archaeological summary. The summary suggests that the valley was intensively exploited in the Neolithic period, was settled in the Bronze Age and Iron Age and was an important routeway with associated settlements in the Roman period. The fact that no features from any of these periods were identified by NMP should not be taken as contradicting the HICA summary but is best explained by the small size of the area mapped.

East Hampshire Hangers and Greensand Terrace (5B)

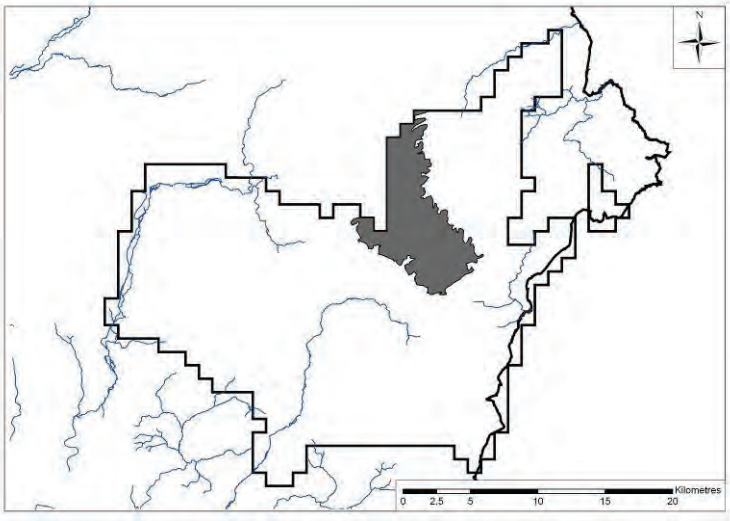


The NMP survey recorded 426 sites in this LCA, which has a slightly below average site density for the Hampshire South Downs: 408 of these are new site records.

Neolithic activity is represented by a long barrow and a possible newly identified long barrow. There are 17 Bronze Age barrows, 14 of them previously unrecorded. Prehistoric and/or Roman settlement and farming is evidenced by eight enclosures (seven of which were previously unrecorded) and four field systems (three newly identified). A number of undated enclosures and field systems were also mapped. One notable feature in this LCA is a series of cross ridge dykes and other linear features on Butser Hill. Three deserted or shrunken medieval settlements were recorded as were a number of medieval field systems, some containing traces of ridge and furrow. The medieval chalk pits at Noare Hill also lie within this LCA. The bulk of the archaeological resource identified by NMP, however, comprises field boundaries and field systems of medieval or post medieval date (107 sites) and post medieval features (124 sites) consisting predominantly of chalk pits, other extractive pits, drainage systems and a few dewponds.

In some respects the NMP findings are consistent with the archaeological summary contained in HICA. The presence of Neolithic long barrows, for instance, does suggest that this area was an early farmed landscape, and the recording of new Bronze Age barrows is not surprising. However, the direct evidence for prehistoric settlement in the form of enclosures or other settlement types is relatively sparse compared with other areas in the Hampshire South Downs. Most of the prehistoric enclosures are in the northern part of the area, whilst there is a concentration of linears around Butser Hill in the south. Despite the known components of the Roman archaeology, NMP failed to identify any trace of the villas and roads in the north of the area.

East Hampshire Wooded Downland Plateau (6A)

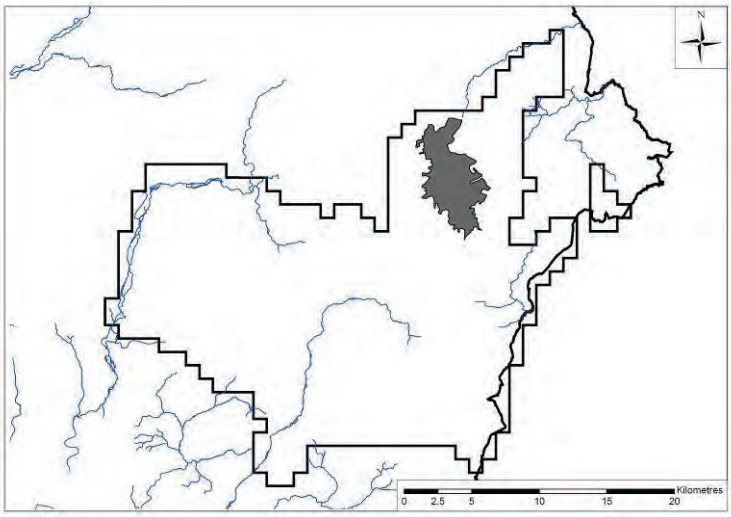


The NMP survey recorded 343 sites in this LCA, which has an average site density for the Hampshire South Downs: 325 of these are new site records.

During the mapping project no Neolithic features were recorded (although a number of undated pits were mapped which could potentially be Neolithic), only 10 Bronze Age barrows were mapped (and six of these are contained in the previously known cemetery at The Jumps, West Tisted), and evidence of later prehistoric and/or Roman settlement and agriculture was limited to a three enclosures, one field system and a few field boundaries. The shrunken medieval settlement of Colemore lies on the border between this LCA and Newton Valence, Farrington and East Tisted Downs in the east and the earthwork remains of Staple Ash manor are located close to the border with the Bighton and Bramdean Downs LCA. Otherwise only three medieval sites were mapped, all of them field boundaries or lynchets. The bulk of the recorded features comprise medieval or post medieval field boundaries and, particularly, small scale post medieval chalk pits and possible post medieval charcoal burning platforms.

These findings are consistent with the HICA archaeological summary, which records little prehistoric or Roman activity. What evidence there is appears to be limited to the edges of the LCA (the enclosures, for instance, are all located in the far north of the area). The conclusion in the summary is that much of the area was heavily wooded until relatively recently. In this respect the mapping of numerous possible charcoal burning platforms provides some insight into ways in which the forest was exploited.

Newton Valence, Farringdon and East Tisted Downs (7C)

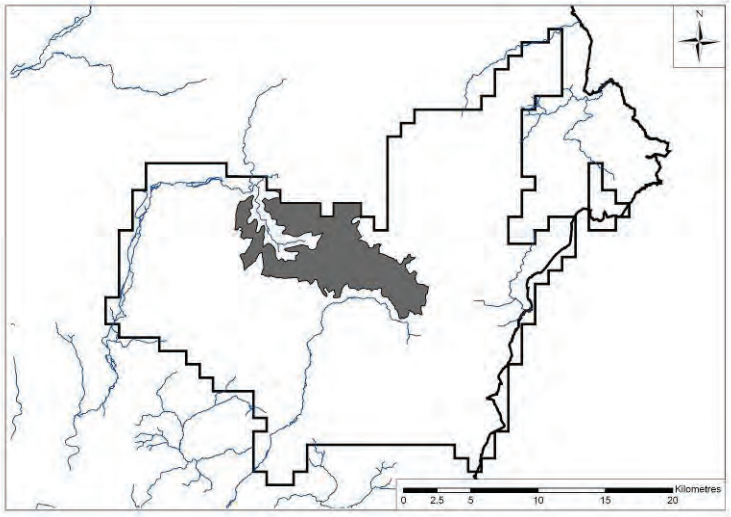


The NMP survey recorded 126 sites in this LCA, which has a below average site density for the Hampshire South Downs: 114 of these are new site records.

The earliest features mapped were 15 Bronze Age barrows, including eight in the cemetery at Hawkley Hanger. Nine of the barrows were previously unrecorded. There is a slight amount of evidence for prehistoric and Roman settlement and agriculture, consisting of two enclosures near Newton Valence and Selborne and four fragments of field systems. The medieval landscape is better represented, with three deserted or shrunken settlements, seven field systems (two of them including ridge and furrow) and 15 medieval or post medieval field systems. The post medieval archaeology comprises numerous chalk pits, a few dewponds six field systems and a deserted settlement.

Although nine new Bronze Age barrows were mapped, generally the numbers of barrows in this LCA are limited. Likewise NMP recorded only a limited amount of evidence for the Iron Age and Roman periods and no Neolithic features. None of this contradicts the HICA archaeological summary, which suggests that the area was not intensively used through the prehistoric and Roman period, but which may have been exploited for herding, grazing and hunting. Many of the field systems in the area reflect late medieval enclosure and the medieval field pattern is relatively well preserved in the landscape around Selborne and Newton Valence.

Bighton and Bramdean Downs (7D)

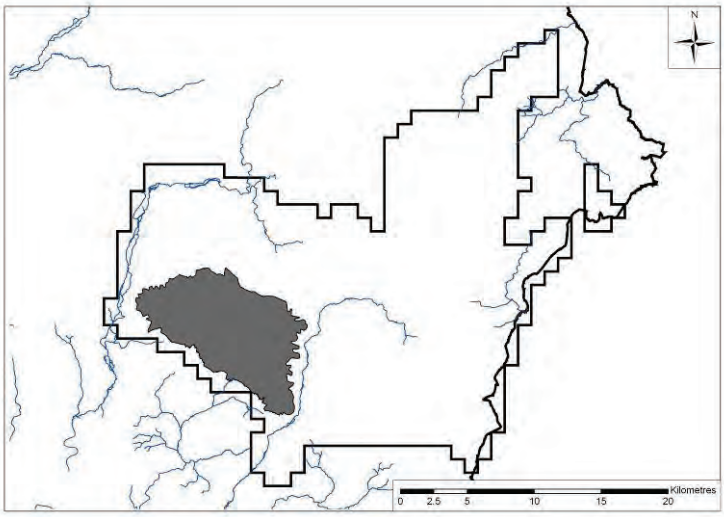


The NMP survey recorded 769 sites in this LCA – the highest number mapped in any area – 708 of which were previously unrecorded. This LCA has almost double average site density for the Hampshire South Downs.

The very high number of sites mapped by NMP is inflated to an extent by 172 small scale chalk pits which are scattered widely throughout the area. Sites from all periods from the Neolithic onwards were recorded, including a possible Neolithic oval barrow, 55 Bronze Age barrows (35 of them newly recorded), extensive evidence for prehistoric settlement and farming, including a banjo enclosure (at Bramdean), 31 enclosures, three enclosure complexes, four possible round houses and 25 field systems. In addition there were 50 undated field systems, some or all of which could be prehistoric in origin. The settlements are distributed throughout the LCA with concentrations in the northern part of the area, while the field systems are much more extensive in the north: elsewhere they tend to be clustered along the edge of the area and extend into neighbouring LCAs, especially into the East Winchester Downs. In the later landscape there are, in addition to the numerous chalk pits, 88 medieval or post medieval field systems or field boundaries, 13 charcoal burning platforms and a few dewponds.

In the HICA archaeological summary it is suggested that Neolithic activity tends to be focused on the Meon Valley and the head of the Itchen Valley. Thus the mapping of a possible oval barrow at Ropley, near Bramdean Common, in the northeast of the area might indicate that Neolithic activity was wider than previously thought. The 35 newly recorded Bronze Age barrows represent a significant increase in the number of known barrows. Their distribution to some extent tends to be on the edges of the LCA, overlooking the Upper Itchen and Meon valleys, although there is also a cemetery at Bramdean Common, close to the oval barrow mentioned above. Of the prehistoric or Roman enclosures 24 were newly identified sites and these are distributed throughout the area (albeit there is a concentration of small enclosures around Cheriton overlooking the Itchen Valley). This supports the view stated in the HICA summary that the extent of Iron Age activity is under-represented in the existing record. Many of the field systems were also previously unrecorded and NMP generally has increased the number and extent of known later prehistoric settlement and farming sites significantly.

Owslebury and Corhampton Downs (7G)



The NMP survey recorded 603 sites in this LCA, 514 of which were previously unrecorded. This LCA has an above average site density for the Hampshire South Downs.

Neolithic activity is represented by two long barrows, at Warren Farm and Longwood Copse, Owslebury. There is extensive evidence for Bronze Age exploitation of the landscape in the form of 56 barrows, 38 of which were newly identified by NMP. Apart

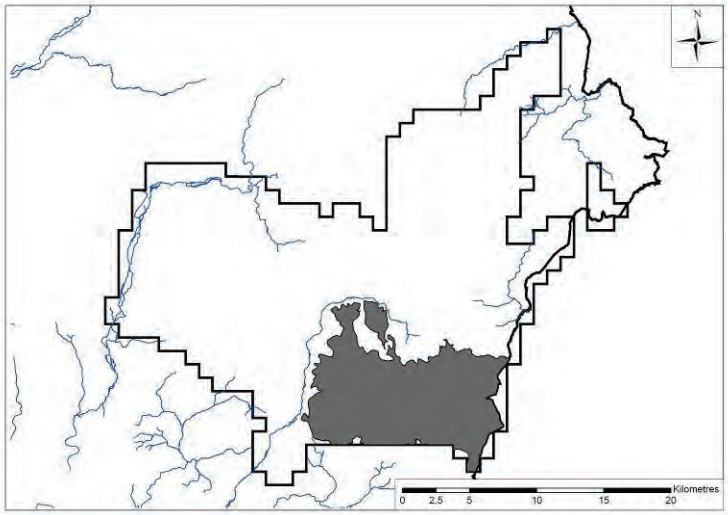
from the cemetery at Twyford, all the barrows are in the eastern part of the LCA or, to a lesser extent, in the centre. There is much evidence for intensive settlement and farming in the later prehistoric and Roman periods, with more than 50 settlements, mostly enclosures of one form or another. These include 15 enclosure complexes and four banjo enclosures. More than 120 prehistoric or Roman field systems and/or field boundaries were mapped. Whereas the settlements were recorded from all parts of the LCA (other than on the chalk dip slope) the fields are absent from the central area where assarts and wavy fields are the predominant HLC Types. There are particularly extensive field systems in the east (Corhampton Down, Shepherd's Down, Preshaw Down). The Winchester to Wickham Roman road runs through the area and a significant number of trackways may be of prehistoric origin.

Five medieval field systems and 44 medieval or post medieval field systems or field boundaries were recorded (seven of them containing traces of ridge and furrow) as well as a possible windmill mound. Fourteen post medieval field systems were mapped but the most numerous features from this period were small scale chalk pits, of which 75 were recorded. A number of Second World War sites were identified including a depot at Droxford Down and a radio station on Stephen's Castle Down.

The NMP mapping suggests the archaeological character of this LCA differs somewhat from that suggested in the HICA archaeological summary. For instance the summary suggests that this area was lightly settled, if settled at all, in the Neolithic but was exploited by communities from the west and east. The two long barrows might indicate that the northwest part of the area was, in fact, a focus for Neolithic activity. The distribution of Bronze Age barrows mapped during the project is broadly consistent with the suggestion in HICA that the barrows are largely confined to the Downland Mosaic Large Scale, although a number of newly identified barrows were recorded from the Downland Mosaic Small Scale. In the Iron Age, however, NMP mapping indicates that the Downland Mosaic Small Scale was quite intensively settled. Considerable numbers of enclosures were mapped in the small scale landscape, including seven enclosure complexes and three of the banjo enclosures. It is interesting, though, that, as suggested in the HICA summary, the fields tend to be found at the periphery of the small scale mosaic, and are concentrated in the large scale mosaic and open downs landscapes.

The most extensive field systems from the medieval period or later are located in the far southeast around Swanmore. The chalk pits are most frequent on the chalk dip slope.

South East Hampshire Downs (7H)



The NMP survey recorded 571 sites in this LCA, 444 of which were previously unrecorded.

Although a slightly below average density of sites was recorded by NMP, there is evidence of intensive activity from the Neolithic period onwards. The sites are distributed fairly evenly throughout the LCA, but with a concentration around Chalton in the southeast and a notable gap in the heavily wooded area at Queen Elizabeth Country Park in the northeast.

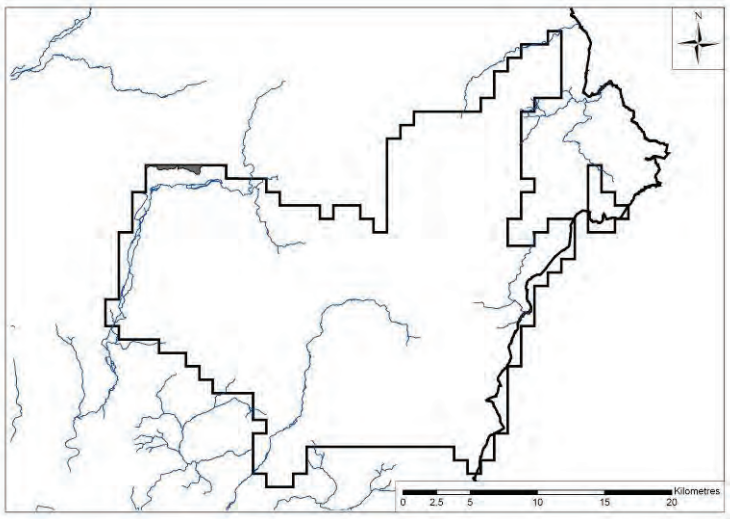
From the Neolithic there are two long barrows and an oval barrow. Ninety three Bronze Age barrows were mapped, of which 33 were newly identified by NMP. The barrows are mainly situated in the northwest (around Old Winchester Hill) and the southeast (Chalton Down), and the new barrows are in these broad areas. Other evidence of possible Bronze Age activity includes the cross ridge dykes at Butser Hill in the very far northeast.

Iron Age and Roman settlement features comprise 27 sites including Old Winchester Hill hillfort, nine enclosure complexes, the Roman village at Chalton and the villa at Wellsworth. In the main the settlements are absent from the northern and southern parts of the LCA but occupy an east-west band running through its central area. Throughout this same zone there are very extensive later prehistoric and Roman field systems (62 were recorded in total).

The Saxon settlement at Chalton is in this LCA as well as three deserted medieval settlements. Fourteen medieval field systems and 30 medieval or post medieval field systems were mapped and these again are primarily in the central zone, especially in the Clanfield area. Elements of the more recent landscape include 120 small scale chalk pits, many of them concentrated in the southwest between Soberton and Hambledon, some charcoal burning platforms and dewponds.

These findings confirm to a degree the HICA archaeological summary, which emphasises the importance of the Meon valley in the Neolithic period: the three Neolithic sites mapped in this area all overlook the Meon valley. The location of the newly identified Bronze Age barrows is also consistent with the summary which suggests again the importance of the Meon valley, as well as the scarp to the north and the area around Clanfield and Chalton. However NMP mapping suggests that the Iron Age and Roman settlement pattern was denser and, in particular, field systems from this time were more extensive than previously thought.

Mid Hampshire Open Downs (8E)

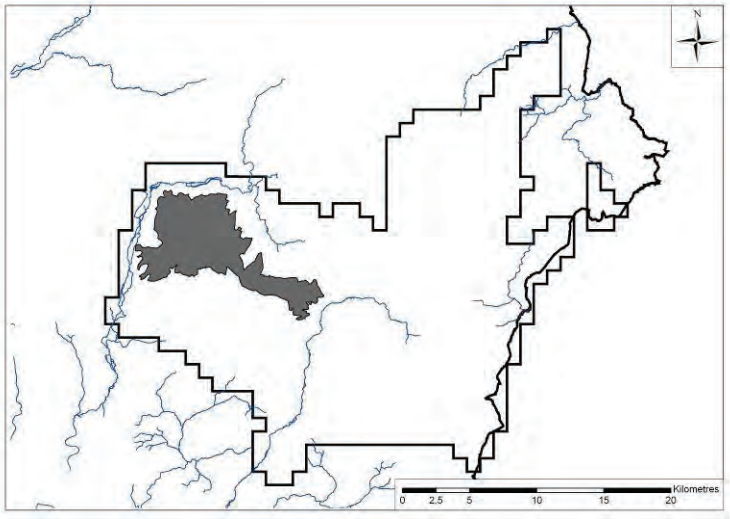


The NMP survey recorded 13 sites in this LCA, 8 of which were previously unrecorded. In the small area mapped there was an above average site density for the Hampshire South Downs.

In the small area mapped there was a rich prehistoric and Romano-British resource, with two Bronze age barrows, the double banjo enclosure at Bridgets Farm, two large enclosure complexes, field systems and possible ranch boundaries.

These findings are consistent with the archaeological summary in HICA, which notes extensive Iron Age and Roman settlement and farming in the LCA.

East Winchester Open Downs (8G)



The NMP survey recorded 354 sites in this LCA, 254 of which were previously unrecorded.

The Neolithic is represented by two long barrows, at Lamborough Lane and Longwood Warren and a newly identified oval barrow at Millbarrow Farm. There are 38 Bronze Age barrows, 13 of which were newly identified during the project, as well as evidence for Bronze Age settlement in the form of unenclosed settlements, including that on Winnall Down. There is extensive evidence for Iron Age and Roman settlement, with the hillfort at St Catherine's Hill, and 42 enclosures and other settlements, including 11 enclosure complexes and three banjo enclosures. Twenty three of these settlements were newly identified. The prehistoric and Roman farming landscape is characterised by 34 field systems, many of them very extensive. The fields are found mainly in the west and central parts of the LCA, around Twyford, Winnall Down and Gander Down, although there are extensive field systems at Westend Down, Warnford, in the east. There are numerous trackways and linear features, many of which may be prehistoric in origin. Two Roman roads run through the area. Fewer features of the medieval or later landscape were mapped – 21 field systems, 34 chalk pits and quarries and five dewponds. There are important sites dating from the First World War, including training trenches and five camps, as well as a Second World War anti-aircraft battery on Magdalen Down.

Some aspects of the NMP survey are consistent with the HICA archaeological summary – the possibility that the east-west chalk ridge formed a prehistoric routeway and the suggestion that the area was intensively exploited in the Bronze Age. However, the mapping indicates that Iron Age and Roman settlement was more extensive than previously thought, given the number of new settlements recorded.

16 Conclusions

The richness of the cultural landscape in the Hampshire South Downs was underlined during the project by the interpretation, mapping and recording of a large number of archaeological features. More than 4,000 sites were identified from aerial photographs and importantly 87% of these were new 'discoveries', not previously recorded in either the Hampshire AHBR or the NMR. The inventory includes a wide range of site types from all periods from the Neolithic to the mid twentieth century and the mapping demonstrates both the great complexity and the intensity of use of the landscape, particularly in the chalklands.

More than 70% of the mapped features were transcribed as cropmarks or soilmarks, reflecting the history of intensive agriculture over much of the project area. The ratio of levelled to extant sites from the prehistoric and Roman periods is significantly higher than this and it is only a slight exaggeration to say that the pre-medieval archaeological resource comprises an almost entirely below ground landscape.

NMP has demonstrated the value of recent woodland cover in the protection of archaeological remains from plough damage. In a number of places photography taken shortly after the felling of non-ancient woodland revealed extensive and (formerly) well preserved features. Good examples include the Celtic fields on Corhampton Down and the deserted settlement at Cuckoo Copse, Newton Valence. It is likely that there are similar examples of rare earthwork survival of monuments in other stands of recent woodland.

Few monuments from the Neolithic period were identified but those that were represent important new findings. They include two possible long barrows, four oval barrows, a possible cursus monument and an interrupted enclosure. More research is needed to confirm the interpretation of the cursus but, if proven it will be the first such feature recorded in Hampshire. The survey also demonstrated that the known long barrow at Warren Farm, Morestead is set within a previously unrecorded ditched enclosure.

Barrows, of which 387 were mapped and recorded, form a major component of the Bronze Age landscape. More than half of those mapped were newly identified as a result of NMP. Barrows are distributed widely throughout the project area but are found predominantly on the chalk, and most occur in 'cemeteries' or groups of three or more. Many of the previously known barrows are sited in prominent positions on high ground, particularly along the central chalk ridge, whereas some newly identified sites are on lower lying land such as in the coombes and valleys.

Celtic fields are a prominent feature of the prehistoric landscape from the Middle and Later Bronze Age onwards and during the project 240 prehistoric field systems were identified, of which more than half were previously unrecorded. Some of these field systems cover extensive areas and their mapping is an important outcome of the project. Their distribution is overwhelmingly centred on the chalklands and virtually all are plough-levelled.

There was a small amount of evidence for unenclosed round house settlements in the form of small ring ditches, some of which may be Bronze Age, but the predominant prehistoric settlement evidence took the form of enclosures of one type or another. These are most likely to be Iron Age or Romano-British in date and include simple discrete enclosures, banjo enclosures and enclosure complexes. Of these the discrete enclosures were the most numerous – 108 were mapped, of which 80% were newly identified. Roughly half of the enclosure complexes and a third of the banjo enclosures were previously unrecorded.

Prehistoric and Romano-British remains were mapped in far greater numbers in the chalklands than elsewhere. In part this may be because cropmarks and soilmarks form more readily on the chalk than in the Greensands and clays. However the uneven

distribution of settlements and fields does appear to reflect more intensive use of the chalklands: on the chalk there is a much greater range of settlement types and an extensive fieldscape; away from the chalk settlement is characterised by infrequent small discrete enclosures not obviously associated with fields and very few prehistoric field systems were recorded in non-chalk areas.

On the chalk the density of Iron Age and Roman settlements, fields and trackways enables a clear picture to emerge of how these component parts of the landscape fitted together. In some places (e.g. the East Winchester Downs) extensive arable fields, interspersed with smaller open areas for grazing, are associated with a dense settlement pattern including some settlements which developed into large enclosure complexes. Elsewhere (e.g. Owslebury and Corhampton Downs) the settlements are more dispersed, with fewer enclosure complexes, and the field systems are much less extensive, suggesting a pastoral-based economy.

Within the chalklands there is a notable disparity between the area to the west of the Meon and that to the east, with a greater density and wider range of settlement types in the west (no banjo enclosures, for instance, were identified east of the Meon). On a wider level, comparison of the range of enclosure types in the South Downs with that recorded from the Danebury Survey (to the west of the Test) reveals significant differences, suggesting that the major rivers running north-south through Hampshire may have served as territorial or cultural boundaries during the Iron Age.

Twelve deserted or shrunken medieval settlements and a further six possible settlements were recorded. For the most part these are located in the eastern part of the project area, with six on the Greensand landscape. Far more evidence of the medieval fieldscape was mapped but although informal field enclosure began in the fourteenth century, the fact that it continued into the post medieval period presents difficulties distinguishing between medieval and post medieval fields.

Typically for Hampshire, few terraced lynchets were identified and only 39 examples of ridge and furrow were recorded. The medieval landscape was most recognisable where the enclosure of open fields resulted in the construction of field boundaries that encapsulate former strips and furlongs. The best preserved examples are in the area around Selborne and Newton Valence, but plough-levelled fields were mapped in the chalklands, especially in the long, narrow parishes of Itchen Stoke and Ovington, Tichborne and Cheriton. In places on the chalk there are suggestions that medieval fields may have been laid out along the lines of former prehistoric fields.

Other than field systems the post medieval agricultural landscape is characterised by extensive water meadows throughout the valleys of the Itchen and Meon and at a few locations in the northeast. A number of dewponds were also identified in the form of cropmark or soilmark pits or hollows. For the most part, however, it was difficult to distinguish between these features and small scale chalk pits, of which 652 were recorded, situated mostly in areas of clay-with-flints.

One important finding was a large number of small circular cropmarks interpreted as possible post medieval charcoal burning platforms in the heavily wooded area around East Tisted. Although there is no well documented charcoal industry in Hampshire these features suggest that charcoal production was far more extensive than previously realised. However, their precise function and origin are open to conjecture because they could equally result from woodland clearance where underwood and brush was stashed in a series of piles and then burnt. The deep staining of the soil caused by these fires might result in the dark ‘cropmarks’ visible on the photographs.

A relatively small number of twentieth century military and defensive sites were recorded compared with previous NMP projects in Hampshire. The most notable aspect is a series of large camps in the Itchen valley dating from the First World War and the identification of

training trenches associated with these camps on the nearby downland is an important finding.

The large numbers of newly identified sites resulting from the survey have increased the knowledge of the prehistoric and Romano-British archaeology in several of the Landscape Character Areas as defined in the draft Hampshire County Council Integrated Character Assessment.

- Newly identified oval barrows suggest that Neolithic activity was wider than previously thought in both the Western Weald Forest and Farmland Heath (1d) and the Bighton and Bramdean Downs (7d) character areas, and the mapping of two long barrows in Owslebury and Corhampton Downs (7g) indicate that this area may have been a focus for Neolithic activity.
- In the Itchen Valley (3c) newly identified barrows demonstrate Bronze Age activity in the northern part of the valley as well as in the south.
- In both the South East Hampshire Downs (7h) and East Winchester Open Downs (8g) the many new features recorded by NMP show that the Iron Age and Roman settlement pattern was denser and, in the former area, that prehistoric field systems were more extensive than previously thought.
- In Owslebury and Corhampton Downs (7g) the survey demonstrated that the Downland Mosaic Small Scale Landscape was more intensively settled than hitherto thought by recording a number of enclosures including seven enclosure complexes and three banjo enclosures.
- In the Bighton and Bramdean Downs area (7d) the survey confirmed the view that the extent of Iron Age settlement was under-represented in the existing record through the mapping of 24 new enclosures and a number of field systems.

The results of the survey, with many new sites identified, clearly demonstrate the value of NMP in Hampshire, especially in the chalklands. Further NMP projects in Hampshire are likely to produce similar results and would be in line with the Strategy for the NMP (Horne 2009).

Even though there has been a long history of archaeological aerial reconnaissance over the Hampshire South Downs a significant number of new sites were transcribed from recent photography (taken over the last decade). It is also notable that in places where there is a complex archaeological landscape – primarily on the chalk – some components of the landscape are only visible in certain years. The condition of known cropmarks could also be monitored by further flying. Therefore there is a strong case for continued reconnaissance programmes during the cropmark and soilmark seasons.

There is a relative lack of reconnaissance during the winter months, when earthwork features are most visible. Future programmes of winter reconnaissance, particular in the Greensand areas where earthworks are most likely to survive, might identify further earthwork sites.

The potential for earthwork survival of archaeological features in non-ancient woodland could be examined further by fieldwork programmes and also by lidar survey.

The project has highlighted a range of individual sites where there is potential for further research, foremost among these is the possible cursus at Lovington. Fieldwork in the East Tisted woodland might confirm the interpretation of the possible charcoal burning platforms recorded in this area and further research might identify ways of differentiating between plough-levelled dewponds and small scale chalk pits.

Overall the survey has fulfilled its main aim of enhancing understanding about past human settlement, by providing a substantial amount of new information regarding archaeological sites and landscapes from the Neolithic period to the twentieth century. The enhanced

baseline data resulting from the project will facilitate decisions regarding strategic planning, management, preservation and research of archaeological sites and historic landscapes within the Hampshire South Downs. In particular it will support the implementation of the historic and cultural heritage elements of the South Downs Management Plan by informing the identification of the most sensitive sites and those areas of high archaeological potential to be prioritised for protection, especially through Environmental Stewardship Higher Level Scheme agreements. It also allows a greater insight into the evolution of the landscape from the prehistoric period and helps the understanding and management of landscape character and sense of place.

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18 Project archive

The HE project number is **2011019**

The project's documentary and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing the project design, project correspondence and administration.
2. Electronic drawings stored in the directory : R:\Historic Environment (CAD)\CAD Archive\NMP Archive\South Downs
3. Electronic database containing details of all sites mapped stored in the directory: L:\Historic Environment (Data)\HE_Projects\NMP\South_Downs

This report text is held in digital form as: G:\Historic Environment (Documents)\NMP DATA\South Downs\Report

Copies of Arcview shapefiles of the drawings with attributed data attached and a copy of the project's Microsoft Access database are deposited at Hampshire County Council Environment Department.

Copies of the AutoCAD drawings are deposited with the NMR in Swindon.

Appendix 1

Double-indexed sites with start date 2,200BC.

Site types	No	Site types	No
Bank (earthwork)/ditch	2	Ditch/ring ditch	3
Bank (earthwork)/ditch/field boundary	1	Ditch/spoil heap	1
Bank (earthwork)/ditch/hollow	1	Ditch/trackway	3
Bank (earthwork)/ditch/trackway	1	Earthwork/trackway	1
Bank (earthwork)/drain/trackway	1	Enclosure/field boundary	4
Bank (earthwork)/dyke	1	Enclosure/field system	4
Bank (earthwork)/enclosure	2	Enclosure/hut circle/settlement	1
Bank (earthwork)/field boundary	2	Enclosure/mound	2
Bank (earthwork)/trackway	5	Enclosure/pit	2
Barrow/ditch	1	Enclosure/settlement	2
Barrow/enclosure	1	Enclosure/trackway	4
Barrow/enclosure/ring ditch	2	Extractive pit/spoil heap	1
Barrow/hut circle/ring ditch	3	Field boundary/field system	1
Barrow/mound	33	Field boundary/path	2
Barrow/pit	2	Field boundary/pit	1
Barrow/ring ditch	11	Field boundary/pit/trackway	1
Barrow/round house	3	Field boundary/trackway	17
Boundary/trackway	2	Field system/pit	2
Boundary/watercourse	1	Field system/settlement	1
Cultivation marks/trackway	1	Field system/settlement/trackway	1
Ditch/drainage ditch/trackway	1	Field system/trackway	5
Ditch/enclosure	3	Hut circle/ring ditch	1
Ditch/field boundary	1	Lynchet/trackway	1
Ditch/mound	1	Ridge and furrow/trackway	1
Ditch/pit	1	Ring ditch/settlement	2

Double-indexed sites with start date 801BC

Site type	No.
Banjo enclosure/enclosure	1
Banjo enclosure/settlement	3
Bank (earthwork)/trackway	1
Boundary/trackway	2
Enclosure 800BC-42BC and 800BC-409	1
Enclosure 800BC-409 and 800BC-1945	1
Enclosure/field boundary	3
Enclosure/field system/settlement	1
Enclosure/pit	2
Enclosure/pit/settlement/trackway	1
Enclosure/settlement	1
Enclosure/temple	1
Enclosure/trackway	1
File boundary/pit	1
File boundary/trackway	17
Settlement/field boundary	1
Settlement/field system	3
Total	**41**

Double indexed sites with a start date of 1066

Site types	No
Assart/charcoal burning platform	1
Bank (earthwork)/field boundary	7
Bank (earthwork)/field boundary/trackway	1
Chalk pit/dewpond	1
Chalk pit/spoil heap	1
Cultivation marks/drainage system	1
Cultivation marks/ridge and furrow	1
Ditch/drainage ditch/trackway	1
Ditch/field boundary/trackway	1
Drain/field boundary	2
Drain/field boundary/trackway	1
Drainage ditch/field boundary	3
Drainage system/water meadow	1
Earthwork/extractive pit	3
Enclosure/hollow	1
Enclosure/field boundary	1
Enclosure/trackway	1
Field boundary/hollow	1
Field boundary/field system	2
Field boundary/mound	1
Field boundary/ridge furrow	3
Field boundary/trackway	15
Field system/ridge and furrow	5
Pit/pond	1
Settlement/field boundary	3
Settlement/field system	4
Settlement/ridge and furrow	1
Total	**64**

Double indexed sites with a start date of 1540, 1701 or 1801

Site type	No
Assart/charcoal burning platform	47
Assart/extractive pit	2
Chalk pit/dewpond	170
Chalk pit/extractive pit	1
Chalk pit/quarry	1
Chalk pit/spoil heap	1
Cultivation marks/drainage ditch	4
Cultivation marks/drainage ditch/drain	1
Cultivation marks/drainage system	1
Dewpond/enclosure	1
Dewpond/extractive pit	39
Dewpond/pit	3
Ditch/drainage ditch	2
Ditch/drainage ditch/trackway	1
Ditch/enclosure	1
Drain/filed boundary	1
Drain/pond	1
Drainage ditch/cropmark and earthwork	2
Drainage ditch/field boundary	1
Drainage ditch/trackway	4
Drainage system/ cropmark and earthwork	2
Drainage system/field system	1
Drainage system/ridge and furrow	2
Drainage system/water meadow	2
Extractive pit/field boundary	1
Extractive pit/gravel pit	1
Extractive pit/hollow	1
Extractive pit/pit	1
Extractive pit/pond	1
Extractive pit/spoil heap	1
Extractive pit/trackway	2
Field boundary/cultivation marks/drainage ditch	1
Field boundary/trackway	1
Fishpond/water meadow	1

Settlement/field boundary	1
Water meadow/cropmark and earthwork	1
Total	**304**

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