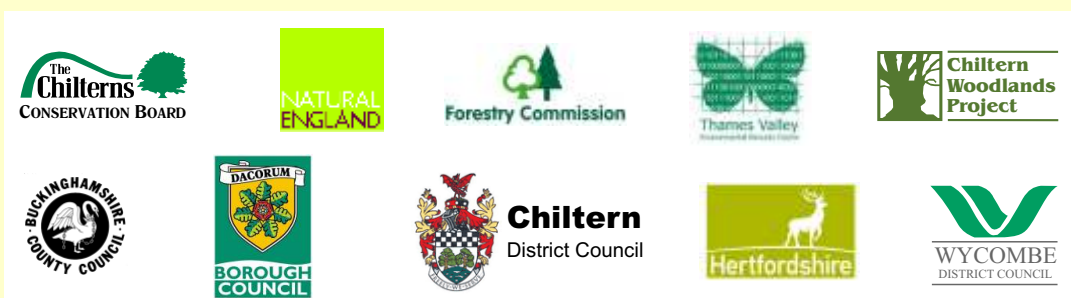




# Ancient Woodland Inventory for the Chilterns

## Appendix - **Dacorum Borough**



# 1. Introduction

This appendix summarises results from the Chilterns Ancient Woodland Survey within Dacorum Borough in the County of Hertfordshire (see map 1 for details). For more information on the project and its methodology, please refer to the main report,<sup>1</sup> which can be downloaded from [www.chilternsaonb.org](http://www.chilternsaonb.org)

The Chilterns Ancient Woodland Survey area includes parts of Buckinghamshire, Bedfordshire, Hertfordshire and Oxfordshire. The extent of the project area included, but was not confined to, the Chilterns Area of Outstanding Natural Beauty (AONB).

The work follows on from previous revisions in the South East.<sup>2</sup> The Chilterns survey was hosted by the Chilterns Conservation Board with support from the Chiltern Woodlands Project, Thames Valley Environmental Records Centre (TVERC) and Surrey Biodiversity Information Centre (SBIC). The work was funded by Buckinghamshire County Council, Chilterns Conservation Board, Chiltern District Council, Dacorum Borough Council, Forestry Commission, Hertfordshire County Council, Natural England and Wycombe District Council.

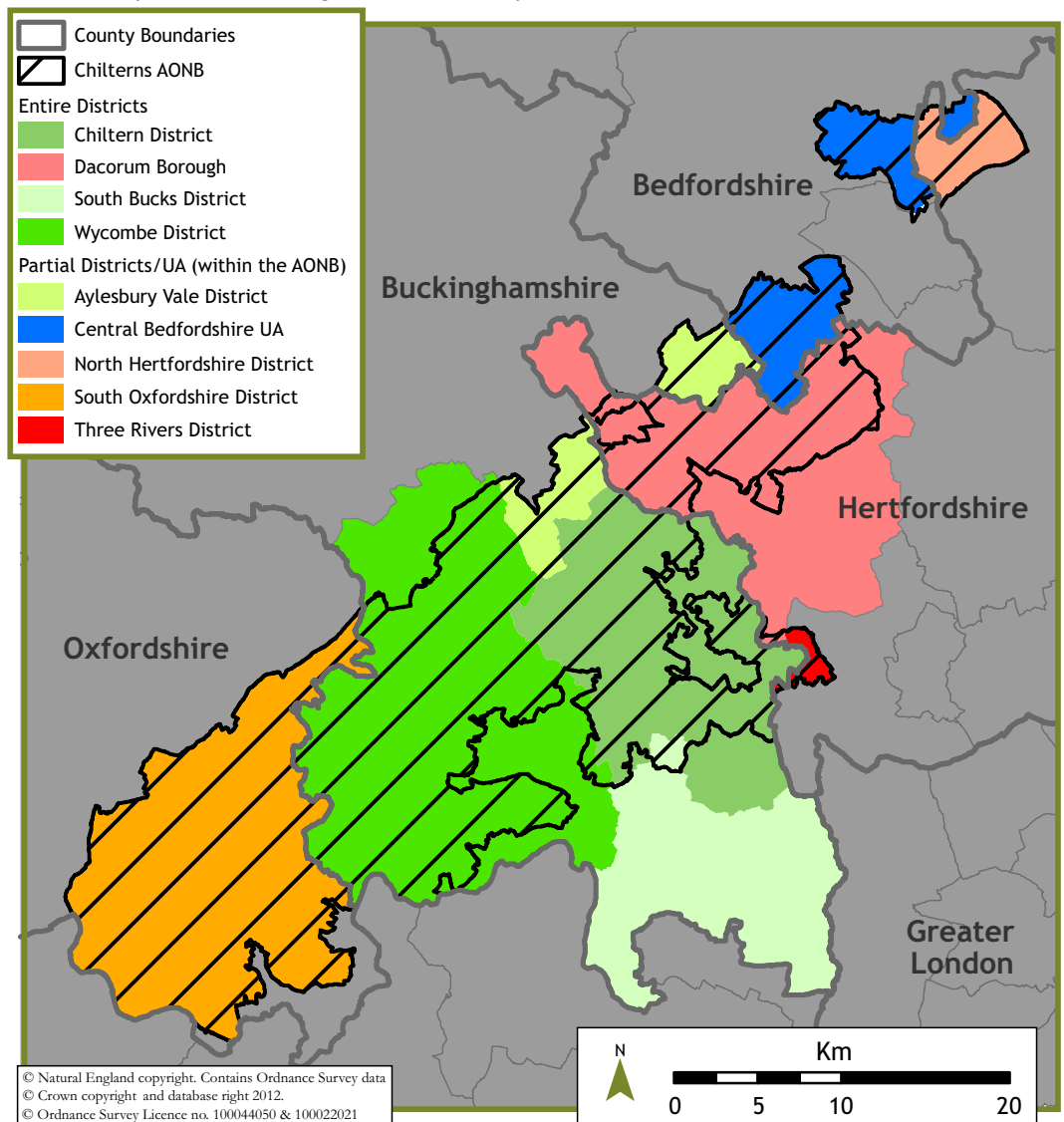
## Project aims

The primary aim of the survey was to revise and update the Ancient Woodland Inventory and to include ancient woodlands less than two hectares in size.

## Background

Comparisons have been made to the 2003 digitized version of the Ancient Woodland Inventory created by the Forestry Commission (from which more detailed statistics at the district and borough level can be derived than from the paper reports). Hereafter, referred to as the 'FC digitized AWI'.

**Map 1:**  
The Survey Area, showing Local Authority areas covered and the Chilterns AONB



<sup>1</sup> Benstead-Hume et al (2012)

<sup>2</sup> Westaway, et al (2007a); Westaway et al (2007b); Sansum et al (2009); Hume et al (2010); Davies et al (2011)

## 2. Ancient woodland definitions

**W**oodlands in Britain are routinely classified as 'ancient woodland' or 'recent woodland' according to their history. The concept of 'ancient woodland' is embedded in national forestry and nature conservation policy.

### Recent woodland

Secondary or recent woodland (less than 400 years old) is either planted or has been allowed to grow naturally through regeneration. These woods are therefore excluded from the inventory.

### Ancient woodland

English Nature<sup>3</sup> (now part of Natural England) defines ancient woodland as:

*'An area that has been wooded continuously since at least 1600 AD. Ancient woodland is divided into ancient semi-natural woodland and plantations on ancient woodland sites. Both types of stand are classed as ancient woods.'*

The date, 1600 AD, was chosen by Peterken,<sup>4</sup> because it reflected the point at which detailed maps started to become more common. Other dates could be argued for but 1600 has been adopted for policy and practical purposes in England. A wood may have been cut, felled or coppiced since 1600, but as long as the area has re-grown or been replanted shortly afterwards then it remains ancient. Ancient woodland therefore does not necessarily contain old trees. Ancient woodland is divided into ancient semi-natural woodland and plantations on ancient woodland sites.

### Ancient semi-natural woodland (ASNW)

Ancient semi-natural stands are those that are composed predominantly of trees and shrubs native to the site that do not obviously originate from planting. They include stands that may have been managed by coppicing or pollarding.

### Ancient replanted woodland (PAWS)

Ancient replanted woodland sites (also called Plantations on Ancient Woodland Sites, or PAWS) are areas of ancient woodland where the original native tree cover has been felled and replaced by planted stock most commonly of a species not native to the site, for example conifers such as Norway spruce (*Picea abies*). The division between ASNW and PAWS may not always be easy to define.

### Ancient wood pasture

Wood pastures were managed for both trees and livestock. They frequently occur in a mosaic with other habitats and the boundaries are often poorly defined. The original inventories were often inconsistent - some of these woodlands were classified whilst others were omitted. Re-examination of the evidence does not always support these decisions and can reveal a complex management history with a mixed pattern of woodland, grazing and shifting agricultural use. Pasture woodlands that showed a wooded nature throughout recent history were included in the revised inventory. These sites can be readily extracted from the dataset.

---

<sup>3</sup> Kirby & Goldberg (2006)

<sup>4</sup> Peterken (1977)

## 3. Methodology and Sources

### Software

The woodland mapping and much of the historical research was done using a Geographic Information System (GIS). The GIS software used was ESRI ArcMap® 9.3.1.<sup>5</sup> The resulting GIS database can be linked to external databases which hold more detailed site survey and archive data.

Data accrued from field surveys was held in a Recorder 6 database by the Thames Valley Environmental Record Centre, from which a report for each site outlining the main survey findings could be generated.<sup>6</sup>

### Inventory revision

The procedure for revising the Ancient Woodland Inventory has three main elements:

### Desk-based mapping

The capture of potential ancient woodland sites employed three key mapping elements:

- The current Ordnance Survey MasterMap® Topographic Layer
- High-resolution aerial photographs
- Ordnance Survey First Edition County Series 25 inch to 1 mile map (or Epoch 1 maps) (1865-85).<sup>7</sup>

This indicative dataset was then compared with the FC digitized AWI.

### Historical Research

The indicative dataset was refined by comparison to two further map resources:

- The tithe maps (1837-51)
- Ordnance Survey Drawings, 2 inches to 1 mile (1804-1815)<sup>8</sup>

Features such as place names and woodland shape and situation in the landscape were also considered.

### Field survey work

Field survey work was carried out to support the desk-based mapping. This work captured:

- Vascular plant species.
- Notable trees, e.g. veteran trees, pollards, coppice stools.
- Archaeological evidence such as saw pits, charcoal hearths, drainage systems, banks, mineral diggings, ridge and furrow markings and lynchets.
- Historical boundary features, e.g. wood banks, stubbed trees or outgrown hedges.
- Current management
- Uses or factors causing disturbance or damage to the wood.
- Structural and habitat diversity e.g. presence of dead wood, streams, ponds and depressions.

### Semi-natural or replanted ancient woodland status

The Forestry Commission's National Inventory of Woodland and Trees (NIWT)<sup>9</sup> was used as the core dataset to redefine the boundaries of PAWS and ASNW with reference to aerial photographs and the FC digitized AWI. Ancient Semi-Natural Woodland was used as the default classification where it was not possible to determine the woodland type.

### Minimum size of a wood to be included in the inventory revision

0.25 ha was generally the lowest size of woodland polygon considered for inclusion in the revised inventory. However, each wood is considered separately and factors such as the location and historical extent of the woodland mean that some woods under 0.25 ha were included.

---

<sup>5</sup> ESRI Inc (2009)

<sup>6</sup> JNCC (2007)

<sup>7</sup> Dates from the British Library: <http://www.bl.uk/reshelp/findhelprestype/maps/index.html>

<sup>8</sup> Dates sourced from the British Library website: <http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/>

<sup>9</sup> Smith (2000)

## 4. Results for Dacorum Borough

Table 1: Summary of the woodland area (hectares) and number of separate woodland parcels from the National Inventory of Woodland and Trees (2002), the FC digitized AWI (2003) and the revised

	Area	% of the total area	Number of woodland parcels	Average area of woodland parcel
Dacorum	21,247			
All woodlands (NIWT) >2 ha	1,997	9.40	209	9.56
FC digitized AWI (woods >2 ha)	771	3.63	189	4.08
Revised AWI (including woods <2 ha)	963	4.53	195	4.94
Overall ancient woodland gain - compared to FC digitized AWI (2003)	192			

Table 2: Ancient woodland type.

Ancient woodland type	Area (hectares)	% of ancient woodland area
Revised AWI - ASNW	652	68
Revised AWI - PAWS	311	32

Table 3: Selected findings from the field survey work

Damage Type	% of sites
Invasive Species	27
Gardenization	17
Rubbish	16
Other	11
Browsing	8
Human Disturbance	6
Rubble	3
Garden Waste	2
Recreation	2

Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Aldbury Nowers	SP 949 131	2.31	D_3388
Aldbury Nowers	SP 950 131	0.18	D_4135
Bourne Grove, Vale Farm	TL 012 055	0.65	HS3_60
Chestnut Wood	SP 946 116	0.90	HS3_22
Dark Wood	TL 060 037	11.29	HS3_87
Fir Wood A	TL 005 012	5.14	CH_1692
Fir Wood B	TL 002 015	0.74	D_3760
Furzefield Wood	SP 964 067	3.49	HS3_37
Gaddesden	TL 035 114	0.14	D_2403
Gaddesden	TL 036 112	0.31	D_2407
Gaddesden A	TL 036 114	1.94	D_2410
Great Wood (East)	TL 001 049	0.31	HS3_111
Great Wood (West)	SP 999 049	1.15	HS3_110
Great Wood Old Chalk Pit	SP 999 051	0.30	HS3_55

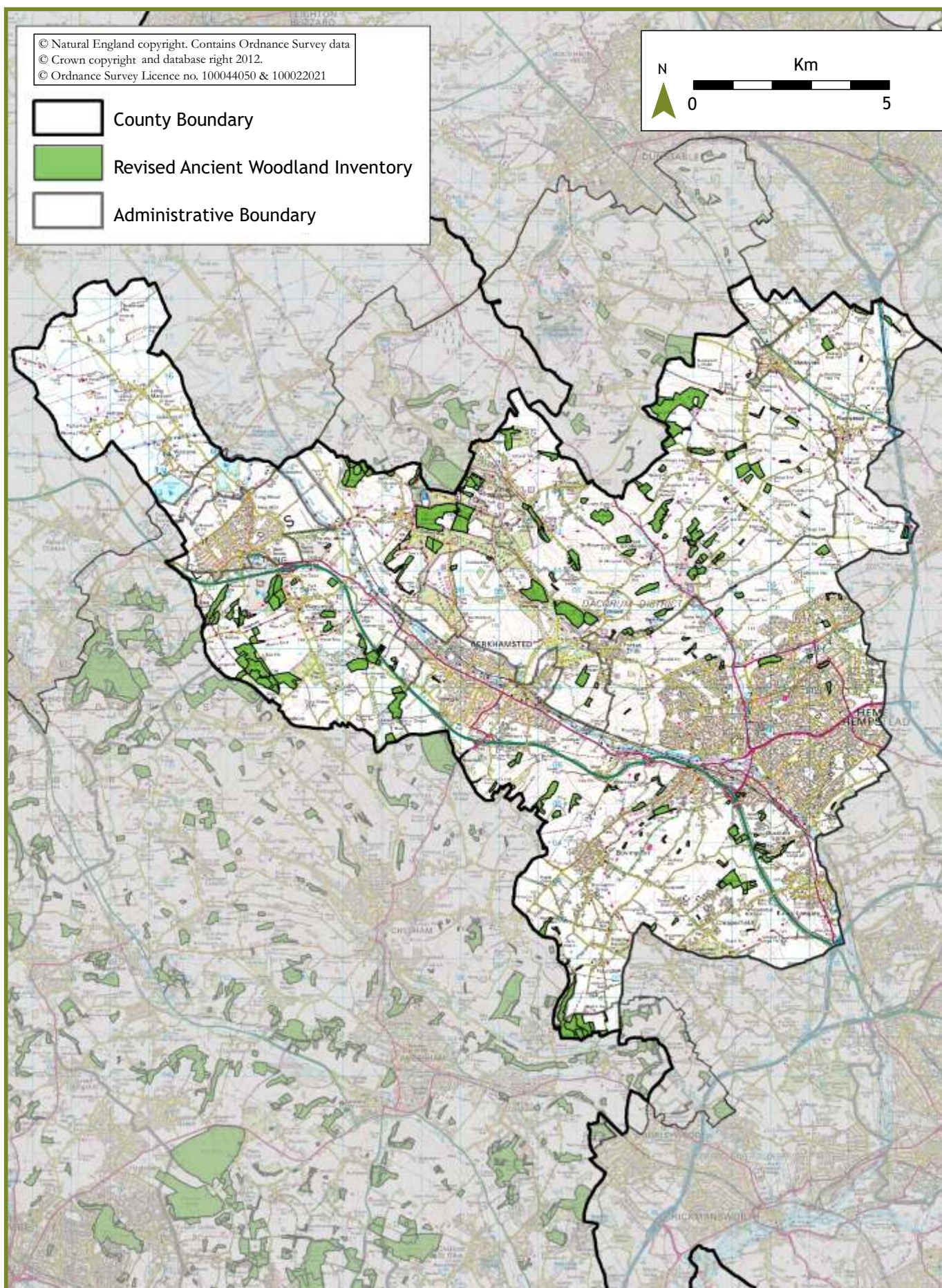
*continued over*

<sup>10</sup> This is a unique code that can be used to cross reference data held within GIS and Recorder 6 databases.

Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Haresfoot	SP 981 059	9.08	HS3_46
Hastoe Hill	SP 917 100	4.09	D_3784
Hay Wood	TL 031 054	4.85	HS3_76
Heathen Grove	SP 993 054	0.83	HS3_128
Hockeridge	SP 979 064	3.63	HS3_136
Home Wood A	TL 047 085	0.79	D_3738
Home Wood B	TL 047 086	0.79	D_2466
Homefield Spring	TL 022 039	0.72	HS3_64
Hudnall Common Corner	TL 007 133	0.40	D_2317
Hudnall Common Plantation	TL 009 135	4.45	D_2322
Hudnall Common Triangle	TL 006 137	0.46	D_2316
Hudnall Farm	TL 006 127	1.69	D_2314
Icedell Wood	SP 993 064	0.39	HS3_125
Lady Grove	TL 007 124	1.56	D_4557
Lady Grove Shaw	TL 006 122	0.66	D_2312
Lodge Bushes	SP 948 113	3.09	HS3_24
Long Green Wood	TL 002 064	0.74	HS3_57
No Man's Friend Wood	SP 947 107	3.29	HS3_23
Nuffield Farm	TL 033 033	0.46	HS3_78
Pendley Beeches	SP 944 113	0.29	HS3_147
Pendley Beeches A	SP 941 112	2.67	HS3_18
Pendley Court Theatre	SP 940 120	0.29	HS3_17
Pendley Lodge	SP 937 118	0.20	HS3_13
Pendley Manor	SP 939 119	3.35	HS3_16
Pendley Manor (East)	SP 942 119	0.94	HS3_19
Pendley Manor (South)	SP 940 117	2.08	HS3_135
Pudd's Cross	TL 006 026	1.17	D_1704
Pudd's Cross	TL 004 025	0.52	D_3758
Rabbit Dell	TL 004 017	1.40	D_1691
Ramacre	TL 024 048	9.14	HS3_63
Rossway A	SP 956 077	1.17	HS3_30
Rossway B	SP 957 075	0.62	HS3_32
Rossway C	SP 958 073	0.21	HS3_34
Rossway D	SP 958 072	0.20	HS3_35
Rossway E	SP 958 075	1.00	HS3_33
Rossway F	SP 957 077	0.52	HS3_31
Rossway G	SP 954 074	0.23	D_2176
Sandpit Green	SP 994 064	0.34	HS3_126
Shamrock Lane	TL 050 021	0.43	HS3_1
Shothanger	TL 027 048	1.04	HS3_141
St. Margaret's Copse	TL 023 118	1.97	D_4561
Stocks	SP 963 134	0.24	D_4134
Stony Dene	TL 057 039	1.58	HS3_88
The Nucket	TL 056 040	0.16	D_2516
The Shrubbery	SP 957 081	4.20	HS3_28
Tring Grove Wood	SP 917 097	4.80	D_2115
Tring Park A	SP 931 112	0.83	HS3_6
Tring Park B	SP 932 110	0.30	HS3_9
Walk Wood	SP 961 134	3.59	AV_4535
Warnersend Wood	TL 044 087	3.72	D_2445
Whitfield Spring	TL 011 128	1.83	D_2327

Map 2: The Revised Ancient Woodland Inventory for Dacorum Borough



## 5. Outputs

The Map shows the revised Ancient Woodland Inventory on an Ordnance Survey 1:50,000 scale base map. Due to the map scale and the volume of small woods added to the inventory this map should be treated as indicative only. These maps represent a snapshot in time and will not show any subsequent revisions.

Natural England will incorporate the final dataset for the Chilterns into the national Ancient Woodland Inventory. These digital boundaries will be available to download online either directly through Natural England's website but also through [www.magic.gov.uk](http://www.magic.gov.uk). Any changes to the inventory made on a case-by-case in the future by Natural England will be incorporated into the national dataset over time.

The data recorded during the field surveys is held by Thames Valley Environmental Records Centre and will be passed on to the relevant Biological Record Centres for incorporation into their county databases. All data and information relating to the project will also be held by the Chilterns Conservation Board.

## 6. Discussion

The accurate mapping of the ancient woodland resource provides important opportunities for understanding and improving connectivity of semi-natural habitats and biodiversity at the landscape scale and can be used to inform and enhance initiatives such as the Biodiversity Opportunity Areas and Conservation Target Areas. The standards of mapping used in the Chilterns Ancient Woodland Survey mean that the revised Ancient Woodland Inventory dataset will be readily synthesised with a range of other compatible spatial datasets and inventories.

The importance of ancient woodland is widely acknowledged<sup>11</sup>. This resource is increasingly threatened by development pressures and lack of appropriate management. It is hoped that the work outlined here will make a useful contribution towards the long-term protection and appropriate management of this irreplaceable resource.

## 7. Acknowledgements

The Ordnance Survey maps are provided by the Chilterns Conservation Board under licence from the Ordnance Survey. Contact Ordnance Survey Copyright for advice on licensing Ordnance Survey map data for further use.

---

<sup>11</sup> English Nature (2002), Defra and the Forestry Commission (2005), Ellis (2004)



## 8. References and Bibliography

Benstead-Hume, V., Morris J. (2012) *A Revision of the Ancient Woodland Inventory for the Chilterns*. Chilterns Conservation Board, Oxfordshire.

Buckinghamshire County Council (1991) *A Plan for the Chilterns Woodland Policy*

Chilterns Conservation Board - Chilterns AONB  
*Management Plan 2008-13*

Chilterns Conservation Board - *Chilterns AONB Pilot Ancient Woodland Survey 2007*

Davies, R., Benstead-Hume, V., Grose, M., Westaway, S. & McKernan, P. (2011). *A Revision of the Ancient Woodland Inventory for Surrey*. Surrey Biodiversity Information Centre, Surrey.

Defra and the Forestry Commission (2005). *Keepers of time: A statement of policy for England's ancient and native woodland*. DEFRA and the Forestry Commission, England.

Department of Communities and Local Government (2012). *National Planning Policy Framework*. London.

Ellis, J. (2004). *Seeing the wood for the trees: a forestry and woodlands framework for South East England*. Forestry and Woodlands Framework Steering Group, Alice Holt, Farnham.

English Nature (2002). Position statement: *Environmentally sustainable forestry and woodland management*. English Nature, Peterborough.

ESRI (2009). ArcMap 9.3.1. Environmental Systems Research Institute, Inc. Redlands, California.

Forestry Commission (2011) *The UK Forestry Standard The UK governments' approach to sustainable forest management*

Hume, V., Grose, M., Sansum, P., Westaway, S. & McKernan, P. (2010). *A Revision of the Ancient Woodland Inventory for West Sussex*. Sussex Biodiversity Record Centre, Henfield, West Sussex.

JNCC (2007). Recorder 6. Joint Nature Conservancy Committee, Peterborough.

Kirby, K. & Goldberg, E. (2006). *Ancient woodland: guidance material for local authorities*. English Nature, Peterborough.

Morris, J.K. (2009). *The Cultural Heritage of Chiltern Woods*. Chiltern Woodlands Project.

Natural England (May 2012) *A revision of the ancient woodland Standing Advice*

Peterken, G. F. (1977). *Habitat conservation priorities in British and European woodlands*. Biological Conservation 11: 223-236.

Sansum, P., McKernan, P., Westaway, S. & Grose, M. (2009). *A revision of the Ancient Woodland Inventory for Ashford Borough, Kent*. High Weald AONB Unit, Flimwell, East Sussex.

Smith, S. (2000). *The National Inventory of Woodland and Trees - England*. Forestry Commission, Edinburgh.

Westaway, S., Grose, M., & McKernan, P. (2007a). *A revision of the Ancient Woodland Inventory for Mid Sussex District, West Sussex*. High Weald AONB Unit, Flimwell, East Sussex.

Westaway, S., Grose, M., & McKernan, P. (2007b). *A revision of the Ancient Woodland Inventory for Tunbridge Wells Borough, Kent*. High Weald AONB Unit, Flimwell, East Sussex.



Victoria Benstead-Hume and  
John Morris

Chilterns  
Ancient Woodland Survey  
May 2010 to June 2012

Report published July 2012

The Chilterns Conservation Board  
The Lodge  
90 Station Road  
Chinnor OX39 4HA  
Tel: 01844 355500  
[www.chilternsaonb.org](http://www.chilternsaonb.org)