



Ancient Woodland Inventory for the Chilterns

Appendix - South Bucks District



Chiltern
District Council



1. Introduction

This appendix summarises results from the Chilterns Ancient Woodland Survey for the whole of South Bucks District in the County of Buckinghamshire (see map 1 for details). For more information on the project and its methodology, please refer to the main report,¹ which can be downloaded from 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.² 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.

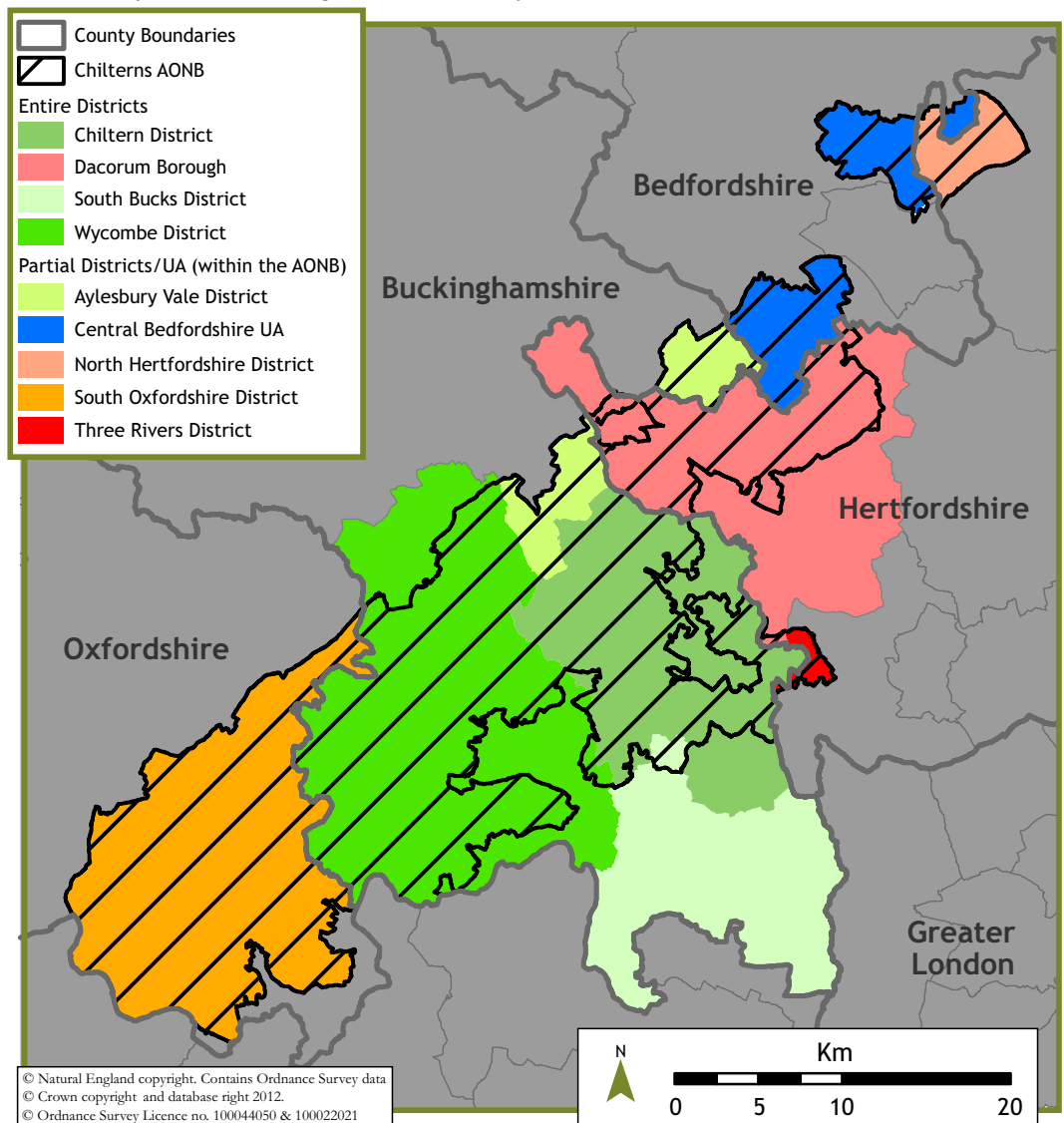
Project aims

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



¹ Benstead-Hume et al (2012)

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

2. Ancient woodland definitions

Woodlands 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 Nature³ (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,⁴ 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.

³ Kirby & Goldberg (2006)

⁴ 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® 9.3.1.⁵ 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.⁶

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).⁷

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)⁸

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)⁹ 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.

⁵ ESRI Inc (2009)

⁶ JNCC (2007)

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

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

⁹ Smith (2000)

4. Results for South Bucks District

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 AWI (2012).

	Area	% of the total area	Number of woodland parcels	Average area of woodland parcel
South Bucks	14,127			
All woodlands (NIWT) >2 ha	2,833	20.05	462	6.13
FC digitized AWI (woods >2 ha)	1,022	7.23	117	8.74
Revised AWI (including woods <2 ha)	1,190	8.43	180	6.61
Overall ancient woodland gain - compared to FC digitized AWI (2003)	168			

Table 2: Ancient woodland type.

Ancient woodland type	Area (hectares)	% of ancient woodland area
Revised AWI - ASNW	887	74
Revised AWI - PAWS	304	26

Table 3: Selected findings from the field survey work

Damage Type	% of sites
Invasive Species	24
Rubbish	22
Gardenization	18
Garden Waste	9
Human Disturbance	8
Rubble	6
Other	4
Garden Planting	1
Poaching	1

Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Baker's Wood	TQ 028 871	1.42	HS_143
Beaconsfield Golf Course A	SU 960 913	1.93	HS_273
Beaconsfield Golf Course B	SU 958 913	0.50	HS_75
Beaconsfield Golf Course C	SU 955 913	1.06	HS_274
Beaconsfield Golf Course D	SU 953 906	2.30	HS_71
Beaconsfield Golf Course E	SU 957 910	2.32	HS_73
Beaconsfield Golf Course F	SU 957 911	1.11	HS_74
Beaconsfield Golf Course G	SU 951 910	0.22	HS_67
Beaconsfield Golf Course H	SU 952 912	0.63	HS_69
Beaconsfield Golf Course I	SU 952 911	0.64	HS_68
Beaconsfield Golf Course J	SU 959 910	1.04	HS_77
Beaconsfield Golf Course K	SU 961 911	0.21	HS_80

continued over

¹⁰ 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

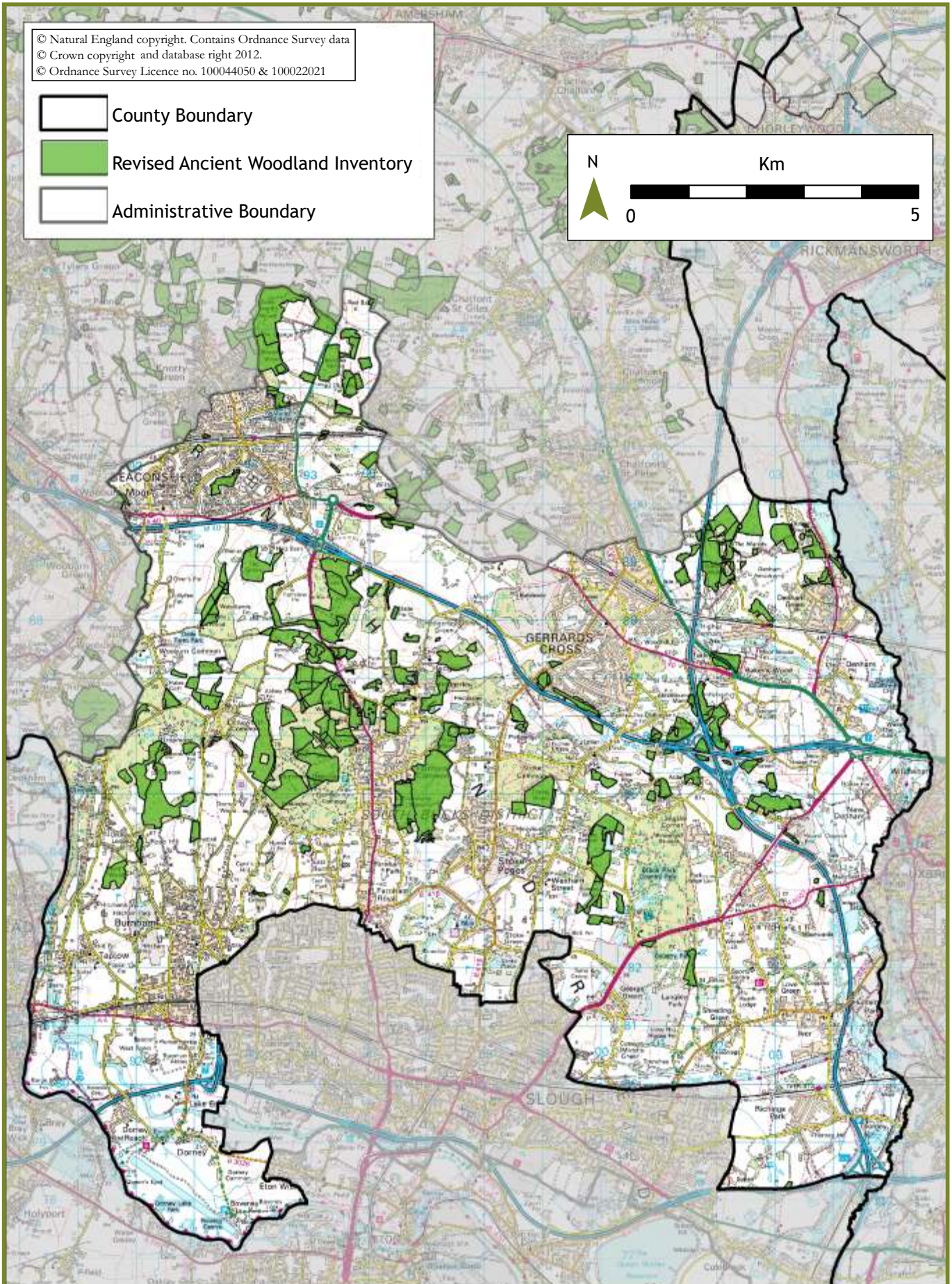
Site Name	Grid reference	Area (hectares)	File code
Birchen Spring Coppice	SU 963 884	2.00	SB2_88
Blackbush Piece	TQ 022 889	1.57	HS_295
Buckinghamshire Golf Course A	TQ 048 866	0.43	HS_156
Buckinghamshire Golf Course B	TQ 050 866	0.28	HS_157
Burtley Copse	SU 951 889	0.27	SB2_73
Burtley Plantation	SU 951 887	3.08	SB2_193
Burtley Wood	SU 952 887	2.48	SB2_74
Cave Wood	SU 962 885	3.60	SB2_179
Cedar Close	TQ 022 838	0.40	SB1_71
Cherry Tree Lane A	TQ 008 853	0.25	SB1_33
Cherry Tree Lane B	TQ 008 852	0.31	SB1_37
Cherry Tree Lane C	TQ 008 850	2.78	SB1_38
Chiltern Woodland Burial Park	SU 964 900	1.09	HS_278
Chiltern Woodland Burial Park A	SU 964 898	0.39	HS_227
Chiltern Woodland Burial Park D	SU 961 899	0.35	HS_82
Chiltern Woodland Burial Park E	SU 963 899	0.32	HS_226
Collsels Wood A	TQ 027 881	6.02	HS_231
Collsels Wood B	TQ 027 880	0.50	HS_144
Collum Shaw	SU 971 863	0.58	SB2_103
Denham, N Of Railway	TQ 029 879	0.22	HS_285
Denham, S Of Railway	TQ 029 878	0.16	HS_145
Fairfield Lodge	SU 990 844	1.96	SB2_258
Farnham Golf	SU 969 834	1.25	SB2_248
Farthing Green Lane	SU 986 838	0.82	SB2_123
Fulmer Common	TQ 003 845	14.45	SB1_15
Fulmer Forest	SU 993 856	7.60	SB1_5
Fulmer Gardens	SU 996 853	0.38	SB1_7
Fulmer Gardens House Garden	SU 996 851	2.05	SB1_171
Fulmer Lodge Wood	SU 991 856	0.82	SB2_269
Fulmer Rise	TQ 003 849	0.12	SB1_18
Fulmer Rise (East)	TQ 005 850	1.11	SB1_27
Fulmer Rise (West)	TQ 002 850	0.32	SB1_17
Fulmer Rise By Path	TQ 004 850	0.40	SB1_23
Further Warren Wood	SU 976 890	0.85	HS_299
Hangings Wood	SU 947 879	10.06	SB2_63
Hedgerley Lake Wood	SU 975 864	1.56	SB2_253
Hedgerley Wood	SU 974 868	2.17	SB2_251
Higher Denham	TQ 025 876	1.40	HS_142
Hill Coppice	SU 942 877	1.65	SB2_60
Hill Wood	SU 943 884	3.70	SB2_62
Holly House Wood A	SU 961 868	0.16	SB2_212
Holly House Wood B	SU 960 868	2.19	SB2_81
Hollybush Wood	TQ 001 828	1.85	SB1_12
Isle Of Wight Farm Shaw	TQ 018 882	0.85	HS_135
Isle Of Wight Farm Shaw	TQ 018 880	0.32	HS_136
Kemsley Wood	SU 965 866	6.70	SB2_96
Langley Lodge	TQ 007 868	1.12	SB1_32
Ledborough Wood	SU 943 921	7.91	HS_61
Mounthill	SU 981 869	2.32	SB2_119
Mounthill - Parkhill	SU 982 867	11.21	SB2_255

continued over

Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Nightingale Wood	TQ 038 887	2.24	HS_289
Opposite Huberts/The Rancho	TQ 006 868	1.57	SB1_30
Penn Wood	TQ 000 852	6.01	SB1_11
Pickeridge Copse	SU 991 860	3.50	SB2_140
Pickeridge Plantation	SU 988 857	4.89	SB2_132
Pickeridge Wood	SU 986 861	1.38	SB2_216
Pinewood Road	TQ 021 837	4.44	SB1_179
Pond's Wood	SU 960 864	7.56	SB2_244
Priory Covert	TQ 046 864	1.34	SB1_103
Rowley Wood	SU 997 834	6.42	SB1_9
School's Wood	SU 963 862	8.51	SB2_89
Sheepcote	SU 922 871	6.49	BU_198
Sheepcote Wood North	SU 921 875	4.18	BU_191
Sheepfold Clump	SU 981 872	0.79	SB2_120
Sheepfold Manure Dump	SU 981 871	0.18	SB2_116
Sheepfold Quarry	SU 982 871	0.10	SB2_121
Stoke Park A	SU 972 831	1.11	SB2_105
Stoke Park B	SU 974 831	0.90	SB2_106
Stoke Park C	SU 971 830	3.06	SB2_104
Stoke Park D	SU 966 831	0.59	SB2_94
Stoke Park E	SU 967 828	0.65	SB2_95
Stoke Park F	SU 968 830	3.89	SB2_97
Stoke Park G	SU 972 828	0.59	SB_1498
The Clump	TQ 022 845	5.74	SB1_72
The Lea A	TQ 052 859	0.39	SB1_107
The Lea B	TQ 051 861	0.28	SB1_148
The Lea C	TQ 047 860	0.30	SB1_105
The Oldhouse Farm	TQ 008 863	3.20	SB1_36
The Rancho	TQ 006 870	4.89	SB1_146
Timber Wood	SU 970 859	21.92	SB2_247
Walk Wood	SU 959 907	6.89	HS_249
Wexham Springs (East)	SU 994 840	1.21	SB2_147
Wexham Springs (North)	SU 993 841	1.01	SB2_142
Wexham Springs (South)	SU 992 841	0.22	SB2_141
Wexham Street	SU 991 830	0.60	SB2_137
Wexham Street Golf Course	SU 993 829	0.27	SB2_144
Whipass Hill	SU 947 917	0.49	HS_65
Wooburn Common	SU 920 876	0.15	BU_193

Map 2: The Revised Ancient Woodland Inventory for South Bucks District



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. 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 acknowledged¹¹. 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.

¹¹ 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