



Ancient Woodland Inventory for the Chilterns

Appendix - Chiltern District



Chiltern
District Council



1. Introduction

This appendix summarises results from the Chilterns Ancient Woodland for the whole of Chiltern 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.

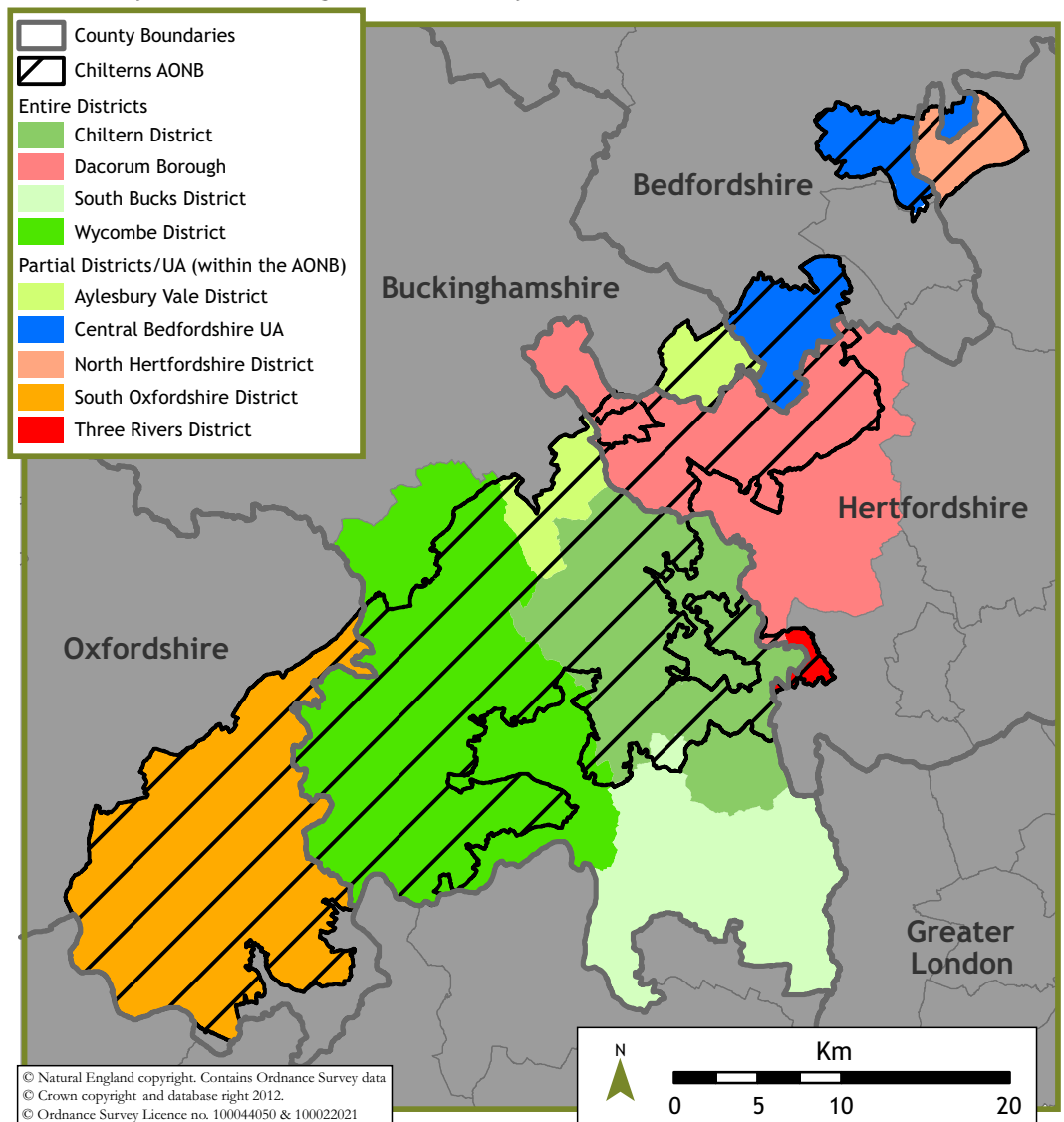
Project aims

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 Chiltern 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

	Area	% of the total area	Number of woodland parcels	Average area of woodland parcel
Chiltern	19,635			
All woodlands (NIWT) >2 ha	2,905	14.80	551	5.27
FC digitized AWI (woods >2 ha)	1,792	9.13	258	6.95
Revised AWI (including woods <2 ha)	1,953	9.95	350	5.58
Overall ancient woodland gain - compared to FC digitized AWI (2003)	161			

Table 2: Ancient woodland type.

Ancient woodland type	Area (hectares)	% of ancient woodland area
Revised AWI - ASNW	992	51
Revised AWI - PAWS	961	49

Table 3: Selected findings from the field survey work

Damage Type	% of sites
Invasive Species	24
Rubbish	23
Rubble	11
Gardenization	7
Garden Waste	6
Human Disturbance	5
Other	5
Grazing	1
Garden Planting	1
Localised Damage	1
Recreation	1

Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Ash Grove	SU 940 988	0.90	HS2_26
Ash Grove	SU 937 986	3.20	HS2_57
Ash Grove - Road Junction	SU 936 987	0.44	HS2_56
Bailey Wood	SU 994 948	8.12	HS2_72
Bailey Wood (W Edge)	SU 992 949	4.33	HS2_192
Birchland Wood	SU 970 899	6.54	HS_94
Birchland Wood	SU 970 903	6.03	HS_95
Chalfont Park	TQ 006 893	8.27	HS_126
Chalkdell Wood	SP 899 013	1.26	HS2_207
Chantry Wood	SU 991 894	3.12	HS_248
Chiltern Woodland Burial Park B	SU 965 899	0.57	HS_250
Deadhern	TQ 001 943	5.31	HS2_238

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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

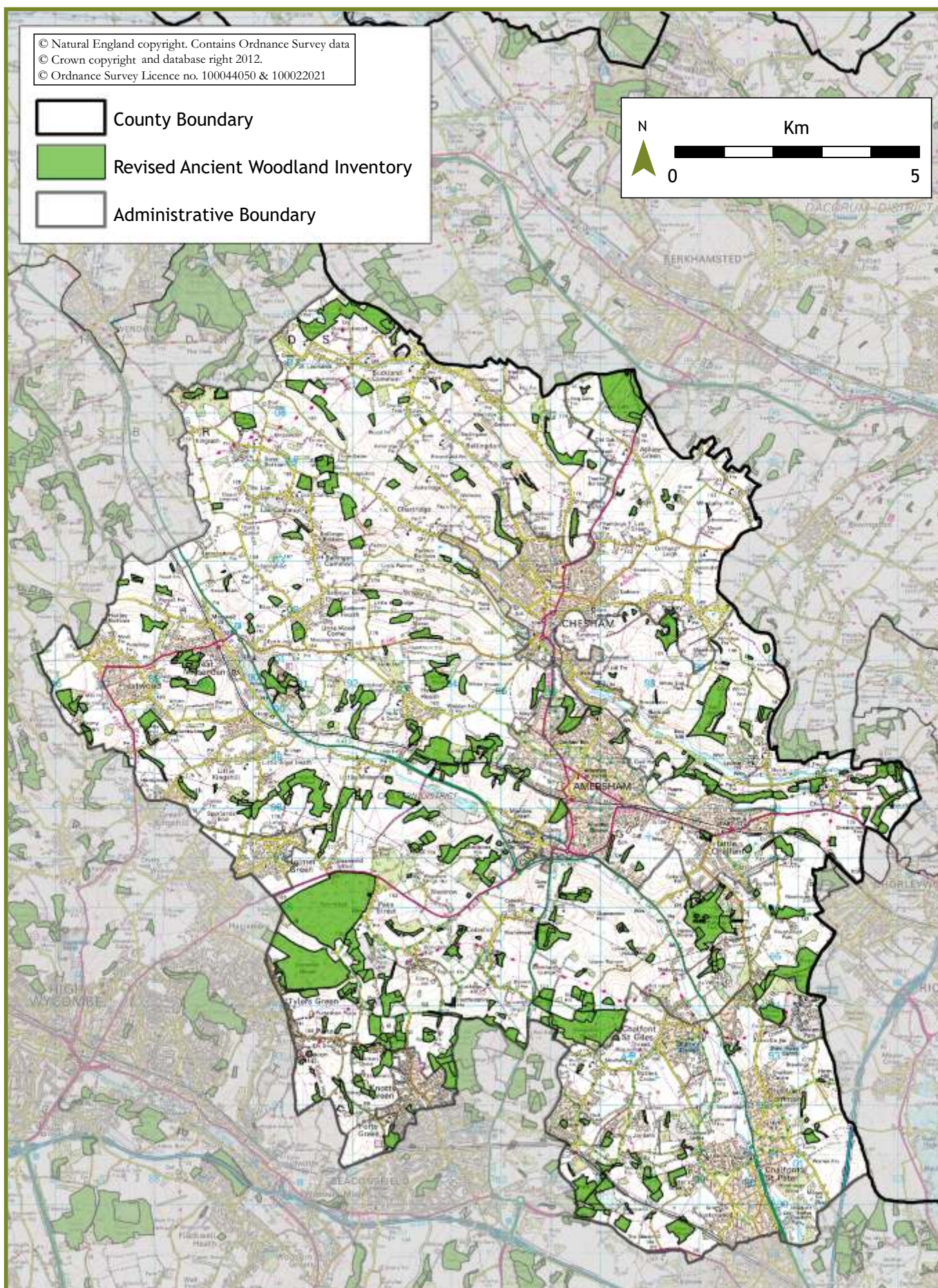
Site Name	Grid reference	Area (hectares)	File code
Dean Wood	SU 969 906	1.84	HS_92
Dean Wood (North Section)	SU 971 909	0.35	HS_93
Dean Wood A	SU 970 907	5.05	HS_91
Dean Wood B	SU 973 907	1.36	HS_100
Furtherwood	SP 917 000	2.28	HS2_11
Green Wood	SU 966 916	1.50	HS_90
Havenfield Wood	SP 894 024	0.52	HS2_112
Hertfordshire House North	SU 939 940	1.18	HS_56
Hertfordshire House South	SU 939 940	0.81	HS_55
Hickman's Coppice	SP 908 024	0.97	HS2_209
High Spring, Shardeloes (North)	SU 941 988	0.42	HS2_28
High Spring, Shardeloes (South)	SU 942 986	0.70	HS2_42
Hockeridge	SP 977 065	6.63	HS3_136
Hockeridge	SP 977 059	2.57	HS3_45
Horn Hill, Chalfont St Peter	TQ 014 925	0.62	HS2_1
Hyde House Plantation	SP 925 009	2.90	CH_1
Hyde House Wood A	SP 926 012	0.78	CH_2
Hyde House Wood B	SP 928 009	6.59	CH_3
Hydeheath Common	SP 931 006	0.38	CH_4
Juniper Hill	SU 909 928	0.66	BU_175
Kiln Pond Wood	SU 999 946	8.17	HS2_237
Landall's Wood	SU 938 929	4.04	HS_57
Latimer Parkfield	SU 998 992	2.29	CH_1648
Latimer Parkfield	TQ 000 992	0.63	CH_1660
Malms Wood	SU 982 907	0.42	HS_113
Malms Wood - The Ash Beds	SU 985 905	6.68	HS_115
Marrod's Bottom	SU 940 938	1.79	HS_225
Marrod's Bottom Lane	SU 936 938	0.49	HS_54
Middle Wood	TQ 014 915	1.45	HS2_5
Milton House (South)	SU 989 931	0.67	HS2_234
Milton House (West)	SU 988 932	0.18	HS2_233
Mounthill Wood	SU 979 906	2.61	HS_108
Mumford's Lane	SU 980 897	1.10	HS_110
New Sowed Wood	SU 927 985	1.59	HS2_67
Newland Gorse A	TQ 005 945	0.84	CH_6
Newland Gorse B	TQ 005 942	2.04	HS2_242
Newland Gorse C	TQ 004 944	2.35	HS2_240
Nicholas Spring	TQ 027 983	3.15	CH_1816
No Man's Wood	SU 915 996	1.05	HS2_211
Pancake	SP 975 068	0.96	HS3_123
Penn Street Farm	SU 923 953	1.79	HS_42
Pond Wood Shaw	SU 908 926	0.16	BU_169
Potter's Cross	SU 905 941	0.28	BU_152
Roberts Wood	TQ 011 923	0.38	HS2_96
Rodgers Wood	SU 966 963	1.11	HS2_79
Rook Wood	SP 905 005	25.25	HS2_23
Round Dell A	SU 949 972	0.78	HS2_226
Round Dell B	SU 950 971	0.62	HS2_227
Round Rocket Plantation	TQ 010 916	3.69	HS2_244
Rowan Farm	TQ 004 935	1.43	HS2_7

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Table 4: List of sites surveyed

Site Name	Grid reference	Area (hectares)	File code
Shardeloes A	SU 937 977	2.25	HS2_216
Shardeloes B	SU 938 976	0.24	HS2_218
Shardeloes C	SU 939 974	1.01	HS2_219
Shardeloes Clump	SU 940 978	0.88	HS2_50
Shardeloes D	SU 941 976	0.78	HS2_221
Shardeloes E	SU 938 980	1.07	HS2_44
Shardeloes F	SU 937 981	0.17	HS2_59
Shardeloes G	SU 934 982	0.13	HS2_63
Shardeloes Lake	SU 944 979	1.41	HS2_51
Shardeloes Lake Island	SU 943 980	0.52	HS2_45
Shardloes Shaw	SU 947 973	0.80	HS2_68
Shrubs Wood	TQ 006 937	1.12	HS2_6
Sibley's Wood	SU 986 897	0.68	HS_117
Snowhill Farm Shaw	SP 978 057	1.52	HS3_137
Stampwell Farm Copse	SU 975 899	0.99	HS_105
Stanley Hill Wood	SU 972 972	2.71	HS2_69
Stumpwell Wood	SU 911 930	1.25	BU_177
The Grove	SU 996 991	7.08	CH_1636
The Stone	SU 991 937	1.26	HS2_82
The Vache A	SU 994 942	0.21	HS2_81
The Vache B	SU 993 945	0.44	HS2_73
The Vache C	SU 992 943	0.90	HS2_74
The Vache E	SU 998 943	0.92	HS2_75
Thirty Acre Knoll	SU 974 904	2.16	HS_103
Todds Wood - Shardeloes Track	SU 933 981	0.63	HS2_62
Turners Wood	SU 996 931	3.10	HS2_84
Weedonhill Wood A	SU 945 990	0.32	HS2_224
Weedonhill Wood B	SU 946 991	1.42	HS2_225
Weedonhill Wood C	SU 948 992	8.38	HS2_267
Wheatsheaf Farm A	SU 962 908	0.39	HS_85
Wheatsheaf Farm B	SU 964 905	0.15	HS_88
Wheatsheaf Farm Shaw	SU 964 906	0.79	HS_275
Willow Wood	SP 966 064	1.44	HS3_39
Willow Wood Barn A	SP 967 067	2.05	HS3_40
Willow Wood Barn B	SP 966 066	0.54	HS3_38
Woodlands Park	SP 888 034	1.01	HS2_18
Wyburn Wood	TQ 023 978	2.76	CH_1799

Map 2: The Revised Ancient Woodland Inventory for Chiltern 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)

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