NATIONAL INVENTORY OF WOODLAND AND TREES

ENGLAND

County Report for

WEST SUSSEX

Forestry Commission

Printed in the United Kingdom

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ACKNOWLEDGEMENTS

INTRODUCTION

This report presents the results for West Sussex from the Forestry Commission National Inventory of Woodland and Trees (NIWT).

The Inventory consists of two separate surveys -

- The Main Woodland Survey (MWS) covering woodlands of 2 hectares and over

- The Survey of Small Woodland and Trees (SSWT) covering Small Woods, Groups of Trees, Linear Features and Individual Trees.

BACKGROUND

Since 1924 the Forestry Commission has carried out a number of national woodland surveys at intervals of between 15 and 20 years. The previous survey was carried out between 1979 and 1982. With the statistics becoming increasingly out of date the Forestry Commission decided to undertake a new survey: the *National Inventory of Woodland and Trees.*

The survey fieldwork for Great Britain was completed in July 2000. Work began in Scotland in 1994, followed by Southern England, Wales and Northern England.

SURVEY METHODS

Main Woodland Survey

In England, Woodland Surveys derived a digital map of all woodland showing Interpreted Forest Types from 1:25 000 scale aerial photography. This provided the basis for the sampling.

The digital map gives the extent of all woodland over 2 hectares and this was updated as survey work progressed. The maps on pages 4-6 show: overall woodland cover; woodland by ownership; and woodland by Interpreted Forest Type, respectively. The total area of woodland was obtained from the digital map with ground sampling undertaken to evaluate a wide range of woodland information such as species, age and stocking.

From the digital map the area of each woodland was recorded and this information was used to determine the intensity at which any selected woodland would be sampled. The overall sampling scheme was as follows:

- 2.0ha - <100ha   : every fifth wood
- 100ha - <500ha   : two woods in five
- 500ha and larger   : all woods

1 hectare square plots were used to sample the selected woodlands on the ground. This was a change of practice from all previous Census surveys, where whole woods have been selected for survey. For each of the three bands of woodland area a different sampling grid was used with the density of the squares being reduced as the woodlands increase in size. The overall aim was to sample 1% of the woodland in each size class.

Survey of Small Woodland and Trees_

The land area of England was stratified into coastal and inland 1 km x 1 km squares and a random sample of 1 km^2 plots were then selected, representing around 1% of the land area. 1:25 000 scale aerial photos were then used to identify features in each sample square. Each 1 km^2 was then divided into 16 parts, and two of these were selected at random for field data collection. Data was collected on Small Woodlands (0.10 - <2.00 ha), Linear Features, Groups and Individual Trees. The survey did not collect information from areas of developed land of 2 hectares or more.

MAIN POINTS FROM THE SURVEY RESULTS

- The total area of woodland of 0.1 hectares and over in West Sussex is 37,507 hectares. This represents 18.9% of the land area. (Table 1)

- Broadleaved woodland is the dominant forest type representing 55.1 % of all woodland. Conifer woodland represents 13.5 %, Mixed woodland 14.1 % and Open Space within woodlands 9.6 %. (Table 2)

- The main conifer species is pine covering 3,408 hectares or 47.4 % of all conifer species. The main broadleaved species is ash covering 4,968 hectares or 20.8 % of all broadleaved species. (Table 3)

- 3,789 hectares or 10 % of woodland over 2 hectares is owned by or leased to the Forestry Commission, and 32,800 hectares or 90 % of woodland is in Other ownership. (Table 6)

- There are a total of 1,262 woods over 2 ha within West Sussex with a mean wood area of 29.8 hectares. (Table 7a) There are a total of 2,115 woods from 0.1 - <2.0 hectares with a mean wood area of 0.43 hectares. (Table 14)

- There are 1.1 million live trees outside woodland in West Sussex. (Table 15)

- Woodland land cover increased by over 2,800 hectares from 17.4 % to 18.8 % of the land area between 1980 and 1995. (Table 19)

- The area of broadleaves increased by 18% between 1980 and 1995, with the relative proportion of broadleaves to conifers increasing from 71% to 77 %. (Table 20)

INVENTORY REPORTS

As well as this report for West Sussex, reports are available for the other counties in the region as shown on the map opposite. Also available are region and county reports for England as well as a report for the country as a whole. Wales and Scotland are also covered by reports. Inventory reports can also be viewed or downloaded from the website at www.forestry.gov.uk/inventory.

Map 1 Regional and county boundaries

East Midlands Region

West Midlands Region

East of England Region

Buckinghamshire

Oxfordshire

London Region

Berkshire

South West Region

Surrey

Kent

South East Region

Hampshire

West Sussex

East Sussex

Isle of Wight

5   10   15   20   Kilometres

Map 2 Distribution of woodland over 2 hectares

Berkshire

Surrey

Hampshire

East Sussex

5   10   15   20
Kilometres

Reference Date 31 March 1995

Map 3 Distribution of woodland over 2 hectares by ownership

Forestry Commission woodland
Other woodland

Berkshire

Surrey

Hampshire

East Sussex

5   10   15   20
Kilometres
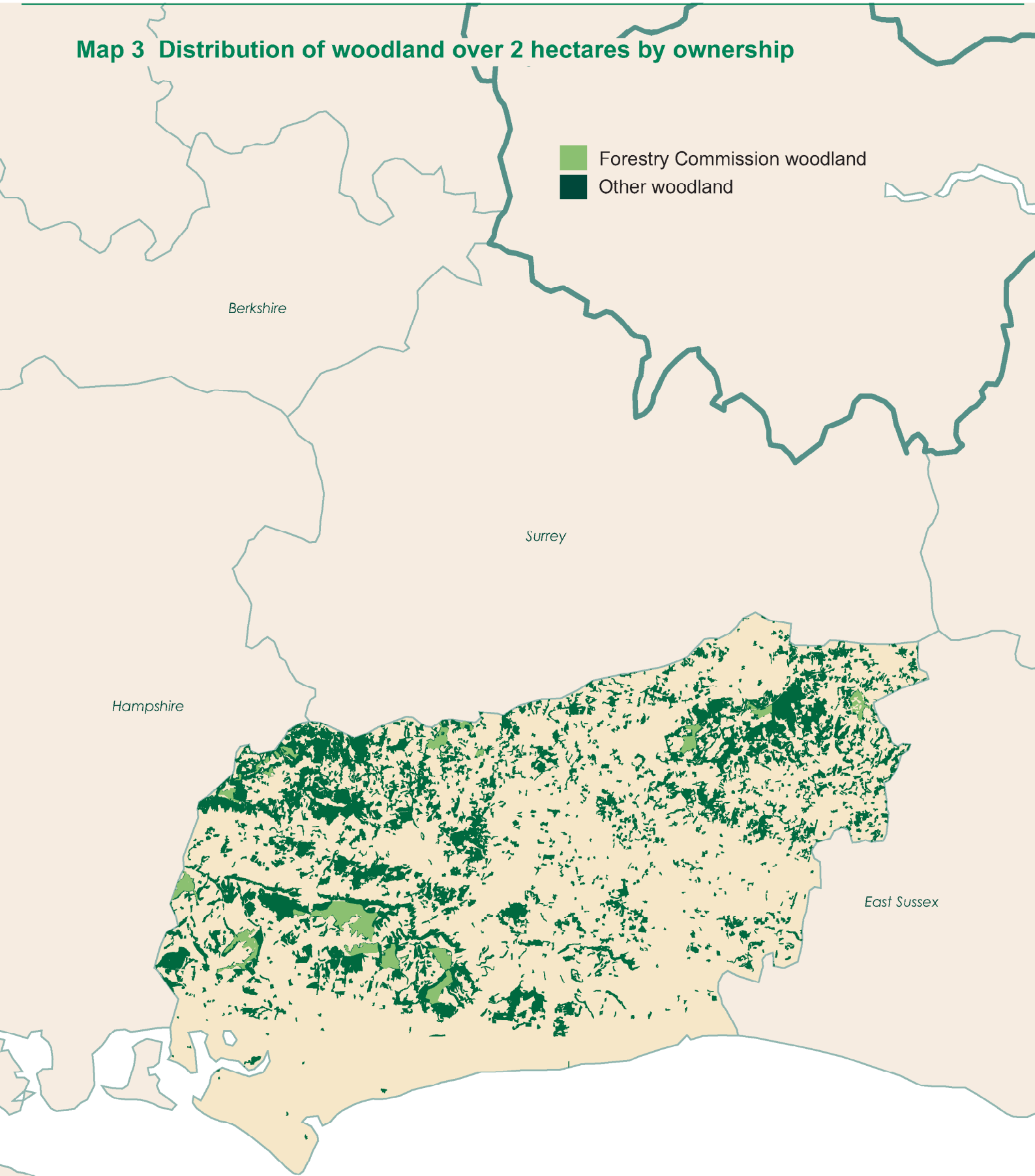
Based on Ordnance Survey mapping with the permission of the
Controller of Her Majesty's Stationary Office.
@   Crown Copyright - Forestry Commission Licence No:GD272388

Map 4 Distribution of woodland over 2 hectares by Interpreted Forest Type

Berkshire

Surrey

Hampshire

East Sussex

Legend:
- Broadleaves
- Conifer
- Mixed
- Felled
- Young trees & shrubs
- Ground prepared for planting
- Coppice

5   10   15   20
Kilometres

Reference Date 31 March 1995

SUMMARY RESULTS FROM THE NATIONAL INVENTORY OF WOODLAND AND TREES (NIWT)

Both the Main Woodland Survey and the Survey of Small Woodland and Trees contributed to the estimate of woodland area for West Sussex.

Tables 1-3 show the combined woodland area from the Main Woodland Survey and the Survey of Small Woodland and Trees.

Tables 4 and 5 summarise the numbers of live trees outside woodland, and the lengths of Linear Features from the Survey of Small Woodland and Trees.

Table 1:	Woodland area by woodland size class
Table 2:	Woodland area by forest type and woodland size
Table 3:	Woodland area by principal species and woodland size
Table 4:	Numbers of live trees outside woodland by feature type
Table 5:	Lengths of Linear Features

Note: *The figures in many of the tables may not add due to rounding*

Table 1   Woodland area by woodland size class

Woodland size (ha)	Woodland area (ha)	% of Woodland area
2.00 and over	36,589	97.6
0.25 - < 2.00	821	2.2
0.10 - < 0.25	97	0.3
Total area of woodland	**37,507**	**100.0**
% Woodland land cover	**18.9**	

1.   Area of West sussex, including inland water, 198,808 ha based on digital boundaries used in the
     1991 Census of Population

Table 2 Woodland area by forest type and woodland size

Forest type	Woodland size (ha)		Total area	Percentage of
	2.0 and over	0.1 - <2.0	(ha)	total area
Conifer	5,072	8	5,080	13.5
Broadleaved	19,975	703	20,678	55.1
Mixed	5,161	130	5,291	14.1
Coppiced	1,297	0	1,297	3.5
Copp-w-standards	826	0	826	2.2
Windblow	10	0	10	0.0
Felled	736	0	736	2.0
Open Space	3,510	76	3,586	9.6
Total	**36,589**	**918**	**37,507**	**100**

1.   See Glossary for definitions of forest types.

Table 3 Woodland area by principal species and woodland size

Species/Groups	Woodland size (ha)		Total area (ha)	Percentage of total area	
	2.0 and over	0.1 -<2.0		Category*	Species**
Pine	3,383	25	3,408	47.4	11.0
Sitka spruce	30	0	30	0.4	0.1
Larch	771	7	778	10.8	2.5
Other conifers	2,592	32	2,624	36.5	8.4
Mixed conifers	324	23	347	4.8	1.1
Total conifers	**7,101**	**87**	**7,188**	**100.0**	**23.1**
Oak	4,616	191	4,807	20.1	15.5
Beech	3,863	61	3,924	16.4	12.6
Sycamore	833	34	867	3.6	2.8
Ash	4,882	86	4,968	20.8	16.0
Birch	3,704	0	3,704	15.5	11.9
Elm	10	8	18	0.1	0.1
Other broadleaves	3,746	131	3,877	16.2	12.5
Mixed broadleaves	1,464	244	1,708	7.2	5.5
Total broadleaves	**23,118**	**755**	**23,873**	**100.0**	**76.9**
Total all species*	**30,219**	**842**	**31,061**		**100.0**

  *Category - species/group percentage of conifer or broadleaved category
**Species/group percentage of all species

***Excludes the 6445ha of Coppice, Felled and Open space areas which were included in Table 2

1.   The standard errors of the area estimates for woodland of 2 ha and over
          for the most common species or species groups are as follows

            Conifers   7%
            Broadleaves   3%
            Pine   12%
            Oak   7%
            Ash   7%

2.   Where the standard errors of these summary measures are 10% or less, the
          confidence intervals will be approximately symmetrical; the true value is
          expected to be within +/- one standard error for about 68% (or about two-thirds)
          of all cases, and within +/- two standard errors for about 95% of all cases.
          Where percentage standard errors are larger , e.g. for less common species or
          more variable species composition, the confidence intervals will be less
          symmetrical (and wider).

Table 4 Numbers of live trees outside woodland by feature type

Feature type	Total number of features	Total number of live trees	Mean number of trees per feature	Tree density (per sq km)
Groups	29,800	449,200	15	226
Narrow Linear Features	11,100	637,600	57	321
Individual Trees	46,200	46,200	1	23
Total		1,133,000		570

1.   Land area used to calculate tree density 198,808ha based on digital boundaries used in 1991 Census of Population

2.   The standard errors of the live tree number estimates for these feature types are:

      Groups   57%
      Narrow Linear Features   41%
      Individual Trees   25%

3.   Where the standard errors of these summary measures are 10% or less, the confidence intervals will be approximately symmetrical; the true value is expected to be within +/- one standard error for about 68% (or about two-thirds) of all cases, and within +/- two standard errors for about 95% of all cases. Where percentage standard errors are larger , e.g. for less common species or more variable species composition, the confidence intervals will be less symmetrical (and wider).

4.   See Glossary for definitions of feature types .

Table 5 Lengths of Linear Features

Feature type	Total number of features	Total length of features (km)	Density of features (m per sq km)
Wide Linear Features	0	0	0
Narrow Linear Features	11,100	799	402
Total		799	402

1.   Land area used to calculate feature density 198,808ha based on digital boundaries used in 1991 Census of Population

2.   The standard errors of the length estimates for these feature types are:

      Wide Linear Features   -
      Narrow Linear Features   44%

3.   Where the standard errors of these summary measures are 10% or less, the confidence intervals will be approximately symmetrical; the true value is expected to be within +/- one standard error for about 68% (or about two-thirds) of all cases, and within +/- two standard errors for about 95% of all cases. Where percentage standard errors are larger , e.g. for less common species or more variable species composition, the confidence intervals will be less symmetrical (and wider).

4.   See Glossary for definitions of feature type .

RESULTS FROM THE MAIN WOODLAND SURVEY (MWS)

Survey Method

Woods were selected from the digital map of woodland of 2 hectares and over, then sampled using a random grid of 1 hectare sample plots. The density of sample plots was reduced as the sampled woodland increase in size, the general aim being to sample 1% of the woodland area. The ground sampling evaluated a wide range of data such as species, age and stocking.

Table 6:	Summary of woodland area by ownership
Chart:	Woodland area by ownership
Table 7a:	Size class distribution of woodland
Table 7b:	Size class distribution of woodland by ownership units
Table 8:	Area of woodland by forest type and ownership
Chart:	Area of woodland by forest type
Table 9a:	Area of High Forest by principal species and ownership
Graph:	Area of High Forest by principal species and ownership
Table 9b:	Area of High Forest by principal species, ownership and category
Graph:	High Forest Category 1 Area by principal species and ownership
Graph:	High Forest Category 2 Area by principal species and ownership
Table 10a:	High Forest Category 1 Area by principal species and planting year class
Graph:	High Forest Category 1 Area by planting year class
Table 10b:	High Forest Category 1 Forestry Commission: area by principal species and planting year class
Graph:	High Forest Category 1 Forestry Commission - area by planting year class
Table 10c:	High Forest Category 1 Other ownership: area by principal species and planting year class
Graph:	High Forest Category 1 Other ownership: area by planting year class
Table 11:	High Forest: principal species by planting year class
Table 12:	Ownership type by area and percentage
Chart:	Ownership type by area

Note: The figures in many of the tables may not add due to rounding

Table 6 Summary of woodland area by ownership

Ownership	ha	% woodland
Forestry Commission	3,789	10
Other	32,800	90
Total area of woodland	**36,589**	**100**

1.   Woodland area from aerial photographic interpretation map updated to 31 March 1995

2.   See Glossary for definitions of ownership types

Woodland area by ownership

■ Forestry Commission
■ Other ownership
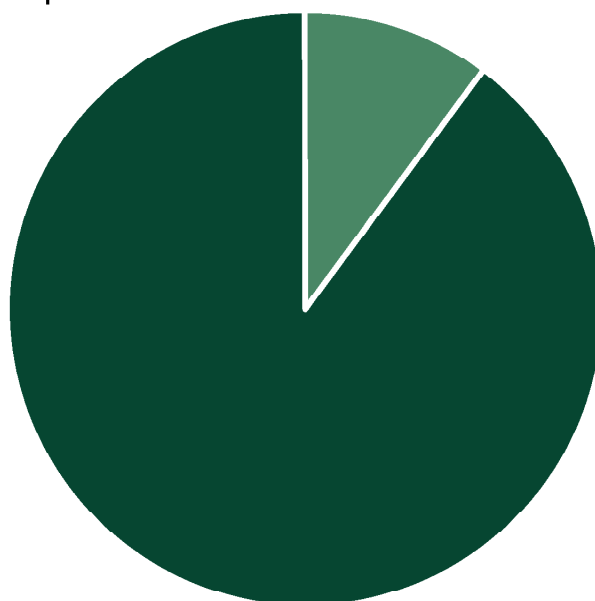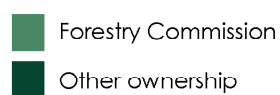
Table 7a Size class distribution of woodland

Size class (ha)	Number of woods	Total area (ha)	Percent of total area	Mean wood area (ha)
<10	897	3,913	10	4.4
10 - <20	155	2,155	6	13.9
20 - <50	126	3,958	11	31.4
50 - <100	36	2,607	7	72.4
<100	**1,214**	**12,633**	**34**	**10.4**
100 - <500	**36**	**6,989**	**19**	**194.1**
500 and >	**12**	**18,018**	**48**	**1501.5**
All woods	**1,262**	**37,639**	**100**	**29.8**

Table 7b Size class distribution of woodland by ownership units

Size class (ha)	FC or Other	Number of woods	Total area (ha)	Percent of total area	Mean wood area (ha)
<10	FC	5	22	0	4.4
	O	941	4,058	11	4.3
10 - <20	FC	0	0	0	0.0
	O	162	2,263	6	14.0
20 - <50	FC	9	273	1	30.3
	O	130	4,079	11	31.4
50 - <100	FC	2	133	0	66.3
	O	42	3,019	8	71.9
<100	FC	16	428	1	26.8
	O	1,275	13,419	36	10.5
100 - <500	FC	11	2,415	6	219.5
	O	40	7,428	20	185.7
500 and >	FC	1	947	3	947.0
	O	11	13,003	35	1182.1
Total	**FC**	**28**	**3,789**	**10**	**135.3**
	O	**1,326**	**33,850**	**90**	**25.5**

1. Table 7a and 7b are based solely on the digital woodland map. The other MWS tables are derived from the field sample data

2. The total area in Tables 7a and 7b is 1050hectares more than recorded in Table 6. This is mainly due to the field samples recording some land in other land uses not differentiated from woodland in the digital map

3. The data available from the digital map enable the identification of woodlands according to their ownerships, Forestry Commission or Other. The entries in table 7b cannot be added to derive table 7a as some woods may consist of both Forestry Commission and Other ownership(s)

   For example, the Forestry Commission may own most of a large wood with some parts in Other ownership(s). In Table 7a the whole area would be treated as one wood and the area allocated to one size category. In Table 7b each of the ownership units would be allocated to the size category for that unit. Dividing woods by ownership can occasionaly generate part woods of less than 2 hectares

Table 8 Area of woodland by forest type and ownership

Forest type	Forestry Commission		Other		All ownerships	
	ha	%	ha	%	ha	%
Conifer	633	16.7	4,440	13.5	5,072	13.9
Broadleaved	2,259	59.6	17,716	54.0	19,975	54.6
Mixed	399	10.5	4,763	14.5	5,161	14.1
Coppice	91	2.4	1,206	3.7	1,297	3.5
Copp-w-Stds	0	0.0	826	2.5	826	2.3
Windblow	0	0.0	10	0.0	10	0.0
Felled	69	1.8	667	2.0	736	2.0
Open Space	338	8.9	3,172	9.7	3,510	9.6
Total	3,789	100.0	32,800	100.0	36,589	100.0

Area of woodland by forest type

- Conifer
- Broadleaves
- Mixed
- Coppice
- Coppice-w-standards
- Felled
- Open Space
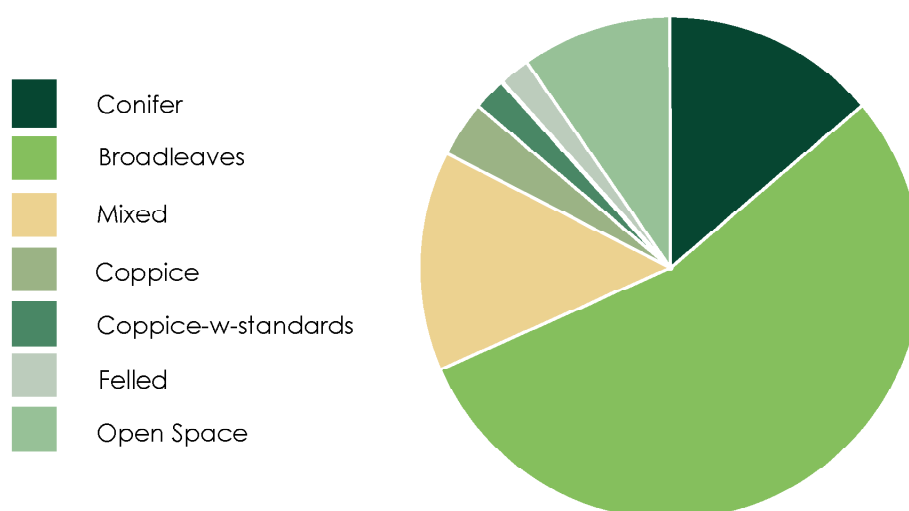
Table 9a Area of High Forest by principal species and ownership

Species	Forestry Commission			Other			All ownerships		
	area (ha)	cat* %	spp** %	area (ha)	cat* %	spp** %	area (ha)	cat* %	spp** %
Scots pine	212	26	6	2,269	36	8	2,481	35	8
Corsican pine	199	24	6	698	11	3	897	13	3
Lodgepole pine	0	0	0	5	0	0	5	0	0
Sitka spruce	0	0	0	30	0	0	30	0	0
Norway spruce	134	16	4	1,196	19	4	1,330	19	4
European larch	0	0	0	61	1	0	61	1	0
Jap/Hybrid larch	0	0	0	710	11	3	710	10	2
Douglas fir	61	7	2	482	8	2	543	8	2
Other conifers	165	20	5	555	9	2	719	10	2
Mixed conifers	43	5	1	281	4	1	324	5	1
Total conifers	**815**	**100**	**25**	**6,286**	**100**	**23**	**7,101**	**100**	**23**
Oak	234	9	7	4,382	21	16	4,616	20	15
Beech	1,479	60	45	2,384	12	9	3,863	17	13
Sycamore	9	0	0	824	4	3	833	4	3
Ash	250	10	8	4,632	22	17	4,882	21	16
Birch	349	14	11	3,355	16	12	3,704	16	12
Poplar	0	0	0	124	1	0	124	1	0
Sweet chestnut	29	1	1	600	3	2	629	3	2
Elm	0	0	0	10	0	0	10	0	0
Other broadleaves	78	3	2	2,915	14	11	2,993	13	10
Mixed broadleaves	48	2	1	1,416	7	5	1,464	6	5
Total broadleaves	**2,476**	**100**	**75**	**20,642**	**100**	**77**	**23,118**	**100**	**77**
Total - all species	**3,291**		**100**	**26,928**		**100**	**30,219**		**100**
Felled	**69**			**667**			**736**		
Total High Forest	**3,360**			**27,595**			**30,955**		

*cat : species percentage of Conifer or Broadleaved in the ownership category
**spp : percentage of all species in the ownership category

1.   In addition to the areas shown there are 3,510ha of other areas integral to
the woodland not stocked with tree species.

2.   The standard errors of the all ownerships area estimates for the most common species or species groups are as follows;

Conifers   7%
Broadleaves   3%
Scots pine   14%
Oak   7%
Ash   7%

3.   Mixtures: where possible the species in mixtures have been separately recorded. Where this
has not been possible they were described as 'Mixed conifers' or 'Mixed broadleaves'.

4.   Confidence Intervals: where the standard errors of these summary measures are 10% or less, the
confidence Intervals will be approximately symmetrical; the true value is expected
to be within +/- one standard error for about 68% (or about two-thirds) of all cases,
and within +/- two standard errors for about 95% of all cases. Where percentage
standard errors are larger , e.g. for less common species or more variable species
composition, the confidence intervals will be less symmetrical (and wider).

Area of High Forest by principal species and ownership
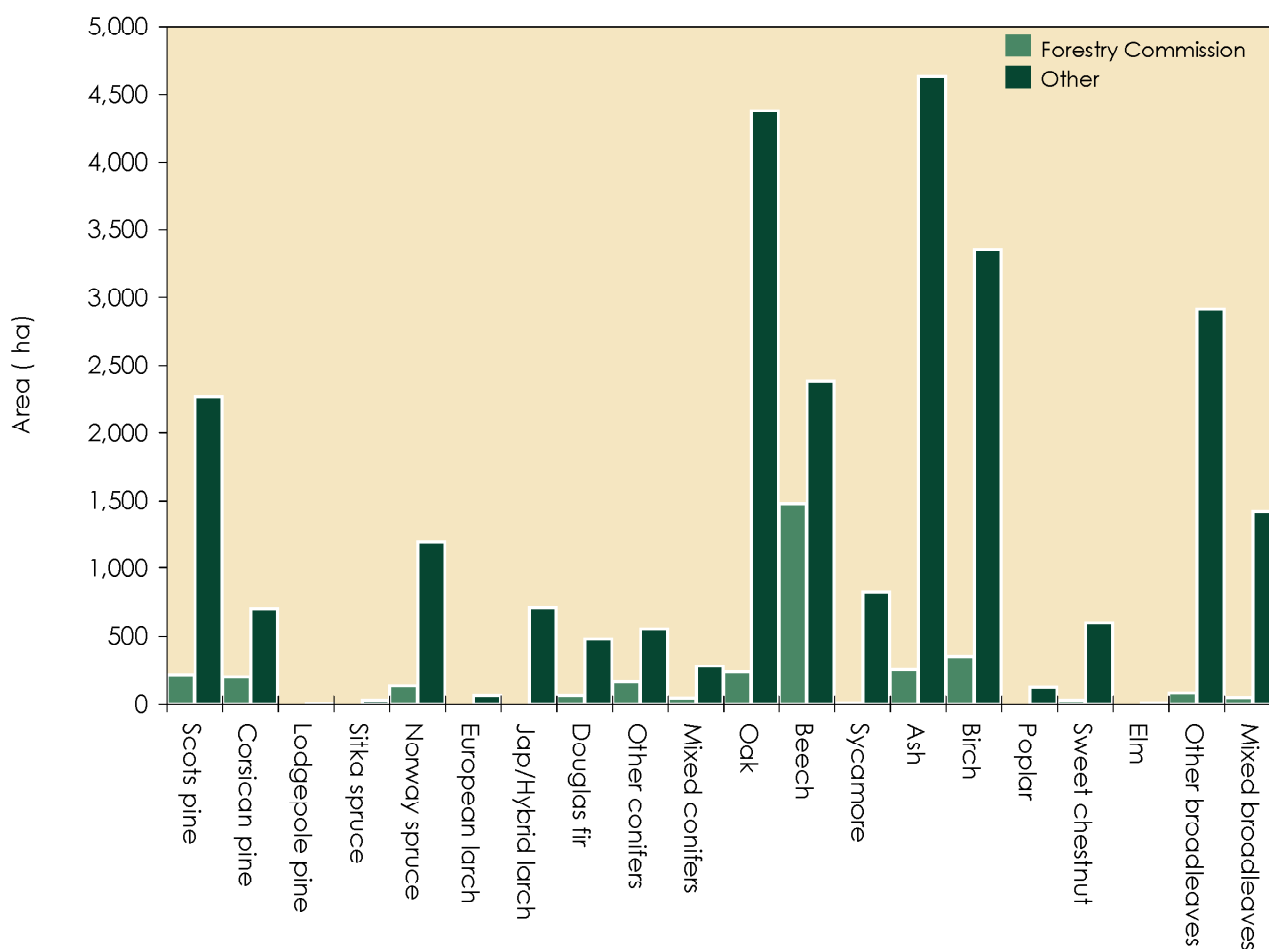
Table 9b Area of High Forest by principal species, ownership and category

Species	Forestry Commission			Other			All ownerships		
	cat. 1	cat. 2	Total (ha)	cat. 1	cat. 2	Total (ha)	cat. 1	cat. 2	Total (ha)
Scots pine	212	0	212	2,228	40	2,269	2,441	40	2,481
Corsican pine	199	0	199	698	0	698	897	0	897
Lodgepole pine	0	0	0	5	0	5	5	0	5
Sitka spruce	0	0	0	30	0	30	30	0	30
Norway spruce	134	0	134	1,182	14	1,196	1,316	14	1,330
European larch	0	0	0	61	0	61	61	0	61
Jap/Hybrid larch	0	0	0	710	0	710	710	0	710
Douglas fir	61	0	61	482	0	482	543	0	543
Other conifers	156	9	165	294	261	555	450	269	719
Mixed conifers	43	0	43	281	0	281	324	0	324
Total conifers	**806**	**9**	**815**	**5,971**	**315**	**6,286**	**6,777**	**324**	**7,101**
Oak	234	0	234	3,906	476	4,382	4,140	476	4,616
Beech	1,475	4	1,479	2,215	169	2,384	3,690	173	3,863
Sycamore	9	0	9	648	177	824	656	177	833
Ash	211	39	250	4,307	324	4,632	4,519	363	4,882
Birch	284	65	349	2,774	581	3,355	3,058	646	3,704
Poplar	0	0	0	124	0	124	124	0	124
Sweet chestnut	16	13	29	503	97	600	519	110	629
Elm	0	0	0	0	10	10	0	10	10
Other broadleaves	0	78	78	1,066	1,850	2,915	1,066	1,928	2,993
Mixed broadleaves	43	4	48	1,012	404	1,416	1,055	408	1,464
Total broadleaves	**2,272**	**204**	**2,476**	**16,555**	**4,087**	**20,642**	**18,828**	**4,291**	**23,118**
Total - all species	**3,078**	**213**	**3,291**	**22,526**	**4,402**	**26,928**	**25,605**	**4,615**	**30,219**

1. The standard errors of the all ownerships area estimates for the most common species or species groups (in all woodland types) are as follows

	Category 1*	Category 2*	Total High Forest
Conifers	8%	36%	7%
Broadleaves	3%	6%	3%
Scots pine	14%	64%	14%
Oak	8%	25%	7%
Ash	7%	23%	7%

*See Glossary for Category 1 and Category 2 descriptions

2. Where the standard errors of these summary measures are 10% or less, the confidence intervals will be approximately symmetrical; the the true value is expected to be within +/- one standard error for about 68% (or about two-thirds) of all cases, and within +/- two standard errors for about 95% of all cases. Where percentage standard errors are larger , e.g. for less common species or more variable species composition, the confidence intervals will be less symmetrical (and wider).

3. Where possible the species in mixtures have been separately recorded. Where this has not been possible they were described as 'Mixed conifers' or 'Mixed broadleaves'.

High Forest Category 1 - Area by principal species and ownership
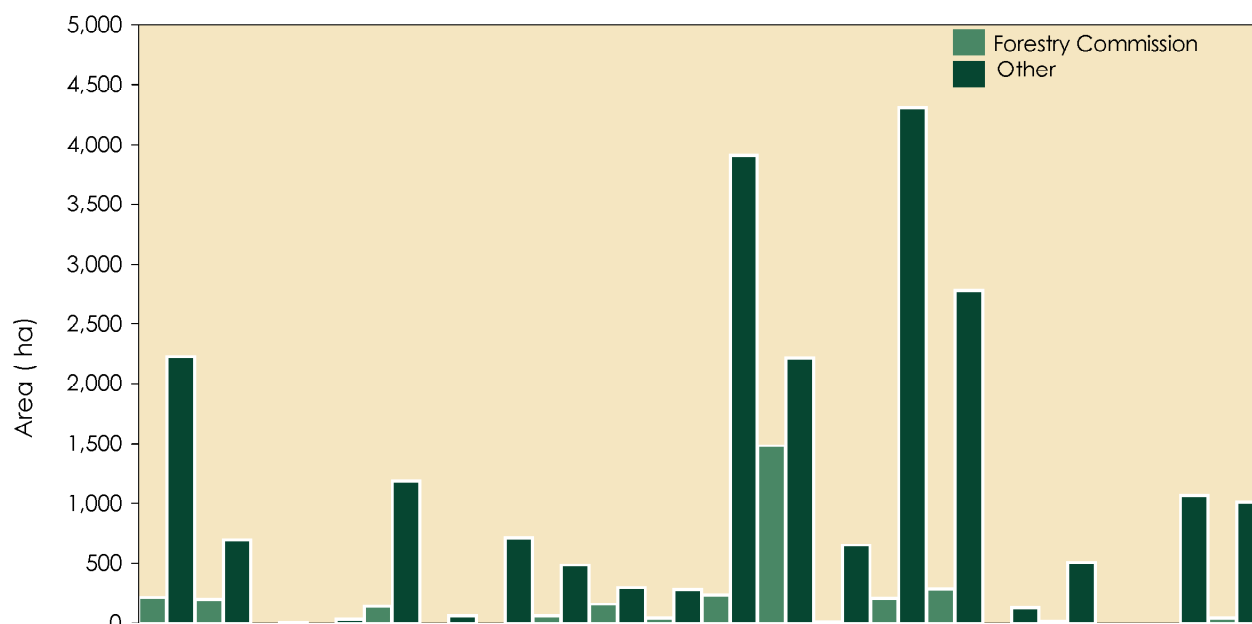
High Forest Category 2 - Area by principal species and ownership
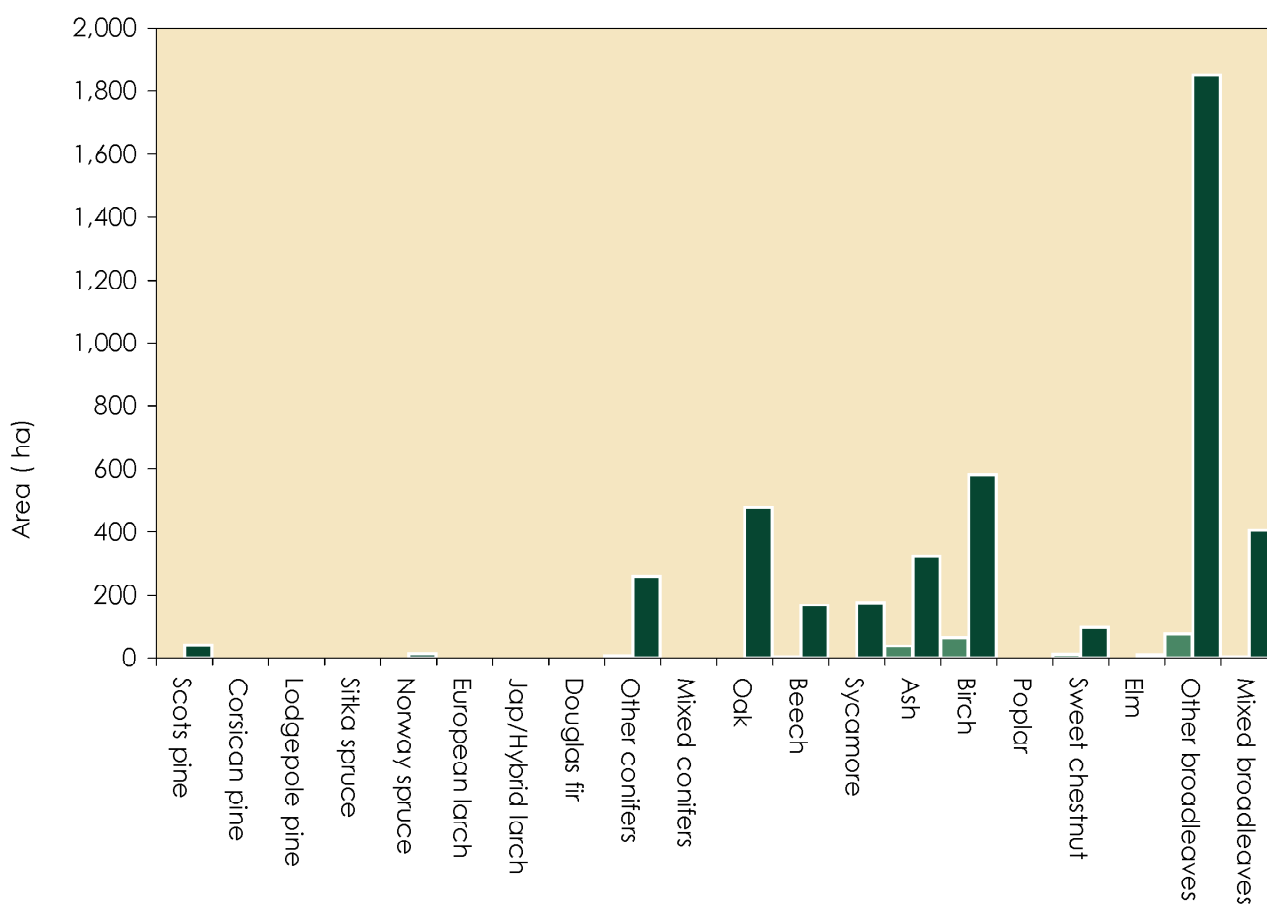
Table 10a High Forest Category 1 - Area by principal species and planting year class

Species	Planting year class*												Total (ha)
	1991-1995	1981-1990	1971-1980	1961-1970	1951-1960	1941-1950	1931-1940	1921-1930	1911-1920	1901-1910	1861-1900	Pre-1861	
Scots pine	216	9	433	716	657	243	61	26	70	0	5	5	2,441
Corsican pine	111	74	474	191	8	39	0	0	0	0	0	0	897
Lodgepole pine	0	0	0	5	0	0	0	0	0	0	0	0	5
Sitka spruce	0	30	0	0	0	0	0	0	0	0	0	0	30
Norway spruce	25	141	336	399	319	96	0	0	0	0	0	0	1,316
European larch	11	0	5	25	0	0	19	0	0	0	0	0	61
Jap/Hybrid larch	215	39	274	96	51	10	20	5	0	0	0	0	710
Douglas fir	81	106	116	158	77	0	4	0	0	0	0	0	543
Other conifers	40	9	30	164	182	19	0	0	0	0	0	4	450
Mixed conifers	61	40	39	79	45	25	0	7	27	0	0	0	324
Total conifers	**760**	**448**	**1,707**	**1,835**	**1,339**	**434**	**104**	**38**	**97**	**0**	**5**	**9**	**6,777**
Oak	300	143	35	212	130	337	184	812	677	581	631	97	4,140
Beech	150	24	43	914	938	705	69	133	281	65	329	38	3,690
Sycamore	5	105	53	126	36	68	84	89	67	0	20	4	656
Ash	270	206	69	817	319	804	718	971	296	22	26	0	4,519
Birch	741	781	150	680	98	281	85	151	92	0	0	0	3,058
Poplar	0	0	5	55	61	3	0	0	0	0	0	0	124
Sweet chestnut	66	20	90	76	93	137	20	10	7	0	0	0	519
Elm	0	0	0	0	0	0	0	0	0	0	0	0	0
Other broadleaves	55	88	5	277	255	234	67	56	12	14	0	0	1,066
Mixed broadleaves	193	109	81	127	68	193	98	96	74	0	10	7	1,055
Total broadleaves	**1,781**	**1,479**	**531**	**3,285**	**1,996**	**2,762**	**1,324**	**2,318**	**1,505**	**682**	**1,017**	**146**	**18,828**
Total - all species	**2,541**	**1,927**	**2,238**	**5,120**	**3,336**	**3,196**	**1,428**	**2,357**	**1,602**	**682**	**1,022**	**155**	**25,605**

*Age determined from records where these were available. Where records were not available or were clearly inaccurate age-class was assigned by reference to similar crops of known age in the locality.

High Forest Category 1 - Area by planting year class
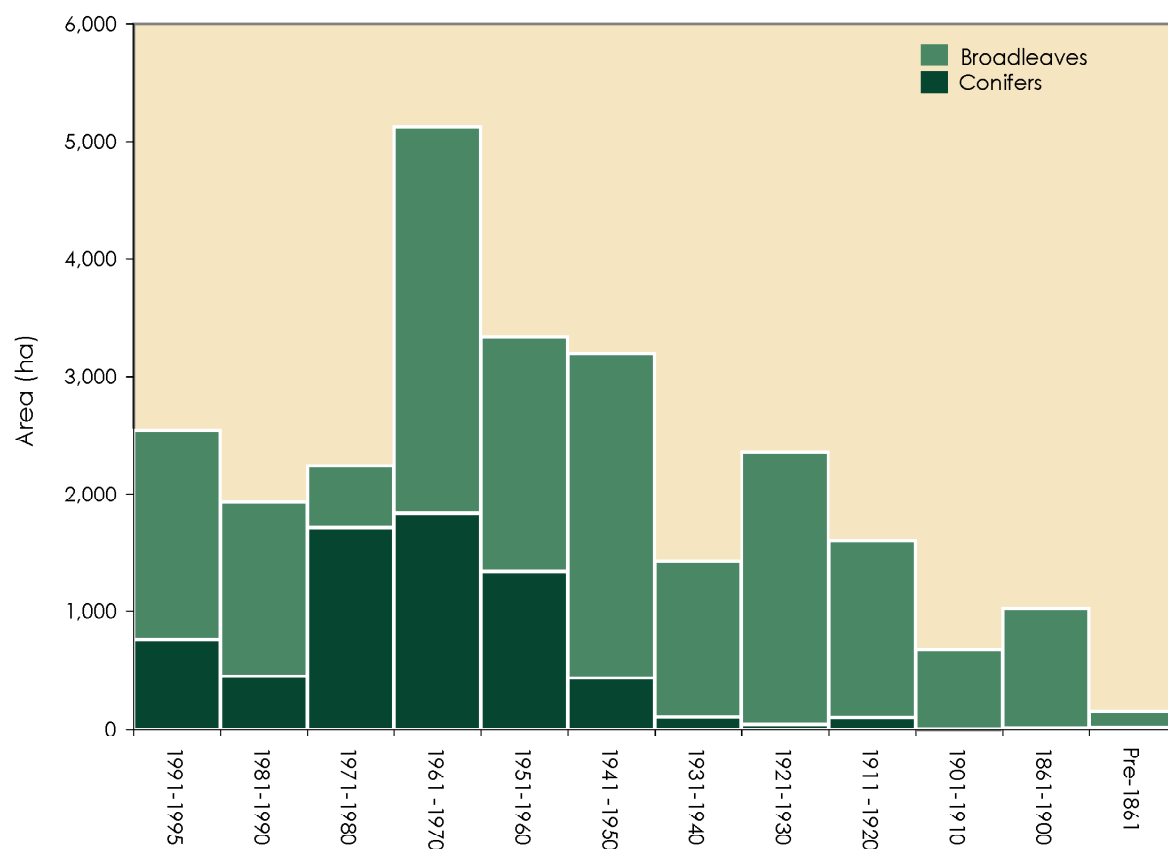
1. Most of the planting year classes cover 10 years, 1991-1995 is 5 years, and the classes prior to 1901 are 40 years or more.

Table 10b High Forest Category 1 - Forestry Commission : area by principal species and planting year classes

Species	Planting year class*												Total (ha)
	1991-1995	1981-1990	1971-1980	1961-1970	1951-1960	1941-1950	1931-1940	1921-1930	1911-1920	1901-1910	1861-1900	Pre-1861	
Scots pine	100	9	65	0	39	0	0	0	0	0	0	0	212
Corsican pine	100	74	22	0	4	0	0	0	0	0	0	0	199
Lodgepole pine	0	0	0	0	0	0	0	0	0	0	0	0	0
Sitka spruce	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway spruce	0	4	26	13	39	52	0	0	0	0	0	0	134
European larch	0	0	0	0	0	0	0	0	0	0	0	0	0
Jap/Hybrid larch	0	0	0	0	0	0	0	0	0	0	0	0	0
Douglas fir	0	0	0	9	52	0	0	0	0	0	0	0	61
Other conifers	0	9	30	56	61	0	0	0	0	0	0	0	156
Mixed conifers	0	0	9	35	0	0	0	0	0	0	0	0	43
Total conifers	**199**	**95**	**152**	**113**	**195**	**52**	**0**	**0**	**0**	**0**	**0**	**0**	**806**
Oak	30	0	0	74	4	56	69	0	0	0	0	0	234
Beech	93	0	0	390	503	420	43	0	0	4	0	22	1,475
Sycamore	0	0	0	9	0	0	0	0	0	0	0	0	9
Ash	88	48	13	17	36	9	0	0	0	0	0	0	211
Birch	215	39	22	0	9	0	0	0	0	0	0	0	284
Poplar	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet chestnut	0	0	0	0	9	0	0	0	7	0	0	0	16
Elm	0	0	0	0	0	0	0	0	0	0	0	0	0
Other broadleaves	0	0	0	0	0	0	0	0	0	0	0	0	0
Mixed broadleaves	22	0	0	4	4	4	9	0	0	0	0	0	43
Total broadleaves	**448**	**87**	**35**	**494**	**565**	**490**	**121**	**0**	**7**	**4**	**0**	**22**	**2,272**
Total - all species	**647**	**182**	**186**	**607**	**760**	**542**	**121**	**0**	**7**	**4**	**0**	**22**	**3,078**

*Age determined from records where these were available. Where records were not available or were clearly inaccurate age-class was assigned by reference to similar crops of known age in the locality.

High Forest Category 1 - Forestry Commission: area by planting year class
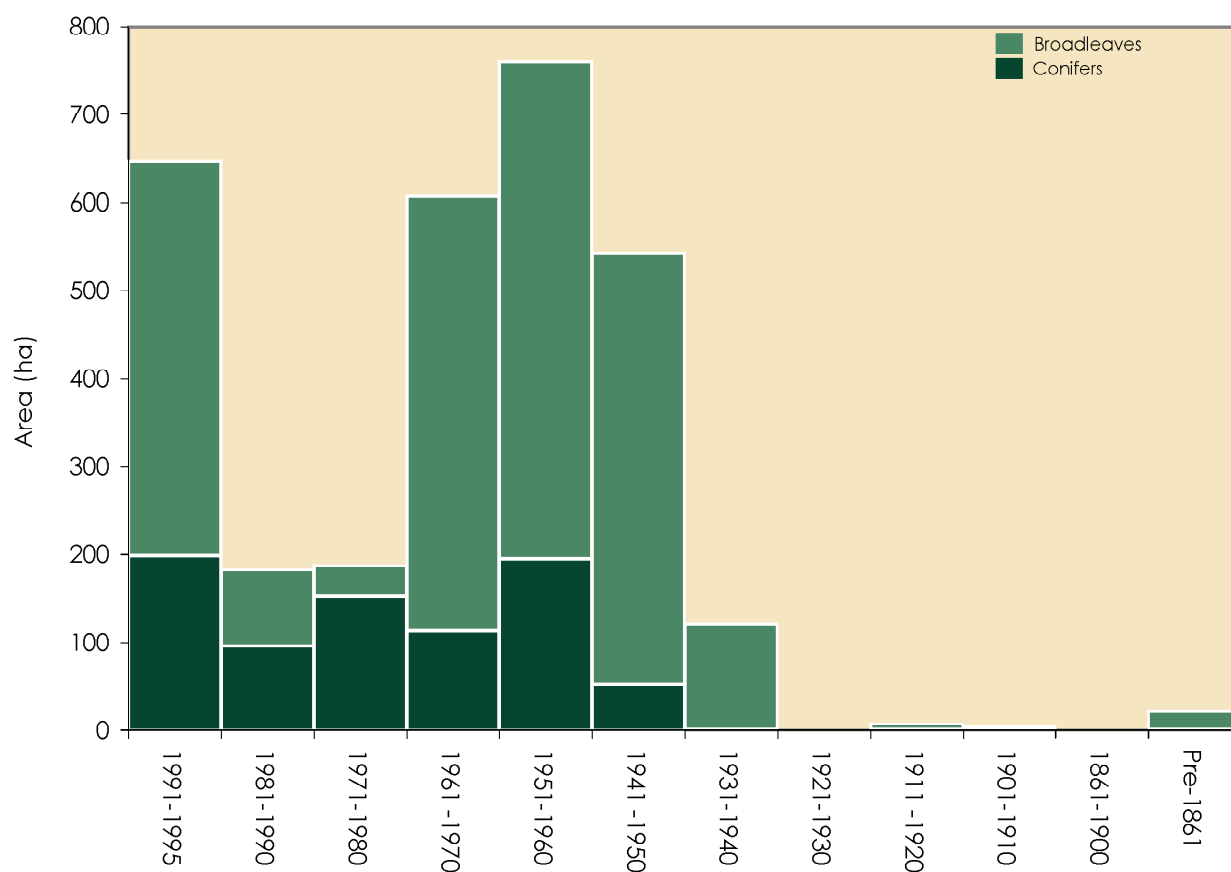

1. Most of the planting year classes cover 10 years, 1991-1995 is 5 years, and the classes prior to 1901 are 40 years or more.

Table 10c High Forest Category 1 - Other ownership: area by principal species and planting year classes

Species	Planting year class*												Total (ha)
	1991-1995	1981-1990	1971-1980	1961-1970	1951-1960	1941-1950	1931-1940	1921-1930	1911-1920	1901-1910	1861-1900	Pre-1861	
Scots pine	116	0	368	716	618	243	61	26	70	0	5	5	2,228
Corsican pine	11	0	453	191	4	39	0	0	0	0	0	0	698
Lodgepole pine	0	0	0	5	0	0	0	0	0	0	0	0	5
Sitka spruce	0	30	0	0	0	0	0	0	0	0	0	0	30
Norway spruce	25	136	310	386	280	44	0	0	0	0	0	0	1,182
European larch	11	0	5	25	0	0	19	0	0	0	0	0	61
Jap/Hybrid larch	215	39	274	96	51	10	20	5	0	0	0	0	710
Douglas fir	81	106	116	150	25	0	4	0	0	0	0	0	482
Other conifers	40	0	0	108	121	19	0	0	0	0	0	4	294
Mixed conifers	61	40	30	44	45	25	0	7	27	0	0	0	281
Total conifers	**561**	**353**	**1,556**	**1,722**	**1,144**	**382**	**104**	**38**	**97**	**0**	**5**	**9**	**5,971**
Oak	270	143	35	138	125	281	115	812	677	581	631	97	3,906
Beech	58	24	43	524	435	285	25	133	281	61	329	16	2,215
Sycamore	5	105	53	117	36	68	84	89	67	0	20	4	648
Ash	182	159	56	800	283	795	718	971	296	22	26	0	4,307
Birch	526	742	128	680	89	281	85	151	92	0	0	0	2,774
Poplar	0	0	5	55	61	3	0	0	0	0	0	0	124
Sweet chestnut	66	20	90	76	84	137	20	10	0	0	0	0	503
Elm	0	0	0	0	0	0	0	0	0	0	0	0	0
Other broadleaves	55	88	5	277	255	234	67	56	12	14	0	0	1,066
Mixed broadleaves	172	109	81	122	64	189	89	96	74	0	10	7	1,012
Total broadleaves	**1,333**	**1,392**	**496**	**2,791**	**1,431**	**2,273**	**1,203**	**2,318**	**1,498**	**678**	**1,017**	**124**	**16,555**
Total - all species	**1,894**	**1,745**	**2,052**	**4,513**	**2,576**	**2,655**	**1,307**	**2,357**	**1,595**	**678**	**1,022**	**133**	**22,526**

*Age determined from records where these were available. Where records were not available or were clearly inaccurate age-class was assigned by reference to similar crops of known age in the locality.

High Forest Category 1 - Other Ownership: area by planting year class

1. Most of the planting year classes cover 10 years, 1991-1995 is 5 years, and the classes prior to 1901 are 40 years or more.
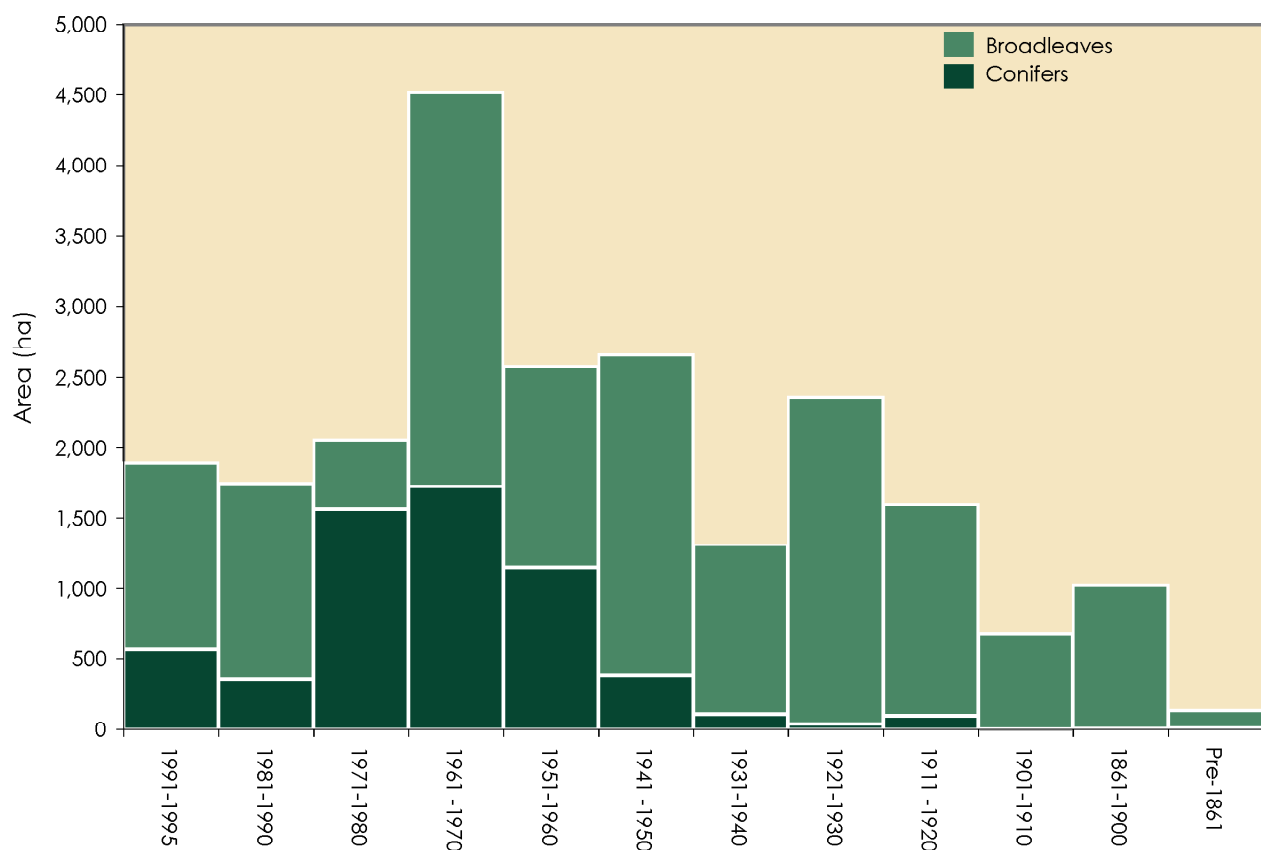
Table 11 High Forest : principal species by planting year class

Planting year class	First	%	Second	%	Third	%
1991-95	Birch	28	Oak	10	Ash	10
1981-90	Birch	32	Other broadleaves	16	Sycamore	10
1971-80	Corsican pine	16	Scots pine	15	Other broadleaves	12
1961-70	Beech	16	Birch	15	Ash	15
1951-60	Beech	26	Scots pine	18	Other broadleaves	9
1941-50	Ash	25	Beech	20	Other broadleaves	12
1931-40	Ash	40	Other broadleaves	18	Oak	10
1921-30	Ash	36	Oak	34	Other broadleaves	7
1911-20	Oak	46	Ash	17	Beech	16
1901-10	Oak	84	Beech	8	Ash	3
1861-1900	Oak	59	Beech	31	Ash	6
Pre 1861	Other conifers	44	Oak	22	Beech	17
All years	**Ash**	**16**	**Oak**	**15**	**Beech**	**13**

1.   Principal species as a percentage of area in the planting year class.

Table 12 Ownership type* by area and percentage

Ownership type	Area (ha)	%
Personal	20,888	57.1
Business	5,872	16.0
Forestry or timber business	0	0.0
Charity	4,507	12.3
Local Authority	1,052	2.9
Other public (not FC)	209	0.6
Forestry Commission	3,789	10.4
Community ownership or common land	0	0.0
Unidentified	272	0.7
Total	**36,588**	**100.0**

* This table is produced from data contributed on a voluntary basis by owners or their representatives.

Ownership type by area

- Personal
- Business
- Forestry or timber business
- Charity
- Local Authority
- Other public
- Forestry Commission
- Community ownership
- Unidentified
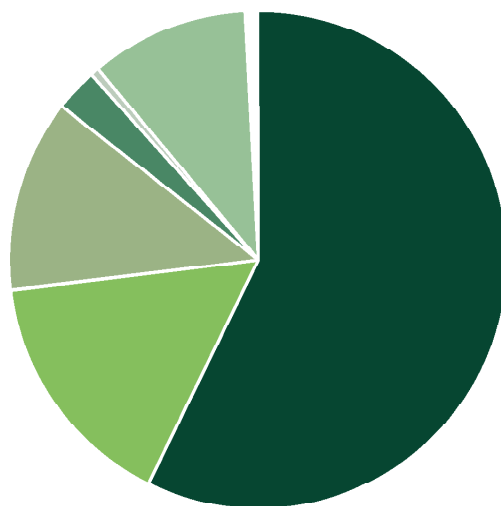
RESULTS FROM THE SURVEY OF SMALL WOODLAND AND TREES (SSWT)

Survey Method

The land area of England was stratified into coastal and inland 1 km x 1 km squares and a random sample of 1 km² plots were then selected, representing around 1% of the land area. 1:25 000 scale aerial photos were then used to identify features in each sample square. Each 1 km² was then divided into 16 parts, and two of these were selected at random for field data collection. Data was collected on Small Woodlands (0.10 - <2.00 ha), Linear Features, Groups and Individual Trees. The survey did not collect information from areas of developed land of 2 hectares or more.

Table 13:	Summary of information from the Survey of Small Woodland and Trees
Table 14:	Woodland area by feature type and woodland size
Table 15:	Numbers of live trees outside woodland by species and feature type
Table 16 :	Numbers of dead trees outside woodland by species and feature type
Table 17:	Numbers of live trees outside woodland by species and height band
Table 18:	Numbers of Groups by group size

Note: The figures in many of the tables may not add due to rounding

Table 13 Summary of information from the Survey of Small Woodlands and Trees

Feature type	Number of features	Total	Unit
Small Woods	2,115	918	Area (ha)
Wide Linear Features	0	0	Area (ha)
Wide Linear Features	0	0	Length (Km)
Narrow Linear Features	11,100	799	Length (Km)
Narrow Linear Features	11,100	637,600	Number of live trees
Groups	29,800	449,200	Number of live trees
Individual Trees	46,200	46,200	Number of live trees

1.   See Glossary for definitions of feature types.

Table 14 Woodland area by feature type and woodland size

Feature type	Woodland size (ha)		Total area	Number of	Mean size
	0.1 - <0.25	0.25 - <2.0	(ha)	features	(ha)
Small Woods	97	821	918	2,115	0.43
Wide Linear Features	0	0	0	0	0.00
Total	97	821	918	2,115	0.43

1.   See Glossary for definitions of feature types.

Table 15 Numbers of live trees outside woodland by species and feature type (000's trees)

Species	Feature type				Total live trees	Percent of total trees	
	Boundary Trees	Middle Trees	Groups	Narrow Linear Features		Category	Species
Pine	0.0	0.0	1.6	0.0	1.6	3.5	0.1
Spruce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Larch	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cypress	2.4	0.0	0.0	35.5	37.9	83.3	3.3
Other conifers	0.0	0.0	0.8	5.2	6.0	13.2	0.5
Total conifers	**2.4**	**0.0**	**2.4**	**40.7**	**45.5**	**100.0**	**4.0**
Oak	20.4	2.4	19.6	60.7	103.1	9.5	9.1
Beech	0.8	0.0	5.5	0.7	7.0	0.6	0.6
Sycamore	0.0	0.0	3.9	1.5	5.4	0.5	0.5
Ash	0.8	0.0	11.0	82.8	94.6	8.7	8.3
Birch	0.0	5.5	167.8	4.4	177.7	16.3	15.7
Poplar	0.0	0.0	3.1	1.5	4.6	0.4	0.4
Sweet chestnut	0.0	0.8	0.0	0.0	0.8	0.1	0.1
Horse chestnut	0.8	1.6	0.0	0.0	2.4	0.2	0.2
Alder	0.0	0.0	37.6	0.7	38.3	3.5	3.4
Lime	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elm	0.0	0.0	25.1	0.7	25.8	2.4	2.3
Willow	0.8	0.8	101.9	22.2	125.7	11.6	11.1
Other broadleaves	7.8	1.6	71.3	421.6	502.3	46.2	44.3
Total broadleaves	**31.4**	**12.5**	**446.8**	**596.9**	**1087.7**	**100.0**	**96.0**
Total - all species	**33.8**	**12.5**	**449.2**	**637.6**	**1133.0**		**100.0**

1.   Percentages

     Category : species percentage of conifer or broadleaved.
     Species : percentage of all species.

2.   The standard errors of the total tree number estimates for these feature types are:

     Individual Trees   25%
     Groups   57%
     Narrow Linear Features   41%

3.   See Glossary for definitions of feature types.

Table 16 Numbers of dead trees outside woodland by species and feature type (000's trees)

Species	Feature type				Total dead trees	Percent of total trees	
	Boundary Trees	Middle Trees	Groups	Narrow Linear Features		Category	Species
Pine	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spruce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Larch	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cypress	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other conifers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total conifers	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Oak	0.0	0.0	1.6	2.2	3.8	13.0	13.0
Beech	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sycamore	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ash	0.0	0.0	0.0	5.2	5.2	17.8	17.8
Birch	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poplar	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet chestnut	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Horse chestnut	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alder	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lime	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elm	0.0	0.0	1.6	3.7	5.3	18.2	18.2
Willow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other broadleaves	0.0	0.0	2.4	12.6	15.0	51.4	51.4
Total broadleaves	**0.0**	**0.0**	**5.5**	**23.7**	**29.2**	**100.0**	**100.0**
Total - all species	**0.0**	**0.0**	**5.5**	**23.7**	**29.2**		**100.0**

1.   See Glossary for definitions of feature types.

Table 17 Numbers of live trees outside woodland by species and height band (000's trees)

Species	Height band (m)				Total live trees
	2-5	5-15	15-20	>20	
Pine	1.6	0.0	0.0	0.0	1.6
Spruce	0.0	0.0	0.0	0.0	0.0
Larch	0.0	0.0	0.0	0.0	0.0
Cypress	0.0	2.4	17.8	17.8	38.0
Other conifers	0.0	6.0	0.0	0.0	6.0
Total conifers	**1.6**	**8.4**	**17.8**	**17.8**	**45.6**
Oak	10.8	55.2	32.4	4.7	103.1
Beech	0.7	2.4	3.9	0.0	7.0
Sycamore	0.0	5.4	0.0	0.0	5.4
Ash	24.5	56.3	12.1	1.6	94.5
Birch	104.3	72.6	0.8	0.0	177.7
Poplar	0.0	1.5	0.0	3.1	4.6
Sweet chestnut	0.0	0.8	0.0	0.0	0.8
Horse chestnut	0.0	0.8	1.6	0.0	2.4
Alder	7.8	29.8	0.7	0.0	38.3
Lime	0.0	0.0	0.0	0.0	0.0
Elm	0.0	25.8	0.0	0.0	25.8
Willow	110.1	14.8	0.7	0.0	125.6
Other broadleaves	363.3	136.1	3.0	0.0	502.4
Total broadleaves	**621.5**	**401.5**	**55.2**	**9.4**	**1,087.6**
Total - all species	**623.1**	**409.8**	**73.0**	**27.1**	**1,133.0**

Table 18 Number of Groups by group size

Number of trees per Group*	Number of Groups (000's)
2	2
3-5	6
6-10	6
11-20	5
21-50	7
51-100	5
>100	0
Total	**30**

*The size of the group is determined by the total number of trees, live plus dead.

COMPARISON OF RESULTS WITH THE 1980 CENSUS AND PREVIOUS SURVEYS

Survey Method

The 1980 Census and 1995 Inventory were undertaken using very different sampling methods.

Inventory practice and technology have moved on since the 1980 Census; this has led to changes in sampling methodology, scope and woodland definitions. For example, the Main Woodland Survey used the digital woodland map, created from aerial photos as a basis for sampling whereas the 1980 Census relied only on the woodland shown on the 1:50,000 Ordnance Survey map. Also in contrast to the 1980 Census, the Survey of Small Woodland and Trees did not record information within developed land e.g. residential or industrial areas of 2 or more hectares.

Where possible adjustments have been made to both the 1980 Census and the Inventory to achieve the nearest available comparison. The apparent changes indicated in the following tables and charts should therefore be treated with caution, particularly where areas are small.

Table 19:	Comparison of woodland area between 1980 Census and 1995 Inventory
Table 20:	Comparison of High Forest area by species between 1980 Census and 1995 Inventory
Chart:	Comparison of High Forest area by species between 1980 Census and 1995 Inventory
Table 21:	Comparison of High Forest Category 1 area by planting year class between 1980 Census and 1995 Inventory
Chart:	Comparison of High Forest Category 1 area by planting year class between 1980 Census and 1995 Inventory
Table 22:	Comparison of numbers of live trees outside woodland between 1980 Census and 1995 Inventory
Table 23:	Comparison of density of non-woodland features between 1980 Census and 1995 Inventory

Woodland cover

Chart	Change in woodland cover through time (1890 – 2000)
Maps:	Woodland by county through time (1895 – 1998)

Note: The figures in many of the tables may not add due to rounding

Table 19 Comparison of woodland area between 1980 Census and 1995 Inventory

Woodland size (ha)	1980 Census woodland area		1995 Inventory woodland area		Change (%)
	(ha)	(%)	(ha)	(%)	(%)
2.0 or more	31,948	92.5	36,589	97.8	15
0.25 - <2.0	2,576	7.5	821	2.2	-68
Total	34,524		37,410		8
% Woodland land cover	17.4		18.8		

1. Differences in sampling methodology may account for some of the apparent differences.

2. The above figures from the 1995 Inventory exclude
    woodland between 0.1 and <0.25 ha, thereby matching the scope of the 1980 Census.
    The 1995 figures above will therefore not match those in the previous sections of the report.

3. Land area used to calculate woodland cover percent (1995), 198,808 ha,
    was based on the 1991 Census of Population digital boundaries.

4. Land area used to calculate woodland cover percent (1980), 198,939ha,
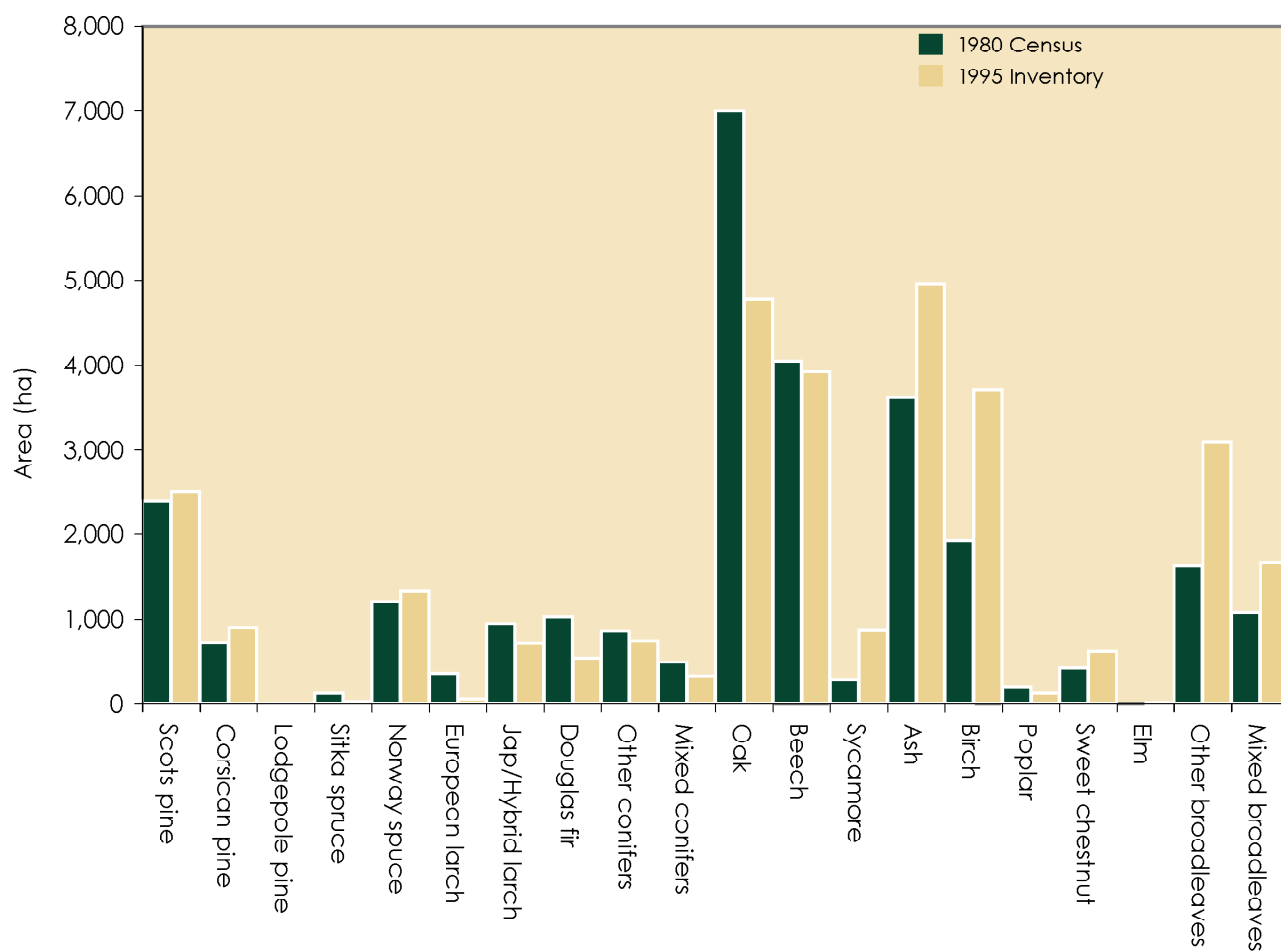
    (Ordnance Survey data)

Table 20 Comparison of High Forest area by species between 1980 Census and 1995 Inventory

Species	1980 Census woodland area (ha)	1995 Inventory woodland area (ha)	Change (%)
Scots pine	2,402	2,506	4
Corsican pine	723	897	24
Lodgepole pine	7	5	-31
Sitka spruce	129	30	-77
Norway spuce	1,211	1,330	10
European larch	364	61	-83
Jap/Hybrid larch	943	717	-24
Douglas fir	1,025	543	-47
Other conifers	864	751	-13
Mixed conifers	495	332	-33
Total conifers	**8,163**	**7,172**	**-12**
Oak	7,005	4,785	-32
Beech	4,047	3,924	-3
Sycamore	291	867	198
Ash	3,615	4,963	37
Birch	1,924	3,704	93
Poplar	200	132	-34
Sweet chestnut	423	629	49
Elm	1	18	1890
Other broadleaves	1,632	3,099	90
Mixed broadleaves	1,082	1,668	54
Total broadleaves	**20,219**	**23,789**	**18**
Total all species	**28,382**	**30,961**	**9**
Felled	**764**	**736**	**-4**
Total High Forest	**29,146**	**31,697**	**9**

1.   Differences in sampling methodology may account for some of the apparent differences.

2.   In the 1980 Census the areas assigned to species included any associated open space such as roads and rides. In the Inventory open spaces are separately identified and the overall proportion is 9.6% (Table 2). To obtain meaningful comparisons between the two datasets the 1980 Census data have therefore been reduced by 9.6%.

3.   The above figures from the 1995 Inventory exclude woodland between 0.1 and <0.25 ha, thereby matching the scope of the 1980 Census.
        The 1995 figures above will therefore not match those in the previous sections of the report.

4.   The 1980 figures include scrub to enable comparison

**Comparison of High Forest area by species between 1980 Census and 1995 Inventory**

Table 21 Comparison of High Forest Category 1 area by planting year class
between 1980 Census and 1995 Inventory

Planting year class	1980 Census woodland area (ha)	1995 Inventory woodland area (ha)	Change (%)
1991-1995	0	2,610	see note
1981-1990	0	1,927	see note
1971-1980	1,414	2,279	61
1961-1970	3,542	5,179	46
1951-1960	4,525	3,437	-24
1941-1950	2,157	3,264	51
1931-1940	1,547	1,428	-8
1921-1930	1,399	2,449	75
1911-1920	1,084	1,627	50
1901-1910	626	682	9
1861-1900	4,465	1,043	-77
Pre 1861	3,582	155	-96
Total all years	**24,341**	**26,080**	**7**

1.   The first two classes, 1991-1995 and 1981-1990, cover the period since the 1980 Census and no comparison is therefore available.

2.   The definition of High Forest Category 1 in the Inventory does not fully coincide with High Forest as defined in the 1980 Census.

Comparison of High Forest Category 1 area by planting year class between 1980 Census and 1995 Inventory
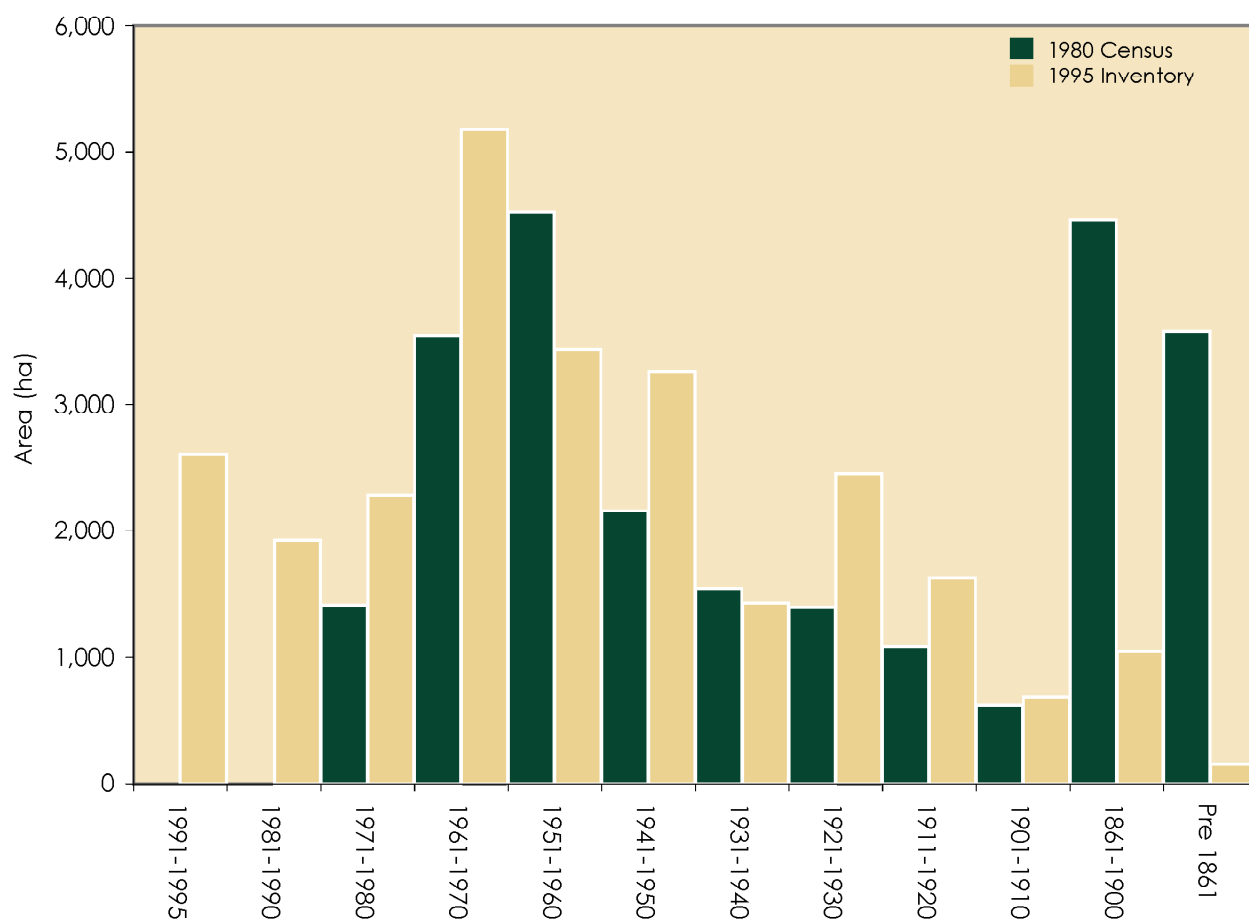
Table 22 Comparison of numbers of live trees outside woodland
between 1980 Census and 1995 Inventory   (000's)

Feature type	1980 Census	1995 Inventory	Change (%)
Boundary Tree	72	32	-55
Middle Tree	38	12	-67
Total Individual Trees	110	45	-59
Groups	277	298	8
Linear Features	481	294	-39
Total	867	636	-27

1.   The Survey of Small Woodland and Trees did not record information referring to tree
       features (I.e. Individual trees, Groups and Narrow Linear Features) within developed
       land.

2.   In the 1980 Census hazel, hawthorn, blackthorn and goat willow were excluded,
       the 1995 Inventory figures have been adjusted accordingly.
       The 1995 figures above will therefore not match those in the previous sections of the
       report.

3.   Changes stated in this table are indicative only. Even with adjustments to the 1995
       Inventory, the two surveys are not directly comparable - 1980 used 7cm diameter at
       breast height, and 1995 used 2m height, as minimum criteria for inclusion.

4.   See Glossary for definitions of feature type.

Table 23 Comparison of density of non-woodland features between 1980
Census and 1995 Inventory

| Feature type	1980 Census	1995 Inventory	Change (%)
Individual Trees (per sq km)	55.1	22.5	-59
Groups (per sq km)	18.8	13.4	-29
Linear Features (m per sq km)	633.4	401.8	-37

1.   The Survey of Small Woodland and Trees did not record information referring to tree
       features (I.e. Individual trees, Groups and Narrow Linear Features) within developed
       land.

2.   In the 1980 Census hazel, hawthorn, blackthorn and goat willow were excluded,
       the 1995 Inventory figures have been adjusted accordingly.
       The 1995 figures above will therefore not match those in the previous sections of the
       report.

3.   Changes stated in this table are indicative only. Even with adjustments to the 1995
       Inventory, the two surveys are not directly comparable - 1980 used 7cm diameter at
       breast height, and 1995 used 2m height, as minimum criteria for inclusion.

4.   See Glossary for definitions of feature type.

WOODLAND COVER

Woodland area data is available from Ministry of Agriculture surveys since 1871, and from Forestry Commission national woodland inventories since 1924. The following chart and maps show the changes in woodland area through time.
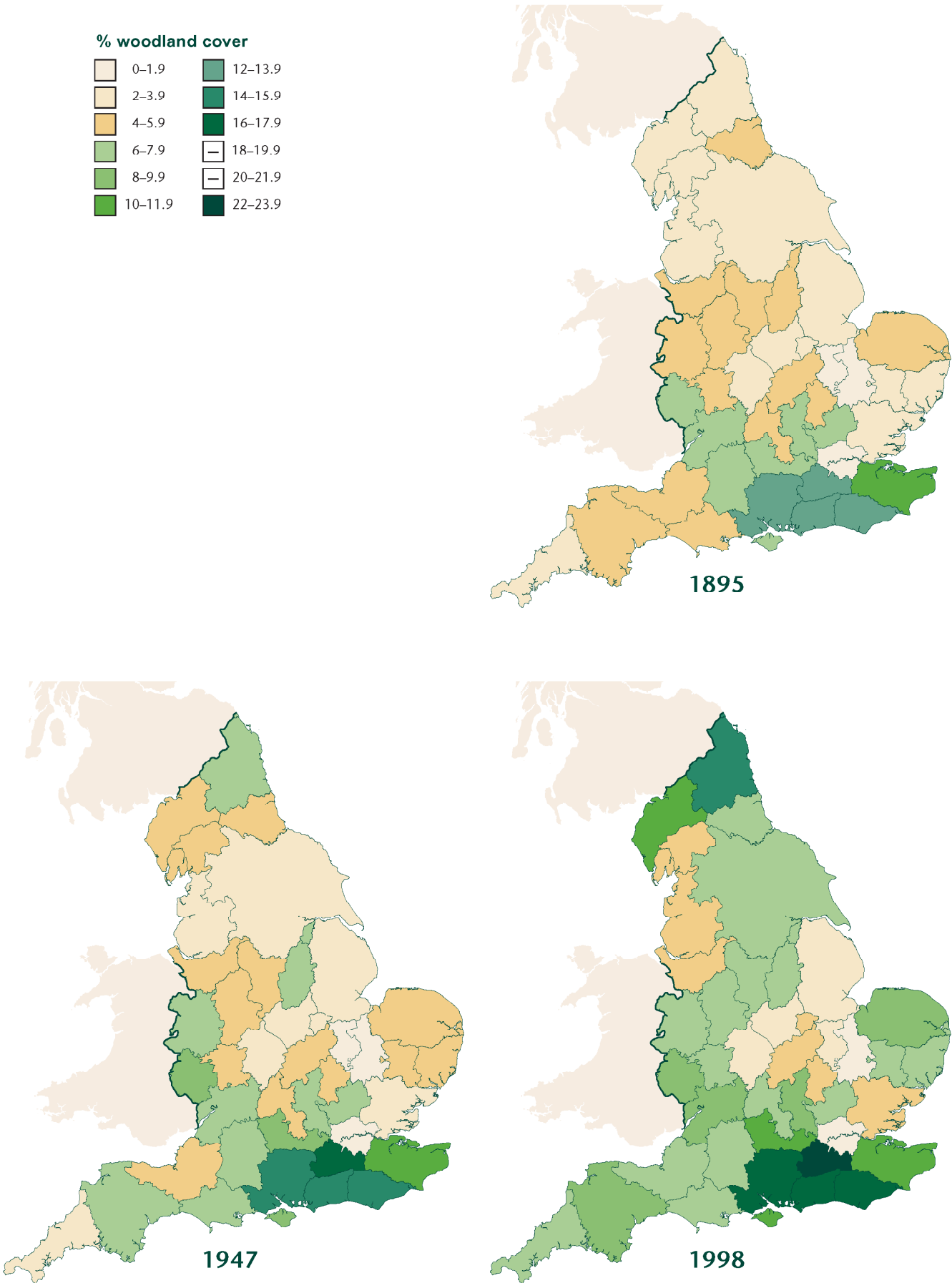
The maps use the old County structure data of England, as reported on in 1895 and 1947. The data from these counties could not be re-worked for different geographic areas. In contrast, the digital woodland map, which forms the basis of the current inventory, can be analysed for any geographic area.

Change in county woodland cover through time (1890 – 2000)
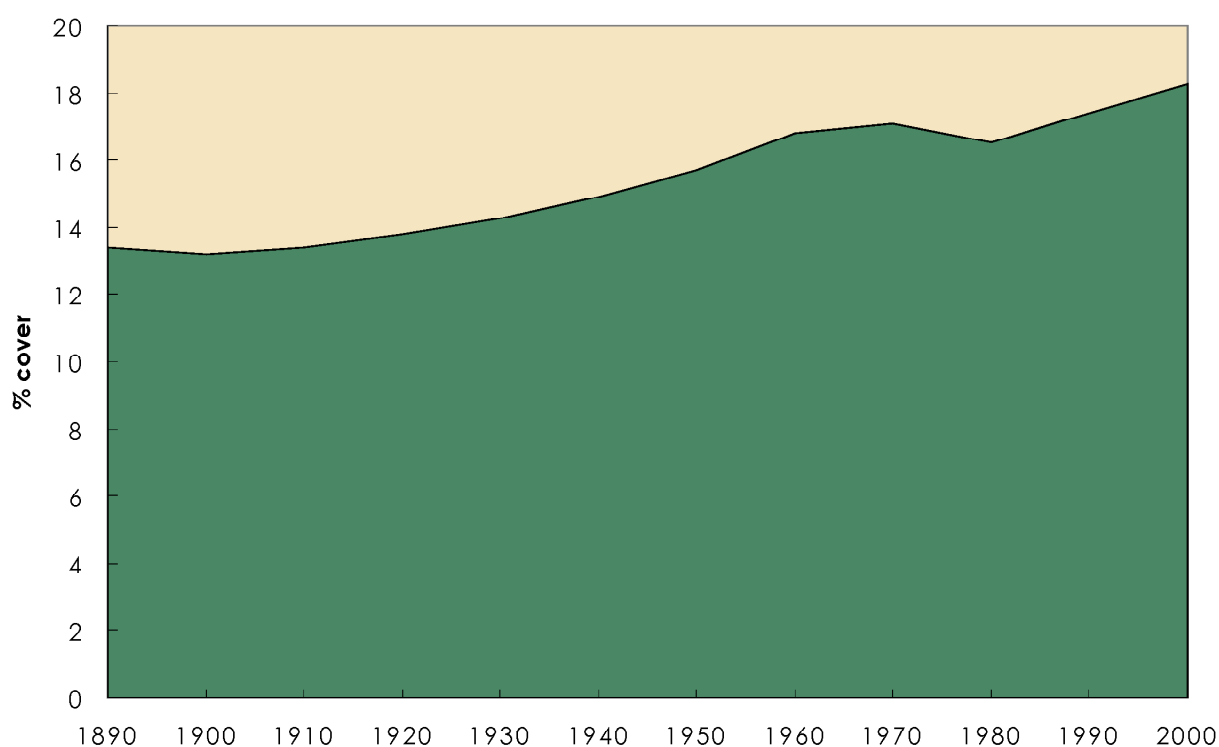
1. Following local government reorganisation the boundaries of the county of the report have changed significantly since 1890 and therefore data from a wider geographic area have been used.

Map 5   Woodland Cover in England by County through time (1895–1998)

% woodland cover

0–1.9	12–13.9
2–3.9	14–15.9
4–5.9	16–17.9
6–7.9	18–19.9
8–9.9	20–21.9
10–11.9	22–23.9

1895

1947

1998

GLOSSARY

Woodland

In the United Kingdom woodland is defined as land with a minimum area of 0.1 ha under stands of trees with, or the potential to achieve, tree crown cover of more than 20%. Areas of open space integral to the woodland are also included. Orchards and urban woodland between 0.1 and 2 ha are excluded. Intervening land-classes such as roads, rivers or pipelines are disregarded if less than 50m in extent. 'Scrubby' vegetation is not Included as a separate category but as Conifer, Broadleaved or Mixed tree types. There is additional information on the quality of woodland within the inventory database.

Woodland of 2 ha and over, and with a minimum width of 50m, is included in the Main Woodland Survey; other woodland and trees are assessed in the Survey of Small Woodland and Trees.

Interpreted Forest Types

The woodland map derived from aerial photographs is differentiated into Interpreted Forest Types (IFTs) which are: Conifer, Broadleaved, Mixed, Coppice, Coppice-with-Standards, Shrubs, Young Trees, Ground Prepared for Planting and Felled. Note that forest types (see below) based on ground survey data are used for reporting purposes because they are more reliable.

High Forest

All woodland except stands managed as Coppice or Coppice-with-Standards with, or with the potential to achieve a tree cover of more than 20%. Two categories of High Forest are recognised:

- **High Forest Category 1**
  Stands which are, or could become, capable of producing wood of a size and quality suitable for sawlogs.

- **High Forest Category 2**
  Stands of lower quality than High Forest Category 1.

Mixtures

Where possible the species in mixtures have been separately recorded. Where this has not been possible they were described as 'Mixed conifers' or 'Mixed broadleaves'.

Forest Types

- **Conifer**

  Woodland containing more than 80% by area of coniferous species.

- **Broadleaved**

  Woodland containing more than 80% by area of broadleaved species.

- **Mixed**

  A combination of broadleaved and coniferous species where each category occupies at least 20% of the canopy (see note on mixtures above.)

- **Coppice**

  Crops of marketable broadleaved species that have at least 2 stems per stool and are either being worked or are capable of being worked on rotation. With the exception of hazel coppice more than half the stems should be capable of producing 1m timber lengths of good form.

- **Coppice with Standards**

  Two-storey stands where the overstorey consists of at least 25 stems per ha that are older than the understorey of worked coppice by at least one coppice rotation.

- **Felled**

  Woodland areas that have been felled or stands where the stocking has been reduced to less than 20% and where it is expected that these areas will be replanted.

- **Windblow**

  Areas of blown woodland which remain uncleared and not regenerated.

- **Open Space**

  Areas within a woodland that are not covered by trees but are integral to the woodland such as open areas, streamsides, deer glades, rides and forest roads.

Ownership types

- **Other Ownership**

  Woodland other than that owned by, or leased to, the Forestry Commission

  - Personal

  types of private occupation, e.g. individuals, private family trusts and family partnerships.

  - Private forestry or timber business

  owned by wood processing industry. This category does not include forest management companies.

  - Other private business

  occupiers, e.g. companies, partnerships, syndicates and pension funds.

  - Local Authority

  Region, County, District or other Council

  - Other public bodies (not FC)

  Government department/agency, nationalised industry, etc.

  - Charitable organisations

  organisations funded by voluntary public subscription, e.g. National Trust, churches and colleges.

- Community ownership or common land

the common property of all members of the community.

- **Forestry Commission**

  Land owned by or land leased to the Forestry Commission

Feature types

- **Small Wood**

  A woodland with an area of 0.1 ha or over but less than 2 ha.

- **Group**

  A group containing two or more trees with an area less than 0.1ha.

- **Individual Tree**

  A tree the crown of which has no contact with any other tree crown and which is at least 2m tall. Two types of individual tree are recognised:

  - Boundary Tree   (an Individual Tree on any boundary)

  - Middle Tree (an Individual Tree not on a boundary)

- **Linear Feature**

  A feature with a length of 25 m or more, and one which is at least four times as long as it is broad. It can be up to 50m wide or as narrow as a single line of trees. Two types of Linear Features are recognised:

  - Narrow Linear Features (with a width of 16 m or less)
  - Wide Linear Features (with a width greater than 16 m)

NOTES

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