

National Forest Inventory statistics for Kent South London and East Sussex

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Kent South London and East Sussex

Map 1 Map of England and the aligned areas

The map shows shortened names for some of the aligned areas. The short names and their full equivalents are to be found in Appendix A. North East Cumbria and Lancashire Yorkshire Gtr Mancs Mersey and Ches Lincs and East Midlands Northants West Midlands East Anglia Herts & Thames Wessex Solent & South Downs Devon and Cornwall 20 40 80 Kilometres Crown Copyright © All rights reserved Forestry Commission 2016

Key findings for Kent South London and East Sussex

Kent, South London and East Sussex (KSL) has a land area of 684,100 hectares making it 11th out of the 14 aligned areas by land area. With 103,265 ha of woodland, CLA ranks 8th out of 14 in terms of woodland area (15% woodland cover). Some 6% of the woodland is under Forestry Commission ownership or management.

Corsican pine is the most commonly occurring of the conifer species whether assessed by stocked area (25%) and number of trees (28%). Scots pine is the most commonly occurring of the broadleaved species when assessed by standing volume (24%).

Oak is the most commonly occurring of the broadleaved species when assessed by stocked area (20%) and standing volume (33%). Sweet chestnut is the most commonly occurring of the broadleaved species when assessed by number of trees (20%).

Some 22% of standing coniferous volume is beyond the age of maximum mean annual increment (or above terminal height of 25m in higher windthrow risk areas). The harvesting assumptions applied in the forecast assume that a proportion of this volume will be felled over a period of time from the start of the forecast. Some 40% of conifer and mixed broadleaf/conifer sections (PS only) show evidence of thinning.

Overall 40% of standing broadleaved volume is beyond the age of maximum mean annual increment (or above terminal height of 25m in higher windthrow risk areas). Some 19% of broadleaved sections (PS only) show evidence of thinning.

Across KSL:

- Ash is estimated as 8% of total stocked area (9% of broadleaved stocked area), 10% of standing volume (12% of broadleaved standing volume) and 7% of the number of trees (7% of the number of broadleaved trees).
- Oak is estimated as 18% of total stocked area (20% of broadleaved stocked area), 28% of standing volume (33% of broadleaved standing volume) and 8% of the number of trees (8% of the number of broadleaved trees).
- Sweet chestnut is estimated as 13% of total stocked area (14% of broadleaved stocked area), 13% of standing volume (15% of broadleaved standing volume) and 18% of the number of trees (20% of the number of broadleaved trees).
- Larch is estimated as 2% of total stocked area (14% of conifer stocked area), 2% of standing volume (14% of conifer standing volume) and 1% of the number of trees (15% of the number of conifer trees).

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Part 1 – introduction and methodology

Introduction

National forest inventories are carried out by the Forestry Commission to provide accurate, up-to-date information about the size, distribution, composition and condition of the forests and woodlands in Great Britain (GB). This information is essential for developing and monitoring policies and guidance to support sustainable forest management.

The current National Forest Inventory (NFI), which began in 2010, is a multipurpose operation that has involved the production of a forest and woodland map for Britain and a continuing programme of field surveys (the first cycle of field surveys completed in late 2015) of the mapped forest and woodland areas.

Information and data collected by the National Forest Inventory is being used for a number of purposes, including estimates and 25-year forecasts of forest metrics such as:

- · standing volume
- timber availability
- tree growth and increment
- · carbon stocks
- biomass

Estimates of aspects of the biodiversity and social value of forests and woodlands will also be provided by the NFI.

This report brings together key woodland information for England previously published across the range of NFI thematic reports. Within the NFI programme, results are presented by the NUTS 1 boundaries^{*}. This report heads a series of reports where the woodland statistics are broken down by aligned area. The data sources and methodology covering the suite of reports is to found in the report for England and the aligned areas.

^{*} See http://ec.europa.eu/eurostat/web/nuts/overview for a description of the Nomenclature of territorial units for statistics (NUTS) classification system.

Part 1 – introduction and methodology

How the estimates are prepared

The methodology, data sources and assumptions are described in the England report. It is important that the estimates presented in this report are interpreted in the light of the information provided in the England report.

The methodology introduces the sub-compartment database and the National Forest Inventory. It describes the metrics presented in this report and how they are derived. The methodology covers how the FC and private sector (PS) forecasts are prepared and includes commentary on the assumptions made in order to calculate the forecast estimates. Finally the methodology covers the tree health metrics.

Note on the estimates

The values in the tables have been independently rounded, so may not add to the totals shown. In some breakdowns of Private sector estimates, the estimates in the body of the table may not sum to the quoted total because each individual value, including the total, has been independently generated by the estimation procedure used for results from the NFI sample survey. Sampling standard errors attached to Private sector estimates are expressed in relative terms (%) to the right of the relevant estimate and as \pm error bars in the figures. Percentages in the pie charts may also not sum to 100 due to rounding.

Due to biological and sampling constraints, for example where there is a very small population of a species within a particular region, the estimates may have a high associated standard error. Since this indicates a high level of uncertainty around those estimates then caution should be used when drawing any conclusions from these values as the estimate may not be representative of the real population. Such estimates have been 'lowlighted' in the tables.

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Woodland area statistics

Woodland area by woodland type

Figure 1 Woodland area by woodland type

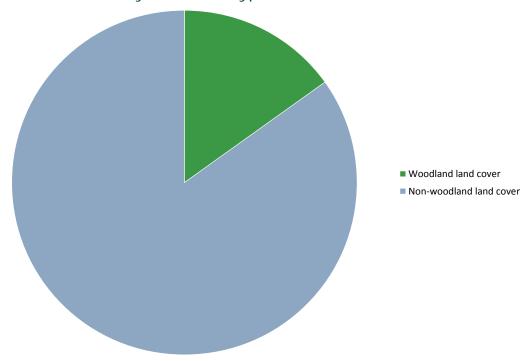


Table 1 Woodland area by woodland type

Woodland Type	Area (ha)	%
Kent South London and East Sussex		
Woodland	102,329	99%
Assumed woodland	760	1%
Low density	177	0%
Total mapped woodland	103,265	100%
Non-woodland area	580,835	
Land area	684,100	
Woodland land cover		15%
Non-woodland land cover		85%

Woodland area by ownership

Figure 2 Woodland area by ownership

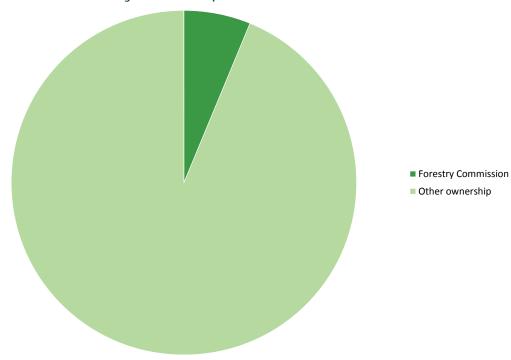


Table 2 Woodland area by ownership

Ownership	Area (ha)	% Woodland
Kent South London and East Sussex		
Forestry Commission	6,439	6%
Other ownership	96,826	94%
Total area of woodland	103,265	100%

Woodland area by interpreted forest type

Figure 3 Woodland area by interpreted forest type

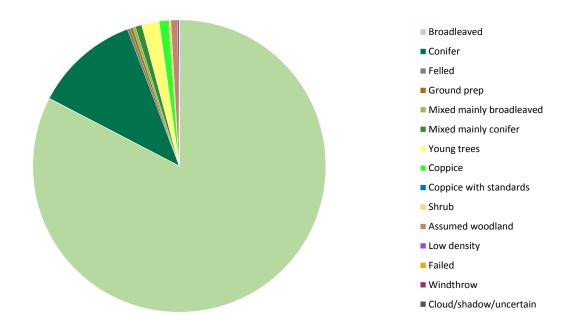


Table 3 Woodland area by interpreted forest type

Forest type	Total area (ha)	% of total area
Kent South London and East Sussex		
Broadleaved	85,350	83%
Conifer	11,973	12%
Felled	332	0%
Ground prep	285	0%
Mixed mainly broadleaved	337	0%
Mixed mainly conifer	733	1%
Young trees	1,954	2%
Coppice	1,089	1%
Coppice with standards	55	0%
Shrub	222	0%
Assumed woodland	760	1%
Low density	177	0%
Failed	0	0%
Windthrow	0	0%
Cloud/shadow/uncertain	0	0%
TOTALS	103,265	100%

Woodland area by interpreted forest type and woodland size

Figure 4 Woodland area by interpreted forest type and woodland size

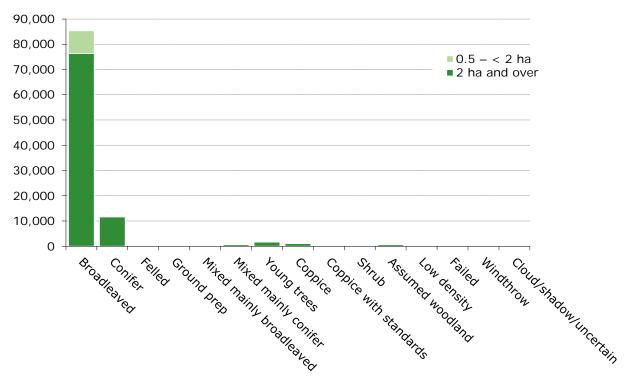


Table 4 Woodland area by interpreted woodland type and woodland size

Forest type	Woodla	Woodland size		
Forest type	2 ha and over	0.5 – < 2 ha	(ha)	
Kent South London and East Sussex				
Broadleaved	76,310	9,040	85,350	
Conifer	11,647	326	11,973	
Felled	320	12	332	
Ground prep	254	31	285	
Mixed mainly broadleaved	247	92	340	
Mixed mainly conifer	632	108	741	
Young trees	1,648	296	1,944	
Coppice	1,077	10	1,087	
Coppice with standards	55	< 1	56	
Shrub	201	22	222	
Assumed woodland	687	73	760	
Low density	155	22	177	
Failed	0	0	0	
Windthrow	0	0	0	
Cloud/shadow/uncertain	0	0	0	
TOTALS	93,232	10,033	103,265	

Woodland area by interpreted forest type and ownership

Figure 5 Woodland area by interpreted forest type and ownership

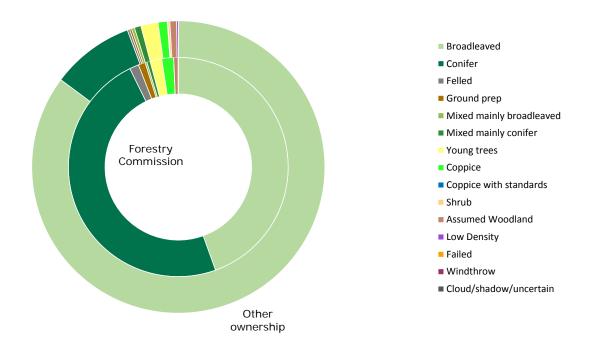


Table 5 Woodland area by interpreted forest type and ownership

	Forestry Co	ommission	Other ownership		
Forest type	Area (ha)	% of total area	Area (ha)	% of total area	
Kent South London and East Sussex					
Broadleaved	2,865	45%	82,484	85%	
Conifer	3,106	48%	8,867	9%	
Felled	88	1%	244	0%	
Ground prep	65	1%	220	0%	
Mixed mainly broadleaved	18	0%	319	0%	
Mixed mainly conifer	31	0%	702	1%	
Young trees	111	2%	1,843	2%	
Coppice	112	2%	977	1%	
Coppice with standards	< 1	0%	54	0%	
Shrub	0	0%	222	0%	
Assumed Woodland	42	1%	718	1%	
Low Density	1	0%	176	0%	
Failed	0	0%	0	0%	
Windthrow	0	0%	0	0%	
Cloud/shadow/uncertain	0	0%	0	0%	
TOTALS	6,439	100%	96,826	100%	

Woodland area by interpreted forest type, woodland size and ownership

Table 6 Woodland area by interpreted forest type, woodland size and ownership

	2 ha an	d over	0.5 – < 2 ha		Takal anaa
Forest type	Forestry Commission	Other	Forestry Commission	Other	Total area (ha)
Kent South London and East Sussex					
Broadleaved	2,860	73,449	5	9,035	85,350
Conifer	3,105	8,542	< 1	325	11,973
Felled	88	232	0	12	332
Ground prep	65	189	0	31	285
Mixed mainly broadleaved	18	229	0	90	337
Mixed mainly conifer	31	602	0	100	733
Young trees	111	1,537	0	306	1,954
Coppice	112	965	0	12	1,089
Coppice with standards	< 1	54	0	0	55
Shrub	0	201	0	22	222
Assumed woodland	35	652	7	66	760
Low Density	1	154	0	22	177
Failed	0	0	0	0	0
Windthrow	0	0	0	0	0
Cloud/shadow/uncertain	0	0	0	0	0
Totals	6,425	86,807	14	10,020	103,265

Woodland area by size class distribution

Figure 6 Woodland area by size class distribution

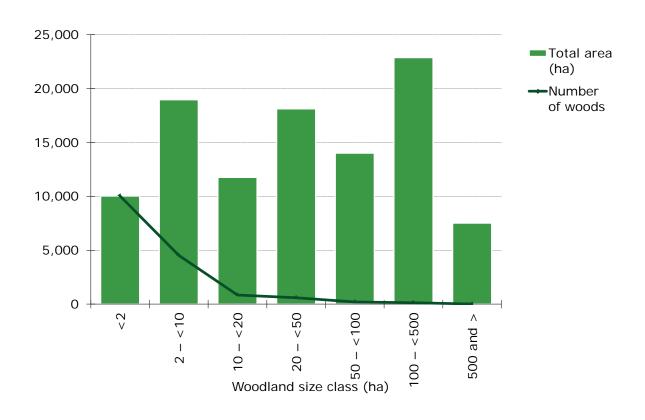


Table 7 Woodland area by size class distribution

Size class (ha)	Total area (ha)	Number of woods	% of total area	Mean wood area (ha)
Kent South Lon	don and East Su	ssex		
<2	10,033	10,030	10%	1
2 - < 10	18,960	4,521	18%	4
10 - < 20	11,762	837	11%	14
20 - < 50	18,117	594	18%	31
50 - < 100	14,007	201	14%	70
100 - < 500	22,869	128	22%	179
500 and >	7,517	12	7%	626
All woods	103,265	16,323	100%	6

Open areas in woodland by land use type

Figure 7 Open areas in woodland by land use type

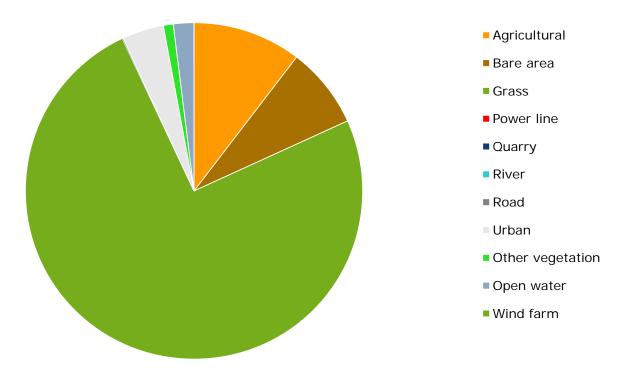


Table 8 Open areas in woodland by land use type

Interpreted open area	Total area (ha)	% of total area
Kent South London and East Sussex		
Agricultural	224	10%
Bare area	168	8%
Grass	1,612	75%
Power line	0	0%
Quarry	2	0%
River	0	0%
Road	0	0%
Urban	86	4%
Other vegetation	20	1%
Open water	42	2%
Wind farm	0	0%
TOTALS	2,155	100%

Net area under canopy

Stocked area by species

Figure 8 Stocked area by principal tree species

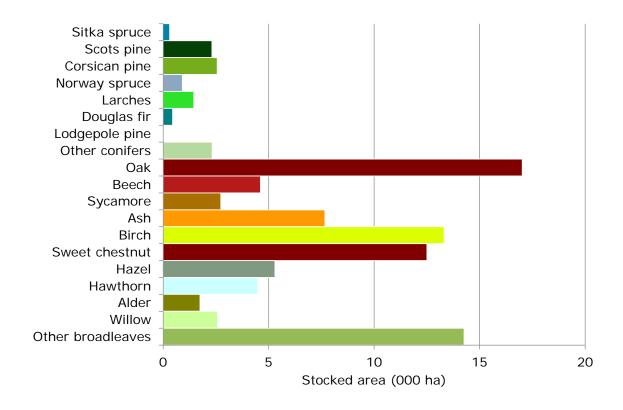


Table 9 Stocked area by principal tree species

	FC	Private sector		Total
Principal species	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Conifers				
Sitka spruce	< 0.1	0.3	64	0.3
Scots pine	0.5	1.8	21	2.3
Corsican pine	1.1	1.5	24	2.6
Norway spruce	0.2	0.7	33	0.9
Larches	0.1	1.3	25	1.5
Douglas fir	0.3	0.1	50	0.4
Lodgepole pine	0.0	0.0	-	0.0
Other conifers	0.3	2.0	21	2.3
All conifers	2.5	7.7	9	10.2
Broadleaves				
Oak	0.5	16.6	8	17.0
Beech	1.0	3.6	18	4.6
Sycamore	< 0.1	2.7	22	2.7
Ash	0.1	7.6	13	7.7
Birch	0.6	12.8	10	13.3
Sweet chestnut	< 0.1	12.4	12	12.5
Hazel	< 0.1	5.3	14	5.3
Hawthorn	0.0	4.5	17	4.5
Alder	< 0.1	1.7	25	1.7
Willow	0.0	2.6	20	2.6
Other broadleaves	0.5	13.8	9	14.3
All broadleaves	2.8	83.5	3	86.3
All species				
All species	5.4	91.2	3	96.6

Figure 9 Stocked area by principal conifer species

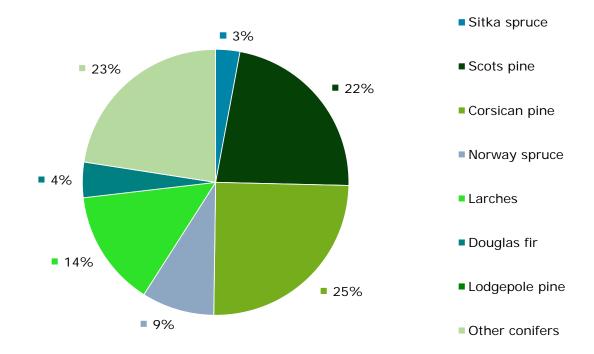
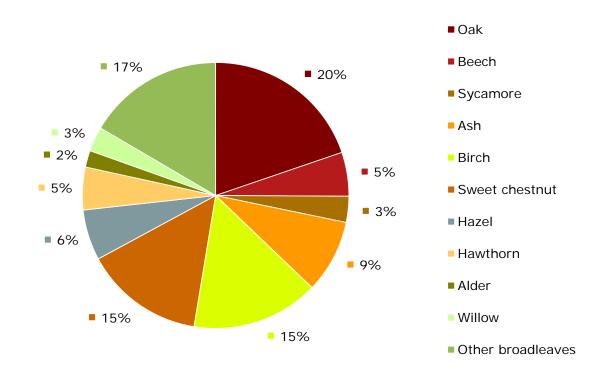


Figure 10 Stocked area by principal broadleaved species



Stocked area by age class

Figure 11 Stocked area by age class

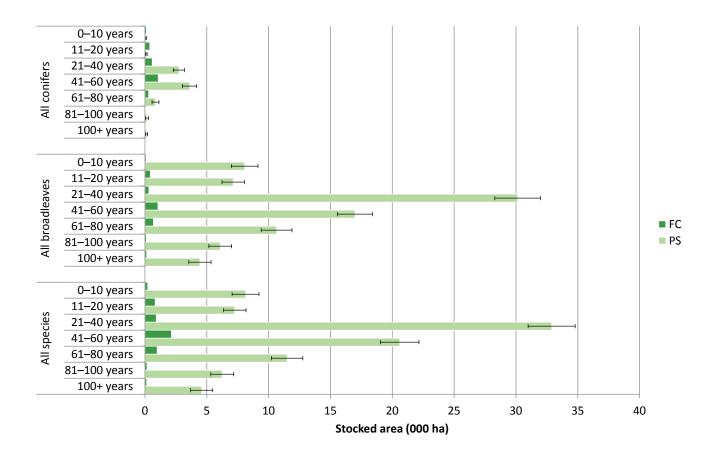


Table 10 Stocked area by age class

	FC	Private sector		Total
Age class (years)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers				
0–10	0.1	< 0.1	56	0.2
11–20	0.4	0.1	46	0.5
21–40	0.6	2.7	16	3.3
41–60	1.1	3.6	16	4.7
61–80	0.3	0.9	33	1.2
81–100	< 0.1	0.2	71	0.2
100+	< 0.1	0.1	59	0.1
Total	2.5	7.7	9	10.2
All broadleaves				
0–10	< 0.1	8.1	13	8.2
11–20	0.4	7.1	13	7.6
21–40	0.3	30.1	6	30.5
41–60	1.1	17.0	8	18.0
61–80	0.7	10.6	12	11.3
81–100	0.1	6.1	15	6.2
100+	0.1	4.4	20	4.6
Total	2.8	83.5	3	86.3
All species				
0–10	0.2	8.1	13	8.4
11–20	0.8	7.3	13	8.1
21–40	0.9	32.9	6	33.8
41–60	2.1	20.6	8	22.7
61–80	1.0	11.5	11	12.5
81–100	0.2	6.3	15	6.4
100+	0.1	4.6	20	4.7
Total	5.4	91.2	3	96.6

Stocked area by mean stand dbh class

Figure 12 Stocked area by mean stand dbh class

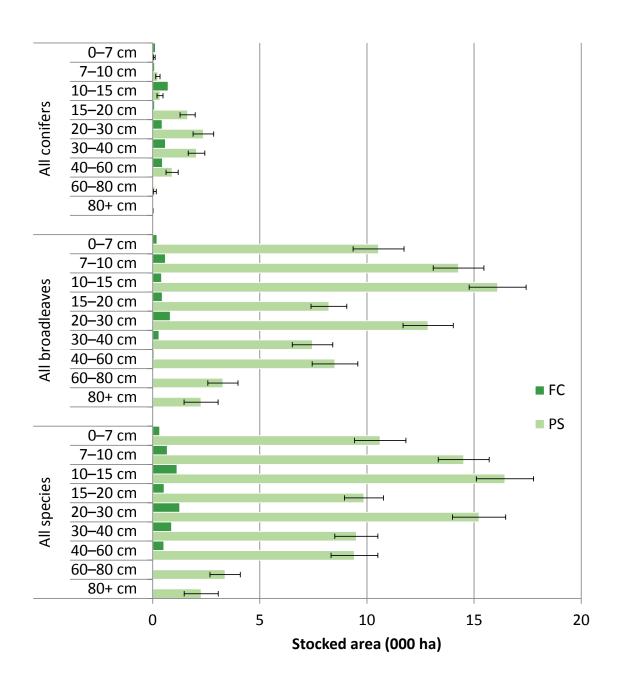


Table 11 Stocked area by mean stand dbh class

	FC	Private sector		Total
Mean stand DBH (cm)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers				
0-7	0.1	< 0.1	56	0.2
7–10	< 0.1	0.2	42	0.3
10–15	0.7	0.3	42	1.1
15–20	< 0.1	1.6	22	1.7
20–30	0.4	2.4	20	2.8
30-40	0.6	2.0	19	2.6
40–60	0.5	0.9	31	1.4
60–80	< 0.1	0.1	64	0.1
80+	0.0	< 0.1	103	< 0.1
Total	2.5	7.7	9	10.2
All broadleaves				
0-7	0.2	10.5	11	10.7
7–10	0.6	14.3	8	14.9
10–15	0.4	16.1	8	16.5
15–20	0.4	8.2	10	8.7
20–30	0.8	12.9	9	13.7
30–40	0.3	7.5	13	7.7
40–60	< 0.1	8.5	13	8.6
60–80	< 0.1	3.3	21	3.3
80+	0.0	2.3	35	2.3
Total	2.8	83.5	3	86.3
All species				
0-7	0.3	10.6	11	10.9
7–10	0.7	14.5	8	15.2
10–15	1.1	16.4	8	17.6
15–20	0.5	9.9	9	10.4
20–30	1.3	15.2	8	16.5
30–40	0.9	9.5	11	10.4
40–60	0.5	9.4	12	9.9
60–80	< 0.1	3.4	21	3.4
80+	0.0	2.3	35	2.3
Total	5.4	91.2	3	96.6

Clearfelled area

Table 12 Clearfelled area

	FC	Private secto	r	Total
Clearfelled area	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London and East Sussex	< 0.1	0.8	49	0.8

Comparison of mapped area estimates and stocked area estimates

Figure 13 Simplified comparison of mapped area and stocked area

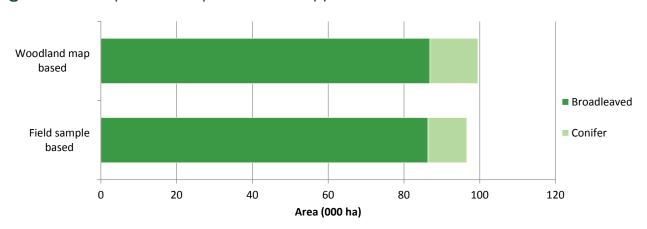


Table 13 Simplified comparison of mapped area and stocked area

	Woodland map based	Field sample based	
	area (000 ha)		
Kent South London and East Sussex			
Broadleaved	86.8	86.3	
Conifer	12.7	10.2	

The broadleaved class includes broadleaved, mixed mainly broadleaved, coppice and coppice with standards. The conifer class includes conifer and mixed mainly conifer. The transition class is excluded from this table as it is not possible to differentiate between conifer and broadleaves with aerial photography interpretation. The area of young trees is included in the field sample based estimates.

Standing volume

Standing volume by species

Figure 14 Standing volume by principal tree species

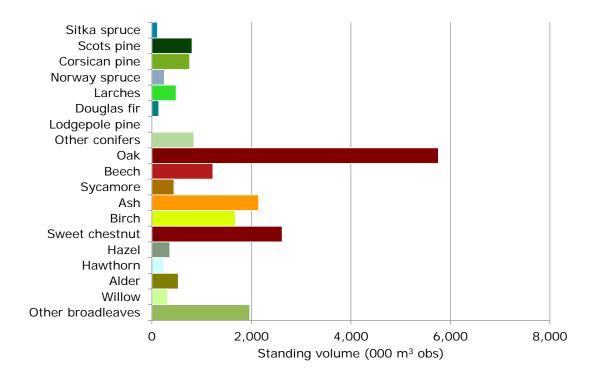


Table 14 Standing volume by principal tree species

Principal species	FC	Private sector		Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Conifers				
Sitka spruce	< 1	110	57	110
Scots pine	121	687	20	807
Corsican pine	186	574	25	760
Norway spruce	53	197	37	251
Larches	26	461	26	488
Douglas fir	61	77	52	138
Lodgepole pine	0	0	-	0
Other conifers	89	756	27	845
All conifers	536	2,823	10	3,359
Broadleaves				
Oak	71	5,689	10	5,759
Beech	175	1,052	22	1,227
Sycamore	9	435	30	444
Ash	13	2,133	17	2,147
Birch	41	1,636	10	1,677
Sweet chestnut	5	2,614	16	2,619
Hazel	< 1	361	19	361
Hawthorn	0	235	23	235
Alder	5	526	29	532
Willow	0	308	21	308
Other broadleaves	39	1,928	14	1,968
All broadleaves	358	16,864	5	17,222
All species				
All species	894	19,693	4	20,588

Figure 15 Standing volume by principal conifer species

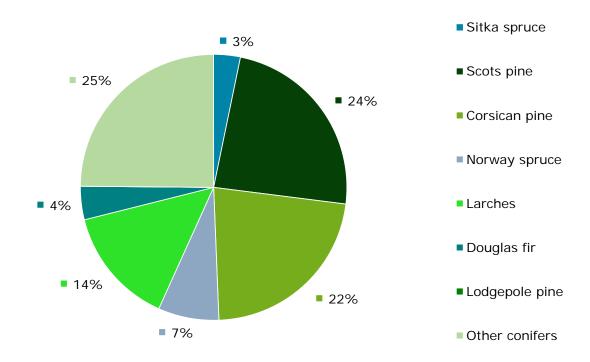
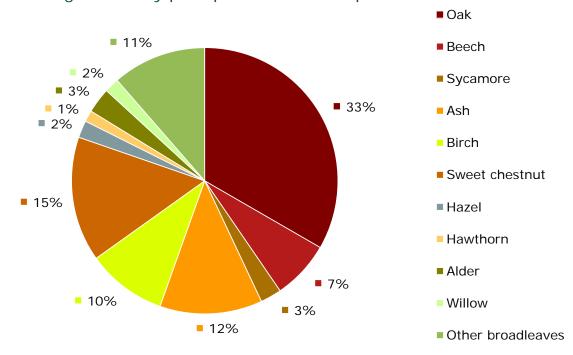


Figure 16 Standing volume by principal broadleaved species



Standing volume by age class

Figure 17 Standing volume by age class

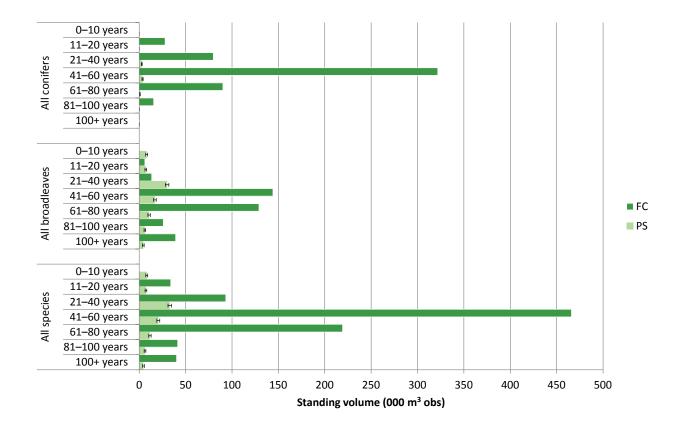


Table 15 Standing volume by age class

	FC	Private secto	r_	Total
Age class (years)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
All conifers				
0–10	< 1	< 1	56	< 1
11–20	28	< 1	46	28
21–40	80	3	16	83
41–60	322	4	16	325
61–80	90	< 1	33	91
81–100	16	< 1	71	16
100+	< 1	< 1	59	1
Total	536	2,823	10	3,359
All broadleaves				
0–10	0	8	13	8
11–20	6	7	13	13
21–40	13	30	6	44
41–60	144	17	8	161
61–80	129	11	12	140
81–100	26	6	15	32
100+	39	4	20	44
Total	358	16,864	5	17,222
All species				
0–10	< 1	8	13	8
11–20	34	7	13	41
21–40	93	33	6	126
41–60	466	21	8	487
61–80	219	11	11	231
81–100	42	6	15	48
100+	40	5	20	45
Total	894	19,693	4	20,588

Standing volume by mean stand dbh class

Figure 18 Standing volume by stand mean dbh class

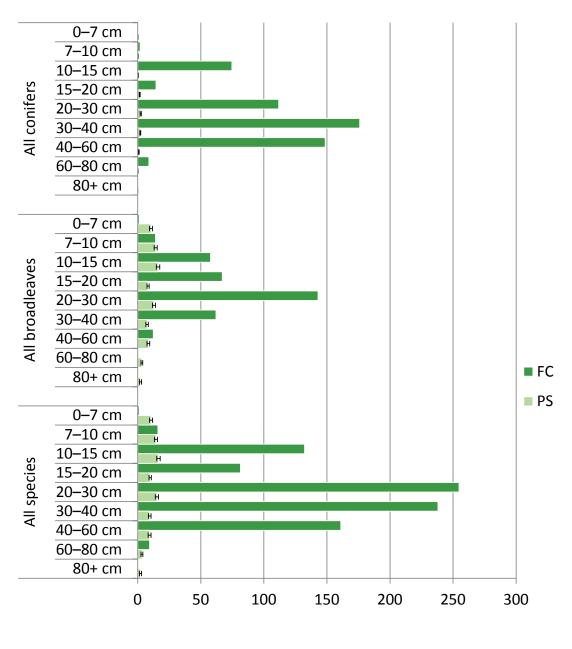


 Table 16 Standing volume by mean stand dbh class

	FC	Private secto	r	Total
Mean stand DBH (cm)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
All conifers				
0-7	< 1	< 1	56	< 1
7–10	2	< 1	42	2
10–15	75	< 1	42	75
15–20	14	2	22	16
20–30	112	2	20	114
30–40	176	2	19	178
40–60	149	< 1	31	150
60–80	9	< 1	64	9
80+	0	< 1	103	< 1
Total	536	2,823	10	3,359
All broadleaves				
0-7	1	11	11	12
7–10	14	14	8	28
10–15	58	16	8	74
15–20	67	8	10	75
20–30	143	13	9	156
30–40	62	7	13	69
40–60	12	9	13	21
60–80	< 1	3	21	4
80+	0	2	35	2
Total	358	16,864	5	17,222
All species				
0-7	1	11	11	12
7–10	16	15	8	31
10–15	132	16	8	149
15–20	81	10	9	91
20–30	255	15	8	270
30–40	238	10	11	248
40–60	161	9	12	170
60–80	9	3	21	13
80+	0	2	35	2
Total	894	19,693	4	20,588

Number of measureable trees

Number of measureable trees by species

Figure 19 Number of trees by principal tree species

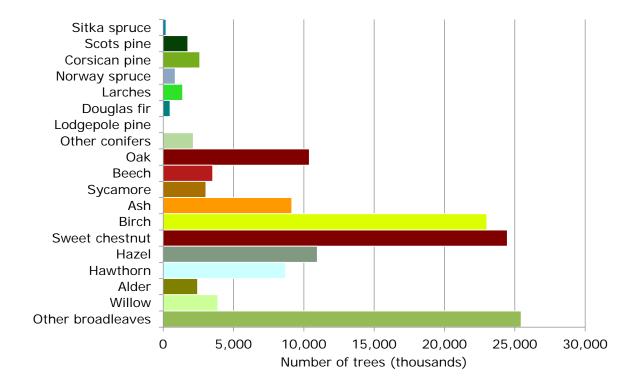


Table 17 Number of trees by principal tree species

	FC	Private secto	r	Total
Principal species	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Conifers				
Sitka spruce	1	196	63	197
Scots pine	239	1,515	24	1,754
Corsican pine	1,517	1,083	24	2,600
Norway spruce	98	755	32	854
Larches	152	1,232	28	1,384
Douglas fir	428	61	40	490
Lodgepole pine	0	0	-	0
Other conifers	162	1,979	29	2,141
All conifers	2,598	6,826	11	9,424
Broadleaves				
Oak	648	9,747	10	10,395
Beech	730	2,793	19	3,523
Sycamore	56	2,981	24	3,037
Ash	111	9,039	16	9,150
Birch	1,231	21,781	12	23,012
Sweet chestnut	198	24,276	15	24,473
Hazel	9	10,953	15	10,962
Hawthorn	0	8,711	19	8,711
Alder	71	2,376	38	2,446
Willow	0	3,885	20	3,885
Other broadleaves	850	24,598	11	25,449
All broadleaves	3,904	121,345	5	125,248
All species				
All species	6,501	128,190	5	134,692

Number of measureable trees by age class

Figure 20 Number of trees by age class

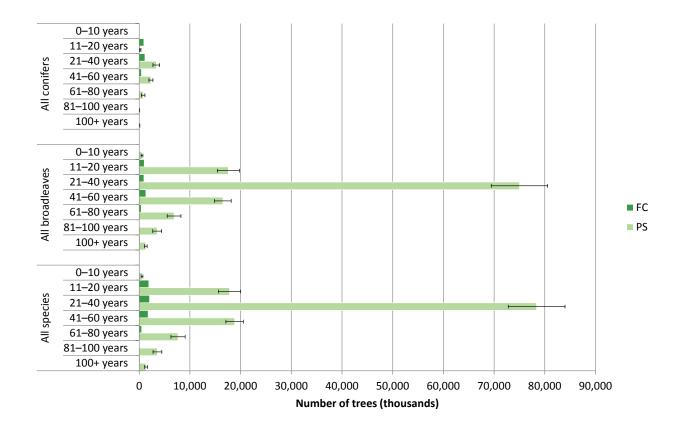
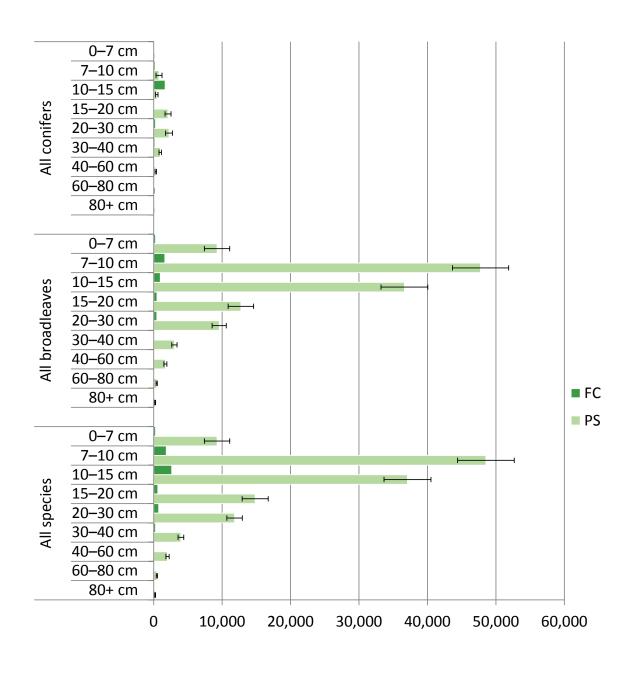


 Table 18 Number of trees by age class

	FC	Private secto	r	Total
Age class (years)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
All conifers				
0–10	23	0	-	23
11–20	909	236	45	1,145
21–40	1,128	3,374	20	4,502
41–60	451	2,311	17	2,762
61–80	76	779	45	855
81–100	9	57	69	65
100+	2	70	69	72
Total	2,598	6,826	11	9,424
All broadleaves				
0–10	0	552	31	552
11–20	991	17,586	12	18,577
21–40	923	75,002	7	75,925
41–60	1,307	16,503	10	17,810
61–80	411	6,878	20	7,288
81–100	111	3,541	24	3,652
100+	161	1,283	21	1,444
Total	3,904	121,345	5	125,248
All species				
0–10	23	552	31	575
11–20	1,900	17,822	12	19,722
21–40	2,051	78,384	7	80,436
41–60	1,758	18,822	9	20,580
61–80	487	7,658	18	8,144
81–100	119	3,598	24	3,717
100+	163	1,354	20	1,517
Total	6,501	128,190	5	134,692

Number of measureable trees by mean stand dbh class

Figure 21 Number of trees by mean stand dbh class



Number of trees (thousands)

Table 19 Number of trees by mean stand dbh class

	FC	Private secto	r _	Total
Mean stand DBH	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
All conifers				
0–7 cm	< 1	0	-	< 1
7–10 cm	214	775	58	989
10–15 cm	1,682	452	39	2,135
15–20 cm	121	2,088	21	2,209
20–30 cm	279	2,232	22	2,511
30–40 cm	197	959	19	1,156
40–60 cm	101	303	32	403
60–80 cm	3	15	58	17
80+ cm	0	2	103	2
Total	2,598	6,826	11	9,424
All broadleaves				
0–7 cm	273	9,260	20	9,533
7–10 cm	1,623	47,757	9	49,380
10–15 cm	962	36,634	9	37,596
15–20 cm	491	12,736	15	13,227
20–30 cm	461	9,575	11	10,036
30–40 cm	85	3,021	13	3,106
40–60 cm	9	1,711	13	1,720
60–80 cm	< 1	440	19	441
80+ cm	0	211	28	211
Total	3,904	121,345	5	125,248
All species				
0–7 cm	273	9,260	20	9,533
7–10 cm	1,837	48,536	9	50,373
10–15 cm	2,644	37,087	9	39,731
15–20 cm	612	14,829	13	15,441
20-30 cm	740	11,814	10	12,554
30–40 cm	282	3,982	11	4,264
40–60 cm	110	2,014	12	2,124
60-80 cm	3	455	19	458
80+ cm	0	214	27	214
Total	6,501	128,190	5	134,692

Biomass stocks in live woodland trees

Biomass stocks by species

Figure 22 Biomass stocks by principal tree species

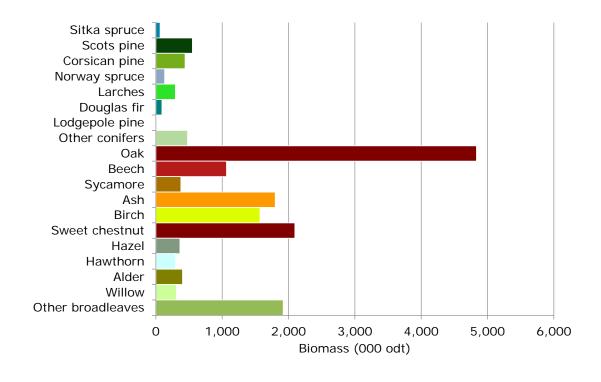


Table 20 Biomass stocks by principal tree species

	FC	Private sector		Total
Principal species	biomass (000 odt)	biomass (000 odt)	SE%	biomass (000 odt)
Conifers				
Sitka spruce	< 1	62	58	62
Scots pine	85	466	20	551
Corsican pine	119	322	24	441
Norway spruce	29	103	37	133
Larches	17	277	26	294
Douglas fir	44	48	52	92
Lodgepole pine	0	0	-	0
Other conifers	50	428	26	478
All conifers	344	1,685	10	2,029
Broadleaves				
Oak	67	4,768	10	4,835
Beech	161	904	21	1,065
Sycamore	8	367	28	376
Ash	12	1,787	17	1,799
Birch	44	1,526	10	1,569
Sweet chestnut	5	2,090	16	2,095
Hazel	< 1	362	17	363
Hawthorn	0	297	22	297
Alder	4	396	30	401
Willow	0	311	20	311
Other broadleaves	38	1,881	14	1,919
All broadleaves	340	14,646	5	14,986
All species				
All species	684	16,335	4	17,019

Carbon stocks in live woodland trees

Carbon stocks by species

Figure 23 Carbon stocks by principal tree species

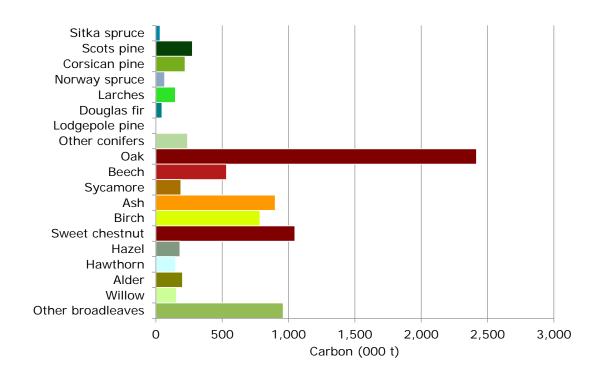


Table 21 Carbon stocks by principal tree species

	FC	Private secto	r	Total
Principal species	carbon (000 t)	carbon (000 t)	SE%	carbon (000 t)
Conifers				
Sitka spruce	< 1	31	58	31
Scots pine	43	233	20	276
Corsican pine	59	161	24	221
Norway spruce	15	52	37	66
Larches	8	139	26	147
Douglas fir	22	24	52	46
Lodgepole pine	0	0	-	0
Other conifers	25	214	26	239
All conifers	172	842	10	1,014
Broadleaves				
Oak	33	2,384	10	2,417
Beech	80	452	21	533
Sycamore	4	184	28	188
Ash	6	893	17	900
Birch	22	763	10	785
Sweet chestnut	3	1,045	16	1,048
Hazel	< 1	181	17	181
Hawthorn	0	148	22	148
Alder	2	198	30	200
Willow	0	156	20	156
Other broadleaves	19	941	14	960
All broadleaves	170	7,323	5	7,493
All species				
All species	342	8,167	4	8,510

Existing woodland management information and economic viability data (PS only)

Sample square distribution

Table 22 Sample square distribution

Number of squares surveyed	Number of squares surveyed	Number of Private sector squares surveyed	Number of Private sector squares containing coniferous species	Number of Private sector squares containing broadleaved species
Kent South London and East Sussex	281	273	154	265

Evidence of management

Figure 24 Evidence of management in PS broadleaf sections

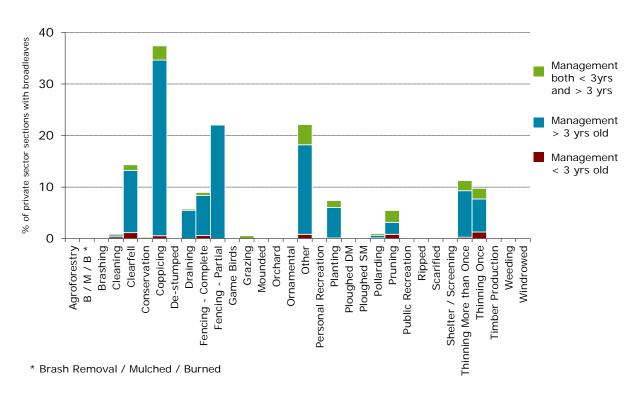


Figure 25 Evidence of management in PS conifer sections

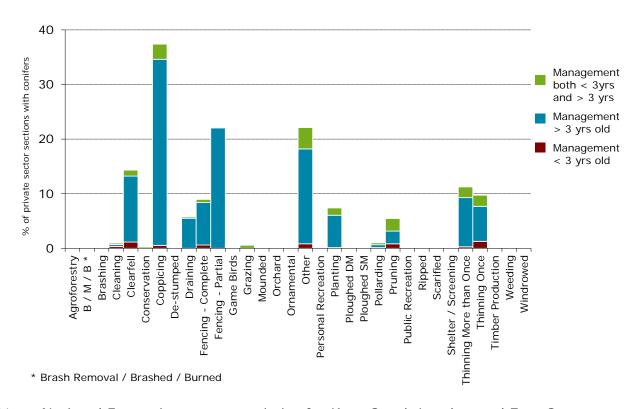


Figure 26 Evidence of management in PS mixed broadleaf/conifer sections

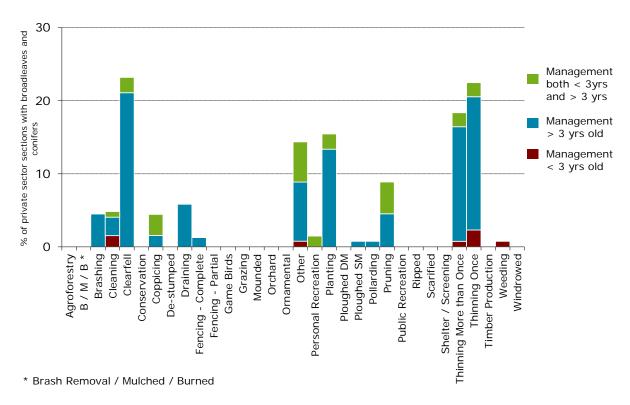
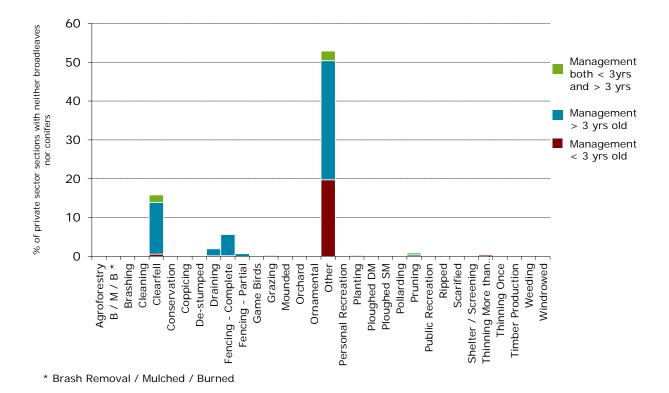
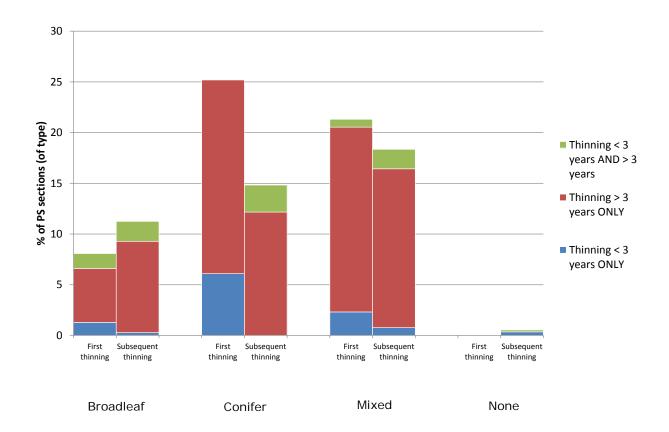


Figure 27 Evidence of management in PS sections with no broadleaf or conifer



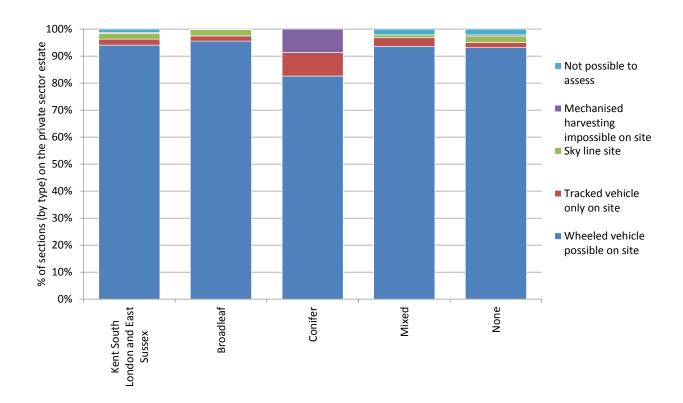
Evidence of thinning

Figure 28 Evidence of thinning



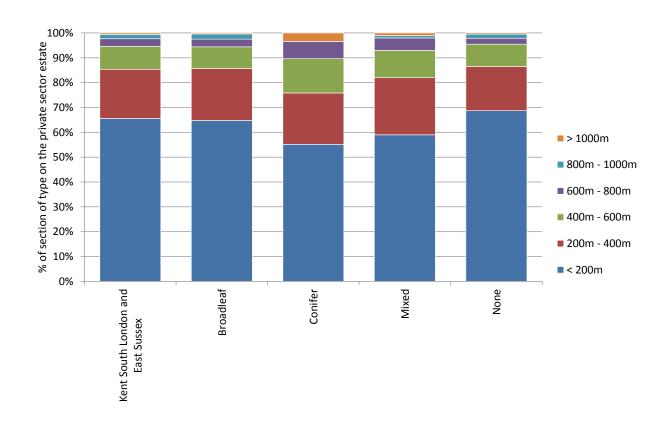
Suitability for harvesting

Figure 29 Suitability for harvesting



Distance to road

Figure 30 Distance to road



Type of road or ride

Figure 31 Road or ride in survey square

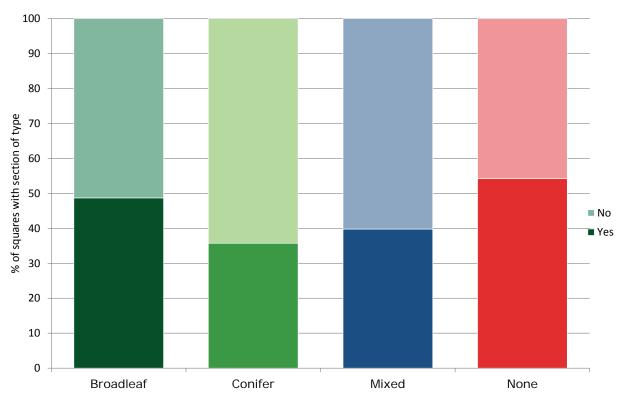
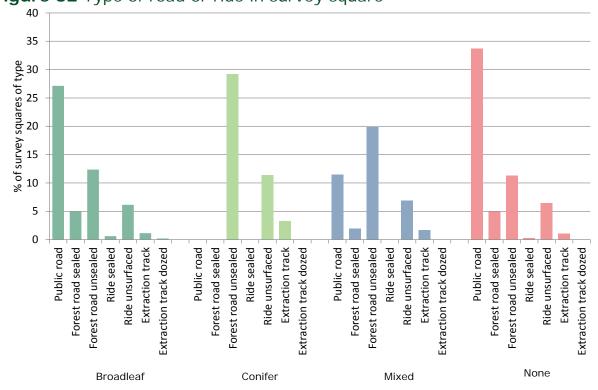


Figure 32 Type of road or ride in survey square



Mean yield class

Figure 33 Mean yield class by principal tree species (FC and PS)

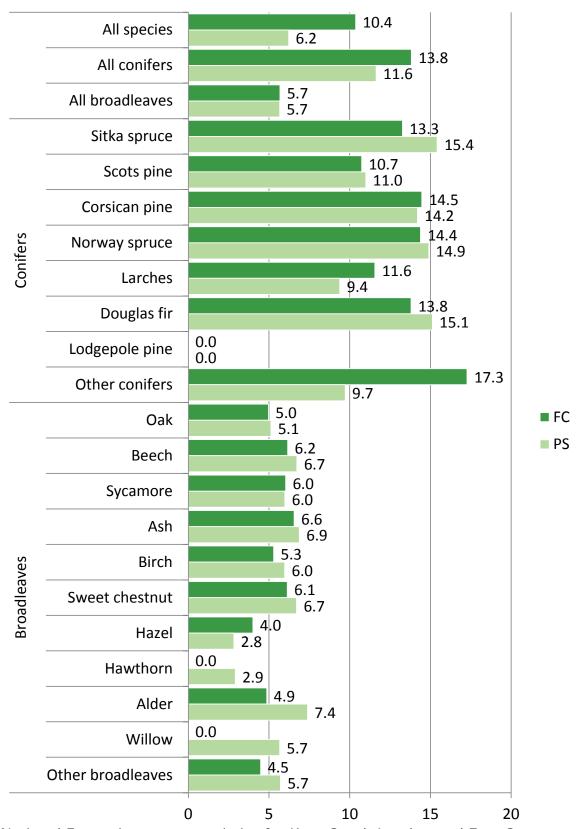


Table 23 Mean yield class by principal tree species (FC and PS)

	FC	Private sector
Principal species	mean yield class	weighted by area
Conifers		
Sitka spruce	13.3	15.4
Scots pine	10.7	11.0
Corsican pine	14.5	14.2
Norway spruce	14.4	14.9
Larches	11.6	9.4
Douglas fir	13.8	15.1
Lodgepole pine	0.0	0.0
Other conifers	17.3	9.7
All conifers	13.8	11.6
Broadleaves		
Oak	5.0	5.1
Beech	6.2	6.7
Sycamore	6.0	6.0
Ash	6.6	6.9
Birc h	5.3	6.0
Sweet chestnut	6.1	6.7
Hazel	4.0	2.8
Hawthorn	0.0	2.9
Alder	4.9	7.4
Willow	0.0	5.7
Other broadleaves	4.5	5.7
All broadleaves	5.7	5.7
All species		
All species	10.4	6.2

Overdue timber stocks

Overdue volume and area

Table 24 Standing volume in overdue timber stocks

	FC	Private secto	r
	volume (000 m³ obs)	volume (000 m³ obs)	SE %
Kent South London	and East Sussex		
All conifers	40	704	33
All broadleaves	2	6,929	10
All species	42	7,635	10

Table 25 Stocked area of overdue timber stocks

	FC	Private secto	r
	area (000 ha)	area (000 ha)	SE %
Kent South London	and East Sussex		
All conifers	0.1	1.1	28
All broadleaves	< 0.1	16.1	9
All species	0.1	17.3	8

Part 3 – How our woodlands might change over time

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25-year softwood forecast

25-year forecast of softwood timber availability

Figure 34 Summary of 25-year forecast of softwood timber availability; average annual volume within period

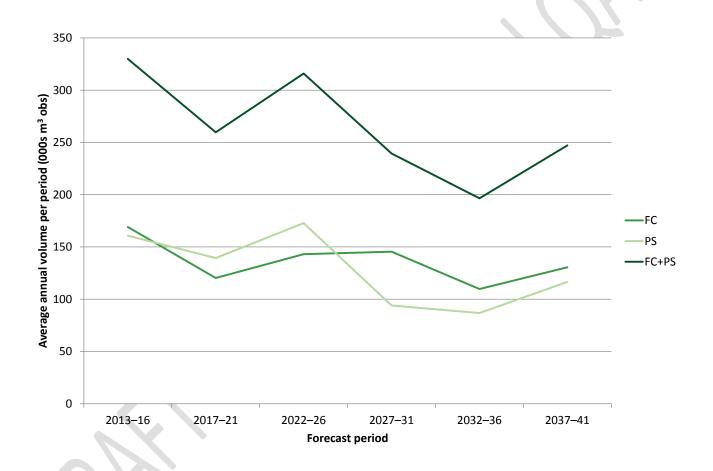


Figure 35 25—year forecast of softwood timber availability; average annual volume within period

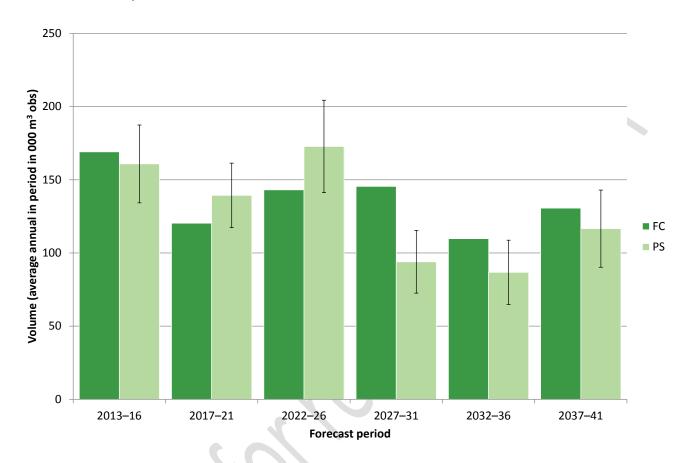


Table 26 25-year forecast of softwood availability; average annual volume within period

	FC	Private secto	Total	
Forecast period	volume	volume	SE%	volume
	(000 m ³ obs)	(000 m³ obs)	3E /0	(000 m ³ obs)
Kent South Lond	on and East Sussex		·	
2013–16	169	161	17	330
2017–21	120	139	16	260
2022–26	143	173	18	316
2027–31	145	94	23	239
2032–36	110	87	25	196
2037–41	131	117	23	247

25-year forecast of softwood timber availability by principal species

Table 27 25-year forecast of softwood timber availability by principal species; average annual volume within period

	2013–16			2017–21					
Dringing angulas	FC	Private sector		FC	Private sec	tor			
Principal species	volume (000 m³ obs)		SE%		volume (000 m³ obs)				
Kent South London and E	Kent South London and East Sussex								
All conifers	13	161	17	16	139	16			
Sitka spruce	< 1	6	65	< 1	4	63			
Scots pine	1	29	32	1	19	24			
Corsican pine	5	41	40	6	32	35			
Norway spruce	< 1	7	39	2	7	36			
Larches	< 1	31	27	< 1	33	37			
Douglas fir	2	6	77	2	6	61			
Lodgepole pine	0	0	_	0	0	_			
Other conifers	4	42	33	4	43	36			

Table 27 (cont'd) 25-year forecast of softwood timber availability by principal species; average annual volume within period

		2022–26		2027–31		
Principal species	FC	Private sector		FC Private sed		tor
Timelpul species	volume (000 m³ obs)		SE%		volume (000 m³ obs)	
Kent South London and E	ast Sussex					
All conifers	14	173	18	18	94	23
Sitka spruce	< 1	19	71	< 1	< 1	78
Scots pine	2	57	35	1	17	28
Corsican pine	6	44	51	8	25	67
Norway spruce	1	6	39	2	15	66
Larches	< 1	21	41	1	11	37
Douglas fir	2	2	64	3	2	68
Lodgepole pine	0	0	_	0	0	_
Other conifers	2	25	33	3	25	32

Table 27 (cont'd) 25-year forecast of softwood timber availability by principal species; average annual volume within period

		2032–36		2037–41					
Principal species	FC	Private sector		FC	Private sec	tor			
Timerpar species	volume (000 m³ obs)		SE%		volume (000 m³ obs)				
Kent South London and Ea	Kent South London and East Sussex								
All conifers	19	87	25	25	117	23			
Sitka spruce	< 1	3	40	< 1	3	39			
Scots pine	1	16	46	2	61	36			
Corsican pine	10	9	56	14	3	35			
Norway spruce	2	24	77	2	12	52			
Larches	1	11	38	1	16	56			
Douglas fir	4	2	57	3	3	34			
Lodgepole pine	0	0	_	< 1	< 1	50			
Other conifers	2	24	42	3	19	38			

25-year forecast of softwood timber availability % spruce

Table 28 25-year forecast of softwood timber availability % spruce

Kent South	n London and				Top di	ameter clas	s (cm)			
East	Sussex	7–14	14–16	16–18	18–24	24–34	34–44	44–54	54+	Total
2013–16	FC (%)	2	7	12	12	8	8	14	23	7
2013-10	PS (%)	13	12	11	10	7	4	2	2	8
2017–21	FC (%)	4	4	7	12	22	29	30	18	15
2017-21	PS (%)	15	12	11	9	7	4	3	2	8
2022–26	FC (%)	3	3	3	5	10	14	16	39	8
2022–20	PS (%)	19	16	21	20	18	10	4	4	14
2027–31	FC (%)	4	4	5	7	12	18	23	29	10
2027-31	PS (%)	10	14	13	11	11	19	31	54	16
2032–36	FC (%)	10	7	6	6	7	11	15	24	9
2032–30	PS (%)	36	27	27	26	31	35	34	6	30
2037–41	FC (%)	16	9	4	4	6	9	11	16	8
2037-41	PS (%)	26	24	20	13	13	12	13	4	13

25-year forecast of softwood timber availability by top diameter class

Table 29 25-year forecast of softwood timber availability by top diameter class; average annual volume within period

2012 1/								
		2013–16		2017–21				
Top diameter class (cm)	FC	Private sector		FC	Private sec	tor		
Top diameter class (cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%		
Kent South London and Ea	ast Sussex							
7–14	5	20	15	3	13	19		
14–16	< 1	10	16	1	8	22		
16–18	< 1	11	16	1	9	22		
18–24	2	36	18	3	33	19		
24-34	3	44	19	4	40	18		
34-44	1	21	24	2	18	23		
44-54	< 1	10	32	< 1	9	30		
54+	< 1	9	43	< 1	9	37		
Total	13	161	17	16	139	16		

Table 29 (cont'd) 25-year forecast of softwood timber availability by top diameter class; average annual volume within period

		2022–26		2027–31		
Top diameter class (cm)	FC	Private sector		FC	Private sec	tor
Top diameter class (cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex					
7–14	2	9	19	2	5	18
14–16	< 1	5	22	1	3	19
16–18	1	7	21	1	4	20
18–24	3	31	18	5	20	23
24-34	4	57	21	6	35	27
34-44	1	33	24	2	15	29
44-54	< 1	17	27	< 1	6	33
54+	< 1 13		34	< 1	5	49
Total	14	173	18	18	94	23

Table 29 (cont'd) 25-year forecast of softwood timber availability by top diameter class; average annual volume within period

		2032–36		2037–41		
Top diameter class (cm)	FC	Private sector		FC	Private sec	tor
Top diameter class (cm)	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%
Kent South London and Ea	ast Sussex					
7–14	2	7	21	2	10	24
14–16	< 1	3	17	< 1	3	20
16–18	1	3	19	1	3	18
18–24	5	17	23	4	12	21
24-34	6	32	29	8	33	23
34-44	2	15	36	5	23	27
44-54	1	6	38	2	13	32
54+	1 3		37	2	20	37
Total	19	19 87		25	117	23

25-year forecast of standing volume in conifers

Figure 36 25-year forecast of standing volume in conifers

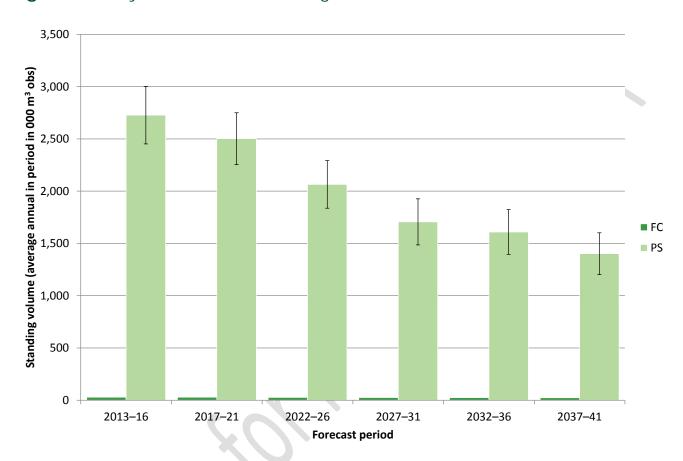


Table 30 25-year forecast of standing volume in conifers; average annual volume within period

	FC	Private secto	Total	
Forecast period	volume	volume	SE%	volume
	(000 m³ obs)	(000 m³ obs)	3E /0	(000 m³ obs)
Kent South Londor	n and East Sussex			
2013–16	28	2,727	10	2,755
2017–21	29	2,502	10	2,531
2022–26	27	2,064	11	2,091
2027–31	26	1,706	13	1,732
2032–36	25	1,609	13	1,634
2037–41	23	1,402	14	1,425

25-year forecast of net increment in conifers

Figure 37 25-year forecast of net increment in conifers

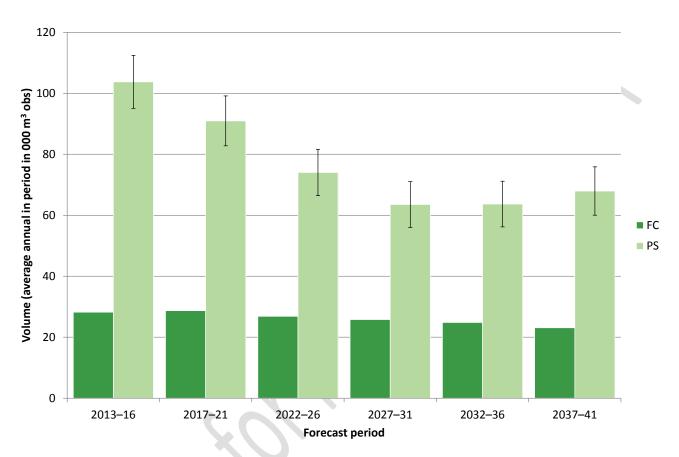
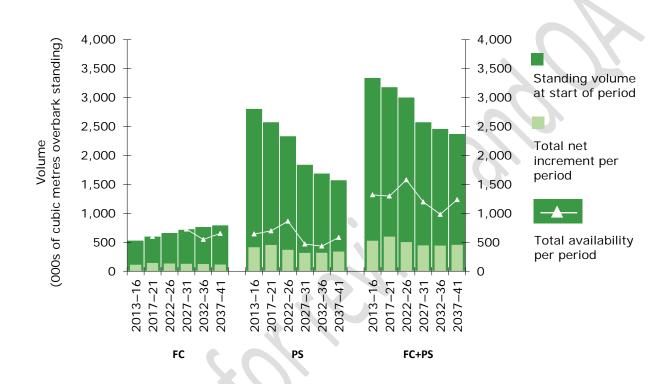


Table 31 25-year forecast of net increment in conifers; average annual volume within period

	FC	Private secto	Total	
Forecast period	volume	volume	CE0/	volume
	(000 m³ obs)	(000 m³ obs)	SE%	(000 m ³ obs)
Kent South Londor	n and East Sussex			
2013–16	28	104	8	132
2017–21	29	91	9	120
2022–26	27	74	10	101
2027–31	26	64	12	89
2032–36	25	64	12	89
2037–41	23	68	12	91

Combined standing volume, net increment and availability

Figure 38 25-year forecast of standing volume, net increment and softwood availability



50-year softwood forecast

50-year forecast of softwood timber availability

Figure 39 Summary of 50-year forecast of softwood timber availability; average annual volume within period

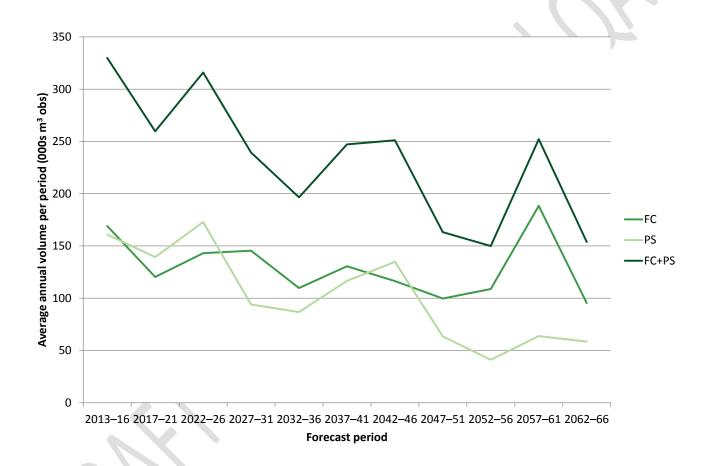


Figure 40 50-year forecast of softwood timber availability; average annual volume within period

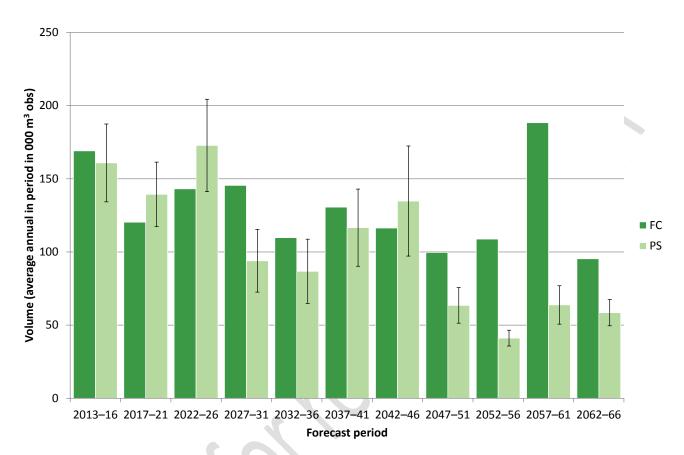


Table 32 Summary of 50–year forecast of softwood timber availability; average annual volume within period

	FC	Private secto	r	Total
Forecast period	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
2013–16	169	161	17	330
2017–21	120	139	16	260
2022–26	143	173	18	316
2027-31	145	94	23	239
2032-36	110	87	25	196
2037-41	131	117	23	247
2042-46	116	135	28	251
2047–51	100	63	19	163
2052–56	109	41	13	150
2057-61	188	64	21	252
2062–66	95	59	15	154

50-year forecast of softwood timber availability by principal species

Table 33 50-year forecast of softwood timber availability by principal species; average annual volume within period

		2013–16		2017–21			
Principal species	FC	Private sector		FC	Private sec	tor	
i illicipai species	volume (000 m³ obs)		SE%	volu (000 m		SE%	
Kent South London and E	ast Sussex						
All conifers	13	161	17	16	139	16	
Sitka spruce	< 1	6	65	< 1	4	63	
Scots pine	1	29	32	1	19	24	
Corsican pine	5	41	40	6	32	35	
Norway spruce	< 1	7	39	2	7	36	
Larches	< 1	31	27	< 1	33	37	
Douglas fir	2	6	77	2	6	61	
Lodgepole pine	0	0	-	0	0	-	
Other conifers	4	42	33	4	43	36	

Table 33 (cont'd) 50-year forecast of softwood timber availability by principal species; average annual volume within period

Principal species	2022–26			2027–31		
	FC	Private sector		FC	Private sec	tor
	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%
Kent South London and East Sussex						
All conifers	14	173	18	18	94	23
Sitka spruce	< 1	19	71	< 1	< 1	78
Scots pine	2	57	35	1	17	28
Corsican pine	6	44	51	8	25	67
Norway spruce	1	6	39	2	15	66
Larches	< 1	21	41	1	11	37
Douglas fir	2	2	64	3	2	68
Lodgepole pine	0	0	-	0	0	-
Other conifers	2	25	33	3	25	32

Table 33 (cont'd) 50-year forecast of softwood timber availability by principal species; average annual volume within period

		2032–36		2037–41			
Dringing engages	FC Private secto		tor	FC Private sec		tor	
Principal species	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%	
Kent South London and Ea	ast Sussex						
All conifers	19	87	25	25	117	23	
Sitka spruce	< 1	3	40	< 1	3	39	
Scots pine	1	16	46	2	61	36	
Corsican pine	10	9	56	14	3	35	
Norway spruce	2	24	77	2	12	52	
Larches	1	11	38	1	16	56	
Douglas fir	4	2	57	3	3	34	
Lodgepole pine	0 0		-	< 1	< 1	50	
Other conifers	2	24	42	3	19	38	

Table 33 (cont'd) 50-year forecast of softwood timber availability by principal species; average annual volume within period

		2042–46		2047–51			
Dringinal enecies	FC	Private sec	tor	FC	Private sec	tor	
Principal species	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%	
Kent South London and Ea	ast Sussex						
All conifers	22	135	28	41	63	19	
Sitka spruce	< 1	3	34	< 1	5	32	
Scots pine	1	55	49	3	26	36	
Corsican pine	10	15	61	27	1	42	
Norway spruce	2	14	48	1	10	51	
Larches	2	3	36	3	3	35	
Douglas fir	5	3	25	5	4	21	
Lodgepole pine	< 1 < 1		50	< 1	< 1	50	
Other conifers	2	42	62	2	13	25	

Table 33 (cont'd) 50-year forecast of softwood timber availability by principal species; average annual volume within period

		2052–56		2057–61			
Dringinal enecies	FC Private sector		FC Private sec		tor		
Principal species	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%	
Kent South London and Ea	ast Sussex						
All conifers	22	41	13	58	64	21	
Sitka spruce	< 1	6	31	< 1	7	30	
Scots pine	4	9	22	22	13	27	
Corsican pine	6	1	41	13	1	42	
Norway spruce	4	3	47	4	20	60	
Larches	1	3	28	3	4	28	
Douglas fir	4	5	20	6	5	19	
Lodgepole pine	< 1 < 1		50	< 1	< 1	50	
Other conifers	2	14	17	9	14	18	

Table 33 (cont'd) 50-year forecast of softwood timber availability by principal species; average annual volume within period

	2062–66						
Drimainal anasias	FC	ctor					
Principal species	volu (000 m	SE%					
Kent South London and Ea	Kent South London and East Sussex						
All conifers	21	59	15				
Sitka spruce	< 1	7	27				
Scots pine	7	9	17				
Corsican pine	5	5	52				
Norway spruce	1	8	53				
Larches	1	4	37				
Douglas fir	4	6	19				
Lodgepole pine	< 1	< 1	50				
Other conifers	3	20	30				

50-year forecast of softwood timber availability % spruce

Table 34 50-year forecast of softwood timber availability % spruce

	h London and East	Top diameter class (cm)								
	Sussex	7–14	14–16	16–18	18–24	24-34	34-44	44–54	54+	Total
2013–16	FC (%)	2	7	12	12	8	8	14	23	7
2013-10	PS (%)	13	12	11	10	7	4	2	2	8
2017–21	FC (%)	4	4	7	12	22	29	30	18	15
2017-21	PS (%)	15	12	11	9	7	4	3	2	8
2022–26	FC (%)	3	3	3	5	10	14	16	39	8
2022-20	PS (%)	19	16	21	20	18	10	4	4	14
2027–31	FC (%)	4	4	5	7	12	18	23	29	10
2027-31	PS (%)	10	14	13	11	11	19	31	54	16
2032–36	FC (%)	10	7	6	6	7	11	15	24	9
2032-36	PS (%)	36	27	27	26	31	35	34	6	30
2037–41	FC (%)	16	9	4	4	6	9	11	16	8
2037-41	PS (%)	26	24	20	13	13	12	13	4	13
2042–46	FC (%)	19	13	10	8	9	8	7	6	9
2042-46	PS (%)	17	22	21	16	13	10	4	3	13
2047–51	FC (%)	10	7	5	2	2	3	4	8	3
2047-31	PS (%)	20	25	28	32	30	26	21	10	25
2052–56	FC (%)	16	15	12	13	12	18	20	29	18
2032-36	PS (%)	20	19	18	22	23	23	32	50	22
2057–61	FC (%)	11	11	10	8	7	7	7	8	8
2037-01	PS (%)	26	24	24	29	51	65	67	73	42
2062–66	FC (%)	8	10	11	10	7	4	4	1	6
2002-00	PS (%)	24	22	20	17	26	68	88	95	26

50-year forecast of standing volume in conifers

Figure 41 50—year forecast of standing volume in conifers; average annual volume within period

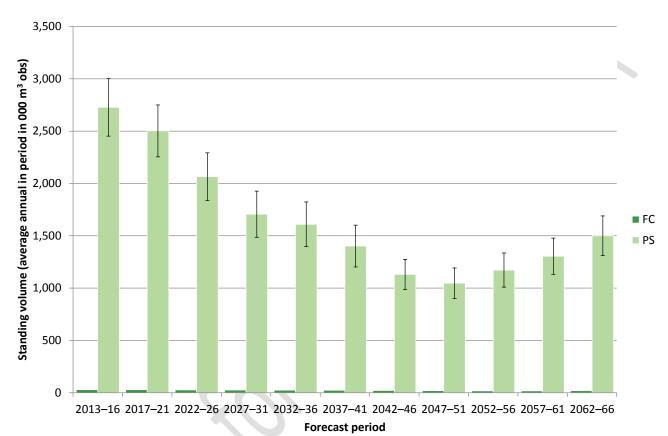


Table 35 50–year forecast of standing volume in conifers; average annual volume within period

	FC	Private secto	r	Total
Forecast period	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
2013–16	28	2,727	10	2,755
2017–21	29	2,502	10	2,531
2022–26	27	2,064	11	2,091
2027-31	26	1,706	13	1,732
2032-36	25	1,609	13	1,634
2037-41	23	1,402	14	1,425
2042-46	22	1,130	13	1,152
2047-51	20	1,047	14	1,066
2052–56	17	1,172	14	1,190
2057-61	17	1,305	13	1,321
2062–66	19	1,500	13	1,519

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50-year forecast of net increment in conifers

Figure 42 50-year forecast of net increment in conifers; average annual volume within period

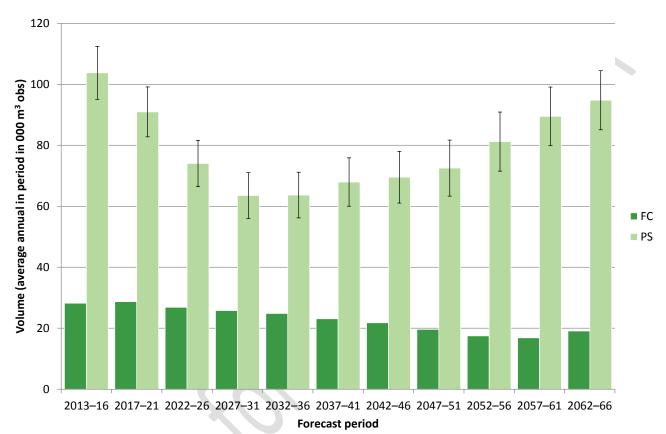
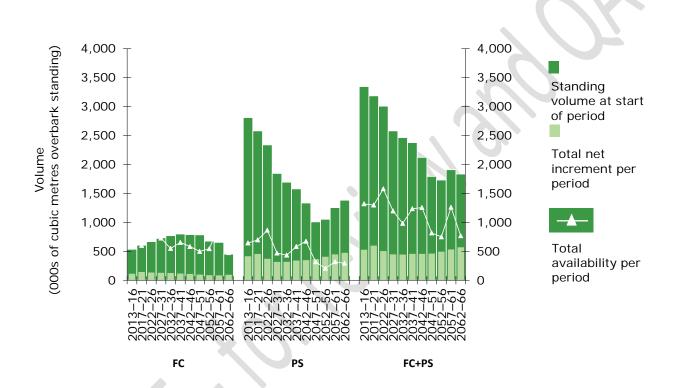


Table 36 50-year forecast of net increment in conifers; average annual volume within period

	FC	Private sect	or	Total
Forecast period	volume	volume	CEO	volume
	(000 m³ obs)	(000 m ³ obs)	SE%	(000m³ obs)
Kent South Londor	n and East Sussex			
2013–16	28	104	8	132
2017–21	29	91	9	120
2022–26	27	74	10	101
2027–31	26	64	12	89
2032–36	25	64	12	89
3037-41	23	68	12	91
2042-46	22	70	12	91
2047–51	20	73	13	92
2052–56	17	81	12	99
2057–61	17	89	11	106
2062–66	19	95	10	114

Combined standing volume, net increment and availability

Figure 43 50-year forecast of standing volume, net increment and softwood availability



50-year hardwood forecast

50-year forecast of hardwood timber availability

Figure 44 Summary of 50-year forecast of hardwood timber availability; average annual volume within period

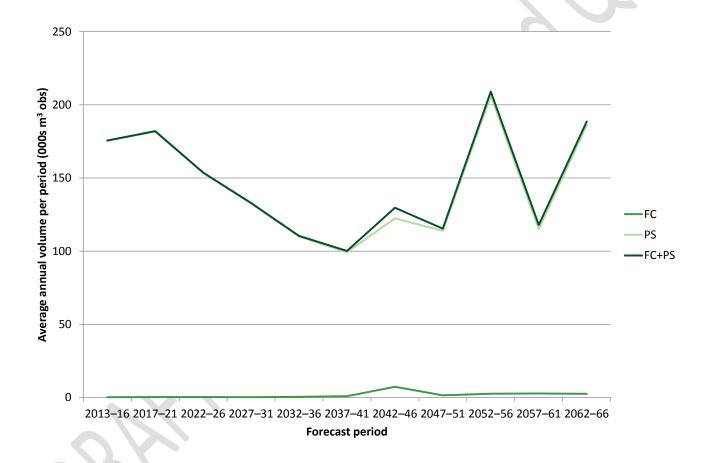


Figure 45 50–year forecast of hardwood timber availability; average annual volume within period

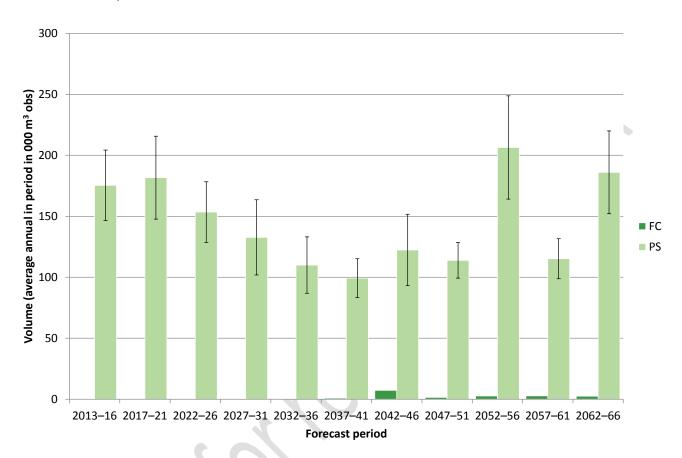


Table 37 50-year forecast of hardwood timber availability; average annual volume within period

	FC	Private secto	or	Total
Forecast period	volume	volume	CE0/	volume
	(000 m³ obs)	(000 m³ obs)	SE%	(000 m ³ obs)
Kent South Londor	n and East Sussex			
2013–16	< 1	175	16	176
2017–21	< 1	182	19	182
2022–26	< 1	153	16	154
2027–31	< 1	133	23	133
2032–36	< 1	110	21	110
2037–41	< 1	99	16	100
2042–46	7	122	24	130
2047–51	1	114	13	115
2052–56	3	206	21	209
2057–61	3	115	14	118
2062–66	2	186	18	189

50-year forecast of hardwood timber availability by principal species

Table 38 50-year forecast of hardwood timber availability by principal species; average annual volume within period

	,	2013–16		2017–21			
Principal species	FC	FC Private sector			Private sector		
	vol. (000 m		SE%	vol. (000 m		SE%	
Kent South London and I	East Sussex						
All broadleaves	< 1	175	16	1	182	19	
Oak	< 1	45	43	< 1	47	56	
Beech	< 1	10	32	< 1	11	39	
Sycamore	< 1	12	55	< 1	11	59	
Ash	< 1	41	37	< 1	29	36	
Birch	< 1	34	29	< 1	45	30	
Sweet chestnut	< 1	7	30	< 1	8	24	
Hazel	0	4	43	< 1	4	44	
Hawthorn	0	3	45	0	2	58	
Alder	< 1	7	69	< 1	2	56	
Willow	0	< 1	28	0	1	40	
Other broadleaves	< 1	12	23	< 1	23	33	

Table 38 (cont'd) 50-year forecast of hardwood timber availability by principal species; average annual volume within period

	2	2022–26		2027–31			
Principal species	FC	Private sec	tor	FC	Private sec	tor	
rillicipai species	volume (000 m³ obs)		SE%	volume (000 m³ obs)		SE%	
Kent South London and I	East Sussex						
All broadleaves	2	153	16	6	133	23	
Oak	< 1	34	34	< 1	62	45	
Beech	< 1	24	47	4	19	45	
Sycamore	< 1	14	57	< 1	2	48	
Ash	< 1	14	38	< 1	7	31	
Birch	< 1	32	32	< 1	14	25	
Sweet chestnut	< 1	15	39	< 1	9	24	
Hazel	< 1	9	64	< 1	5	36	
Hawthorn	0	1	32	0	1	28	
Alder	< 1	< 1	52	< 1	< 1	52	
Willow	0	1	38	0	2	36	
Other broadleaves	< 1	13	24	< 1	12	21	

Table 38 (cont'd) 50-year forecast of hardwood timber availability by principal species; average annual volume within period

	2032–36			2037–41			
Principal species	FC	FC Private sector			Private sector		
rtilicipal species	volume (000 m³ obs)		SE%	volu (000 m		SE%	
Kent South London and I	East Sussex						
All broadleaves	3	110	21	7	99	16	
Oak	< 1	25	30	< 1	16	29	
Beech	2	26	78	5	15	69	
Sycamore	< 1	3	51	< 1	4	47	
Ash	< 1	9	36	< 1	9	27	
Birch	< 1	18	31	< 1	12	21	
Sweet chestnut	< 1	16	34	< 1	11	22	
Hazel	< 1	3	29	< 1	6	34	
Hawthorn	0	1	26	0	1	25	
Alder	< 1	< 1	75	< 1	1	62	
Willow	0	2	34	0	2	33	
Other broadleaves	< 1	14	21	< 1	20	29	

Table 38 (cont'd) 50-year forecast of hardwood timber availability by principal species; average annual volume within period

	2	2042–46		2047–51			
Principal species	FC Private sector			FC	Private sec	tor	
Trincipal species	volu (000 m		SE%	volu (000 m		SE%	
Kent South London and	East Sussex						
All broadleaves	6	122	24	8	114	13	
Oak	< 1	41	67	< 1	24	41	
Beech	2	6	39	5	6	36	
Sycamore	< 1	5	43	< 1	9	46	
Ash	< 1	11	25	< 1	13	24	
Birch	< 1	16	18	< 1	21	21	
Sweet chestnut	< 1	19	30	< 1	13	29	
Hazel	< 1	3	26	< 1	5	28	
Hawthorn	0	2	24	0	2	24	
Alder	< 1	1	62	< 1	1	64	
Willow	0	4	46	0	3	40	
Other broadleaves	< 1	16	19	< 1	19	24	

Table 38 (cont'd) 50-year forecast of hardwood timber availability by principal species; average annual volume within period

	,	2052–56		2057–61			
Principal species	FC	Private sector		FC	FC Private sec		
Principal Species	volume (000 m³ obs)		SE%	volu (000 m		SE%	
Kent South London and I	East Sussex						
All broadleaves	4	206	21	18	115	14	
Oak	< 1	34	38	4	16	22	
Beech	2	42	68	12	16	54	
Sycamore	< 1	8	50	< 1	10	63	
Ash	< 1	17	36	< 1	16	30	
Birch	< 1	18	23	< 1	18	24	
Sweet chestnut	< 1	41	57	< 1	11	32	
Hazel	< 1	12	48	< 1	2	27	
Hawthorn	0	2	25	0	2	25	
Alder	< 1	1	59	< 1	6	82	
Willow	0	4	45	0	2	43	
Other broadleaves	< 1	28	33	< 1	20	27	

Table 38 (cont'd) 50-year forecast of hardwood timber availability by principal species; average annual volume within period

2062–66				
FC	tor			
volu	ume	SE%		
(000 m	n ³ obs)	3E 70		
East Sussex				
5	186	18		
2	42	49		
2	5	38		
< 1	9	59		
< 1	18	36		
< 1	38	28		
< 1	7	24		
0	3	34		
0	3	31		
< 1	1	58		
0	10	80		
< 1	51	35		
	FC Volu (000 m East Sussex 5 2 2 < 1 < 1 < 1 < 1 0 0 < 1 0	FC		

50-year forecast of hardwood timber availability by top diameter class

Table 39 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2013–16		2017–21		
Top diameter class	FC	Private sec	tor	FC Private sec		tor
(cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex					
7–14	< 1	33	13	< 1	36	14
14–16	< 1	8	15	< 1	9	19
16–18	< 1	9	15	< 1	10	19
18–24	< 1	32	16	< 1	34	19
24-34	< 1	46	20	< 1	46	23
34-44	< 1	22	28	< 1	24	33
44-54	< 1	11	34	< 1	12	40
54+	< 1 15		43	< 1	12	35
Total	< 1	175	16	1	182	19

Table 39 (cont'd) 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2022–26		2027–31		
Top diameter class	FC	Private sector		FC Private sec		tor
(cm)	volume (000 m³ obs)		SE%	volu (000 n		SE%
Kent South London and Ea	ast Sussex					
7–14	< 1	41	21	2	29	11
14–16	< 1	9	22	< 1	5	14
16–18	< 1	8	22	< 1	6	16
18–24	< 1	25	22	2	18	17
24-34	< 1	30	20	1	26	25
34-44	< 1	17	27	< 1	17	34
44-54	< 1	10	31	< 1	9	35
54+	< 1	13	34	< 1	21	72
Total	2	153	16	6	133	23

Table 39 (cont'd) 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2032–36		2037–41		
Top diameter class	FC	Private sec	tor	FC Private sec		tor
(cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex					
7–14	< 1	35	15	1	35	11
14–16	< 1	6	16	< 1	6	11
16–18	< 1	5	14	< 1	6	12
18–24	< 1	12	14	2	15	14
24-34	< 1	16	24	2	16	25
34-44	< 1	11	36	< 1	9	34
44-54	< 1	7	39	< 1	5	41
54+	< 1 19		61	< 1	8	46
Total	3	110	21	7	99	16

Table 39 (cont'd) 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2042–46		2047–51		
Top diameter class	FC	Private sec	tor	FC Private sec		tor
(cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex		,			
7–14	1	32	11	1	29	11
14–16	< 1	7	11	< 1	8	12
16–18	< 1	7	11	< 1	9	13
18–24	1	19	12	2	26	14
24-34	2	19	22	3	21	20
34-44	< 1	11	43	< 1	10	29
44-54	< 1	6	50	< 1	5	33
54+	< 1	21	77	< 1	5	29
Total	6	122	24	8	114	13

Table 39 (cont'd) 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2052–56		2057–61		
Top diameter class	FC	Private sec	tor	FC Private sec		tor
(cm)	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex					
7–14	1	29	11	4	24	13
14–16	< 1	9	14	2	5	10
16–18	< 1	11	15	2	6	12
18–24	< 1	39	16	5	21	14
24-34	1	57	26	4	31	18
34-44	< 1	31	32	1	14	21
44-54	< 1	16	37	< 1	6	27
54+	< 1	15	34	< 1	9	36
Total	4	206	21	18	115	14

Table 39 (cont'd) 50-year forecast of hardwood timber availability by top diameter class; average annual volume within period

		2062–66			
Top diameter class	FC	FC Private sec			
(cm)	volu (000 m	SE%			
Kent South London and Ea	ast Sussex				
7–14	2	26	12		
14–16	< 1	8	14		
16–18	< 1	8	14		
18–24	< 1	35	17		
24-34	< 1	56	22		
34–44	< 1	28	27		
44–54	< 1	13	33		
54+	< 1	12	38		
Total	5	186	18		

50-year forecast of standing volume in broadleaves

Figure 46 50-year forecast of standing volume in broadleaves; average annual volume within period

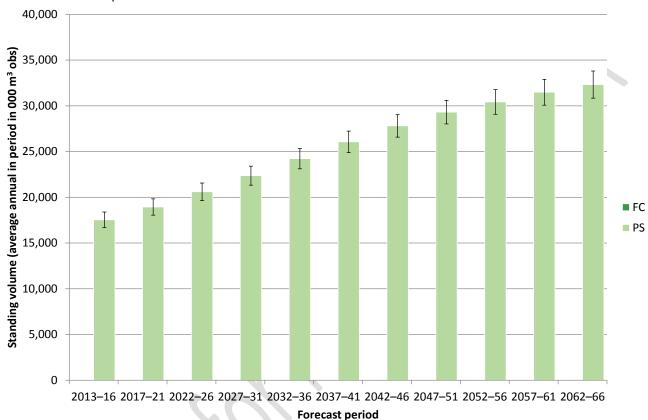


Table 40 50-year forecast of standing volume in broadleaves; average annual volume within period

	FC	Private secto	r	Total
Forecast period	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
2013–16	< 1	175	16	176
2017–21	< 1	182	19	182
2022–26	< 1	153	16	154
2027–31	< 1	133	23	133
2032–36	< 1	110	21	110
2037-41	< 1	99	16	100
2042-46	7	122	24	130
2047-51	1	114	13	115
2052-56	3	206	21	209
2057–61	3	115	14	118
2062–66	2	186	18	189

Table 41 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

	2	2013–16		2017–21		
Principal species	FC	Private sec	tor	FC Private sec		tor
Principal species	volume (000 m³ obs)		SE%	voli (000 m		SE%
Kent South London and I		. 0.00)		(000 11	. 3.3)	
All broadleaves	13	17,539	5	14	18,934	5
Oak	2	5,843	10	2	6,096	10
Beech	7	1,092	21	7	1,168	21
Sycamore	< 1	428	29	< 1	429	29
Ash	< 1	2,101	17	< 1	2,153	17
Birch	2	1,732	10	3	1,919	10
Sweet Chestnut	< 1	2,788	16	< 1	3,123	15
Hazel	< 1	401	18	< 1	482	17
Hawthorn	0	262	23	0	323	23
Alder	< 1	532	29	< 1	549	30
Willow	0	343	20	0	412	20
Other broadleaves	2	2,066	14	2	2,319	14

Table 41 (cont'd) 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

	2022–26			2027–31		
Dringinal engaine	FC	Private sec	tor	FC	Private sec	tor
Principal species	volume (000 m³ obs)		SE%	vol. (000 m		SE%
Kent South London and	East Sussex					
All broadleaves	13	20,595	5	13	22,360	5
Oak	2	6,320	10	2	6,503	10
Beech	6	1,231	21	6	1,259	22
Sycamore	< 1	411	30	< 1	459	28
Ash	< 1	2,253	17	< 1	2,412	17
Birch	3	2,154	10	2	2,388	11
Sweet Chestnut	< 1	3,537	15	< 1	3,971	15
Hazel	< 1	567	16	< 1	647	16
Hawthorn	0	400	22	0	484	21
Alder	< 1	582	30	< 1	621	29
Willow	0	495	19	0	580	19
Other broadleaves	2	2,658	13	2	3,044	12

Table 41 (cont'd) 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

	-	2032–36		2037–41		
Principal species	FC	Private sec	tor	FC Private sec		tor
Principal species	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and	East Sussex					
All broadleaves	12	24,222	5	11	26,062	5
Oak	2	6,759	10	2	7,074	10
Beech	6	1,274	22	6	1,296	23
Sycamore	< 1	518	27	< 1	573	26
Ash	< 1	2,565	17	< 1	2,720	17
Birch	2	2,625	11	2	2,876	11
Sweet Chestnut	< 1	4,407	14	< 1	4,827	14
Hazel	< 1	731	15	< 1	796	15
Hawthorn	0	570	21	0	656	20
Alder	< 1	656	29	< 1	687	28
Willow	0	662	19	0	740	19
Other broadleaves	2	3,430	12	1	3,787	12

Table 41 (cont'd) 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

	2042–46			2047–51			
Dubashashasasas	FC	Private sec	tor	FC	Private sec	tor	
Principal species	volu (000 m		SE%	volı (000 m		SE%	
Kent South London and	East Sussex						
All broadleaves	11	27,809	4	11	29,313	4	
Oak	2	7,377	10	2	7,575	10	
Beech	5	1,343	23	5	1,423	23	
Sycamore	< 1	623	25	< 1	660	25	
Ash	< 1	2,860	16	< 1	2,974	16	
Birch	1	3,106	11	1	3,302	11	
Sweet Chestnut	< 1	5,233	14	< 1	5,583	14	
Hazel	< 1	859	15	< 1	909	15	
Hawthorn	0	739	20	0	819	20	
Alder	< 1	714	28	< 1	738	28	
Willow	0	809	19	0	872	19	
Other broadleaves	1	4,110	11	1	4,415	11	

Table 41 (cont'd) 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

	2052–56			2057–61		
D	FC	Private sec	tor	FC	FC Private sec	
Principal species	vol. (000 m		SE%	volı (000 m		SE%
Kent South London and I	East Sussex					
All broadleaves	10	30,426	4	10	31,488	4
Oak	2	7,772	10	2	8,023	10
Beech	5	1,393	23	5	1,358	23
Sycamore	< 1	670	25	< 1	671	25
Ash	< 1	3,054	16	< 1	3,101	16
Birc h	1	3,462	11	< 1	3,613	11
Sweet Chestnut	< 1	5,868	14	< 1	6,124	14
Hazel	< 1	925	15	< 1	952	15
Hawthorn	0	895	20	0	964	20
Alder	< 1	758	28	< 1	749	29
Willow	0	934	19	0	986	20
Other broadleaves	1	4,653	11	< 1	4,885	11

Table 41 (cont'd) 50-year forecast of standing volume in broadleaves by principal species; average annual volume within period

		2062–66				
Dringinal enocios	FC	Private sec	tor			
Principal species	volu	ume	SE%			
	(000 m	n³ obs)	<i>3E 7</i> 0			
Kent South London and	East Sussex					
All broadleaves	10	32,323	5			
Oak	2	8,239	10			
Beech	5	1,399	24			
Sycamore	< 1	652	26			
Ash	< 1	3,115	17			
Birc h	< 1	3,660	11			
Sweet Chestnut	< 1	6,447	14			
Hazel	< 1	993	15			
Hawthorn	0	1,029	20			
Alder	< 1	759	29			
Willow	0	998	20			
Other broadleaves	< 1	4,965	11			

50-year forecast of net increment in broadleaves

Figure 47 50-year forecast of net increment in broadleaves; average annual volume within period

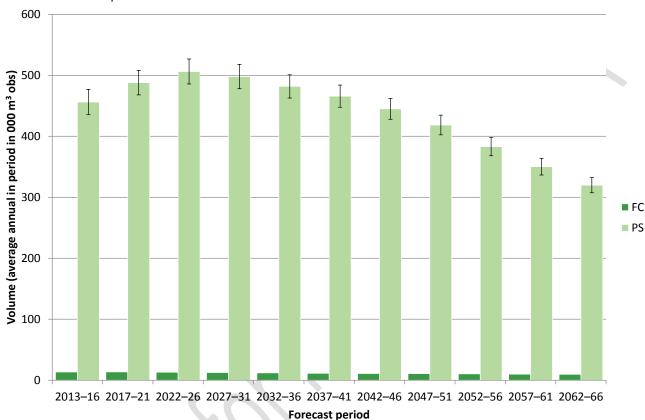


Table 42 50-year forecast of net increment in broadleaves; average annual volume within period

	FC	Private secto	r	Total
Forecast period	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
2013–16	13	456	5	470
2017–21	14	488	4	502
2022–26	13	506	4	519
2027–31	13	498	4	510
2032–36	12	482	4	494
3037–41	11	466	4	477
2042–46	11	445	4	456
2047–51	11	419	4	429
2052–56	10	383	4	394
2057–61	10	350	4	360
2062–66	10	320	4	330

Table 43 50—year forecast of net increment in broadleaves by principal species; average annual volume within period

	2013–16			2017–21			
5	FC	Private sec	tor	FC Private sec		tor	
Principal species	volu (000 m		SE%	volu (000 m		SE%	
Kent South London and Ea	ast Sussex						
All broadleaves	13	167	5	14	175	5	
Oak	2	28	13	2	29	13	
Beech	7	9	31	7	9	30	
Sycamore	< 1	26	16	< 1	29	16	
Ash	< 1	34	12	< 1	32	11	
Birch	2	10	24	3	11	22	
Sweet Chestnut	< 1	< 1	64	< 1	< 1	56	
Hazel	< 1	6	24	< 1	6	23	
Hawthorn	0	11	20	0	13	18	
Alder	< 1	1	74	< 1	2	53	
Willow	0	10	31	0	11	28	
Other broadleaves	2	31	15	2	34	15	

Table 43 (cont'd) 50-year forecast of net increment in broadleaves by principal species; average annual volume within period

	2022–26			2027–31			
Principal species	FC	Private sec	tor	FC Private sec		tor	
rincipal species	volume (000 m³ obs)		SE%	volu (000 n		SE%	
Kent South London and Ea	ast Sussex						
All broadleaves	13	178	5	13	181	5	
Oak	2	29	12	2	29	12	
Beech	6	10	30	6	10	30	
Sycamore	< 1	29	17	< 1	28	18	
Ash	< 1	30	11	< 1	35	14	
Birch	3	10	25	2	9	26	
Sweet Chestnut	< 1	< 1	53	< 1	< 1	51	
Hazel	< 1	6	22	< 1	5	21	
Hawthorn	0	14	17	0	15	16	
Alder	< 1	3	62	< 1	3	65	
Willow	0	11	28	0	11	27	
Other broadleaves	2	35	14	2	35	14	

Table 43 (cont'd) 50-year forecast of net increment in broadleaves by principal species; average annual volume within period

	2032–36			2037–41			
Principal species	FC	Private sec	tor	FC Private sec		tor	
rincipal species	volume (000 m³ obs)		SE%	volu (000 m		SE%	
Kent South London and Ea	ast Sussex						
All broadleaves	12	181	5	11	177	5	
Oak	2	29	12	2	28	12	
Beech	6	9	31	6	9	32	
Sycamore	< 1	26	18	< 1	25	19	
Ash	< 1	39	16	< 1	40	18	
Birch	2	9	26	2	9	27	
Sweet Chestnut	< 1	< 1	50	< 1	< 1	60	
Hazel	< 1	5	21	< 1	4	17	
Hawthorn	0	15	16	0	15	16	
Alder	< 1	2	67	< 1	2	66	
Willow	0	11	27	0	11	27	
Other broadleaves	2	35	13	1	33	13	

Table 43 (cont'd) 50-year forecast of net increment in broadleaves by principal species; average annual volume within period

	2042–46			2047–51		
Principal species	FC	Private sec	tor	FC Private sect		tor
	volume (000 m³ obs)		SE%	volu (000 n		SE%
Kent South London and Ea	ast Sussex					
All broadleaves	11	164	6	11	151	6
Oak	2	26	12	2	25	13
Beech	5	9	34	5	8	34
Sycamore	< 1	23	20	< 1	19	19
Ash	< 1	38	19	< 1	36	19
Birch	1	8	29	1	7	30
Sweet Chestnut	< 1	< 1	61	< 1	< 1	53
Hazel	< 1	3	17	< 1	2	17
Hawthorn	0	14	16	0	14	16
Alder	< 1	2	65	< 1	1	63
Willow	0	11	27	0	10	27
Other broadleaves	1	31	13	1	29	14

Table 43 (cont'd) 50-year forecast of net increment in broadleaves by principal species; average annual volume within period

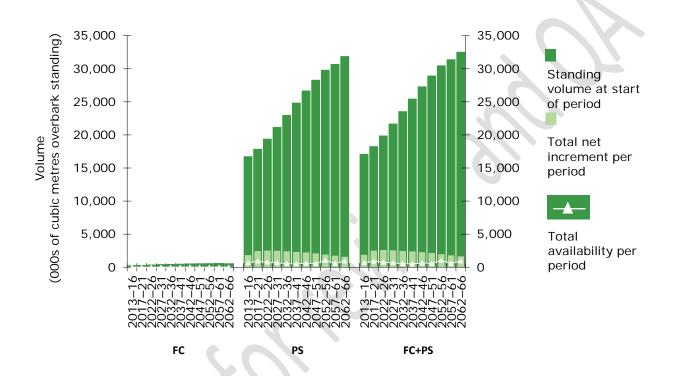
	2052–56			2057–61		
Dringing chasics	FC	Private sec	tor	FC Private secto		tor
Principal species	volume (000 m³ obs)		SE%	volu (000 m		SE%
Kent South London and Ea	ast Sussex					
All broadleaves	10	138	6	10	123	5
Oak	2	25	13	2	25	13
Beech	5	7	34	5	7	32
Sycamore	< 1	17	19	< 1	15	19
Ash	< 1	31	19	< 1	20	19
Birch	1	6	29	< 1	6	28
Sweet Chestnut	< 1	< 1	53	< 1	< 1	54
Hazel	< 1	2	24	< 1	3	38
Hawthorn	0	13	16	0	13	16
Alder	< 1	1	59	< 1	< 1	58
Willow	0	9	27	0	9	27
Other broadleaves	1	26	14	< 1	23	14

Table 43 (cont'd) 50-year forecast of net increment in broadleaves by principal species; average annual volume within period

	2062–66				
Dringing species	FC	Private sec	ctor		
Principal species	volu (000 m		SE%		
Kent South London and Ea	ast Sussex				
All broadleaves	10	112	5		
Oak	2	24	13		
Beech	5	7	30		
Sycamore	< 1	14	19		
Ash	< 1	15	16		
Birch	< 1	6	24		
Sweet Chestnut	< 1	< 1	59		
Hazel	< 1	3	38		
Hawthorn	0	12	15		
Alder	< 1	< 1	57		
Willow	0	8	27		
Other broadleaves	< 1	21	14		

Combined standing volume, net increment and availability

Figure 48 combined hardwood standing volume, net increment and availability



NFI summary report – Part 4

Part 4 - Tree health

Ash	97
Oak	106
Sweet chestnut	115
Larch	124

Ash

Figure 49 Stocked area of ash by age class

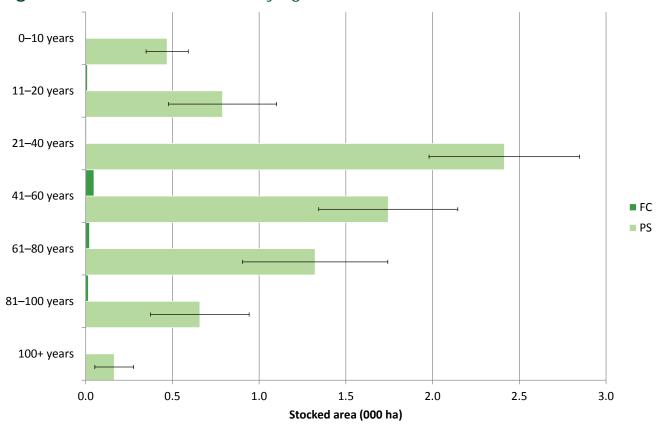


Table 44 Stocked area of ash by age class

	FC	Private sector		Total
Age class (years)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0–10	< 0.1	0.5	26	0.5
11–20	< 0.1	0.8	39	0.8
21–40	< 0.1	2.4	18	2.4
41–60	< 0.1	1.7	23	1.8
61–80	< 0.1	1.3	32	1.3
81–100	< 0.1	0.7	43	0.7
100+	< 0.1	0.2	68	0.2
Total	0.1	7.6	13	7.7

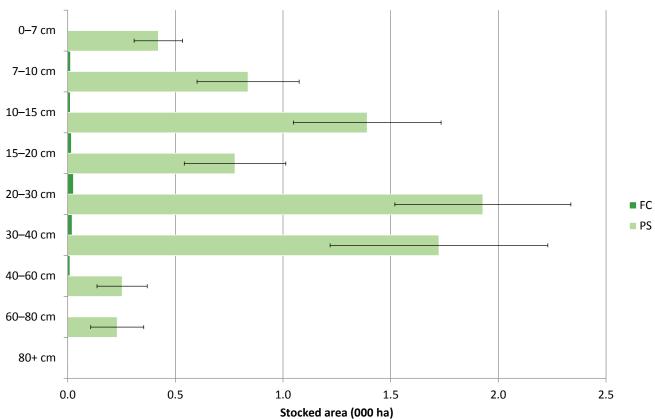


Figure 50 Stocked area of ash by mean stand dbh class

Table 45 Stocked area of ash by mean stand dbh class

M 1 1 5 5 1 1	FC	Private secto	r	Total
Mean stand DBH (cm)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0–7	< 0.1	0.4	27	0.4
7–10	< 0.1	0.8	28	0.9
10–15	< 0.1	1.4	25	1.4
15–20	< 0.1	0.8	30	0.8
20–30	< 0.1	1.9	21	2.0
30-40	< 0.1	1.7	29	1.7
40–60	< 0.1	0.3	46	0.3
60-80	< 0.1	0.2	54	0.2
+08	0.0	0.0	-	0.0
Total	0.1	7.6	13	7.7

Figure 51 Standing volume of ash by age class

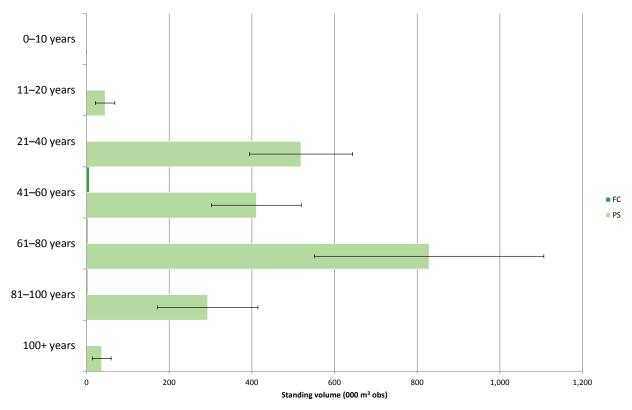


Table 46 Standing volume of ash by age class

	FC	Private secto	r	Total
Age class (years)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
0–10	0	< 1	47	< 1
11–20	< 1	45	52	45
21–40	< 1	519	24	519
41–60	7	411	26	418
61–80	3	829	34	832
81–100	3	293	41	296
100+	< 1	37	62	37
Total	13	2,133	17	2,147

Figure 52 Standing volume of ash by mean stand dbh class

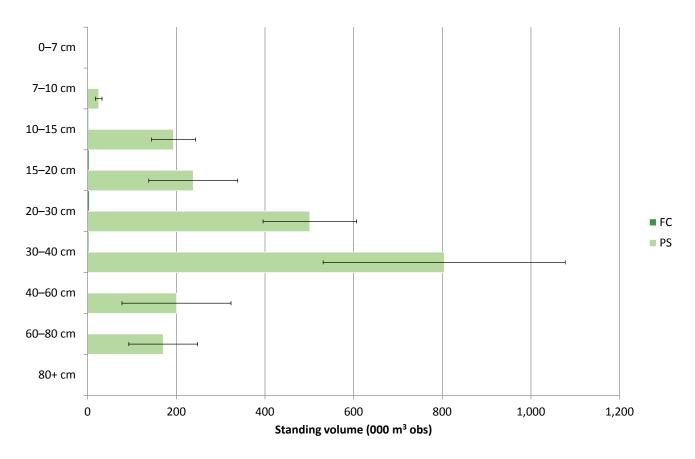


Table 47 Standing volume of ash by mean stand dbh class

Managara da DDU	FC	Private secto	r	Total
Mean stand DBH (cm)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
0–7	0	0	-	0
7–10	< 1	25	29	25
10–15	2	194	26	196
15–20	3	238	42	241
20–30	4	501	21	505
30-40	2	804	34	807
40–60	1	200	61	202
60–80	< 1	170	45	170
+ 08	0	0	-	0
Total	13	2,133	17	2,147

Figure 53 Number of ash trees by age class

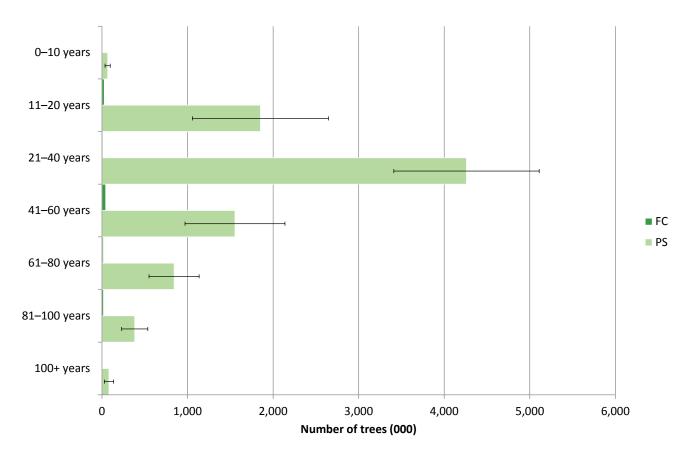


Table 48 Number of ash trees by age class

	FC	Private secto	Total	
Age class (years)	number of trees (thousands)	number of trees (thousands)		number of trees (thousands)
Kent South London	and East Sussex			
0–10	0	65	47	65
11–20	26	1,852	43	1,878
21–40	10	4,260	20	4,270
41–60	42	1,555	38	1,597
61–80	12	843	35	855
81–100	18	382	40	400
100+	2	82	64	84
Total	111	9,039	16	9,150

Figure 54 Number of ash trees by mean stand dbh class

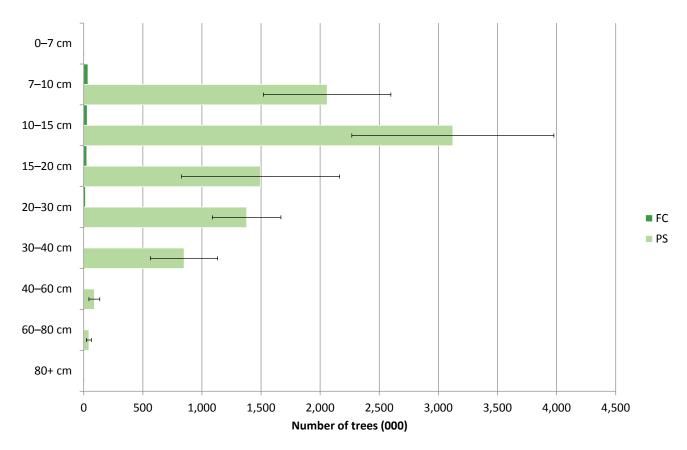


Table 49 Number of ash trees by mean stand dbh class

Moon stand DDII	FC	Private secto	or	Total
Mean stand DBH (cm)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South Londor	Kent South London and East Sussex			
0–7	0	0	-	0
7–10	35	2,059	26	2,095
10–15	30	3,122	27	3,152
15–20	26	1,496	45	1,522
20–30	15	1,378	21	1,393
30–40	4	849	33	853
40–60	1	90	51	91
60–80	< 1	44	47	44
+ 08	0	0	-	0
Total	111	9,039	16	9,150

Part 4 - Tree health

Figure 55 Ash as a proportion of woodland

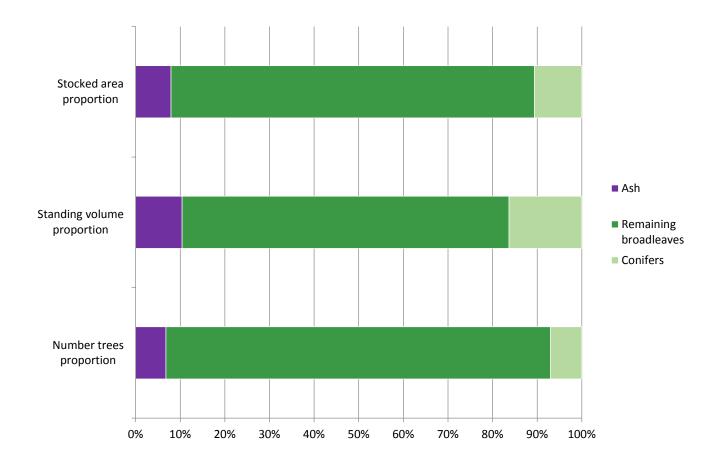


Table 50 Stocked area of ash as a proportion of woodland

	Stocked area of ash				
Aligned area	FC	Private sec	tor	Total	
	area (000 ha)	area (000 ha)	SE%	area (000 ha)	
Kent South London and East Sussex	0.1	7.6	13	7.7	

Table 50 (cont'd) Stocked area of ash as a proportion of woodland

	Stocked area of all broadleaves and all species					
Aligned area	Total of all broadleaves	Total of all species	Percentage of ash in all broadleaves	Percentage of ash in all species		
	area (000 ha)	area (000 ha)	(percent)	(percent)		
Kent South London and East Sussex	86.3	96.6	9	8		

Table 51 Standing volume of ash as a proportion of woodland

	Standing volume of ash				
Aligned area	FC	Private sector		Total	
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	
Kent South London and East Sussex	13	2,133	17	2,147	

Table 51 (cont'd) Standing volume of ash as a proportion of woodland

	Standing volume of all broadleaves and all species					
Aligned area	Total of all broadleaves	Total of all species	Percentage of ash in all broadleaves	Percentage of ash in all species		
	volume (000 m³ obs)	volume (000 m³ obs)	(percent)	(percent)		
Kent South London and East Sussex	17,222	20,588	12	10		

Part 4 - Tree health

Table 52 Number of ash trees as a proportion of woodland

	Numbers of trees of ash				
Aligned Area	FC	Private sector		Total	
	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)	
Kent South London and East Sussex	111	9,039	16	9,150	

Table 52 (cont'd) Number of ash trees as a proportion of woodland

	Number of trees of all broadleaves and all species				
Aligned Area	Total of all broadleaves	Total of all species	Percentage of ash in all broadleaves	Percentage of ash in all species	
	number of trees (thousands)	number of trees (thousands)	(percent)	(percent)	
Kent South London and East Sussex	125,248	134,692	7	7	

Oak

Figure 56 Stocked area of oak by age class

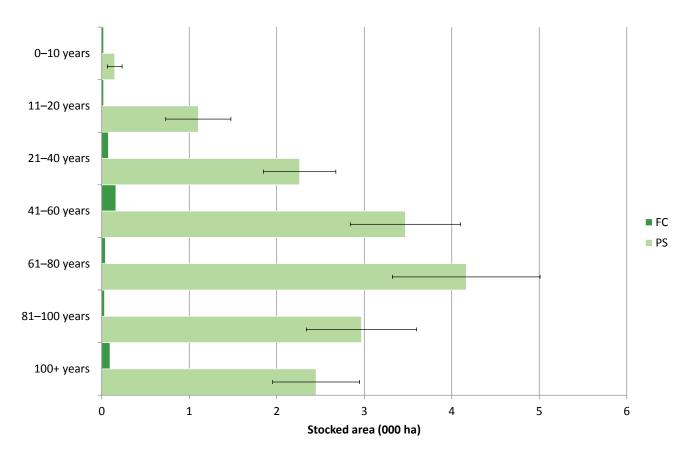


Table 53 Stocked area of oak by age class

	FC	Private secto	Total	
Age class (years)	years) area area <i>SE%</i>		area (000 ha)	
Kent South London	and East Sussex			
0–10	< 0.1	0.1	57	0.2
11–20	< 0.1	1.1	34	1.1
21–40	< 0.1	2.3	18	2.3
41–60	0.2	3.5	18	3.6
61–80	< 0.1	4.2	20	4.2
81–100	< 0.1	3.0	21	3.0
100+	< 0.1	2.5	20	2.5
Total	0.5	16.6	8	17.0

0-7 cm
7-10 cm
10-15 cm
15-20 cm
20-30 cm
40-60 cm
60-80 cm
80+ cm

3

Stocked area (000 ha)

5

6

Figure 57 Stocked area of oak by mean stand dbh class

Table 54 Stocked area of oak by mean stand dbh class

2

Mean stand DBH (cm)	FC	Private sector		Total			
	area (000 ha)	area (000 ha)	SE%	area (000 ha)			
Kent South London and East Sussex							
0–7	< 0.1	0.4	35	0.4			
7–10	< 0.1	0.8	14	0.9			
10–15	< 0.1	1.6	28	1.6			
15–20	0.1	0.7	26	0.9			
20-30	0.2	2.5	21	2.6			
30-40	< 0.1	1.8	24	1.9			
40-60	< 0.1	5.7	16	5.7			
60-80	< 0.1	2.2	28	2.2			
+08	0.0	1.0	39	1.0			
Total	0.5	16.6	8	17.0			

0

Figure 58 Standing volume of oak by age class

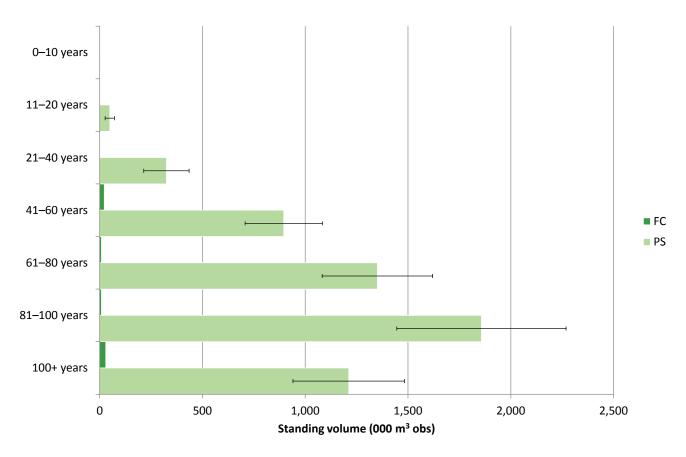


Table 55 Standing volume of oak by age class

	FC	Private sector		Total			
Age class (years)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)			
Kent South London and East Sussex							
0–10	0	0	-	0			
11–20	< 1	49	46	49			
21-40	2	325	34	327			
41–60	22	895	21	918			
61–80	8	1,351	20	1,359			
81–100	8	1,857	22	1,865			
100+	29	1,211	22	1,241			
Total	71	5,689	10	5,759			

Figure 59 Standing volume of oak by mean stand dbh class

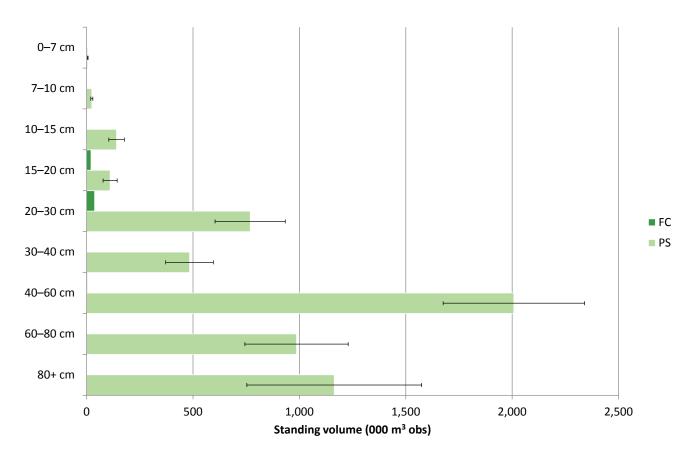


Table 56 Standing volume of oak by mean stand dbh class

Moon stand DDII	FC	Private secto	or	Total
Mean stand DBH (cm)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	n and East Sussex			
0–7	< 1	5	46	5
7–10	2	24	21	26
10–15	3	141	26	144
15–20	20	110	30	130
20–30	37	768	21	806
30–40	3	483	23	487
40–60	4	2,008	17	2,012
60–80	< 1	986	25	987
+08	0	1,163	35	1,163
Total	71	5,689	10	5,759

Figure 60 Number of oak trees by age class

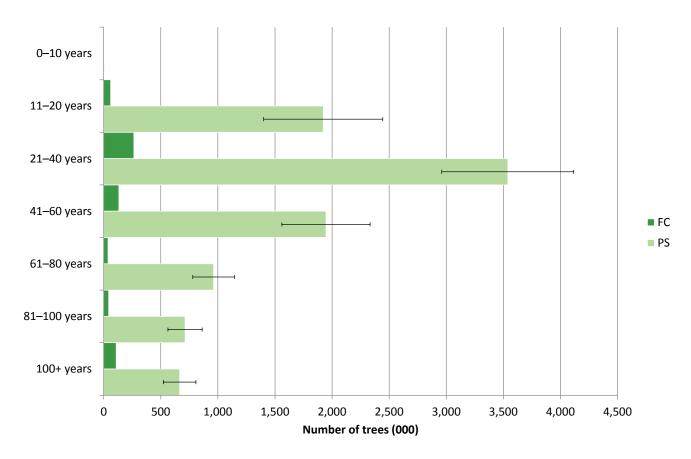


Table 57 Number of oak trees by age class

	FC	Private sector		Total
Age class (years)	number of trees (thousands)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		number of trees (thousands)
Kent South London	and East Sussex			
0–10	0	0	-	0
11–20	61	1,922	27	1,983
21–40	264	3,538	16	3,802
41–60	133	1,947	20	2,079
61–80	38	962	19	1,000
81–100	44	712	21	756
100+	109	665	21	774
Total	648	9,747	10	10,395

0-7 cm 7-10 cm 10-15 cm 15-20 cm 20-30 cm ■ FC PS 30-40 cm 40-60 cm 60-80 cm 80+ cm 500 1,000 1,500 2,000 2,500 3,000 3,500

Number of trees (000)

Figure 61 Number of oak trees by mean stand dbh class

Table 58 Number of oak trees by mean stand dbh class

	FC	Private secto	r	Total
Mean stand DBH (cm)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South London	and East Sussex			
0–7	98	645	42	742
7–10	222	2,194	18	2,415
10–15	56	2,305	26	2,361
15–20	134	705	28	839
20-30	132	1,794	21	1,926
30-40	4	596	24	600
40-60	3	1,113	17	1,116
60-80	< 1	266	24	266
80+	0	129	34	129
Total	648	9,747	10	10,395

Figure 62 Oak as a proportion of woodland

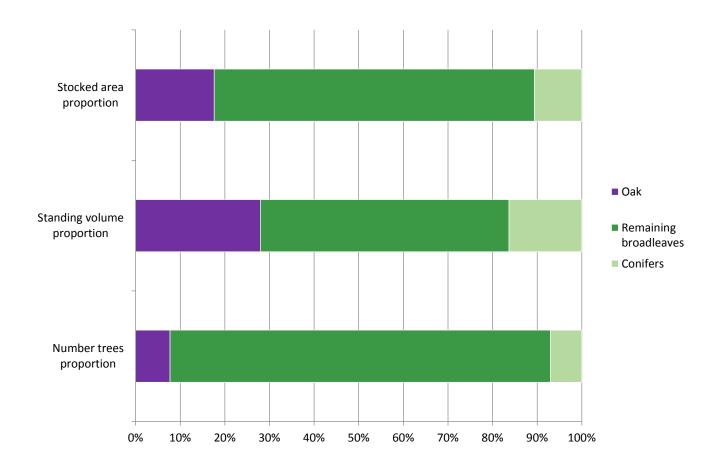


Table 59 Stocked area of oak as a proportion of woodland

	Stocked area of oak				
Aligned area	FC	Private sec	tor	Total	
	area (000 ha)	area (000 ha)	SE%	area (000 ha)	
Kent South London and East Sussex	0.5	16.6	8	17.0	

Table 59 (cont'd) Stocked area of oak as a proportion of woodland

	Stocked area of all broadleaves and all species					
Aligned area	Total of all broadleaves	Total of all species	Percentage of oak in all broadleaves	Percentage of oak in all species		
	area (000 ha)	area (000 ha)	(percent)	(percent)		
Kent South London and East Sussex	86.3	96.6	20	18		

Table 60 Standing volume of oak as a proportion of woodland

	Standing volume of oak				
Aligned area	FC	Private sec	tor	Total	
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	
Kent South London and East Sussex	71	5,689	10	5,759	

Table 60 (cont'd) Standing volume of oak as a proportion of woodland

	Standing volume of all broadleaves and all species					
Aligned area	Total of all broadleaves	Total of all species	Percentage of oak in all broadleaves	Percentage of oak in all species		
	volume (000 m³ obs)	volume (000 m³ obs)	(percent)	(percent)		
Kent South London and East Sussex	17,222	20,588	33	28		

Table 61 Number of oak trees as a proportion of woodland

	Numbers of trees of oak				
Aligned Area	FC	Private sector		Total	
	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)	
Kent South London and East Sussex	648	9,747	10	10,395	

Table 61 (cont'd) Number of oak trees as a proportion of woodland

	Number of trees of all broadleaves and all species				
Aligned Area	Total of all broadleaves	Total of all species	Percentage of oak in all broadleaves	Percentage of oak in all species	
	number of trees (thousands)	number of trees (thousands)	(percent)	(percent)	
Kent South London and East Sussex	125,248	134,692	8	8	

Sweet chestnut

Figure 63 Stocked area of sweet chestnut by age class

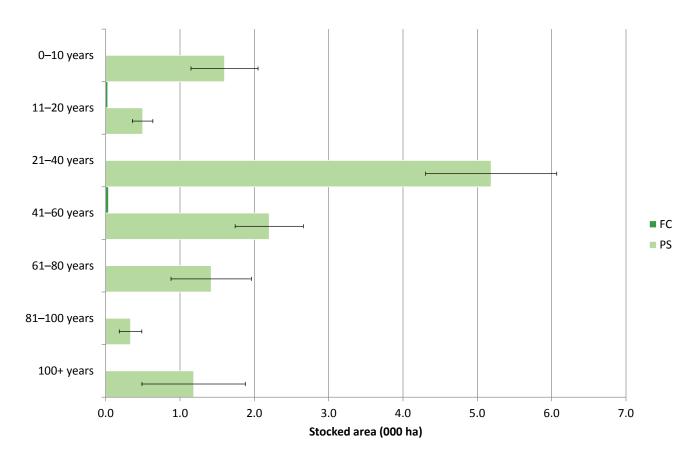


Table 62 Stocked area of sweet chestnut by age class

	FC	Private secto	Total	
Age class (years)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0–10	< 0.1	1.6	28	1.6
11–20	< 0.1	0.5	28	0.5
21–40	< 0.1	5.2	17	5.2
41–60	< 0.1	2.2	21	2.2
61–80	< 0.1	1.4	38	1.4
81–100	< 0.1	0.3	46	0.3
100+	< 0.1	1.2	59	1.2
Total	< 0.1	12.4	12	12.5

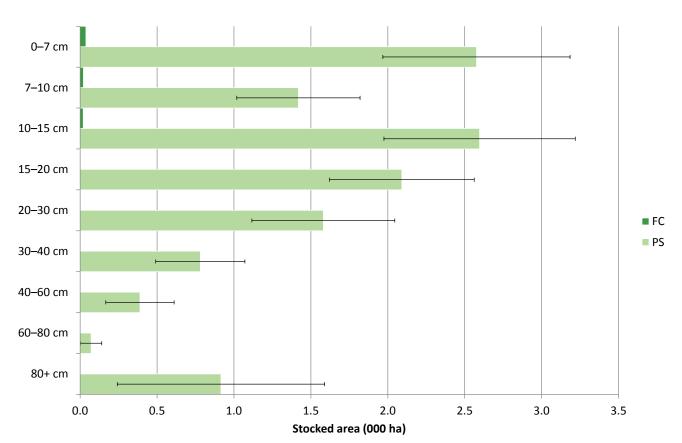


Figure 64 Stocked area of sweet chestnut by mean stand dbh class

Table 63 Stocked area of sweet chestnut by mean stand dbh class

	FC	Private secto	r	Total
Mean stand DBH (cm)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0–7	< 0.1	2.6	24	2.6
7–10	< 0.1	1.4	28	1.4
10–15	< 0.1	2.6	24	2.6
15–20	< 0.1	2.1	22	2.1
20–30	< 0.1	1.6	29	1.6
30-40	< 0.1	0.8	37	0.8
40–60	< 0.1	0.4	57	0.4
60-80	< 0.1	< 0.1	98	< 0.1
+08	0.0	0.9	74	0.9
Total	< 0.1	12.4	12	12.5

Figure 65 Standing volume of sweet chestnut by age class

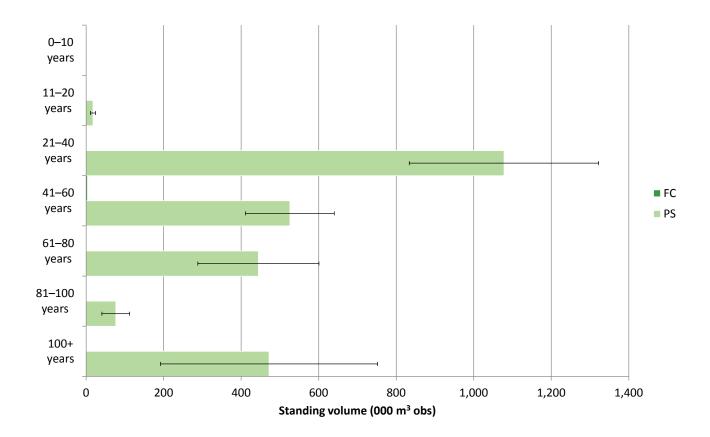


Table 64 Standing volume of sweet chestnut by age class

	FC	Private secto	r	Total
Age class (years)	volume (000 m³ obs)			volume (000 m³ obs)
Kent South London	and East Sussex			
0–10	0	0	-	0
11–20	< 1	18	37	18
21–40	< 1	1,078	23	1,078
41–60	3	526	22	529
61–80	< 1	444	35	445
81–100	< 1	76	47	77
100+	< 1	472	59	472
Total	5	2,614	16	2,619

Figure 66 Standing volume of sweet chestnut by mean stand dbh class

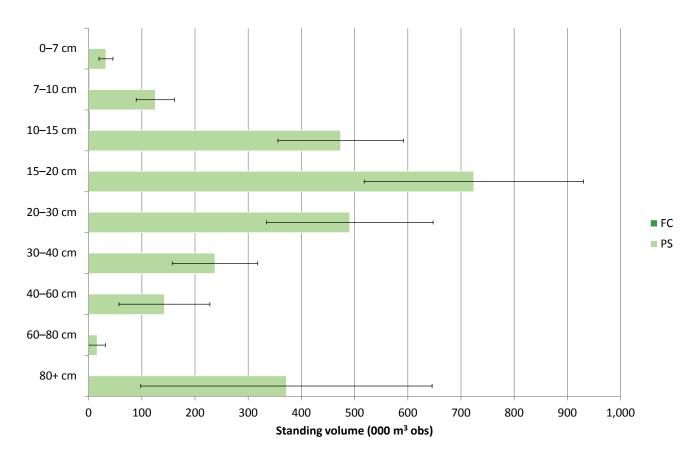


Table 65 Standing volume of sweet chestnut by mean stand dbh class

Maria atau d DDU	FC	Private secto	r	Total
Mean stand DBH (cm)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
0–7	< 1	33	40	33
7–10	2	125	29	127
10–15	2	474	25	476
15–20	< 1	724	28	724
20-30	< 1	491	32	491
30-40	< 1	237	34	238
40-60	< 1	142	60	143
60–80	< 1	16	98	16
80+	0	372	74	372
Total	5	2,614	16	2,619

Figure 67 Number of sweet chestnut trees by age class

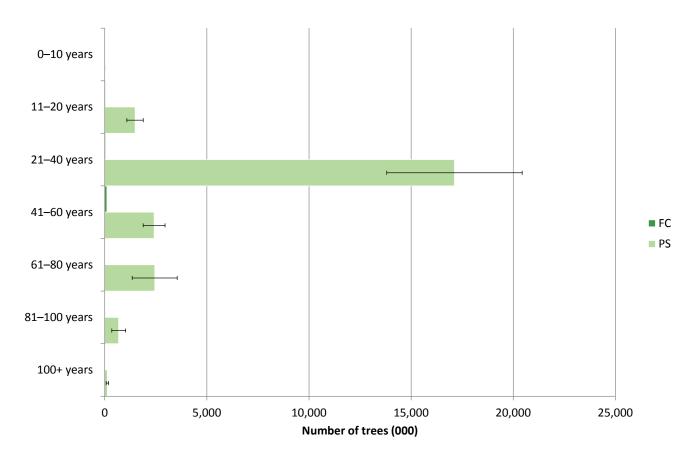


Table 66 Number of sweet chestnut trees by age class

	FC	Private sector		Total
Age class (years)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South London	and East Sussex			
0–10	0	0	-	0
11–20	38	1,484	27	1,523
21–40	40	17,119	19	17,159
41–60	107	2,418	22	2,525
61–80	10	2,447	45	2,457
81–100	1	680	50	681
100+	< 1	128	48	129
Total	198	24,276	15	24,473

Figure 68 Number of sweet chestnut trees by mean stand dbh class

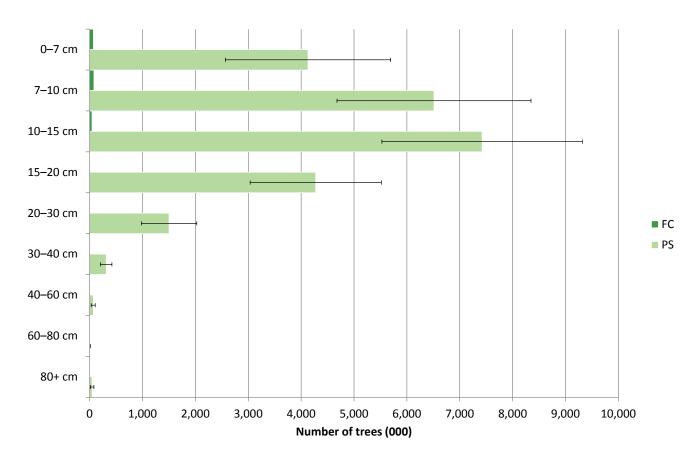


Table 67 Number of sweet chestnut trees by mean stand dbh class

Many stand DDU	FC	Private secto	Total	
Mean stand DBH (cm)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South London	and East Sussex			
0–7	71	4,130	38	4,201
7–10	80	6,512	28	6,593
10–15	43	7,423	26	7,466
15–20	2	4,276	29	4,278
20-30	< 1	1,501	35	1,502
30-40	< 1	313	34	313
40-60	< 1	67	57	67
60–80	< 1	7	98	8
+08	0	46	74	46
Total	198	24,276	15	24,473

Figure 69 Sweet chestnut as a proportion of woodland

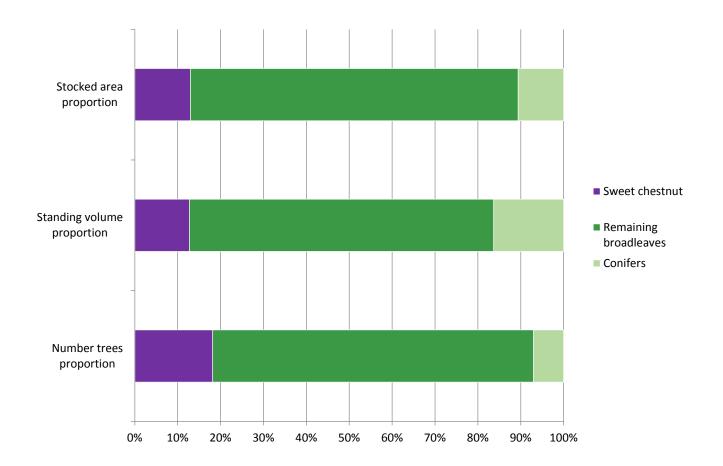


Table 68 Stocked area of sweet chestnut as a proportion of woodland

	Stocked area of sweet chestnut				
Aligned area	FC	Private sec	tor	Total	
	area (000 ha)	area (000 ha)	SE%	area (000 ha)	
Kent South London and East Sussex	< 0.1	12.4	12	12.5	

Table 68 (cont'd) Stocked area of sweet chestnut as a proportion of woodland

	Stocked area of all broadleaves and all species					
Aligned area	Total of all broadleaves	Total of all species	Percentage of sweet chestnut in all broadleaves	Percentage of sweet chestnut in all species		
	area (000 ha)	area (000 ha)	(percent)	(percent)		
Kent South London and East Sussex	86.3	96.6	14	13		

Table 69 Standing volume of sweet chestnut as a proportion of woodland

	Standing volume of sweet chestnut				
Aligned area	FC	Private sec	tor	Total	
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	
Kent South London and East Sussex	5	2,614	16	2,619	

Table 69 (cont'd) Standing volume of sweet chestnut as a proportion of woodland

	Standing volume of all broadleaves and all species				
Aligned area	Total of all broadleaves	Total of all species	Percentage of sweet chestnut in all broadleaves	Percentage of sweet chestnut in all species	
	volume (000 m³ obs)	volume (000 m³ obs)	(percent)	(percent)	
Kent South London and East Sussex	17,222	20,588	15	13	

Table 70 Number of sweet chestnut trees as a proportion of woodland

	Numbers of trees of sweet chestnut				
Aligned Area	FC	Private sector		Total	
	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)	
Kent South London and East Sussex	198	24,276	15	24,473	

Table 70 (cont'd) Number of sweet chestnut trees as a proportion of woodland

	Number of trees of all broadleaves and all species				
Aligned Area	Total of all broadleaves	Total of all species	sweet	Percentage of sweet chestnut in all species	
	number of trees (thousands)	number of trees (thousands)	(percent)	(percent)	
Kent South London and East Sussex	125,248	134,692	20	18	

Larch

Figure 70 Stocked area of larch by age class

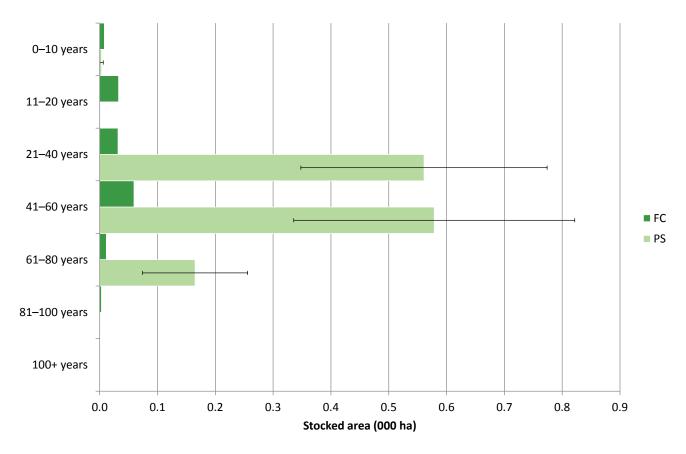


Table 71 Stocked area of larch by age class

	FC	Private sector		Total
Age class (years)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0–10	< 0.1	< 0.1	101	< 0.1
11–20	< 0.1	0.0	-	< 0.1
21–40	< 0.1	0.6	38	0.6
41–60	< 0.1	0.6	42	0.6
61–80	< 0.1	0.2	55	0.2
81–100	< 0.1	0.0	-	< 0.1
100+	0.0	0.0	-	0.0
Total	0.1	1.3	25	1.5

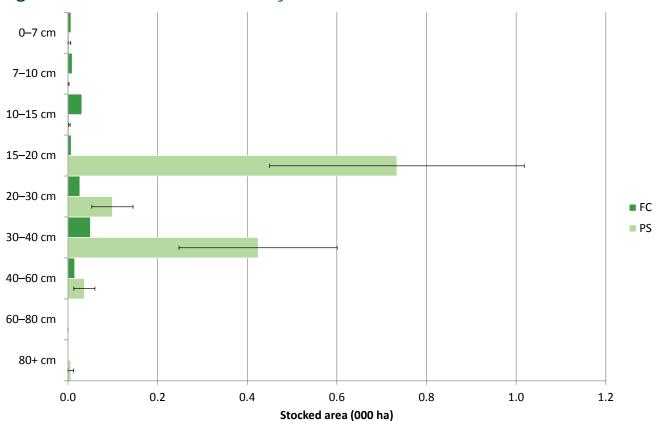


Figure 71 Stocked area of larch by mean stand dbh class

Table 72 Stocked area of larch by mean stand dbh class

Marin stand DDU	FC	Private secto	r	Total
Mean stand DBH (cm)	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London	and East Sussex			
0-7	< 0.1	< 0.1	101	< 0.1
7–10	< 0.1	< 0.1	101	< 0.1
10–15	< 0.1	< 0.1	60	< 0.1
15–20	< 0.1	0.7	39	0.7
20-30	< 0.1	< 0.1	46	0.1
30-40	< 0.1	0.4	42	0.5
40-60	< 0.1	< 0.1	64	< 0.1
60–80	0.0	0.0	-	0.0
+08	0.0	< 0.1	102	< 0.1
Total	0.1	1.3	25	1.5

Figure 72 Standing volume of larch by age class

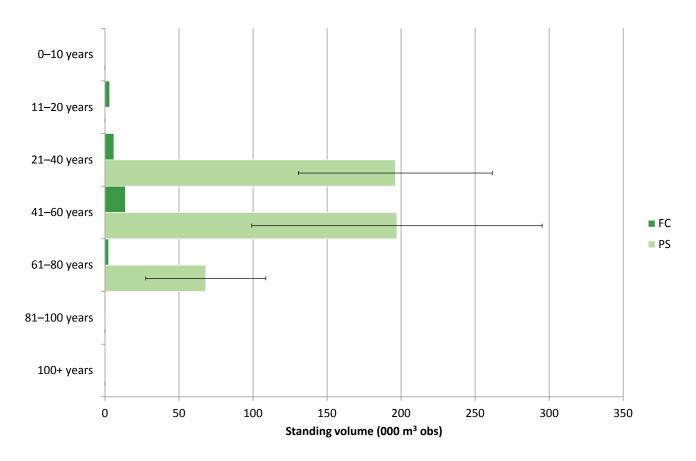


Table 73 Standing volume of larch by age class

	FC	Private sector		Total
Age class (years)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	and East Sussex			
0–10	< 1	0	-	< 1
11–20	3	0	-	3
21-40	6	196	33	202
41–60	14	197	50	211
61–80	3	68	60	71
81–100	< 1	0	-	< 1
100+	0	0	-	0
Total	26	461	26	488

Figure 73 Standing volume of larch by mean stand dbh class

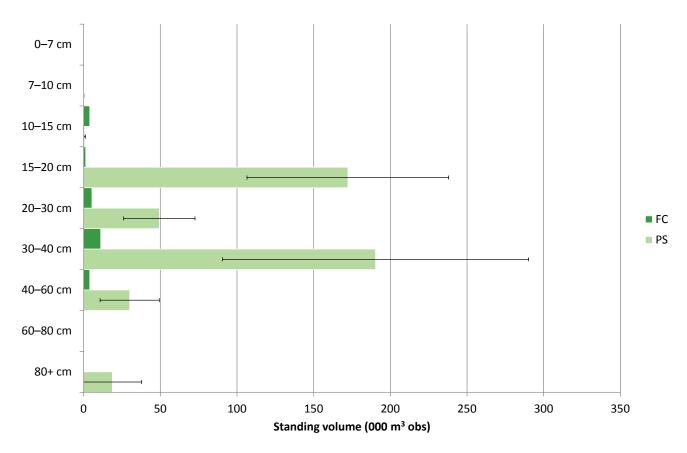


Table 74 Standing volume of larch by mean stand dbh class

Maan stand DDI	FC	Private sect	or	Total
Mean stand DBH (cm)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London	n and East Sussex			
0–7	< 1	0	-	< 1
7–10	< 1	< 1	101	< 1
10–15	4	< 1	75	5
15–20	1	172	38	174
20–30	5	49	47	55
30–40	11	190	52	201
40–60	4	30	64	34
60–80	0	0	-	0
80+	0	19	102	19
Total	26	461	26	488

Figure 74 Number of larch trees by age class

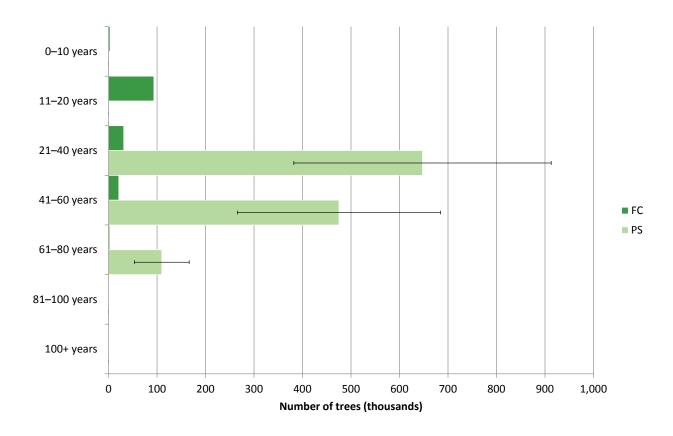


Table 75 Number of larch trees by age class

	FC	Private secto	Total	
Age class (years)	number of trees number of trees (thousands) (thousands)		number of trees (thousands)	
Kent South London	and East Sussex			
0–10	3	0	-	3
11–20	93	0	-	93
21–40	31	647	41	679
41–60	21	475	44	496
61–80	2	110	52	112
81–100	< 1	0	-	< 1
100+	0	0	-	0
Total	152	1,232	28	1,384

Figure 75 Number of larch trees by mean stand dbh class

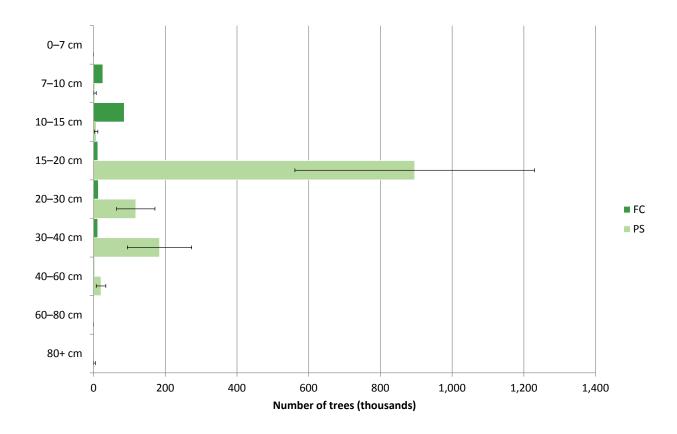


Table 76 Number of larch trees by mean stand dbh class

Many stand DDII	FC	Private secto	Total	
Mean stand DBH (cm)	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South London	and East Sussex			
0–7	< 1	0	-	< 1
7–10	26	4	101	30
10–15	86	7	64	93
15–20	12	896	37	908
20-30	13	118	45	131
30-40	12	184	49	196
40-60	3	21	64	23
60-80	0	0	-	0
80+	0	2	102	2
Total	152	1,232	28	1,384

Figure 76 Larch as a proportion of woodland

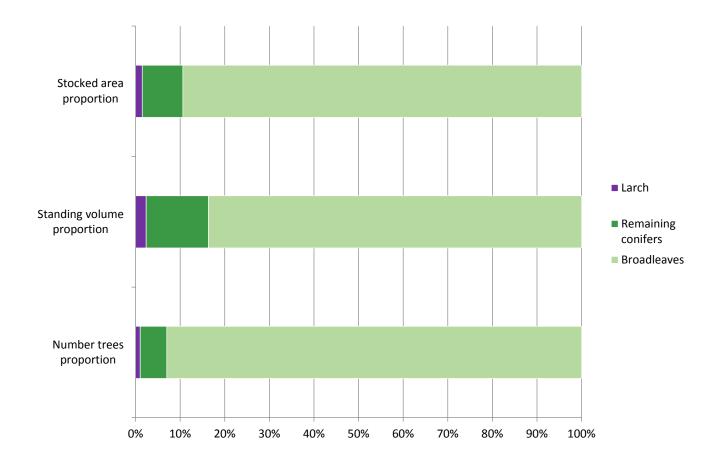


Table 77 Stocked area of larch as a proportion of woodland

	Stocked area of larch			
Aligned area	FC	Private sec	tor	Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Kent South London and East Sussex	0.1	1.3	25	1.5

Table 77 (cont'd) Stocked area of larch as a proportion of woodland

	Stocked area of all conifers and all species				
Aligned area	Total of all conifers	Total of all species	Percentage of larch in all conifers	Percentage of larch in all species	
	area (000 ha)	area (000 ha)	(percent)	(percent)	
Kent South London and East Sussex	10.2	96.6	14	2	

Table 78 Standing volume of larch as a proportion of woodland

	Standing volume of larch			
Aligned area	FC	Private sec	tor	Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Kent South London and East Sussex	26	461	26	488

Table 78 (cont'd) Standing volume of larch as a proportion of woodland

	Standing volume of all conifers and all species			
Aligned area	Total of all conifers	Total of all species	Percentage of larch in all conifers	Percentage of larch in all species
	volume (000 m³ obs)	volume (000 m³ obs)	(percent)	(percent)
Kent South London and East Sussex	3,359	20,588	15	2

Table 79 Number of larch trees as a proportion of woodland

	Numbers of trees of larch			
Aligned Area	FC	Private sector		Total
	number of trees (thousands)	number of trees (thousands)	SE%	number of trees (thousands)
Kent South London and East Sussex	152	1,232	28	1,384

Table 79 Number of larch trees as a proportion of woodland

	Number of trees of all conifers and all species			
Aligned Area	Total of all conifers	Total of all species	Percentage of larch in all conifers	Percentage of larch in all species
	number of trees (thousands)	number of trees (thousands)	(percent)	(percent)
Kent South London and East Sussex	9,424	134,692	15	1

Appendix A – Aligned area nomenclature

Table 80 Aligned area long and short names

Long name	Short name	Abbreviation
Cumbria and Lancashire	Cumbria and Lancashire	CLA
Devon Cornwall and the Isles of Scilly	Devon and Cornwall	DCS
East Anglia	East Anglia	EAN
East Midlands	East Midlands	EMD
Greater Manchester Merseyside and Cheshire	Gtr Mancs Mersey and Ches	GMC
Hertfordshire and North London	Herts and North London	HNL
Kent South London and East Sussex	Kent S London and E Sussex	KSL
Lincolnshire and Northamptonshire	Lincs and Northants	LNA
North East	North East	NEA
Solent and South Downs	Solent and South Downs	SSD
Thames	Thames	THS
Wessex	Wessex	WSX
West Midlands	West Midlands	WMD
Yorkshire	Yorkshire	YOR

Glossary

Actual production	Timber reported as having been felled and removed from the forest. The Forestry Commission keeps records of actual production for its estate, while estimates for the Private sector come from surveys of harvesting companies and timber processors. These figures are available from Forestry Commission Statistics.
Aerial photograph	Photograph of the ground taken from an elevated/direct-down position, with a camera that is not supported by a ground-based structure.
Age class	A grouping of trees into specific age ranges for classification purposes.
Area (forest/woodland)	Forest and woodland area can be defined in net or gross terms. Net area is the land actually covered by trees (in the National Forest Inventory that is to the drip line of the canopy). Gross area includes both the area covered by trees and the open spaces (<0.5 hectare) within (e.g. rides, glades, ponds).
Availability	A term to describe what timber could potentially be available for harvesting within a forest area.
Biological potential	A term applied to forecast scenarios with the objective of maximising timber production. It typically involves felling stands in the year of maximum MAI and management table thinning. It may not take account of factors that constrain thinning and felling (e.g. wind risk or pest attack). The forecast results set out in this report involve constraints on thinning and times of felling to take account of wind risk.
Broadleaves	Trees and shrubs that belong to the angiosperm division of the plant kingdom (as distinct from the gymnosperm division that includes conifers). Most in the UK have laminar leaves and are deciduous. Sometimes referred to as 'hardwoods'.
Canopy cover	Area covered by a mass of foliage and branches formed collectively by the crowns of trees.
Clearfell area	Area here all the trees have been felled at once. In non-clearfell areas, only some of the trees are felled at any one time.
Clearfelling	Cutting down of an area of woodland (if it is within a larger area of woodland it is typically a felling greater than 0.25 hectare). Sometimes a scatter or small clumps of trees may be left standing within the felled area.
Conifers	Trees and shrubs that belong to the gymnosperm division of the plant kingdom (as distinct from the angiosperm division that includes broadleaves). Conifers mostly have needles or scale-like leaves and are usually evergreen. Sometimes referred to as 'softwoods'.
Cumulative volume	The total volume of timber that is forecast to be produced over the entire
production	forecast period, including any overdue timber.
DAMS (Detailed	A measure of exposure at a particular location. Can be used as a proxy
Aspect Methodology Score)	indicator of the risk of catastrophic wind damage to a stand of trees. May be used to influence decisions on thinning and timing of clearfelling where wind is a risk factor.
DBH (diameter at breast height)	The diameter on the stem of a tree at 'breast height', defined as 1.3 m from ground level.
Dothistroma needle blight	A disease of conifers (especially pine) which causes defoliation, losses in yield and, in severe cases, tree death. Also known as red band needle blight.

NFI summary report

Felling plan	A spatial and temporal plan of harvesting activities within a forest or woodland.
Forest (or woodland)	Land predominately covered in trees (defined as land under stands of trees with a canopy cover of at least 20%, or the ability to achieve this, and with a minimum area of 0.5 hectare and minimum width of 20 m), whether in large tracts (generally called forests) or smaller areas known by a variety of terms (including woods, copses, spinneys or shelterbelts).
Forest management plan	A holistic spatial and temporal plan stating the objectives of management together with details of forestry proposals over a period of five years and outlining intentions over a minimum total of 10 years. Such plans allow managers to communicate proposals and demonstrate sustainable forest management. They can be used to authorise thinning, felling and other management operations.
Forest Service	An agency within the Department of Agriculture and Rural Development (DARD) in Northern Ireland responsible for the regulation of forestry and the management of state forests in Northern Ireland.
Forestry Commission	The government department responsible for regulating forestry, implementing forestry policy and managing state forests in England and Scotland. Forestry policy is devolved, with the exception of common issues addressed on a GB or UK basis, such as international forestry, plant health and forestry standards.
Forestry Commission (FC) estate	Forests, woodlands, open land and other property managed by the Forestry Commission.
Great Britain (GB)	England, Scotland and Wales.
Hardwood	The wood of broadleaved trees or the broadleaves themselves.
High forest	Woodland which is not managed as coppice or pollards and which may or
	may not be managed for timber.
Increment	The increase in volume of a tree or a stand over a year or annualised over a specified period measured either in m³ per year or in m³ per hectare per year. See also Mean Annual Increment (MAI).
Interpreted forest type (IFT)	Interpreted forest type is a classification of woodland into woodland types as identified from aerial photography and satellite imagery.
Interpreted open area (IOA)	Interpreted open are is a classification of open spaces within woodlands as identified from aerial photography and satellite imagery.
Like-for-like (restocking)	The restocking of areas of felled trees with trees of the same species and yield class.
Maximising	The management of woodland to maximise volume production by
productivity	thinning at the MTI.
Mean annual	The average annual rate of volume production from year of planting to a
increment (MAI)	given year, expressed in m ³ obs per hectare per year. In even-aged stands it is calculated by dividing cumulative volume production by age.
MTT (management table thinning)	A sequence of thinnings prescribed by Forestry Commission yield tables over the life of a forest stand. Management table thinning refers to the pattern of thinning recommended in these yield tables. In standard yield tables the thinnings are set to an intensity which aims to maximise diameter increment whilst also maintaining maximum cumulative volume production
MTI (marginal thinning intensity)	The maximum sustainable intensity of thinning defined as 70% of yield class per hectare per year (m³ obs/ha/year).
timining intensity)	Liass per riectare per year (III DDS/Ha/year).

NFI summary report

Maximum MAI	The age at which a stand reaches the maximum average rate of volume
(maximum mean	increment which it can achieve. Felling the stand at this age will ensure
annual increment)	that the stand reaches its highest average production per annum for its
(MMAI)	lifespan, thus optimising the stand in terms of volume production over
	the long term.
Mean annual	The average rate of volume production up to a given year, expressed in
increment (MAI)	m³ per hectare per year. In even-aged stands it is calculated by dividing
merernent (www.	cumulative volume production by age.
Mensuration	The study of the measurement of lengths, areas, volumes and related
Wensuration	quantities. Forest mensuration is concerned with the measurement of
	trees, woodlands and forests, including standing and felled timber.
National Forest	An inventory run by the Forestry Commission, set up in 2009, to provide
Inventory (NFI)	a record of key information about GB forests and woodlands.
National Inventory of	An inventory run by the Forestry Commission, set up in 1995 and
Woodland and Trees	completed in 2002, to provide a record of key information about GB
(NIWT)	forests and woodlands.
Natural Resources	Natural Resources Wales is the largest Welsh Government Sponsored
Wales (NRW)	Body - employing 1,900 staff across Wales with a budget of £180 million.
	NRW was formed in April 2013, largely taking over the functions of the
	Countryside Council for Wales, Forestry Commission Wales and the
	Environment Agency in Wales, as well as certain Welsh Government
	functions.
Overbark	Used as a qualification when the diameter or volume of wood includes the
Overbank	bark.
Overbark standing	Timber is defined in this report as the volume of stemwood to 7 cm top
(OBS)	diameter in m ³ overbark standing (obs), including stump (above ground)
(063)	
	and usable branchwood (of minimum 3 m in length and 7 cm top
O	diameter).
Overdue	Timber contained in stands that are beyond the felling age prescribed by
	the harvesting scenario at the start of the forecast.
Phytophthora	Fungus-like pathogens that can cause extensive damage and mortality to
	trees and other plants.
Planned production	The volumes and assortments published in the removals forecast,
	reflecting the cumulative impact of managing the FC estate (as of 31
	March 2012) in accordance with approved forest design and thinning
	plans.
Potential production	A forecast which will not necessarily transpire. As the private sector
,	estate forecast makes assumptions about future levels of harvest, and
	the assumptions may not transpire, this forecast is one of potential
	production.
Private sector estate	Forests and woodlands in the UK not managed by the Forestry
Trivate sector estate	Commission, Natural Resources Wales or Forest Service. In the context of
	the National Forest Inventory, 'Private sector' is used for convenience
	although it includes land owned or managed by bodies such as local
	authorities and charities.
Production forecast	A forecast of softwood volume production based on a firm plan of
	harvesting.
Restocking plan	A spatial and temporal plan describing how felled areas are to be
	replanted or regenerated.
Satellite imagery	Imagery of the earth taken from space from a satellite.
Softwood	The wood of coniferous trees or the conifers themselves.

NFI summary report

Stand	A distinct area of woodland, generally composed of a uniform group of trees in terms of species composition and spatial distribution, and age
	and size class distribution.
Standard error (SE)	The measure of the margin of error associated with an estimate as a
	result of sampling from a population with statistical variability. Larger
	standard errors indicate less precision in the estimate. Standard errors in
	this report are quoted in relative terms (i.e. as percentages of the value
	of the estimate).
Standing volume	The live stemwood and usable branchwood of trees (up to 7 cm top
	diameter). It excludes roots, below ground stump material, small
	branches, foliage and deadwood. For Private sector woodland only, it also
	excludes trees in woodlands of less than 0.5 hectare. Usually expressed as m ³ overbark standing (m ³ obs).
Stemwood	The woody material forming the above ground main growing shoot(s) of
Sterriwood	a tree or stand of trees. The stem includes all woody volume above
	ground with a diameter greater than 7 cm overbark. Stemwood includes
	wood in major branches where there is at least 3 m of straight length to
	7 cm top diameter.
Stocked area	The area stocked with living trees. The stocked areas in this report are
	quoted in gross terms for the FC/NRW estate and in net terms for the
	private sector estate (see the definition of area abve).
Sub-compartment	A database owned and maintained by the Forestry Commission that holds
database (SCDB)	an inventory of all stands of trees managed by the Forestry Commission
	(including that formerly managed by Forestry Commission Wales which is
	now managed by Natural Resources Wales).
Sustainable forest	The stewardship and use of forests and forest lands in a way, and at a
management	rate, that maintains their biodiversity, productivity, regeneration capacity
	and vitality and their potential to fulfil, now and in the future, relevant
	ecological, economic and social functions at local, national and global
Tanaka la	levels, and that does not cause damage to other ecosystems.
Terminal height	The top height of a stand at which wind damage is expected to reach a level necessitating clearfelling.
Thinning	The periodic harvesting of trees in a woodland, involving the removal of
	some trees for commercial use and the retention of others for future
	production or long-term retention.
Thinning plan	A spatial and temporal plan of harvesting activities within a forest or
	woodland.
Top diameter	The diameter of the smaller (top) end of a length of stemwood,
	branchwood or log, often used to define different categories of wood
Top bolebt	products (e.g. sawlogs, roundwood, pulp) and merchantable timber.
Top height	The mean total height of the 100 largest dbh trees per hectare. Great Britain and Northern Ireland.
UK (United Kingdom) Windthrow	
VVIIIULIII OVV	Uprooting of trees by the wind. Windthrow can be endemic – i.e. that caused by frequently recurring peak winds – or catastrophic – an
	infrequent occurrence associated with exceptionally strong winds where
	large areas/numbers of trees are blown down.
Woodland	see Forest.
Yield class (YC)	An index used in the UK of the potential productivity of even-aged stands
1.3.2 3.23 (10)	of trees based on maximum MAI. It reflects the potential productivity of
	the site for the tree species growing on it.
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Aligned area reports in this series

This report is one in a series of reports describing the current stocks in woodland, the economic viability data, timber availability forecasts and estimates of the current stocks within woodland of four species currently at risk from pests and diseases.

Reports are available for:

- England
- Cumbria and Lancashire
- Devon Cornwall and the Isles of Scilly
- East Anglia
- East Midlands
- Greater Manchester Merseyside and Cheshire
- Hertfordshire and North London
- Kent South London and East Sussex
- Lincolnshire and Northamptonshire
- North East
- Solent and South Downs
- Thames
- Wessex
- West Midlands
- Yorkshire

The methodology, data sources and assumptions are described in the England report. It is important that the estimates presented in this report are interpreted in the light of the information provided in the England report.

NFI national reports and papers

This series of reports is part of the wider suite of publications from the National Forest Inventory (NFI). NFI reports that contain information relating to this series of reports are:

- NFI woodland area statistics, Great Britain, England, Scotland, Wales (2011)
- Standing timber volume for coniferous trees in Britain (2012)
- 25-year forecast of softwood availability (2012)
- 25-year forecast of standing coniferous volume and increment (2012)
- Preliminary estimates of broadleaved species in British woodlands, with special focus on ash (2012)
- Biomass in live woodland trees in Britain (2014)
- Carbon in live woodland trees in Britain (2014)
- 50-year forecast of softwood availability (2014)
- 50-year forecast of hardwood availability (2014)
- 25-year forecast of softwood availability (2016)

Each theme has a series of associated reports, papers and data, tailored for different audiences and uses.

This report is a supporting document for the Official Statistics report *National Forest Inventory statistics for England and aligned areas* (2017) and provides more detailed results for Kent South London and East Sussex.

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