NFI provisional estimates for woodland within 75 miles of Sandwich

Summary

This report provides a detailed picture of stocked area and the standing volume of timber for woodland within a 75 mile radius of Sandwich. These estimates are a subset of those published as part of the 2012 growing stock information presented in the National Forest Inventory (NFI) *50-year forecasts of softwood timber availability* and *50-year forecast of hardwood timber availability*. NFI reports are published at www.forestresearch.gov.uk.

In addition, the report provides forecasts of timber availability, for softwoods and hardwoods arising from the stocked area and standing volume. Forecasts are based on the 'headline' harvesting scenario described in the NFI 50-year forecast reports. Forecasting for broadleaved woodland in the Private sector is provided using a harvesting scenario which brings all Private sector broadleaved woodland into production.

The estimates provided in this report are provisional in nature.

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Approach

The approach taken in the derivation of these results and to be used in their interpretation is described in the full suite of forecast reports which can be found at www.forestresearch.gov.uk/forecast. Refer to the *Standing timber volume in coniferous trees in Britain* (2012) and the *NFI preliminary estimates of quantities of broadleaved species in British Woodlands with special focus on ash* (2014) reports for a description of the underlying methodologies and interpretation, and also for the England and GB context. Refer to the *NFI forecasts methodology overview* (2012) report for a detailed description and discussion of forecasting future availability of timber from NFI field survey data and from information in the Forestry Commission's sub-compartment database (SCDB). The wider context of forecasts of timber production from woodland in Great Britain and its constituent countries under a range of harvesting scenarios can be found in the *50-year forecast of softwood timber availability* (2014) and the *50-year forecast of hardwood timber availability* (2014). The biomass is described in *Estimate of biomass in live woodland trees*, (2011) (www.forestresearch.gov.uk/forecast).

The estimates reported here are based upon field samples assessed between October 2009 and August 2013, the results of which have been subjected to rigorous data quality assurance procedures. These field samples constitute approximately two thirds of the sites to be sampled within the first cycle of NFI field sampling. As a consequence, the estimates in this report are classed as provisional.

Results

The results presented in this report are estimates of stocked areas and standing volumes at 31 March 2012, and 25-year forecasts of softwood and hardwood availability under the 'headline' harvesting scenario and modified to assume that all hardwoods are harvested in woodland within 75 miles of Sandwich. The data sources used for the compilation of these estimates are the same as described in the National Forest Inventory reports *Standing timber volume for coniferous trees in Britain* (2012), the *50-year forecast of softwood availability* (2014) and the *50-year forecast of hardwood availability* (2014). Estimates for the Forestry Commission (FC) estate are derived from their sub-compartment database, while those for the private sector (i.e. non-FC in England) estate are derived from information collected in the NFI field survey. A fuller description of these data sources and how they are used in the production of estimates, including sampling standard errors attached to the private sector estimates, is provided in the earlier documents.

The Private sector forecast in this report represents the potential availability of timber under the assumption of harvesting to maximise timber production. The actual levels of timber that will be produced will vary from the results reported here as production

depends on the harvesting choices made by forest and woodland owners who are unlikely to consistently choose to maximise production over the forecast period.

Results are provided for:
- stocked area at 31 March 2012 (**Figures 1 – 3** and **Tables 1 – 3**)
- felled area (**Table 4**)
- standing volume at 31 March 2012 (**Figures 4 – 6** and **Tables 5 – 7**)
- above ground biomass stocks at 31 March 2012 (**Figures 7 – 9** and **Table 8**)
- the 25-year timber forecast (**Figures 10 – 13** and **Tables 9 – 10**)
- the 25-year biomass forecast (**Table 11**)

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 (SE) attached to Private sector estimates are expressed in relative terms (%) to the right of the relevant estimate.

Where the standard error is high this indicates that the estimate should be interpreted with a degree of caution. Any estimate with a relatively large standard error is shown in amber in the tables.

These standard errors depend on the combination of a number of factors but broadly:

- The more woodland that is within the area of interest the more samples that will have been selected, generally leading to lower standard errors

- Increasing the number of categories and sub-categories used (e.g. conifers and broadleaves then sub-divided into species groupings) will result in higher standard errors, especially for the categories that occur less frequently such as minor species

- More variability will also result in higher standard errors; for instance if a species is usually more evenly stocked when compared with another then its standard error will tend to be lower than the latter species.

In this report, for the 75 mile radius, for some of the variables reported, the categories have been pooled into broader categories to produce figures with more acceptable standard errors.

Stocked area at 31 March 2012

Figure 1 Principal tree species composition by stocked area at 31 March 2012
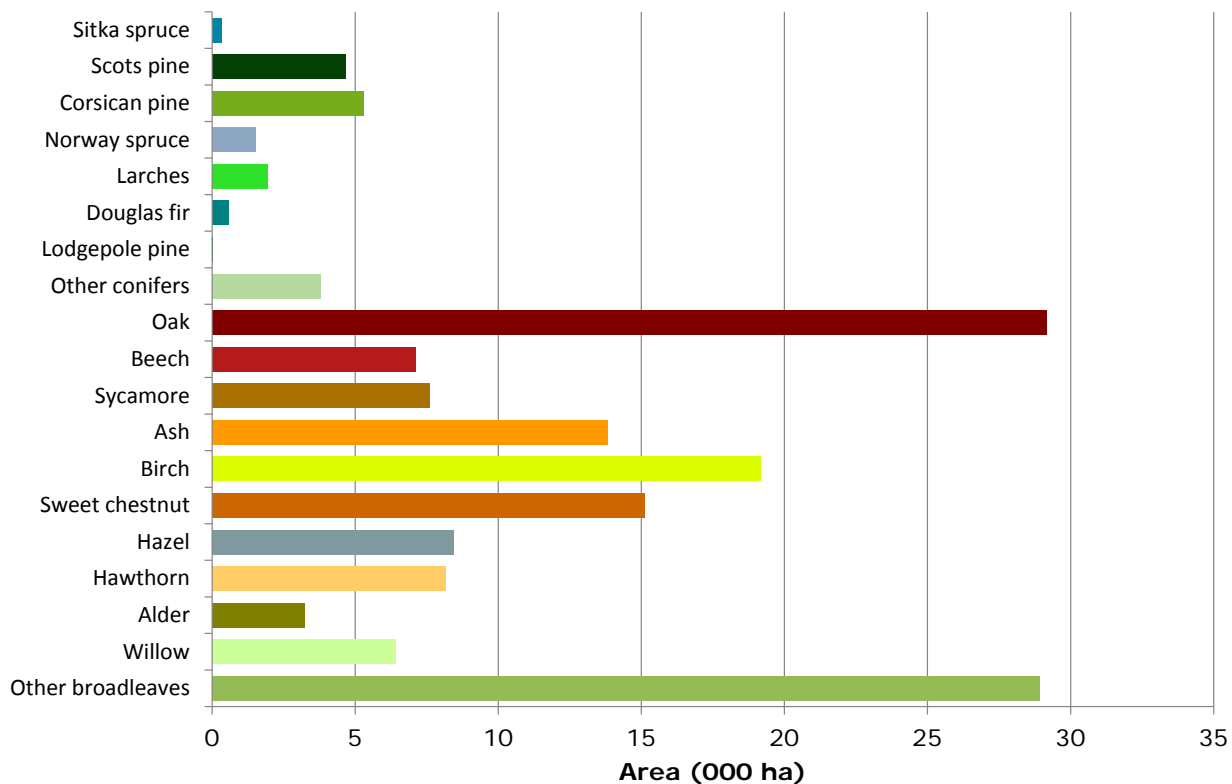
Figure 2 Principal conifer tree species composition by stocked area at 31 March 2012

Legend:
- Sitka spruce
- Scots pine
- Corsican pine
- Norway spruce
- Larches
- Douglas fir
- Lodgepole pine
- Other conifers
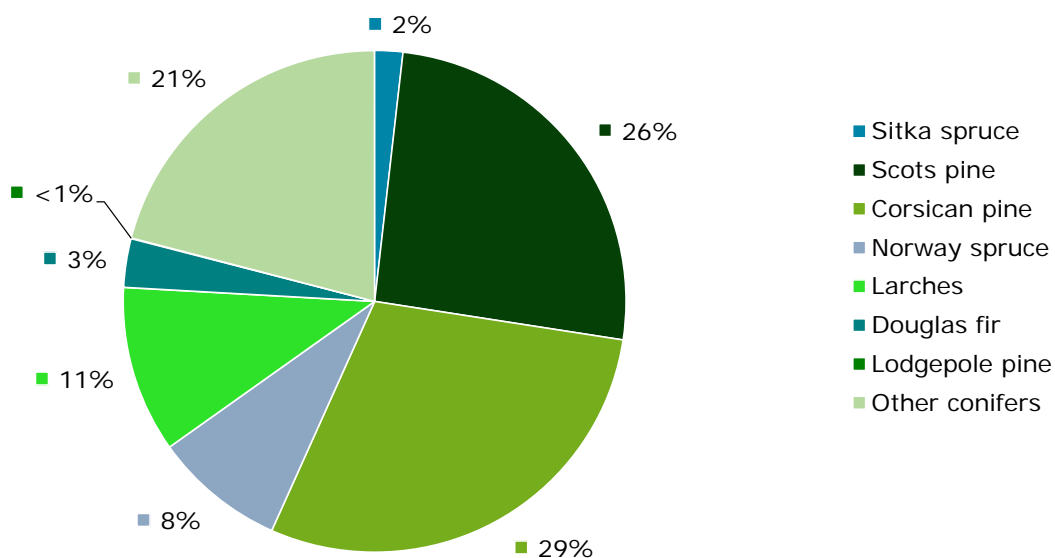
Figure 3 Principal broadleaved tree species by stocked area as at 31 March 2012

Legend:
- Oak
- Beech
- Sycamore
- Ash
- Birch
- Sweet chestnut
- Hazel
- Hawthorn
- Alder
- Willow
- Other broadleaves
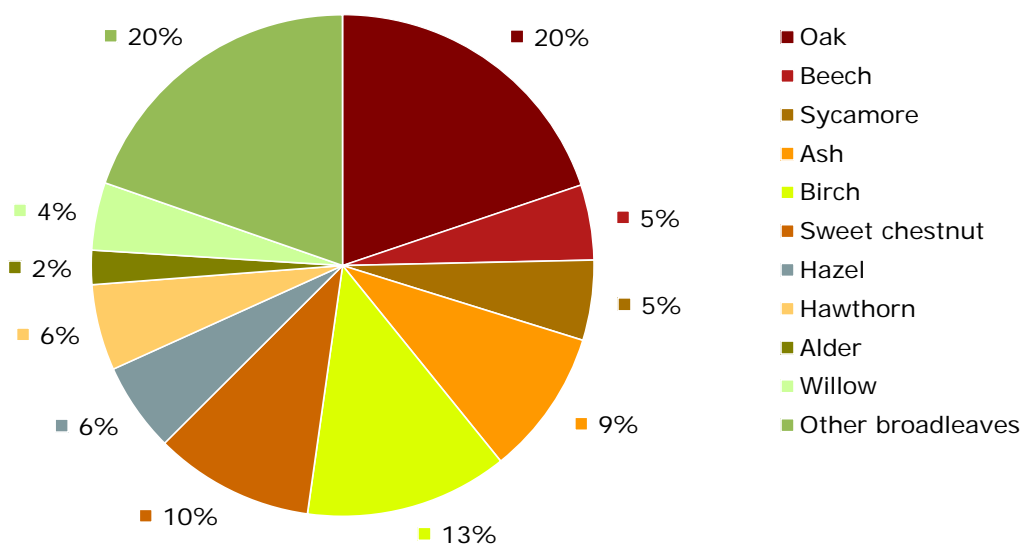
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Table 1 Stocked area by principal tree species at 31 March 2012

Principal species	FC area (000 ha)	Private sector area (000 ha)	SE%	Total area (000 ha)
Conifers				
Sitka spruce	< 0.1	0.3	60	0.3
Scots pine	0.9	3.8	14	4.7
Corsican pine	2.9	2.4	20	5.3
Norway spruce	0.2	1.3	24	1.5
Larches	0.2	1.8	22	2.0
Douglas fir	0.3	0.2	37	0.6
Lodgepole pine	< 0.1	0.0	-	< 0.1
Other conifers	0.4	3.4	18	3.8
All conifers	**4.9**	**13.2**	**7**	**18.1**
Broadleaves				
Oak	0.7	28.5	6	29.2
Beech	1.2	6.0	16	7.1
Sycamore	0.1	7.5	14	7.6
Ash	0.2	13.7	9	13.8
Birch	0.9	18.3	8	19.2
Sweet chestnut	0.1	15.0	11	15.1
Hazel	< 0.1	8.4	12	8.4
Hawthorn	0.0	8.2	12	8.2
Alder	< 0.1	3.2	22	3.2
Willow	< 0.1	6.4	15	6.4
Other broadleaves	1.1	27.8	8	28.9
All broadleaves	**4.3**	**143.2**	**2**	**147.5**
All species				
All species	**9.1**	**156.5**	**2**	**165.6**

Table 2 Stocked area by age class at 31 March 2012

Age class	FC area (000 ha)	Private sector area (000 ha)	*SE%*	Total area (000 ha)
All conifers				
0–10 years	0.2	0.2	*35*	0.3
11–20 years	0.8	0.2	*34*	0.9
21–40 years	1.8	4.8	*14*	6.7
41–60 years	1.7	6.3	*12*	8.0
61–80 years	0.4	1.4	*29*	1.8
81–100 years	0.1	0.2	*68*	0.3
100+ years	< 0.1	0.1	*63*	0.1
Total	**4.9**	**13.2**	**7**	**18.1**
All broadleaves				
0–10 years	0.2	16.4	*11*	16.6
11–20 years	0.7	14.4	*11*	15.1
21–40 years	0.7	45.7	*5*	46.4
41–60 years	1.5	26.7	*7*	28.1
61–80 years	0.8	20.0	*9*	20.9
81–100 years	0.2	14.4	*11*	14.6
100+ years	0.2	5.5	*18*	5.8
Total	**4.3**	**143.2**	**2**	**147.5**
All species				
0–10 years	0.4	16.6	*11*	17.0
11–20 years	1.4	14.6	*11*	16.0
21–40 years	2.5	50.6	*5*	53.1
41–60 years	3.1	33.0	*6*	36.1
61–80 years	1.2	21.5	*8*	22.7
81–100 years	0.3	14.6	*11*	14.9
100+ years	0.2	5.7	*18*	5.9
Total	**9.1**	**156.5**	**2**	**165.6**

Table 3 Stocked area by mean stand dbh class at 31 March 2012

Mean stand DBH	FC area (000 ha)	Private sector area (000 ha)	SE%	Total area (000 ha)
All conifers				
0–7 cm	0.2	0.2	35	0.4
7–10 cm	< 0.1	0.5	36	0.6
10–15 cm	1.6	0.7	26	2.3
15–20 cm	0.5	2.3	20	2.8
20–30 cm	0.9	4.1	15	5.1
30–40 cm	0.9	3.3	16	4.2
40–60 cm	0.6	1.5	23	2.2
60–80 cm	< 0.1	0.5	58	0.5
80+ cm	0.0	< 0.1	91	< 0.1
Total	**4.9**	**13.2**	**7**	**18.1**
All broadleaves				
0–7 cm	0.4	21.0	11	21.4
7–10 cm	1.0	24.7	6	25.7
10–15 cm	0.6	24.6	7	25.1
15–20 cm	0.6	12.4	9	13.0
20–30 cm	1.2	21.4	7	22.6
30–40 cm	0.4	13.9	9	14.3
40–60 cm	< 0.1	15.8	10	15.9
60–80 cm	< 0.1	5.1	18	5.2
80+ cm	< 0.1	4.3	23	4.3
Total	**4.3**	**143.2**	**2**	**147.5**
All species				
0–7 cm	0.6	21.2	11	21.8
7–10 cm	1.1	25.2	6	26.3
10–15 cm	2.2	25.3	7	27.5
15–20 cm	1.1	14.7	8	15.7
20–30 cm	2.1	25.5	7	27.7
30–40 cm	1.3	17.2	8	18.5
40–60 cm	0.7	17.3	9	18.1
60–80 cm	< 0.1	5.6	17	5.6
80+ cm	< 0.1	4.4	23	4.4
Total	**9.1**	**156.5**	**2**	**165.6**

Table 4 Felled area at 31 March 2012

Clearfelled area	FC area (000 ha)	Private sector area (000 ha)	SE%	Total area (000 ha)
	0.2	1.5	36	1.7

Standing volume at 31 March 2012

Figure 4 Principal tree species composition by standing volume at 31 March 2012
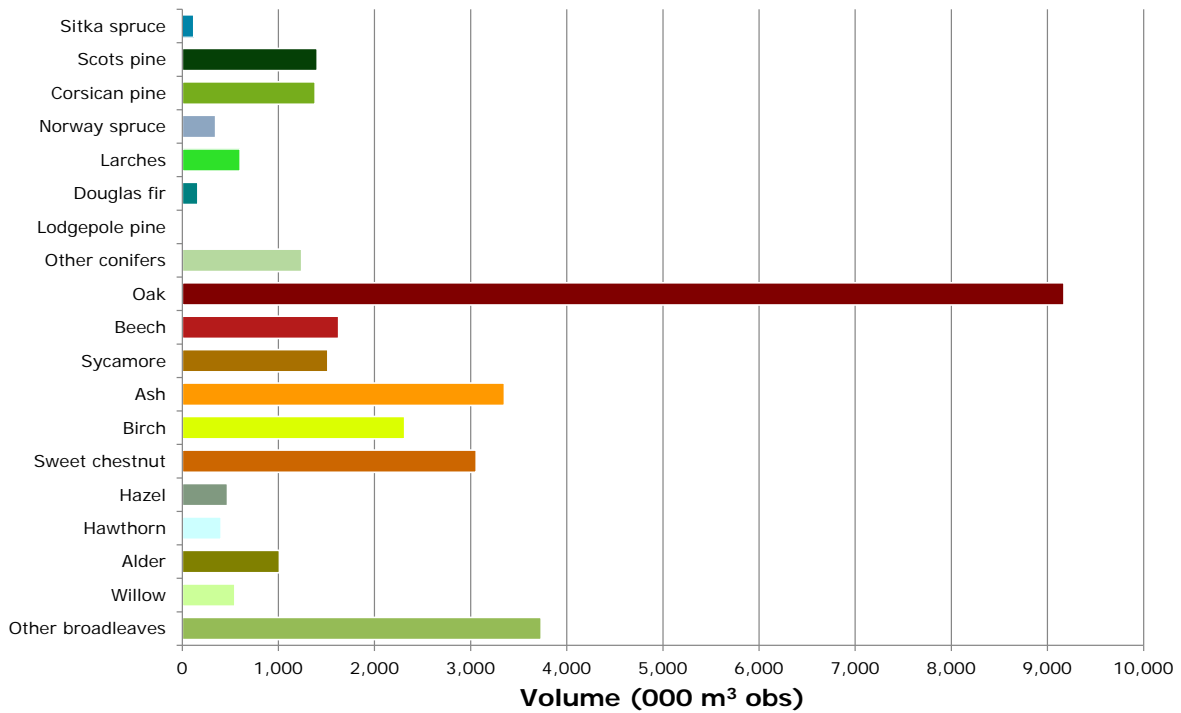
Figure 5 Principal conifer tree species composition by standing volume at 31 March 2012

Legend:
- Sitka spruce
- Scots pine
- Corsican pine
- Norway spruce
- Larches
- Douglas fir
- Lodgepole pine
- Other conifers
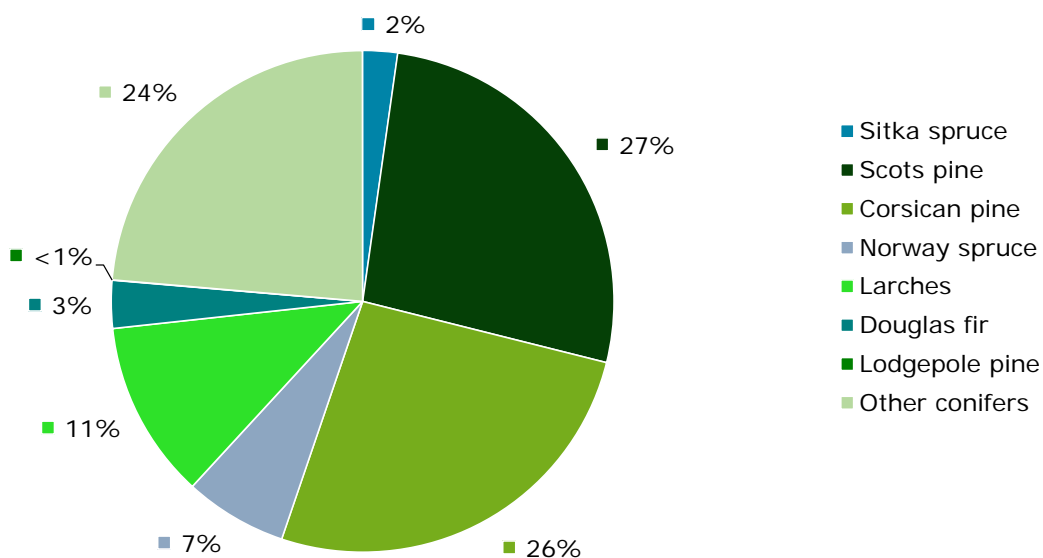
Figure 6 Principal broadleaved tree species composition by standing volume at 31 March 2012

Legend:
- Oak
- Beech
- Sycamore
- Ash
- Birch
- Sweet chestnut
- Hazel
- Hawthorn
- Alder
- Willow
- Other broadleaves
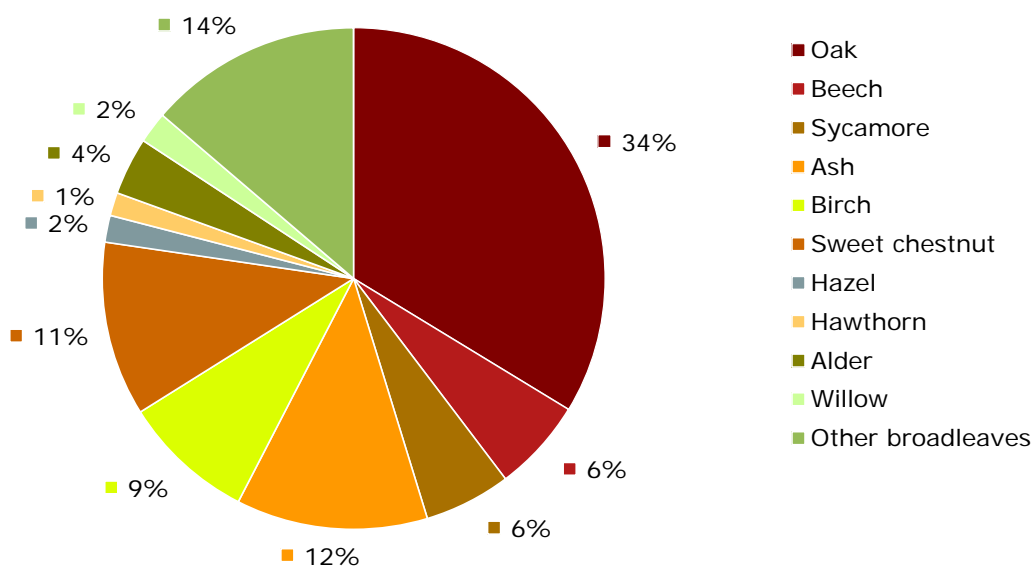
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Table 5 Standing volume by principal tree species at 31 March 2012

Principal species	FC volume (000 m³ obs)	Private sector volume (000 m³ obs)	SE%	Total volume (000 m³ obs)
Conifers				
Sitka spruce	< 1	117	54	117
Scots pine	189	1,215	14	1,404
Corsican pine	502	880	23	1,383
Norway spruce	64	284	26	348
Larches	29	572	23	601
Douglas fir	68	94	44	163
Lodgepole pine	< 1	0	-	< 1
Other conifers	112	1,131	23	1,243
All conifers	**966**	**4,255**	**9**	**5,221**
Broadleaves				
Oak	107	9,065	8	9,173
Beech	194	1,434	18	1,627
Sycamore	11	1,503	20	1,514
Ash	24	3,327	13	3,350
Birch	66	2,247	9	2,313
Sweet chestnut	10	3,047	15	3,058
Hazel	3	469	16	472
Hawthorn	0	405	16	405
Alder	6	1,004	28	1,011
Willow	< 1	547	16	547
Other broadleaves	81	3,654	13	3,735
All broadleaves	**502**	**26,647**	**4**	**27,149**
All species				
All species	**1,468**	**30,917**	**4**	**32,385**

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Table 6 Standing volume by age class at 31 March 2012

Age class	FC volume (000 m^3 obs)	Private sector volume (000 m^3 obs)	*SE%*	Total volume (000 m^3 obs)
All conifers				
0–10 years	< 1	0	-	**< 1**
11–20 years	58	5	*66*	63
21–40 years	265	1,308	*17*	**1,573**
41–60 years	499	2,124	*13*	**2,623**
61–80 years	109	672	*34*	781
81–100 years	34	30	*56*	64
100+ years	1	115	*67*	117
Total	**966**	**4,255**	*9*	**5,221**
All broadleaves				
0–10 years	< 1	6	*37*	6
11–20 years	8	467	*14*	**475**
21–40 years	32	5,746	*7*	**5,778**
41–60 years	207	5,593	*8*	**5,800**
61–80 years	153	6,525	*10*	**6,678**
81–100 years	38	5,824	*12*	**5,862**
100+ years	65	2,486	*19*	**2,551**
Total	**502**	**26,647**	*4*	**27,149**
All species				
0–10 years	< 1	6	*37*	6
11–20 years	66	472	*14*	**537**
21–40 years	297	7,057	*7*	**7,354**
41–60 years	706	7,725	*7*	**8,431**
61–80 years	262	7,200	*10*	**7,462**
81–100 years	71	5,854	*11*	**5,926**
100+ years	67	2,602	*18*	**2,669**
Total	**1,468**	**30,917**	*4*	**32,385**

Table 7 Standing volume by mean dbh class at 31 March 2012

Mean stand DBH	FC volume (000 m³ obs)	Private sector volume (000 m³ obs)	SE%	Total volume (000 m³ obs)
All conifers				
0–7 cm	< 1	< 1	74	< 1
7–10 cm	2	16	53	18
10–15 cm	165	77	26	242
15–20 cm	86	538	21	623
20–30 cm	221	1,394	19	1,615
30–40 cm	267	1,182	17	1,449
40–60 cm	212	733	23	945
60–80 cm	13	236	53	249
80+ cm	< 1	78	81	79
Total	**966**	**4,255**	**9**	**5,221**
All broadleaves				
0–7 cm	2	91	18	93
7–10 cm	25	1,049	8	1,074
10–15 cm	78	2,908	8	2,986
15–20 cm	87	2,545	12	2,632
20–30 cm	202	5,107	8	5,309
30–40 cm	85	3,866	11	3,950
40–60 cm	19	5,703	11	5,722
60–80 cm	3	2,343	16	2,346
80+ cm	< 1	3,036	21	3,036
Total	**502**	**26,647**	**4**	**27,149**
All species				
0–7 cm	2	91	18	93
7–10 cm	28	1,065	8	1,093
10–15 cm	243	2,985	8	3,229
15–20 cm	173	3,084	10	3,257
20–30 cm	423	6,507	8	6,930
30–40 cm	351	5,050	9	5,401
40–60 cm	231	6,439	10	6,670
60–80 cm	16	2,581	15	2,597
80+ cm	< 1	3,115	20	3,115
Total	**1,468**	**30,917**	**4**	**32,385**

Above ground biomass at 31 March 2012

Figure 7 Principal tree species composition by above ground biomass at 31 March 2012
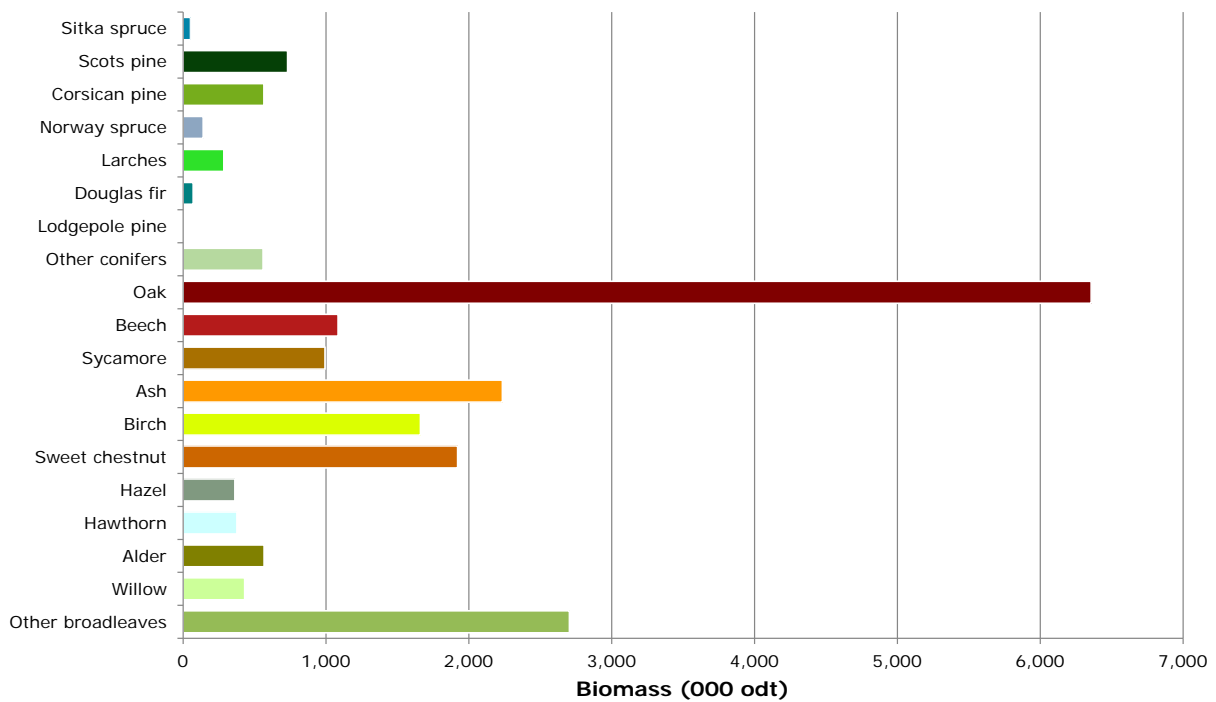
Figure 8 Principal conifer tree species composition by above ground biomass at 31 March 2012

Figure 9 Principal broadleaved tree species composition by above ground biomass at 31 March 2012

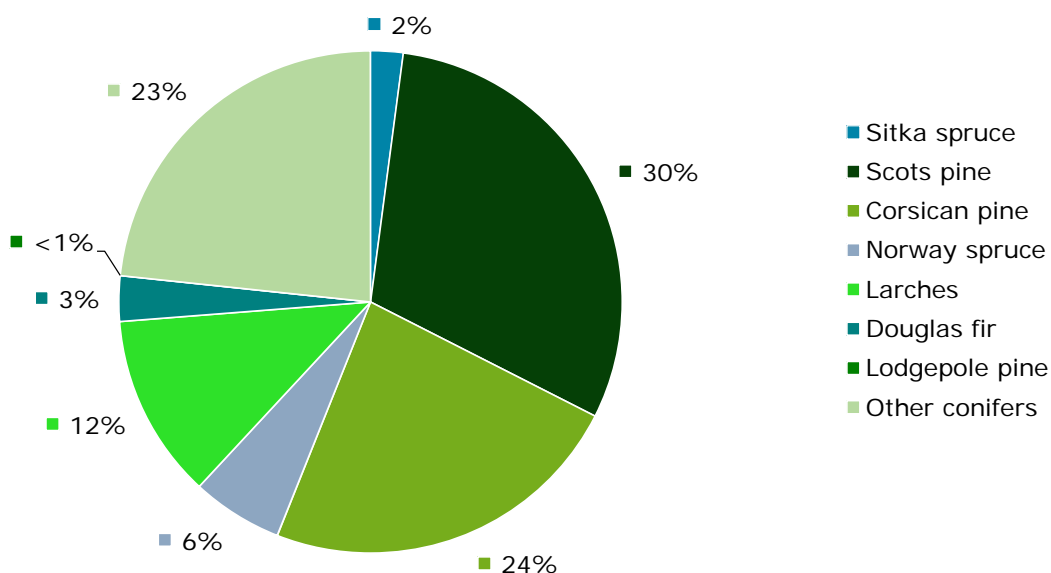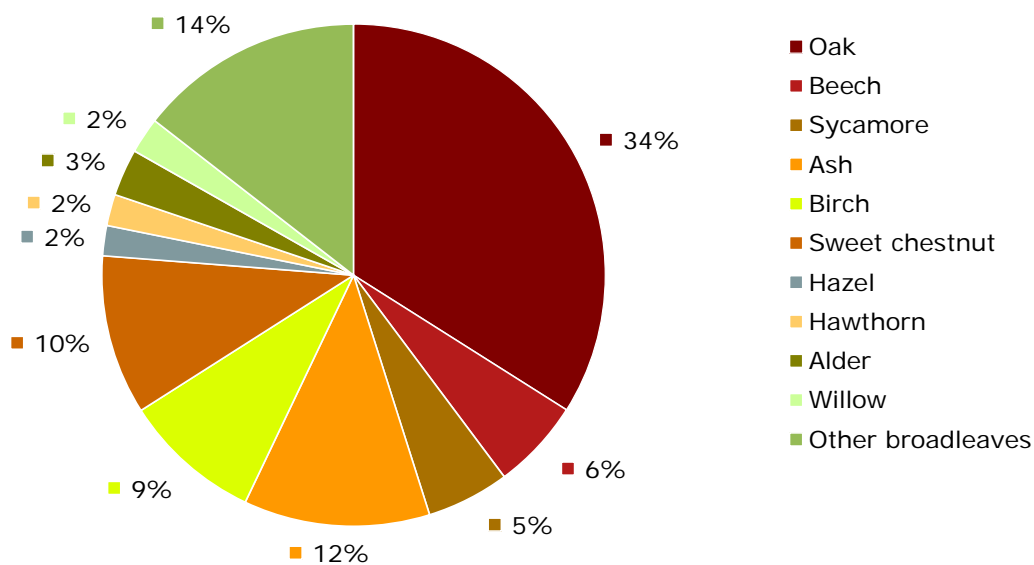**Table 8** Biomass stock (above ground) by principal tree species as at 31 March 2012

Principal species	FC	Private sector		Total
	biomass (000 odt)	biomass (000 odt)	*SE%*	biomass (000 odt)
Conifers				
Sitka spruce	< 1	50	*54*	**50**
Scots pine	54	677	*14*	**731**
Corsican pine	135	431	*23*	**566**
Norway spruce	14	126	*26*	**141**
Larches	7	278	*23*	**285**
Douglas fir	20	51	*43*	**71**
Lodgepole pine	< 1	0	*-*	**< 1**
Other conifers	25	535	*22*	**561**
All conifers	**256**	**2,130**	*8*	**2,386**
Broadleaves				
Oak	40	6,316	*8*	**6,356**
Beech	70	1,015	*17*	**1,085**
Sycamore	4	989	*19*	**993**
Ash	9	2,227	*13*	**2,236**
Birch	27	1,635	*9*	**1,662**
Sweet chestnut	4	1,918	*14*	**1,922**
Hazel	< 1	362	*15*	**363**
Hawthorn	0	377	*16*	**377**
Alder	2	566	*27*	**568**
Willow	< 1	431	*16*	**431**
Other broadleaves	29	2,675	*12*	**2,704**
All broadleaves	**185**	**18,474**	*4*	**18,659**
All species				
All species	**441**	**20,612**	*4*	**21,052**

25-year forecast of availability

Refer to the NFI report *50-year forecast of softwood timber availability* (2014) for a description of the underlying methodology and interpretation of the softwood forecast, and also for the England and GB context.

Refer to the NFI report *50-year forecast of hardwood timber availability* (2014) for a description of the underlying methodology and interpretation of the hardwood forecast, and also for the England and GB context.

In **Tables 9 – 11** and **Figures 10 – 13** the estimates for the Forestry Commission are based on harvesting regimes derived from their felling and thinning plans as of 31 March 2012.

For the Private sector, information for **Tables 9 – 11** and **Figures 10 – 13** is based on a scenario which assumes felling at age of maximum mean annual increment with moderate wind risk measures for conifers and broadleaves.

Restocking assumptions for conifer stands clearfelled during the forecast period have been implemented that provide for:

- a 10% reduction in the area of conifers on the subsequent rotation
- restocking of currently clearfelled land
- a change in the composition of conifer species on restocking

Restocking assumptions for broadleaved stands clearfelled during the forecast period have been included that provide for:

- No reduction in stocked area.
- Like for like species choices are used for broadleaves.
- That 50% of the land associated with the reduction in conifer stocked area arising from the assumption above is stocked with broadleaves.

A full description of the restocking assumptions is to be found in **Table D3** of the *50-year forecast of softwood timber availability* (2014). The same restocking assumptions have been applied to both the FC and Private sector forecasts.

Woodland that is classed as currently clearfelled will be restocked according to the restock prescription.

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25-year forecast of timber availability

Table 9 25-year forecast of timber availability by time period and principal species; average annual volumes within period

| Principal species | 2017–21 | | | | 2022–26 | | | | 2027–31 | | | |
| | FC | Private sector | | Total | FC | Private sector | | Total | FC | Private sector | | Total |
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
All conifers	**59**	**194**	**12**	**253**	**45**	**215**	**15**	**260**	**46**	**194**	**16**	**240**
Sitka spruce	< 1	6	54	6	< 1	19	73	19	< 1	< 1	80	< 1
Scots pine	15	36	16	51	9	74	24	83	5	59	25	64
Corsican pine	29	47	27	77	26	52	44	78	28	44	50	71
Norway spruce	3	10	25	13	2	9	27	11	4	26	48	29
Larches	1	39	33	41	1	25	36	26	2	14	31	16
Douglas fir	4	7	56	10	3	3	52	6	4	3	52	7
Lodgepole pine	< 1	0	-	< 1	< 1	0	-	< 1	< 1	0	-	< 1
Other conifers	6	54	30	60	4	36	26	39	4	49	26	53
All broadleaves	**11**	**1,161**	**6**	**1,172**	**< 1**	**812**	**6**	**813**	**11**	**732**	**8**	**743**
Oak	2	91	30	93	< 1	108	19	108	2	200	22	202
Beech	7	19	19	26	< 1	47	28	48	7	66	38	73
Sycamore	< 1	136	21	136	< 1	54	22	54	< 1	39	31	40
Ash	< 1	299	14	299	< 1	124	18	124	< 1	60	23	60
Birch	< 1	219	11	219	< 1	137	14	137	< 1	100	18	101
Sweet chestnut	< 1	78	16	78	< 1	77	13	77	< 1	65	12	66
Hazel	< 1	27	18	27	< 1	55	25	55	< 1	25	15	25
Hawthorn	0	15	16	15	0	15	15	15	0	15	15	15
Alder	< 1	89	30	89	< 1	34	29	34	< 1	12	46	12
Willow	0	21	23	21	0	18	15	18	0	28	20	28
Other broadleaves	< 1	165	15	166	< 1	144	19	144	< 1	117	13	118
All species	**69**	**1,356**	**5**	**1,426**	**46**	**1,028**	**6**	**1,074**	**57**	**927**	**7**	**984**

Table 9 (cont'd) 25-year forecast of timber availability by time period and principal species; average annual volumes within period

| Principal species	2032–36				2037–41			
	FC	Private sector		Total	FC	Private sector		Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
All conifers	**52**	**201**	**23**	**253**	**51**	**222**	**18**	**272**
Sitka spruce	< 1	5	32	5	< 1	5	32	5
Scots pine	8	60	27	68	7	105	29	112
Corsican pine	31	50	70	81	32	26	68	58
Norway spruce	3	14	50	17	2	19	43	22
Larches	1	14	32	15	1	17	53	18
Douglas fir	4	3	37	8	4	6	31	10
Lodgepole pine	< 1	0	-	< 1	< 1	< 1	36	< 1
Other conifers	3	57	47	60	3	44	40	47
All broadleaves	**1**	**694**	**8**	**695**	**11**	**595**	**6**	**605**
Oak	< 1	173	23	174	2	110	22	112
Beech	< 1	49	45	50	7	26	42	33
Sycamore	< 1	20	21	21	< 1	29	24	29
Ash	< 1	59	22	59	< 1	60	21	60
Birch	< 1	85	14	85	< 1	69	13	69
Sweet chestnut	< 1	120	20	120	< 1	71	12	71
Hazel	< 1	36	21	36	< 1	36	17	36
Hawthorn	0	15	14	15	0	18	14	18
Alder	< 1	15	31	15	< 1	13	30	13
Willow	0	25	16	25	0	36	26	36
Other broadleaves	< 1	96	12	96	< 1	123	11	124
All species	**53**	**896**	**8**	**948**	**61**	**817**	**7**	**879**

Table 10 25-year forecast of timber availability by period, top-diameter class and conifer or broadleaves

Top diameter class (cm)	2017–21 FC (000 m³)	2017–21 Private sector (000 m³)	SE%	2022–26 FC (000 m³)	2022–26 Private sector (000 m³)	SE%	2027–31 FC (000 m³)	2027–31 Private sector (000 m³)	SE%	2032–36 FC (000 m³)	2032–36 Private sector (000 m³)	SE%	2037–41 FC (000 m³)	2037–41 Private sector (000 m³)	SE%
All conifers															
7–14	13	20	14	8	14	14	5	10	13	5	14	18	5	18	19
14–16	3	11	17	4	8	16	3	5	13	2	6	21	2	6	19
16–18	3	13	17	4	10	16	4	7	14	3	7	26	3	6	19
18–24	9	46	14	9	43	14	12	34	15	14	38	29	13	31	24
24–34	14	54	14	11	69	17	13	63	19	15	74	28	16	66	20
34–44	8	25	18	5	37	21	5	34	20	6	34	25	6	40	23
44–54	4	12	23	2	18	24	2	17	23	3	15	30	3	22	26
54+	3	14	28	2	17	28	2	23	28	4	13	28	4	33	30
Total	**59**	**194**	**12**	**45**	**215**	**15**	**46**	**194**	**16**	**52**	**201**	**23**	**51**	**222**	**18**

Top diameter class (cm)	2017–21 FC (000 m³)	2017–21 Private sector (000 m³)	SE%	2022–26 FC (000 m³)	2022–26 Private sector (000 m³)	SE%	2027–31 FC (000 m³)	2027–31 Private sector (000 m³)	SE%	2032–36 FC (000 m³)	2032–36 Private sector (000 m³)	SE%	2037–41 FC (000 m³)	2037–41 Private sector (000 m³)	SE%
All broadleaves															
7–14	3	267	5	< 1	243	7	2	204	5	< 1	224	5	2	229	5
14–16	< 1	70	6	< 1	60	10	< 1	44	7	< 1	42	7	< 1	40	6
16–18	< 1	71	6	< 1	56	9	< 1	44	7	< 1	40	7	< 1	39	7
18–24	3	226	7	< 1	147	8	3	124	8	< 1	107	9	3	109	8
24–34	2	272	8	< 1	156	10	3	140	13	< 1	112	13	3	102	13
34–44	< 1	129	11	< 1	70	13	< 1	75	17	< 1	63	17	1	40	15
44–54	< 1	63	14	< 1	35	15	< 1	38	19	< 1	33	19	< 1	17	17
54+	< 1	63	19	< 1	44	17	< 1	62	32	0	72	29	< 1	20	26
Total	**11**	**1,161**	**6**	**< 1**	**812**	**6**	**11**	**732**	**8**	**1**	**694**	**8**	**11**	**595**	**6**

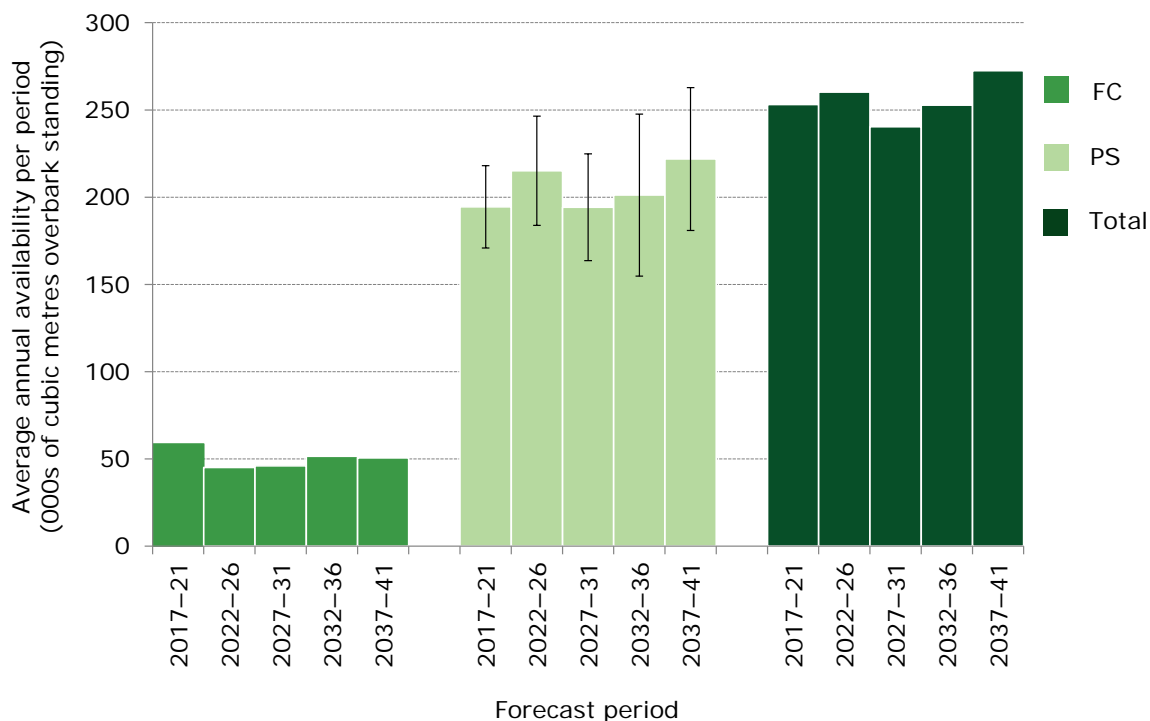**Figure 10** Overview of 25-year forecast of average annual softwood availability
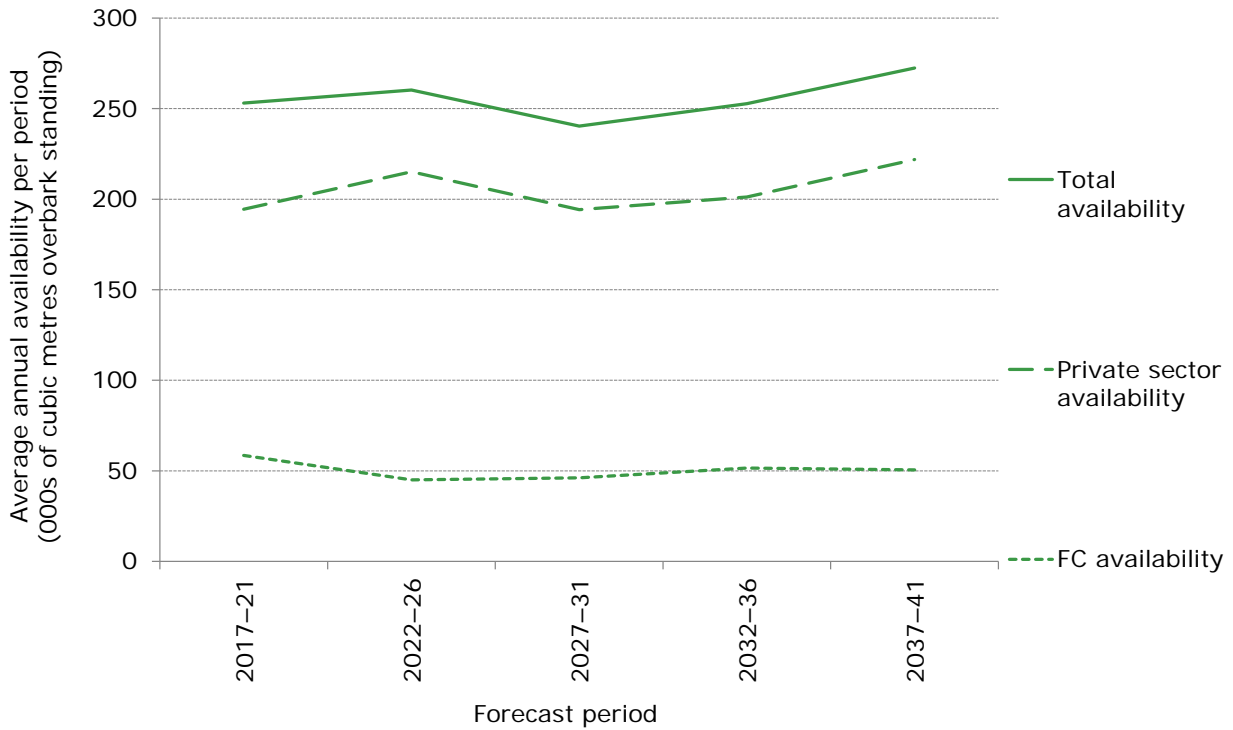
Figure 11 Overview of 25-year forecast of average annual hardwood availability
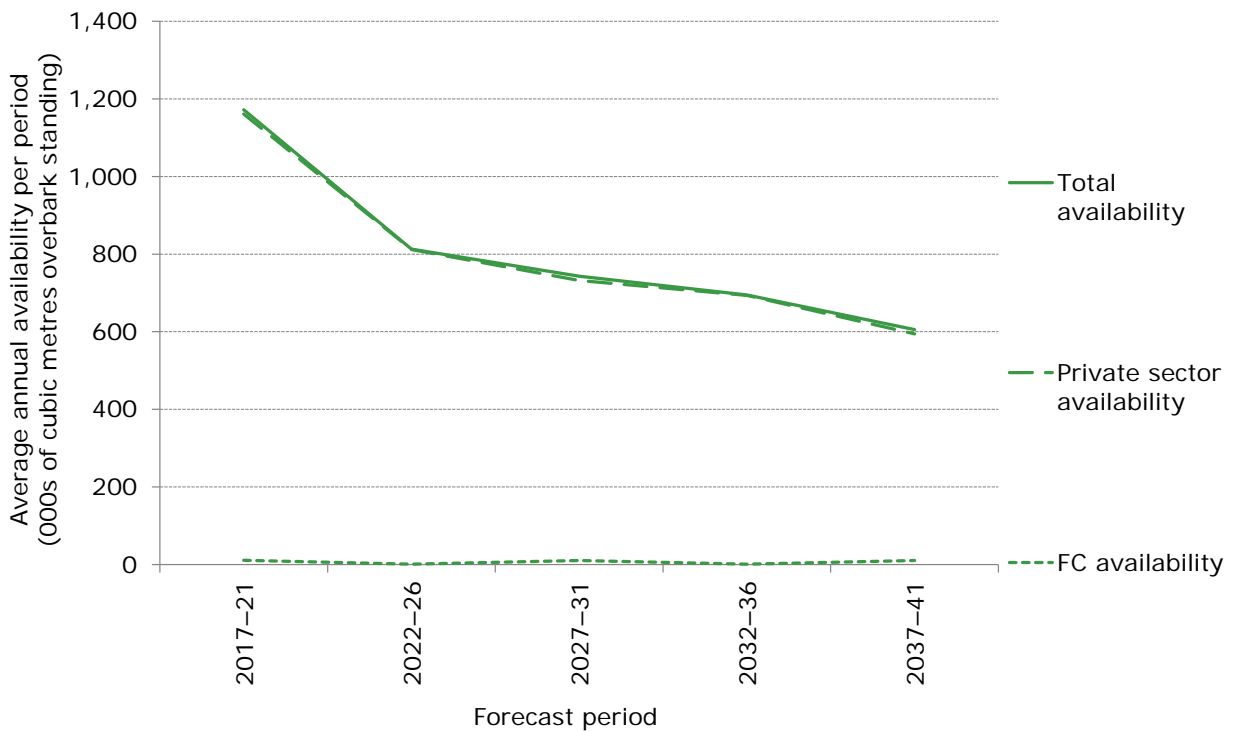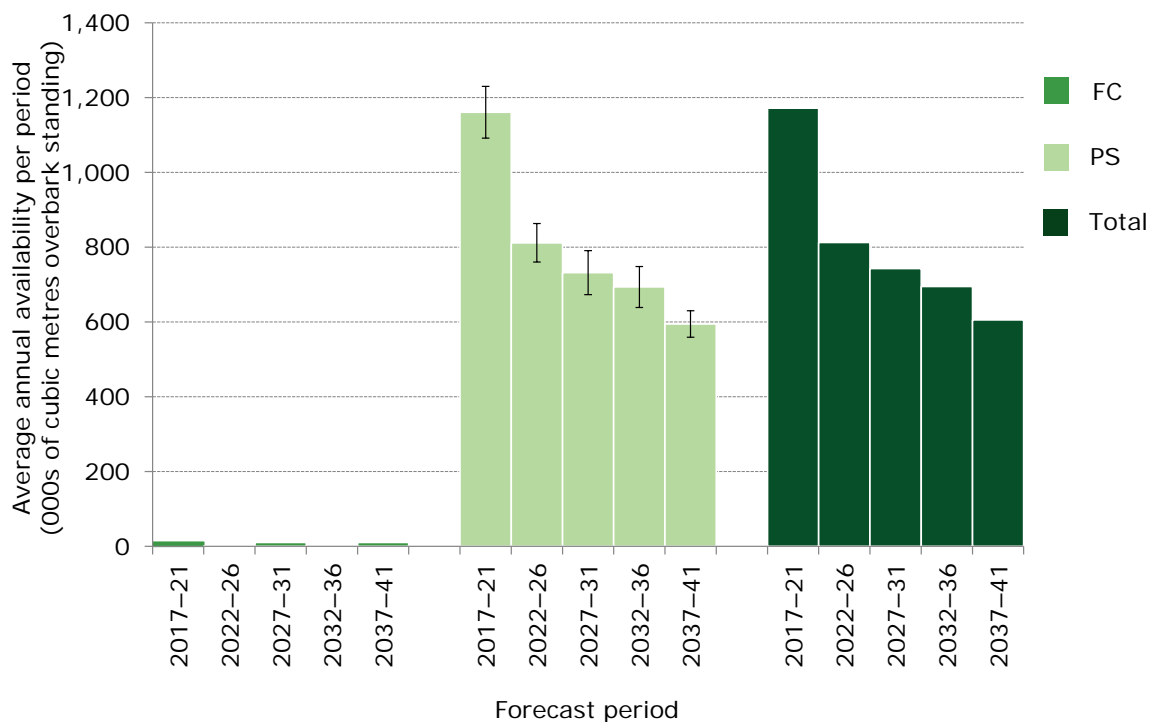
Figure 12 25-year forecast of average annual softwood availability

Figure 13 25-year forecast of average annual hardwood availability

NFI Provisional Report

25-year forecast of biomass availability

Table 11 25-year forecast of biomass availability by period, top-product category and conifer or broadleaves

Product category	2017–21			2022–26			2027–31			2032–36			2037–41		
	FC	Private sector		FC	Private sector		FC	Private sector		FC	Private sector		FC	Private sector	
	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%
All conifers															
stump	0.6	1.5	11	0.5	1.6	14	0.4	1.4	15	0.5	1.5	21	0.4	1.6	17
stem	22.6	73.3	12	17.4	82.0	15	17.7	73.3	16	20.0	75.1	23	19.6	86.2	19
tips	0.9	1.3	13	0.5	0.9	14	0.4	0.8	16	0.4	1.0	20	0.4	1.3	14
branches	4.9	13.5	12	3.6	15.5	14	3.4	15.0	16	3.8	14.3	20	3.6	16.9	19
Total	**29.1**	**89.7**	**10**	**22.0**	**100.0**	**12**	**21.8**	**90.5**	**13**	**24.6**	**91.8**	**19**	**24.1**	**106.1**	**16**

Product category	2017–21			2022–26			2027–31			2032–36			2037–41		
	FC	Private sector		FC	Private sector		FC	Private sector		FC	Private sector		FC	Private sector	
	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%	(000 odt)	(000 odt)	SE%
All broadleaves															
stump	0.2	15.2	5	< 0.1	11.7	6	0.1	10.8	6	< 0.1	10.0	6	0.1	9.1	5
stem	5.7	572.4	6	0.5	405.7	6	5.7	374.6	8	0.6	350.5	8	5.7	299.6	6
tips	0.6	31.5	5	< 0.1	27.9	6	0.2	28.7	8	0.2	31.1	7	0.2	29.1	6
branches	1.7	148.6	6	0.2	106.7	6	1.5	97.6	8	0.3	88.9	8	1.5	75.3	6
Total	**8.3**	**767.6**	**5**	**0.7**	**552.0**	**5**	**7.5**	**511.6**	**6**	**1.0**	**480.5**	**6**	**7.5**	**413.0**	**5**

Note that the stump + stem above refer to the same part of the tree as the volume to 7cm.

NFI national reports and papers

The principal themes reported on for the 2011 woodland profile and future forecasts are:

- GB 2011 preliminary estimates of broadleaved species
- GB 2011 standing coniferous timber volume
- UK 25-year forecast of softwood availability
- GB 25-year forecast of coniferous standing volume and increment
- Biomass in live woodland trees in Britain
- Carbon in live woodland trees in Britain

The principal themes reported on for the 2012 woodland profile and future forecasts are:

- 50-year forecast of softwood timber availability
- 50-year forecast of hardwood timber availability
- 25-year forecast of softwood availability (2016) update

Each theme has a series of reports, papers and data, tailored for different audiences and uses. All the documents and data can be found on the NFI website www.forestresearch.gov.uk/inventory.

Glossary

A glossary of terms is presented in the full suite of forecast reports which can be found at www.forestresearch.gov.uk/forecast.

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This report contains a subset of the information provided in the Official Statistics reports *50-year forecast of softwood timber availability* (2014) and *50-year forecast of hardwood timber availability* (2014) publications. More information about Official Statistics and the UK Statistics Authority is available at www.statisticsauthority.gov.uk

National Forest Inventory Statistician: David Ross