

NFI provisional estimates for woodland in the New Forest National Park

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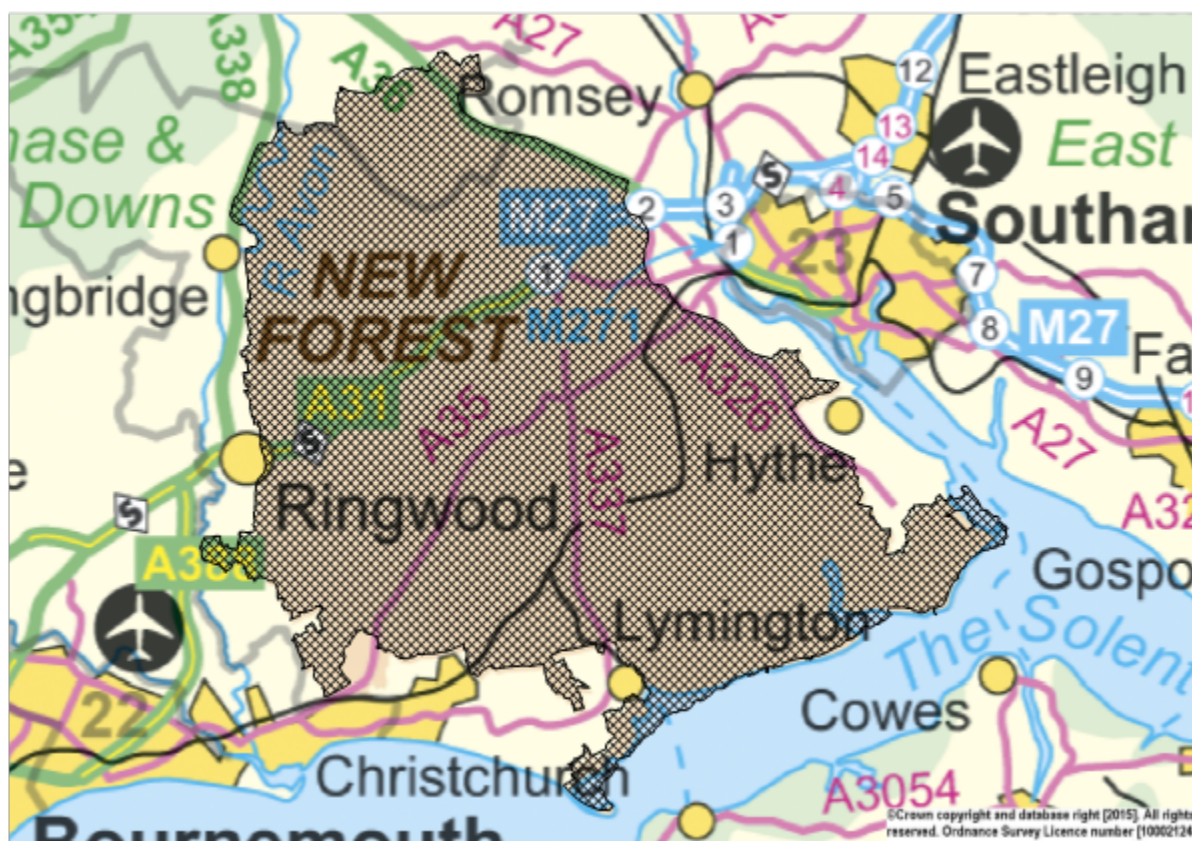
Website: www.forestry.gov.uk/inventory
www.forestry.gov.uk/forecast

Summary

This report provides a detailed picture of the stocked area in woodland, the standing volume of timber and the associated live biomass and carbon stocks for woodland in the New Forest National Park. 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 forecast of softwood timber availability (2014)* and *50-year forecast of hardwood timber availability (2014)*. NFI reports are published at www.forestry.gov.uk/inventory.

In addition, the report provides forecasts of timber availability, standing volume and increment for softwoods and hardwoods arising from the stocked area and standing volume. Forecasts are based on the 'headline' harvesting scenario described in the 50-year forecasts NFI reports. An alternative forecast 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.forestry.gov.uk/forecast. Refer to the *Standing timber volume for coniferous trees in Britain* (2012) and the *NFI preliminary estimates of quantities of broadleaved species in British woodlands with special focus on ash* (2012) reports for a description of the underlying methodologies and interpretation, and also for the England and Great Britain (GB) context. Refer to the *NFI forecasts methodology* (2012) overview 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 GB 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 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 standing volumes and stocked areas at 31 March 2012, and 50-year forecasts of softwood and hardwood availability under the 'headline' harvesting scenario and also under a scenario assuming all hardwoods are harvested in Private sector woodland in the New Forest National Park. The data sources used for the compilation of these estimates are the same as described in the NFI 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 the FC's SCDB, while those for the Private sector (i.e. non-FC) 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 (SEs) attached to the Private sector estimates, is provided in the earlier documents.

Results are provided for stocked area at 31 March 2012 (**Figures 1–1a** and **Tables 1–3**), felled area (**Table 4**), standing volume at 31 March 2012 (**Figures 2–2a** and **Tables 5–7**), biomass and carbon stocks at 31 March 2012 (**Tables 8–9**).

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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 SEs attached to Private sector estimates are expressed in relative terms (%) to the right of the relevant estimate. Percentages in the pie charts may also not sum to 100 due to rounding.

Stocked area at 31 March 2012

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

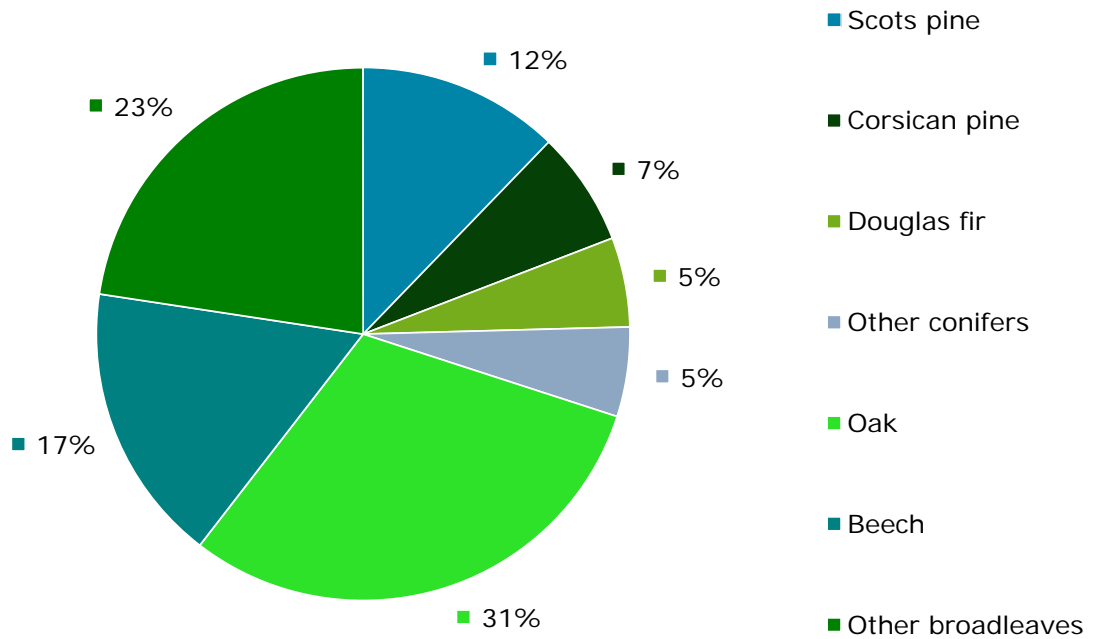
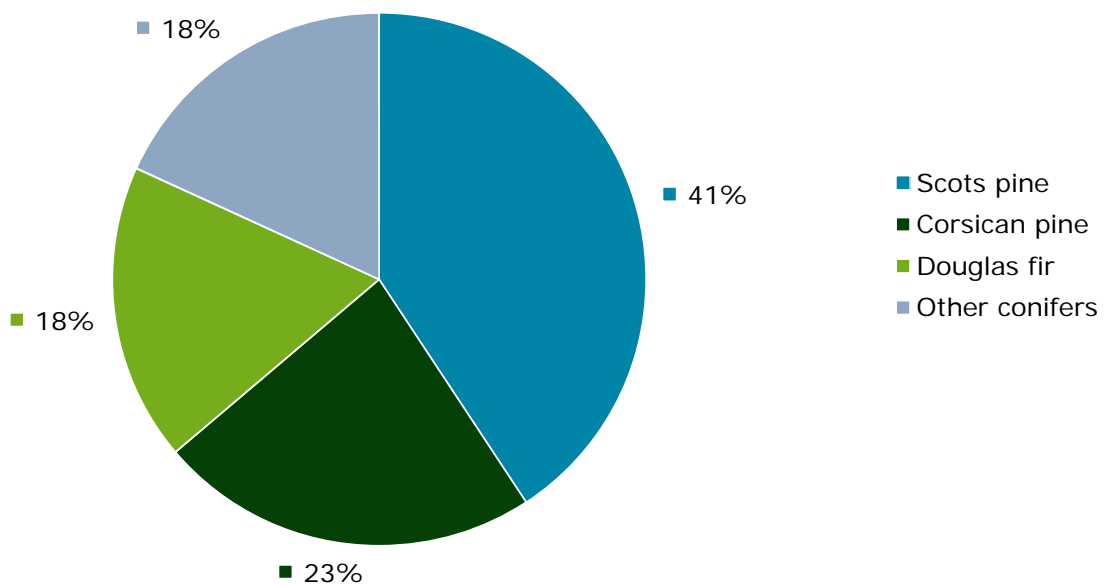


Figure 1a Principal conifer tree species composition by stocked area at 31 March 2012



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Figure 1b Principal broadleaved tree species composition by stocked area at 31 March 2012

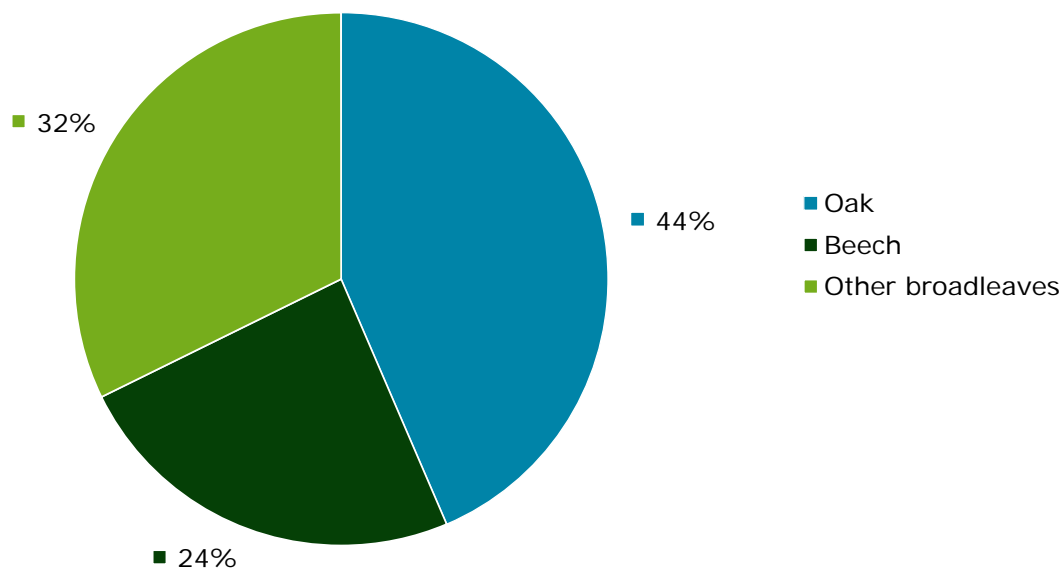


Table 1 Stocked area by principal tree species at 31 March 2012

Principal species	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
Conifers				
Scots pine	1.4	0.9	36	2.3
Corsican pine	1.0	0.3	94	1.3
Douglas fir	0.9	0.1	68	1.0
Other conifers	0.5	0.5	41	1.0
All conifers	3.8	1.8	15	5.6
Broadleaves				
Oak	4.1	1.5	14	5.7
Beech	2.2	1.0	27	3.2
Other broadleaves	1.0	3.2	9	4.2
All broadleaves	7.4	6.2	5	13.6
All species				
All species	11.2	8.0	2	19.2

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Table 2 Stocked area by age class at 31 March 2012

Age class	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers				
0–40 years	0.9	0.6	53	1.5
41–80 years	2.2	1.0	31	3.2
80+ years	0.7	0.1	70	0.8
Total	3.8	1.8	15	5.6
All broadleaves				
0–40 years	0.3	3.2	12	3.4
41–80 years	1.0	1.2	18	2.2
80+ years	6.2	1.8	18	7.9
Total	7.4	6.2	5	13.6
All species				
0–40 years	1.2	3.8	13	5.0
41–80 years	3.1	2.3	18	5.4
80+ years	6.9	1.9	19	8.8
Total	11.2	8.0	2	19.2

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

Mean stand DBH	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers				
0–20 cm	0.8	0.2	47	1.1
21–60 cm	2.7	1.5	27	4.1
60+ cm	0.3	0.1	68	0.4
Total	3.8	1.8	15	5.6
All broadleaves				
0–20 cm	1.2	3.3	11	4.5
21–60 cm	5.9	2.0	14	7.9
60+ cm	0.2	0.9	25	1.1
Total	7.4	6.2	5	13.6
All species				
0–20 cm	2.1	3.5	11	5.6
21–60 cm	8.6	3.5	14	12.0
60+ cm	0.5	1.0	23	1.5
Total	11.2	8.0	2	19.2

Table 4 Felled area at 31 March 2012

Clearfelled area	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
	0.2	0.0	-	0.2

Standing volume at 31 March 2012

Figure 2 Principal tree species composition by standing volume at 31 March 2012

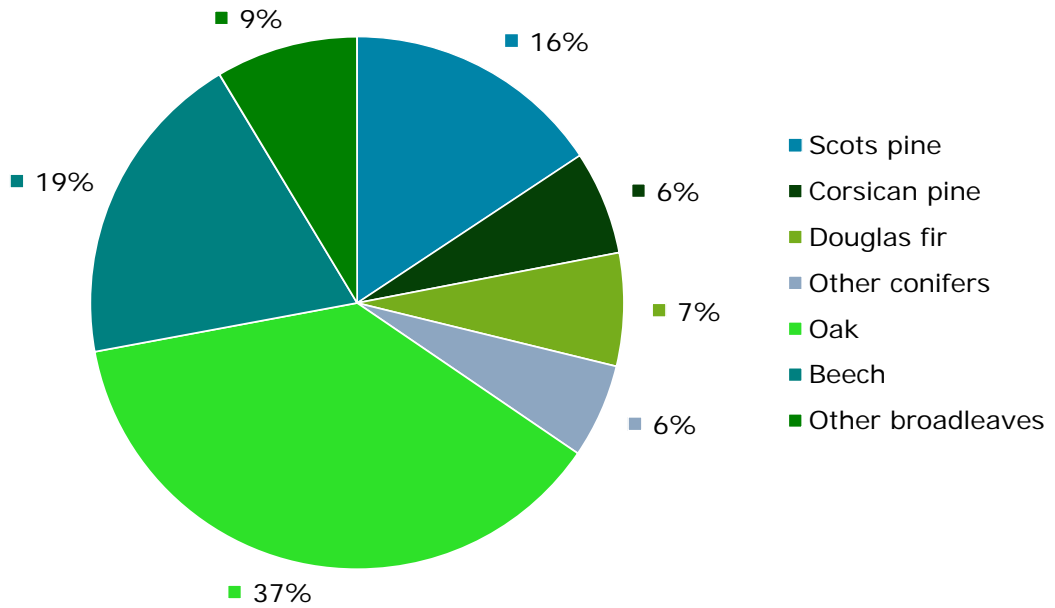
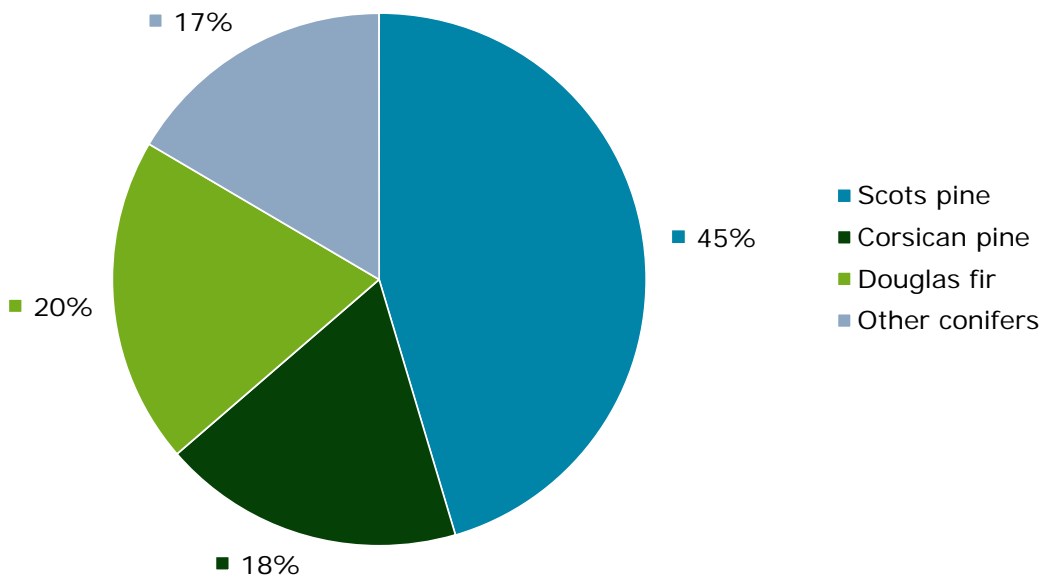


Figure 2a Principal conifer tree species composition by standing volume at 31 March 2012



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Figure 2b Principal broadleaved tree species composition by standing volume at 31 March 2012

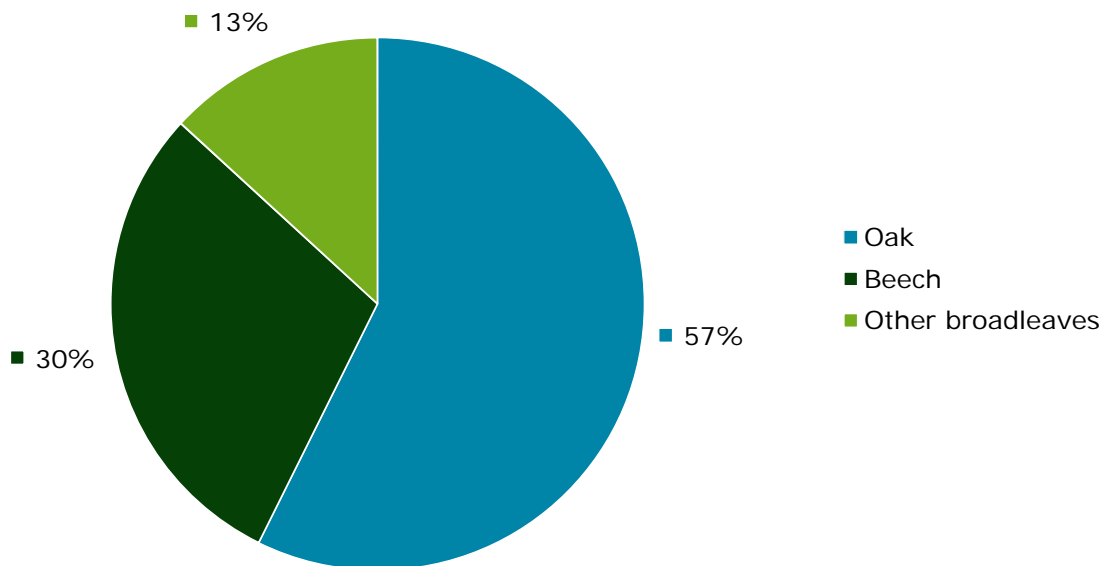


Table 5 Standing volume by principal tree species at 31 March 2012

Principal species	FC	Private sector		Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	SE%	volume (000 m ³ obs)
Conifers				
Scots pine	523	409	46	932
Corsican pine	253	122	94	375
Douglas fir	332	75	71	407
Other conifers	191	148	48	339
All conifers	1,299	753	25	2,052
Broadleaves				
Oak	1,472	760	12	2,232
Beech	813	335	37	1,148
Other broadleaves	197	316	21	513
All broadleaves	2,485	1,434	11	3,918
All species				
All species	3,784	2,187	11	5,971

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Table 6 Standing volume by age class at 31 March 2012

Age class	FC	Private sector		Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	SE%	volume (000 m ³ obs)
All conifers				
0–40 years	104	173	68	277
41–80 years	837	385	28	1,221
80+ years	359	196	95	555
Total	1,299	753	25	2,052
All broadleaves				
0–40 years	7	152	21	159
41–80 years	158	306	21	465
80+ years	2,319	975	17	3,295
Total	2,485	1,434	11	3,918
All species				
0–40 years	111	325	37	436
41–80 years	995	691	19	1,686
80+ years	2,678	1,171	23	3,849
Total	3,784	2,187	11	5,971

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Table 7 Standing volume by mean stand DBH class at 31 March 2012

Mean stand DBH	FC	Private sector		Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	SE%	volume (000 m ³ obs)
All conifers				
0–20 cm	92	44	60	136
21–60 cm	1,077	652	35	1,730
60+ cm	129	57	69	187
Total	1,299	753	25	2,052
All broadleaves				
0–20 cm	212	175	17	387
21–60 cm	2,213	713	19	2,926
60+ cm	59	546	20	605
Total	2,485	1,434	11	3,918
All species				
0–20 cm	305	218	18	523
21–60 cm	3,290	1,366	19	4,655
60+ cm	189	603	19	792
Total	3,784	2,187	11	5,971

Biomass and carbon stocks at 31 March 2012

Table 8 Standing biomass by principal tree species at 31 March 2012

Principal species	FC	Private sector		Total
	biomass (000 odt)	biomass (000 odt)	SE%	biomass (000 odt)
Conifers				
Scots pine	357	272	43	629
Corsican pine	149	75	94	225
Douglas fir	217	47	71	264
Other conifers	107	83	46	189
All conifers	831	477	23	1,308
Broadleaves				
Oak	1,289	626	13	1,914
Beech	790	291	37	1,081
Other broadleaves	174	284	19	457
All broadleaves	2,255	1,226	10	3,481
All species				
All species	3,085	1,703	10	4,789

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Table 9 Total carbon stocks in principal tree species at 31 March 2012

Principal species	FC	Private sector		Total
	carbon (000 t)	carbon (000 t)	SE%	carbon (000 t)
Conifers				
Scots pine	179	136	43	315
Corsican pine	75	38	94	112
Douglas fir	109	24	71	132
Other conifers	53	41	46	95
All conifers	415	239	23	654
Broadleaves				
Oak	644	313	13	957
Beech	395	146	37	541
Other broadleaves	87	142	19	229
All broadleaves	1,127	613	10	1,741
All species				
All species	1,543	852	10	2,394

NFI national reports and papers

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

- 2011 preliminary estimates of broadleaved species in British woodlands
- 2011 standing coniferous timber volume
- 25-year forecast of softwood availability
- 25-year forecast of coniferous standing volume and increment
- 2011 biomass in live woodland trees in Britain
- 2011 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 availability
- 50 year forecast of hardwood availability

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.forestry.gov.uk/inventory.

Glossary

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

Official Statistics

This is an Official Statistics publication. More information about Official Statistics and the UK Statistics Authority is available at www.statisticsauthority.gov.uk

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