

# NFI provisional estimates for woodland within 50 miles of Southampton

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[www.forestry.gov.uk/forecast](http://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 within a 50-mile radius of Southampton. 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](http://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](http://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 within 50 miles of Southampton. 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**), evidence of thinning in Private sector stands from the NFI field survey (**Figure 3**), the 'headline' 50-year forecast (**Figures 4–8** and **Tables 10–12**) and the 'unrestricted' 50-year forecast

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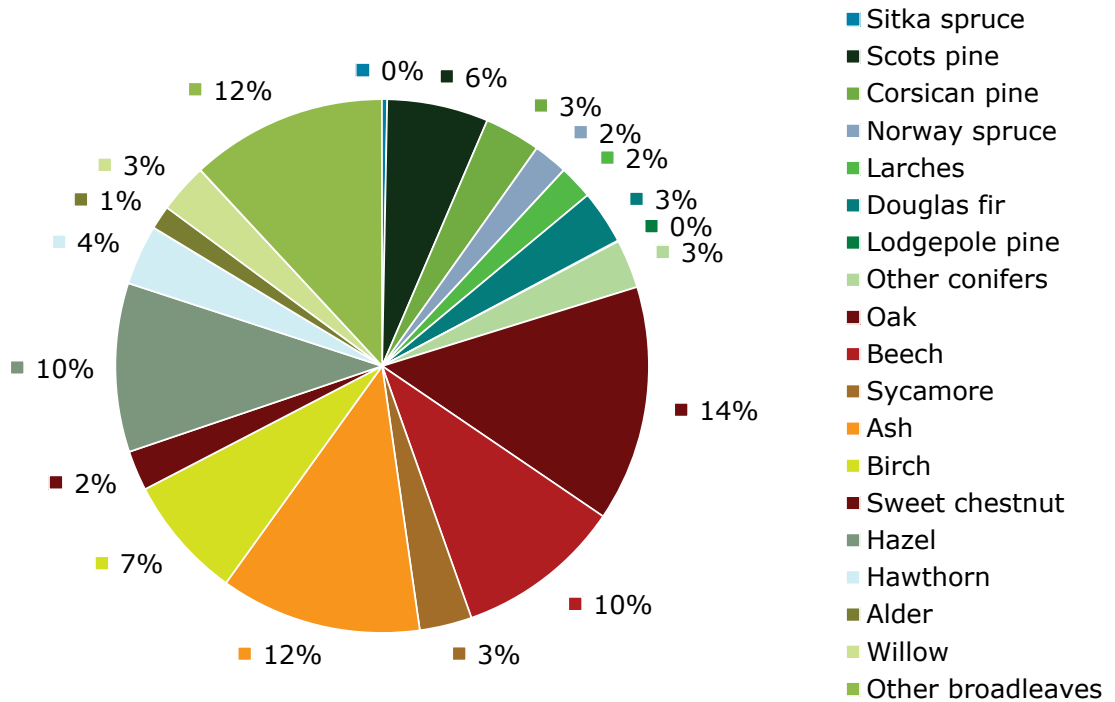
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(**Figures 9–13** and **Tables 13–15**). **Figures 14–15** and **Table 16** compare the hardwood production under the two scenarios.

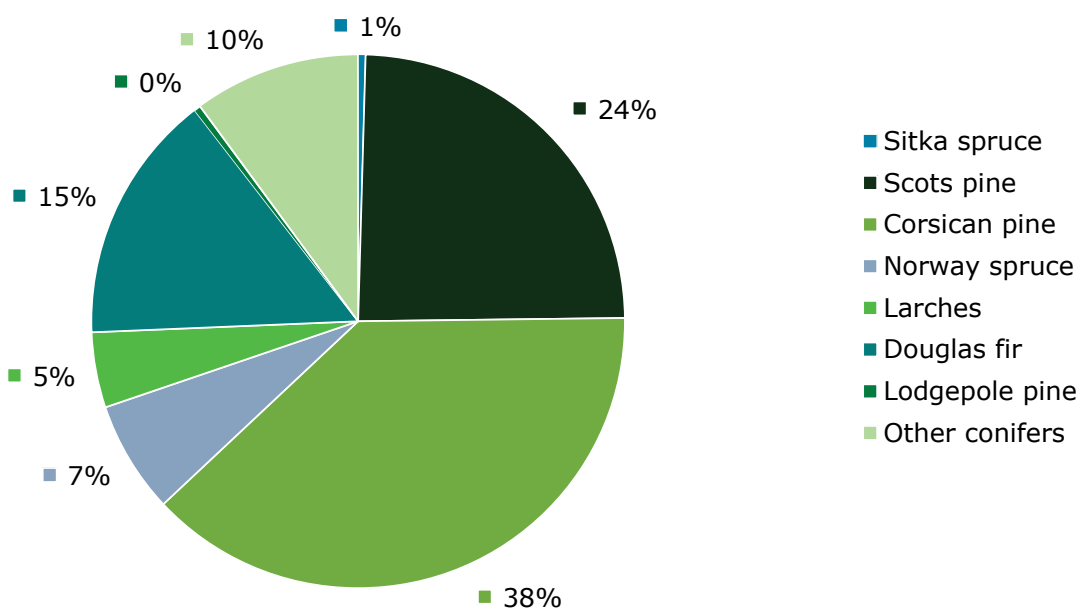
The values in the tables have been independently rounded, so may not add to the totals shown. In some breakdowns of Private sector estimates, the estimates in the body of the table may not sum to the quoted total because each individual value, including the total, has been independently generated by 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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**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)
<b>Conifers</b>				
Sitka spruce	0.1	0.6	40	<b>0.6</b>
Scots pine	2.9	9.6	10	<b>12.5</b>
Corsican pine	4.6	2.3	22	<b>6.9</b>
Norway spruce	0.8	3.4	15	<b>4.2</b>
Larches	0.5	3.6	14	<b>4.2</b>
Douglas fir	1.8	4.8	14	<b>6.6</b>
Lodgepole pine	0.0	0.1	71	<b>0.1</b>
Other conifers	1.2	4.8	12	<b>6.0</b>
<b>All conifers</b>	<b>11.9</b>	<b>29.3</b>	<b>4</b>	<b>41.2</b>
<b>Broadleaves</b>				
Oak	6.2	22.9	5	<b>29.1</b>
Beech	7.2	13.3	8	<b>20.5</b>
Sycamore	0.2	6.3	11	<b>6.5</b>
Ash	0.6	24.3	5	<b>24.8</b>
Birch	0.8	14.4	7	<b>15.2</b>
Sweet chestnut	0.2	4.8	15	<b>4.9</b>
Hazel	0.0	20.8	6	<b>20.8</b>
Hawthorn	0.0	7.4	9	<b>7.4</b>
Alder	0.1	2.8	14	<b>2.9</b>
Willow	0.0	6.1	11	<b>6.1</b>
Other broadleaves	2.0	22.3	6	<b>24.3</b>
<b>All broadleaves</b>	<b>17.1</b>	<b>145.6</b>	<b>1</b>	<b>162.8</b>
<b>All species</b>				
<b>All species</b>	<b>29.1</b>	<b>174.8</b>	<b>1</b>	<b>203.9</b>



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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)
<b>All conifers</b>				
0–10 years	0.8	1.6	25	<b>2.4</b>
11–20 years	1.2	0.7	27	<b>1.9</b>
21–40 years	2.1	5.6	13	<b>7.7</b>
41–60 years	4.6	15.9	7	<b>20.5</b>
61–80 years	2.1	3.5	15	<b>5.7</b>
81–100 years	0.7	1.2	31	<b>1.8</b>
100+ years	0.4	0.9	29	<b>1.2</b>
<b>Total</b>	<b>11.9</b>	<b>29.3</b>	<b>4</b>	<b>41.2</b>
<b>All broadleaves</b>				
0–10 years	0.4	19.8	8	<b>20.2</b>
11–20 years	0.4	18.1	7	<b>18.5</b>
21–40 years	0.7	33.0	4	<b>33.7</b>
41–60 years	3.7	21.8	5	<b>25.5</b>
61–80 years	4.2	17.1	6	<b>21.3</b>
81–100 years	1.1	20.2	6	<b>21.3</b>
100+ years	6.7	15.5	7	<b>22.3</b>
<b>Total</b>	<b>17.1</b>	<b>145.6</b>	<b>1</b>	<b>162.8</b>
<b>All species</b>				
0–10 years	1.2	21.4	7	<b>22.6</b>
11–20 years	1.6	18.8	7	<b>20.4</b>
21–40 years	2.8	38.8	4	<b>41.6</b>
41–60 years	8.3	37.8	5	<b>46.1</b>
61–80 years	6.3	20.6	6	<b>26.9</b>
81–100 years	1.8	21.4	6	<b>23.2</b>
100+ years	7.1	16.1	7	<b>23.2</b>
<b>Total</b>	<b>29.1</b>	<b>174.8</b>	<b>1</b>	<b>203.9</b>

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

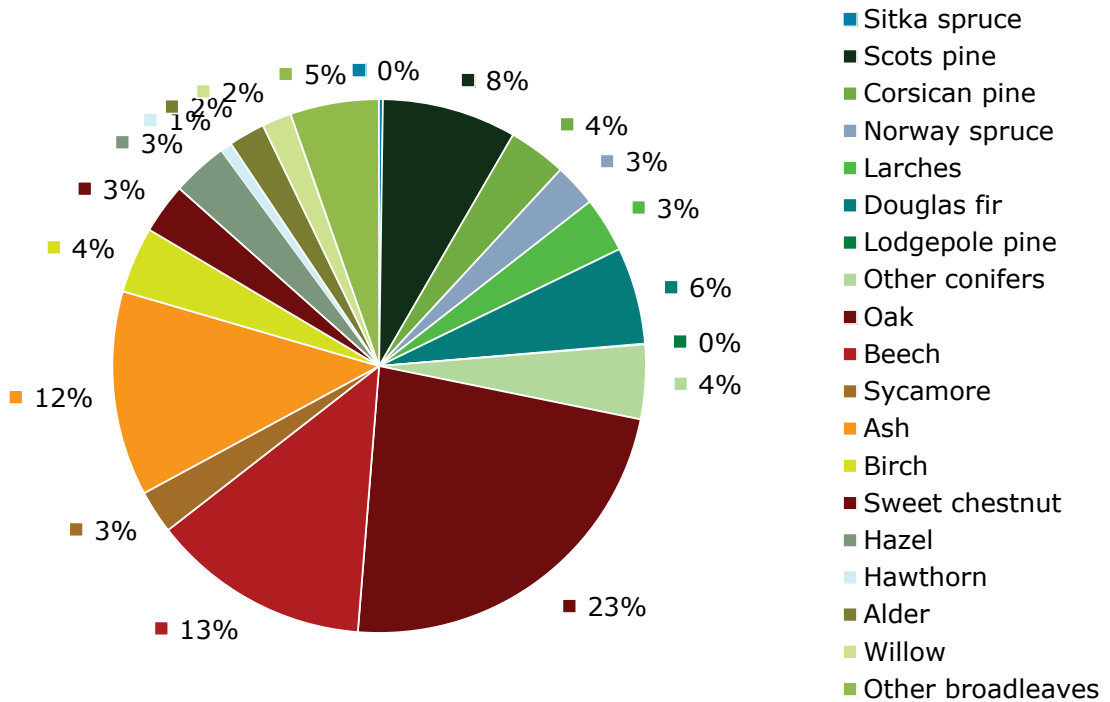
Mean stand DBH	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
<b>All conifers</b>				
0-7 cm	0.2	1.5	24	<b>1.7</b>
7-10 cm	9.9	0.8	23	<b>10.7</b>
10-15 cm	116.4	1.6	22	<b>118.0</b>
15-20 cm	180.4	3.1	16	<b>183.4</b>
20-30 cm	752.3	7.5	11	<b>759.8</b>
30-40 cm	1,075.5	7.2	10	<b>1,082.7</b>
40-60 cm	887.4	5.8	12	<b>893.2</b>
60-80 cm	150.9	1.2	25	<b>152.1</b>
80+ cm	59.9	0.6	46	<b>60.5</b>
<b>Total</b>	<b>11.9</b>	<b>29.3</b>	<b>4</b>	<b>41.2</b>
<b>All broadleaves</b>				
0-7 cm	3.5	24.8	7	<b>28.4</b>
7-10 cm	25.9	25.8	5	<b>51.7</b>
10-15 cm	185.6	18.8	5	<b>204.4</b>
15-20 cm	311.9	13.4	6	<b>325.3</b>
20-30 cm	1,857.6	19.9	5	<b>1,877.5</b>
30-40 cm	1,271.7	14.1	7	<b>1,285.8</b>
40-60 cm	422.7	15.9	7	<b>438.6</b>
60-80 cm	81.8	8.8	9	<b>90.6</b>
80+ cm	37.7	4.0	14	<b>41.7</b>
<b>Total</b>	<b>17.1</b>	<b>145.6</b>	<b>1</b>	<b>162.8</b>
<b>All species</b>				
0-7 cm	3.7	26.3	6	<b>30.1</b>
7-10 cm	35.8	26.7	5	<b>62.5</b>
10-15 cm	302.0	20.5	5	<b>322.5</b>
15-20 cm	492.3	16.6	6	<b>508.8</b>
20-30 cm	2,609.9	27.4	5	<b>2,637.3</b>
30-40 cm	2,347.2	21.4	6	<b>2,368.6</b>
40-60 cm	1,310.1	21.4	6	<b>1,331.5</b>
60-80 cm	232.7	9.8	8	<b>242.5</b>
80+ cm	97.5	4.7	14	<b>102.2</b>
<b>Total</b>	<b>29.1</b>	<b>174.8</b>	<b>1</b>	<b>203.9</b>

**Table 4** Felled area at 31 March 2012

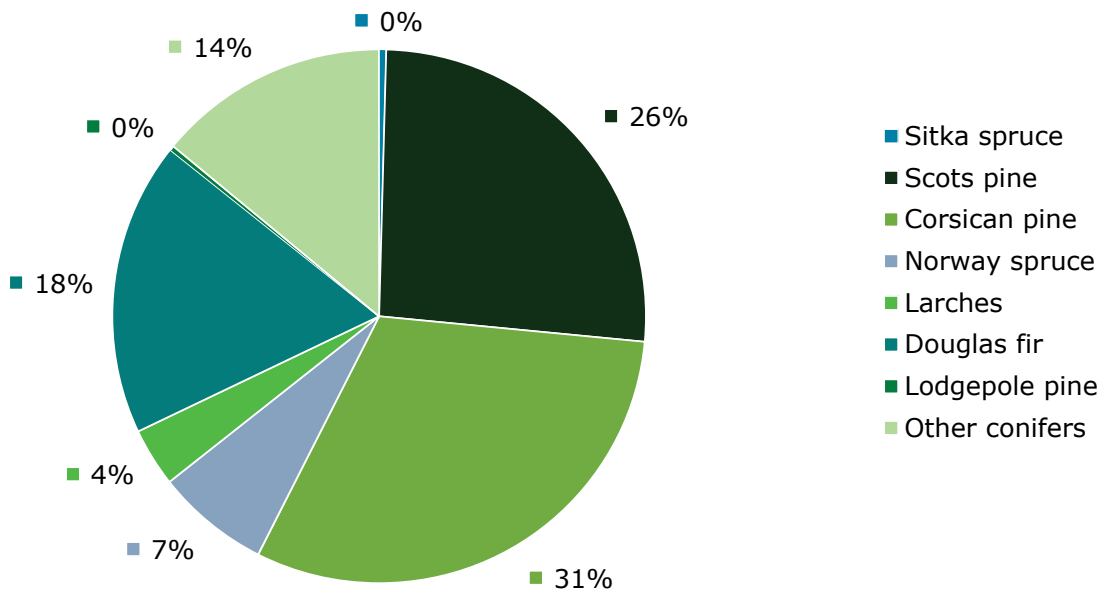
Clearfelled area	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
	0.8	1.6	28	<b>2.4</b>

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

Principal species	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>Conifers</b>				
Sitka spruce	14	105	30	<b>119</b>
Scots pine	844	3,350	11	<b>4,194</b>
Corsican pine	1,001	810	22	<b>1,811</b>
Norway spruce	222	1,110	18	<b>1,332</b>
Larches	115	1,603	14	<b>1,718</b>
Douglas fir	575	2,453	19	<b>3,028</b>
Lodgepole pine	9	22	77	<b>31</b>
Other conifers	453	1,863	14	<b>2,316</b>
<b>All conifers</b>	<b>3,233</b>	<b>11,337</b>	<b>5</b>	<b>14,569</b>
<b>Broadleaves</b>				
Oak	1,796	10,106	7	<b>11,902</b>
Beech	1,837	4,977	10	<b>6,814</b>
Sycamore	21	1,330	12	<b>1,351</b>
Ash	79	6,322	7	<b>6,401</b>
Birch	88	1,976	8	<b>2,064</b>
Sweet chestnut	34	1,537	14	<b>1,571</b>
Hazel	4	1,739	8	<b>1,742</b>
Hawthorn	0	355	12	<b>355</b>
Alder	18	1,121	18	<b>1,139</b>
Willow	0	914	18	<b>914</b>
Other broadleaves	321	2,455	10	<b>2,777</b>
<b>All broadleaves</b>	<b>4,198</b>	<b>32,844</b>	<b>3</b>	<b>37,043</b>
<b>All species</b>				
<b>All species</b>	<b>7,431</b>	<b>44,128</b>	<b>2</b>	<b>51,559</b>

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**Table 6** Standing volume by age class at 31 March 2012

Age class	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
0–10 years	0	2	51	<b>3</b>
11–20 years	63	35	36	<b>98</b>
21–40 years	379	1,340	15	<b>1,720</b>
41–60 years	1,488	6,563	7	<b>8,051</b>
61–80 years	806	1,918	17	<b>2,723</b>
81–100 years	294	1,018	42	<b>1,311</b>
100+ years	203	461	31	<b>663</b>
<b>Total</b>	<b>3,233</b>	<b>11,337</b>	<b>5</b>	<b>14,569</b>
<b>All broadleaves</b>				
0–10 years	0	44	36	<b>44</b>
11–20 years	6	694	13	<b>700</b>
21–40 years	41	4,413	6	<b>4,455</b>
41–60 years	601	5,579	7	<b>6,180</b>
61–80 years	870	5,238	8	<b>6,107</b>
81–100 years	237	8,797	7	<b>9,034</b>
100+ years	2,443	8,079	9	<b>10,522</b>
<b>Total</b>	<b>4,198</b>	<b>32,844</b>	<b>3</b>	<b>37,043</b>
<b>All species</b>				
0–10 years	0	46	34	<b>46</b>
11–20 years	69	731	13	<b>800</b>
21–40 years	421	5,776	6	<b>6,197</b>
41–60 years	2,089	12,160	5	<b>14,249</b>
61–80 years	1,675	7,125	7	<b>8,800</b>
81–100 years	531	9,840	8	<b>10,371</b>
100+ years	2,646	8,450	8	<b>11,096</b>
<b>Total</b>	<b>7,431</b>	<b>44,128</b>	<b>2</b>	<b>51,559</b>

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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 <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
0-7 cm	0	0	75	<b>0</b>
7-10 cm	10	21	23	<b>30</b>
10-15 cm	116	228	28	<b>345</b>
15-20 cm	180	741	15	<b>922</b>
20-30 cm	752	2,444	11	<b>3,197</b>
30-40 cm	1,075	3,163	10	<b>4,239</b>
40-60 cm	887	3,411	12	<b>4,298</b>
60-80 cm	151	704	22	<b>855</b>
80+ cm	60	624	63	<b>684</b>
<b>Total</b>	<b>3,233</b>	<b>11,337</b>	<b>5</b>	<b>14,569</b>
<b>All broadleaves</b>				
0-7 cm	4	77	15	<b>81</b>
7-10 cm	26	973	7	<b>998</b>
10-15 cm	186	2,265	6	<b>2,450</b>
15-20 cm	312	2,469	7	<b>2,781</b>
20-30 cm	1,858	5,359	5	<b>7,216</b>
30-40 cm	1,272	5,181	8	<b>6,453</b>
40-60 cm	423	7,186	7	<b>7,609</b>
60-80 cm	82	5,745	9	<b>5,826</b>
80+ cm	38	3,590	16	<b>3,628</b>
<b>Total</b>	<b>4,198</b>	<b>32,844</b>	<b>3</b>	<b>37,043</b>
<b>All species</b>				
0-7 cm	4	77	15	<b>81</b>
7-10 cm	36	995	7	<b>1,031</b>
10-15 cm	302	2,498	6	<b>2,800</b>
15-20 cm	492	3,223	6	<b>3,715</b>
20-30 cm	2,610	7,818	5	<b>10,428</b>
30-40 cm	2,347	8,379	6	<b>10,726</b>
40-60 cm	1,310	10,540	6	<b>11,850</b>
60-80 cm	233	6,376	8	<b>6,609</b>
80+ cm	98	4,221	17	<b>4,318</b>
<b>Total</b>	<b>7,431</b>	<b>44,128</b>	<b>2</b>	<b>51,559</b>

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## 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)
<b>Conifers</b>				
Sitka spruce	8	65	30	<b>73</b>
Scots pine	585	2,242	11	<b>2,827</b>
Corsican pine	604	461	22	<b>1,064</b>
Norway spruce	123	590	17	<b>713</b>
Larches	72	946	14	<b>1,019</b>
Douglas fir	381	1,541	19	<b>1,922</b>
Lodgepole pine	6	14	76	<b>20</b>
Other conifers	250	1,067	13	<b>1,317</b>
<b>All conifers</b>	<b>2,029</b>	<b>6,939</b>	<b>5</b>	<b>8,967</b>
<b>Broadleaves</b>				
Oak	1,586	8,405	7	<b>9,991</b>
Beech	1,732	4,264	10	<b>5,995</b>
Sycamore	19	1,111	12	<b>1,131</b>
Ash	73	5,217	6	<b>5,290</b>
Birch	86	1,836	8	<b>1,922</b>
Sweet chestnut	31	1,192	14	<b>1,224</b>
Hazel	4	1,690	8	<b>1,693</b>
Hawthorn	0	421	11	<b>421</b>
Alder	15	815	18	<b>830</b>
Willow	0	938	17	<b>938</b>
Other broadleaves	289	2,272	9	<b>2,561</b>
<b>All broadleaves</b>	<b>3,835</b>	<b>28,179</b>	<b>3</b>	<b>32,014</b>
<b>All species</b>				
<b>All species</b>	<b>5,864</b>	<b>35,095</b>	<b>2</b>	<b>40,959</b>

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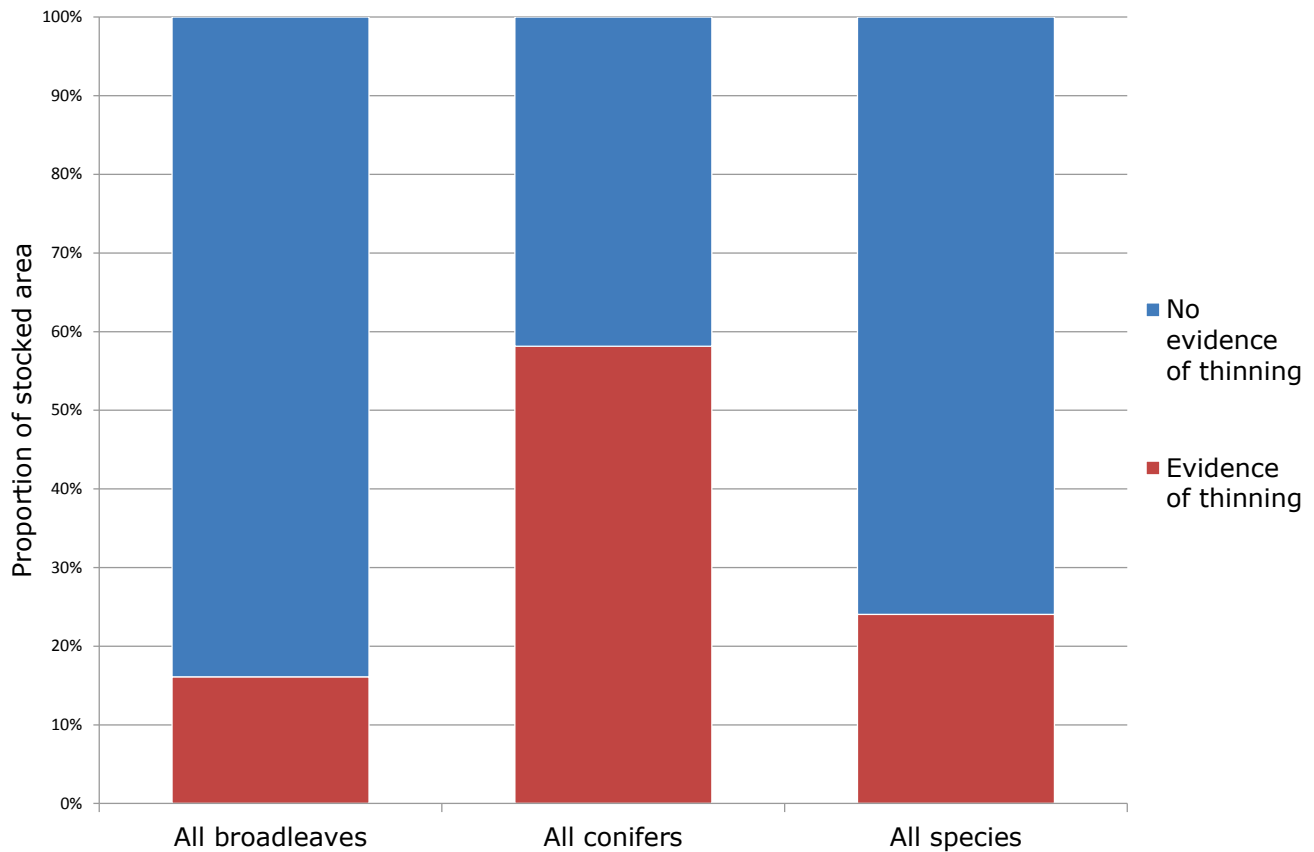
**Table 9** Total carbon stocks in principal tree species at 31 March 2012

Principal species	FC	Private sector		Total
	carbon (000 t)	carbon (000 t)	SE%	carbon (000 t)
<b>Conifers</b>				
Sitka spruce	4	32	30	<b>37</b>
Scots pine	292	1,121	11	<b>1,413</b>
Corsican pine	302	230	22	<b>532</b>
Norway spruce	61	295	17	<b>357</b>
Larches	36	473	14	<b>509</b>
Douglas fir	190	770	19	<b>961</b>
Lodgepole pine	3	7	76	<b>10</b>
Other conifers	125	534	13	<b>659</b>
<b>All conifers</b>	<b>1,014</b>	<b>3,469</b>	<b>5</b>	<b>4,484</b>
<b>Broadleaves</b>				
Oak	793	4,203	7	<b>4,996</b>
Beech	866	2,132	10	<b>2,998</b>
Sycamore	10	556	12	<b>565</b>
Ash	37	2,608	6	<b>2,645</b>
Birch	43	918	8	<b>961</b>
Sweet chestnut	16	596	14	<b>612</b>
Hazel	2	845	8	<b>847</b>
Hawthorn	0	210	11	<b>210</b>
Alder	7	407	18	<b>415</b>
Willow	0	469	17	<b>469</b>
Other broadleaves	145	1,136	9	<b>1,280</b>
<b>All broadleaves</b>	<b>1,918</b>	<b>14,089</b>	<b>3</b>	<b>16,007</b>
<b>All species</b>				
<b>All species</b>	<b>2,932</b>	<b>17,547</b>	<b>2</b>	<b>20,479</b>



## Evidence of thinning

**Figure 3** Evidence of thinning in Private sector sites



## 50-year forecast of timber 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 **Figures 4–8 and Tables 10–12** the estimates for the Forestry Commission are based on harvesting regimes derived from Forestry Commission felling and thinning plans as of 31 March 2012.

For the Private sector, information for **Figures 4–8 and Tables 10–12** is based on a scenario which assumes felling at age of maximum mean annual increment with moderate wind risk measures for conifers. For broadleaves, however, only those areas where there is evidence of thinning are assumed to be managed in future. This is a highly conservative assumption but better reflects current practice than assuming all stands will be managed. In turn it is assumed that these broadleaved stands are managed to felling at age of maximum mean annual increment with moderate wind risk measures.

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

- 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 assume:

- no reduction in stocked area
- like-for-like species choices are used for broadleaves
- 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 Forestry Commission and Private sector forecasts.

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

In **Figures 9–13** and **Tables 13–15** the management assumptions for the Private sector hardwoods have been changed to assume all hardwoods are thinned and felled rather than only those in areas that have evidence of thinning. In this report, the tables and figures for estimates under this management scenario will be labelled as 'unrestricted'.

**Figures 14–15** and **Table 16** compare the Private sector hardwood timber availability under the two scenarios. Figure 14 shows the Private sector hardwood availability for the two scenarios during the 50-year forecast. Figure 15 and Table 16 compare the hardwood availability in first 15 years of the forecast under the two scenarios.

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## 50-year forecast of timber availability under the 'headline' harvesting scenario

**Table 10** 50-year forecast of timber availability by time period and principal species

Principal species	2013-16			2017-21			2022-26			2027-31						
	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total				
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)				
<b>All conifers</b>	<b>137</b>	<b>614</b>	<b>11</b>	<b>752</b>	<b>128</b>	<b>563</b>	<b>9</b>	<b>691</b>	<b>100</b>	<b>442</b>	<b>9</b>	<b>542</b>	<b>91</b>	<b>490</b>	<b>10</b>	<b>581</b>
Sitka spruce	0	3	41	3	0	8	30	9	0	6	44	6	0	6	50	6
Scots pine	26	117	24	143	23	140	18	163	17	115	19	131	17	162	21	179
Corsican pine	56	89	34	145	52	47	41	99	45	35	45	80	29	18	36	48
Norway spruce	11	39	19	50	10	72	37	82	8	64	26	72	9	95	30	104
Larches	5	88	29	93	5	83	18	87	3	51	16	54	3	54	19	57
Douglas fir	21	167	26	188	19	115	23	134	16	92	26	108	19	71	29	90
Lodgepole pine	1	0	73	1	0	0	98	0	0	5	82	5	0	0	98	0
Other conifers	19	110	27	129	19	97	24	115	12	74	23	85	12	83	22	95
<b>All broadleaves</b>	<b>69</b>	<b>387</b>	<b>12</b>	<b>456</b>	<b>10</b>	<b>330</b>	<b>12</b>	<b>339</b>	<b>55</b>	<b>180</b>	<b>15</b>	<b>236</b>	<b>10</b>	<b>160</b>	<b>25</b>	<b>170</b>
Oak	13	59	24	72	2	82	29	84	10	57	37	67	2	24	27	25
Beech	47	53	25	101	5	91	22	96	38	51	25	89	5	78	49	84
Sycamore	1	24	34	25	0	12	38	12	1	4	26	5	0	4	24	4
Ash	2	140	21	142	1	70	18	71	2	20	18	22	1	13	32	15
Birch	1	30	25	31	1	34	23	34	1	18	21	19	0	10	32	10
Sweet chestnut	0	37	64	37	0	4	25	4	0	8	27	9	0	7	34	7
Hazel	0	6	57	6	0	7	51	7	0	7	26	7	0	8	46	8
Hawthorn	0	1	32	1	0	1	27	1	0	1	23	1	0	1	27	1
Alder	0	1	71	1	0	1	67	1	0	1	37	1	0	1	63	1
Willow	0	1	26	1	0	1	23	1	0	1	21	1	0	2	20	2
Other broadleaves	4	34	37	38	1	27	36	28	3	10	21	13	1	10	15	11
<b>All species</b>	<b>206</b>	<b>994</b>	<b>8</b>	<b>1,201</b>	<b>138</b>	<b>888</b>	<b>7</b>	<b>1,026</b>	<b>156</b>	<b>621</b>	<b>8</b>	<b>777</b>	<b>101</b>	<b>652</b>	<b>10</b>	<b>752</b>

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**Table 10 (cont'd)** 50-year forecast of timber availability by time period and principal species

Principal species	2032-36			2037-41			2042-46			2047-51						
	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total				
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)				
<b>All conifers</b>	<b>76</b>	<b>425</b>	<b>11</b>	<b>501</b>	<b>81</b>	<b>302</b>	<b>14</b>	<b>384</b>	<b>130</b>	<b>288</b>	<b>14</b>	<b>419</b>	<b>90</b>	<b>235</b>	<b>12</b>	<b>325</b>
Sitka spruce	2	9	26	11	2	8	19	10	4	11	19	15	2	11	13	14
Scots pine	11	211	19	222	17	124	26	141	19	79	25	99	15	75	25	90
Corsican pine	32	6	38	39	30	43	60	74	66	15	54	80	29	0	24	29
Norway spruce	6	48	34	54	6	21	25	27	6	56	34	62	8	33	31	42
Larches	3	33	18	36	3	26	19	29	7	22	19	28	5	21	19	26
Douglas fir	15	65	27	79	15	47	25	62	18	46	30	64	17	35	12	52
Lodgepole pine	0	0	98	0	0	0	57	0	0	1	94	1	0	0	43	0
Other conifers	7	53	27	59	8	32	21	40	11	58	42	69	13	59	21	72
<b>All broadleaves</b>	<b>50</b>	<b>146</b>	<b>14</b>	<b>196</b>	<b>36</b>	<b>146</b>	<b>14</b>	<b>183</b>	<b>75</b>	<b>200</b>	<b>12</b>	<b>275</b>	<b>28</b>	<b>159</b>	<b>13</b>	<b>187</b>
Oak	9	23	31	32	6	19	26	24	22	22	24	45	9	40	44	49
Beech	35	63	29	98	26	64	30	90	41	53	34	94	13	21	15	33
Sycamore	1	3	22	4	0	4	21	4	1	7	19	7	1	9	25	9
Ash	2	15	16	17	1	19	16	20	3	25	13	29	2	30	15	32
Birch	1	7	21	7	1	10	18	11	1	21	21	23	1	14	15	15
Sweet chestnut	0	13	46	13	0	3	29	4	0	28	48	28	0	7	66	7
Hazel	0	5	21	5	0	7	26	7	0	9	21	9	0	15	20	15
Hawthorn	0	1	15	1	0	2	13	2	0	2	13	2	0	2	13	2
Alder	0	0	39	1	0	1	41	1	0	1	35	1	0	1	47	1
Willow	0	2	19	2	0	3	28	3	0	4	30	4	0	2	25	2
Other broadleaves	3	11	12	14	2	13	11	16	5	25	24	30	2	17	15	19
<b>All species</b>	<b>127</b>	<b>571</b>	<b>9</b>	<b>698</b>	<b>118</b>	<b>449</b>	<b>11</b>	<b>567</b>	<b>205</b>	<b>488</b>	<b>10</b>	<b>693</b>	<b>118</b>	<b>393</b>	<b>9</b>	<b>511</b>

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**Table 10 (cont'd)** 50-year forecast of timber availability by time period and principal species

Principal species	2052-56			2057-61				
	FC	Private sector	Total	FC	Private sector	Total		
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)		
<b>All conifers</b>	<b>80</b>	<b>296</b>	<b>16</b>	<b>376</b>	<b>85</b>	<b>234</b>	<b>8</b>	<b>318</b>
Sitka spruce	2	16	11	18	2	17	11	19
Scots pine	15	70	25	85	18	83	20	101
Corsican pine	25	1	24	26	21	1	23	21
Norway spruce	6	94	47	100	7	20	16	28
Larches	3	21	18	24	4	23	18	27
Douglas fir	19	47	15	65	19	43	11	62
Lodgepole pine	0	0	40	0	1	0	40	1
Other conifers	10	47	13	57	13	47	10	60
<b>All broadleaves</b>	<b>54</b>	<b>173</b>	<b>11</b>	<b>227</b>	<b>35</b>	<b>191</b>	<b>16</b>	<b>226</b>
Oak	13	23	30	35	9	34	40	42
Beech	35	55	29	90	20	74	31	94
Sycamore	1	7	25	8	0	3	30	3
Ash	1	35	13	36	1	31	35	32
Birch	1	12	15	13	2	14	16	15
Sweet chestnut	1	4	46	5	1	11	65	11
Hazel	0	7	20	7	0	5	21	5
Hawthorn	0	2	13	2	0	4	38	4
Alder	0	1	51	1	0	1	79	1
Willow	0	6	41	6	0	3	47	3
Other broadleaves	3	19	18	22	3	11	14	14
<b>All species</b>	<b>134</b>	<b>468</b>	<b>11</b>	<b>602</b>	<b>120</b>	<b>423</b>	<b>8</b>	<b>542</b>

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**Table 11** 50-year forecast of standing volume; annual average volumes within periods

Forecast period	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
2013-16	3,164	10,308	5	<b>13,473</b>
2017-21	3,209	9,224	6	<b>12,433</b>
2022-26	3,266	7,876	6	<b>11,142</b>
2027-31	3,353	6,686	7	<b>10,039</b>
2032-36	3,474	5,469	8	<b>8,944</b>
2037-41	3,552	5,115	8	<b>8,666</b>
2042-46	3,508	4,768	8	<b>8,276</b>
2047-51	3,405	4,938	7	<b>8,343</b>
2052-56	3,432	5,293	6	<b>8,725</b>
2057-61	3,415	5,567	6	<b>8,983</b>
<b>All broadleaves</b>				
2013-16	4,148	33,163	3	<b>37,311</b>
2017-21	4,318	34,497	3	<b>38,814</b>
2022-26	4,430	36,756	3	<b>41,186</b>
2027-31	4,578	39,657	2	<b>44,235</b>
2032-36	4,699	42,535	2	<b>47,234</b>
2037-41	4,731	45,349	2	<b>50,080</b>
2042-46	4,771	47,659	2	<b>52,430</b>
2047-51	4,759	49,868	2	<b>54,627</b>
2052-56	4,801	51,855	2	<b>56,656</b>
2057-61	4,818	53,374	2	<b>58,192</b>
<b>All species</b>				
2013-16	7,312	43,442	2	<b>50,754</b>
2017-21	7,527	43,708	2	<b>51,235</b>
2022-26	7,696	44,640	2	<b>52,336</b>
2027-31	7,931	46,350	2	<b>54,281</b>
2032-36	8,173	48,010	2	<b>56,184</b>
2037-41	8,283	50,464	2	<b>58,747</b>
2042-46	8,279	52,418	2	<b>60,697</b>
2047-51	8,164	54,789	2	<b>62,952</b>
2052-56	8,234	57,123	2	<b>65,356</b>
2057-61	8,233	58,907	2	<b>67,140</b>

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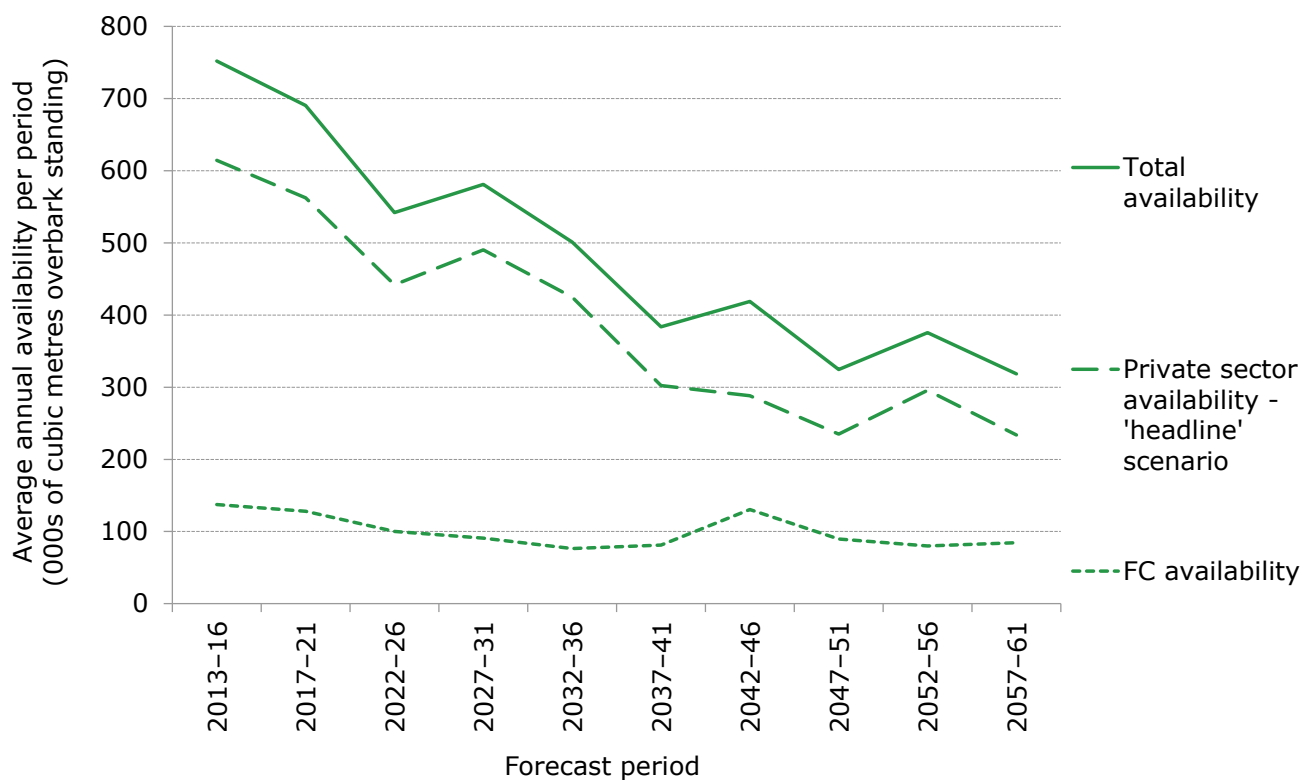
**Table 12** 50-year forecast of net increment; annual average volumes within periods

Forecast period	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
2013-16	119	323	5	<b>442</b>
2017-21	118	294	5	<b>411</b>
2022-26	108	247	6	<b>355</b>
2027-31	103	227	7	<b>331</b>
2032-36	99	214	7	<b>313</b>
2037-41	96	234	6	<b>330</b>
2042-46	92	260	6	<b>352</b>
2047-51	86	296	5	<b>382</b>
2052-56	85	328	5	<b>413</b>
2057-61	85	349	4	<b>433</b>
<b>All broadleaves</b>				
2013-16	60	563	4	<b>623</b>
2017-21	60	660	2	<b>720</b>
2022-26	58	726	2	<b>784</b>
2027-31	58	740	2	<b>797</b>
2032-36	58	721	2	<b>779</b>
2037-41	55	688	2	<b>744</b>
2042-46	54	639	2	<b>693</b>
2047-51	51	589	2	<b>640</b>
2052-56	49	544	3	<b>593</b>
2057-61	45	499	3	<b>545</b>
<b>All species</b>				
2013-16	179	887	3	<b>1,065</b>
2017-21	177	955	2	<b>1,132</b>
2022-26	166	974	2	<b>1,140</b>
2027-31	161	968	2	<b>1,128</b>
2032-36	156	935	2	<b>1,091</b>
2037-41	151	921	2	<b>1,073</b>
2042-46	146	897	2	<b>1,043</b>
2047-51	137	883	2	<b>1,020</b>
2052-56	133	870	2	<b>1,003</b>
2057-61	130	845	2	<b>975</b>



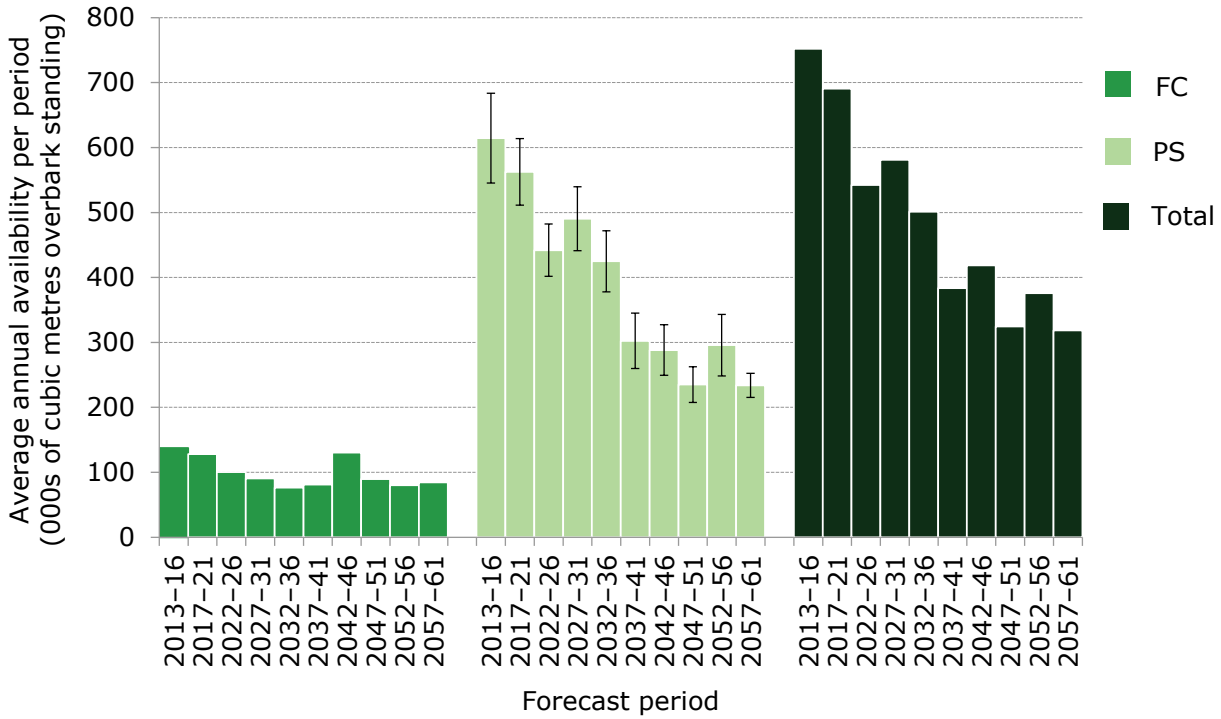
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**Figure 4** Overview of 50-year forecast of average annual softwood availability

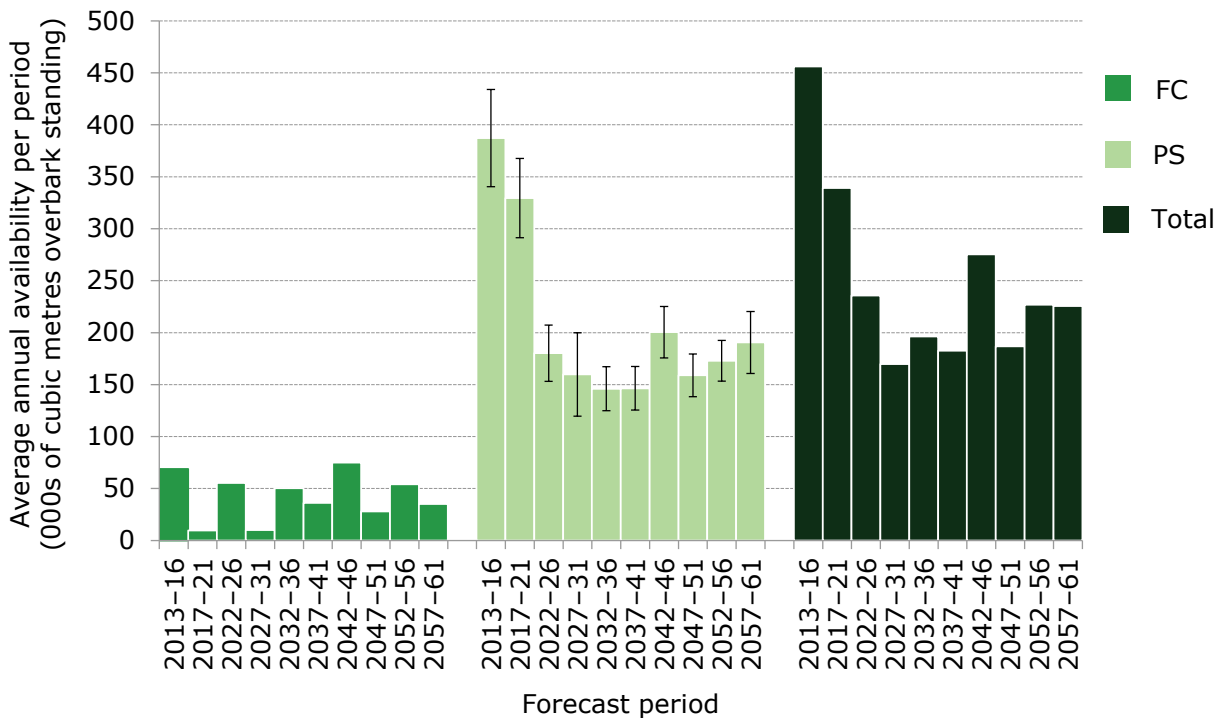


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**Figure 5** 50-year forecast of average annual softwood availability

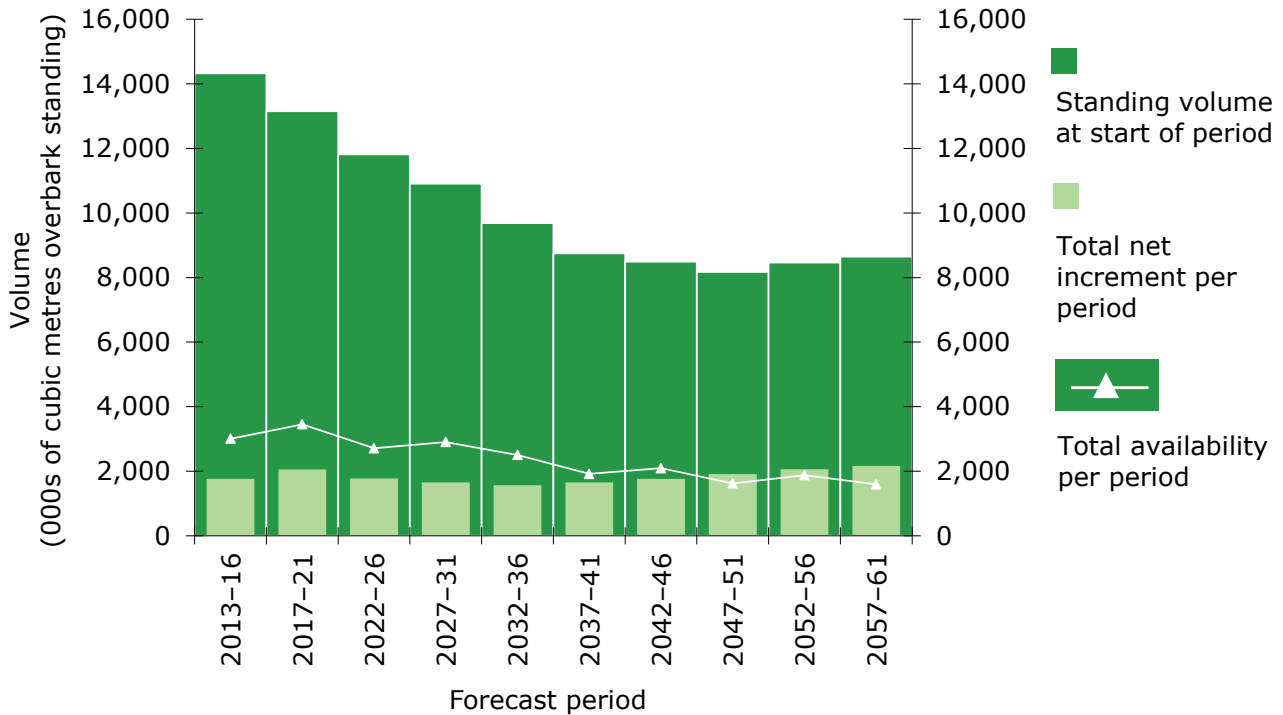


**Figure 6** 50-year forecast of average annual hardwood availability

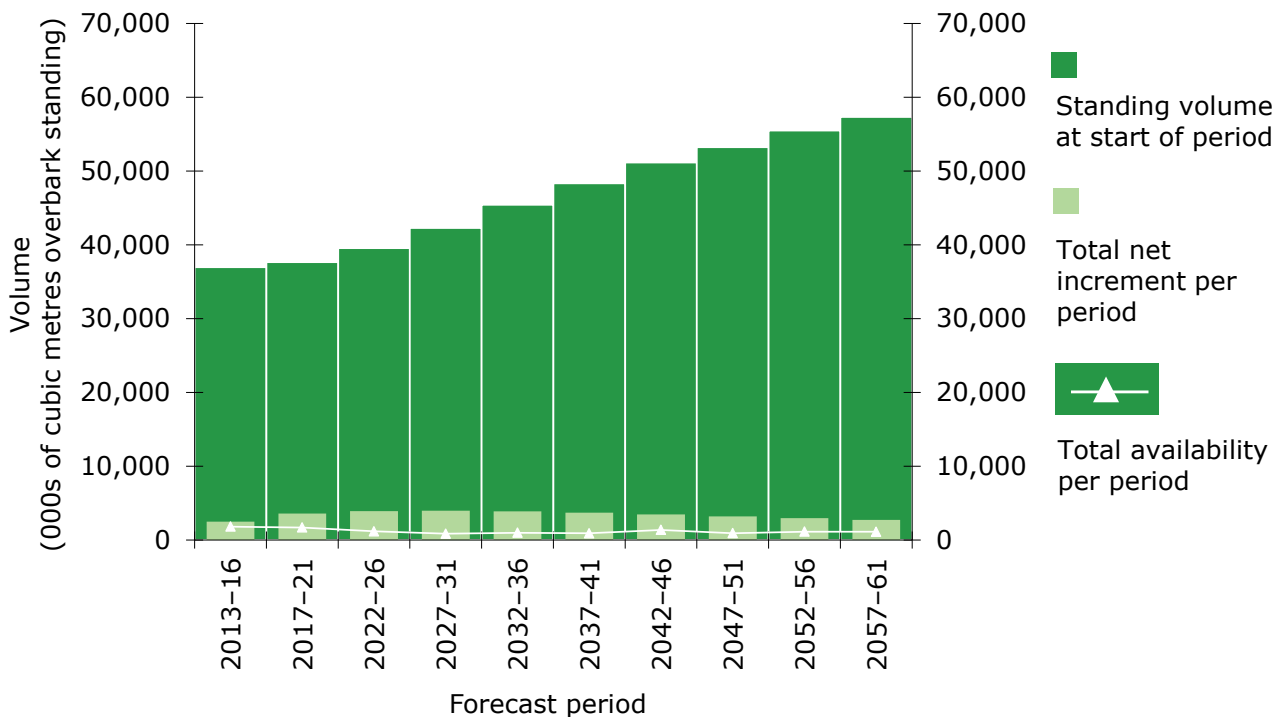


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**Figure 7** 50-year forecast of softwood standing volume, increment and availability



**Figure 8** 50-year forecast of hardwood standing volume, increment and availability



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## 50-year forecast of timber availability under the 'unrestricted' scenario

**Table 13** 50-year forecast of timber availability by time period and principal species – unrestricted biological potential for Private sector hardwoods

Principal species	2013-16			2017-21			2022-26			2027-31						
	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total				
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)				
<b>All conifers</b>	<b>137</b>	<b>614</b>	<b>11</b>	<b>752</b>	<b>128</b>	<b>563</b>	<b>9</b>	<b>691</b>	<b>100</b>	<b>442</b>	<b>9</b>	<b>542</b>	<b>91</b>	<b>490</b>	<b>10</b>	<b>581</b>
Sitka spruce	0	3	41	3	0	8	30	9	0	6	44	6	0	6	50	6
Scots pine	26	117	24	143	23	140	18	163	17	115	19	131	17	162	21	179
Corsican pine	56	89	34	145	52	47	41	99	45	35	45	80	29	18	36	48
Norway spruce	11	39	19	50	10	72	37	82	8	64	26	72	9	95	30	104
Larches	5	88	29	93	5	83	18	87	3	51	16	54	3	54	19	57
Douglas fir	21	167	26	188	19	115	23	134	16	92	26	108	19	71	29	90
Lodgepole pine	1	0	73	1	0	0	98	0	0	5	82	5	0	0	98	0
Other conifers	19	110	27	129	19	97	24	115	12	74	23	85	12	83	22	95
<b>All broadleaves</b>	<b>69</b>	<b>2,194</b>	<b>5</b>	<b>2,263</b>	<b>10</b>	<b>1,741</b>	<b>4</b>	<b>1,751</b>	<b>55</b>	<b>944</b>	<b>6</b>	<b>999</b>	<b>10</b>	<b>760</b>	<b>8</b>	<b>770</b>
Oak	13	269	16	281	2	283	17	285	10	199	19	209	2	212	13	214
Beech	47	118	16	165	5	153	15	159	38	137	22	176	5	129	30	134
Sycamore	1	152	15	153	0	111	15	111	1	50	20	51	0	20	13	20
Ash	2	807	9	809	1	505	7	506	2	173	8	175	1	89	12	90
Birch	1	175	9	176	1	211	10	212	1	101	10	101	0	55	16	55
Sweet chestnut	0	94	28	95	0	55	20	55	0	37	19	37	0	48	28	48
Hazel	0	146	9	146	0	149	9	149	0	97	12	97	0	50	17	50
Hawthorn	0	15	18	15	0	16	17	16	0	11	12	11	0	11	11	11
Alder	0	122	21	122	0	102	18	102	0	31	15	31	0	15	46	15
Willow	0	33	23	33	0	25	16	25	0	20	14	20	0	57	43	57
Other broadleaves	4	267	17	270	1	135	11	137	3	84	13	86	1	78	12	79
<b>All species</b>	<b>206</b>	<b>2,805</b>	<b>4</b>	<b>3,011</b>	<b>138</b>	<b>2,302</b>	<b>4</b>	<b>2,440</b>	<b>156</b>	<b>1,386</b>	<b>5</b>	<b>1,542</b>	<b>101</b>	<b>1,253</b>	<b>6</b>	<b>1,354</b>

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**Table 13 (cont'd)** 50-year forecast of timber availability by time period and principal species – unrestricted biological potential for Private sector hardwoods

Principal species	2032-36			2037-41			2042-46			2047-51						
	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total	FC	Private sector	Total				
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)				
<b>All conifers</b>	<b>76</b>	<b>425</b>	<b>11</b>	<b>501</b>	<b>81</b>	<b>302</b>	<b>14</b>	<b>384</b>	<b>130</b>	<b>288</b>	<b>14</b>	<b>419</b>	<b>90</b>	<b>235</b>	<b>12</b>	<b>325</b>
Sitka spruce	2	9	26	11	2	8	19	10	4	11	19	15	2	11	13	14
Scots pine	11	211	19	222	17	124	26	141	19	79	25	99	15	75	25	90
Corsican pine	32	6	38	39	30	43	60	74	66	15	54	80	29	0	24	29
Norway spruce	6	48	34	54	6	21	25	27	6	56	34	62	8	33	31	42
Larches	3	33	18	36	3	26	19	29	7	22	19	28	5	21	19	26
Douglas fir	15	65	27	79	15	47	25	62	18	46	30	64	17	35	12	52
Lodgepole pine	0	0	98	0	0	0	57	0	0	1	94	1	0	0	43	0
Other conifers	7	53	27	59	8	32	21	40	11	58	42	69	13	59	21	72
<b>All broadleaves</b>	<b>50</b>	<b>667</b>	<b>7</b>	<b>717</b>	<b>36</b>	<b>666</b>	<b>5</b>	<b>702</b>	<b>75</b>	<b>747</b>	<b>5</b>	<b>822</b>	<b>28</b>	<b>723</b>	<b>5</b>	<b>751</b>
Oak	9	101	11	110	6	108	12	114	22	108	14	131	9	102	18	111
Beech	35	138	27	173	26	108	21	134	41	98	22	139	13	55	12	67
Sycamore	1	23	16	24	0	25	13	25	1	37	12	38	1	44	15	45
Ash	2	121	14	123	1	113	8	114	3	137	7	141	2	155	12	157
Birch	1	49	12	50	1	47	9	48	1	84	11	85	1	73	9	73
Sweet chestnut	0	51	27	52	0	19	22	20	0	51	30	52	0	38	33	38
Hazel	0	53	22	53	0	63	14	63	0	62	13	62	0	90	9	90
Hawthorn	0	14	11	14	0	26	19	26	0	19	10	19	0	17	10	17
Alder	0	11	22	12	0	13	16	13	0	17	17	17	0	18	19	18
Willow	0	19	12	19	0	56	25	56	0	28	28	28	0	21	16	21
Other broadleaves	3	83	10	86	2	87	8	89	5	103	8	108	2	108	13	110
<b>All species</b>	<b>127</b>	<b>1,093</b>	<b>6</b>	<b>1,219</b>	<b>118</b>	<b>970</b>	<b>6</b>	<b>1,087</b>	<b>205</b>	<b>1,036</b>	<b>5</b>	<b>1,241</b>	<b>118</b>	<b>958</b>	<b>5</b>	<b>1,076</b>

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**Table 13 (cont'd)** 50-year forecast of timber availability by time period and principal species – unrestricted biological potential for Private sector hardwoods

Principal species	2052-56			2057-61				
	FC	Private sector	Total	FC	Private sector	Total		
	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)		
<b>All conifers</b>	<b>80</b>	<b>296</b>	<b>16</b>	<b>376</b>	<b>85</b>	<b>234</b>	<b>8</b>	<b>318</b>
Sitka spruce	2	16	11	18	2	17	11	19
Scots pine	15	70	25	85	18	83	20	101
Corsican pine	25	1	24	26	21	1	23	21
Norway spruce	6	94	47	100	7	20	16	28
Larches	3	21	18	24	4	23	18	27
Douglas fir	19	47	15	65	19	43	11	62
Lodgepole pine	0	0	40	0	1	0	40	1
Other conifers	10	47	13	57	13	47	10	60
<b>All broadleaves</b>	<b>54</b>	<b>796</b>	<b>4</b>	<b>850</b>	<b>35</b>	<b>736</b>	<b>6</b>	<b>771</b>
Oak	13	88	13	101	9	113	17	121
Beech	35	98	19	133	20	141	21	160
Sycamore	1	37	18	38	0	24	14	24
Ash	1	195	8	196	1	110	11	111
Birch	1	69	10	70	2	68	10	69
Sweet chestnut	1	21	21	22	1	54	31	54
Hazel	0	62	11	62	0	55	9	55
Hawthorn	0	21	10	21	0	29	16	29
Alder	0	16	17	16	0	14	15	14
Willow	0	56	24	56	0	33	21	33
Other broadleaves	3	128	11	130	3	91	9	93
<b>All species</b>	<b>134</b>	<b>1,092</b>	<b>5</b>	<b>1,226</b>	<b>120</b>	<b>969</b>	<b>5</b>	<b>1,089</b>

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**Table 14** 50-year forecast of standing volume; annual average volumes within periods – unrestricted biological potential for Private sector hardwoods

Forecast period	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
2013–16	3,164	10,308	5	<b>13,473</b>
2017–21	3,209	9,224	6	<b>12,433</b>
2022–26	3,266	7,876	6	<b>11,142</b>
2027–31	3,353	6,686	7	<b>10,039</b>
2032–36	3,474	5,469	8	<b>8,944</b>
2037–41	3,552	5,115	8	<b>8,666</b>
2042–46	3,508	4,768	8	<b>8,276</b>
2047–51	3,405	4,938	7	<b>8,343</b>
2052–56	3,432	5,293	6	<b>8,725</b>
2057–61	3,415	5,567	6	<b>8,983</b>
<b>All broadleaves</b>				
2013–16	4,148	27,779	3	<b>31,927</b>
2017–21	4,318	22,652	3	<b>26,970</b>
2022–26	4,430	18,865	4	<b>23,295</b>
2027–31	4,578	18,460	3	<b>23,038</b>
2032–36	4,699	18,616	3	<b>23,315</b>
2037–41	4,731	19,412	3	<b>24,143</b>
2042–46	4,771	20,087	3	<b>24,858</b>
2047–51	4,759	21,056	3	<b>25,814</b>
2052–56	4,801	21,547	3	<b>26,348</b>
2057–61	4,818	21,749	3	<b>26,567</b>
<b>All species</b>				
2013–16	7,312	38,048	2	<b>45,359</b>
2017–21	7,527	31,840	3	<b>39,367</b>
2022–26	7,696	26,714	3	<b>34,410</b>
2027–31	7,931	25,112	3	<b>33,043</b>
2032–36	8,173	24,046	3	<b>32,219</b>
2037–41	8,283	24,478	3	<b>32,760</b>
2042–46	8,279	24,794	3	<b>33,073</b>
2047–51	8,164	25,923	3	<b>34,086</b>
2052–56	8,234	26,759	3	<b>34,992</b>
2057–61	8,233	27,224	2	<b>35,457</b>

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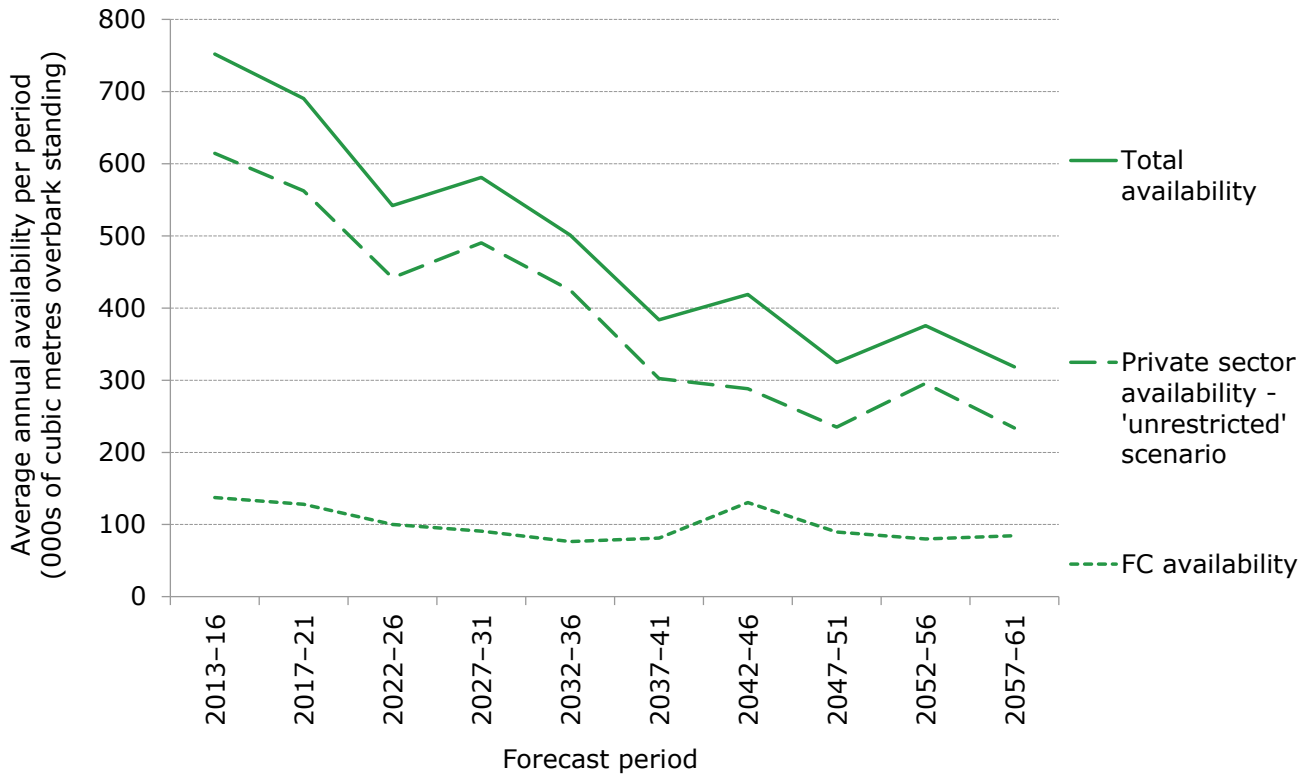
**Table 15** 50-year forecast of net increment; annual average volumes within periods – unrestricted biological potential for Private sector hardwoods

Forecast period	FC	Private sector		Total
	volume (000 m <sup>3</sup> obs)	volume (000 m <sup>3</sup> obs)	SE%	volume (000 m <sup>3</sup> obs)
<b>All conifers</b>				
2013–16	119	323	5	<b>442</b>
2017–21	118	294	5	<b>411</b>
2022–26	108	247	6	<b>355</b>
2027–31	103	227	7	<b>331</b>
2032–36	99	214	7	<b>313</b>
2037–41	96	234	6	<b>330</b>
2042–46	92	260	6	<b>352</b>
2047–51	86	296	5	<b>382</b>
2052–56	85	328	5	<b>413</b>
2057–61	85	349	4	<b>433</b>
<b>All broadleaves</b>				
2013–16	60	546	4	<b>606</b>
2017–21	60	584	3	<b>643</b>
2022–26	58	612	3	<b>670</b>
2027–31	58	679	2	<b>736</b>
2032–36	58	765	2	<b>822</b>
2037–41	55	860	2	<b>915</b>
2042–46	54	909	2	<b>963</b>
2047–51	51	910	2	<b>961</b>
2052–56	49	859	2	<b>908</b>
2057–61	45	808	2	<b>853</b>
<b>All species</b>				
2013–16	179	869	3	<b>1,048</b>
2017–21	177	878	2	<b>1,056</b>
2022–26	166	860	2	<b>1,026</b>
2027–31	161	906	2	<b>1,067</b>
2032–36	156	979	2	<b>1,135</b>
2037–41	151	1,093	2	<b>1,244</b>
2042–46	146	1,168	2	<b>1,314</b>
2047–51	137	1,204	2	<b>1,341</b>
2052–56	133	1,186	2	<b>1,319</b>
2057–61	130	1,154	2	<b>1,285</b>



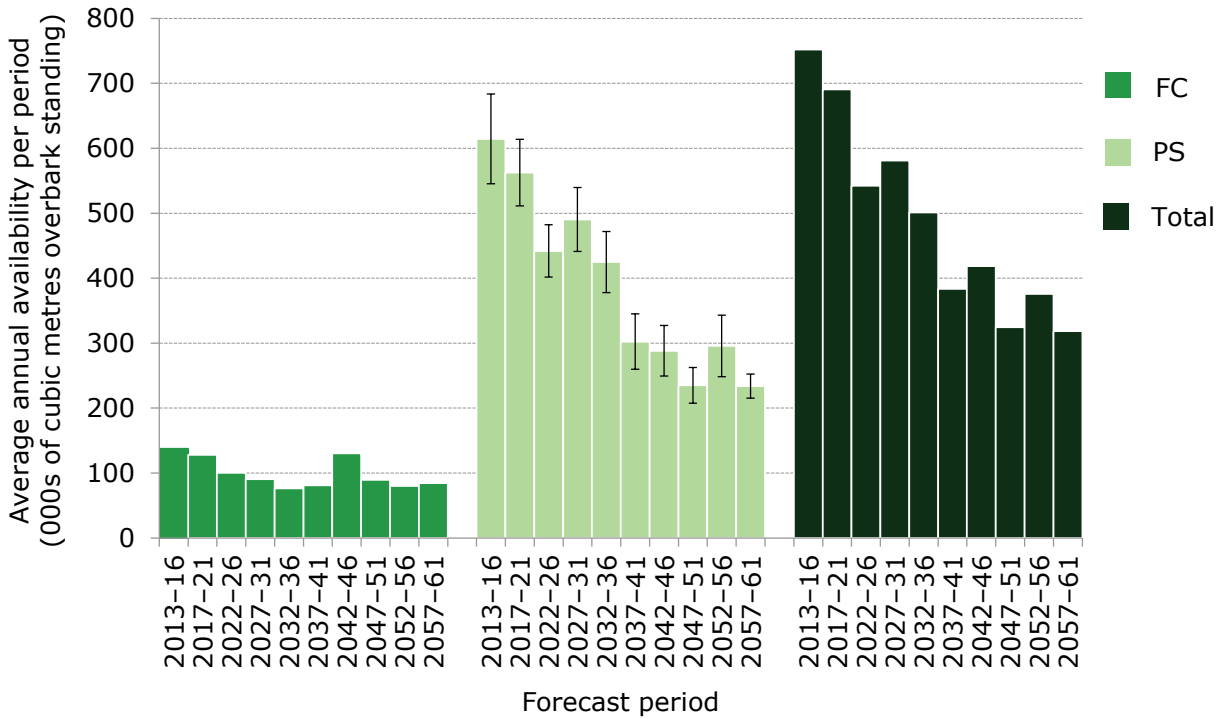
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**Figure 9** Overview of 50-year forecast of average annual softwood availability – unrestricted biological potential for Private sector hardwoods

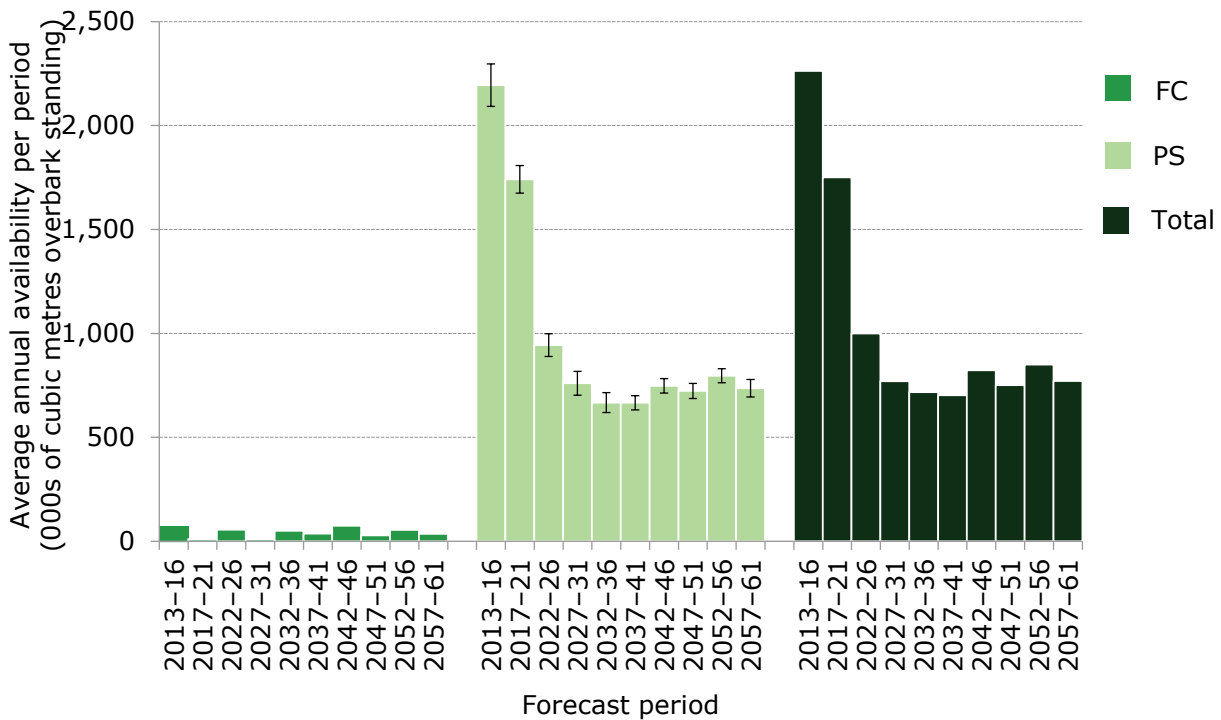


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**Figure 10** 50-year forecast comparison of average annual softwood availability–unrestricted biological potential for Private sector hardwoods

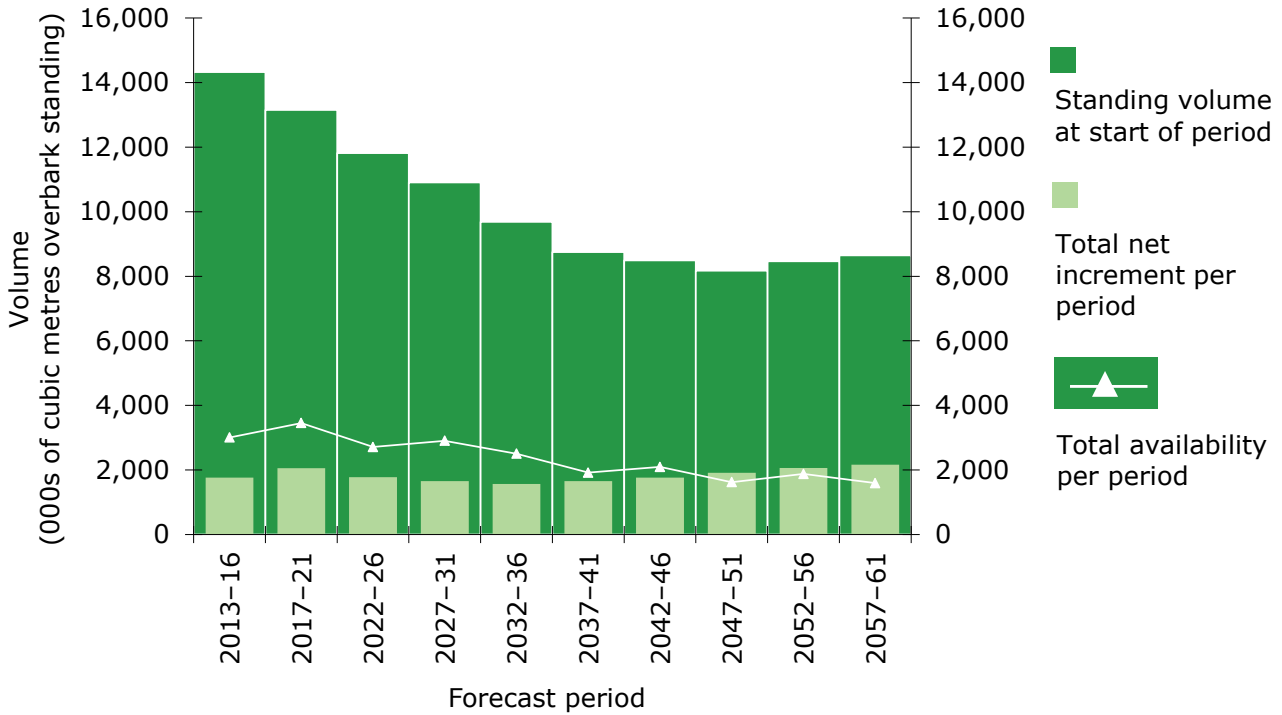


**Figure 11** 50-year forecast comparison of average annual hardwood availability – unrestricted biological potential for Private sector hardwoods

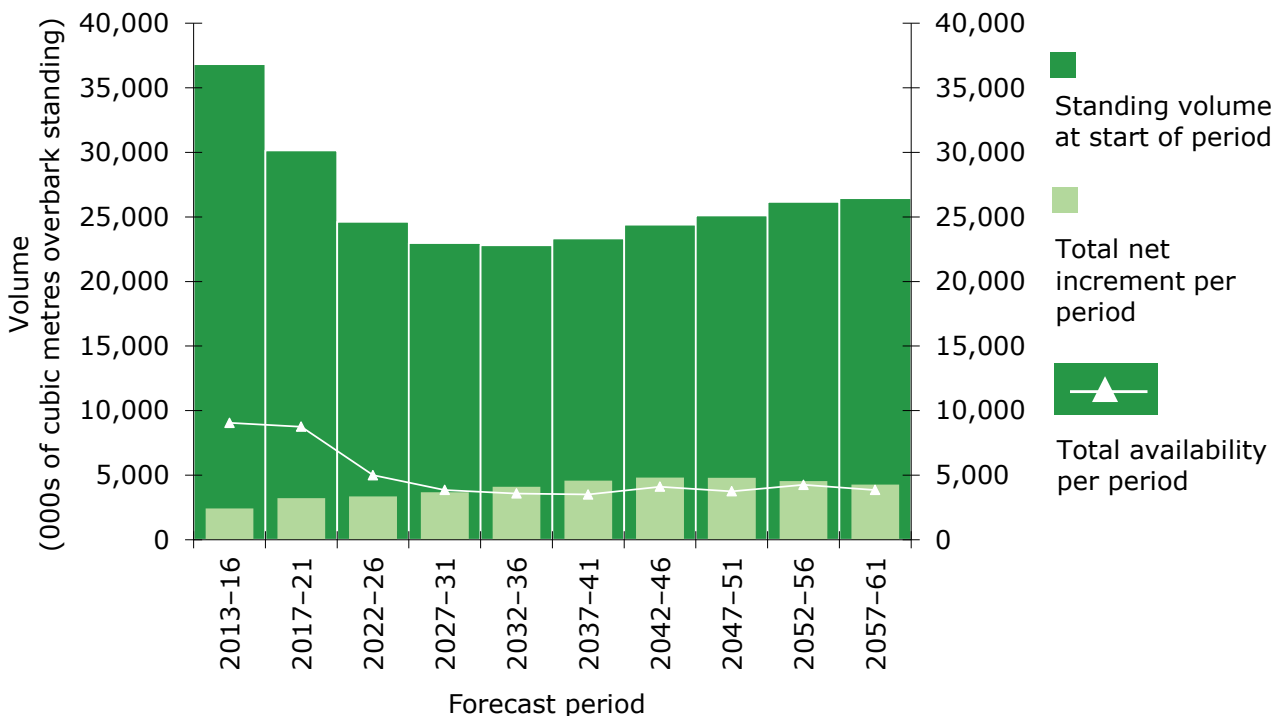


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**Figure 12** 50-year summary of softwood standing volume, increment and availability – unrestricted biological potential for Private sector hardwoods



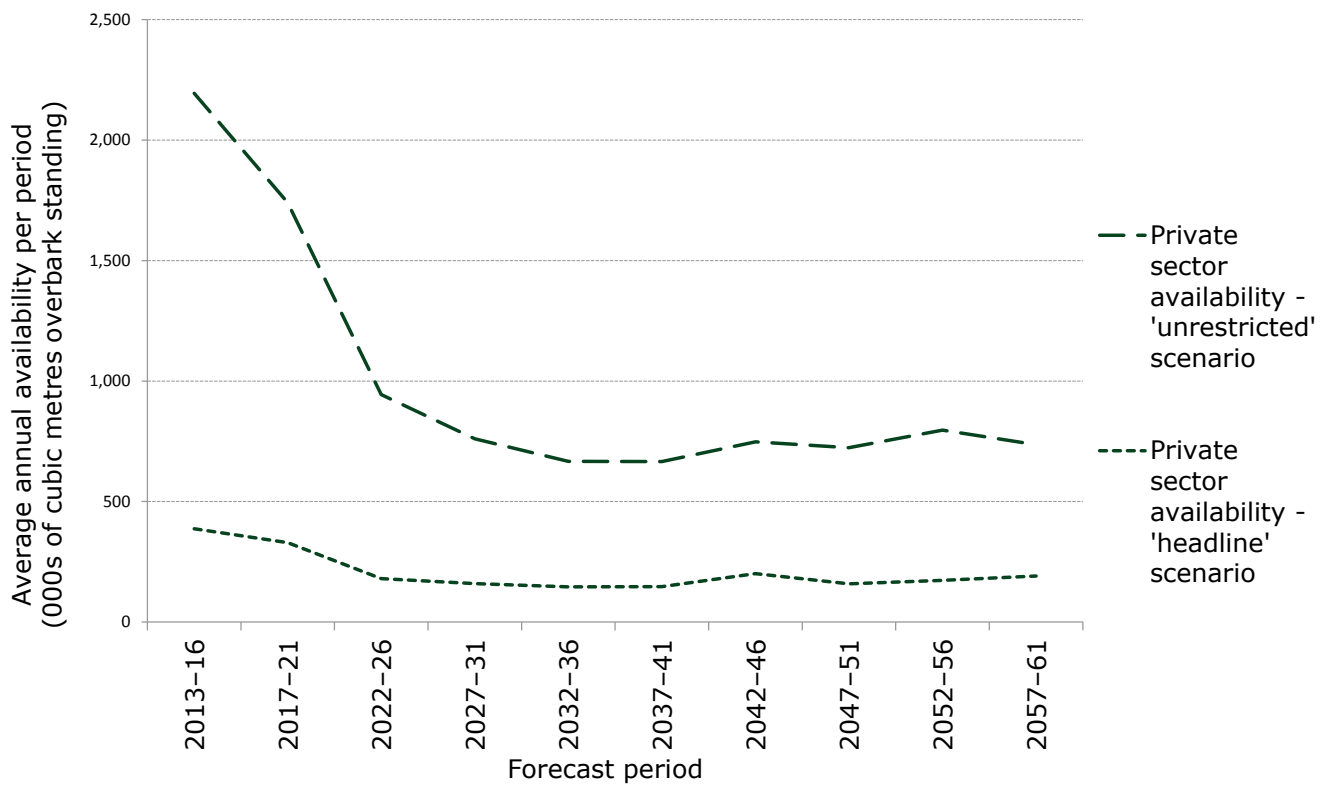
**Figure 13** 50-year summary of hardwood standing volume, increment and availability – unrestricted biological potential for Private sector hardwoods



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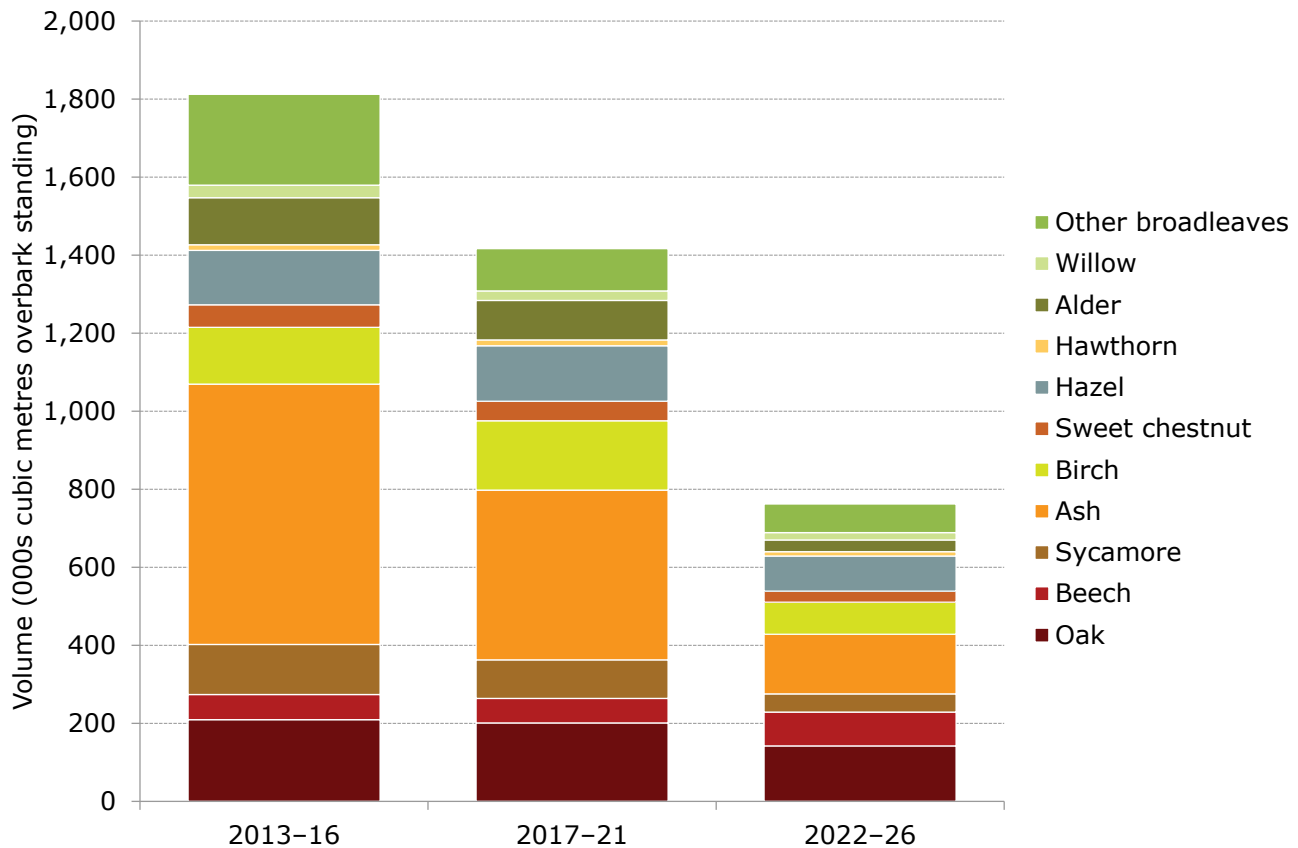
## Comparison of hardwood production between harvesting scenarios

**Figure 14** 50-year forecast comparison of average annual hardwood timber availability



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**Figure 15** 15-year forecast comparison of average annual hardwood timber availability



**Table 16** 15-year forecast comparison of average annual timber availability

Principal species	2013-16			2017-21			2022-26		
	Headline	Unrestricted volume (000 m <sup>3</sup> obs)	Difference	Headline	Unrestricted volume (000 m <sup>3</sup> obs)	Difference	Headline	Unrestricted volume (000 m <sup>3</sup> obs)	Difference
<b>All conifers</b>	<b>752</b>	<b>752</b>	<b>0</b>	<b>691</b>	<b>691</b>	<b>0</b>	<b>542</b>	<b>542</b>	<b>0</b>
Sitka spruce	3	3	0	9	9	0	6	6	0
Scots pine	143	143	0	163	163	0	131	131	0
Corsican pine	145	145	0	99	99	0	80	80	0
Norway spruce	50	50	0	82	82	0	72	72	0
Larches	93	93	0	87	87	0	54	54	0
Douglas fir	188	188	0	134	134	0	108	108	0
Lodgepole pine	1	1	0	0	0	0	5	5	0
Other conifers	129	129	0	115	115	0	85	85	0
<b>All broadleaves</b>	<b>456</b>	<b>2,263</b>	<b>1,807</b>	<b>339</b>	<b>1,751</b>	<b>1,411</b>	<b>236</b>	<b>999</b>	<b>763</b>
Oak	72	281	210	84	285	201	67	209	143
Beech	101	165	64	96	159	63	89	176	87
Sycamore	25	153	128	12	111	99	5	51	47
Ash	142	809	667	71	506	435	22	175	153
Birch	31	176	146	34	212	177	19	101	82
Sweet chestnut	37	95	58	4	55	50	9	37	29
Hazel	6	146	140	7	149	142	7	97	90
Hawthorn	1	15	14	1	16	15	1	11	11
Alder	1	122	120	1	102	101	1	31	30
Willow	1	33	32	1	25	24	1	20	19
Other broadleaves	38	270	233	28	137	109	13	86	74
<b>All species</b>	<b>1,201</b>	<b>3,011</b>	<b>1,811</b>	<b>1,026</b>	<b>2,440</b>	<b>1,414</b>	<b>777</b>	<b>1,542</b>	<b>765</b>

## 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](http://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](http://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](http://www.statisticsauthority.gov.uk)

National Forest Inventory Statistician: Alan Brewer