

NFI estimates for woodland in catchment areas in Wales

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Summary

This report provides a picture of the tree species diversity within woodland summarised by River Basin Districts (RBD) and broken out by catchment areas in Wales. These estimates are a subset of those published as part of the 2021 growing stock information presented in the National Forest Inventory (NFI) 25-year forecasts of softwood timber availability (2022). NFI reports are published at the NFI webpages.

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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 the NFI forecast webpages. Refer to the 25-year forecasts of softwood timber availability (2022) report for a description of the underlying methodologies and interpretation, and also for the GB context.

The estimates reported here are based upon the second cycle of field samples assessed between 2015 and 2020, the results of which have been subjected to rigorous data quality assurance procedures.

Results

The results presented in this report are estimates of stocked area for the principal woodland tree species at 31 March 2022. As this report provides a picture of the species diversity within catchment areas in Wales, the estimates have not been broken down by the ownership categories as in the main suite of NFI reports. Furthermore, the estimates have been derived solely from information collected in the NFI field survey which covers all woodland in Wales that is more than 0.5ha in size irrespective of whether publicly or privately owned and managed. A fuller description of this data source and how it is used in the production of estimates, including sampling standard errors attached to the estimates, is provided in the earlier published documents.

Estimates are provided for stocked area at 31 March 2022 for the Dee River Basin District (Figure 1 and Table 1), the Severn River Basin District and the catchment areas within this RBD (Figures 2-7 and Table 2), and the Western Wales River Basin District and the catchment areas within this RBD (Figures 8-12 and Table 3).

The values in the tables have been independently rounded, so may not add to the totals shown. In some breakdowns, 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 estimates are expressed in relative terms (%) to the right of the relevant estimate. 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, 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 shown in amber in the tables.

Dee River Basin District

Map 1. Dee River Basin District

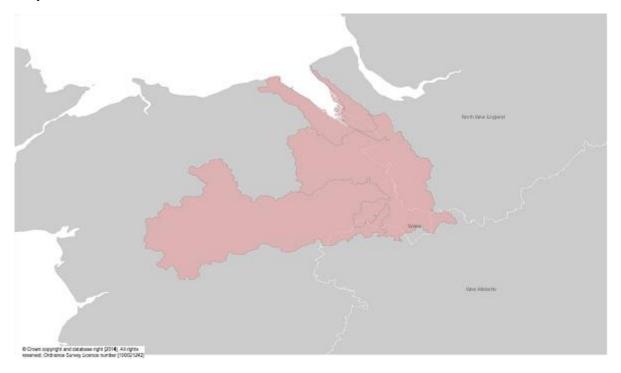


Figure 1. Principal tree species composition by stocked area at 31 March 2022 - Dee River Basin District

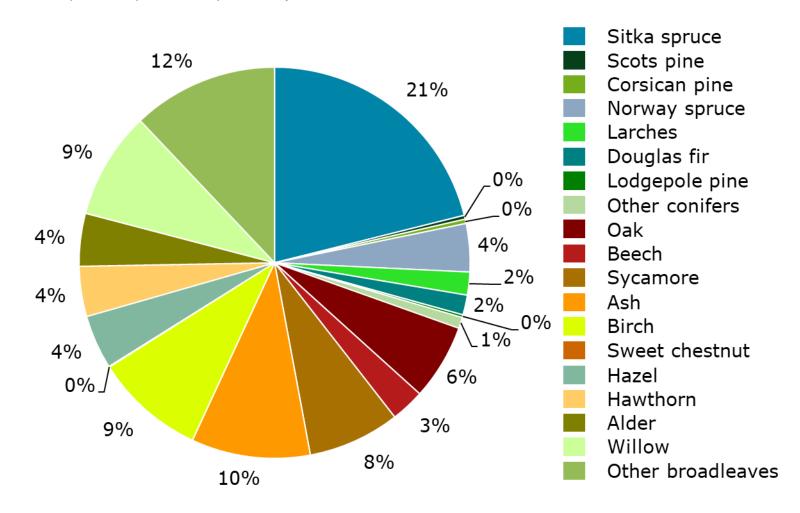


Table 1. Stocked area by principal tree species at 31 March 2022 – Dee River Basin District

Principal tree species	Dee RBD					
groups	area (000 ha)	SE%				
All woodland						
All conifers	5.0	11				
Sitka spruce	3.5	26				
Scots pine	0.1	133				
Corsican pine	0.1	81				
Norway spruce	0.7	66				
Larches	0.3	68				
Douglas fir	0.3	80				
Lodgepole pine	0.0	136				
Other conifers	0.1	92				
All broadleaves	11.3	6				
Oak	1.0	26				
Beech	0.5	52				
Sycamore	1.2	21				
Ash	1.6	17				
Birch	1.5	20				
Sweet chestnut	0.0	54				
Hazel	0.7	26				
Hawthorn	0.7	25				
Alder	0.7	40				
Willow	1.5	20				
Other broadleaves	2.0	17				
All species	16.3	3				

Severn River Basin District

Map 2. Severn River Basin District

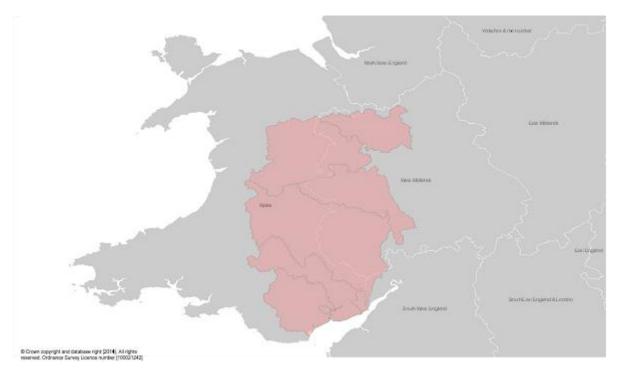


Figure 2. Principal tree species composition by stocked area at 31 March 2022 – Severn River Basin District

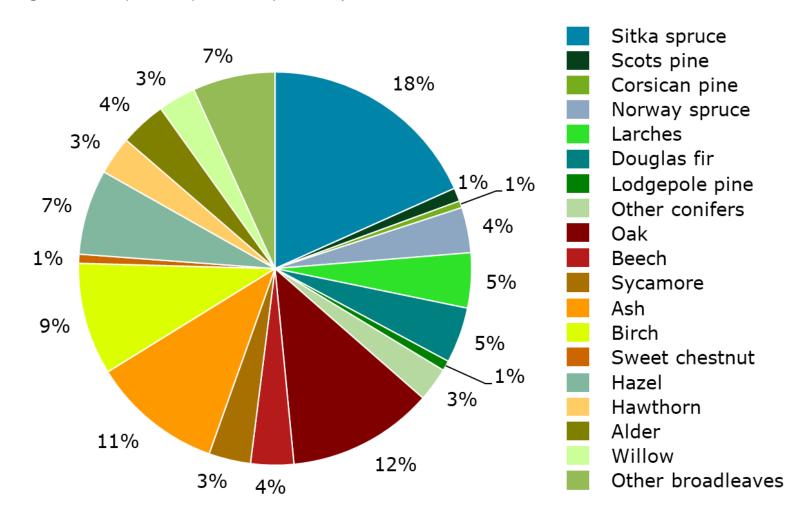
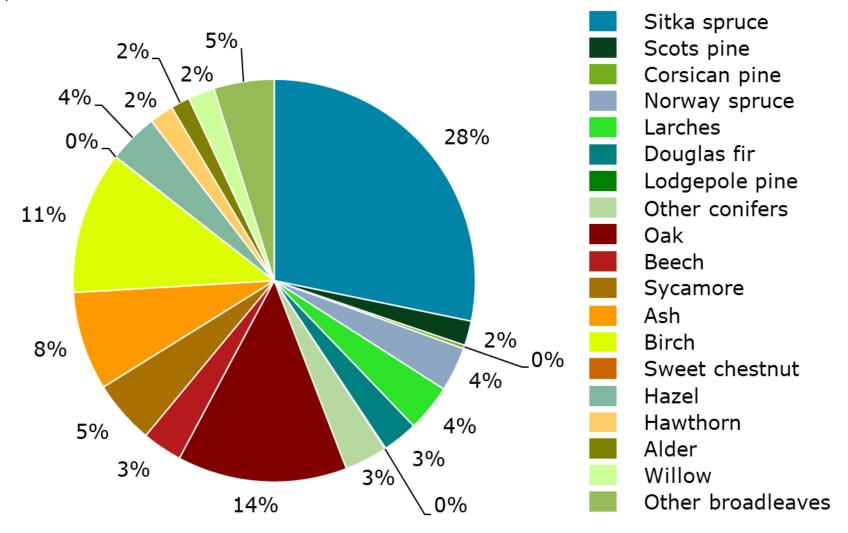


Table 2. Stocked area by principal tree species at 31 March 2022 – Severn River Basin District

	Severn	RBD	Shropshire Middle Severn & Severn Uplands		Teme		Wye		Usk		South East Valleys	
Principal tree species groups	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%
All woodland												
All conifers	53.2	4	14.6	9	5.2	16	19.3	6	4.9	8	9.4	6
Sitka spruce	26.7	7	9.3	15	0.7	79	9.9	12	2.2	21	5.3	14
Scots pine	1.6	31	0.7	34	0.3	81	0.3	49	0.2	78	0.2	73
Corsican pine	0.8	45	0.1	78	0.0	129	0.4	56	0.2	82	0.0	43
Norway spruce	5.4	18	1.2	51	1.0	30	2.1	29	0.8	34	0.7	45
Larches	6.6	16	1.2	52	0.6	42	1.8	30	0.6	36	1.6	29
Douglas fir	6.7	15	0.9	46	1.3	30	3.9	20	0.5	32	0.2	69
Lodgepole pine	1.2	40	0.0	65	0.0	-	0.2	52	0.0	73	0.9	42
Other conifers	4.1	22	1.1	44	1.3	50	0.7	28	0.3	40	0.4	39
All broadleaves	93.0	2	18.4	6	13.7	6	33.1	4	11.6	4	15.6	5
Oak	17.5	8	4.5	20	2.3	23	7.7	12	1.7	20	2.1	19
Beech	5.2	13	1.1	48	0.8	50	1.4	17	0.7	28	1.2	24
Sycamore	5.0	15	1.7	30	0.7	38	0.7	32	0.7	45	1.0	24
Ash	15.7	8	2.6	26	2.4	21	6.2	11	2.6	17	1.6	14
Birch	13.5	9	3.8	19	1.6	25	2.2	18	1.3	16	3.7	14
Sweet chestnut	1.1	28	0.0	<i>75</i>	0.5	54	0.5	36	0.0	90	0.1	59
Hazel	10.2	10	1.3	37	2.1	28	4.8	14	1.3	25	0.8	17
Hawthorn	4.6	14	0.6	51	0.9	28	1.8	26	0.3	34	0.8	31
Alder	5.5	13	0.5	44	1.0	46	1.6	25	0.6	34	1.7	18
Willow	4.5	13	0.7	31	0.3	34	2.2	21	0.2	18	1.0	16
Other												
broadleaves	9.9	9	1.6	26	0.9	28	3.6	14	2.0	15	1.6	21
All species	146.4	1	33.0	3	18.9	2	52.4	2	16.6	2	24.9	3

Figure 3. Principal tree species composition by stocked area at 31 March 2022 – Shropshire Middle Severn and Severn Uplands catchments



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Figure 4. Principal tree species composition by stocked area at 31 March 2022 – Teme catchment

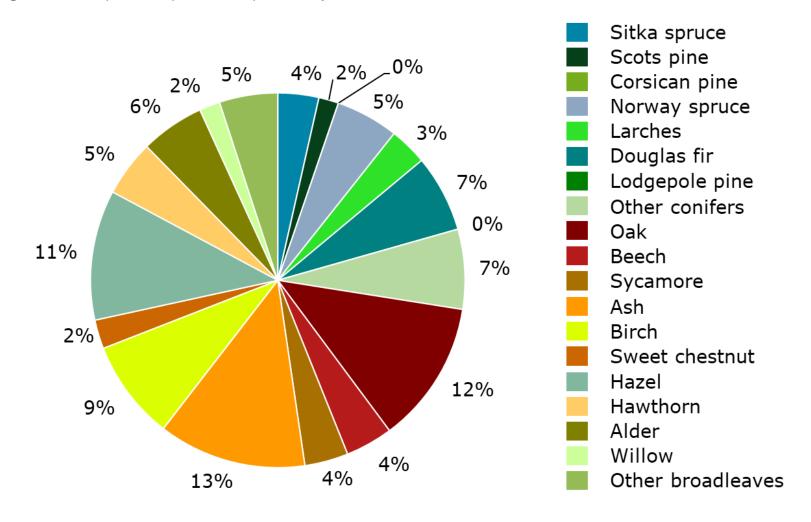


Figure 5. Principal tree species composition by stocked area at 31 March 2022 – Wye catchment

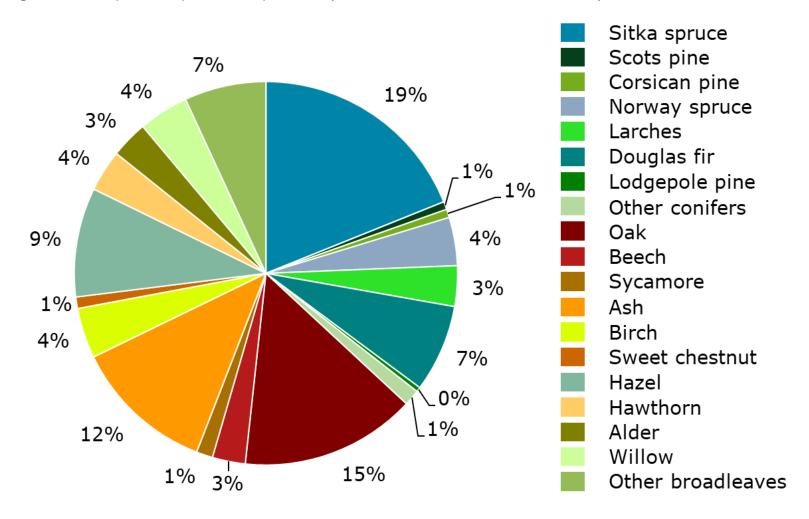


Figure 6. Principal tree species composition by stocked area at 31 March 2022 – Usk catchment

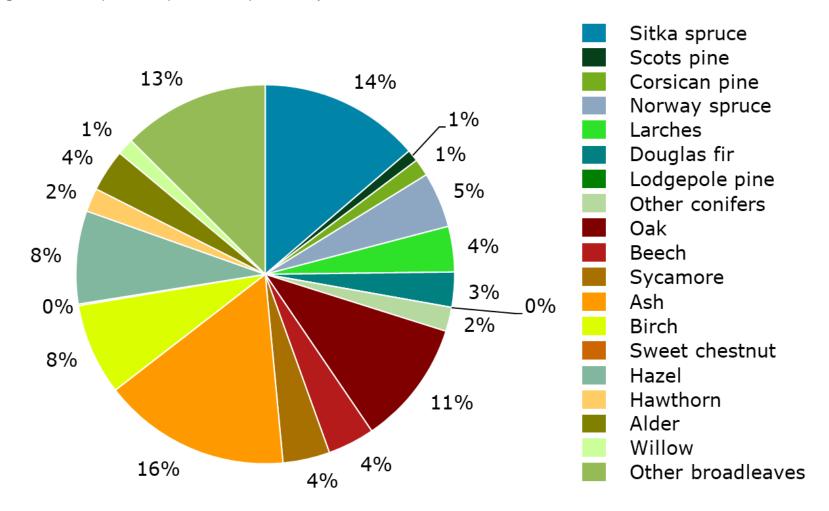
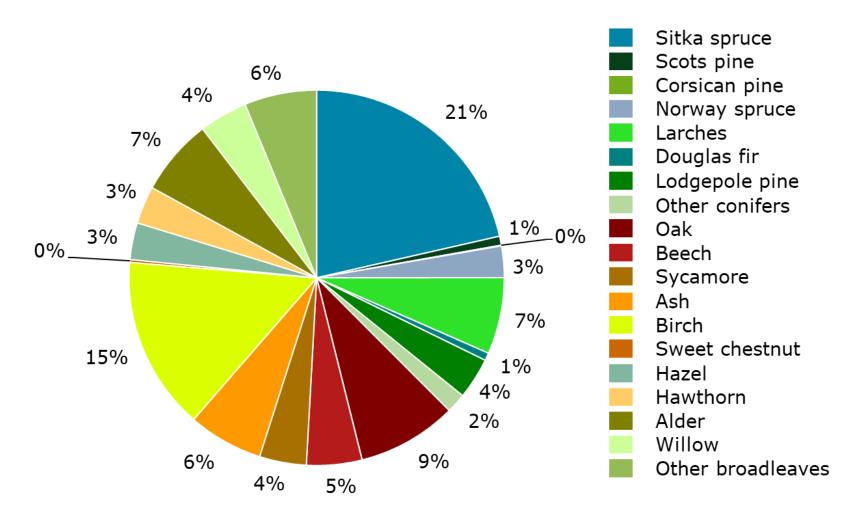


Figure 7. Principal tree species composition by stocked area at 31 March 2022 – South East Valleys catchment



Western Wales River Basin District

Map 3. Western Wales River Basin District

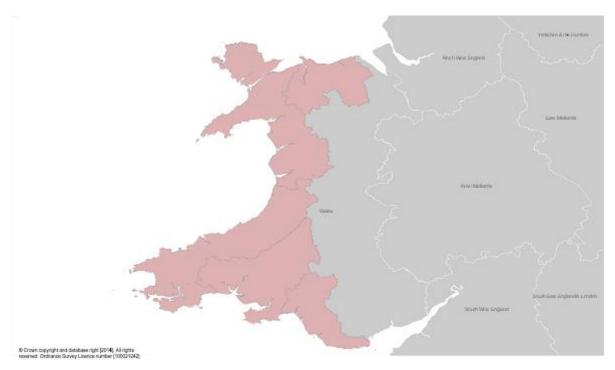


Figure 8. Principal tree species composition by stocked area at 31 March 2022 – Western Wales River Basin District

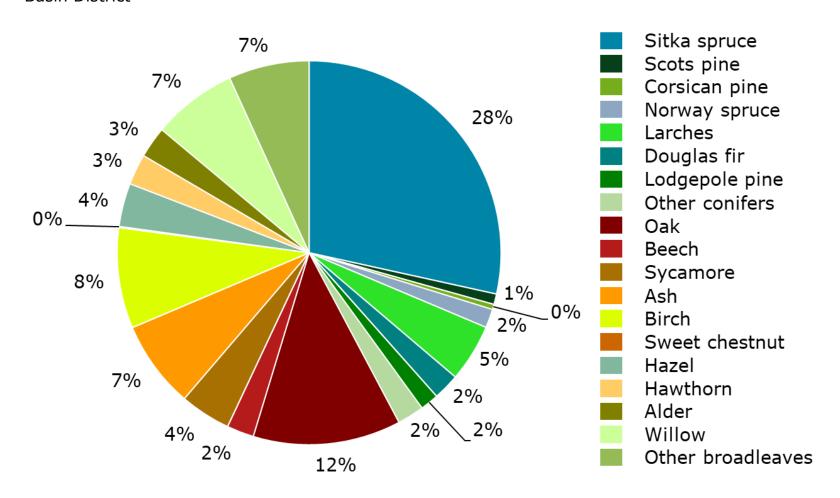


Table 3. Stocked area by principal tree species at 31 March 2022 – Western Wales River Basin District

Principal tree species groups	Western Wale	es RBD	Conwy and Clwyd & Northwest Wales		South Wes Wales	st	Loughor to Taf		Ogmore to Tawe	
	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%	area (000 ha)	SE%
All woodland										
All conifers	73.6	2	30.0	3	14.3	<i>5</i>	16.7	6	13.3	7
Sitka spruce	49.5	4	18.8	7	10.3	8	11.9	9	9.5	11
Scots pine	1.5	23	1.0	30	0.1	58	0.2	<i>37</i>	0.3	51
Corsican pine	0.8	40	0.5	51	0.0	119	0.1	114	0.2	86
Norway spruce	2.7	23	1.1	34	0.5	47	0.7	50	0.4	73
Larches	8.5	12	3.4	16	1.6	29	2.0	31	1.5	30
Douglas fir	3.9	21	1.6	30	0.8	35	1.1	48	0.4	<i>73</i>
Lodgepole pine	2.7	22	1.3	29	0.3	<i>57</i>	0.3	71	0.8	47
Other conifers	3.9	15	2.2	19	0.6	42	0.6	33	0.4	<i>57</i>
All broadleaves	100.3	2	34.1	4	24.9	<i>5</i>	29.1	4	12.0	6
Oak	21.7	6	8.5	8	4.2	13	6.0	12	2.9	17
Beech	4.0	12	2.0	18	0.8	23	0.6	31	0.3	51
Sycamore	7.4	10	2.5	15	2.1	20	1.9	18	0.8	31
Ash	12.8	<i>7</i>	2.4	13	4.8	11	4.6	12	1.3	25
Birch	14.7	8	7.8	11	2.2	23	2.7	13	1.8	23
Sweet chestnut	0.2	49	0.2	52	0.0	65	0.0	-	0.0	135
Hazel	6.4	8	1.7	15	1.8	17	2.4	14	0.7	29
Hawthorn	4.5	11	1.2	22	1.2	17	1.4	15	0.7	41
Alder	4.6	12	1.0	23	0.8	22	2.2	20	0.7	31
Willow	12.4	7	3.1	15	3.9	15	4.0	13	1.5	<i>17</i>
Other broadleaves	11.8	7	3.8	10	3.0	14	3.3	13	1.5	19
All species	174.2	1	64.2	2	39.3	3	45.8	3	25.4	3

Figure 9. Principal tree species composition by stocked area at 31 March 2022 – Conwy and Clwyd and North West Wales catchments

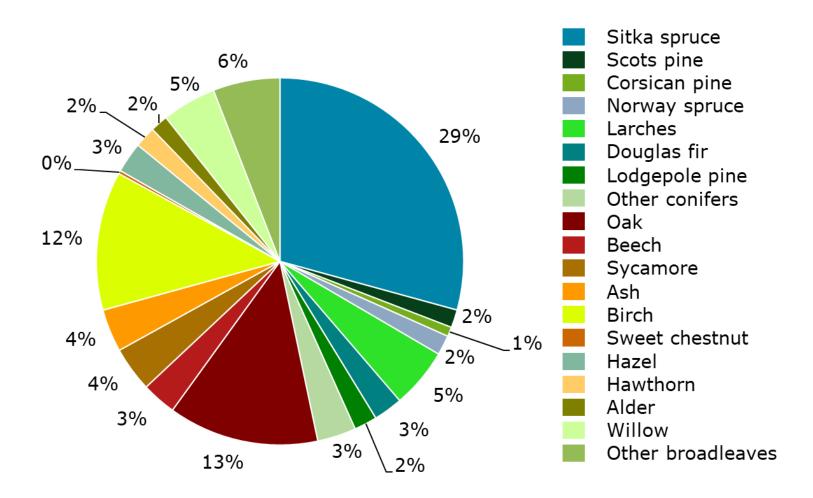


Figure 10. Principal tree species composition by stocked area at 31 March 2022 – South West Wales catchment

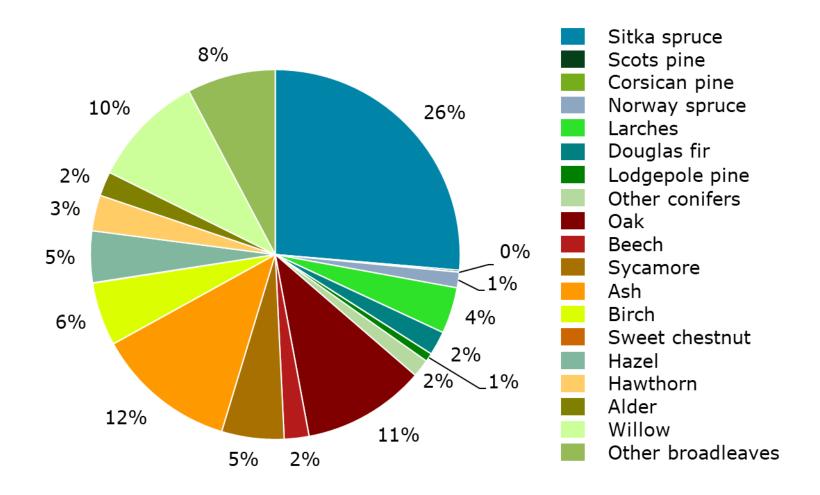


Figure 11. Principal tree species composition by stocked area at 31 March 2022 – Loughor to Taf catchment

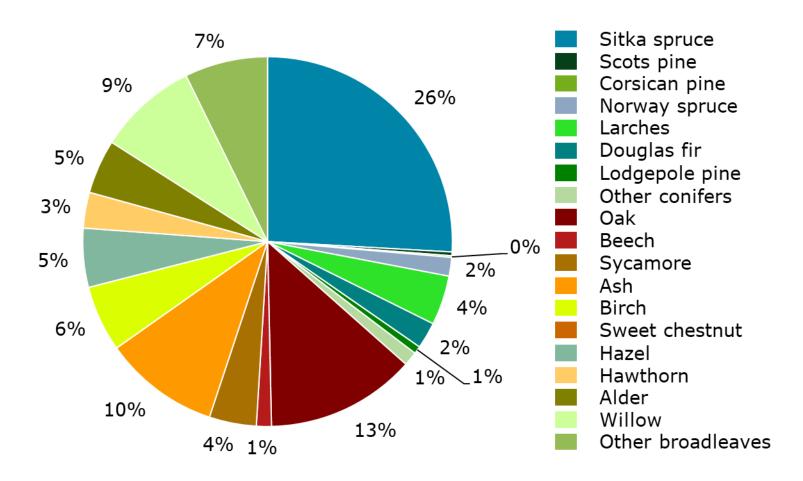
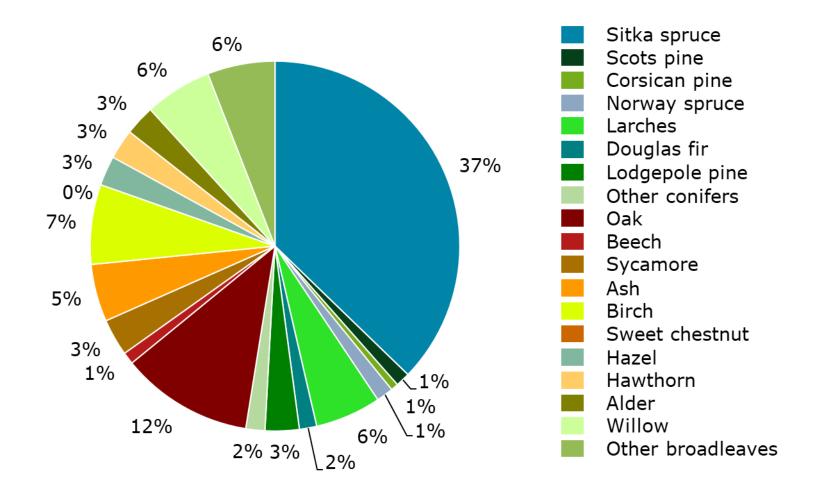


Figure 12. Principal tree species composition by stocked area at 31 March 2022 – Ogmore to Tawe catchment



NFI national reports and papers

This inventory report is one of a series of publications reporting the outputs of the Forestry Commission National Forest Inventory. It forms part of the 25-year forecast of softwood availability series, which includes the following reports:

- Standing timber volume for coniferous trees in Britain (April 2012)
- 25-year forecast of standing coniferous volume and increment (2012)
- 25-year forecast of softwood timber availability (July 2012)
- 25-year forecast of softwood timber availability (2014)
- 25-year forecast of softwood timber availability (2016)

Supporting technical documentation for these reports is available in:

- National Forest Inventory survey methodology
- National Forest Inventory forecasts methodology overview
- Interpreting National Forest Inventory timber volume forecasts

The woodland map and areas derived from it can be found in:

 National Forest Inventory woodland area statistics (for Great Britain, England, Scotland, and Wales).

Full details are available from the NFI web pages.

The National Forest Inventory supports sustainable forest management in Great Britain. For more information see <u>The UK Forestry Standard</u> and its supporting Guidelines.

Glossary

A glossary of terms is presented in the 25-year forecasts of softwood timber availability (2022) report which can be found at the NFI forecast webpages.

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