

# Forestry Statistics 2023

## Chapter 1: Woodland Area & Planting

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## Introduction

This chapter contains information on:

- UK woodland area;
- certified woodland area;
- areas of new planting and restocking;
- felling; and
- canopy cover in England.

Estimates for England, Wales, Scotland and Northern Ireland are included in addition to UK totals. International comparisons are provided in the International Forestry chapter. Further information on the data sources and methodology used to compile the figures is provided in the Sources chapter.

Figures on woodland area and certified woodland area at 31 March 2023 and on new planting and restocking for the period 2022/23 were previously published in Provisional Woodland Statistics 2023, released on 15 June 2023. For further details on revisions, see the Woodland Areas and Planting section of the Sources chapter.

A new section, reporting on total canopy cover in England, is included for the first time in this release.

A copy of all woodland area and planting tables, along with longer time series (where available) can be accessed in spreadsheet format from our [Data Downloads](#) page.

## Key findings

The main findings are:

- The area of woodland in the UK at 31 March 2023 is estimated to be 3.25 million hectares. This represents 13% of the total land area in the UK, 19% in Scotland, 15% in Wales, 10% in England, and 9% in Northern Ireland.
- Of the total UK woodland area, 0.86 million hectares is owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales or the Forest Service (in Northern Ireland).
- The total certified woodland area in the UK at 31 March 2023 is 1.44 million hectares, including all Forestry England/Forestry and Land Scotland/Welsh Government Woodland Estate/Forest Service woodland. Overall, 44% of the UK woodland area is certified.
- 12.96 thousand hectares of newly created woodland were reported in the UK in 2022/23.
- Canopy cover in England was 1.94 million hectares (15% of land area) at 31 March 2022.

## 1.1 Woodland area

Woodland is defined in UK forestry statistics as land under stands of trees with a minimum area of 0.5 hectares and a canopy cover of at least 20%, or having the potential to achieve this. The definition relates to land use, rather than land cover, so integral open space and felled areas that are awaiting restocking are included as woodland. Further information, including how this UK definition compares with the international definition of woodland, is provided in the Sources chapter.

Statistics on woodland area are used to inform government policy and resource allocation, to provide context to UK forestry and land management issues and are reported to international organisations. They are also used in the compilation of natural capital accounts.

Increases in woodland area result from the creation of new woodland. This can be achieved through new planting or by natural colonisation of trees. Further information is available in the section on new planting.

Decreases in woodland area result from the conversion of woodland to other land uses. Regulatory approval is usually required before trees can be felled. Felling approval will normally require the area to be restocked, but there are some cases in which trees may be permanently removed, generally for environmental reasons. The permanent removal of trees may also be authorised under planning regulations, to enable development.

Most public sector woodland is managed by Forestry England (FE), Forestry and Land Scotland (FLS), Natural Resources Wales (NRW) and the Forest Service (FS) in Northern Ireland. Other public sector woodland (e.g., owned by local authorities) is included with privately owned woodland as “private sector” in this release.

The Natural Resources Wales woodland areas relate to the Welsh Government Woodland Estate. There is approximately 900 hectares of woodland on National Nature Reserves and other land managed by Natural Resources Wales that is not included in the Natural Resources Wales figures.

### 1.1.1 Area of Woodland

The area of woodland in the UK at 31 March 2023 is estimated to be 3.25 million hectares (Table 1.1). Of this total, 1.49 million hectares (46%) is in Scotland, 1.33 million hectares (41%) is in England, 0.31 million hectares (10%) is in Wales and 0.12 million hectares (4%) is in Northern Ireland.

Eight hundred and fifty-eight thousand hectares (858 thousand hectares or 26%) of woodland in the UK is owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales or the Forest Service (in Northern Ireland).

Conifers account for just under one half (48%) of the UK woodland area, although this proportion varies from 71% in Scotland to 23% in England.

Table 1.1 Area of woodland by ownership &amp; forest type, UK, 31 March 2023

thousand hectares

Forest type & ownership <sup>1,2</sup>	England <sup>3</sup>	Wales <sup>3</sup>	Scotland <sup>3</sup>	Northern Ireland <sup>4</sup>	UK
<b>Conifers</b>					
FE/FLS/NRW/FS	143	89	410	54	697
Private sector woodland	160	50	650	9	869
<b>Total</b>	<b>303</b>	<b>139</b>	<b>1,060</b>	<b>63</b>	<b>1,566</b>
<b>Broadleaves<sup>5</sup></b>					
FE/FLS/NRW/FS	70	26	57	8	161
Private sector woodland	952	147	377	47	1,524
<b>Total</b>	<b>1,023</b>	<b>173</b>	<b>434</b>	<b>55</b>	<b>1,685</b>
<b>Total</b>					
FE/FLS/NRW/FS	214	115	468	62	858
Private sector woodland	1,112	197	1,027	56	2,393
<b>Total</b>	<b>1,326</b>	<b>312</b>	<b>1,494</b>	<b>118</b>	<b>3,251</b>

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Natural Resources Wales, Forest Service, National Forest Inventory.

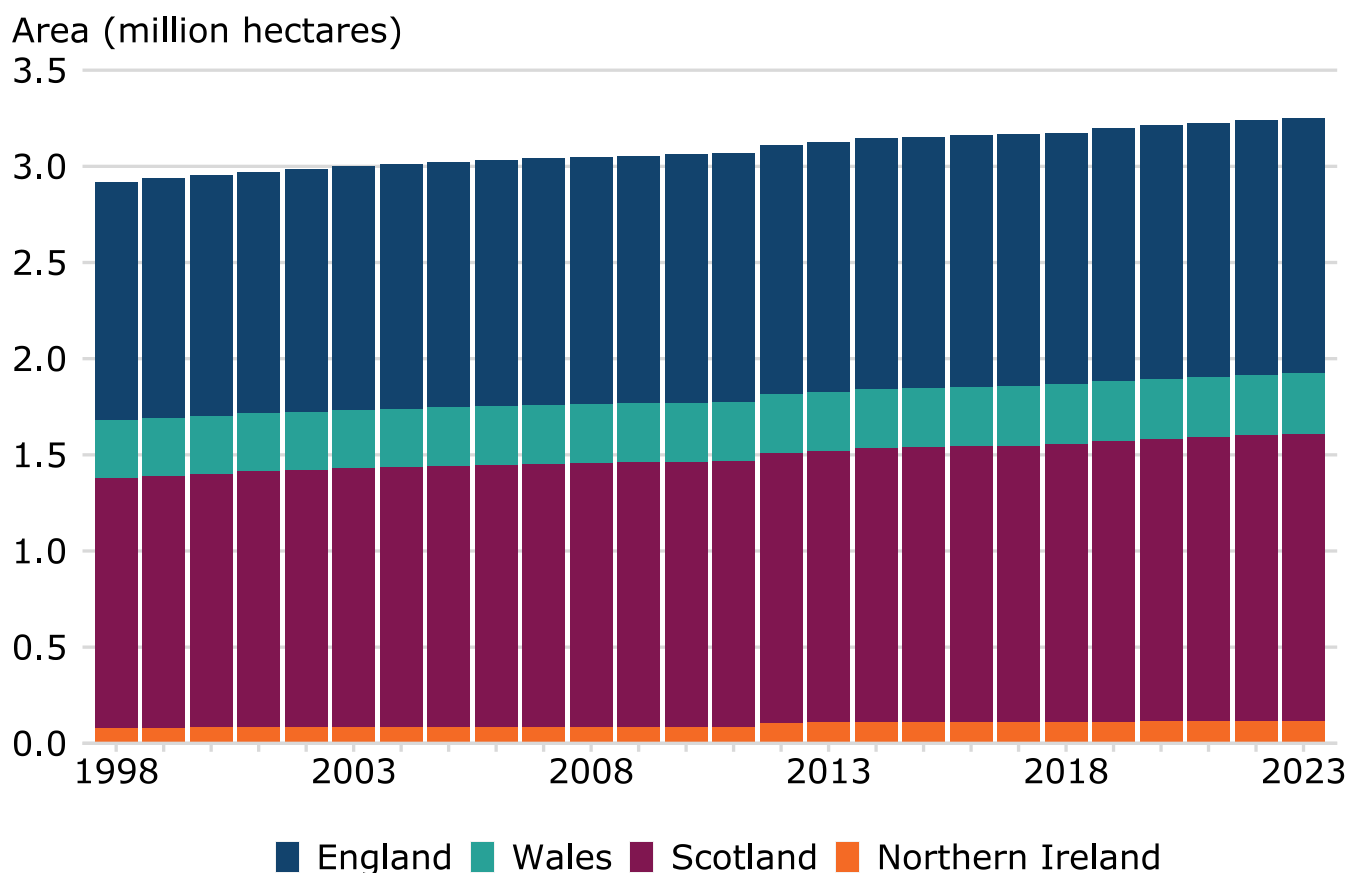
Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland). NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Figures for England, Wales and Scotland are based on data obtained from the National Forest Inventory and adjusted for new planting, but at present no adjustment is made for woodland recently converted to another land use. Further information on how the figures have been estimated is available in the Annex.
4. Figures for Northern Ireland are obtained from the Northern Ireland Woodland Register.
5. Broadleaves include coppice and coppice with standards.



Figure 1.1 shows woodland area by country since 1998. Woodland area in the UK has risen by 331 thousand hectares since 1998, an increase of 11% over the period.

Figure 1.1 Area of woodland, UK, 1998 to 2023



Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Natural Resources Wales, Forest Service, National Forest Inventory.

Notes:

1. Woodland areas for England, Wales and Scotland shown in this figure are based on data from the National Forest Inventory. The trends shown take account of areas of new planting and identifiable permanent woodland loss. Areas of woodland loss that are not yet identifiable (e.g., conversion of woodland for the restoration of open habitats) are not accounted for. Further information can be found on the [National Forest Inventory](#) page.
2. Figures for 1998 to 2009 for England, Wales and Scotland were revised from those initially published, to produce results that are consistent with the National Forest Inventory and enable comparisons over time.
3. Areas at 31 March.

## 1.1.2 Woodland cover through time

The 3.25 million hectares of woodland in the UK in 2023 (Table 1.1) represents 13% of the total land area in the UK, 19% in Scotland, 15% in Wales, 10% in England and 9% in Northern Ireland (Table 1.2).

Table 1.2 Woodland cover, UK, 1086 to 2023

Year	percent of land area <sup>1</sup>				
	England	Wales	Scotland	Northern Ireland	UK
1086 <sup>2</sup>	~15.0	[x]	[x]	[x]	[x]
ca. 1350 <sup>2</sup>	~10.0	[x]	~4.0	[x]	[x]
17 <sup>th</sup> Century <sup>2,3</sup>	~8.0	[x]	~4.0	~1.5	[x]
1905 <sup>3</sup>	5.2	4.2	4.5	1.1	4.7
1924	5.1	5.0	5.6	1.0	5.0
1947 <sup>3</sup>	5.8	6.2	6.6	1.7	5.9
1965	6.8	9.7	8.4	3.1	7.4
1980	7.3	11.6	11.8	4.9	9.0
1995-99	8.4	13.8	16.4	6.0	11.3
1998 <sup>4</sup>	9.5	14.4	16.7	6.0	12.0
2023 <sup>5,6</sup>	10.2	15.1	19.2	8.6	13.4

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Natural Resources Wales, Forest Service, National Forest Inventory.

Notes:

1. Percentage of the total surface area excluding inland water. The total surface areas, excluding inland water, are taken from the UK Standard Area Measurements (published by the Office for National Statistics).
2. Estimates for England and Scotland before 1905 come from a variety of sources, including the Domesday Survey of England, *Scottish Woodland History* (Smout, 1997) and Roy Military Survey of Scotland, 1747 to 1755.
3. For Northern Ireland, 17th Century figure is estimate for all Ireland, 1905 figure is estimate for the Province of Ulster, 1908 and 1947 figure assumes no change from 1939 to 40 census.

4. 1998 figures shown for England, Wales and Scotland have been revised from those originally published to produce estimates that are consistent with subsequent data from the National Forest Inventory.
5. Figures for England, Wales and Scotland are based on data obtained from the National Forest Inventory (NFI) and adjusted for new planting, but at present no adjustment is made for woodland recently converted to another land use. Further information on how the figures have been estimated is available in the Sources chapter.
6. Figures for Northern Ireland are obtained from the Northern Ireland Woodland Register.
7. [x] = data not available.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

### 1.1.3 Woodland area by ownership

Forestry England, Forestry and Land Scotland, Natural Resources Wales and the Forest Service in Northern Ireland owned or managed 26% of the total woodland area in the UK in 2023 (Table 1.3). This proportion ranged from 16% of the woodland area in England, 31% in Scotland, 37% in Wales to 53% in Northern Ireland.

Table 1.3 Area of woodland by ownership, UK, 2019 to 2023

thousand hectares

Ownership/year	England	Wales	Scotland	Northern Ireland	UK
<b>FE/FLS/NRW/FS woodland</b>					
2019	215	117	470	62	864
2020	215	117	470	62	863
2021	214	115	467	62	858
2022	214	115	467	62	858
2023	214	115	468	62	858
<b>Private sector woodland</b>					
2019	1,101	193	989	51	2,334
2020	1,105	193	999	54	2,352
2021	1,107	195	1,009	55	2,366
2022	1,109	196	1,019	55	2,379
2023	1,112	197	1,027	56	2,393
<b>Total woodland</b>					
2019	1,316	310	1,459	113	3,198
2020	1,320	310	1,469	117	3,215
2021	1,321	310	1,476	117	3,224
2022	1,323	310	1,486	118	3,237
2023	1,326	312	1,494	118	3,251

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Natural Resources Wales, Forest Service, National Forest Inventory.

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland). NRW estimates only relate to woodland formerly owned/managed by FC Wales.
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately owned woodland.
3. Figures for England, Wales and Scotland are based on data obtained from the National Forest Inventory (NFI) and adjusted for new planting, but at present no adjustment is made for woodland recently converted to another land use. Further information on how the figures have been estimated is available in the Sources chapter.
4. Northern Ireland figures are obtained from the Northern Ireland Woodland Register.
5. There may be a delay between changes in woodland ownership occurring and the changes being reflected in the statistics.
6. Areas at 31 March.

## 1.2 Certified woodland area

Certified woodland in the UK has been independently audited against the UK Woodland Assurance Standard. Forestry certification schemes are owned by international non-governmental organisations and exist to promote good forest practice. They offer product labels to demonstrate that wood or wood products come from well-managed forests.

Figures for certified woodland areas are often used as an indicator of sustainable forest management. However, it should be noted that woodland that is not certified may also be managed sustainably.

Most changes to the certified woodland area figures over time are a result of new areas being certified or certificates not being renewed upon expiry. Temporary changes can also occur if there is a time lag between expiry and renewal.

Statistics on certified timber are provided in Chapter 2.

The total area of certified woodland in the UK at 31 March 2023 is 1.44 million hectares (Table 1.4). This represents 44% of the total UK woodland area, 61% of the woodland area in Scotland, 56% in Northern Ireland, 47% in Wales and 24% in England.

Table 1.4 Area of certified woodland, UK, 31 March 2023

thousand hectares

Country	FE/FLS/NRW/FS	Private sector	Total	Percentage of woodland area (%)
England	214	105	319	24
Wales	115	33	148	47
Scotland	468	437	905	61
Northern Ireland	62	4	66	56
<b>UK</b>	<b>858</b>	<b>579</b>	<b>1,438</b>	<b>44</b>

Source: Forest Stewardship Council, Grown in Britain, Programme for the Endorsement of Forest Certification, Forestry England, Forestry and Land Scotland, Natural Resources Wales, Forest Service.

Notes:

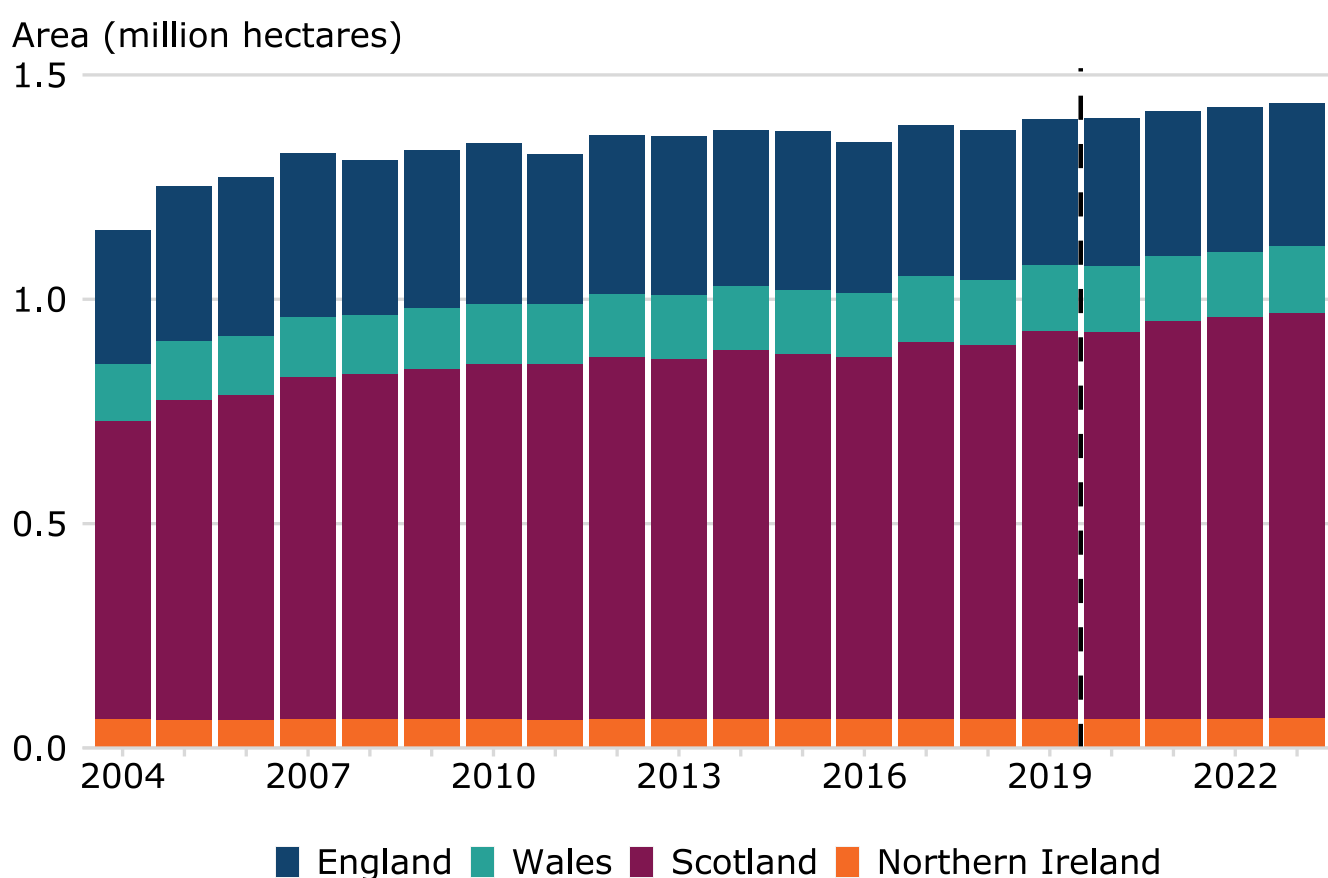
1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland). NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately owned woodland.
3. All certified woodland is certified under the Forest Stewardship Council (FSC) scheme, Grown in Britain (GiB) scheme or the Programme for the Endorsement of Forest Certification (PEFC) scheme, with many woodlands certified under multiple schemes.
4. The estimates are based on UK data published by FSC, GiB and PEFC, supplemented by data from individual certificate holders. Where possible, figures are for the woodland area certified, rather than the land area certified.
5. All Forestry England/Forestry and Land Scotland/Natural Resources Wales WGWE/Forest Service woodland is certified. The Forestry England/Forestry and Land Scotland/Welsh Government Woodland Estate/Forest Service areas are the latest areas, as shown in Table 1.1, rather than the areas shown on certificates.

Data: Longer time series of the above table are available from the Data Downloads webpage.

Figure 1.2 presents certified woodland area by country since 2004. This shows an increase in certified woodland area of around 284 thousand hectares (25%) from 2004 to 2023, with most of this increasing occurring in the early 2000s.

The 1.44 million hectares of certified woodland in the UK at March 2023 represents a 1% increase on the previous year.

Figure 1.2 Area of certified woodland, UK, 2004 to 2023



Source: Forest Stewardship Council, Grown in Britain, Programme for the Endorsement of Forest Certification, Forestry England, Forestry and Land Scotland, Natural Resources Wales, Forest Service.

Notes:

1. All certified woodland is certified under the Forest Stewardship Council (FSC) scheme, Grown in Britain (GiB) scheme or the Programme for the Endorsement of Forest Certification (PEFC) scheme, with many woodlands certified under multiple schemes.



2. The estimates are based on UK data published by FSC, GiB and PEFC, supplemented by data from individual certificate holders. Where possible, figures are for the woodland area certified, rather than the land area certified.
3. Dashed line: prior to 31 March 2020, certified woodland area figures are based on data from FSC and PEFC; from 31 March 2020 onwards, certified woodland area figures include data from GiB.
4. Figures for earlier years were revised for consistency with results from the National Forest Inventory.

### 1.3 Land use

Not all land that is owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales and the Forest Service in Northern Ireland is woodland; other land uses include agricultural land, mountain areas and moorland.

The woodland areas and land areas shown for Natural Resources Wales relate to the Welsh Government Woodland Estate. There is approximately 900 hectares of woodland on National Nature Reserves and other land managed by Natural Resources Wales that is not included in the Natural Resources Wales figures.

Woodland accounted for 79% of all Forestry England/Forestry and Land Scotland/Natural Resources Wales/Forest Service land in the UK at 31 March 2023 (Table 1.5). This proportion was highest in Wales (93%) and lowest in Scotland (73%).

Table 1.5 Public sector land use<sup>1</sup>, UK, 2019 to 2023

thousand hectares

Land use	England	Wales	Scotland	Northern Ireland	UK
<b>Woodland</b>					
2019	215	117	470	62	864
2020	215	117	470	62	863
2021	214	115	467	62	858
2022	214	115	467	62	858
2023	214	115	468	62	858
<b>Other land</b>					
2019	39	6	164	13	222
2020	38	6	164	13	221
2021	39	8	169	13	229
2022	39	9	167	13	227
2023	39	9	173	13	233
<b>Total land area</b>					
2019	253	123	634	75	1,086
2020	253	123	634	75	1,085
2021	253	123	636	75	1,087
2022	253	123	634	75	1,086
2023	253	124	641	75	1,092

Source: Forestry England, Forestry and Land Scotland, Natural Resources Wales, Forest Service.

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland). NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. "Other land" includes agricultural land and areas of moorland and mountain.
3. There may be a delay between changes in woodland ownership occurring and the changes being reflected in the statistics.
4. The reduction in the area of public woodland in Wales in 2021 relates to a change in how institutional arrangements for land around Lake Vyrnwy are accounted for. See note 9, page 105 of [Natural Resources Wales Annual Accounts 2018/19](#) for further information on the status of this land.

5. Areas at 31 March.

## 1.4 National Forest Inventory

This section contains interim results from the National Forest Inventory (NFI). The statistics are based on field survey data combined with information from the NFI woodland map, which is a spatial representation of woodland areas in Great Britain.

For conifers, the data presented in this chapter are interim estimates at 31 March 2021, published in the NFI [25-year forecast of softwood timber availability](#) report in 2022. For broadleaves, the data presented in this chapter are interim estimates at 31 March 2012, published in the NFI 50-year forecast of hardwood timber availability report in 2014. Both reports are available from the [National Forestry Inventory homepage](#).

The data presented in Tables 1.6 to 1.9 (and Figure 1.3a and 1.3b) relate to stocked areas. These differ from the woodland areas presented in earlier sections, as stocked areas exclude felled areas and (for private sector land) areas of integral open space.

The data on growing stock presented in Table 1.10 form the basis of the softwood availability forecast (Table 2.4a), and the data on growing stock presented in Table 1.11 form the basis for the hardwood availability forecast (Tables 2.4b).

Further information can be found on the [National Forest Inventory homepage](#).

### 1.4.1 Woodland area by age: conifers

Table 1.6 presents the area of conifers, broken down by age class, ownership and country.

Sixty per cent of the coniferous woodland area in Great Britain was occupied by stands of 40 years old or younger (Table 1.6c). A further 13% of stands were aged over 60 years.

Table 1.6a Stocked coniferous woodland area under FE/FLS/NRW ownership by age class, Great Britain, 2021

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	37	19	107	165
21-40	38	24	88	153
41-60	28	17	87	132
61-80	16	10	39	67
81-100	5	1	11	18
100+	1	0	3	4
<b>All age classes</b>	<b>125</b>	<b>71</b>	<b>335</b>	<b>540</b>

See Table 1.6c for information on sources and notes.

Table 1.6b Stocked coniferous woodland area under private sector ownership by age class, Great Britain, 2021

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	25	13	143	180
21-40	40	15	197	252
41-60	58	15	140	213
61-80	22	4	26	52
81-100	5	1	5	11
100+	4	0	2	7
<b>All age classes</b>	<b>153</b>	<b>49</b>	<b>513</b>	<b>715</b>

See Table 1.6c for information on sources and notes.

Table 1.6c Total stocked coniferous woodland area by age class, Great Britain, 2021

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	61	31	250	346
21-40	78	39	285	405
41-60	86	32	227	345
61-80	37	15	65	118
81-100	11	2	16	29
100+	5	1	6	11
<b>All age classes</b>	<b>278</b>	<b>119</b>	<b>848</b>	<b>1,255</b>

Source (Table 1.6a, 1.6b & 1.6c): [National Forest Inventory: 25-year forecast of softwood timber availability](#) (Forest Research, 2022) (supporting data).

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Stocked area only: excludes felled areas and (for private sector land) open space.
4. Areas at 31 March 2021.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

## 1.4.2 Woodland area by age: broadleaves

Table 1.7 presents the area of broadleaves, broken down by age class, ownership and country.

Around one half (53%) of the broadleaved area was occupied by stands of 40 years old or younger (Table 1.7c). More than one quarter (28%) of stands were aged over 60 years.

Table 1.7a Stocked broadleaf woodland area under FE/FLS/NRW<sup>1</sup> ownership by age class, Great Britain, 2012

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	8	7	11	25
21-40	6	2	5	13
41-60	13	2	4	19
61-80	13	2	4	19
81-100	4	1	2	7
100+	10	3	5	18
<b>All age classes</b>	<b>54</b>	<b>16</b>	<b>32</b>	<b>102</b>

See Table 1.7c for information on sources and notes.

Table 1.7b Stocked broadleaf woodland area under private sector<sup>2</sup> ownership by age class, Great Britain, 2012

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	217	30	84	332
21-40	227	33	84	344
41-60	145	22	58	225
61-80	117	15	22	154
81-100	92	11	9	112
100+	51	10	7	67
<b>All age classes</b>	<b>849</b>	<b>121</b>	<b>265</b>	<b>1,235</b>

See Table 1.7c for information on sources and notes.

Table 1.7c Total stocked broadleaf woodland area by age class, Great Britain, 2012

thousand hectares

Age class (years)	England	Wales	Scotland	Great Britain
0-20	225	37	95	357
21-40	232	36	90	357
41-60	157	24	63	244
61-80	130	17	26	173
81-100	97	12	11	119
100+	61	12	12	85
<b>All age classes</b>	<b>902</b>	<b>137</b>	<b>297</b>	<b>1,337</b>

Source (Table 1.7a, 1.7b & 1.7c): National Forest Inventory: 50-year forecast of hardwood availability (Forestry Commission, 2014) (supporting data).

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Stocked area only: excludes felled areas and (for private sector land) open space.
4. Areas at 31 March 2012.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

### 1.4.3 Woodland area by species: conifers

Table 1.8 presents the area of conifers, broken down by principal species, ownership and country.

Sitka spruce accounts for around one half (54%) of the conifer area in Great Britain (Table 1.8c), followed by Scots pine (17%) and larches (8%). Sitka spruce is less dominant in England, accounting for over one quarter (28%) of the conifer area there.

Table 1.8a Stocked coniferous woodland area under FE/FLS/NRW<sup>1</sup> ownership by principal species, Great Britain, 2021

	thousand hectares			
<b>Principal species</b>	<b>England</b>	<b>Wales</b>	<b>Scotland</b>	<b>Great Britain</b>
Sitka spruce	48	46	212	306
Scots pine	18	2	49	70
Corsican pine	22	2	1	26
Norway spruce	7	5	12	24
Larches	8	5	20	33
Douglas fir	10	6	6	23
Lodgepole pine	3	2	28	34
Other conifers	7	3	6	15
<b>All conifers</b>	<b>125</b>	<b>71</b>	<b>335</b>	<b>530</b>

See Table 1.8c for information on sources and notes.



Table 1.8b Stocked coniferous woodland area under private sector<sup>2</sup> ownership by principal species, Great Britain, 2021

thousand hectares

Principal species	England	Wales	Scotland	Great Britain
Sitka spruce	31	29	302	362
Scots pine	37	1	101	139
Corsican pine	10	1	0	11
Norway spruce	17	3	12	32
Larches	21	8	38	67
Douglas fir	13	4	7	23
Lodgepole pine	4	2	45	51
Other conifers	20	2	7	28
<b>All conifers</b>	<b>153</b>	<b>49</b>	<b>513</b>	<b>715</b>

See table 1.8c for information on sources and notes.

Table 1.8c Total stocked coniferous woodland area by principal species, Great Britain, 2021

thousand hectares

Principal species	England	Wales	Scotland	Great Britain
Sitka spruce	79	74	515	668
Scots pine	55	3	150	208
Corsican pine	32	2	2	36
Norway spruce	24	8	24	57
Larches	30	13	57	100
Douglas fir	23	10	13	46
Lodgepole pine	8	4	73	84
Other conifers	26	5	12	44
<b>All conifers</b>	<b>278</b>	<b>119</b>	<b>848</b>	<b>1,245</b>

Source (Table 1.8a, 1.8b & 1.8c): [National Forest Inventory: 25-year forecast of softwood timber availability](#) (Forest Research, 2022).

### Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g. owned by local authorities) and privately-owned woodland.
3. Stocked area only: excludes felled areas and (for private sector land) open space.
4. Areas at 31 March 2021.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

### 1.4.4 Woodland area by species: broadleaves

Table 1.9 presents the area of broadleaves, broken down by principal species, ownership and country.

The most commonly occurring broadleaved species in Great Britain are birch (accounting for 18% of broadleaf woodland), oak (16%) and ash (12%) (Table 1.9c). Birch is more dominant in Scotland, accounting for 43% of the broadleaf area there.

Table 1.9a Stocked broadleaf woodland area under FE/FLS/NRW<sup>1</sup> ownership by principal species, Great Britain, 2012

thousand hectares

Principal species	England	Wales	Scotland	Great Britain
Oak	16	3	3	21
Beech	13	2	1	15
Sycamore	1	0	0	2
Ash	3	1	0	4
Birch	6	2	11	19
Sweet chestnut	1	0	0	1
Hazel	0	0	0	1
Hawthorn	0	0	0	0
Alder	1	0	1	1
Willow	0	0	0	0
Other broadleaves	14	9	15	38
<b>All broadleaves</b>	<b>54</b>	<b>16</b>	<b>32</b>	<b>102</b>

See Table 1.9c for information on sources and notes.

Table 1.9b Stocked broadleaf woodland area under private sector<sup>2</sup> ownership by principal species, Great Britain, 2012

thousand hectares

Principal species	England	Wales	Scotland	Great Britain
Oak	151	23	23	198
Beech	59	5	15	78
Sycamore	74	9	21	105
Ash	120	18	15	153
Birch	90	11	116	217
Sweet chestnut	28	0	0	28
Hazel	64	14	8	86
Hawthorn	57	8	8	73
Alder	30	10	16	56
Willow	41	11	13	65
Other broadleaves	133	12	29	174
<b>All broadleaves</b>	<b>849</b>	<b>121</b>	<b>265</b>	<b>1,235</b>

See Table 1.9c for information on sources and notes.

Table 1.9c Total stocked broadleaf woodland area by principal species, Great Britain, 2012

thousand hectares

Principal species	England	Wales	Scotland	Great Britain
Oak	167	26	26	219
Beech	72	6	15	94
Sycamore	75	9	22	106
Ash	123	19	16	157
Birch	96	12	128	236
Sweet chestnut	28	0	0	29
Hazel	65	14	8	87
Hawthorn	57	8	8	73
Alder	31	10	17	58
Willow	41	11	13	65
Other broadleaves	146	21	44	212
<b>All broadleaves</b>	<b>902</b>	<b>137</b>	<b>297</b>	<b>1,337</b>

Source (Table 1.9a, 1.9b & 1.9c): National Forest Inventory: 50-year forecast of hardwood availability (Forestry Commission, 2014).

Notes:

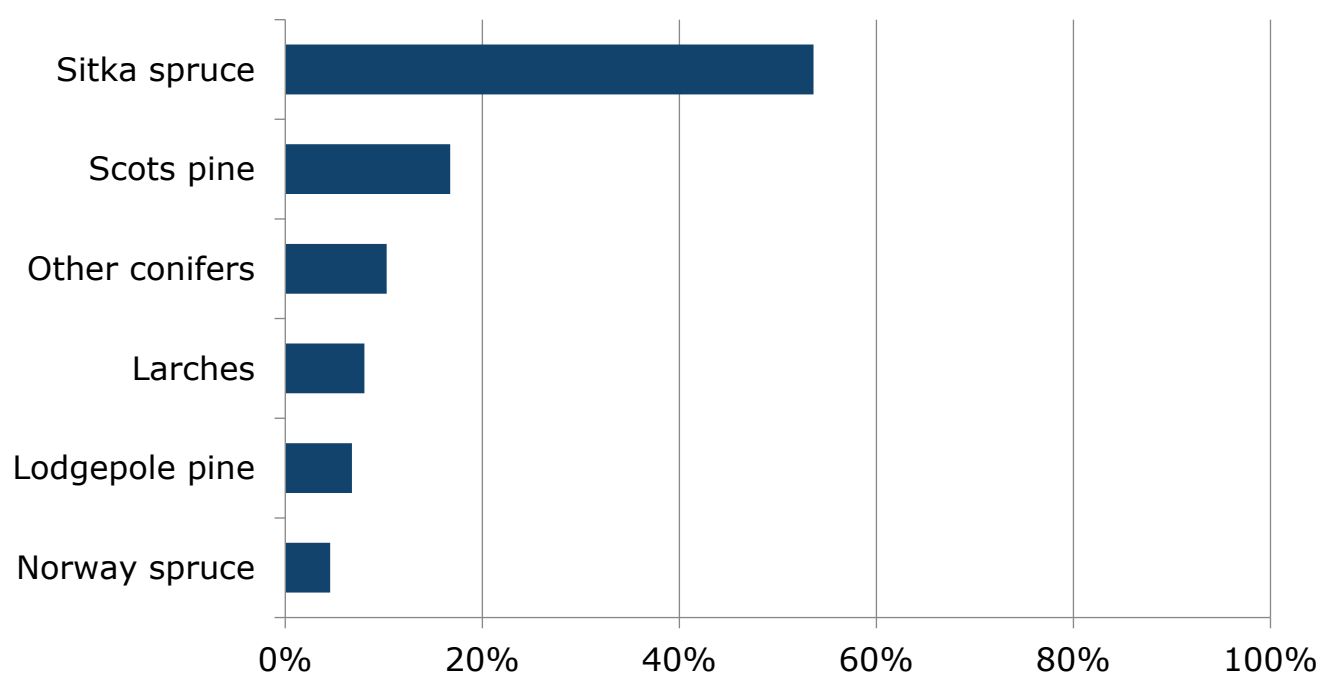
1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Stocked area only: excludes felled areas and (for private sector land) open space.
4. Areas at 31 March 2012.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

### 1.4.5 Woodland area by species: summary

Figures 1.3a and 1.3b show that, whilst the conifer area is dominated by a small number of species (Sitka spruce and Scots pine together account for over two thirds of the conifer area), broadleaves are more varied.

Figure 1.3a Stocked woodland area by principal conifer species, Great Britain, 2021



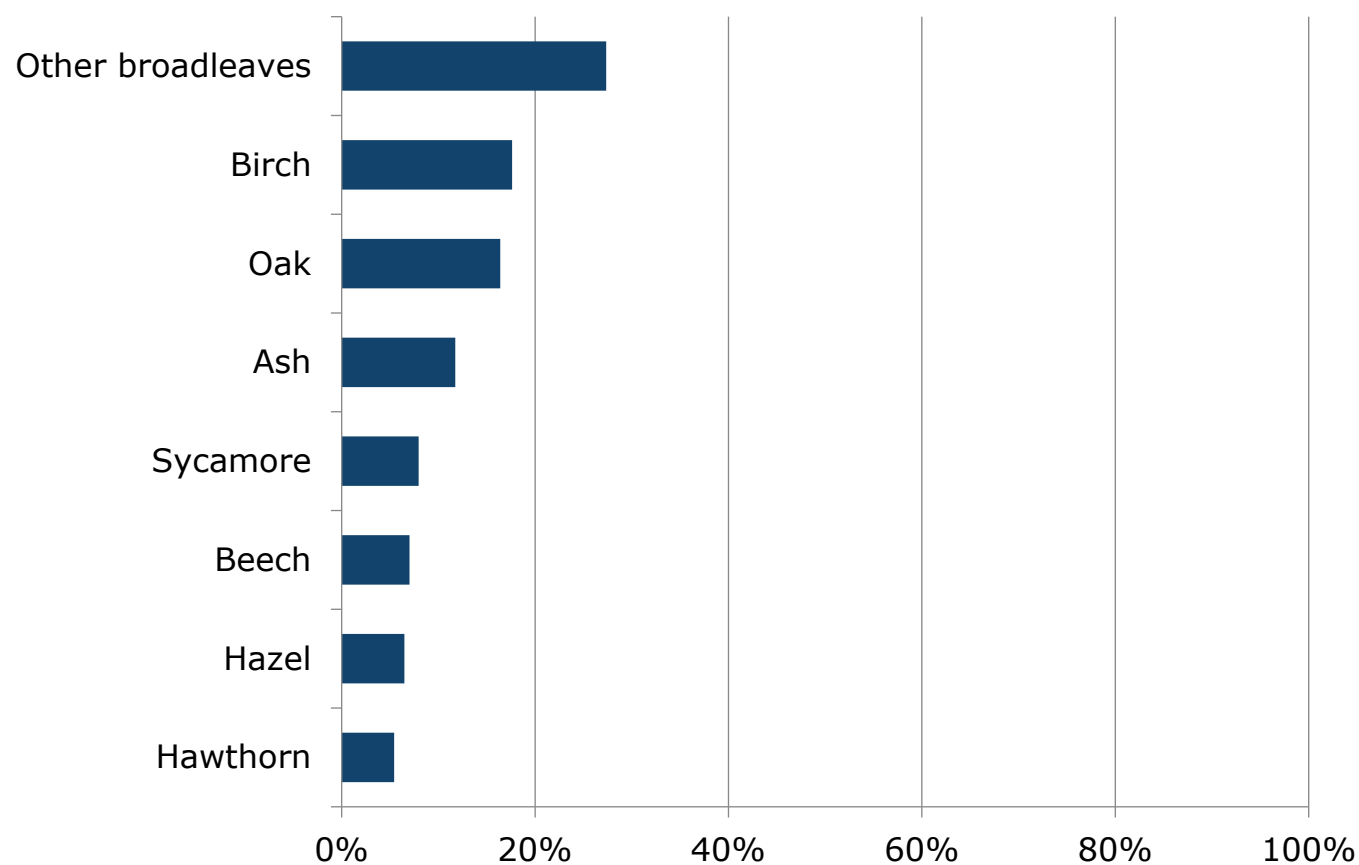
Source: National Forest Inventory: 25-year forecast of softwood timber availability (Forest Research, 2022).

Notes:

1. Stocked area only: excludes felled areas and (for private sector land) open space.
2. Areas at 31 March 2021.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

Figure 1.3b Stocked woodland area by principal broadleaf species, Great Britain, 2012



Source: National Forest Inventory: 50-year forecast of hardwood availability (Forestry Commission, 2014).

Notes:

1. Stocked area only: excludes felled areas and (for private sector land) open space.
2. Areas at 31 March 2012.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

## 1.4.6 Growing stock by species: conifers

Growing stock is the volume of timber in living trees. It is also often referred to as the standing volume.

Table 1.10 presents the volume of coniferous growing stock, broken down by principal species, ownership and country.

The total volume of coniferous growing stock in Great Britain in 2021 was 396 million m<sup>3</sup> overbark standing (Table 1.10c).

Sitka spruce accounted for over one half (55%) of the conifer growing stock, followed by Scots pine (15%) and larches (9%). This largely reflects the distribution of species by area (see Table 1.8c).

### Table 1.10a Growing stock under FE/FLS/NRW<sup>1</sup> ownership by principal conifer species, Great Britain, 2021

million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Sitka spruce	10.1	13.1	52.1	75.3
Scots pine	3.2	0.5	9.3	13.0
Corsican pine	4.7	0.5	0.4	5.5
Norway spruce	1.4	1.3	3.0	5.7
Larches	1.6	1.3	3.9	6.9
Douglas fir	2.7	1.6	1.7	6.0
Lodgepole pine	0.6	0.6	4.7	5.9
Other conifers	1.4	1.0	1.0	3.5
<b>All conifers</b>	<b>25.8</b>	<b>20.0</b>	<b>76.1</b>	<b>121.8</b>

See Table 1.10c for information on sources and notes.



Table 1.10b Growing stock under private sector<sup>2</sup> ownership by principal conifer species, Great Britain, 2021million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Sitka spruce	12.4	9.8	118.0	140.5
Scots pine	15.2	0.3	28.8	44.5
Corsican pine	4.6	0.3	0.1	5.1
Norway spruce	7.6	1.6	6.3	15.5
Larches	9.1	4.0	14.8	28.2
Douglas fir	6.7	2.0	3.4	12.4
Lodgepole pine	1.2	0.4	12.7	14.3
Other conifers	8.2	1.2	2.8	12.2
<b>All conifers</b>	<b>65.1</b>	<b>19.8</b>	<b>188.0</b>	<b>273.9</b>

See Table 1.10c for information on sources and notes.

Table 1.10c Total growing stock by principal conifer species, Great Britain, 2021

million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Sitka spruce	22.6	22.9	170.2	215.8
Scots pine	18.5	0.8	38.1	57.6
Corsican pine	9.2	0.8	0.5	10.6
Norway spruce	9	2.9	9.3	21.3
Larches	10.8	5.4	18.8	35.1
Douglas fir	9.4	3.7	5.1	18.4
Lodgepole pine	1.8	1	17.4	20.2
Other conifers	9.6	2.2	3.8	15.7
<b>All conifers</b>	<b>90.9</b>	<b>39.8</b>	<b>264.1</b>	<b>395.7</b>

Source (Table 1.10a, 1.10b &amp; 1.10c): National Forest Inventory: 25-year forecast of softwood availability (Forest Research, 2022).

### Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE)
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g. owned by local authorities) and privately-owned woodland.
3. Areas at 31 March 2021.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

### 1.4.7 Growing stock by species: broadleaves

Table 1.11 presents the volume of broadleaved growing stock, broken down by principal species, ownership and country.

The total volume of broadleaved growing stock in Great Britain in 2012 was 245 million m<sup>3</sup> overbark standing (Table 1.11c).

Oak (28%), ash (16%) and beech (12%) accounted for the majority of the broadleaved volume. To some extent, this reflects the distribution of species by area (see Table 1.11c).

Table 1.11a Growing stock under FE/FLS/NRW<sup>1</sup> ownership by principal broadleaf species, Great Britain, 2012million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Oak	3.3	0.5	0.6	4.4
Beech	2.8	0.4	0.1	3.4
Sycamore	0.1	0.0	0.0	0.2
Ash	0.4	0.1	0.0	0.5
Birch	0.5	0.1	1.7	2.3
Sweet chestnut	0.1	0.0	0.0	0.1
Hazel	0.0	0.0	0.0	0.1
Hawthorn	0.0	0.0	0.0	0.0
Alder	0.1	0.0	0.1	0.2
Willow	0.0	0.0	0.0	0.0
Other broadleaves	1.3	0.8	1.2	3.3
<b>All broadleaves</b>	<b>8.7</b>	<b>1.9</b>	<b>3.9</b>	<b>14.5</b>

See Table 1.11c for information on sources and notes.

Table 1.11b Growing stock under private sector<sup>2</sup> ownership by principal broadleaf species, Great Britain, 2012million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Oak	51.7	7.7	5.6	65.0
Beech	19.8	1.6	5.2	26.6
Sycamore	16.2	2.4	4.8	23.4
Ash	30.1	6.9	2.8	39.8
Birch	11.3	1.2	8.5	20.9
Sweet chestnut	7.7	0.2	0.0	7.9
Hazel	5.0	0.9	0.4	6.4
Hawthorn	2.8	0.4	0.3	3.4
Alder	6.8	2.1	1.9	10.8
Willow	4.9	0.8	0.9	6.5
Other broadleaves	16.0	1.1	2.6	19.6
<b>All broadleaves</b>	<b>172.3</b>	<b>25.4</b>	<b>32.9</b>	<b>230.6</b>

See Table 1.11c for information on sources and notes.

Table 1.11c Total growing stock by principal broadleaf species, Great Britain, 2012

million m<sup>3</sup> overbark standing

Principal species	England	Wales	Scotland	Great Britain
Oak	55.0	8.1	6.3	69.4
Beech	22.6	2.0	5.3	29.9
Sycamore	16.4	2.4	4.9	23.6
Ash	30.5	7.0	2.8	40.3
Birch	11.8	1.3	10.1	23.2
Sweet chestnut	7.8	0.2	0.0	8.0
Hazel	5.1	0.9	0.5	6.5
Hawthorn	2.8	0.4	0.3	3.4
Alder	6.9	2.2	1.9	11.0
Willow	4.9	0.8	0.9	6.5
Other broadleaves	17.2	1.8	3.8	22.9
<b>All broadleaves</b>	<b>181.0</b>	<b>27.3</b>	<b>36.8</b>	<b>245.1</b>

Source (Table 1.11a, 1.11b & 1.11c): National Forest Inventory: 50-year forecast of hardwood availability (Forestry Commission, 2014).

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales. NRW estimates only relate to the Welsh Government Woodland Estate (WGWE).
2. Private sector: all other woodland. Includes woodland managed by NRW outside the WGWE, other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Areas at 31 March 2012.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

## 1.5 Area of farm woodland

Agricultural censuses run by Defra (Department for Environment, Food and Rural Affairs) and the devolved administrations collect annual information on the land use of farms. Table 1.12 and Figure 1.4 below show the area of woodland on farms.

Table 1.12 Area of farm woodland, UK, 2013 to 2022<sup>1,2</sup>

thousand hectares

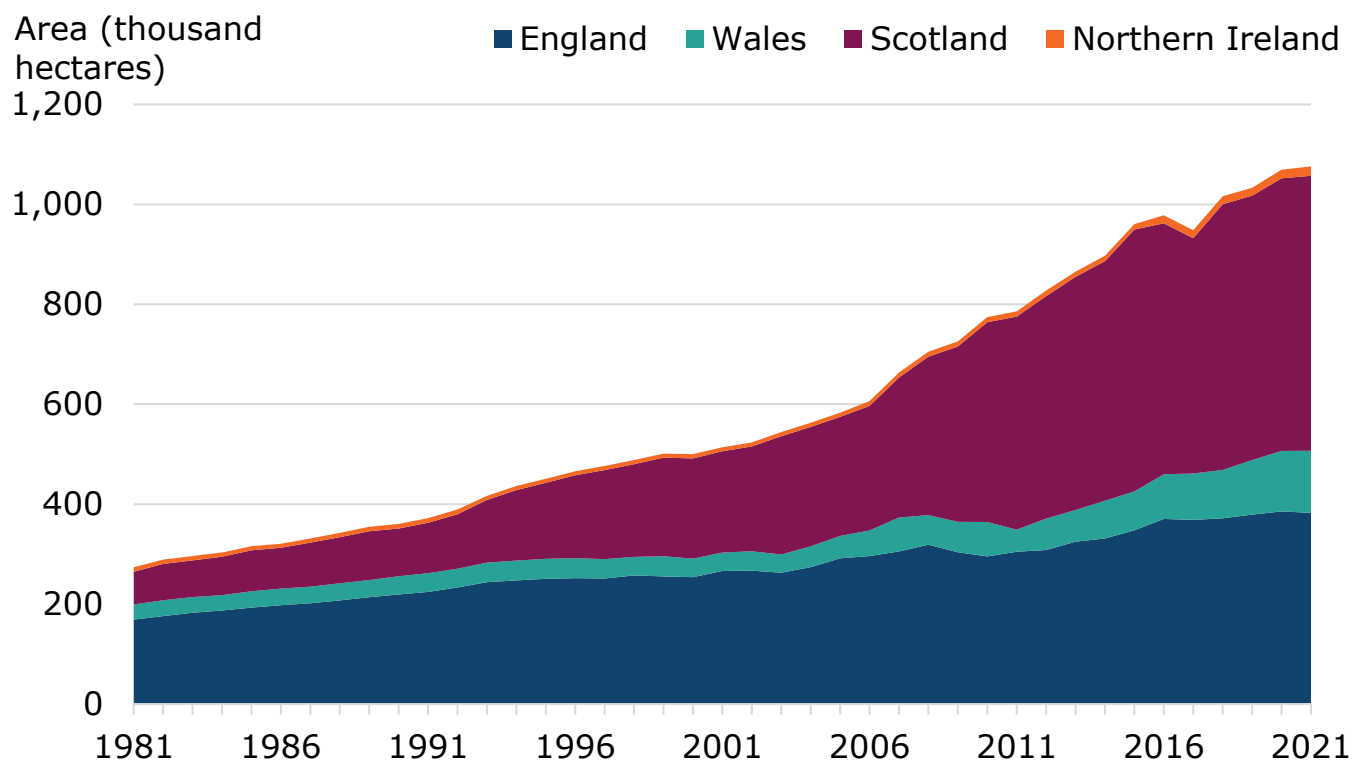
Year	England	Wales	Scotland	Northern Ireland	UK
2013	325	63	467	10	865
2014	331	76	479	11	897
2015	348	78	524	11	961
2016	370	89	502	16	978
2017	369	93	560	16	1,037
2018	372	97	532	16	1,016
2019	379	109	529	16	1,033
2020	385	121	546	17	1,069
2021	382	124	550	19	1,076
2022 <sup>3</sup>	382	125	[x]	19	[z]

Source: Defra, Scottish Government, Welsh Government, Northern Ireland Executive.

Notes:

- Changes in the area of farm woodland over time indicate a change in the area of farm land that is reported as woodland and do not necessarily indicate a change in woodland area.
- Figures include estimates for farm woodland that is not in receipt of grant aid.
- [x]: data not available (at time of publication, results from the 2023 Scottish Agricultural Census are not publicly available).
- [z]: not applicable. UK total cannot be calculated.

Figure 1.4 Area of farm woodland, UK, 1981 to 2021



Source: Defra, Scottish Government, Welsh Government, Northern Ireland Executive.

Notes:

1. Changes in the area of farm woodland over time indicate a change in the area of farm land that is reported as woodland and do not necessarily indicate a change in woodland area.
2. Figures include estimates for farm woodland that is not in receipt of grant aid.
3. Area of woodland on farms shown to 2021, as results from the 2022 Scottish Agricultural Census are not currently available.

## 1.6 New planting and publicly funded restocking

### 1.6.1 New planting

New planting is the creation of new areas of woodland by planting trees on land that was not previously woodland. The statistics presented here also include new woodland that is created by natural colonisation of trees (where known). Statistics on new planting are used to inform government policy and resource allocation and are used in producing annual estimates of woodland area.

There are a number of factors that can affect the level of new planting in the UK. These include:

- choices by landowners reflecting their own motivation and needs;
- the costs and availability of land for conversion to woodland;
- the availability of grants for new planting, the level of grant payments available and the awareness of grants among potential recipients;
- the tax benefits available from owning woodland;
- expected future markets for wood products such as timber and woodfuel;
- income from payments for ecosystem services, particularly carbon storage;
- national and local initiatives, for example on biodiversity, green infrastructure and water management.

In 2022/23, 12.96 thousand hectares of new woodland were created in the UK (Table 1.13a). Broadleaves accounted for 51% of the new planting area in 2022/23. Sixty-three percent (63%) of the total new planting took place in Scotland, 24% in England, 9% in Wales and 3% in Northern Ireland.



Table 1.13a Area of new planting by forest type, UK, 2018/19 to 2022/23

thousand hectares

Year (ending 31/3)	England	Wales	Scotland	Northern Ireland	UK
<b>Conifers</b>					
2018/19	0.42	0.32	7.27	0.10	8.11
2019/20	0.24	0.04	7.43	0.06	7.77
2020/21	0.18	0.08	6.94	0.07	7.27
2021/22	0.27	0.18	6.34	0.09	6.88
2022/23	0.26	0.47	5.53	0.07	6.33
<b>Broadleaves</b>					
2018/19	0.99	0.35	3.94	0.14	5.42
2019/20	2.10	0.04	3.61	0.14	5.90
2020/21	1.87	0.21	3.72	0.22	6.02
2021/22	1.98	0.44	4.14	0.45	7.01
2022/23	2.87	0.72	2.66	0.38	6.63
<b>Total</b>					
2018/19	1.41	0.67	11.21	0.24	13.53
2019/20	2.34	0.08	11.05	0.20	13.66
2020/21	2.05	0.29	10.66	0.28	13.29
2021/22	2.26	0.62	10.48	0.54	13.89
2022/23	3.13	1.19	8.19	0.45	12.96

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Forest Service, grant schemes.

Notes:

1. Private sector new planting figures are based on grant-supported new planting and (where possible) with estimates for areas planted without grant aid.
2. Figures for grant-aided planting relate to areas for which grants were paid during the year.
3. Estimates for areas planted without grant aid are believed to be under-reported and, as a result, the reported figures are likely to under-estimate the true level of planting activity. For England, woodland planting funded by sources other than the Countryside Stewardship Woodland Creation Grant, the Woodland Carbon Fund and the HS2 Woodland Fund include planting supported by the

Woodland Trust, by the Environment Agency, by Natural England, by the Community Forest Trust, by the Northern Forest and land acquired by the National Forest Company.

4. The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
5. Includes woodland formed by natural colonisation (where known).

Data: Longer time series of the above table are available from the Data Downloads page.

In 2022/23, most new planting (98%) took place on private sector land (Table 1.13b).

Table 1.13b Area of new planting by ownership, UK, 2018/19 to 2022/23

thousand hectares

Year (ending 31/3)	England	Wales	Scotland	Northern Ireland	UK
<b>FC/FLS/NRW/FS</b>					
2018/19	0.02	0.00	1.03	0.00	1.05
2019/20	0.10	0.00	0.27	0.04	0.42
2020/21	0.01	0.06	0.57	[low]	0.64
2021/22	[low]	0.02	0.62	0.02	0.67
2022/23	0.03	0.09	0.17	0.00	0.30
<b>Private sector</b>					
2018/19	1.39	0.67	10.19	0.24	12.48
2019/20	2.24	0.08	10.78	0.15	13.24
2020/21	2.04	0.23	10.09	0.28	12.65
2021/22	2.25	0.60	9.85	0.52	12.23
2022/23	3.09	1.09	8.02	0.45	12.66
<b>Total</b>					
2018/19	1.41	0.67	11.21	0.24	13.53
2019/20	2.34	0.08	11.05	0.20	13.66
2020/21	2.05	0.29	10.66	0.28	13.29
2021/22	2.26	0.62	10.48	0.54	13.89
2022/23	3.13	1.19	8.19	0.45	12.96

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Forest Service, grant schemes.

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland).
2. Private sector: all other woodland. Includes other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Private sector new planting figures are based on grant-supported new planting and (where possible) with estimates for areas planted without grant aid.
4. Figures for grant-aided planting relate to areas for which grants were paid during the year.

5. Estimates for areas planted without grant aid are believed to be under-reported and, as a result, the reported figures are likely to under-estimate the true level of planting activity. For England, woodland planting funded by sources other than the Countryside Stewardship Woodland Creation Grant, the Woodland Carbon Fund and the HS2 Woodland Fund include planting supported by the Woodland Trust, by the Environment Agency, by Natural England and land acquired by the National Forest Company. For Scotland, a small amount of new planting without grant aid was included from 2018/19 to 2019/20.
6. The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
7. Includes woodland formed by natural colonisation (where known).
8. [low]: less than 0.005 thousand hectares.

Data: Longer time series of the above table are available from the Data Downloads web page.

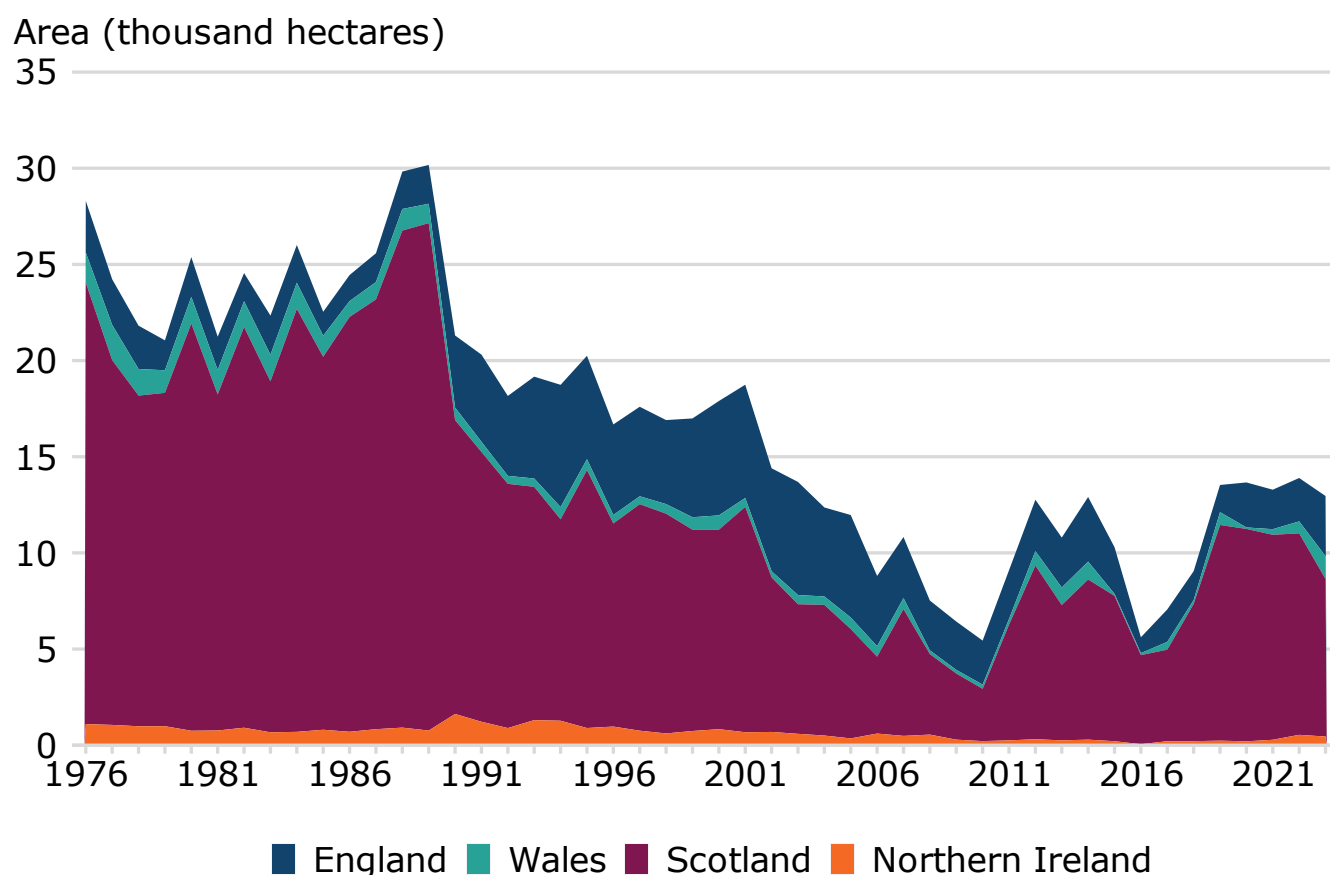
Figure 1.5 shows areas of new planting by country since the year ending March 1976. Trends in new planting rates have been influenced by changes to the incentives available to land owners (in the form of grants) and the availability of land for planting.

In the last 10 years, areas of new planting in the UK have ranged from under 6 thousand hectares to around 14 thousand hectares.

At 12.96 thousand hectares, the current level of new planting in the UK is 7% lower than the level reported in 2021/22.

For further information, see the New Planting and Restocking section of the Sources chapter.

Figure 1.5 Area of new planting, UK, 1976 to 2023



Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Forest Service, grant schemes.

Notes:

1. Private sector figures are based on grant-supported new planting and (where possible) with estimates for areas planted without grant aid.
2. Figures for grant-aided planting relate to areas for which grants were paid during the year.
3. Estimates for areas planted without grant aid are believed to be under-reported and, as a result, the reported figures are likely to under-estimate the true level of planting activity. For England, woodland planting funded by sources other than the Countryside Stewardship Woodland Creation Grant, the Woodland Carbon Fund and the HS2 Woodland Fund include planting supported by the Woodland Trust, by the Environment Agency, by Natural England and land acquired by the National Forest Company. For Scotland, a small amount of new planting without grant aid was included for 2016/17 and 2018/19 to 2019/20.
4. The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
5. Includes woodland formed by natural colonisation (where known).

## 1.6.2 Publicly funded restocking

Restocking is the replacement of trees on areas of woodland that have been felled; this can be done either through replanting or natural regeneration. The statistics presented here include felled areas that have been restocked by both natural regeneration and replanting.

As restocking takes place on woodland that has been previously harvested and it is a condition of most felling licences that the area is restocked, restocking rates are mainly driven by harvesting levels (with a time lag, usually of around 2 years, between harvesting and restocking). Figures for timber harvesting (wood production) are available in the UK-Grown Timber chapter.

Economic factors, including grant rates, may have some effect on the species choice at restocking. In addition, the precise timing of restocking may be affected by weather conditions.

This release only covers publicly funded restocking, that is:

- restocking of Forestry England/Forestry and Land Scotland/Natural Resources Wales/Forest Service woodland and
- grant aided restocking of private sector woodland.

Grant support for restocking in Scotland has been limited since 2008. The Forestry Grant Scheme was launched in Scotland in March 2015 and does include support for restocking in most but not all circumstances. As a result, grant-aided restocking does not represent all private sector restocking in Scotland. It is therefore likely that conifer restocking in Scotland in recent years is under-reported in this release and other statistics

Grant support in England is now provided by the Countryside Stewardship scheme, which opened for applications in early 2016. Funding for restocking under Countryside Stewardship is only available under limited circumstances (through the tree health grant). The restoration (and restocking with native species) of PAWS (Plantation on Ancient Woodland Sites) is also supported by the HS2 Woodland

Fund. No estimate has been made for restocking in England that is no longer supported by grants and therefore restocking in England in recent years is under-reported in this release and other statistics.

A total of 12.39 thousand hectares of publicly funded restocking were reported in the UK in 2022/23 (Table 1.14a).

**Table 1.14a Area of publicly funded restocking by forest type, UK, 2018/19 to 2022/23**

thousand hectares

<b>Year (ending 31/3)</b>	<b>England</b>	<b>Wales</b>	<b>Scotland</b>	<b>Northern Ireland</b>	<b>UK</b>
<b>Conifers</b>					
2018/19	1.26	1.04	9.12	0.72	12.15
2019/20	2.11	0.92	8.19	0.69	11.91
2020/21	1.76	1.16	7.96	0.62	11.51
2021/22	2.29	0.93	8.34	0.79	12.35
2022/23	2.01	1.08	6.17	0.81	10.06
<b>Broadleaves</b>					
2018/19	0.38	0.66	2.07	0.11	3.23
2019/20	0.63	0.58	1.69	0.03	2.92
2020/21	0.65	0.68	1.21	0.02	2.57
2021/22	0.81	0.54	1.56	0.02	2.93
2022/23	0.68	0.26	1.31	0.08	2.33
<b>Total</b>					
2018/19	1.65	1.70	11.20	0.83	15.38
2019/20	2.74	1.50	9.88	0.71	14.83
2020/21	2.42	1.85	9.17	0.64	14.07
2021/22	3.09	1.48	9.90	0.81	15.28
2022/23	2.69	1.34	7.47	0.89	12.39

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Forest Service, grant schemes.

Notes:

1. Private sector figures are based on areas for which grants were paid during the year.
2. Since 2010/11, no estimates of the area planted without grant aid are available. As a result, the reported figures are likely to under-estimate the true level of planting activity.
3. The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
4. Includes woodland restocked by natural regeneration (where known).
5. Restocking by natural regeneration in non-clearfell areas may be under-represented.
6. Results for 2022/23 do not include private sector restocking in England, for which data is unavailable.

Data: Longer time series of the above table are available from the Data Downloads web page.



Table 1.14b Area of publicly funded restocking by ownership, UK, 2018/19 to 2022/23

thousand hectares

Year (ending 31/3)	England	Wales	Scotland	Northern Ireland	UK
<b>FC/FLS/NRW/FS</b>					
2018/19	1.57	1.22	7.15	0.79	10.72
2019/20	2.48	1.48	5.35	0.62	9.94
2020/21	1.98	1.67	5.00	0.60	9.26
2021/22	2.54	1.34	5.59	0.65	10.11
2022/23	2.69	1.00	3.53	0.55	7.77
<b>Private sector</b>					
2018/19	0.08	0.48	4.05	0.04	4.65
2019/20	0.26	0.02	4.52	0.09	4.89
2020/21	0.43	0.18	4.16	0.04	4.81
2021/22	0.55	0.14	4.32	0.16	5.17
2022/23	[x]	0.34	3.94	0.35	4.62
<b>Total</b>					
2018/19	1.65	1.70	11.20	0.83	15.38
2019/20	2.74	1.50	9.88	0.71	14.83
2020/21	2.42	1.85	9.17	0.64	14.07
2021/22	3.09	1.48	9.90	0.81	15.28
2022/23	2.69	1.34	7.47	0.89	12.39

Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Welsh Government, Forest Service, grant schemes.

Notes:

1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: Forest Service (Northern Ireland).
2. Private sector: all other woodland. Includes other publicly owned woodland (e.g., owned by local authorities) and privately-owned woodland.
3. Private sector figures are based on areas for which grants were paid during the year.
4. Since 2010/11, no estimates of the area planted without grant aid are available. As a result, the reported figures are likely to under-estimate the true level of planting activity.
5. The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
6. Includes woodland restocked by natural regeneration (where known).

7. Restocking by natural regeneration in non-clearfell areas may be under-represented.
7. [x]: data not available. Data on private sector restocking in England in 2022/23 is unavailable.

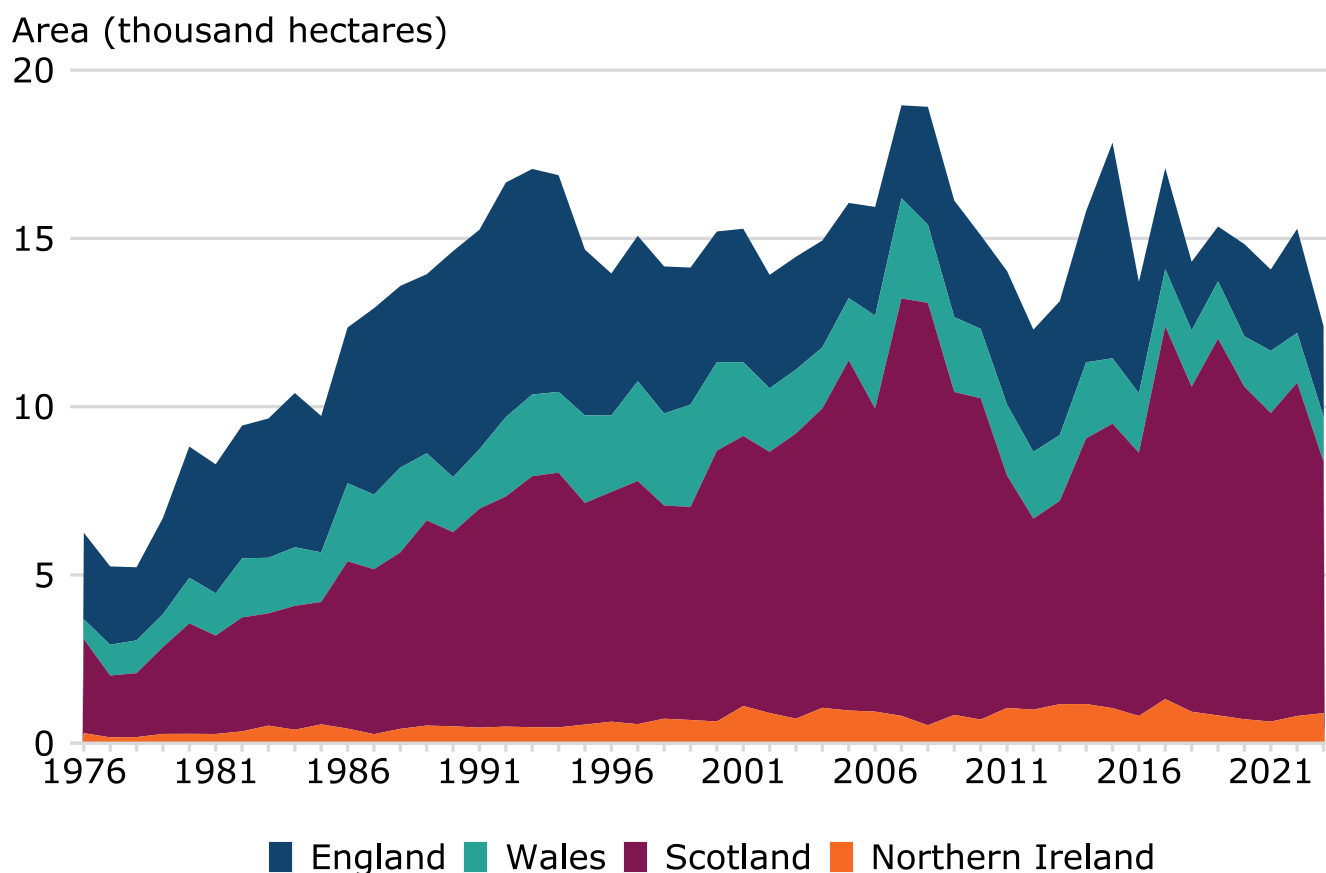
Data: Longer time series of the above table are available from the Data Downloads web page.

Figure 1.6 shows reported areas of restocking by country since the year ending March 1976. It indicates an increase in restocking rates during the period. Over the same period, there has been a general increase in UK wood production (see UK-Grown Timber chapter).

The reported area of restocking fell significantly after a peak of 19 thousand hectares in 2006/07. This followed changes to grant support for restocking in Scotland, that resulted in some non-grant aided Sitka spruce restocking being excluded from the estimates. The chart shows a dip in the area of restocking in 2015/16, following changes to grant schemes across the UK. Reported restocking has continued to fall in England, where grant aid is now only available in very limited circumstances and for which a 2022/23 estimate is not available.

The reported area of publicly funded restocking in the UK in 2022/23 represents a 19% decrease from the previous year. For further information, see the New Planting and Restocking section of the Sources chapter.

Figure 1.6 Area of publicly funded restocking, UK, 1976 to 2023



Source: Forestry Commission, Forestry England, Scottish Forestry, Forestry and Land Scotland, Natural Resources Wales, Forest Service, grant schemes.

Notes:

1. Private sector figures are based on areas for which grants were paid during the year.
2. Since 2010/11, no estimates of the area planted without grant aid are available. As a result, the reported figures are likely to under-estimate the true level of planting activity.
3. The planting season lies both sides of 31 March and the weather can cause planting to be advanced or delayed.
4. Includes woodland restocked by natural regeneration.
5. Restocking by natural regeneration in non-clearfell areas may be under-represented.
6. Results for 2022/23 do not include private sector restocking in England, for which data is unavailable.

## 1.7 Felling

### Felling

Approval for the felling (cutting down) of trees in the UK is granted through felling licences issued by the Forestry Commission, Scottish Forestry, Natural Resources Wales or the Forest Service in Northern Ireland.

Felling licences may be conditional (where felling approval is granted subject to replanting) or unconditional (where tree felling is approved without the requirement to replant). Unconditional licences are routinely issued for silvicultural thinning operations and in these cases no woodland loss takes place. However, an unconditional felling licence without the requirement to replant may be issued if there are overriding environmental considerations, for example to enable the restoration of important habitats.

The removal of trees may also be authorised under planning regulations, to enable development (including for windfarms). In this case, a felling licence is not required.

The removal of trees might also be required through a Statutory Plant Health Notice (SPHN). A SPHN may require the felling and destruction of infected trees or containment of infested material on site, and is issued by the Forestry Commission, Scottish Forestry, Natural Resources Wales or the Forest Service to prevent the spread of pests and diseases. Similar actions are also required within the public woodland estate managed by these organisations. There is no legal requirement for woodland to be restocked after felling under a SPHN.

Since 2010/11, SPHNs have mainly been issued to attempt to slow down the spread of *Phytophthora ramorum*, first found in the UK in 2002 on viburnum, and in 2009 on Japanese larch, a significant sporulating host resulting in a dramatic upsurge in the disease.

Statutory felling of infected *P. ramorum* infected larch does not apply within the designated *P. ramorum* management zone in south west Scotland where the high levels of infection and proportion of larch in the area make this unfeasible.

However, felling licences are still required, and movement licences are required to stop spread out of this area. In Wales, *P. ramorum* Core Disease Zone SPHNs are still served to contain material on site, but felling still requires a felling licence.

Further information on felling and Statutory Plant Health Notices is provided in the Sources chapter.

## Woodland loss

Information on unconditional felling licences that do not relate to thinning may be seen as an indication of the level of woodland loss on land that is not owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales or the Forest Service. However, the data relates only to felling licences issued, so does not provide information on whether the felling actually took place (or the timing of the felling). In addition, felling licences do not cover woodland loss that is authorised under planning regulations.

The National Forest Inventory report [Preliminary estimates of the changes in canopy cover in British woodlands between 2006 and 2015 \(2016\)](#) has reported:

- 3.3 thousand hectares of observed permanent woodland loss between 2006 and 2015;
- a further 0.7 thousand hectares of ground under development and 0.2 thousand hectares of newly established habitats;
- 69% of the clearfelled area observed in 2006 had been restocked by 2012, leaving around 33.9 thousand hectares of woodlands in transition and open areas;

- 63% of the area observed as clearfelled between 2006 and 2009 had been restocked by 2012, leaving around 28.6 thousand hectares of woodlands in transition and open areas.

These are interim estimates that are likely to underestimate the final position; updated estimates will be available when results from the NFI second cycle field survey are released.

### 1.7.1 Felling licences

Table 1.15 shows the area covered by unconditional felling licences issued by the Forestry Commission, Scottish Forestry and Natural Resources Wales in the last 10 years. The figures do not include unconditional felling licences issued to permit thinning of woodlands. The table covers woodland in England, Scotland and Wales that is not owned or managed by Forestry England, Forestry and Land Scotland or Natural Resources Wales only; it does not cover felling that is exempt from felling licence approval (such as authorisations for felling under planning regulations, felling required under a Statutory Plant Health Notice or felling that is approved on condition that the area is restocked).

A total of 0.6 thousand hectares of woodland in Great Britain were covered by unconditional felling licences (with no requirement to restock) in the year to March 2023.

Table 1.15 Area of private sector woodland covered by unconditional felling licences<sup>1,2</sup>, Great Britain, 2012/13 to 2022/23

thousand hectares

Year	England	Wales	Scotland	Great Britain
2013/14	0.4	0.1	0.1	0.6
2014/15	0.2	1.6	0.1	1.9
2015/16	0.2	0.1	0.2	0.5
2016/17	0.2	[low]	[low]	0.2
2017/18	0.2	[low]	[low]	0.2
2018/19	0.7	[low]	[low]	0.8
2019/20	0.3	0.1	0.3	0.6
2020/21	0.4	0.4	0.3	1.0
2021/22	0.3	[low]	0.1	0.4
2022/23	0.5	[low]	0.2	0.6

Source: Forestry Commission, Scottish Forestry, Natural Resources Wales

Notes:

1. Felling licences issued in the period. Excludes areas exempt from felling licence approval and licences issued for thinning.
2. From April 2019 Felling Permissions, issued under the Forestry and Land Management Act (Scotland) 2018, have replaced Felling Licences in Scotland.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

## 1.7.2 Statutory Plant Health Notices

Table 1.16a shows the number of sites where a Statutory Plant Health Notice has been served in the UK between 2012/13 and 2022/23. For Scotland, the figures show the number of Statutory Plant Health Notices issued, rather than number of sites.

All woodland, including sites owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales or the Forest Service in Northern Ireland are covered. As Statutory Plant Health Notices are not issued in the *Phytophthora ramorum* management zone in southwest Scotland, the figures presented here do not cover all felling of infected larch.

A total of 136 sites in Wales were served with Statutory Plant Health Notices in the year to 31 March 2023. In contrast, in Northern Ireland, no sites were served with Statutory Plant Health Notices during the same period (Table 1.16a). In Scotland, a total of 329 Statutory Plant Health Notices were served in the year to 31 March 2023 (Table 1.16a).



Table 1.16a Number of sites where a Statutory Plant Health Notice has been served, UK, 2013/14 to 2022/23

Year	England	Wales	Scotland	Northern Ireland	UK
2013/14	227	287	55	28	597
2014/15	144	75	17	17	253
2015/16	75	50	32	3	160
2016/17	103	52	67	0	222
2017/18	82	130	70	14	296
2018/19	128	197	284	0	609
2019/20	48	97	198	0	343
2020/21	203	170	282	2	657
2021/22	269	150	301	0	720
2022/23	[x]	136	329	0	[z]

Source: Forestry Commission, Scottish Forestry, Natural Resources Wales, Forest Service.

Note:

1. The number of sites where infection of larch by *Phytophthora ramorum* has been confirmed, or where there is sufficient suspicion of infection and a Statutory Plant Health Notice has been served on the landowner. Excludes felling within the *Phytophthora ramorum* management zone in south west Scotland, where Statutory Plant Health Notices are not issued.
2. For Scotland, figures relate to the number of Statutory Plant Health Notices issued.
3. [x]: data not available.
4. [z]: not applicable. UK total cannot be calculated.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

In 2022/23, 1.7 thousand hectares of woodland in Wales, Scotland and Northern Ireland required felling under Statutory Plant Health Notices, 0.7 thousand hectares in Wales and 1.0 thousand hectares in Scotland (Table 1.16b). No Statutory Plant Health Notices were issued in Northern Ireland in 2022/23.

**Table 1.16b Felling areas<sup>1</sup> under Statutory Plant Health Notices, UK, 2013/14 to 2022/23**

Year	thousand hectares					UK
	England	Wales	Scotland <sup>2,3</sup>	Northern Ireland		
2013/14	0.9	5.0	0.2	0.5	6.6	
2014/15	0.3	0.6	0.1	0.0	1.0	
2015/16	0.2	0.4	0.1	0.0	0.7	
2016/17	0.3	0.2	0.2	0.0	0.7	
2017/18	0.2	1.2	0.3	0.1	1.7	
2018/19	0.6	1.6	1.4	0.0	3.6	
2019/20	0.3	0.5	1.0	0.0	1.8	
2020/21	1.3	1.4	1.8	0.0	4.5	
2021/22	1.5	1.2	1.3	0.0	4.0	
2022/23	[x]	0.7	1.0	0.0	[z]	

Source: Forestry Commission, Scottish Forestry, Natural Resources Wales, Forest Service.

Note:

1. The area that is required to be felled within the Statutory Plant Health Notice.
2. Felling areas in Scotland relate to larch only.
3. Excludes felling within the *Phytophthora ramorum* management zone in south west Scotland, where Statutory Plant Health Notices are not issued.
4. [x]: data not available.
5. [z]: not applicable. UK total cannot be calculated.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

## 1.8 Canopy cover in England

The [Environmental Targets \(Woodland and Trees Outside Woodland\) \(England\) Regulations 2023](#) sets a target that by the end of 31 December 2050 at least 16.5% of all land in England is covered by woodland and trees outside woodland. In order to monitor progress to this target, a baseline measurement has been undertaken to record the position at March 2022 and updates will be produced on a 5 yearly basis.

In order to report on canopy cover for the March 2022 baseline, the following metrics have been combined:

- The area of woodland, based on the 2022 National Forest Inventory woodland map for England;
- The area of trees outside woodland (covering small woodlands, groups of trees and lone trees, but excluding hedgerows), based on the map of Trees Outside Woodland for England; and
- The area of traditional orchards, based on the Natural England orchard dataset and orchards recorded by the National Forest Inventory.

Table 1.17 presents the estimate of canopy cover in England at March 2022.

**Table 1.17 Canopy cover, England, 2022**

<b>Canopy cover</b>	<b>Area (thousand hectares) [p]</b>	<b>Percentage of total land area (%) [p]</b>
Woodland	1,330	10.2
Trees outside woodland	586	4.5
Orchards	24	0.2
<b>Total canopy cover</b>	<b>1,940</b>	<b>14.9</b>

Source: Forest Research

Notes:

1. The estimated woodland area shown here differs from the figure reported for woodland area in England in 2022 in Tables 1.1 to 1.3. The figure for England, Scotland and Wales in the earlier tables are based on the latest NFI woodland map that is complete for the whole of Great Britain, with estimated new planting to 2021/22 added to give estimates of woodland area at March 2022 that are consistent across Great Britain. In this table, the woodland figure is derived from a more recent NFI woodland map for England, providing estimates at March 2022 and including some revisions for earlier planting that had been omitted from earlier maps.
2. The area of trees outside woodlands is derived from the 2022 Trees Outside Woodland map for England, derived from remote sensing and fieldwork.
3. The estimated area of orchards is derived from Natural England's traditional orchards dataset and from the National Forest Inventory map. The areas from the dataset have been adjusted to remove areas where stocking densities are too low to qualify as traditional orchards.
4. [p]: provisional and may be subject to revision.

These figures are outside the scope of National Statistics. For further information see the Sources chapter.

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