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#### Introduction

This publication contains provisional statistics for the year to March 2017 on:

- UK woodland area;
- certified woodland area; and
- areas of new planting and publicly funded restocking.

Estimates for England, Wales, Scotland and Northern Ireland are included in addition to UK totals.

Figures at March 2017 and for the period 2016-17 are published for the first time in this release and are provisional. Some figures for earlier years have been revised from those previously released. For further details, see the Revisions section of the Annex.

These provisional statistics will be superseded on 28 September 2017 with the publication of final and more detailed results in *Forestry Statistics 2017*, available at: <a href="https://www.forestry.gov.uk/forestry/infd-7agdgc">www.forestry.gov.uk/forestry/infd-7agdgc</a>

Previous editions of this release were titled "Woodland Area, Planting and Restocking". The name of the release has been amended for clarification and does not indicate any change in scope from recent editions.

# Key findings

The main findings are:

- The area of woodland in the UK at 31 March 2017 is estimated to be 3.17 million hectares. This represents 13% of the total land area in the UK, 10% in England, 15% in Wales, 18% in Scotland and 8% in Northern Ireland.
- Of the total UK woodland area, 0.86 million hectares is owned or managed by the Forestry Commission (in England and Scotland), Natural Resources Wales or the Forest Service (in Northern Ireland).
- The total certified woodland area in the UK at 31 March 2017 is 1.39 million hectares, including all Forestry Commission/Natural Resources Wales/Forest Service woodland. Overall, 44% of the UK woodland area is certified.
- Seven thousand hectares of newly created woodland were reported in the UK in 2016-17, mostly with coniferous species.
- Seventeen thousand hectares of woodland restocking were reported in the UK in 2016-17, mostly with conifers.

#### Area of woodland

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% (25% in Northern Ireland), 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 Annex.

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 owned and managed by the Forestry Commission (FC) in England and Scotland, Natural Resources Wales (NRW) in Wales and the Forest Service (FS) in Northern Ireland. Other public sector woodland (e.g. owned by local authorities) are included with privately owned woodland as "private sector" in this release.

The Natural Resources Wales woodland areas shown in this release relate to areas previously owned or managed by Forestry Commission Wales. They exclude any areas previously owned or managed by other parts of Natural Resources Wales, such as the former Environment Agency in Wales and the former Countryside Council for Wales.

The area of woodland in the UK at 31 March 2017 is estimated to be 3.17 million hectares (Table 1). This represents 13% of the total land area in the UK, 10% in England, 15% in Wales, 18% in Scotland and 8% in Northern Ireland.

0.86 million hectares of woodland in the UK (27%) is owned or managed by the Forestry Commission (in England and Scotland), Natural Resources Wales or the Forest Service (in Northern Ireland).

Conifers account for around one half (51%) of the UK woodland area, although this proportion varies from 26% in England to 74% in Scotland.

Table 1: Area of woodland, 2017

thousands of hectares

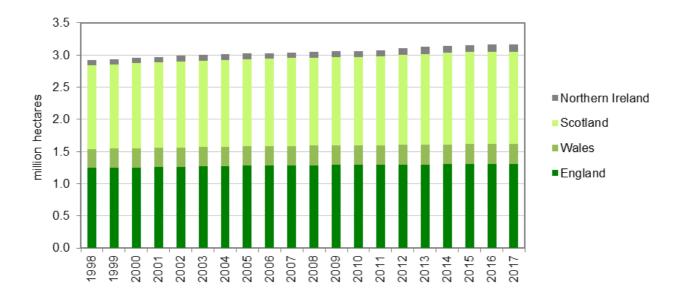
	England	Wales	Scotland	Northern Ireland	UK
FC/NRW/FS <sup>1</sup>					
Conifers	151	98	429	56	733
Broadleaves	63	19	40	7	130
Total	214	117	470	62	863
Private sector <sup>2</sup>					
Conifers	189	53	632	11	885
Broadleaves	904	137	338	39	1,418
Total	1,092	190	970	50	2,303
Total Woodland					
Conifers	340	151	1,061	66	1,618
Broadleaves	967	156	378	46	1,548
Total	1,307	307	1,440	112	3,166

Source: Forestry Commission, Natural Resources Wales, Forest Service, National Forest Inventory.

- (1) FC: Forestry Commission (England and 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 previously owned/managed by the Countryside Council for Wales and the Environment Agency in Wales, other publicly owned woodland (e.g. owned by local authorities) and privately owned woodland.
- (3) Areas as at 31 March 2017. Figures are provisional.
- (4) 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.
- (5) Figures for Northern Ireland are obtained from the Northern Ireland Woodland Register.
- (6) Broadleaves include coppice and coppice with standards.

Figure 1 shows woodland area by country since 1998. The figure indicates that woodland area has risen by around 250 thousand hectares since 1998, an increase of 8% over the period.

Figure 1: Area of woodland, 1998 to 2017



Source: Forestry Commission, Natural Resources Wales, Forest Service, National Forest Inventory.

#### Note:

(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 on the National Forest Inventory is available at <a href="https://www.forestry.gov.uk/inventory">www.forestry.gov.uk/inventory</a>.

#### Area of certified woodland

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.

Table 2 shows the area of certified woodland. The total area of certified woodland in the UK at 31 March 2017 is 1.39 million hectares. This represents 44% of the total UK woodland area, 26% of the woodland area in England, 47% in Wales, 58% in Scotland and 58% in Northern Ireland.

Table 2: Area of certified woodland, 2017

thousands of hectares

	England	Wales	Scotland	Northern Ireland	UK
FC/NRW/FS <sup>1</sup>	214	117	470	62	863
Private sector <sup>2</sup>	122	28	371	3	525
Total	337	145	841	65	1,388
% of woodland area	26%	47%	58%	58%	44%

Source: Forest Stewardship Council, Forestry Commission, Natural Resources Wales, Forest Service.

#### Note

- (1) FC: Forestry Commission (England and 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 previously owned/managed by the Countryside Council for Wales and the Environment Agency in Wales, other publicly owned woodland (e.g. owned by local authorities) and privately owned woodland.
- (3) Areas as at 31 March 2017.
- (4) All certified woodland in 2017 is certified under the Forest Stewardship Council (FSC) scheme. Some of these woodlands are also certified under the Programme for the Endorsement of Forest Certification (PEFC) scheme.
- (5) The estimates are based on UK data published by FSC, supplemented by data from individual certificates and other sources. Where possible, figures are for the woodland area certified, rather than the land area certified.
- (6) All Forestry Commission/Natural Resources Wales (formerly owned/managed by FC Wales)/Forest Service woodland is certified. The Forestry Commission/Natural Resources Wales/Forest Service areas are the latest areas, as shown in Table 1, rather than the areas shown on certificates.

Figure 2 presents certified woodland area by country since December 2001, with figures for earlier years revised for consistency with results from the National Forest Inventory. This shows an increase in certified woodland area of around 330 thousand hectares (31%) since December 2001.

The 1.39 million hectares of certified woodland at March 2017 represents a 3% increase on the previous year. Most of this increase occurred in Scotland and resulted from both increases in certified areas for existing certificate holders (usually when certificates were renewed) and new certificates issued.

1.5 1.2 ■Northern Ireland million hectares 0.9 Scotland ■Wales 0.6 ■England 0.3 0.0 2012 2013 Mar 2005 Mar 2016 Sep 2002 Mar 2006 Mar 2008 Mar 2009 Mar 2010 Mar 2014 Mar 2015 Dec 2001 Mar 2004 Mar 2007 Mar 2011 Mar Mar

Area of certified woodland, 2001 to 2017 Figure 2:

Source: Forest Stewardship Council, Forestry Commission, Natural Resources Wales, Forest Service.

- (1) All certified woodland is certified under the Forest Stewardship Council (FSC) scheme. Some of these woodlands are also certified under the Programme for the Endorsement of Forest Certification (PEFC)
- (2) The estimates are based on UK data published by FSC, supplemented by data from individual certificates and other sources. Where possible, figures are for the woodland area certified, rather than the land area certified.

# 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. 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.

Table 3 shows the area of new woodland that was created in the year to 31 March 2017. The total area of new planting in the UK in 2016-17 was 6.5 thousand hectares. Conifers accounted for 54% of the total area of new planting. Most new planting (84%) took place on private sector land.

Most new planting (73%) took place in Scotland, 17% in England, 6% in Wales and the remaining 4% in Northern Ireland.

Table 3: Area of new planting, 2016-17

thousands of hectares

	England	Wales	Scotland	Northern Ireland	UK
New planting by forest type					
Conifers	0.1	0.2	3.2	0.1	3.5
Broadleaves	1.0	0.2	1.5	0.2	3.0
All new planting	1.1	0.4	4.8	0.2	6.5
New planting by ownership					
FC/NRW/FS <sup>1</sup>	0.0	0.0	1.1	0.0	1.1
Private sector <sup>2</sup>	1.1	0.4	3.7	0.2	5.5
All new planting	1.1	0.4	4.8	0.2	6.5

Source: Forestry Commission, Natural Resources Wales, Forest Service, grant schemes.

- (1) FC: Forestry Commission (England and 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 and, for England, includes new planting supported by the Woodland Trust and land acquired by the National Forest Company. For Scotland, includes a small amount of non-grant aided broadleaved planting.
- (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).
- (6) Figures are provisional.

Figure 3 shows areas of new planting by country since the year ending March 1976. UK new planting rates have fallen from the late 1980's, decreasing by 82% between 1988-89 and 2009-10. This followed changes to the tax benefits from owning forestry in the UK, introduced in the 1988 Finance Act (www.legislation.gov.uk/ukpga/1988/39/contents).

The area of new planting in the UK between 2010-11 and 2014-15 was around twice the level of that reported in 2009-10. This increase was largely driven by increases in Scotland following the introduction of Rural Development Contracts. New planting decreased in 2015-16 to levels similar to that reported in 2009-10. This decrease is likely to have been influenced by changes in grant schemes across the UK.

At 6.5 thousand hectares in 2016-17, the current level of new planting represents a 16% increase from the 5.6 thousand hectares achieved in 2015-16. For further information, see the Data Sources and Methodology section of the Annex.

35 30 25 thousand hectares ■ Northern Ireland 20 Scotland 15 ■ Wales ■ England 10 5

Area of new planting, 1976 to 2017 Figure 3:

Source: Forestry Commission, Natural Resources Wales, Forest Service, grant schemes.

- (1) Private sector figures are based on areas for which grants were paid during the year and, for England, includes new planting supported by the Woodland Trust and land acquired by the National Forest Company. Figures for grant-aided planting under Rural Development Contracts in Scotland relates to calendar years.
- (2) Estimates of areas planted without grant aid are also included (where possible) up to 2009-10. For Scotland, a small amount of new planting without grant aid is included for 2016-17. 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
- (4) Includes woodland formed by natural colonisation (where known).
- (5) Figures are provisional.

# 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, often of around 2 years, between harvesting and restocking). Figures for timber harvesting (wood production) were most recently released in *UK Wood Production and Trade: 2016 provisional figures* (available at <a href="https://www.forestry.gov.uk/forestry/beeh-a9zjnu">www.forestry.gov.uk/forestry/beeh-a9zjnu</a>).

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 Commission/ Natural Resources Wales/ Forest Service Woodland and
- grant aided restocking of private sector woodland.

Grant support for restocking with conifers changed with the introduction of Rural Development Contracts in Scotland in 2008. As a result, grant aid was no longer available for restocking with Sitka spruce in many cases. No estimate has been included for restocking with Sitka spruce in the private sector in Scotland that is no longer supported by grants. It is therefore likely that conifer restocking in Scotland in recent years is underreported in this release and other statistics. The Forestry Grant Scheme was launched in Scotland in March 2015.

Grant support in England is now provided by the Countryside Stewardship scheme, which opened for applications in early 2016. No funding is provided for restocking under Countryside Stewardship. No estimate has been made for restocking in England that is no longer supported by grants and it is therefore likely that restocking in England is underreported in this release.

Table 4 shows the reported area of publicly funded restocking that took place in the year to 31 March 2017. In 2016-17, a total 17.1 thousand hectares of restocking was publicly funded. Conifers accounted for over three quarters (78%) of the total area of restocking. Most reported restocking (69%) took place on FC/NRW/FS land.

Around two thirds of all publicly funded restocking (65%) took place in Scotland, 18% in England, 10% in Wales and the remaining 8% in Northern Ireland.

Table 4: Area of publicly funded restocking, 2016-17

thousands of hectares

	England	Wales	Scotland	Northern Ireland	UK
Restocking by forest type					
Conifers	2.0	1.1	9.1	1.1	13.4
Broadleaves	1.0	0.5	2.0	0.2	3.7
All restocking	3.0	1.7	11.1	1.3	17.1
Restocking by ownership					
FC/NRW/FS <sup>1</sup>	2.4	1.4	6.7	1.3	11.7
Private sector <sup>2</sup>	0.6	0.2	4.4	0.1	5.3
All restocking	3.0	1.7	11.1	1.3	17.1

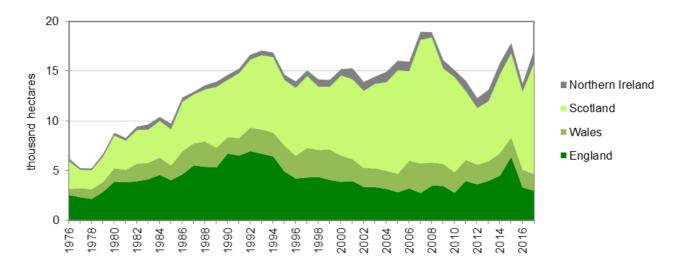
Source: Forestry Commission, Natural Resources Wales, Forest Service, grant schemes.

- (1) FC: Forestry Commission (England and 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. No estimate of areas planted without grant aid was included. Figures for grant-aided planting under Rural Development Contracts in Scotland relates to the calendar year 2016.
- (4) The planting season lies both sides of 31 March, and the weather can cause planting to be advanced or delayed.
- (5) Includes woodland restocked by natural regeneration.
- (6) Restocking by natural regeneration in non-clearfell areas may be under-represented in the above table.
- (7) Figures are provisional.

Figure 4 shows reported areas of restocking by country since the year ending March 1976. It indicates an overall increase in restocking rates during the period. Over the same period, there has been a general increase in UK wood production (see www.forestry.gov.uk/forestry/infd-a9zjnu).

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. Results from the Forestry Commission's Nursery Survey (an annual survey of the main forest nurseries in Great Britain) indicate that, despite a dip in the 2009/10 planting year, sales of Sitka spruce plants to Scotland have been relatively stable in recent years.

The chart shows that the reported area of publicly funded restocking in 2016-17 represents a 24% increase from the previous year, and is now similar to the level achieved in 2014-15. The dip in 2015-16 followed changes to grant schemes across the UK. For further information, see the Data Sources and Methodology section of the Annex.



Area of restocking, 1976 to 2017 Figure 4:

Source: Forestry Commission, Natural Resources Wales, Forest Service, grant schemes.

- (1) Private sector figures are based on areas for which grants were paid during the year. Figures for grantaided planting under Rural Development Contracts in Scotland relates to calendar years.
- (2) Estimates of areas planted without grant aid are also included (where possible) up to 2009-10, but no estimates are available since then. 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
- (4) Includes woodland restocked by natural regeneration.
- (5) Restocking by natural regeneration in non-clearfell areas may be under-represented.
- (6) Figures are provisional.

#### **Annex**

#### Introduction

This annex provides background information on the woodland area, planting and publicly funded restocking statistics presented in this release. It covers the data sources and methodology used to produce the statistics, information on quality measures and on any revisions to historic data and links to further information.

# Glossary

Broadleaves Trees that do not have needles or cones, such as oak, birch and beech. A few, such as alder, have cone-like structures for their seeds which are not true cones.

Clearfell areas Sites where all trees have been felled at once. In non-clearfell areas, only some of the trees are felled at any one time.

Conifers Trees with needles and cones, such as spruce, pine and larch.

Coppice Trees that are cut near ground level (or sometimes higher, in which case they are called pollards), causing them to produce many small shoots. These shoots are harvested every few years at a relatively early age for products such as staves, fencing, fuel and charcoal. "Coppice with standards" includes scattered trees that are left to grow as normal ("standards").

**Establishment** The first five to ten years or formative period that ends once young trees are of sufficient size that, given adequate protection, they are likely to survive at the required stocking.

Forest In the United Kingdom, there is no formal definition of "forest"; the term is often used for large woodland areas (especially conifers) or for old Royal hunting preserves such as the New Forest or the Forest of Dean.

Forest Service (FS) The agency of the Northern Ireland Department of Agriculture, Environment and Rural Affairs responsible for forestry matters in Northern Ireland.

Forestry Commission (FC) The government department responsible for forestry matters in England, Scotland and (until March 2013) Wales. The Forestry Commission's functions in Wales transferred to a new organisation, Natural Resources Wales, on 1 April 2013. The responsibility for forestry is devolved.

FSC Forest Stewardship Council.

Great Britain (GB) England, Wales and Scotland.

Hectare (ha) unit of area defined as 10,000 square metres (100 m by 100 m), approximately equivalent to 2.47 acres.

Natural colonisation The creation of new woodland by natural means, i.e. without sowing or planting.

Natural regeneration The regeneration of existing woodland by natural means, i.e. without sowing or planting.

Natural Resources Wales (NRW) The organisation responsible for advising the Welsh Government on the environment, created on 1 April 2013. NRW is responsible for the functions previously carried out by the Environment Agency in Wales, the Countryside Council for Wales and Forestry Commission Wales.

New planting Establishing woodland on ground that was not woodland in the recent past.

NFI National Forest Inventory.

NIWT 1995-99 National Inventory of Woodland and Trees.

Restocking The replacement of trees on areas of woodland that have been felled; this can be done either through replanting or natural regeneration.

United Kingdom (UK) Great Britain and Northern Ireland.

Woodland Land under stands of trees with a minimum size of 0.5 hectares and a canopy cover of at least 20% (25% in Northern Ireland), or having the potential to achieve this, including integral open space, and including felled areas that are awaiting restocking.

## Data sources and methodology

#### Area of woodland

The provisional woodland areas in Great Britain at March 2016 provided in this release (see table A1 on page 22) are based on the *NFI provisional woodland area map of Great Britain at March 2016*. The map is overlaid with a map of Forestry Commission land (including land formerly owned/managed by Forestry Commission Wales), to enable a breakdown by ownership type to be estimated, and the figures derived from these maps are then updated to March 2017 by adding areas of new planting in 2016-17. Initial estimates of conifer stocked area and broadleaved stocked area at March 2012, derived from NFI interim field survey results, were used to estimate the breakdown by type of woodland. More information can be found on the Methodology and Outputs web page at <a href="https://www.forestry.gov.uk/forestry/ahen-589ddl">www.forestry.gov.uk/forestry/ahen-589ddl</a>.

The provisional 2016 woodland map differs by around 27 thousand hectares (<1%) from the figures for woodland area provided in the NFI report on *Tree cover outside woodland in Great Britain*, that were based on the NFI 2013 map and the National Tree Map<sup>TM</sup> (NTM<sup>TM</sup>), the latter in combination with samples of visual aerial photograph interpretation and field sampling outside of areas on the NFI map. The estimates in the tree cover report are higher because they include estimates of woodland area outside the NFI map derived from the other sources. It is intended that the woodland area estimates published in 2018/19 will bring these two figures into line by reporting an updated, calibrated NFI woodland area that incorporates these additional areas and uses analysis of the main NFI fieldwork survey to exclude currently mapped areas that are not woodland. Further information on the methodology used by the National Forest Inventory and comparisons of results from the NFI and previous woodland area estimates is available at <a href="https://www.forestry.gov.uk/inventory">www.forestry.gov.uk/inventory</a>.

In the time series presented in Figure 1, woodland area estimates for years before 2011 have been revised for consistency with results from the National Forest Inventory, to enable comparisons over time.

The figures shown for Natural Resources Wales in this release only relate to woodland that was previously owned/managed by Forestry Commission Wales, and do not currently include estimates for other Natural Resources Wales woodland (previously owned/managed by the Countryside Council for Wales or the Environment Agency in Wales).

Figures for Northern Ireland (Forest Service and non-Forest Service woodland) are provided by the Northern Ireland Forest Service. County breakdowns are available from the Forest Service Woodland Register at <a href="https://www.dardni.gov.uk/index/forestry/the-forest-industry/woodland-register.htm">www.dardni.gov.uk/index/forestry/the-forest-industry/woodland-register.htm</a>.

#### Certified area

Data on certified woodland areas are obtained from the Forest Stewardship Council (FSC), and contact with individual land owners and managers. Some of the certified woodland has dual certification, i.e. it is certified under both the FSC scheme and the Programme for the Endorsement of Forest Certification (PEFC) scheme.

The data collected from FSC are the areas that are certified for each certificate holder. Follow-up enquiries are then made with larger certificate holders to check the certified areas and to provide a country breakdown.

As all Forestry Commission/Natural Resources Wales (formerly owned/managed by FC Wales)/Forest Service woodland is certified, the areas used are those provided in Table 1, rather than the areas shown on the certificates.

#### New planting and restocking

New planting is the creation of new areas of woodland. Restocking is the replanting of existing areas of woodland that have been felled. New planting can use planting/seeding or natural colonisation. Restocking can also use planting/seeding or natural regeneration.

Information about Forestry Commission, Natural Resources Wales and Forest Service new planting and restocking comes from administrative systems. For new planting and restocking by Forest Enterprise Scotland and by Natural Resources Wales, the figures obtained relate to net areas (i.e. excluding integral open space). These are converted to estimates of gross areas (i.e. including integral open space) for consistency with other planting and woodland area data, by using an assumption of 15% open space.

Information about other woodland has come principally from grant schemes, including Countryside Stewardship in England, the English Woodland Grant Scheme (EWGS), Glastir in Wales, Better Woodlands for Wales (BWW), Forestry Grant Scheme in Scotland, Rural Development Contracts in Scotland, Scottish Forestry Grant Scheme (SFGS) and Woodland Grant Scheme (WGS).

Areas receiving grant are allocated to years by date of payment. For natural colonisation and regeneration, the areas are generally those for which the second instalment of grant has been paid during the year. The second instalment is approved when woodland reaches a certain stage and density of growth, so this information corresponds approximately to the amount of new and restocked woodland created.

The coverage and level of grant support differ across schemes, so that figures on grantaided planting are not directly comparable between countries or over time. Grant support for restocking of conifers changed with the introduction of Rural Development Contracts in Scotland in 2008. As a result, grant aid was no longer available for restocking with Sitka

spruce in many cases. This will have led to a reduction in the proportion of private sector restocking that is grant aided and therefore reported for Scotland.

New planting estimates for England also include areas supported by the Woodland Trust and (until 2014-15) areas funded under Natural England's Higher Level Stewardship Scheme. In 2016-17, the estimated area of new planting includes new woodland creation supported by the Woodland Trust under the MOREwoods and Partnerships England projects.

Areas of land acquired by the National Forest Company for new planting have been included for 2015-16 and 2016-17. To avoid potential double counting, areas of new planting believed to be supported by grant aid or by Woodland Trust have been excluded.

Local estimates for private sector areas of planting and restocking which are not grant-aided were included for England, Wales and Scotland up to 2009-10, where possible. Estimates of non-grant-aided planting and restocking were relatively small (less than one thousand hectares annually), and it has been assumed that all of this area is broadleaves. A small estimate for broadleaved new planting without grant aid in Scotland in 2016-17 has also been included. No estimates have been included for restocking with Sitka spruce in Scotland, or for restocking in England, that are no longer supported by grants. It is assumed that there is no non-FS non-grant aided new planting and restocking in Northern Ireland.

The use of natural regeneration in non-clearfell systems may be increasing - particularly for broadleaves in England. These systems are not satisfactorily represented by measuring restocking area within any given year, and so broadleaf regeneration may be underreported in this release and other statistics.

Figures for Northern Ireland (Forest Service and private sector woodland) are provided by the Forest Service (<a href="www.daera-ni.gov.uk/topics/forestry">www.daera-ni.gov.uk/topics/forestry</a>).

Further information on administrative sources can be found at: <a href="https://www.forestry.gov.uk/forestry/infd-832ey5">www.forestry.gov.uk/forestry/infd-832ey5</a>.

The methodology and outputs relevant to UK woodland area, planting and restocking were reviewed in 2014. The review report is available at <a href="https://www.forestry.gov.uk/pdf/mrwapr.pdf/\$FILE/mrwapr.pdf">www.forestry.gov.uk/pdf/mrwapr.pdf</a>/\$FILE/mrwapr.pdf.

# Quality

The statistics on woodland area presented here refer to woodland as a land use rather than a land cover, so felled areas and newly planted areas are included within the definition of woodland. Some statistics on woodland area as a land cover are available from other sources (e.g. Countryside Survey 2007, <a href="www.countrysidesurvey.org.uk">www.countrysidesurvey.org.uk</a>, and associated Land Cover Map; a more recent Land Cover Map 2015 is also available).

Detailed information on the quality of the statistics presented in this publication is available in the *Quality Report: Woodland Area, Planting and Restocking* at: <a href="https://www.forestry.gov.uk/pdf/qrwapr.pdf/\$FILE/qrwapr.pdf">www.forestry.gov.uk/pdf/qrwapr.pdf</a>

Further quality information on FC Official Statistics is available at: <a href="https://www.forestry.gov.uk/forestry/infd-7zhk85">www.forestry.gov.uk/forestry/infd-7zhk85</a>

#### Revisions

Figures at March 2017 and for 2016-17 are provisional and published for the first time in this release.

Woodland area figures at March 2016 have been revised from those provided in *Forestry Statistics 2016* to take account of updates to the NFI woodland area map. This resulted in very small revisions to the woodland area estimates in England, Wales and Scotland (<0.3%). Revised woodland areas at March 2016, obtained from the NFI provisional woodland area map of Great Britain at March 2016 are provided in table A1, below.

Table A1: Area of woodland, 2016 (revised)

thousands of hectares

	England	Wales	Scotland	Northern Ireland	UK
FC/NRW/FS <sup>1</sup>					
Conifers	151	98	431	56	735
Broadleaves	64	19	40	7	129
Total	215	117	470	62	864
Private sector <sup>2</sup>					
Conifers	189	53	628	11	880
Broadleaves	903	137	337	39	1,416
Total	1,091	190	965	50	2,296
Total Woodland					
Conifers	339	151	1,058	66	1,615
Broadleaves	966	156	377	46	1,545
Total	1,306	307	1,435	112	3,159

Source: Forestry Commission, Natural Resources Wales, Forest Service, National Forest Inventory.

#### Note

- 1. FC: Forestry Commission (England and 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 previously owned/managed by the Countryside Council for Wales and the Environment Agency in Wales, other publicly owned woodland (e.g. owned by local authorities) and privately owned woodland.
- 3. Areas as at 31 March 2016. Figures are revised from those previously released in 2016.
- 4. Figures for England, Wales and Scotland are based on data obtained from the National Forest Inventory.
- 5. Figures for Northern Ireland are obtained from the Northern Ireland Woodland Register.
- 6. Broadleaves include coppice and coppice with standards.

Revisions to new planting and restocking data for 2015-16 and earlier years has resulted in:

- An increase of 0.1 thousand hectares in the new planting area for England, following inclusion of areas of land acquired for planting by the National Forest Company; and
- Increases of 0.2 thousand hectares in 2014-15 and 0.1 thousand hectares in 2015-16 in the restocking areas in Northern Ireland, following revisions to historic data by the NI Forest Service.

The Forestry Commission's revisions policy sets out how revisions and errors to these statistics are dealt with, and can be found at:

www.forestry.gov.uk/pdf/FCrevisions.pdf/\$FILE/FCrevisions.pdf.

#### Further information

Accompanying tables to this release, available at <a href="www.forestry.gov.uk/forestry/infd-7aqknx">www.forestry.gov.uk/forestry/infd-7aqknx</a>, provide longer time series data by country for new planting and publicly funded restocking and for certified woodland.

Further information on the National Forest Inventory is available at www.forestry.gov.uk/inventory.

Additional woodland area statistics are available in *Forestry Statistics 2016* (published September 2016) and *Forestry Facts & Figures 2016* (published September 2016), and can be found at <a href="https://www.forestry.gov.uk/forestry/infd-7aqdgc">www.forestry.gov.uk/forestry/infd-7aqdgc</a>.

Figures in tables have been independently rounded, so may not add to the totals shown.

Figures for woodland area in the UK are provided to international organisations; the Food and Agriculture Organisation of the United Nations (FAO) for the 5-yearly *Global Forest Resources Assessment* (<a href="www.fao.org/forestry/fra/en">www.fao.org/forestry/fra/en</a>), and Forest Europe for the 4-yearly State of Europe's Forests (<a href="www.foresteurope.org/reporting\_SFM">www.foresteurope.org/reporting\_SFM</a>). The *Global Forest Resources Assessment* 2015 was released in September 2015 and State of Europe's Forests 2015 was released in October 2015. Both publications used UK data submitted in 2014.

Figures for woodland area and new planting are also used to compile the UK's Greenhouse Gas Inventory for the Land Use, Land Use Change and Forestry (LULUCF) sector, submitted to the United Nations Framework Convention on Climate Change (UNFCCC, <a href="http://unfccc.int/national\_reports/annex\_i-ghg\_inventories/national\_inventories-submissions/items/8108.php">http://unfccc.int/national\_reports/annex\_i-ghg\_inventories/national\_inventories-submissions/items/8108.php</a>). Statistics on UK greenhouse gas emissions are published by the Department of Business, Energy and Industrial Strategy (BEIS) at <a href="http://www.gov.uk/government/collections/uk-greenhouse-gas-emissions-statistics">http://www.gov.uk/government/collections/uk-greenhouse-gas-emissions-statistics</a>.

The international definition of forests differs slightly from the UK definition of woodland in terms of the minimum canopy cover threshold. For the UK, there is a requirement for canopy cover of at least 20%, whilst the international definition specifies a minimum of 10% canopy cover.

#### Release schedule

Final results for woodland area and certified woodland area at March 2017 and for new planting and publicly funded restocking in 2016-17 will be published on 28 September 2017 in *Forestry Statistics 2017* and *Forestry Facts & Figures 2017*.

Provisional figures for woodland area and certified woodland area at March 2018 and for new planting and restocking in 2017-18 will be published on 14 June 2018 in *Woodland Area, Planting and Restocking: 2018 Edition*.

#### **National Statistics**

The UK Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods; and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics, it is a statutory requirement that the Code of Practice shall continue to be observed.

For more information about National Statistics and the UK Statistics Authority visit www.statisticsauthority.gov.uk.