

Forestry Commission Key Performance Indicators

Headline Performance Update
31 December 2019

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Headline Performance Update at 31 December 2019 (First Release)

The Forestry Commission publishes a set of key performance indicators against which we assess our contribution to forestry and woodlands in England, and use to identify trends in the wider forestry sector in England. These indicators reflect our priorities to expand, protect, and improve England's woodlands. This includes some of the contributions that Forestry England makes to people, nature and the economy through its management of the nation's forests.

Our use of indicators reflects our commitment to evidence based working and to ensuring that there is a robust evidence base available to the forestry sector to underpin policy and operational decisions. We publish:

- Updates on these six headline key performance indicators quarterly¹. They are listed in Table 1.
- Reports on *Government supported new planting of trees in England* annually with a mid-year interim update. The latest report is the interim one² covering the first half of 2019-20. The next full report, for the 2019-20 year, is scheduled to be published on 11 June 2020.
- Reports on our full suite of around 60 indicators in our Forestry Commission *Key Performance Indicators* report annually³. The latest report is for 2019. The next report is scheduled to be published on 11 June 2020.

Each of these six headline indicators are based on statistical and geographical analysis of Forestry Commission administrative data, the National Forest Inventory or data available from other parts of the Defra Group.

Previous, current and future editions of all these reports are available from the [Forestry Commission key performance indicators webpage](#) on the GOV.UK¹ web site.

¹ Available from the Forestry Commission key performance indicators page on GOV.UK at <https://www.gov.uk/government/collections/forestry-commission-corporate-plan-performance-indicators>

² Forestry Commission (2019) *Government supported new planting of trees in England: Interim update for the half-year April to September 2019-20*. Bristol: Forestry Commission, at <https://www.gov.uk/government/statistics/government-supported-new-planting-of-trees-in-england-interim-update-for-the-half-year-april-to-september-2019>

³ Forestry Commission (2019) *Corporate Plan Performance Indicators 2019*, Bristol: Forestry Commission, at <https://www.gov.uk/government/statistics/forestry-commission-corporate-plan-performance-indicators-2019>

Table 1: Forestry Commission Headline Key Performance Indicators

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Forest Services		
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Improvement	Percentage of woodland in active management (including in the nation's forests managed by Forestry England)	10
Expansion	Area of woodland; and rate of new planting of trees	11
Forestry England		
Organisational	Cost of managing the nation's forests (per hectare)	14
Economy	Number of businesses operating in the nation's forests	15

This is an Official Statistics report, produced to adhere to the *Code of Practice for Statistics*⁴.

All of the year-end outturns for each of the headline indicators shown in this report, and the systems in place by which these reports have been produced, have been assured by the Government Internal Audit Agency.

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Evidence and Analysis
Strategic Development
Forest Services

Bristol, 12th February 2019

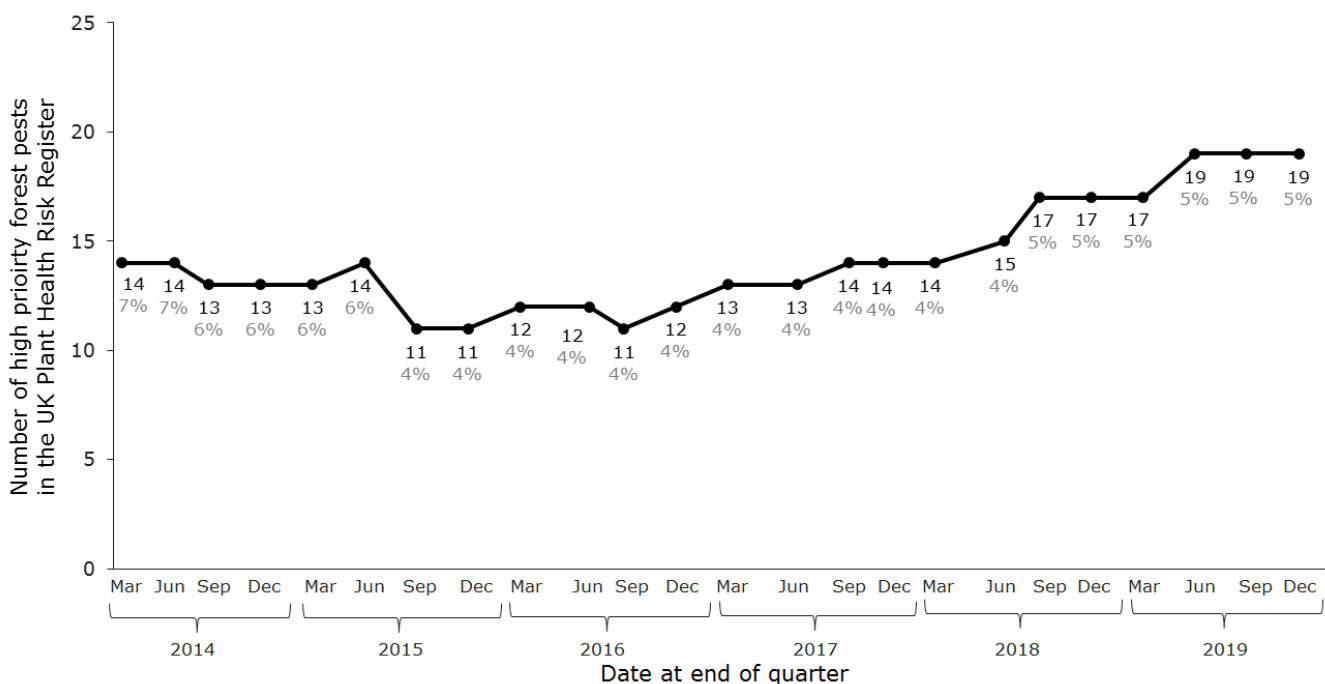
Contact: kerry.ward@forestrycommission.gov.uk

⁴ Office for Statistics Regulation and UK Statistics Authority and (2018) *Code of Practice for Statistics*, available from <https://www.statisticsauthority.gov.uk/code-of-practice/the-code/>

Forest Services

Protection

Number of high priority forest pests in the UK Plant Health Risk Register (UKPHRR).



Source: [UK Plant Health Risk Register \(UKPHRR\)](#) data.

Report at end December 2019: There are now 358 forest pests on the [UK Plant Health Risk Register \(UKPHRR\)](#), **19 (5%) of which are considered high priority.**

Pests are ranked as high priority if they have a mitigated relative risk rating of 15 or more (see Table 2 and Note A below). These high priority pests require actions, in addition to current mitigation measures, to help prevent them having a potentially substantial negative impact on England’s woodland.

There has been no increase in the number of high priority forest pests in the UK Plant Health Risk Register since 30 June 2019.

Of the 19 pests and diseases listed, nine are currently present in England, with only two being classed as widespread; namely *Phytophthora alni* which affects all alder species in Great Britain and *Pseudomonas syringae* pv. *aesculi*, that causes horse chestnut bleeding canker.

Work continues in an effort to eradicate the newly found population of the larger eight-toothed spruce bark beetle (*Ips typographus*) in Kent. This pest does not meet the

definition as 'high priority' for this indicator because its mitigated risk rating is less than 15. This is, however, a quarantine (notifiable) pest considered to be a major risk to Norway spruce trees in particular⁵.

Table 2: The 19 high priority forest pests in the UK Plant Health Risk Register with a relative risk rating (mitigated) of 15 or more at end December 2019

Common name	Latin name	Type of pest	Present in the UK?	Mitigated Likelihood score	Mitigated Impact rating	Mitigated Likelihood multiplied by Impact risk rating
Alder rust	<i>Melampsorium hiratsukanum</i>	Fungus	Present: limited	5	4	20
Bleeding canker of horse chestnut	<i>Pseudomonas syringae pv. aesculi</i>	Bacterium	Present: widespread	5	4	20
Shoot blight on cedar/Tip blight on eastern hemlocks	<i>Sirococcus tsugae</i>	Fungus	Present: limited	5	4	20
n/a	<i>Agrilus fleischeri</i>	Insect	Absent	4	5	20
Two-lined chestnut borer	<i>Agrilus bilineatus</i>	Insect	Absent	4	5	20
Sudden oak death; ramorum dieback	<i>Phytophthora ramorum</i>	Oomycete	Present: limited	4	4	16
Chalara ash dieback	<i>Hymenoscyphus fraxineus</i>	Fungus	Present: limited	4	4	16
Red-necked longhorn beetle	<i>Aromia bungii</i>	Insect	Absent	4	4	16
Phytophthora disease of alder	<i>Phytophthora alni</i>	Oomycete	Present: widespread	4	4	16

⁵ There is more information on the larger eight-toothed European spruce bark beetle (*Ips typographus*) here: <https://www.gov.uk/guidance/eight-toothed-european-spruce-bark-beetle-ips-typographus>

Common name	Latin name	Type of pest	Present in the UK?	Mitigated Likelihood score	Mitigated Impact rating	Mitigated Likelihood multiplied by Impact risk rating
Thousand cankers disease	<i>Geosmithia morbida</i>	Fungus	Absent	4	4	16
Walnut twig beetle	<i>Pityophthorus juglandis</i>	Insect	Absent	4	4	16
Zigzag elm sawfly	<i>Aproceros leucopoda</i>	Insect	Present: unknown distribution	5	3	15
Emerald ash borer	<i>Agrilus planipennis</i>	Insect	Absent	3	5	15
Acute oak decline	<i>n/a</i>	Other	Present: limited	3	5	15
Two spotted oak buprestid	<i>Agrilus biguttatus</i>	Insect	Present: limited	3	5	15
Butternut canker	<i>Ophiognomonia clavignenti-juglandacearum</i>	Fungus	Absent	3	5	15
Sachalin fir bark beetle	<i>Polygraphus proximus</i>	Insect	Absent	3	5	15
Cypress jewel beetle or juniper buprestid	<i>Lamprodila festiva</i>	Insect	Absent	5	3	15
A leaf gall nematode	<i>Litylenchus crenatae</i>	Nematode	Absent	3	5	15

Unmitigated risk ratings

The number of forest pests with an unmitigated risk rating of 15 or more at the end of December 2019 is 60 (17%) of those on the UKPHRR.

Notes:

A) **Definition, Source and Summary:** This indicator seeks to report trends in forest pests from the UK Plant Health Risk Register (UKPHRR) that records and rates risks to UK crops, trees, gardens and ecosystems from plant pests and pathogens. 'High priority' pests and diseases are defined for the purposes of this indicator as those with a mitigated relative risk rating (the mitigated likelihood score multiplied by the mitigated impact score) of 15 or more. The individual ratings for likelihood and impact are each on a scale from 1 to 5. Relative risk ratings therefore can have values from a minimum of 1 to a maximum of 25. Taking into account the economic, environmental and social importance of the host species, these risk scores are used to help prioritise additional actions to combat the threats posed by the pests. It should be noted that the data are for the UK. Nearly all listed forest pests present in the UK will also be present in England and listed forest pests absent from the UK are very likely to pose a threat to England.

B) **'Likelihood'** provides an assessment of the probability of entry and establishment of a pest for those pests that are absent from the UK which, when combined, can result in the introduction of the threat to a new area. Some pests on the UKPHRR are already present in the UK. In these cases the risk is that of the pest spreading to its maximum extent in the UK. The likelihood scale has a minimum value of 1 (lowest risk) through to 5 (highest risk). There is more information on the factors taken into account in the Phase 1 UK Plant Health Risk Register – Summary Guide⁶ (page 6).

C) **'Impact'** is an indication of the relative consequence of the pest for the host plant or sector, should the risk materialise. It does not take account of the size or value of the host or sector. Where the pest is already present, the impact is that caused by further spread, against a baseline of damage already occurring. Thus for a pest which is already widespread, the additional impact of it spreading to its full potential distribution may be limited, even if the pest itself is very damaging or expensive to control. The impact scale has a minimum value of 1 (lowest risk) through to 5 (highest risk). There is more on the factors taken into account in the Phase 1 UK Plant Health Risk Register – Summary Guide (page 6-7).

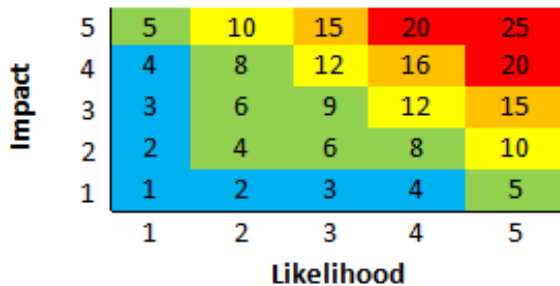
D) **'Value at risk'**. Value at risk is not taken into account in this indicator.

E) **'Mitigations'** can reduce likelihood, impact or both and the risks remaining after mitigation provide the basis for this indicator. Mitigations may reduce risk by enhancing regulation, surveillance, awareness and research, or by providing an industry scheme or a contingency plan. The difference between unmitigated and mitigated risk represents an expert judgement of the effectiveness of the current mitigations. See Phase 1 UK Plant Health Risk Register – Summary Guide (page 4) for details.

F) **Possible Relative Risk Ratings:** Relative risk ratings can take values from a minimum of 1 (lowest risk) through to 25 (highest risk). For the purposes of this indicator 'high priority' pests have been defined as those with a relative risk rating of 15 or more.

⁶ <https://secure.fera.defra.gov.uk/phiw/riskRegister/Summary-of-Guidance-for-phase-1-Public-Ver2.pdf>

Possible Relative Risk Ratings:

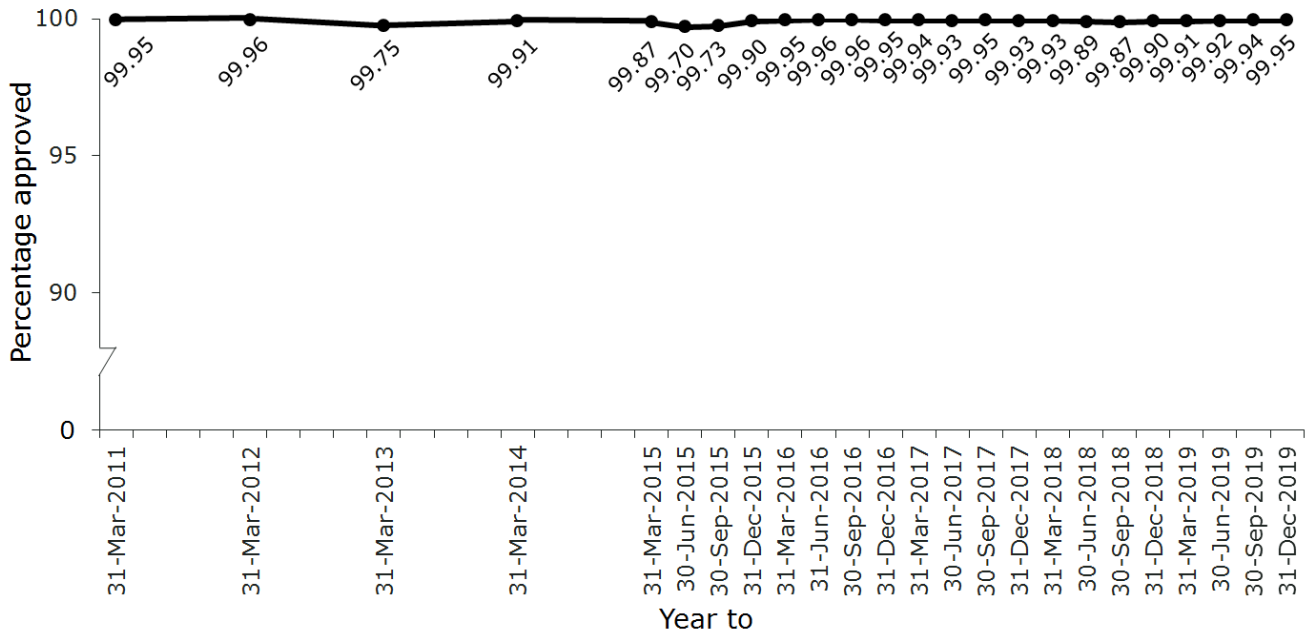


G) **Other forest pests and diseases affecting English woodland.** The indicator is only based on the pests included in the UKPHRR. In so doing it effectively captures the major non-native pests threatening UK forestry together with a limited selection of native pests that are the subject of major Government campaigns of action. There are many native and non-native forest pests that are not included in the UKPHRR.

H) **Precise end of quarter report dates are:** 9 April 2014, 2 July 2014, 19 September 2014, 31 December 2014, 30 March 2015, 23 June 2015, 24 September 2015, 29 December 2015, 30 March 2016, 7 July 2016, 30 September 2016, 30 December 2016, 30 March 2017, 4 July 2017, 2 October 2017, 27 December 2017, 31 March 2018, 2 July 2018, 30 September 2018, 31 December 2018, 31 March 2019, 1 July 2019, 1 October 2019 and 31 December 2019.

Open Data: The spreadsheets of the [UK Plant Health Risk Register \(UKPHRR\)](#).

Percentage of known tree felling that is carried out with Forestry Commission approval (i.e. the % of felling that is licensable by the Forestry Commission that is not illegal felling. This excludes felling with development approval)



Source: Forestry Commission administrative data.

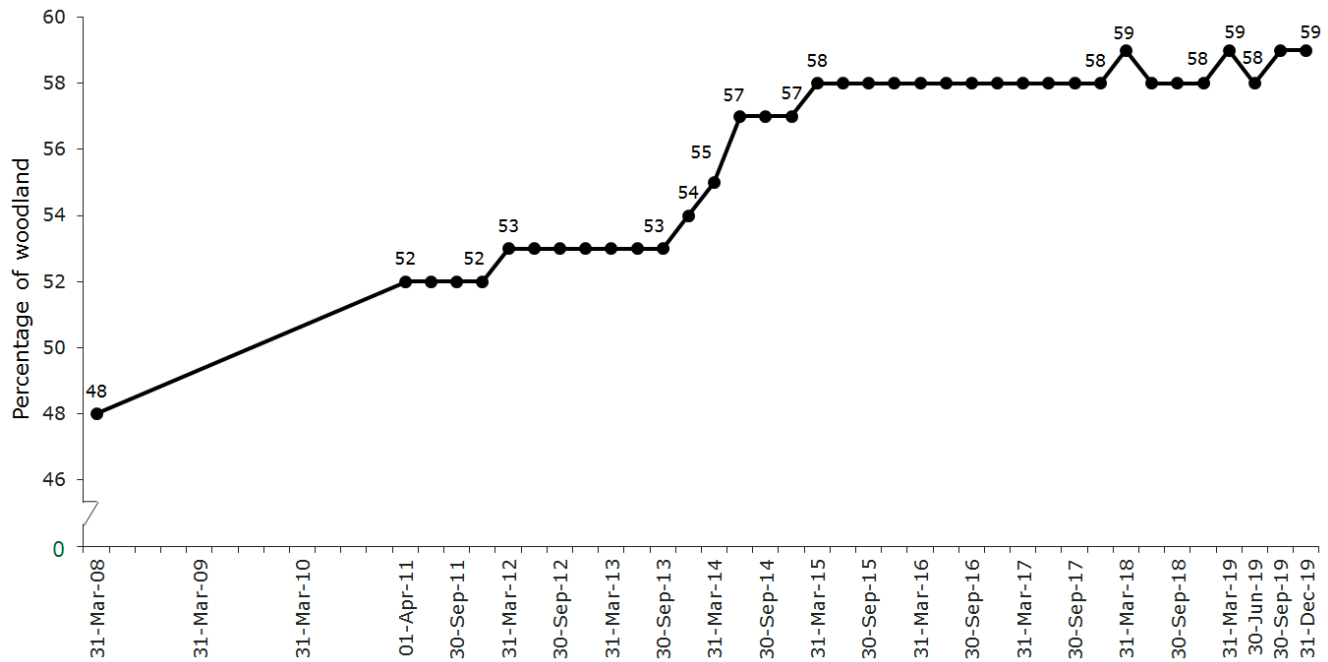
Report for year to 31 December 2019: **99.95% of known tree felling was carried out with Forestry Commission approval.**

The overall figure of legal felling remains at a consistently very high level.

Open Data: Locations of approved felling licence applications in England are available from the [Forestry Commission Open Data site](#).

Improvement

Percentage of woodland in active management (including in the nation's forests managed by Forestry England)



Source: Forestry Commission administrative data and the [National Forest Inventory](#).

Position at 31 December 2019 is that **59 out of every 100 hectares of English woodland are actively managed, totalling 768,000 hectares of woodland in management** (at this date, when rounded).

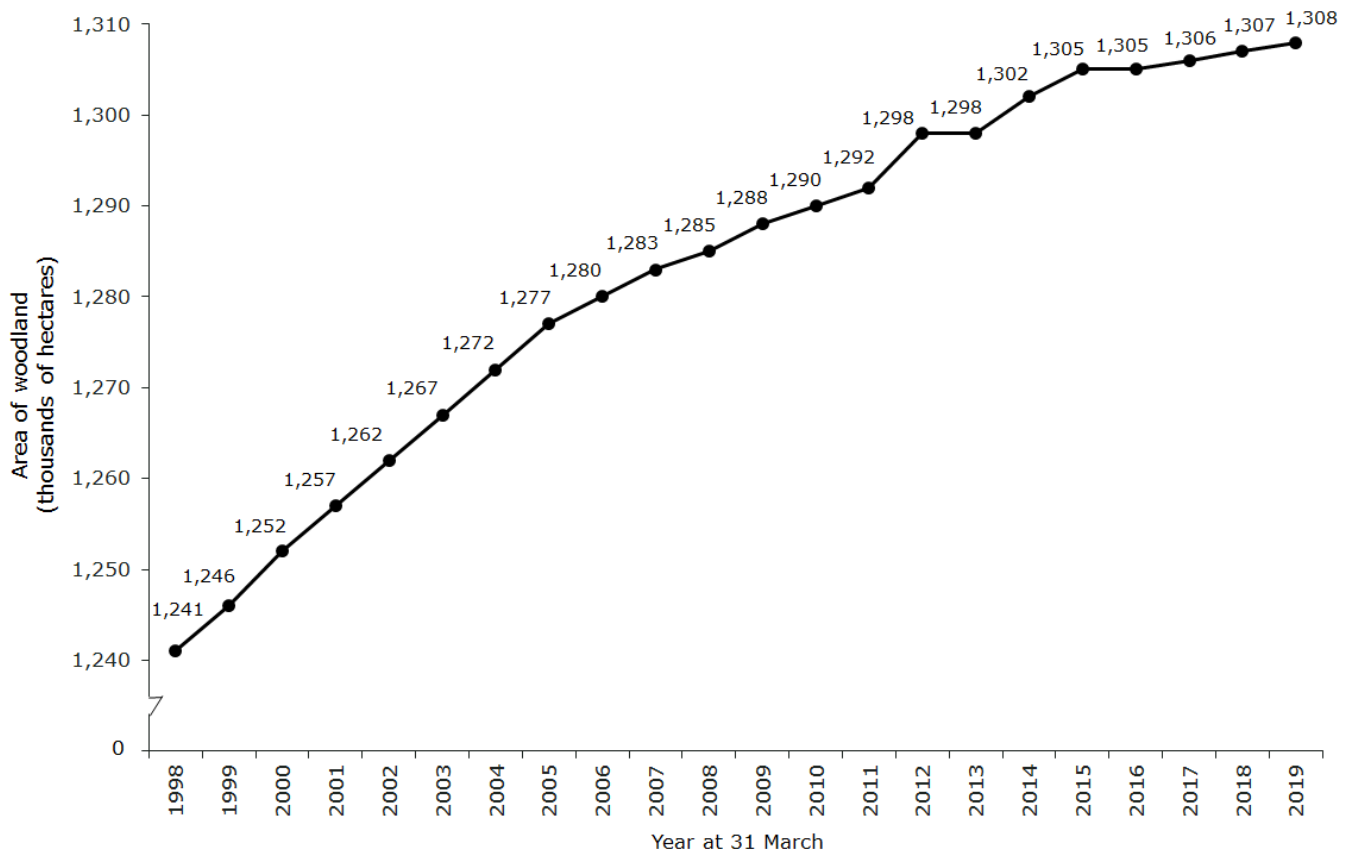
The percentage of woodland that is actively managed has remained at 59%. Evidence suggests that although prices have softened a little, markets for wood remain relatively strong.

Open Data: Locations of 'managed woodland' in England are available from the [Forestry Commission Open Data site](#).

Expansion

Area of woodland, and rate of new planting of trees

A. Area of woodland in England headline indicator: updated annually



Source: *Forestry Statistics 2019* (Forest Research) based mainly on the [National Forest Inventory](#) woodland map and Forestry Commission administrative data.

Position at 31 March 2019: **1,308 thousand hectares (ha) of woodland in England that equates to 10.0% of the land area of England.**

This indicator includes all woodland in England and is reported on an annual basis. This report is the most up-to-date information available and reflects the timing of updates of this National Statistics report. The next report will be in *Provisional Woodland Statistics: 2020 Edition* scheduled for publication on 11 June 2020 when the provisional figure for woodland area as at 31 March 2020 is due to be released.

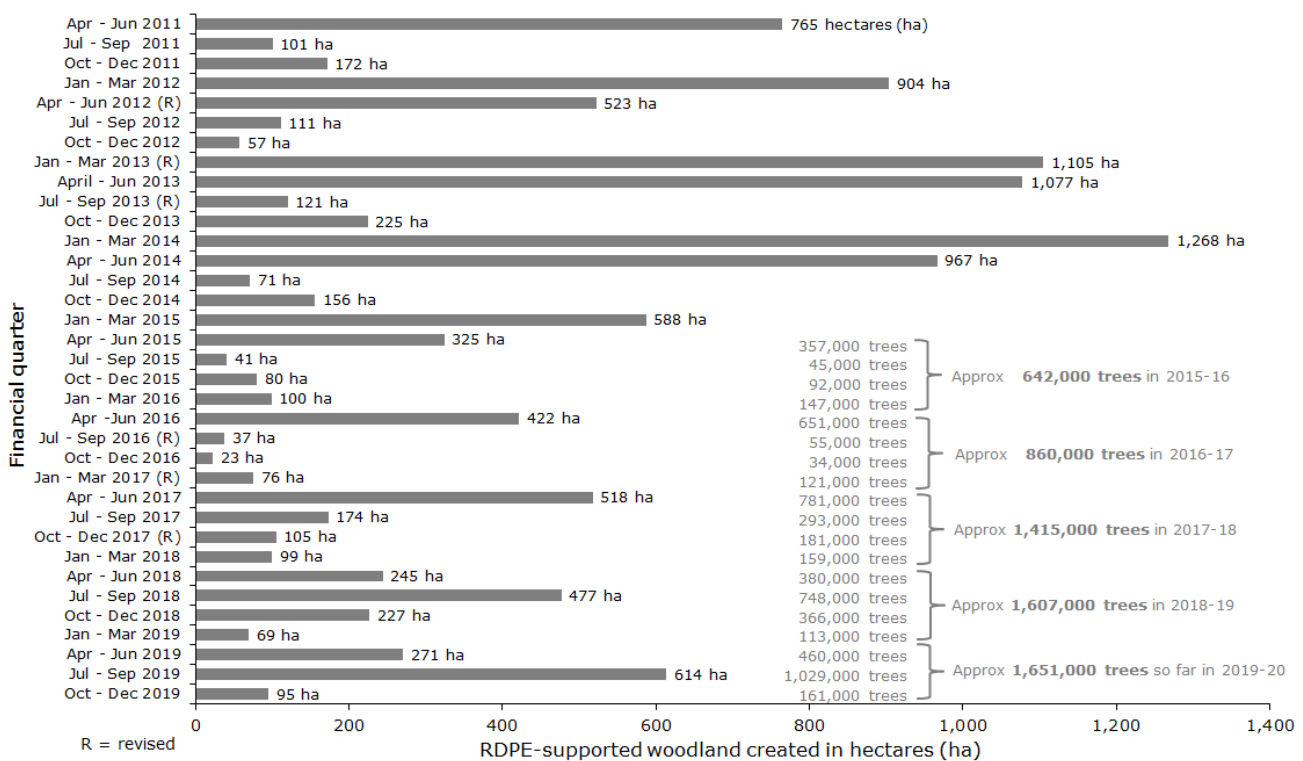
Over the last 10 years the area of woodland has increased by an average of 2.0 thousand ha per year. Over the 20 year period from 1999 to 2019 the area of woodland has increased from 9.6% to 10.0% of the land area of England.

B. Hectares of woodland created (gross) specifically with the grant support of the Rural Development Programme for England – updated quarterly

The statistics in this section report on area of new planting of woodland in England supported by the Countryside Stewardship (CS) Woodland Creation Grant (WCG) incentives, that are a part of the Rural Development Programme for England (RDPE). They are based on the area (in hectares) of grant claims for payment, that have been both a) submitted by or on behalf of the woodland owner, and b) sent for payment in each quarter.

Due to most new planting of trees taking place in the winter and the timing of paying the claims, a seasonal trend has been observed in the statistics with more payments made and counted a few months after the winter planting season (as can be seen in the bar chart below). We expect greater levels of new planting to be reported for the April to June, and July to September quarters.

i) RDPE-supported new planting by quarter (in hectares)

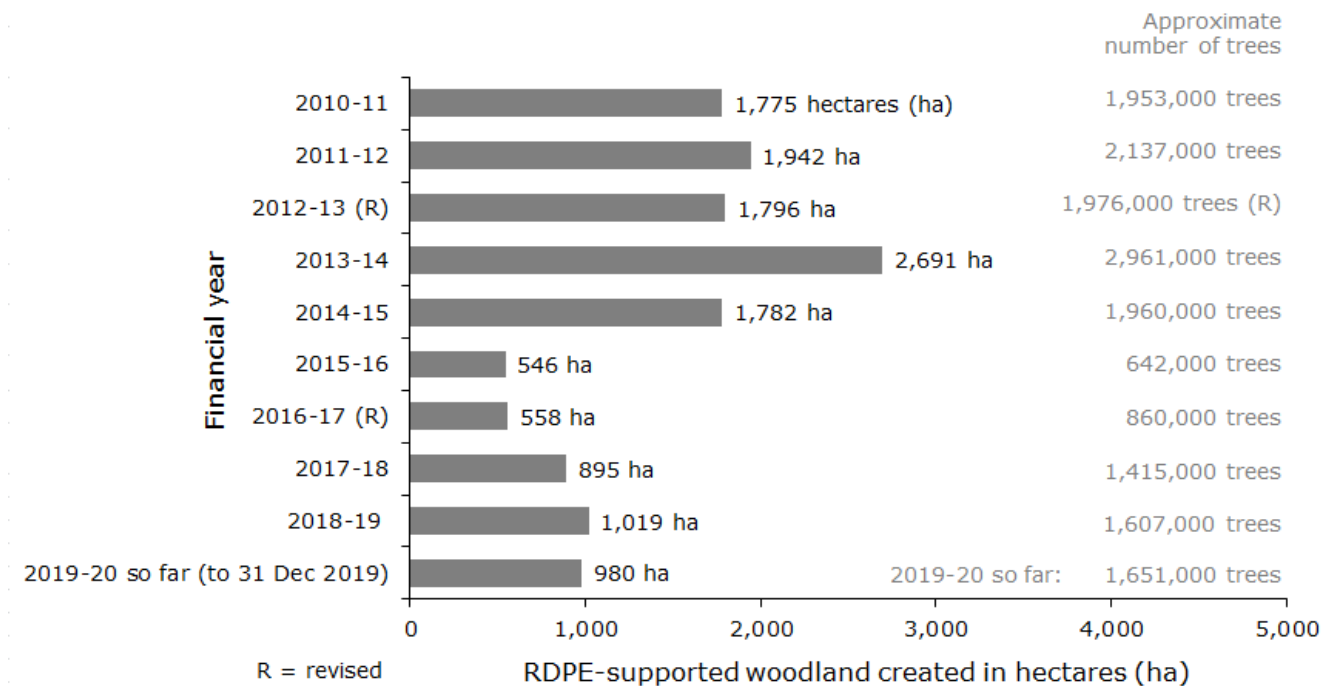


Source: Based on Forestry Commission administrative data. Figures may not sum to annual and year-to-date totals due to rounding.

Woodland created with RDPE grant support October to December 2019 inclusive: **95 hectares (ha)**.

This is less than half the area of land reported as newly planted with trees in the same quarter of 2018-19 (227 ha). It brings the total area of land newly planted with trees in the 9 months to 31 December 2019 to 980 hectares; this is almost the total for the whole of the 2018-19 year (1,019 hectares).

ii) RDPE-supported new planting: summary by financial year (in hectares)



Source: Based on Forestry Commission administrative data.

C. Government supported new planting in England

Statistics on new planting of woodland with RDPE support - as shown in sections B i) and B ii) above) - plus the nine other forms of central government support counted, are reported separately in the Forestry Commission's *Government supported new planting of trees in England* statistical series. The latest report available is the *Interim update for the half year April to September 2019-20* (including data available at the mid-year point). Publication of the next update, a full report on new planting in the 2019-20 year is scheduled for publication on GOV.UK on the Forestry Commission's Key Performance Indicators webpage on 11 June 2020.

D. Total new planting of trees in England

The most recent statistics giving the total new planting of woodland in England in 2019-20 (and previous years), including that with, and without, central Government support, were published in *Forestry Statistics 2019* (Forest Research) on the new planting and restocking webpage. The next report will be in *Provisional Woodland Statistics: 2020 Edition* scheduled for publication on 11 June 2020.

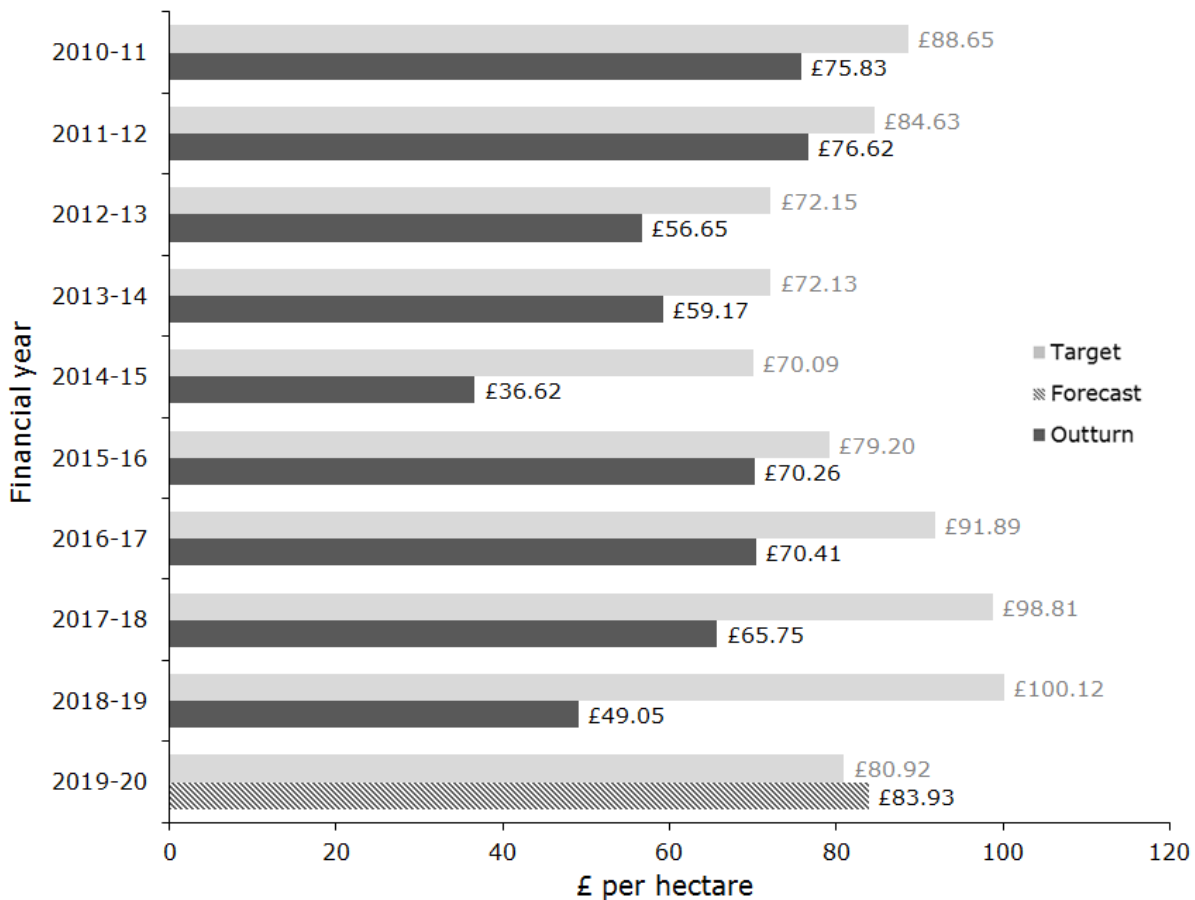
E. Future releases of these statistics

Government has committed to increase tree planting across the UK to 30,000 hectares per year by 2025, to work towards net zero and protect and restore the environment. Hectares of land use change is the industry-accepted measure for woodland creation, as used by forestry investors, land managers applying for grant funding, NGOs creating woodland for biodiversity or recreation, and government organisations administering grants or regulating land use. We will therefore measure delivery of this target in hectares rather than individual tree numbers, and this will be reflected in future releases of these statistics.

Forestry England

Organisational

Cost of managing the nation's forests (per hectare)



Source: Forestry England accounts.

Reports for this indicator are published as at 31 March and 30 September each year. The most recent report as at 30 September 2019 is as follows.

Forecast for the 2019-20 financial year, as at 30 September 2019 is: **£83.93 per hectare**, against a target of £80.92 per hectare.

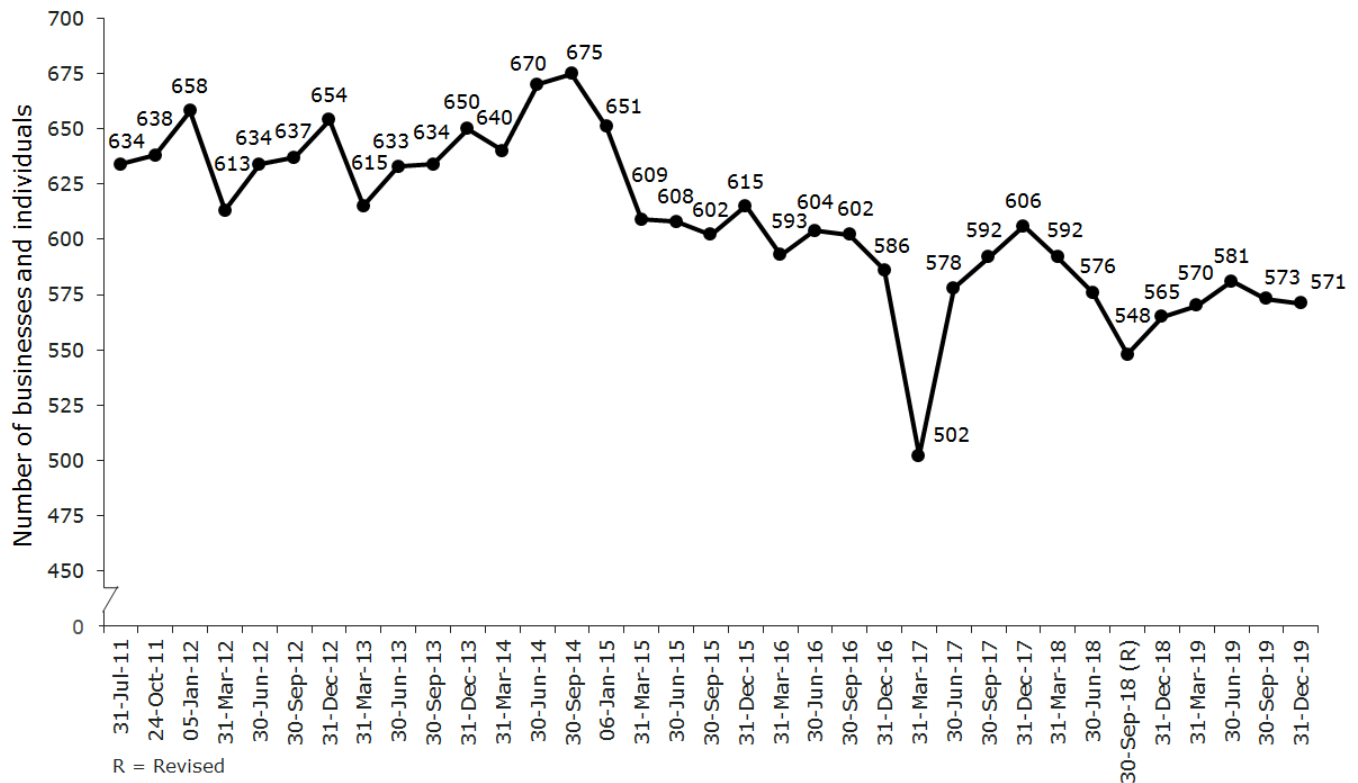
The target for 2019-20 is greater than the previous year outturn due to Forestry England's planned project expenditure and the carry-over of programmes from 2018-19 that were slipped due to bad weather. This expenditure is funded from reserves.

Market conditions have resulted in slower than expected working of sold parcels of standing timber, meaning revenue projections for timber are below plan.

Projected performance indicates Forestry England's performance on this indicator should be within target for the full financial year.

Economy

Number of businesses operating in the nation's forests managed by Forestry England



Source: Forestry England administrative data.

Position at 31 December 2019: **571 businesses and individuals.**

The total number of businesses operating in the nation's forests managed by Forestry England has decreased by two in net terms since the previous report as at 30 September 2019. This is mainly due to seasonal movement in tenancy agreements, particularly in the agricultural sector.