

# Forestry Commission Key Performance Indicators

Headline Performance Update  
30 June 2019

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## Headline Performance Update at 30 June 2019 (First Release)

The Forestry Commission publishes a set of key performance indicators against which we assess our contribution to the delivery of the Government's priorities for forestry and woodlands in England, and use to identify trends in the wider forestry sector in England. These indicators reflect our priorities to protect, improve and expand 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. What's more they indicate part of our contribution to the delivery of the government's 25 Year Environment Plan<sup>1</sup>.

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 quarterly<sup>2</sup>. They are listed in Table 1.
- Reports on *Government supported new planting of trees in England* annually with a mid-year interim update<sup>3</sup>. The latest report is that for the 2018-19 year. The next update, an interim one covering the first half of 2019-20 is scheduled to be published on 19<sup>th</sup> November 2019.
- Reports on our full suite of around 60 indicators in our *Forestry Commission Indicators Report* annually<sup>4</sup>. The latest report is for 2019. The next update is scheduled to be published on 11<sup>th</sup> 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.

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<sup>1</sup> HM Government (2018) *A Green Future: Our Plan to Improve the Environment*, London: Defra, at <https://www.gov.uk/government/publications/25-year-environment-plan>

<sup>2</sup> 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>

<sup>3</sup> Forestry Commission (2019) *Government supported new planting of trees in England: Report for 2018-19*. Bristol: Forestry Commission, at <https://www.gov.uk/government/statistics/government-supported-new-planting-of-trees-in-england-report-for-2018-19>

<sup>4</sup> 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 Performance Indicators**

Aim	Headline Indicator	Page
<b>Forest Services</b>		
<b>Protection</b>	Number of high priority forest pests in the <u>UK Plant Health Risk Register</u> (UKPHRR).	4
<b>Protection</b>	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)	9
<b>Improvement</b>	Percentage of woodland in active management (including in the nation's forests managed by Forestry England)	10
<b>Expansion</b>	Area of woodland; and rate of new planting of trees	11
<b>Forestry England</b>		
<b>Organisational</b>	Cost of managing the nation's forests (per hectare)	14
<b>Economy</b>	Number of businesses operating in the nation's forests	15

Throughout this report we show the statistical sources drawn upon and signpost the underlying spatial data on our map-based Forestry Commission Open Data site<sup>5</sup>.

Previous, current and future editions of Forestry Commission indicators reports are available from the Forestry Commission indicators page on the GOV.UK<sup>2</sup> web site.

This is an Official Statistics report, produced to adhere to the *Code of Practice for Statistics*<sup>6</sup>.

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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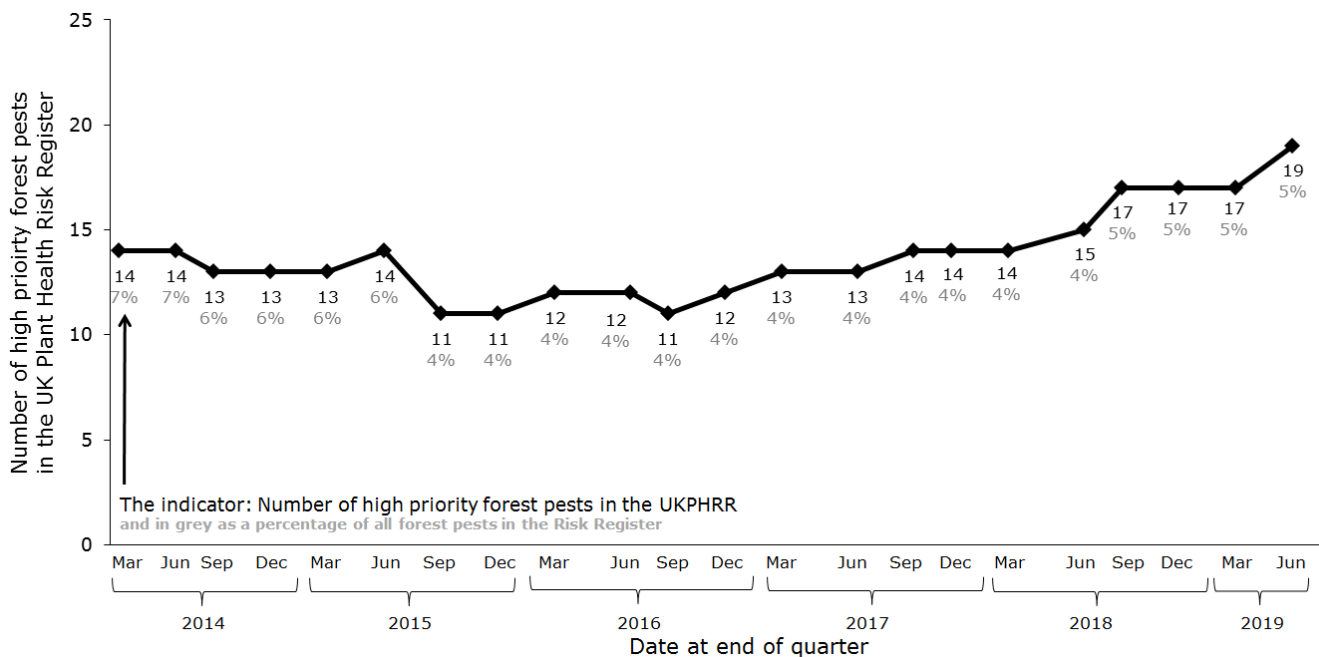
<sup>5</sup> Forestry Commission geospatial Open Data is available from <http://data-forestry.opendata.arcgis.com/>

<sup>6</sup> 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 June 2019: There are now 356 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.

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.

The 2 additional high priority pests and diseases added since 31 March 2019 are the two-lined chestnut borer insect (*Agilus bilineatus*) that can affect oak trees, and a leaf gall nematode<sup>7</sup> (*Litylenchus crenatae*) generally considered to be the cause of leaf disease on beech trees, though this has not been proved. Both of these pests are (considered to be) absent from the UK.

<sup>7</sup> A nematode is a very small elongated roundworm.

*Phytophthora ramorum* and *Chalara* dieback of ash (*Hymenoscyphus fraxineus*) continue to have a landscape scale impact. Work continues in an effort to eradicate the newly found population of the larger eight-toothed spruce bark beetle (*Ips typographus*) in Kent. While this particular pest does not meet the definition as 'high priority' for this indicator, this is a quarantine (notifiable) pest considered to be a major risk to Norway spruce trees in particular<sup>8</sup>.

**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 June 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

<sup>8</sup> 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
Phytophthora disease of alder	<i>Phytophthora alni</i>	Oomycete	Present: widespread	4	4	16
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 June 2019 is 60 (17%) of those on the UKPHRR. After mitigations the number is 19.

**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 Guide<sup>9</sup> (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.

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<sup>9</sup> <https://secure.fera.defra.gov.uk/phiw/riskRegister/Summary-of-Guidance-for-phase-1-Public-Ver2.pdf>

Possible Relative Risk Ratings:

Impact	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		<b>Likelihood</b>				

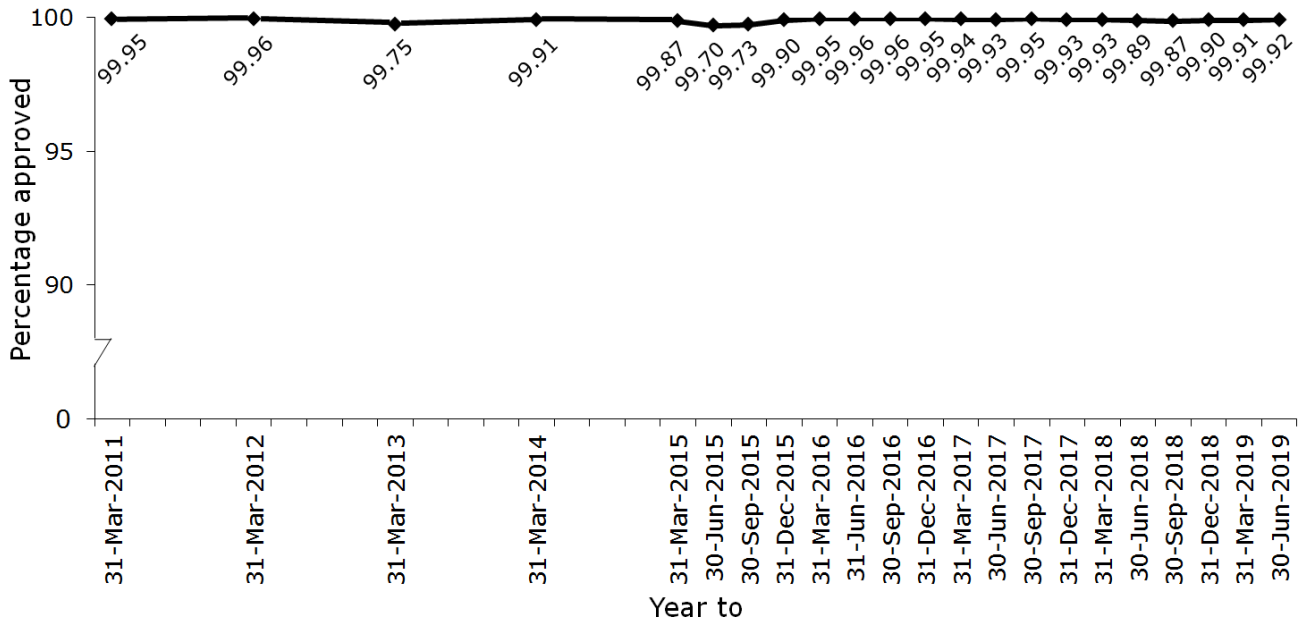
G) **Other forest pests and diseases affecting English woodland.** The indicator is only based on the pests included in the UKPHRR. In so doing it effectively captures the major non-native pests threatening UK forestry together with a limited selection of native pests that are the subject of major Government 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<sup>th</sup> April 2014, 2<sup>nd</sup> July 2014, 19<sup>th</sup> September 2014, 31<sup>st</sup> December 2014, 30<sup>th</sup> March 2015, 23<sup>rd</sup> June 2015, 24<sup>th</sup> September 2015, 29<sup>th</sup> December 2015, 30<sup>th</sup> March 2016, 7<sup>th</sup> July 2016, 30<sup>th</sup> September 2016, 30<sup>th</sup> December 2016, 30<sup>th</sup> March 2017, 4<sup>th</sup> July 2017, 2<sup>nd</sup> October 2017, 27<sup>th</sup> December 2017, 31<sup>st</sup> March 2018, 2<sup>nd</sup> July 2018, 30<sup>th</sup> September 2018, 31<sup>st</sup> December 2018, 31<sup>st</sup> March 2019 and 1<sup>st</sup> July 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.

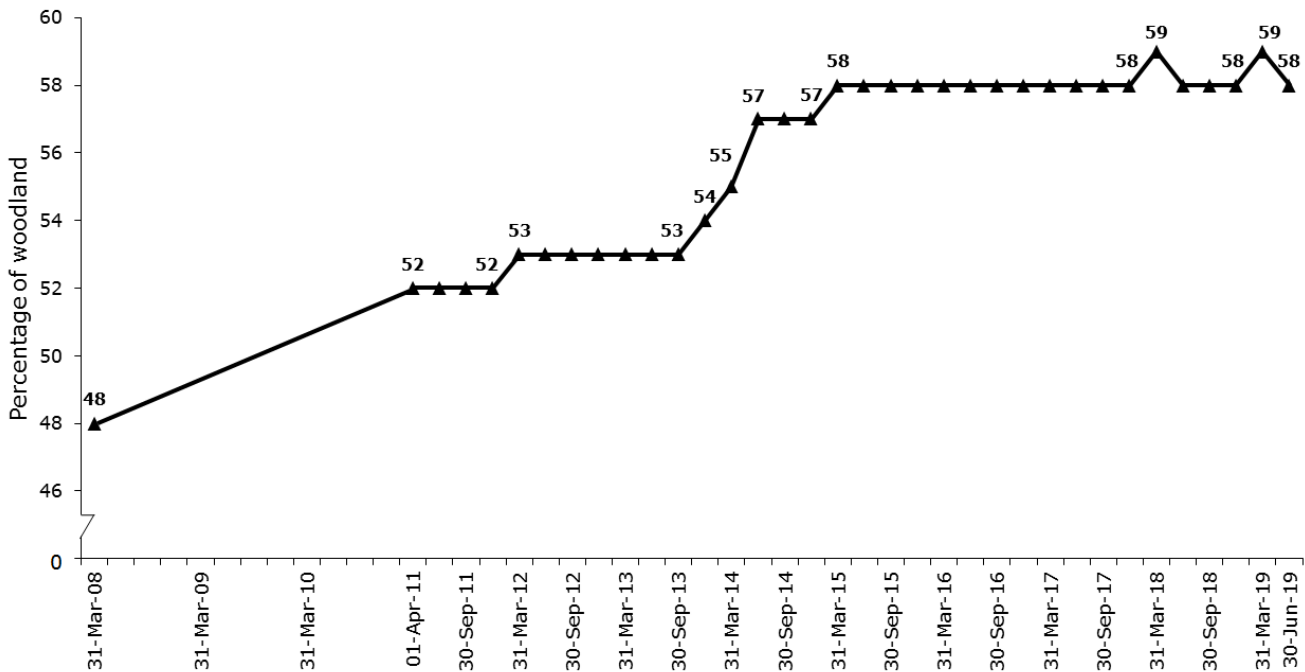
Report for year to 30 June 2019: **99.92% of known tree felling was carried out with Forestry Commission approval.** The aim is to keep this indicator above 95%.

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 30 June 2019 is that **58 out of every 100 hectares of English woodland are actively managed, totalling 762,000 hectares of woodland in management** (at this date, when rounded).

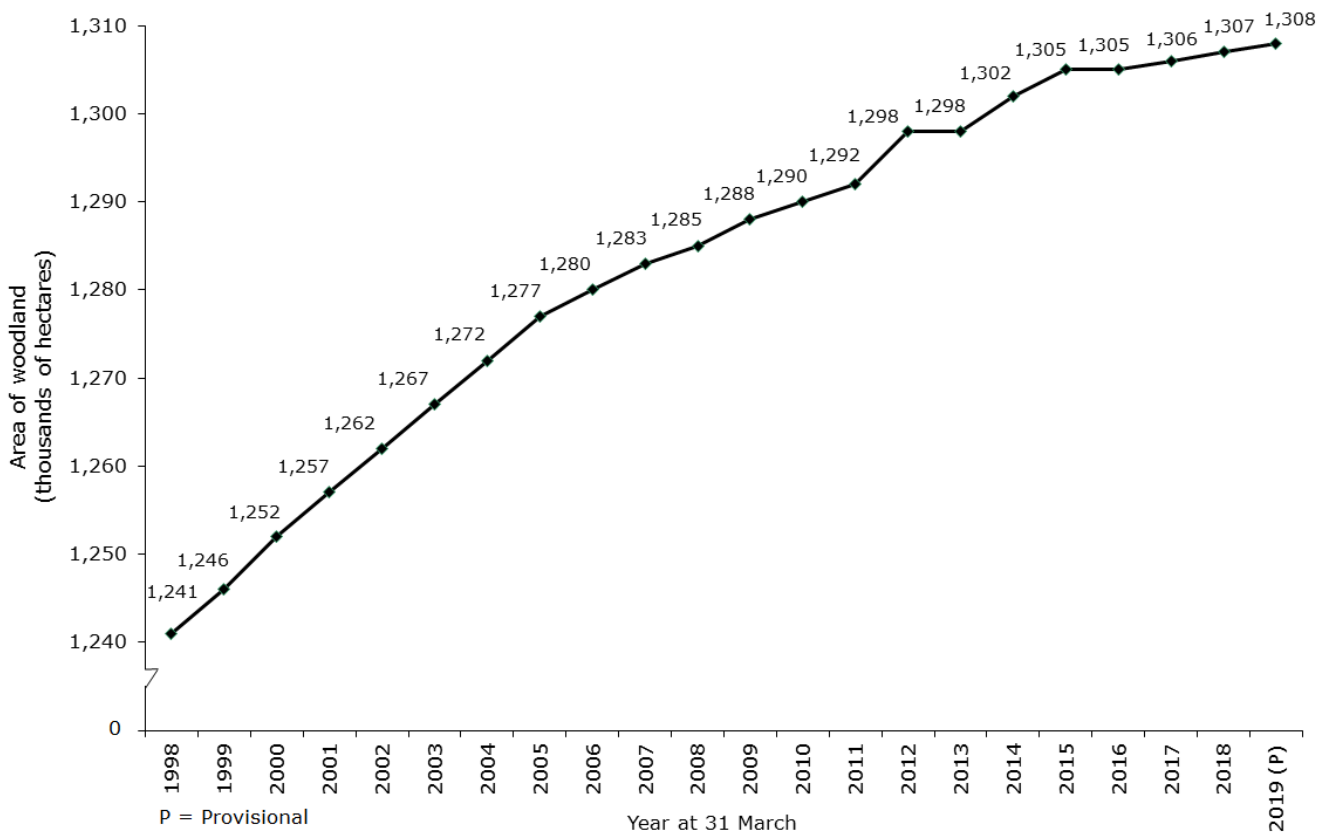
The percentage of woodland that is actively managed has decreased slightly to 58% since last quarter. There is scope to further increase the area of woodland in active management to meet demand for UK grown timber, to help manage tree pests and diseases and to improve woodland resilience.

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 2018](#) and [Provisional Woodland Statistics 2019](#) (Forest Research) based mainly on the [National Forest Inventory](#) woodland map and Forestry Commission administrative data.

Provisional figure at 31 March 2019: **1,308 thousand hectares (ha) of woodland in England that equates to 10.0% of the land area of England**. The aspiration is to achieve 12% woodland cover by 2060, equating to 1,566 thousand hectares.

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 [Forestry Statistics 2019](#) scheduled for publication on 26<sup>th</sup> September 2019 when the provisional woodland area figure for 31 March 2019 is due to be revised or confirmed.

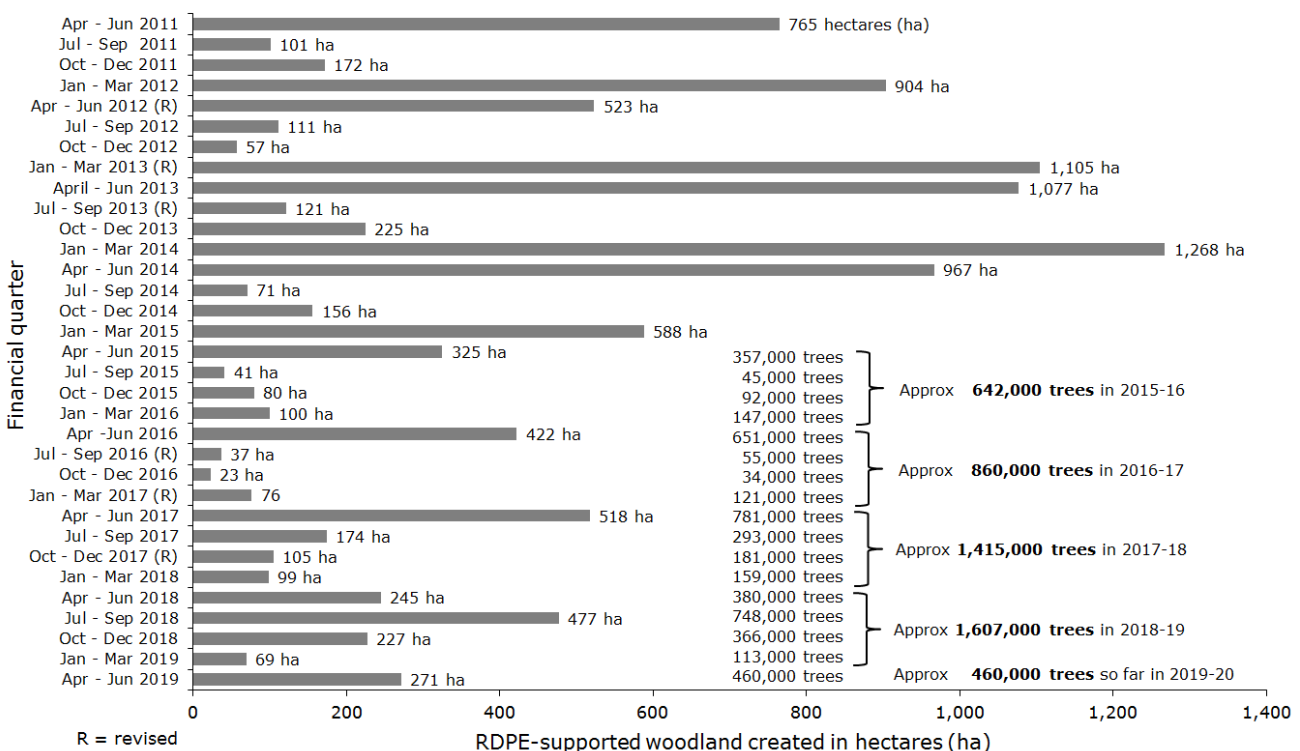
Over the last 10 years the area of woodland has increased by an average of 2.0 thousand ha per year. Over the 20 year period from 1999 to 2019 the area of woodland has increased from 9.6% to 10.0% of the land area of England.

## B. Hectares of woodland created (gross) specifically with the grant support of the Rural Development Programme for England, and the approximate number of trees that represents –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. They are supplied with the approximate number of trees to which that equates.

Since most new planting of trees takes place in the winter to promote their successful establishment, a seasonal trend has been observed in the statistics in recent years, 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 in the reports for the April to June, and July to September quarters.

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

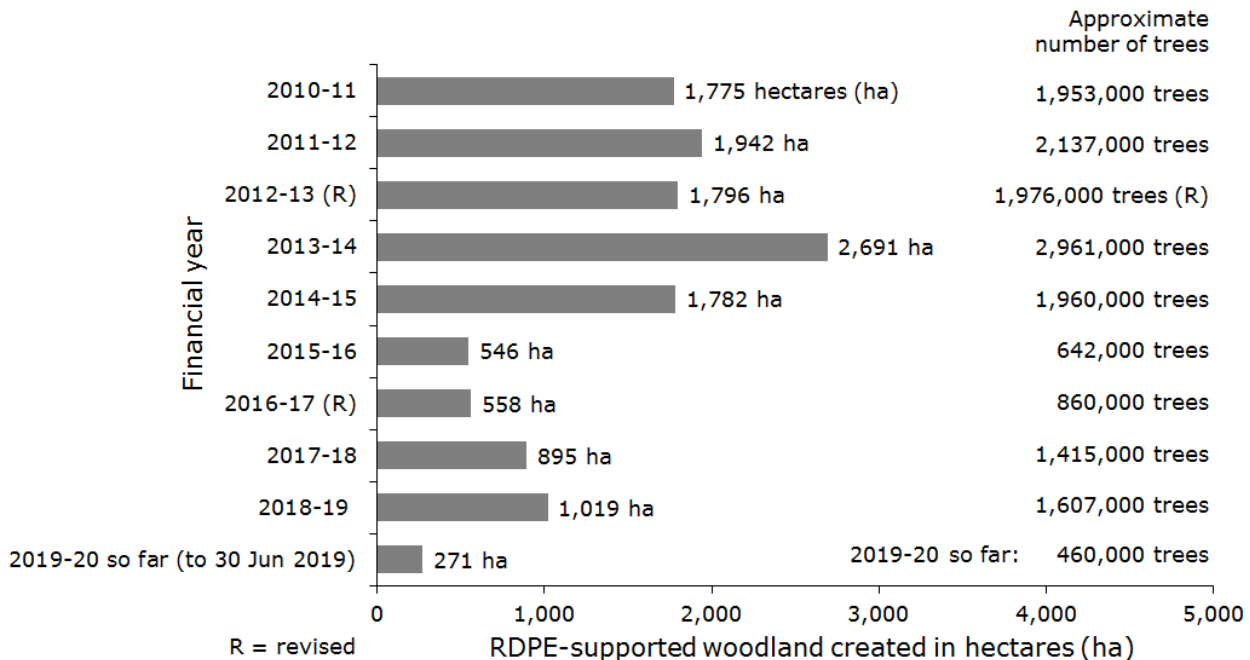


Source: Based on Forestry Commission administrative data. Figures may not sum to annual totals due to rounding.

Woodland created with RDPE grant support April to June 2019 inclusive:  
**271 hectares, equating to approximately 460,000 trees in this quarter.**

The area of woodland created in the first quarter of 2019-20 is broadly similar to that reported for the same period of last year.

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



Source: Based on Forestry Commission administrative data.

Open Data: The [National Forest Inventory](#) woodland map and locations of RDPE grant supported woodland creation in England are available as spatial data from the [Forestry Commission Open Data site](#).

## C. Government supported new planting of trees in England

Statistics on the new planting of trees towards the Government's manifesto commitment to plant 11 million trees in the 2017-22 parliament, that include trees newly planted 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 [Report for the 2018-19 year](#). Publication of the next update, an interim one, for new planting in the first half 2019-20 year (where data available at the mid-year point) is scheduled for publication in the Forestry Commission's [Government supported new planting of trees in England: Interim update for the half year April to September 2019](#) on 19<sup>th</sup> November 2019.

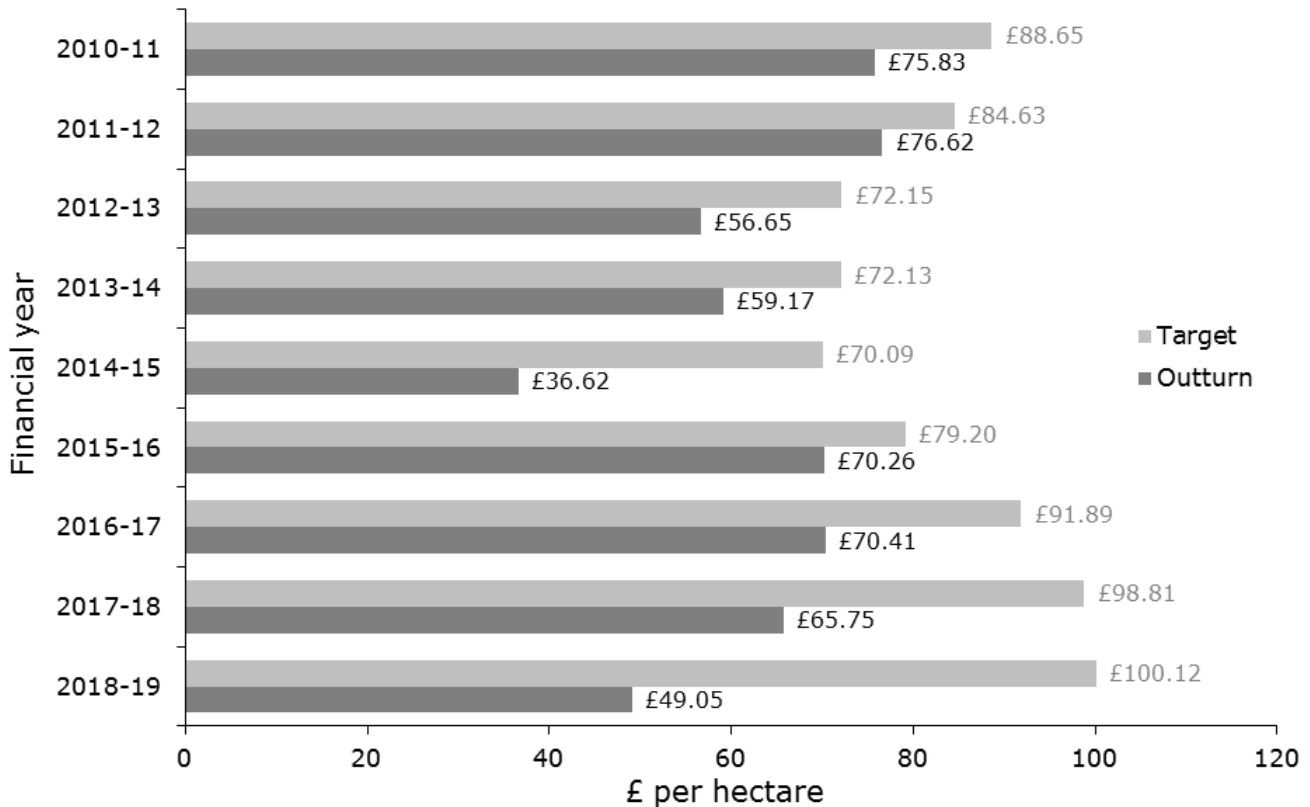
## D. All new planting of trees in England in total

The most recent statistics covering **all** recorded new planting of woodland in England in 2018-19 (and previous years), also including that without direct government support, were published in [Provisional Woodland Statistics 2019](#) (and [Forestry Statistics 2018](#)). The next report will be in [Forestry Statistics 2019](#) scheduled for publication on 26<sup>th</sup> September 2019 when the provisional new planting statistics for 2018-19 are due to be revised or confirmed.

# Forestry England

## Organisational

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



Source: Forestry England accounts.

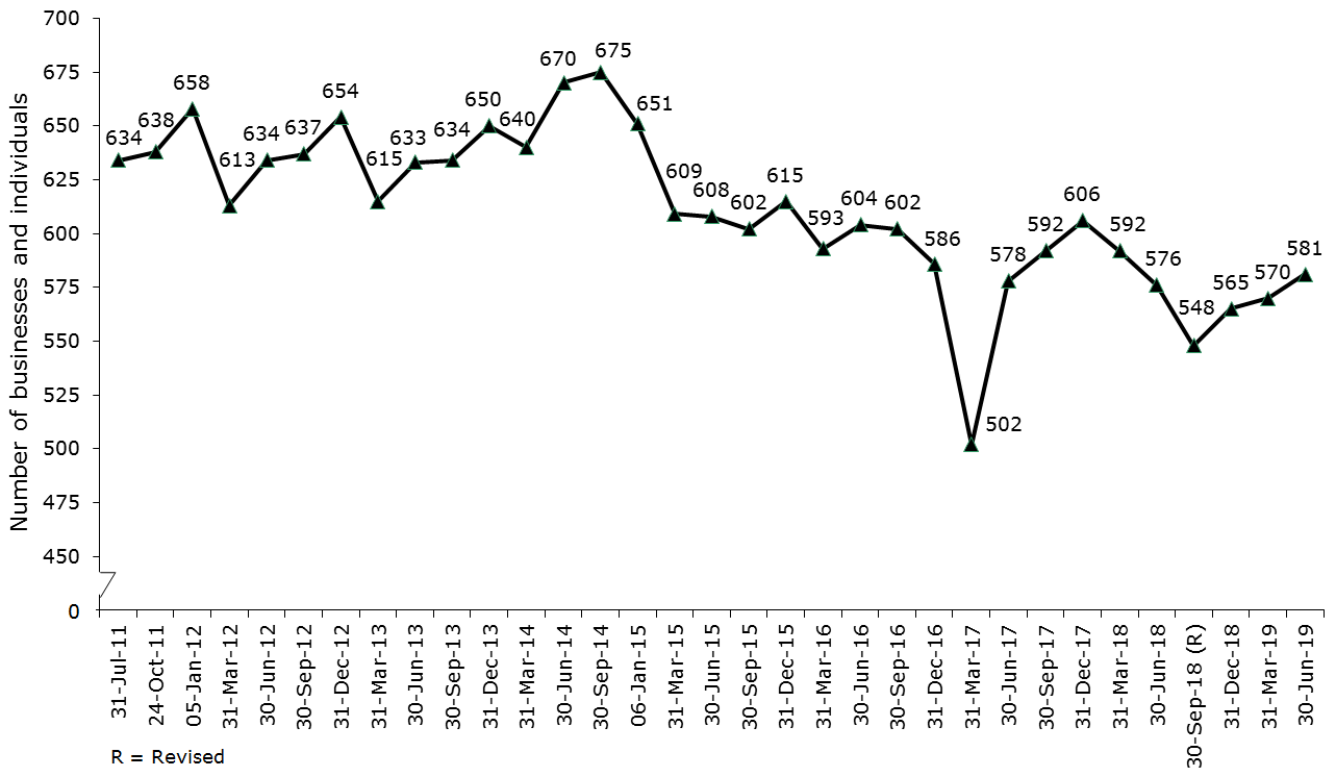
Reports for this indicator are published as at 31 March and 30 September each year. The most recent report as at 31 March 2019 is as follows.

The outturn for 2018-19 financial year is **£49.05 per hectare**, against a target of £100.12 per hectare.

The difference between the outturn and the target is £51.07 per hectare. This is due to income being higher than target which has the impact of reducing the net cost by £45.29 per hectare, and costs being lower which has reduced the net cost by £5.78 per hectare. The main driver for the income increase is the strong rise in timber prices over the last half of the year.

## Economy

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



Source: Forestry England administrative data.

Position at 30 June 2019: **581 businesses and individuals.**

There has been a net increase of 11 businesses operating in the nation's forests managed by Forestry England since the last quarter. These include new café leases and two new education providers and it is apparent that businesses remain keen to operate and expand their businesses on the estate.