

Forestry Commission Key Performance Indicators

Headline Performance Update
31 December 2020

Forestry Commission Key Performance Indicators Headline Performance Update at 31 December 2020 (First Release)

The Forestry Commission publishes a range of key performance indicators to show our contribution towards forestry and woodlands in England, and to show barometers of trends in the wider forestry sector in England. The indicators reflect our priorities to protect, improve and expand England's woodlands. They display some of the contributions Forestry England makes to people, nature and the economy through the nation's forests. As such they show part of how we are contributing to delivery of the government's 25 Year Environment Plan¹.

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 quarterly². 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 an interim one covering the first half of 2020-21 (where data available at mid-year)³. The next full report, for the complete 2020-21 year, is expected to be published in June 2021.
- Reports on our full suite of around 60 indicators in our *Forestry Commission Key Performance Indicators* report annually. The latest report⁴ is for 2019-20. The next report is expected to be published in June 2021.

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.UK² web site. We will consider all requests to make publication content available in alternative formats.

¹ 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>

² 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>

³ Forestry Commission (2020) *Government supported new planting of trees in England: Interim update for the half year April to September 2020*, 8 pages, at <https://www.gov.uk/government/statistics/government-supported-new-planting-of-trees-in-england-interim-update-for-the-half-year-april-to-september-2020>

⁴ Forestry Commission (2020) *Key Performance Indicators: Report for 2019-20*, Bristol: Forestry Commission, 78 pages, at <https://www.gov.uk/government/statistics/forestry-commission-key-performance-indicators-report-for-2019-20>

Table 1: Forestry Commission Headline Key Performance Indicators

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Forest Services	
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IMPROVE	
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EXPAND	
Area of woodland, and rate of new planting of woodland with support from the Rural Development Programme for England	11
Forestry England	
ORGANISATIONAL	
Cost of managing the nation's forests (per hectare)	15
ECONOMY	
Number of businesses operating in the nation's forests	16

This is an Official Statistics publication, produced to adhere to the *Code of Practice for Statistics*⁵.

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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Bristol, 16th February 2021

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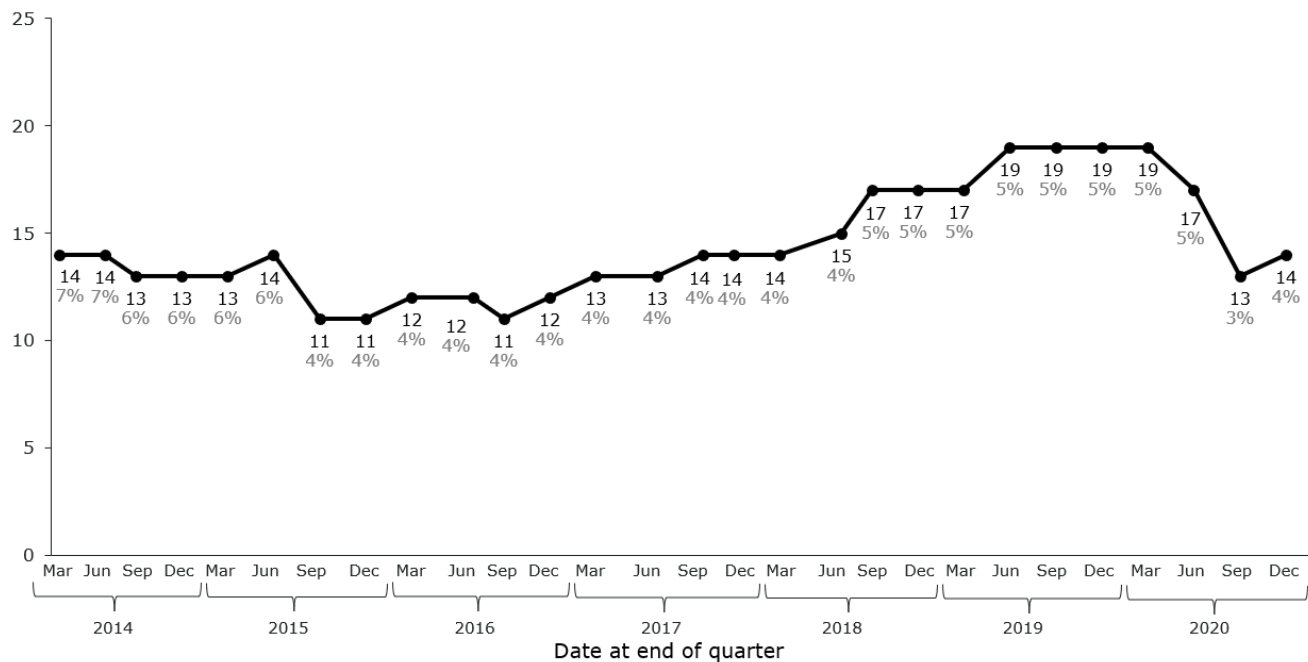
⁵ Office for Statistics Regulation and UK Statistics Authority and (2018) *Code of Practice for Statistics*, available from <https://www.statisticsauthority.gov.uk/code-of-practice/the-code/>

Forest Services

Protection

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

Number of high priority forest pests in the UK Plant Health Risk Register



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

Report at end December 2020: There are now 396 pests identified as forest pests on the [UK Plant Health Risk Register \(UKPHRR\)](#), **14 (4%) of which have been assessed and are considered high priority**.

Pests are ranked as high priority if they are assessed as having 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 a net increase of one high priority forest pest in the UK Plant Health Risk Register since 30 September 2020. The total number of forest pests that has increased by ten to 396 in the same quarter. The overall proportion of forest pests considered high priority has increased to 4% (when rounded). One addition is the plane wilt fungus, also known as canker stain of plane, (*Ceratocystis platani*), which can affect several species of plane trees. The other addition is the fan-leaf virus nematode (the *Xiphinema* index of nematodes). Meanwhile, reassessment of the risks has led to the *Agilus fleischeri* insect no longer being considered high priority.

Of the 14 pests and diseases now listed as 'high priority', eight 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 particular⁶.

Table 2: The 14 high priority forest pests in the UK Plant Health Risk Register with a relative risk rating (mitigated) of 15 or more at end December 2020

Pest or disease: common name	Pest or disease: Latin name	Type of pest or disease	Present in the UK?	Mitigated likelihood score	Mitigated impact rating	Mitigated likelihood multiplied by impact risk rating
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: unknown distribution	5	4	20
Two-lined chestnut borer	<i>Agilus bilineatus</i>	Insect	Absent	4	5	20
Sudden oak death; <i>ramorum</i> dieback	<i>Phytophthora ramorum</i>	Oomycete ⁷	Present: limited	4	4	16
<i>Chalara</i> ash dieback	<i>Hymenoscyphus fraxineus</i>	Fungus	Present	4	4	16
Phytophthora disease of alder	<i>Phytophthora alni</i>	Oomycete ⁶	Present: widespread	4	4	16
Zigzag elm sawfly	<i>Aproceros leucopoda</i>	Insect	Present: unknown distribution	5	3	15
Emerald ash borer	<i>Agilus planipennis</i>	Insect	Absent	3	5	15

⁶ 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>

⁷ An oomycete is an algae-like fungus.

Table 2 continued: The 13 high priority forest pests in the UK Plant Health Risk Register with a relative risk rating (mitigated) of 15 or more at end December 2020

Pest or disease: common name	Pest or disease: Latin name	Type of pest or disease	Present in the UK?	Mitigated likelihood score	Mitigated impact rating	Mitigated likelihood multiplied by impact risk rating
Acute oak decline	<i>n/a</i>	Other	Present: limited	3	5	15
Two spotted oak buprestid	<i>Agilus biguttatus</i>	Insect	Present: limited	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
Fan-leaf virus nematode ⁸	<i>Xiphinema index</i>	Nematodes	Absent	5	3	15
Plane wilt	<i>Ceratocystis platani</i>	Fungus	Absent	3	5	15

Source: UK Plant Health Risk Register (UKPHRR) data.

Unmitigated risk ratings

The number of forest pests assessed as having an unmitigated risk rating of 15 or more at the end of December 2020 is 63 (16%) of pests identified as forest pests on the UKPHRR.

⁸ A nematode is a very small elongated roundworm.

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) **Pests included in the scope of this indicator:** This indicator only includes pests listed on the UK Plant Health Risk Register that have been professionally assessed and where the assessment provides the information needed to identify which are forest pests, and of those which are high priority according to the indicator definition.
- C) **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 Guide⁹ (page 6).
- D) **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).
- E) **Value at risk:** Value at risk is not taken into account in this indicator.
- F) **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.
- G) **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.

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

Table 3: Possible Relative Risk Ratings

Impact

5	5 Green	10 Yellow	15 Amber	20 Red	25 Red
4	4 Blue	8 Green	12 Yellow	16 Amber	20 Red
3	3 Blue	6 Green	9 Green	12 Yellow	15 Amber
2	2 Blue	4 Green	6 Green	8 Green	10 Yellow
1	1 Blue	2 Blue	3 Blue	4 Blue	5 Green
	1	2	3	4	5

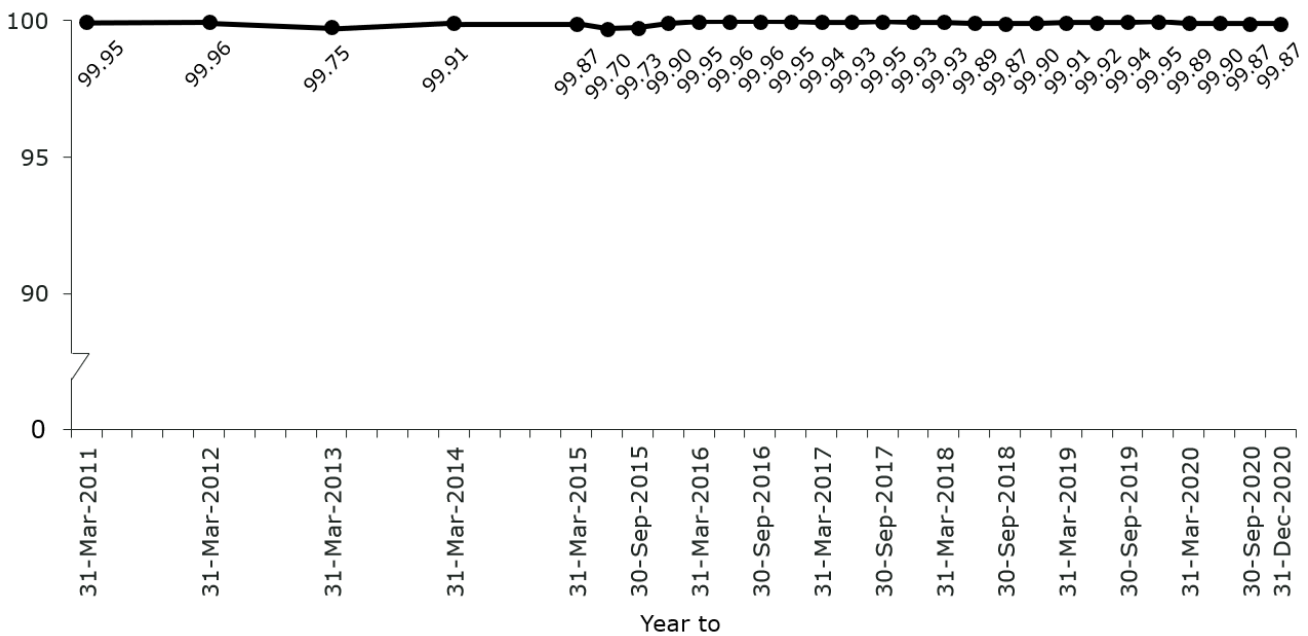
Likelihood

- H) **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.
- I) **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, 31 December 2019, 31 March 2020, 1 July 2020, 30 September 2020 and 31 December 2020.

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)

Percentage of known tree felling approved



Source: Forestry Commission administrative data.

Report for year to 31 December 2020: **99.87% of known tree felling was carried out with Forestry Commission approval.**

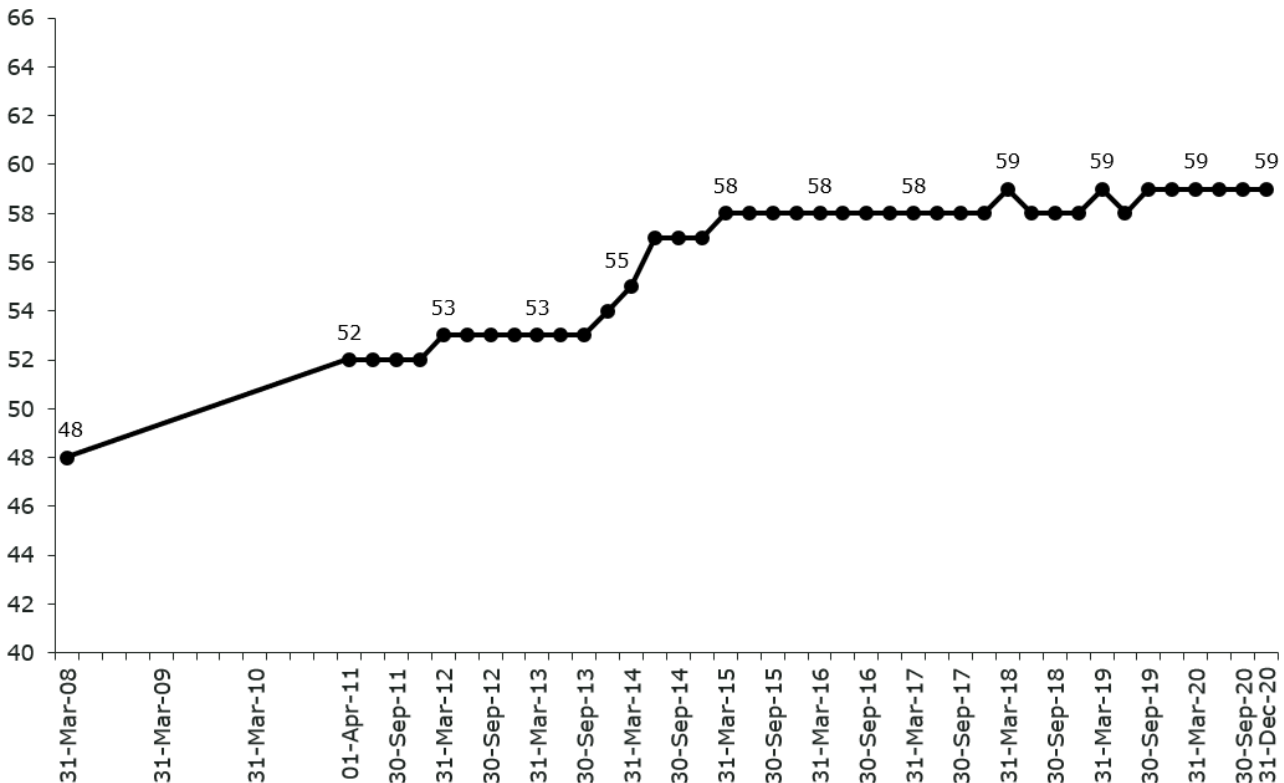
The overall figure of legal felling remains at a consistently very high level.

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)

Percentage of woodland in active management



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

Position at 31 December 2020 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 is 59%. Evidence suggests markets remained relatively strong despite disruption to markets caused by coronavirus.

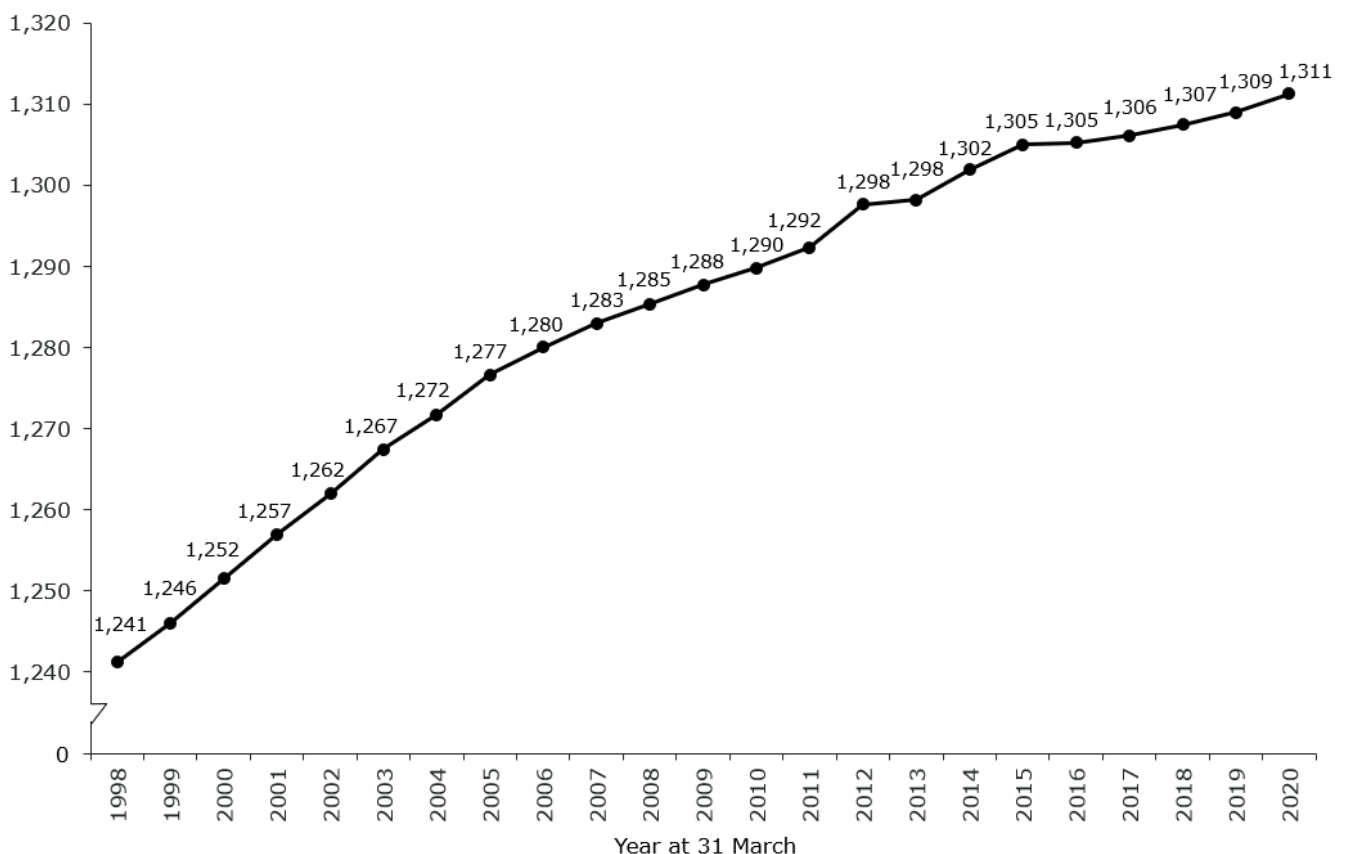
Open Data: Locations of 'managed woodland' in England are available from the [Forestry Commission Open Data site](#).

Expansion

Area of woodland, and rate of new planting of woodland with support from the Rural Development Programme for England

A. Area of woodland in England headline indicator (updated annually)

Area of woodland (thousands of hectares)



Source: *Forestry Statistics 2020* (Forest Research).

Note: Figures 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. Figures at 2018 and 2019 have been revised from those provided in *Forestry Statistics 2019* to take account of updates to the NFI woodland area map.

Confirmed figure at 31 March 2020: **1,311 thousand hectares (ha) of woodland in England** that equates to 10.05% of the area of England. This is an increase of 2 thousand hectares over the position a year before.

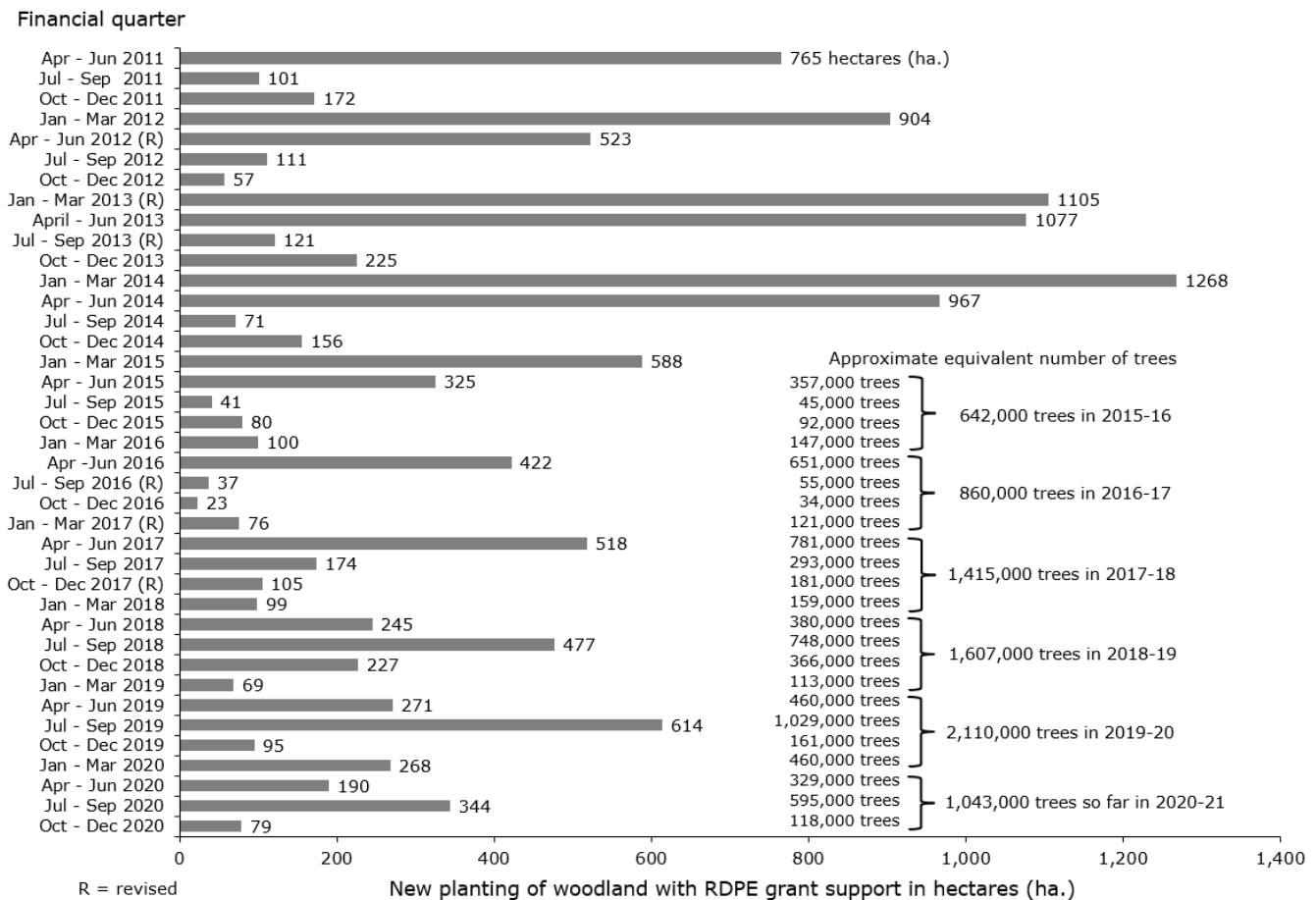
This indicator includes all woodland in England and is reported on an annual basis. Over the last 10 years the area of woodland has increased by an average of 2.1 thousand ha per year. Over the 20 year period from 1999 to 2019 the area of woodland has increased from 9.59% to 10.05% of the area of England.

The next update a provisional figure for 2021 is scheduled to be published on 17 June 2021 in *Provisional Woodland Statistics: 2021 Edition* (Forest Research)

B. New planting of woodland created with support from 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 generally expect greater levels of new planting to be reported for the April to June, and July to September quarters.

i) New planting of woodland with RDPE grant support by quarter (hectares¹⁰)



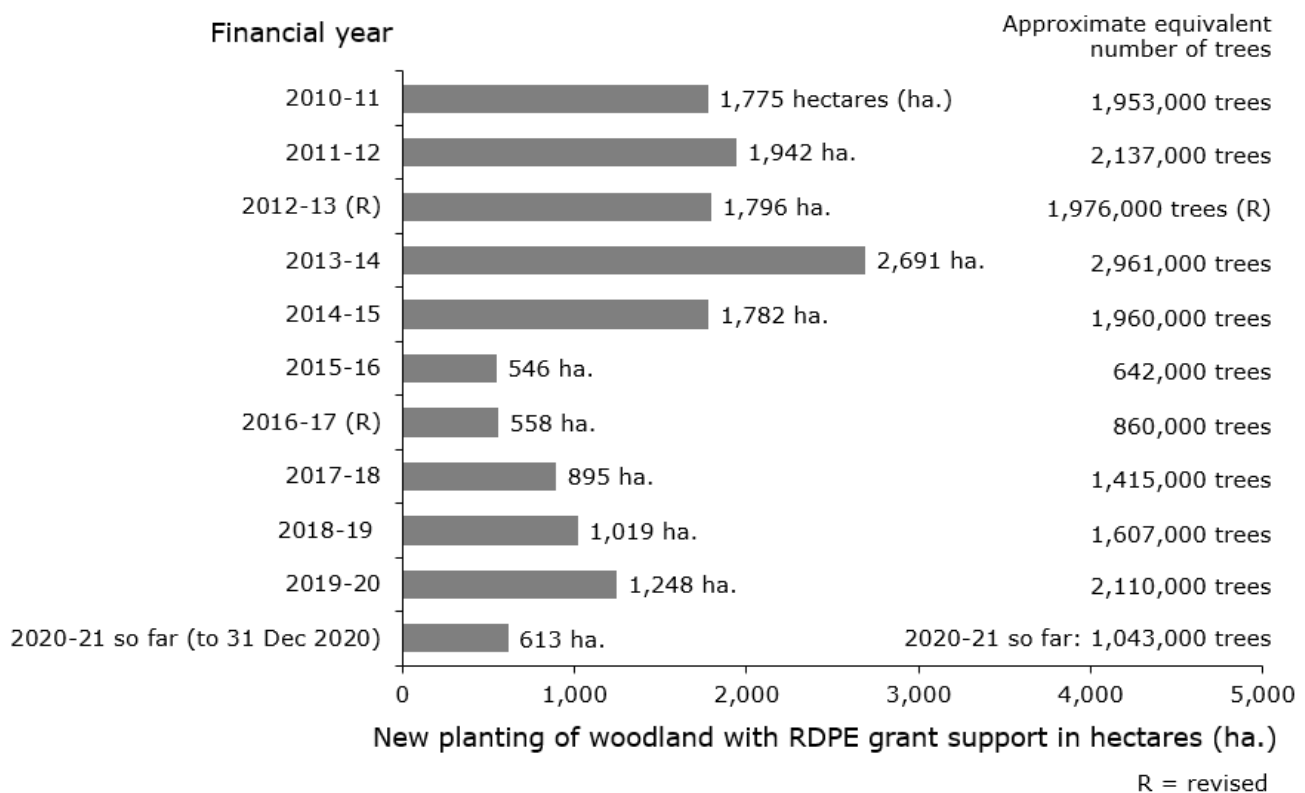
Source: Based on Forestry Commission administrative data. Figures may not sum to annual totals due to rounding.

New planting of woodland created with RDPE grant support October to December 2020 inclusive: **79 hectares (ha.)**.

¹⁰ Hectares of land use change is the industry-accepted measure for woodland creation. To add to the ways the statistics can be used we also report the approximate equivalent number of trees this represents.

The amount of recorded woodland creation supported by this grant in the third quarter of 2020-21 is comparable with the same quarters for recent previous years, when reported levels of tree planting are low. It brings the total area planted with this type of support in the first three quarters of this financial year to 613 hectares. This is only 63% of the area planted over the same period last year, and less than that in the equivalent nine-month periods in the previous two years. The acceleration in planting rates seen in 2019-20 does not appear to have been maintained. Stakeholders' feedback indicates that landowners have deferred grant applications and new planting until there is greater certainty over forthcoming grant offers and, in part, due to the impact of the coronavirus restrictions on them.

ii) New planting of woodland with RDPE grant support by financial year (hectares)



Source: Based on Forestry Commission administrative data.

C. Government supported new planting

Statistics on new planting with RDPE grant 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 2020 year. Publication of the next update, a full report on new planting in the 2020-21 year is expected to be published on the Forestry Commission key performance indicators webpage on the GOV.UK web site in June 2021.

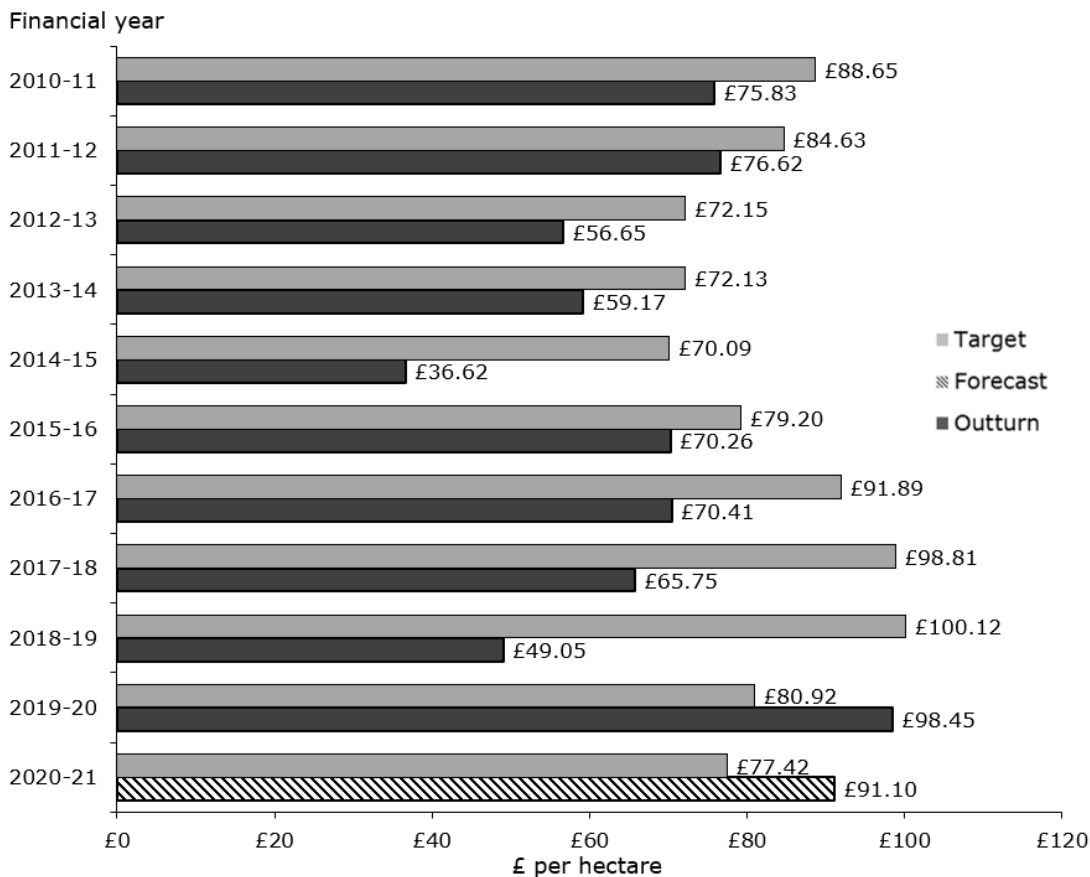
D. Total new planting of woodland in England

Government has committed to increase tree planting across the UK to 30,000 hectares per year by 2025, to work towards net zero greenhouse gas emissions by 2050 and protect and restore the environment. 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 2020](#) (Forest Research). The next report will be in [Provisional Woodland Statistics: 2021 Edition](#) (Forest Research) scheduled for publication on 17 June 2021.

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. The most recent report as at 30 September 2020 is as follows.

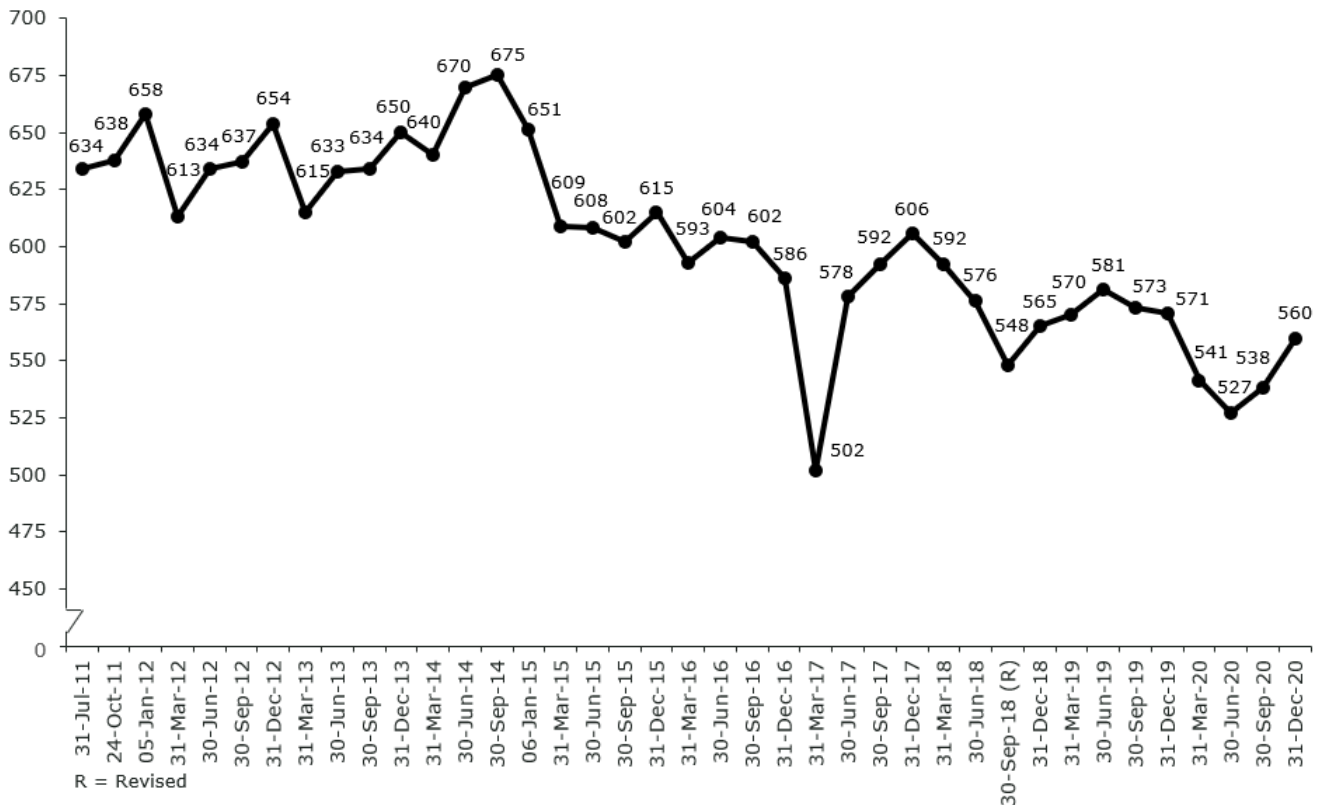
The forecast for 2020-21 is **£91.10 per hectare** against a target cost of £77.42 per hectare, which is 18% above target.

The target cost for 2020-21 was set before the impact of coronavirus on Forestry England. Forecast performance shows that the position is expected to be worse than target due to the impacts of coronavirus. Overall income is currently forecast to be £12m lower than expected and this reflects the closure of visitor sites due to lockdown and the impact of coronavirus on both the timber market and on rental income. To mitigate income losses, costs have been reduced by around £8.5m. Cost reduction and cost avoidance has taken place by freezing recruitment and deferring or curtailing operational programmes. Capital schemes have also been stopped and deferred. Whilst the action on capital does not directly improve this performance metric it does help to alleviate some of the cash pressures that are caused by the operating position.

Economy

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

Number of businesses and individuals



Source: Forestry England administrative data.

Position at 31 December 2020: **560 businesses and individuals.**

There has been a net increase of 22 businesses in the third quarter of 2020-21. These are mainly agricultural and sporting agreements, which is to be anticipated for this time of year.