



# Autumn analysis 2016



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## Summary

A warm start to the autumn recording season was followed by a sunny October and November and a dry December. Most autumn species and events were recorded later than during the benchmark year of 2007\*. The exceptions were the departure of migrating birds and the date of lawn last cut.

\*chosen because the mean monthly temperatures during autumn 2007 were similar to the 1961-90 averages.



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# Weather

## Temperature

- In July, August, September and December, average monthly temperatures were above the Central England Temperature 30-year average (1961-90).
- September 2016 was the second warmest September in the Met Office temperature series since 1910, December was also the eighth warmest.
- In contrast, November was the coldest in the Met Office temperature series since 2010.

## Rainfall

- Rainfall totals in July, August, September and November were very similar to the 30-year average (1961-90).

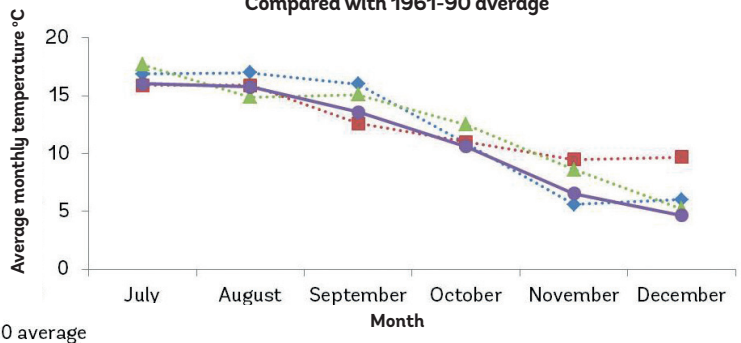
- October was dryer than the 30-year average and the sixth driest in the Met Office rainfall series since 1910.
- December 2016 was also dryer than the 30-year average, quite a contrast from December 2015, which was the wettest in the UK for 100 years.

## Sunshine

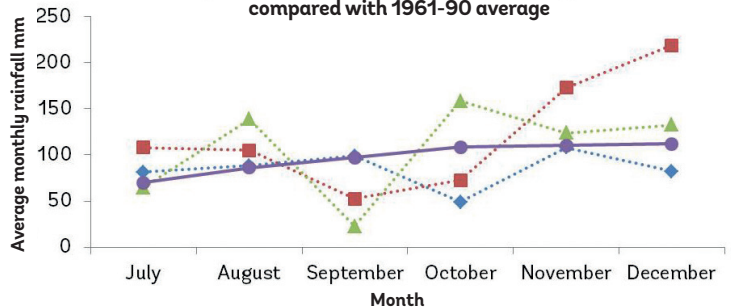
- October and November were particularly sunny.
- Compared to the 1961-90 average, October had 22% more sunshine hours and November had 28% more sunshine hours.
- This made it the third sunniest November in a series from 1929.

\*\*Central England Temperature dataset is a record from a roughly triangular area of the UK, enclosed by Bristol, Lancashire and London.

Central England Temperature \*\* 2014-16  
Compared with 1961-90 average



UK rainfall 2014-16  
compared with 1961-90 average



# Phenology

The UK average date for each species and event in 2016 was compared to the UK average in the benchmark year of 2007. Most autumn 2016 species and events were recorded later than during the benchmark year. The exceptions were the departure of migrating birds and the date of lawn last cut.

## Migratory birds

- As usual, swifts were the first migratory birds to leave the UK, with an average last recorded date of 9 August. House martins and swallows departed a month later, in mid-September. The summer departure date was 4 days earlier than during the benchmark year for swifts and 6 days earlier for house martins and swallows.
- The average first recorded date for fieldfares and redwings arriving in the UK was the 30 October, which is 6 and 4 days later than in 2007.

## Trees and shrubs

- First and full tint of leaves on all trees and shrubs was recorded later than during the benchmark year. First tint of rowan and pedunculate and sessile oak was particularly late, 12 days later than in 2007.
- Leaf fall and bare tree was also recorded later than during the benchmark year, although the difference was not as large as for leaf tinting. Averaged across all of the species, leaf fall was 2 days later than in 2007 and bare tree was 4 days later.
- Horse chestnut had the earliest first tinting, full tinting and leaves



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falling dates, most likely due to leaves changing colour early due to infestation by leaf miner. It was also one of the earliest species to become bare.

- Ash and rowan were the earliest species to lose all of their leaves despite ash being one of the latest species to start tinting. These trees were bare at the beginning of November, whereas the oak species weren't bare until early December.

## Fruit

- Date of first ripe fruit was later or equal to the benchmark year for all species. Hawthorn and sessile oak were particularly late compared to the benchmark year, 11 and 13 days respectively.
- Fruit score ranged from 2.6 for blackthorn, a meagre crop, to 4.3 for ivy, a good crop. This fruit score for ivy berries is a joint highest score with 2014.

## Last lawn cut

- The average date for lawn last cut was 24 October, 6 days earlier than during the benchmark year and the earliest since 2012. This may be due to the cool and dry end to the autumn.

# Your records

The number of records received in autumn 2016 was 27,800. These records came from 2,300 recorders. Autumn wasn't as well recorded as spring 2016 for which we received 45,000 records from 3,000 recorders.

We received over 1900 observations of bramble first ripe fruit, making it the most popular autumn event. Rowan first ripe fruit was also popular.

Sessile oak first ripe fruit and fly agaric first recorded were the least observed events with only 69 and 114 observations each.



ROWAN BERRIES: BEN LEE/WTML

Thank you for your continued support with the project. Please keep sending us your records; they contribute to a powerful dataset that helps scientists to understand nature's response to changes in the environment.

**Table 1: Timing of tree and shrub events in autumn 2016**

