



# Autumn 2009 Review

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## Recording

Recording some autumn events can be testing; for example, it seems so much easier to note the arrival of the first swallow than the departure of the last. Perhaps that's one reason we have been unable to locate as many historic records of events in autumn as in spring. We are not alone; around the world far less has been published on changes in nature's autumn calendar than in spring's. With each passing year, this makes your records increasingly important, as we become better placed to fathom how and why autumn is changing.

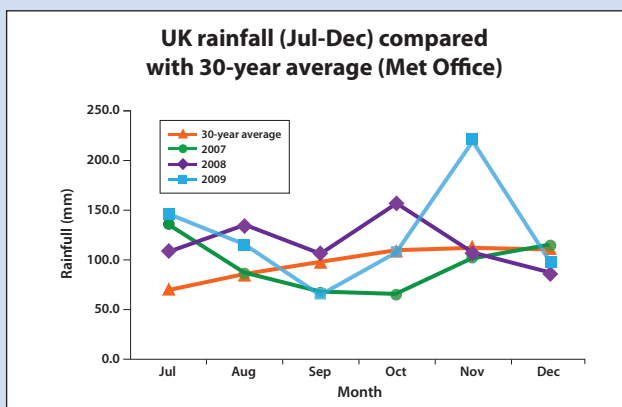
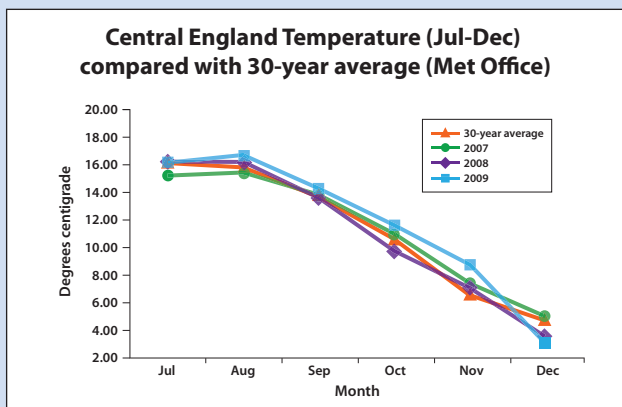
All this means we are delighted to note that 42,460 observations of individual autumn events were submitted to Nature's Calendar in 2009, compared to 33,978 in 2008 after a previous decline from 60,888 in 2006. Please continue to make every effort to record autumn events and encourage your friends and family to do likewise, so we can gain as strong an understanding about them as we have of spring events.

## Weather

A couple of years ago, we established autumn 2007 as our autumn benchmark for nature's calendar, as the period July-December was only 0.04 degrees centigrade above the 30-year (1961-90) average. This same period in 2008 was also only 0.19 degrees centigrade below the 30-year average. But in 2009 it was somewhat warmer; 0.5 degrees centigrade above average with autumn (Sep-Nov) itself the sixth warmest in a series stretching back to 1914. Perhaps more noticeably for those of you who do your bit to limit your impact on climate change by holidaying in the UK rather than flying abroad, summer (Jun-Aug) was once again rather wet with the

summers of 2007 to 2009 combined being the wettest three-in-a-row since 1914.

July was memorable for being the wettest in England and Wales since 1914 with twice the average rainfall. September was notable for being very dry with much of England, Wales and Northern Ireland having less than a third of the average amount. October was almost one degree above average, largely due to a very mild last 10 days.



Rainfall in October varied considerably across the UK but overall was very close to average. November was the warmest since 2003 and seventh warmest since 1914 but, perhaps more importantly for many late autumn events, it was the wettest since 1914. It was followed in quick succession by the coldest December since 1995, with snowfalls after mid-month.

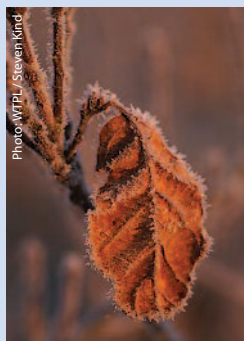


Photo: WTP/L. Steven Kind

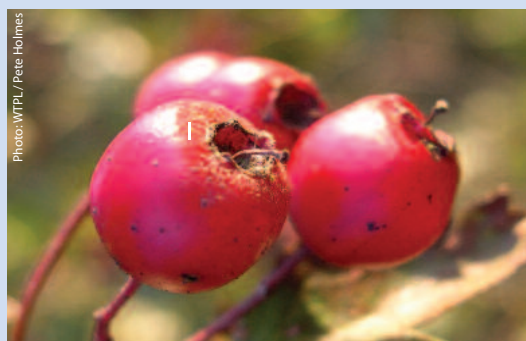


Photo: WTP/L. Pete Holmes

# Events in 2009 compared to 2007

## Classic autumn events (October-December)

On average:

- Departing migrants left two days earlier, the same day as in 2008
- Events leading up to leaf fall got progressively more advanced as autumn progressed, with first tint (19 Sep) one day earlier than in 2007, full tint (16 Oct) three days earlier, leaf fall (16 Oct) four days earlier but trees bare (14 Nov) only two days earlier.

## Summer-autumn fruiting (August-September)

On average:

- Fruit ripening occurred on the same day as in 2007.

Collectively your observations seem slightly counterintuitive, given the warm autumn. Temperatures alone raise expectations that autumn events would have occurred later than in 2007. But nature's calendar seems to be more complex in autumn than in spring and driven not just by temperature but a range of factors, including rainfall, which varied between extremes from month to month. Indeed, it may be that day-to-day changes in



Photo: WTP/L/Christine Martin

the weather, e.g. early frosts or high wind, have a disproportionate impact on the timing of many autumn events.

## Further analyses

Now that we have more than ten years' worth of autumn records from across the UK we have a real chance of unravelling the cues nature is responding to. We also plan to analyse trends in events recorded year-round, such as blackcap, chiffchaff and lawn mowing, though we anticipate this winter's heavy snowfall will have had a substantial impact. And finally, we will be taking a look at your fruiting scores, which may begin to tell a very interesting story in their own right and particularly when considered in tandem with the timing of autumn events.

With luck and a fair wind, we hope we may be able to provide you with greater insights next autumn.



Photo: WTP/L/Pete Holmes



Photo: WTP/L/Shawn Nixon



Photo: WTP/L/Margaret Barton