

Review of autumn 2007 from Nick Collinson, head of conservation policy at the Woodland Trust

Autumn 2007 results

Summary

In 2007, summer and early autumn fruiting was earlier than in 2006 because of the influence of the exceptionally warm spring 2007 temperatures. Classic autumn events like leaf tint and fall were earlier than in 2006 because of cooler conditions in the later part of the year which ended the growing season sooner.

Records received

There were 48,184 observations in 2007, of which 8,125 were the 'Autumnwatch six' events (bramble fruit ripe, hawthorn fruit ripe, swift departure, ripe conkers, ivy flowering, oak first tint). This compares to 60,888 and 14,230 in 2006.

What happened to 'classic autumn' events?

By this we mean leaf tinting and fall and other events which happen from October onwards. These were earlier than in 2006, as we would expect, given the colder temperature (See figure 1). Only in warmer years do these events occur later.

What happened to summer and early autumn fruiting?

Fruiting time is closely associated with flowering time in the spring. With spring 2007 being the warmest on record and 2007 phenology the earliest on record, we would expect fruiting to be early too, which it was. Indeed 2007 temperatures were well above average right through until June, at which point they dipped fractionally below average.

Summary of 2007 events compared to 2006:

Classic autumn events (Oct/Nov/Dec events) On average:

- Winter migrants were 8 days earlier
- First tint was 9 days earlier
- Full tint was 12 days earlier
- Leaf fall was 13 days earlier
- Bare trees were seen 7 days earlier

Summer/autumn fruiting (Aug/Sep events) On average:

- Fruit ripe was 7 days earlier (remember earlier fruiting is associated with early flowering and spring 2007 was the warmest on record)



Have we found our autumn marker year?

Regular readers of this newsletter will know that we use 2001 as our marker year with which to compare all subsequent **spring** records, because it represents average spring temperatures for the 30 year period 1961-1990. We've been waiting for a long time to find an average autumn to be our marker year.

Temperatures during autumn 2007 were similar to the 30-year temperature average throughout the season (see figure 2). July-Dec temperatures were only 0.04°C above average, while Aug-Nov temperatures were only 0.2°C above the average. This compares with our 2001 spring benchmark in which Jan-Apr temperatures were 0.16°C below average.

Autumn 2007 appears a suitable benchmark for all but the fruiting events. Fruiting is closely associated with spring flower timing and summer temperatures.

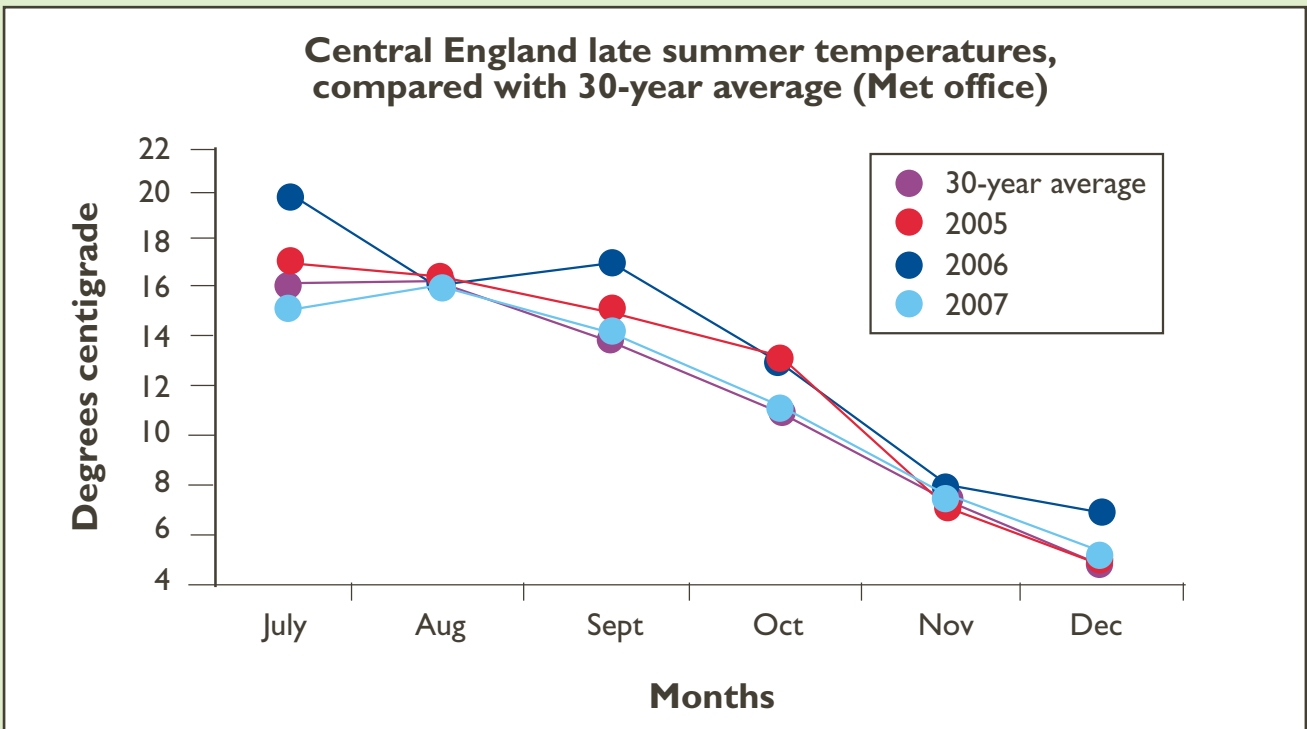


Figure 1: Autumns 2005-2007 compared with the 30-year (1961-1990) average. While 2005 & 2006 were well above average for most of the autumn, 2007 was similar to the average throughout.

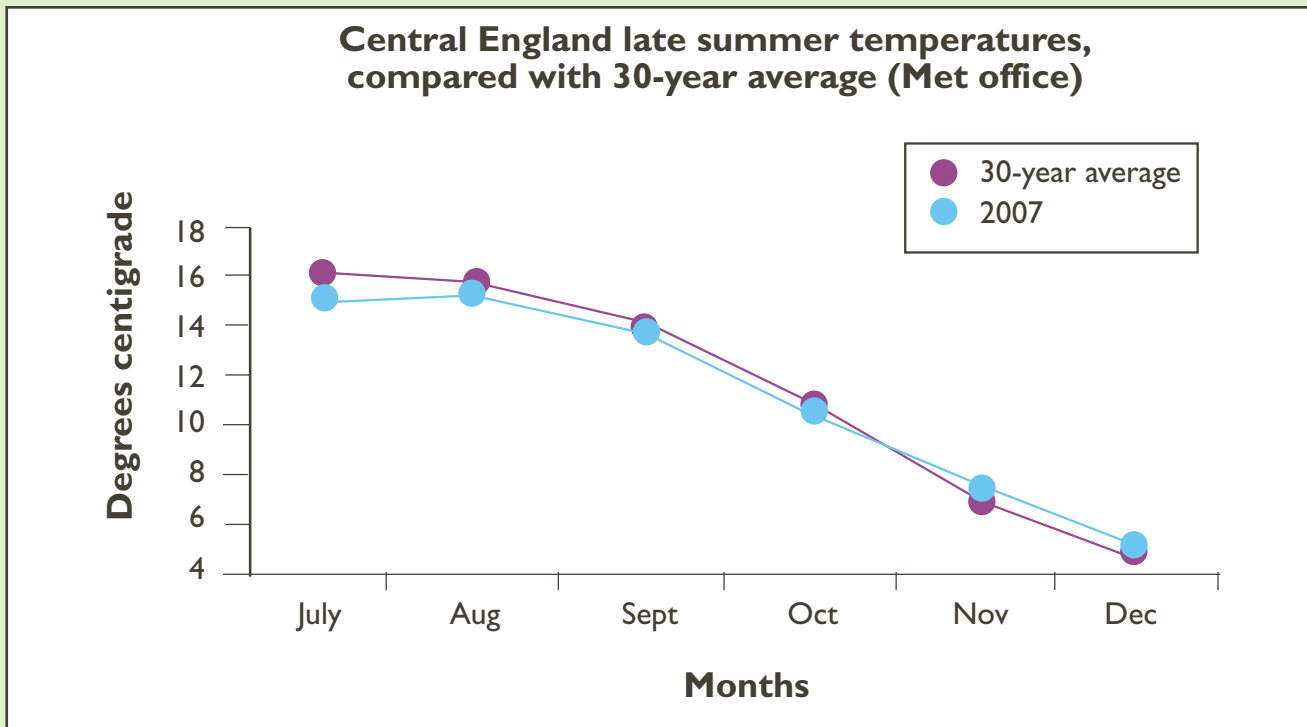


Figure 2: Autumn 2007 provides the UKPN with its autumn phenological marker year. The period July–Dec was only 0.04°C above average, the period August–December only 0.2°C above average.

Rosehips: WTPL/Pete Holmes



Sloes: WTPL/Pete Holmes



Year	UK Average 2003	UK Average 2004	UK Average 2005	UK Average 2006	UK Average 2007	England Average 2007	Wales Average 2007	Scotland Average 2007	NI Average 2007
Trees and shrubs – first tint									
Ash	27 Sep	4 Oct	7 Oct	8 Oct	1 Oct	2 Oct	29 Sep	27 Sep	1 Oct
Silver birch	13 Sep	21 Sep	22 Sep	25 Sep	17 Sep	18 Sep	15 Sep	7 Sep	10 Sep
Horse chestnut	10 Sep	15 Sep	13 Sep	13 Sep	7 Sep	7 Sep	3 Sep	1 Sep	3 Sep
Pedunculate oak	29 Sep	3 Oct	2 Oct	1 Oct	25 Sep	26 Sep	19 Sep	26 Sep	20 Sep
Sycamore	20 Sep	23 Sep	27 Sep	30 Sep	19 Sep	19 Sep	16 Sep	14 Sep	13 Sep
Full tint									
Ash	16 Oct	20 Oct	22 Oct	29 Oct	18 Oct	19 Oct	16 Oct	13 Oct	19 Oct
Silver birch	19 Oct	19 Oct	26 Oct	30 Oct	19 Oct	20 Oct	16 Oct	5 Oct	14 Oct
Horse chestnut	12 Oct	13 Oct	13 Oct	18 Oct	8 Oct	9 Oct	7 Oct	1 Oct	5 Oct
Pedunculate oak	29 Oct	31 Oct	14 Nov	11 Nov	30 Oct	30 Oct	29 Oct	28 Oct	26 Oct
Sycamore	17 Oct	17 Oct	23 Oct	29 Oct	16 Oct	17 Oct	15 Oct	6 Oct	12 Oct
Leaf fall									
Ash	18 Oct	22 Oct	25 Oct	30 Oct	18 Oct	18 Oct	10 Oct	17 Oct	15 Oct
Silver birch	19 Oct	21 Oct	27 Oct	30 Oct	15 Oct	17 Oct	6 Oct	4 Oct	10 Oct
Horse chestnut	17 Oct	19 Oct	20 Oct	22 Oct	11 Oct	11 Oct	11 Oct	6 Oct	12 Oct
Pedunculate oak	1 Nov	4 Nov	13 Nov	12 Nov	29 Oct	30 Oct	24 Oct	26 Oct	21 Oct
Sycamore	16 Oct	19 Oct	25 Oct	28 Oct	14 Oct	15 Oct	4 Oct	8 Oct	9 Oct
Bare									
Ash	6 Nov	7 Nov	15 Nov	17 Nov	7 Nov	7 Nov	3 Nov	6 Nov	5 Nov
Silver birch	16 Nov	15 Nov	27 Nov	23 Nov	16 Nov	18 Nov	8 Nov	4 Nov	13 Nov
Horse chestnut	10 Nov	13 Nov	19 Nov	18 Nov	11 Nov	11 Nov	8 Nov	8 Nov	8 Nov
Pedunculate oak	23 Nov	2 Dec	13 Nov	4 Dec	28 Nov	29 Nov	28 Nov	27 Nov	22 Nov
Sycamore	11 Nov	10 Nov	24 Nov	21 Nov	14 Nov	14 Nov	11 Nov	8 Nov	10 Nov
Fruit ripe									
Blackthorn	7 Sep	11 Sep	9 Sep	5 Sep	29 Aug	29 Aug	26 Aug	11 Sep	1 Sep
Bramble	14 Aug	15 Aug	6 Aug	6 Aug	4 Aug	3 Aug	3 Aug	24 Aug	12 Aug
Elder	28 Aug	29 Aug	29 Aug	25 Aug	19 Aug	18 Aug	22 Aug	10 Sep	31 Aug
Hawthorn	7 Sep	7 Sep	24 Aug	30 Aug	23 Aug	22 Aug	23 Aug	5 Sep	25 Aug
Hazel	11 Sep	18 Sep	12 Sep	8 Sep	4 Sep	3 Sep	4 Sep	26 Sep	10 Sep
Horse chestnut	19 Sep	19 Sep	17 Sep	16 Sep	8 Sep	8 Sep	10 Sep	18 Sep	16 Sep
Pedunculate oak	20 Sep	23 Sep	20 Sep	18 Sep	12 Sep	12 Sep	19 Sep	2 Oct	14 Sep
Rowan	24 Aug	22 Aug	18 Aug	20 Aug	4 Aug	4 Aug	4 Aug	14 Aug	2 Aug
Bird – summer departures									
House martin	20 Sep	23 Sep	22 Sep	19 Sep	20 Sep	20 Sep	24 Sep	19 Sep	21 Sep
Swallow	21 Sep	24 Sep	22 Sep	18 Sep	19 Sep	19 Sep	23 Sep	21 Sep	21 Sep
Swift	20 Aug	18 Aug	17 Aug	15 Aug	13 Aug	13 Aug	17 Aug	17 Aug	17 Aug
Birds winter arrivals									
Fieldfare	26 Oct	25 Oct	31 Oct	1 Nov	24 Oct	25 Oct	27 Oct	13 Oct	16 Oct
Redwing	31 Oct	27 Oct	29 Oct	1 Nov	26 Oct	27 Oct	26 Oct	11 Oct	13 Oct
Other events									
Fly agaric	6 Oct	27 Sep	4 Oct	29 Sep	30 Sep	4 Oct	11 Sep	25 Aug	18 Sep
Ivy flowering	24 Sep	23 Sep	22 Sep	22 Sep	17 Sep	16 Sep	16 Sep	14 Oct	20 Sep
Lawn last cut	21 Oct	1 Nov	3 Nov	3 Nov	30 Oct	30 Oct	1 Nov	19 Oct	21 Oct

Table showing UK average dates for a selection of autumn events 2003-2007.