BBC Autumnwatch



September 2006 | full report

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Provisional results of the Autumnwatch 2006 survey

27 September 2006 | These results must be seen as very provisional, simply indications of possible 2006 autumn phenology, given it is too early to be any less equivocal. Some events may be largely complete (i.e. blackberry), while others (i.e. oak leaf first tint) have hardly started. The focus of this report will therefore be on larger trends and issues. Species record information to date is also presented.

Figure 1

Summer 2006 Central England Temperature (CET)



Figure 2

Summer 2006 rainfall (England & Wales averages)



Autumnwatch weather

After a fairly average spring summer 2006 has been warm. Figure 1 shows just how warm July was, with temperatures 4°C above average. This corresponded with below average rainfall for June and July, leading to drought. Many trees showed signs of stress at this time, and we also had reports of chicks dying in nests under corrugated iron roofs. Wildlife was clearly struggling with the hot dry July. Much needed rain came in August and this helped fruits to swell and ripen. It's been a bumper fruiting year by all accounts as flowers were left untouched by late frosts. This was partially to do with the fact that the more 'normal' spring (see Springwatch 2006 report) meant later flowering, thus escaping frost damage was more likely.

Blackberry

To date over 2,000 people have recorded blackberry fruit ripe.

The average date across the UK is the 1st August (so far), which is earlier than in recent years. It is also 3 days earlier than the Autumnwatch 2005 average.

This is likely to be due to the timing of analysis and the fact that other later records are still due in, which will result in the final average date being later.



However the bar chart for blackberries appears to show the peak of sightings is well and truly over so it could also be due to the very warm summer speeding up fruit ripening.

Autumnwatch results showed blackberries were riper in England about 2 weeks than they were in Scotland, just like last year (average dates 1st August and 15th August respectively). This is due to the difference in average temperature north to south and the timing of flowering also being later.

Swift departure

To date only 670 records of Swift last seen have been made, perhaps illustrating the date you last see something is not easy to record.

The Swift bar chart suggests records are now well and truly over and swifts have gone.

Postcard records are still coming in however.



The UK Autumnwatch average for this is (so far) 11th August, which is earlier than recent years, but 2 days later than the Autumnwatch 2005 average. Again, this may to be due to the timing of analysis and the fact that other records are still due in, but even then it is unlikely the date will change much now. The England average for swift last seen so far is 10th August, while the Scotland average is 13th August.

Swift migration is an interesting one. They tend to leave earlier in warmer years, as being single brooders once the young are fledged they depart soon after. In warmer years, when there is plenty of food, fledging is quicker than in cooler years. In cool periods when the adults have to travel some distance to find food, the fledglings can actually enter a state of torpor and development slows down.

This would be consistent in terms of Scotland's swifts departing slightly later, with fledging time taking slightly longer in more northern latitudes. 2006 has certainly been a good year from swiftlets developing quickly and therefore migration taking place ea4rlier. The results seem to reflect this.

Hawthorn ripe berries

To date only 640 records have been received of ripe hawthorn berries. The Autumnwatch UK average for hawthorn ripe berries is currently 23rd August, the same date as in Autumnwatch 2005; both are earlier than recent years.

Earlier flowering in milder springs, followed by good ripening conditions over the summer, might explain earlier hawthorn ripening, although UKPN dates for 2005 were 3rd September, so it is possible that inaccurate Autumnwatch ID is an issue. Also



there are some concerns that records may contain, red, but hard berries i.e. not fully ripe (they redden well before they soften). As with blackberries we intuitively expect that hawthorn berries will ripen earlier in warm years following earlier flowering and pollination in the spring.

Ivy flowers

So far only about 180 records, as we have only just begun to receive records of ivy flowering. It is unclear at this stage whether ivy flowering phenology is changing over the longer term with climate.

The current average is 8th September, this will change. Last year the Autumnwatch average date was 21st September. UKPN average recently range from 23rd-27th.

Ivy plays an important role in terms of later summer pollen and nectar as well as very late berries, for winter birds.

It is much maligned by those who might wish to 'tidy' up the urban and rural landscape, but does play a wide range of important roles for wildlife, including; roosting sites for bats, nesting and roosting for birds, diapause sites for insects, food source for a wide range of wildlife. 2006 COMPARE WITH 2005 IV

The UK Phenelegy Network - seeking to collate and store all UK data on Mature's Calenda. For notes relating to this graph click here or to close this wincow and make changes to your select to create enother graph, click here. To recet this graph back to it's original state leick here.



Contrary to belief it is not a parasite of trees, taking no nutrients directly from them. It is shallow rooted and for that reason doesn't tend to compete with its host for water, except perhaps with shallow rooted trees in drought conditions. Support is the only thing it needs from a tree, and this causes no problems to healthy trees. The only circumstances where it is worth considering ivy control in terms of wildlife, is where an ancient tree, with a weak crown, is heavily clad with ivy and there is a risk that the increased 'sail area' of the ivy could destabilise branches.

Conkers

So far we have only about 270 records of conkers.

The graph above shows that we are still very much within the recording period, current average date 8th Sept, this will undoubtedly change.

As with other fruit ripening we would expect to see conkers earlier in warmer years.



The Autumnwatch 2005 final average UK date was 17th September. Recent years have seen the UKPN average date for conkers ripening around 19th/20th September.

Oak first tint

So just over 230 records in, as this event has hardly started.

The average date for Autumnwatch 2005 was 30th September, the current average this year is only the 2nd September (this will change).

Current understanding of leaf tinting suggests that in warmer non-drought years, leaf tinting starts later and leaves stay on the trees longer- i.e. leaf tinting is later and lasts longer.



However in drought years rainfall can be a major factor in early leaf tinting. Given the drought during June & July, we may see slightly earlier average dates for this event, when all records are in.

In non-drought years start of leaf tint is caused by the cessation of chlorophyll (which makes the leaf appear green) production in the leaf and therefore other pigments in the leaf (otherwise masked by the chlorophyll) begin to appear.

The most common of these is carotene, which is yellow/orange in colour. This pigment is in leaves all the time, but only revealed at the end of the year when chlorophyll breaks down.

In drought years, stressed deciduous trees adopt the strategy of losing their leaves as it is through their leaves that they lose water.

Drought leaf tint is more like leaf desiccation, with leaves turning brown and dry.

Tables of results

Table 1

Average UKPN dates from 2000-2004 for the six Autumnwatch events

| | 2000 average | 2001 average | 2002 average | 2003 average | 2004 average | 2005 average |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Bramble fruit ripe | 30/08/2000 | 27/08/2001 | 25/08/2002 | 14/08/2003 | 14/08/2004 | 06/08/2005 |
| Hawthorn fruit ripe | 16/09/2000 | 20/09/2001 | 12/09/2002 | 07/09/2003 | 07/09/2004 | 24/08/2005 |
| Oak first tint | 08/10/2000 | 06/10/2001 | 03/10/2002 | 29/09/2003 | 03/10/2004 | 02/10/2005 |
| Swift last recorded | 26/08/2000 | 26/08/2001 | 20/08/2002 | 20/08/2003 | 18/08/2004 | 17/08/2005 |
| Horse chestnut fruit ripe | 27/09/2000 | 26/09/2001 | 23/09/2002 | 19/09/2003 | 19/09/2004 | 17/09/2005 |
| lvy flowering | 29/09/2000 | 30/09/2001 | 27/09/2002 | 24/09/2003 | 23/09/2004 | 22/09/2005 |

Table 2

Autumnwatch 2006 average dates (so far)

| | UK | England | Scotland | Wales | Northern Ireland |
|-------------------------------|------------|------------|------------|------------|---------------------|
| Bramble fruit ripe | 01/08/2006 | 01/08/2006 | 15/08/2006 | 01/08/2006 | 13/08/2006 |
| Hawthorn fruit ripe | 22/08/2006 | 22/08/2006 | 26/08/2006 | 22/08/2006 | 23/08/2006 |
| Oak first tint | 28/08/2006 | 28/08/2006 | 31/08/2006 | 28/08/2006 | 26/08/2006 |
| Swift last recorded | 11/08/2006 | 10/08/2006 | 13/08/2006 | 12/08/2006 | 17/08/2006 |
| Conker fruit ripe | 04/09/2006 | 04/09/2006 | 07/09/2006 | 03/09/2006 | 11/09/2006 |
| lvy flowering | 05/09/2006 | 05/09/2006 | 03/09/2006 | 07/09/2006 | 08/09/2006 |