Autumnwatch Results 2005

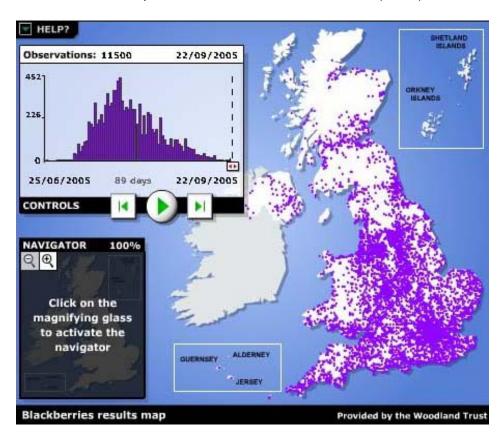
These results must be seen as provisional given the timing of writing. For some events records may be largely in, but others such as oak leaf first tint may be incomplete.

See also the Woodland Trust press release, Early autumn after warm summer spells trouble for nature

UKPN UK-wide averages					
	2000	2001	2002	2003	2004
Blackberry fruit ripe	30/08/2000	27/08/2001	25/08/2002	14/08/2003	14/08/2004
Swift departure	26/08/2000	26/08/2001	20/08/2002	20/08/2003	18/08/2004
Hawthorn fruit ripe	16/09/2000	20/09/2001	12/09/2002	07/09/2003	07/09/2004
Horse chestnut fruit ripe	27/09/2000	26/09/2001	23/09/2002	19/09/2003	19/09/2004
Ivy flowering	29/09/2000	30/09/2001	27/09/2002	24/09/2003	23/09/2004
Oak first tint	08/10/2000	06/10/2001	03/10/2002	29/09/2003	03/10/2004

Blackberry

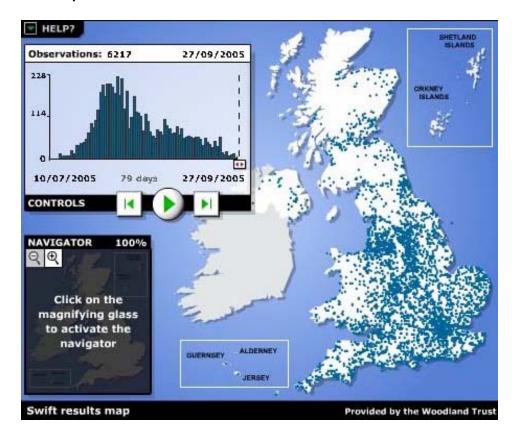
For the actual live maps follow the instruction in View Trends (above)



To date 11,500 people have recorded blackberry fruit ripe, of which over 10,400 are attributable to England, so a similar recorder spread to Springwatch. The average date across the UK is the 5th August. Ripening seems to have been about a week earlier than 2004 and there is some evidence for a steady advance in ripening (from late August to the first week of August; albeit based on a small number of years). Autumnwatch results showed blackberries were ripening in England about 2 weeks earlier than they were in Scotland (average dates 4th August and 21st August respectively).

We expect to see fruit ripening earlier in warm years as fruiting is closely linked to flowering, and with earlier flowering and earlier pollination, fruit development will start earlier.

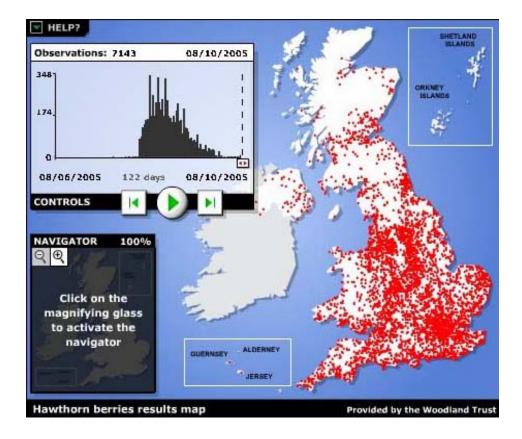
Swift departure



To date over 6,200 records of Swift last seen have been made, perhaps illustrating the date you last see something is not easy to record. The UK Autumnwatch average for this is (so far) 16th August, which is a little earlier than recent years. The graph above suggest that most of the records will now be in; but there are bound to be a few stragglers and people hanging on to their records to make sure that they see no more swifts. The England average for swift last seen so far is 16th August, while the Scotland average is 20th August.

Swift migration is an interesting one. They tend to leave earlier in warmer years, as being single brooded, once 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.

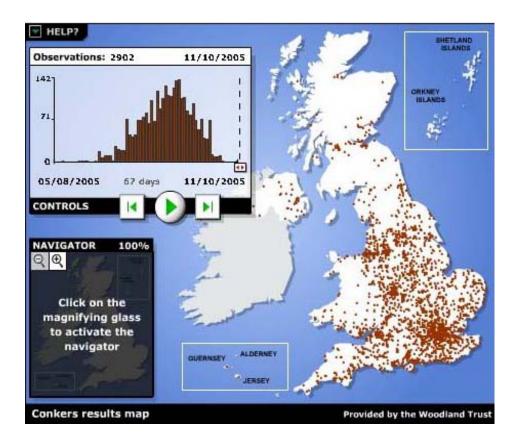
Hawthorn ripe berries



To date over 7,100 records were received of ripe hawthorn berries. The Autumnwatch UK average for hawthorn ripe berries is currently 22nd August, which is about two weeks earlier than 2004, although the graph above suggests there may be more records to come. The few early records (June/July) are suspect as they are probably records of berries rather than ripe berries! Also there are some concerns that records may contain, red, but hard berries i.e. not fully ripe (they redden well before they soften). So, we expect the final mean date will be a little later than the 22nd, but still earlier than in 2004 with some evidence of a general advance in ripening, albeit again based on a small number of years.

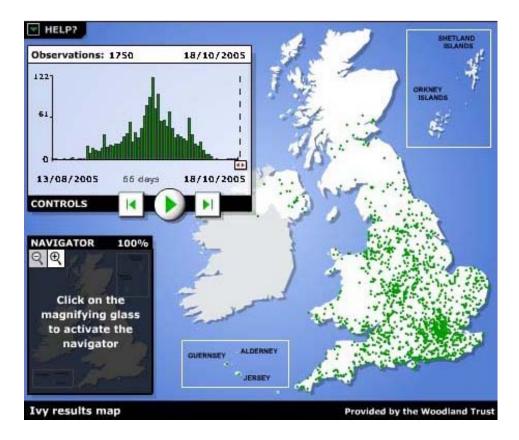
As with blackberries we intuitively expect that hawthorn berries will ripen earlier in warm years following earlier flowering and pollination in the spring. We have evidence from outside Autumnwatch that hawthorn berry yield is affected by weather in the previous summer when flower buds are being formed. Rising temperatures would therefore be expected to increase berry production.

Conkers



A small number of records (2,902), compared to the others. As an ornamental tree horse chestnut may be concentrated in urban and suburban areas, or perhaps our recorders have passed the conker-playing stage? The graph suggests that the recording period may be all but finished. The average date so far is 15th September. As with bramble and hawthorn this is earlier than previous years and again seems part of a trend towards earlier ripening

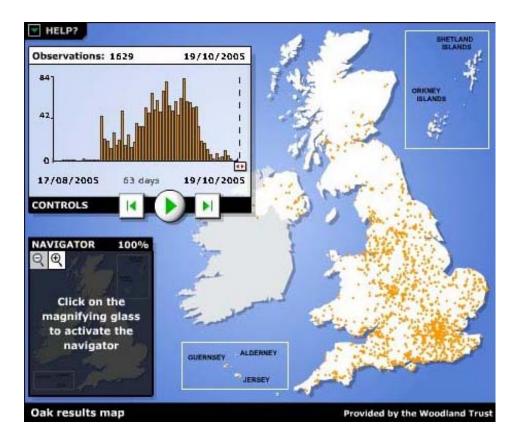
Ivy flowers



With over 1700 records the above graph suggests that records of ivy flowering have petered out. The average date is 17th September. This would be almost two weeks earlier than 2004 with evidence of an advance in recent years. It is unclear at this stage whether ivy flowering phenology is changing over the longer term with climate.

The low numbers of records may reflect that this subtle but beautiful flower is simply overlooked. 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. 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.

Oak first tint



Over 1,600 records have been received with an average date of 23 September. This would be earlier than in recent years. However, we feel that there are many more records to come since oak is a late tinter! In terms of leaf colour and fall it looks like (gales and sudden frosts notwithstanding) that it could be a late year for leaf fall.

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. 2003 for example saw some very early leaf tinting dates (as early as late July) for particularly shallow rooted trees such as beech, birch and horse chestnut. Already this year, in some parts of the UK we have had records of some early tinting in these shallow rooted species. Of course Oak, being a deep rooted tree, is less susceptible to low upper-soil moisture.

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.