David Pannett's History of Bicton part 93

Our changing weather and climate

Each February we must still expect our ration of winter weather, but as the days get longer we look out for those first signs of spring – bulbs emerging from the ground and blossom bursting on the trees.

Over the last 26 years, June Hughes, our garden correspondent, has been doing this, noting the dates at which each type of spring flower appears in her garden. The results, plotted as a sort of graph, have already been discussed in these columns, but now there are further years to be added (since 2010).

The earlier pattern showed that no two years were alike, but each tended to contribute to an almost regular rhythm over the course of a four or five year cycle. Also each flower type appeared in its turn, broadly in step with the others. Such was this regular rhythm one might be tempted to project the same pattern into the future...

The spring of 2013 did, however, turn out to be much cooler than expected with even a dose of winter weather coming much later than usual. In 2012, on the weekend of March 24th we experienced warm sunny conditions ideal for enjoying the 'great outdoors', but on the same weekend in 2013 a blizzard arrived to keep us indoors. On the hills it was a disaster for sheep farmers and it was no wonder that damson blossom did not appear until May.

In the following year conditions were more average and may point to an early spring in 2015. We must just wait and see – there is space for your own observations in the chart.

The mechanisms underlying these patterns operate here at a sort of climatic 'crossroads' between polar and tropical air masses and also between moist oceanic and dry continental influences. The movement of depressions and slow moving anticyclones can alter the balance of these influences, allowing one or the other to be dominant. Such outside influences are particularly important in winter when local solar heating is at its weakest, i.e. we do not make weather, just import it.

These short and long term fluctuations which we experience have been well recorded by instruments for a century or more. Earlier data comes from a variety of observations such as those in ships' logbooks. Chronicles, including one from Shrewsbury, have always been good at recording extremes, such as storms, floods, frosts and droughts from the sixteenth to the eighteenth centuries.

The general impression given by all this that the variable nature of our weather, which we now experience, has been going on for centuries. The frequency and magnitude of extreme events can change slightly however, to give whole decades higher or lower averages. Thus the 'Little Ice Age' starting in the fourteenth century was not without its warm spells.

Weather variations naturally influence agricultural production so that fluctuations in the price of grain can provide clues to them. A run of bad years may have a yet prolonged effect if there is too little seed remaining and so famine occurs.

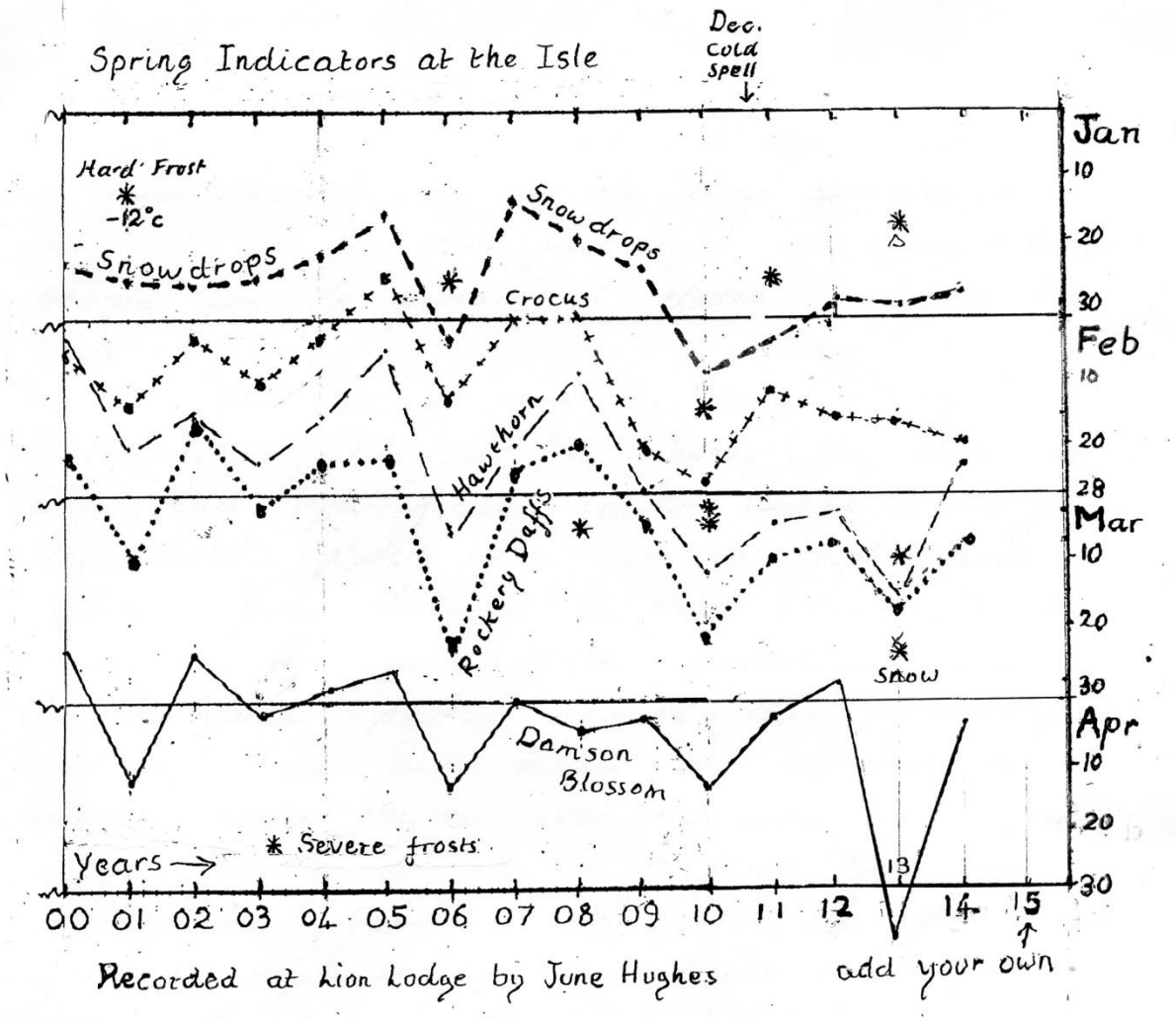
Annual growth rings of trees reflect each year's weather conditions and a run of years can produce a distinctive pattern. By studying the rings in successive older lumps of wood with overlapping sequences, whole centuries can be dated. Apart from the value of this in dating wooden structures, rare extreme climatic events can be seen. For instance, well preserved timber from around Irish peat bogs shows that trees were severely stressed in the years 546-9. The cause could have been volcanic dust blocking out sunlight, as it has done on several occasions since, but back-up evidence from dated layers in the Greenland Ice Cap is not clear. A comet/asteroid crashing into the sea has even been suggested.

Apart from bad harvests, which must have afflicted northern Europe, it may be no coincidence that in the following years there are records of a plague sweeping through the roman Empire, helped by trade routes. Did the climatic shock alter the behaviour of rats and fleas, as it might have done with the Black Death of the fourteenth century?

The significance of all this to our local area is the way in which a new mediaeval pattern of settlement and administration developed during the 'Dark Ages', replacing the Romanised world. Older history books may have given the impression of Anglo Saxons sweeping into the country destroying all before them, when in reality the local population had already been much reduced and towns no longer maintained as a result.

After this event, however, the dominant weather became more settled with warmer and drier conditions, which all helped the development of new Anglo Saxon Kingdoms. Later, conditions even encouraged the Vikings to settle in Iceland and Greenland!

If nothing else, all this changing weather has given the English something to talk about other than religion and politics, although historically they were very much linked.


Spring Indicators at the Isle
Dec. cold spell
Hard Frost
-12°c
Snow drops
Snow drops
Crocus
Hawthorn
Rockery Daffs
Snow
Damson Blossom
Jan
Feb
Mar
Apr
10
20
30
28
Years →
* Severe frosts
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
Recorded at Lion Lodge by June Hughes
add your own