

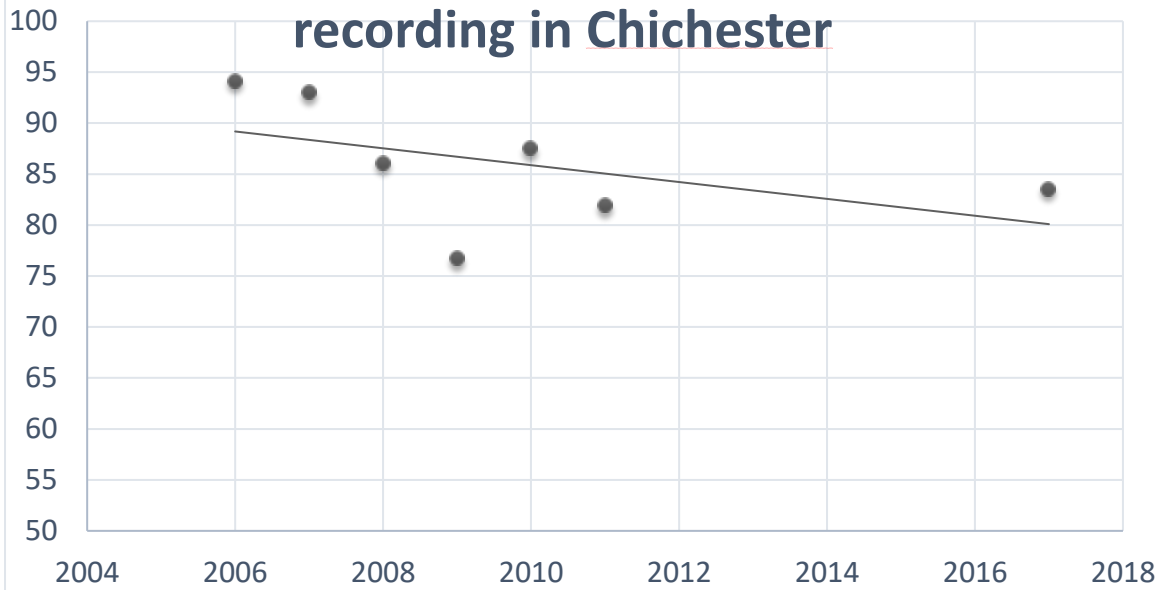
Chichester Natural History Society – 2017 Phenology Report

- CNHS collected Phenology data for several years at the beginning of this century. These have been combined with this years data and analyzed in a standard manner.
- Given the methodology by which CNHS collect this data we will need significantly more data points before any statistical analysis yields a significant result.
- However, the real value is in the creation of a significant set of data that illustrates changes to species over time.

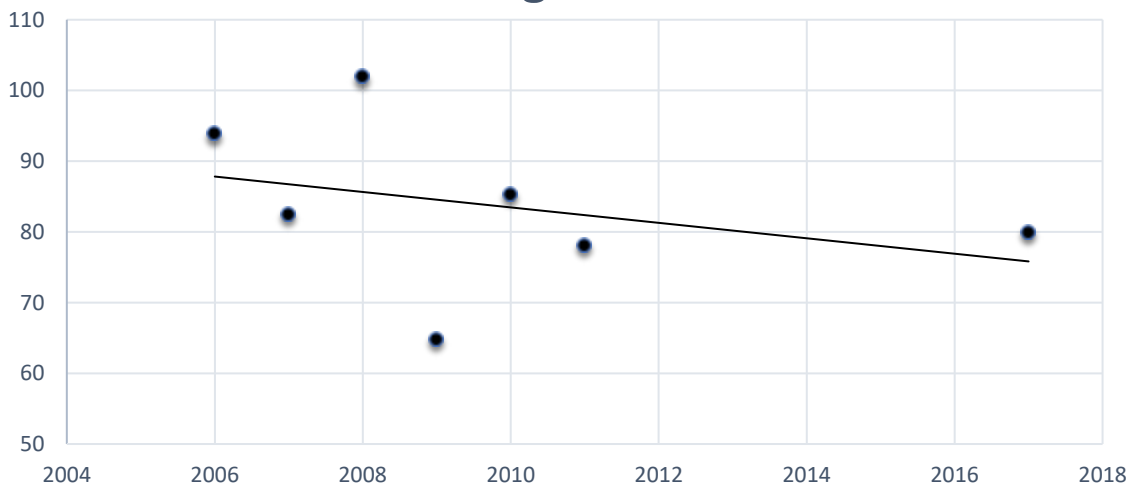
What impacts Phenology results ?

- ▶ Numerous studies into changes in phenological records suggest that it is temperature that is the primary cause (Sparks,Jeffree & Jeffree 2008, Menzel 2006, etc).
- ▶ Using Met office data for Southern England during the recording period :
 - ▶ The warmest springs (average of Feb, Mar, Apr) were 2007, 2011, 2017.
 - ▶ The coolest springs were 2006, 2010.
 - ▶ 2009 had a relatively cold Feb and a warm Mar/Apr
- ▶ Health Warning ... the data collection method introduces significant variability into the results ... and therefore any comments on the results are pure speculation ...

Chiff Chaff - Average first day of recording in Chichester



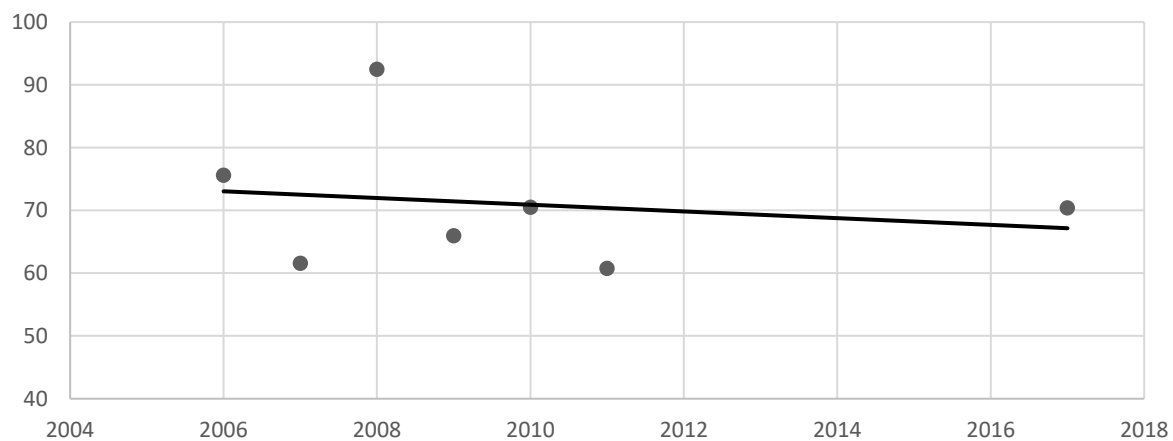
Brimstone Butterfly - Average first day of recording in Chichester



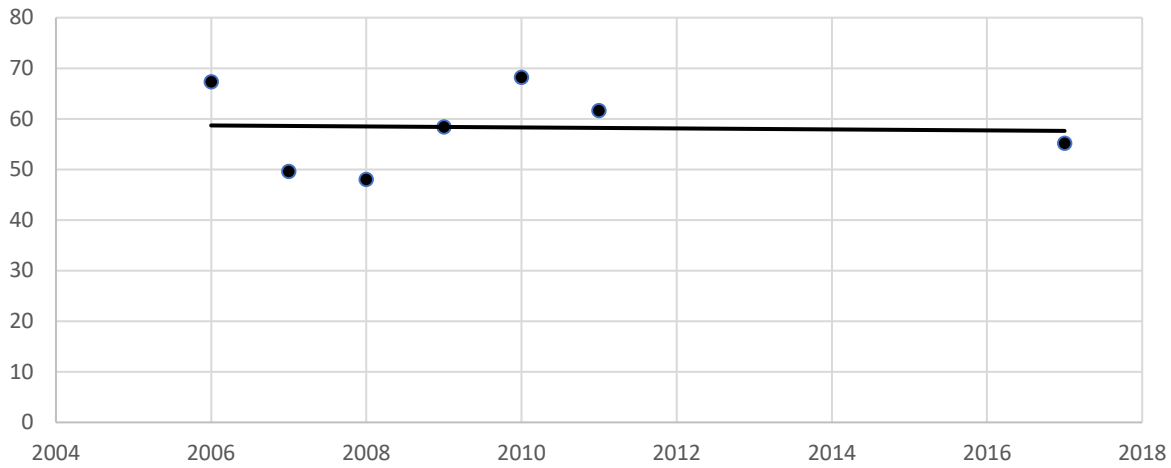
Primrose in flower - Average first day of recording in Chichester



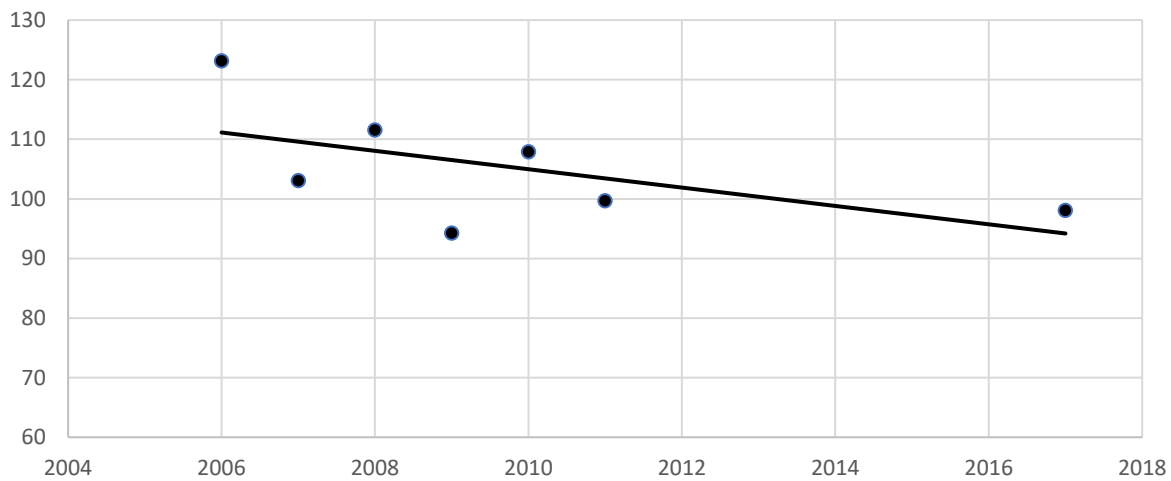
Honey Bee - Average first day of recording in Chichester



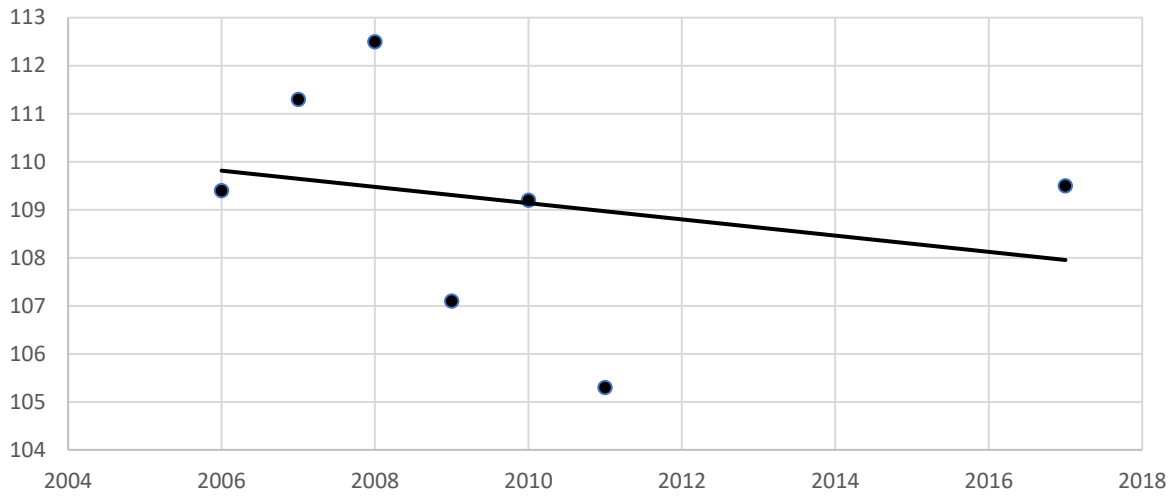
Frog Spawn - Average first day of recording in Chichester



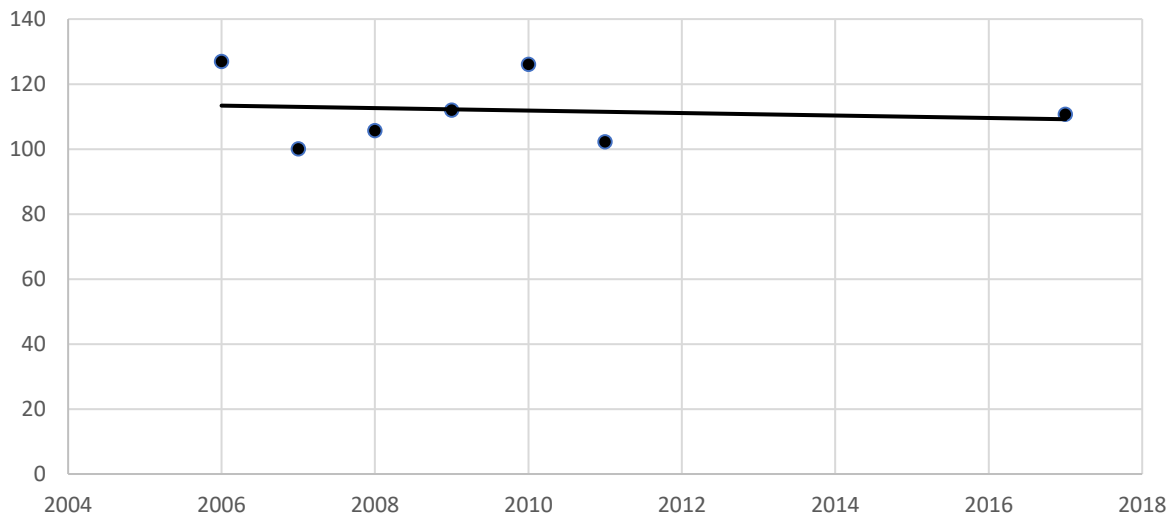
Orange tip butterfly - Average first day of recording in Chichester



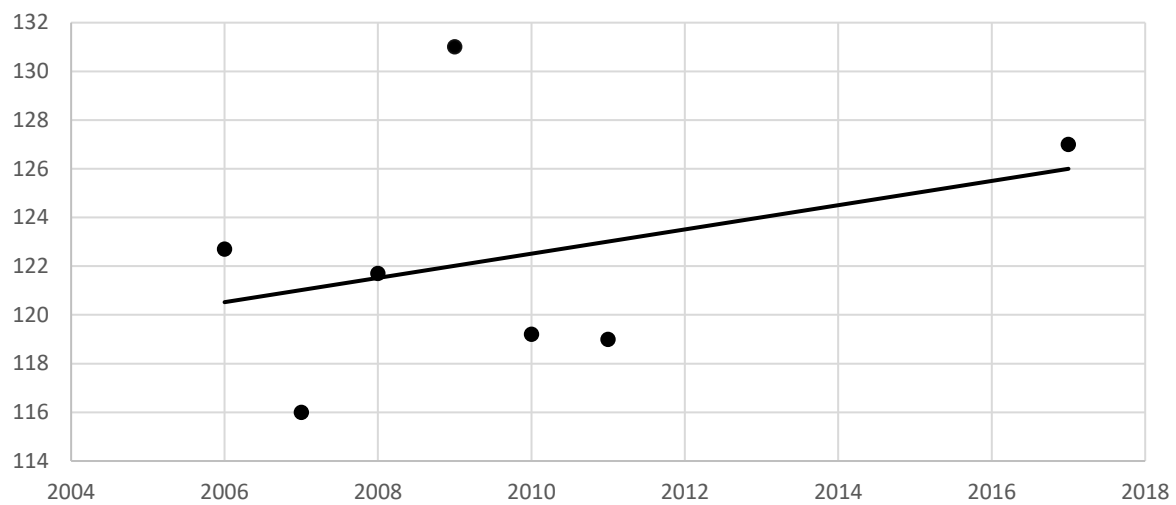
Swallow - Average first day of recording in Chichester



Hawthorn in Flower- Average first day of recording in Chichester

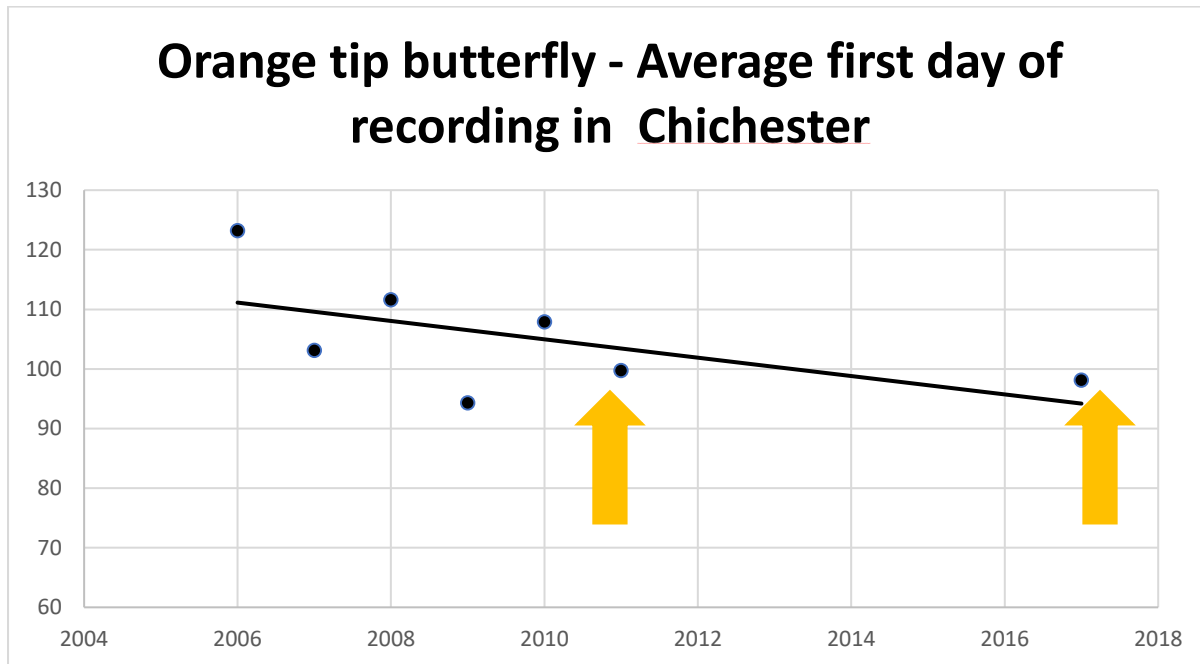


Cuckoo - Average first day of recording in Chichester

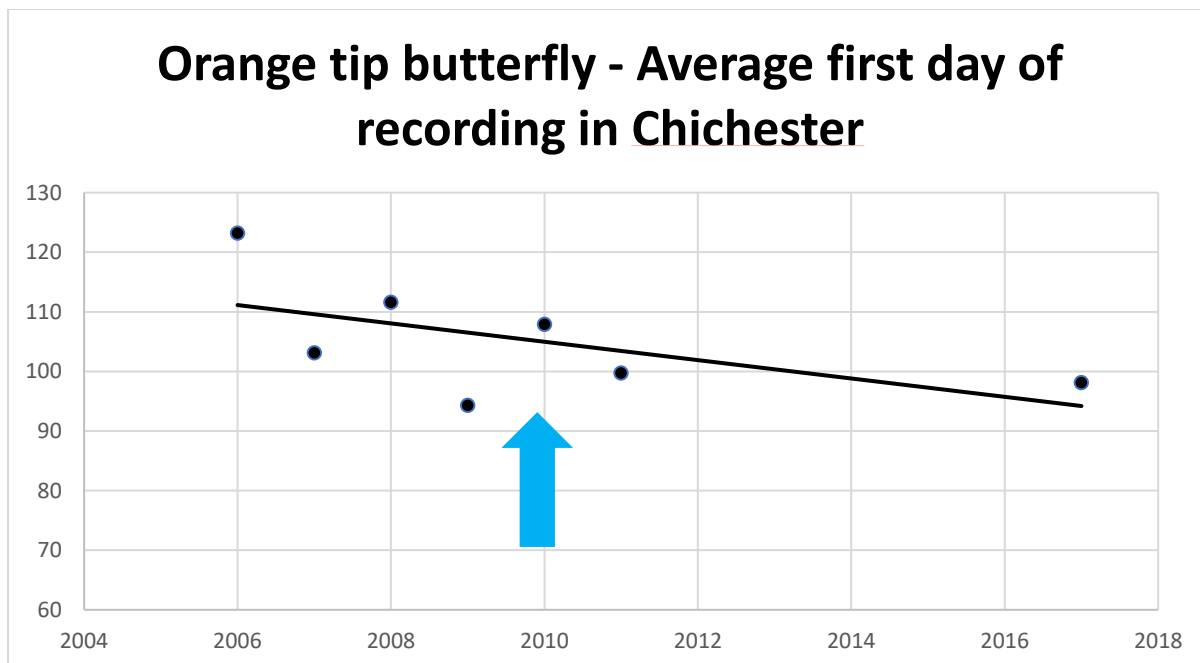


Summary

- ▶ The only species whose average recording is later in the year is the Cuckoo.
 - ▶ Is this due to its relative decline (now on RSPB Red list) ?
 - ▶ Records provided via Rachel Smith (from a non CNHS member in Bosham) for the last 12 years show no significant change in first recording
- ▶ Over the course of the analysis 4 of the species (Chiff Chaff, Brimstone Butterfly, Orange Tip Butterfly & Swallow) appear to be sighted earlier in the year.
- ▶ The relationship with the temperature is interesting as the following two charts illustrate :



Arrows show warmest springs



Arrow shows coolest spring

