BBC Springwatch 2007 Nick Collinson & Tim Sparks Report as at 16/05/2007

(N.B. Records are still coming in, so this report is still somewhat provisional)

Temperature in spring 2007

		^o C above the 30 years 1962-
MONTH	CET ℃	1990 average
Jan	7.0	3.6
Feb	5.8	2.4
March	7.2	2.0
April	11.2	3.9

Table 1- Central England Temperatures for January-April and how they differ from the 30-year average

Spring 2007 has been extremely mild (Table 1, Figure 1). Indeed we had the warmest April on record (Met Office) and the Jan-April temperatures show it has been the warmest spring, at least since we started the UKPN, and certainly since we started the Springwatch survey (Figure 2).

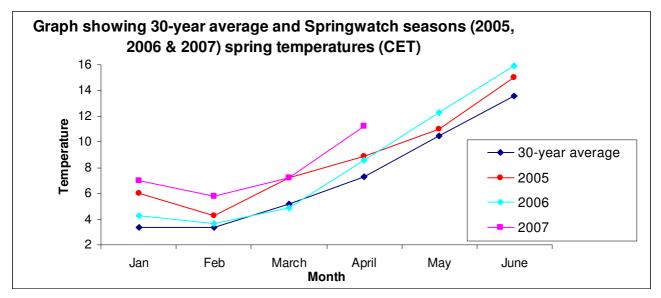


Figure 1: Springwatch springs 2005, 2006 & 2007 temperatures compared to the 30-year (1961-90) average. Spring 2007 was considerably warmer than the last two Springwatch years. Central England temperature (CET) is representative of temperatures across much of the UK.

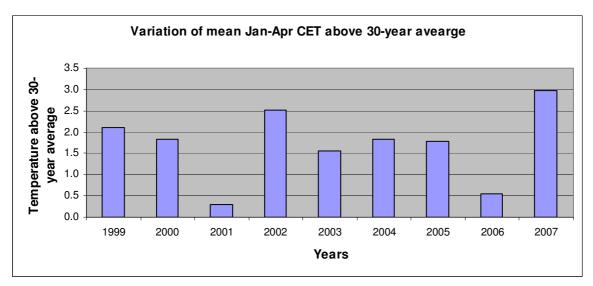


Figure 2: Recent years, except spring 2001 & 2006, have been well above average temperature, 2007 particularly so.

species name	event	total
red-tailed bumblebee	first seen	3394
frog spawn	first seen	7622
hawthorn	flowering	1546
ladybird	first seen	5955
peacock butterfly	first seen	4063
swift	first seen	1873
	total:	24453

Springwatch numbers of records

- Another good response from Springwatch recorders, although down on last year at 24,453 records
- As with previous years, by far the majority of records came from England (89% of records), with Scotland, Wales and Northern Ireland having 5%, 4.5% and 1.5% of records respectively
- Springwatch 2007 data provides us with another huge phenological dataset, gathered in one season.
- Springwatch has again proved a powerful vehicle for mobilising people to take action for the natural world.

Species summary

Species	Average date across the UK				
	The phenological norm.	2005 Springwatch	2006 Springwatch	2007 Springwatch	
Red-tailed bumblebee	-	-	7 th April	21 st March	
Frogspawn	12 th March	6 th March	15 th March	25 th February	
7-spot ladybird	-	7 th March	21 st March	5 th March	
Hawthorn flowers	11 th May	28 th April	8 th May	16 th April	
Peacock butterfly	15 th April	30 th March	14 th April	15 th March	
Swift returning	10 th May	5 th May	4 th May	Records still coming in	

- For those species with complete records for 2007, this has been our earliest Springwatch season.
- Well ahead of the normal time we would have expected to see these events 30 years ago, based on our data for the phenological norm between 1961-1990

<u>In 2007</u>

- Red-tailed bumblebee first seen on average 2 weeks earlier than last year
- **Frogspawn** first seen on average 15 days earlier than "normal".
- 7-spot ladybird first seen 2 weeks earlier than last year
- Hawthorn flowers first seen almost a month earlier than normal & 3 weeks earlier than last year
- Peacock butterfly first seen a month earlier than normal and a month earlier than last year
- Swift returning- data still coming in

Issues of concern

- **Mismatches of timing (synchrony)**, as plants, birds and insects are all responding at different rates. The records from 2007 illustrate this- different changes in timing when subject to the same changes in temperature
- **Increased competition** the oak tree came into leaf 3 weeks earlier than the ash this year, while this used to happen at a similar time- oak is more responsive to temperature change
- Life cycle problems- for the 3rd year running we had records of frozen frogspawn as mild winter temperature gave way to a cold snap. Significant variations in temperature are predicted to become more common in the future.