

## **Trends in Butterfly Populations in the Upper Thames area 2005 Transect Co-ordinator's Report to Recorders**

*This report is based on transect returns from 34 sites. There are a welcome number of additions both from new transects set up by individuals and from newly exchanged data from a number of BBOWT sites. My thanks go to all the individual recorders and to Debbie Lewis for co-ordinating the BBOWT data. All of the commoner species have produced trends but some of the scarcer species are either not well enough represented on transects or are not seen sufficiently regularly to produce indices. I will first go through the commoner species. The longest period for which co-ordinated indices have been produced is 11 years.*

### Small & Essex Skipper

There is only a short run for these as most established sites only record the aggregate species. However, those transects which count them separately show a slight increase in both species over 2004.

### Small/Essex Skipper

There is a small, but significant upward trend over a nine year period with 2005 only slightly down on the 2004 peak.

### Large Skipper

Numbers were down slightly on 2002-04 but otherwise the best since 1995 and the trend is definitely upwards over the 11 years.

### Dingy Skipper

The index was slightly down on 2004 but well above 2003, the only three years which have produced an index.

### Grizzled Skipper

There was a steady decrease from 1997-9 but no indices were produced again until 2005 when the index was near the low of 1999, giving a negative trend. However, most sites recorded an increase or little change from 2004 to 2005.

### Brimstone

2005 was a good year for the species, only 1996/7 giving higher indices but the population has remained steady overall for the past 11 years.

### Large White

The highest index since 1998 was produced, and 4.6% above 2004, the third highest overall.

### Small White

An average year but down 11% on 2004, with no significant long-term trend.

### Green-veined White

In contrast to the Small White the trend is definitely upwards although 2005 was 10% down on 2004, which was the highest in the eleven years.

### Orange-tip

Another success story with a significant increase over ten years, 2005 just exceeding the previous peak of 2004.

### Green Hairstreak

Only three years of indices but the best so far.

### Small Copper

Eight of the 11 years produced indices and 2005 was down from the previous two years. However, the long term trend is upwards.

### Brown Argus

An apparent downwards trend but there is a gap of four years in the indices. However, the last two years have shown increases, with 2005 second only to the 1997 peak.

### Common Blue

The population seems stable overall with 2005 an average year, slightly down on 2004 (0.5%) but higher than 2002. After 1997, 2003 had the second highest index.

### Chalkhill Blue

Indices for only the last four years are available but 2005 was significantly the best, a 24% increase overall.

### Holly Blue

This species, as is well known, has a population cycle of about seven years. As the last dip was at the turn of the century it is due for another minimum. It is therefore not surprising that 2005 was 14% down on 2004 and we would expect another decrease this coming season. The lack of indices for 1998-2001 is an indicator of how low the population falls but in the past it has always picked up again.

### Red Admiral

A good year for this immigrant, 30% up on 2004 though less than 2003, being fourth highest in the period. It was observed throughout the season with good numbers from late June to late September.

### Painted Lady

In contrast with Red Admiral there were few records anywhere in the region or nationally, not enough to produce an index. Many sites produced zero counts.

### Small Tortoiseshell

This species continues its decline with a severe downward trend, after a revival in 2002/3, with its lowest index in 11 years. However, no index was produced for 2000/1, which could have been lower as they were poor years nationally.

### Peacock

Unlike the last species the Peacock had its best year in the last ten and the trend over that period is significantly upwards. The 2005 index is 15.5% above that for 2004 and 3.6% greater than 2002, the previous highest.

### Comma

The Comma has increased at an even greater rate than the Peacock over the same period, 2005 surpassing the previous record year, 2004 by over 10%.

### Speckled Wood

The last four years have been good for this species, very slightly down on 2004 and only just over 3% below the peak year 2002. The late nineties had considerably lower indices although they were increasing over that period. The result is a significant trend upwards.

### Marbled White

The indices for the last three years have been virtually identical but well above 1995-8 and similar to 1999. This gives a significant trend upwards over the period. The peak was in 2003.

### Meadow Brown

As most people would agree from casual observation 2005 was an excellent year and, in fact, it produced the highest index over the period, just exceeding the previous peak in 1999. The trend is slightly, but significantly upwards.

### Ringlet

The trend for the Ringlet is more significantly upwards than for the Meadow Brown even though 2005 was the poorest since 2001 and the second year in succession showing a decline. This species likes damper conditions than the previous species so the run of dry summers may be having an effect.

### Small Heath

This species is not well represented in numbers on our local transects and indices have only been produced for 1997/8 and 2004/5. There has been, however, a 10% increase over that time. The national records show a severe decline followed by a recovery over the same period which may account for the gap in the indices.

*The following species are not sufficiently well represented to produce co-ordinated indices so it has been necessary to look at individual site records.*

Silver-spotted Skipper Only one site, namely Swyncombe Down has sufficient records to see a trend. Here, numbers doubled from 19 to 40 between 2002 and 2004 and only fell by two in 2005. Four other sites recorded only ones and twos.

Few Clouded Yellows were seen (8 sites), only Aston Upthorpe (4), Hartslock (3) and Finemere (2) recorded more than singles.

Only Finemere Wood and Grendon & Doddershall Woods record significant numbers of Purple Hairstreak and both registered a drop from a peak in 2004.

Black Hairstreak is found in the same woods but numbers recorded are too low to be meaningful. Neither species is really suited to transect recording, mainly being found too far above head height.

Small Blue has declined at Seven Barrows and College Lake (East) over the past few years. But, at Swyncombe Down thanks to a large set-aside field and field margins full of Kidney Vetch numbers have roughly doubled each year for the past three years.

Finemere Wood and Grendon & Doddershall Woods have recorded good increases in White Admiral over the past two years and the Bowdown population is gradually recovering from very low numbers.

The only site recording more than ones or twos of Dark Green Fritillary is Swyncombe Down where numbers were similar in 2004/5, a doubling from 2002/3.

Bowdown is the only site where Silver-washed Fritillary is recorded regularly and 2004 & 2005 marked a recovery from very low numbers to double figures. This is no doubt due to improved management, which has helped the White Admiral as well.

2005 is the first year since 1999 that Wall has not been recorded on any of the transects and may not be recorded again unless there is a change in the butterfly's fortunes in our area.

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