

**BUTTERFLIES 2003**  
by Peter Glenister and Keith Balmer

The hot dry summer in 2003 was good for many of our butterflies particularly for the Blues, Coppers and the Nymphalids, which showed considerable increases above the previous year.

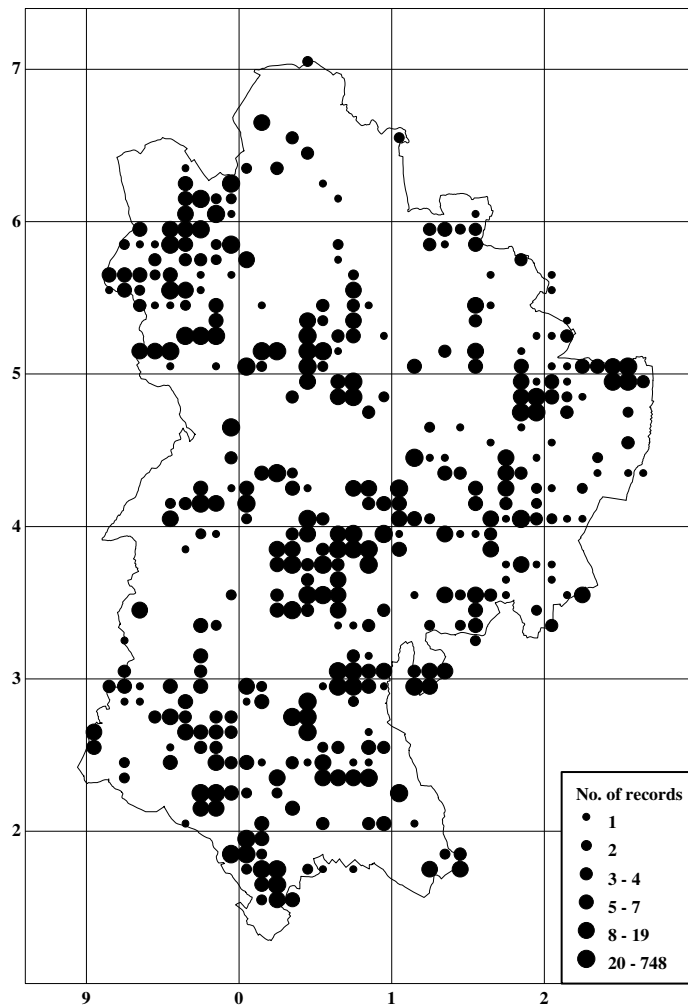
The sightings from the transect walks generally exceeded the records since 2000. The total sightings and numbers of species ( ) for the long running transects were:

	2000	2001	2002	2003	
Hill Rise, Bedford	425 (19)	496 (19)	364 (20)	392 (19)	B & YA
Potton Wood	2305 (17)	2575 (20)	2872 (22)	3560 (25)	IPW & BF
Priory Country Park	1332 (20)	1083 (16)	913 (19)	1591 (19)	RB & EN
Sharpenhoe Clappers	5335 (30)	5677 (30)	5441 (30)	7640 (29)	DC
Totternhoe Quarry	2712 (30)	2158 (25)	2666 (28)	3880 (26)	GWH
Whipsnade Downs	4615 (28)	*	1842 (27)	3949 (27)	GWH

\* not walked in 2001 due to Foot and Mouth disease precautions.

Reference to the transect data in the paragraphs that follow mostly relate to the Bedfordshire Butterfly Transect Report by G W Herbert.

Records were received from all the 23 10Km squares in the county except for SP82. Less than 100 records were received from SP93, TL06 and TL15. At the time of writing this report (26/04/04) all records received (more than 9,600, reporting over 42,000 butterflies seen in 383 1km squares) have been entered into the BNHS computer database. Records were analysed at this date but may be subject to minor revision.



Number of records per 1 km square, showing the uneven distribution of records in 2003.

The most sightings recorded were for Meadow Brown 7,121, Gatekeeper 4,273, Chalkhill Blue 3,649, Ringlet 3,092, Small White 2,597, Common Blue 2,417.

The earliest sightings were of Peacock 25<sup>th</sup> January, Small Tortoiseshell 21<sup>st</sup> February, Comma 21<sup>st</sup> February, Brimstone 21<sup>st</sup> February, Small White 26<sup>th</sup> March, Orange Tip 27<sup>th</sup> March, Painted Lady 27<sup>th</sup> March.

The latest seen were Red Admiral 28<sup>th</sup> November, Peacock 24<sup>th</sup> November, Small Tortoiseshell 15<sup>th</sup> November, Comma 7<sup>th</sup> November, Clouded Yellow 6<sup>th</sup> November, Small Copper 20<sup>th</sup> October, Speckled Wood 17<sup>th</sup> October.

The earliest and latest flight times recorded giving the longest sighting period were: Peacock 25<sup>th</sup> January and 24<sup>th</sup> November 10 month's duration, Small Tortoiseshell 21<sup>st</sup> February and 15<sup>th</sup> November, Comma 21<sup>st</sup> February and 7<sup>th</sup> November both 9 month's duration, Red Admiral 31<sup>st</sup> March and 28<sup>th</sup> November, Brimstone 21<sup>st</sup> February and 10<sup>th</sup> October both 8 month's duration.

The most widespread recorded throughout the county seen in 1km squares were: Small Tortoiseshell 179, Painted Lady 148, Meadow Brown 142, Speckled Wood 138, Brimstone 138, Small White 132, Peacock 130.

Whereas most species recordings increased during 2003 the following decreased in 2003:

	2002	2003	
Large Skipper	2933	953	2003 was similar to previous years, 2002 being exceptionally high
Clouded Yellow	37	11	
Green-veined White	2037	1382	
Purple Hairstreak	35	18	
Holly Blue	405	90	
Wall Brown	12	6	

Particularly large increases from 2002 to 2003 were recorded for the following:

	2002	2003
Dingy Skipper	93	145
Grizzled Skipper	24	43
Small White	1290	2597
White-letter Hairstreak	29	72
Small Copper	29	215
Brown Argus	125	317
Common Blue	957	2417
Chalkhill Blue	2050	3649
White Admiral	10	32
Red Admiral	255	676
Painted Lady	185	1288
Small Tortoiseshell	429	1213
Dark Green Fritillary	135	214
Small Heath	262	1082

In all cases below numbers in ( ) refer to the previous year 2002. The peak numbers are the highest count from any individual record and is not the total seen on that day. For peak numbers transect sections are treated as separate records.

### Skippers

#### **Small Skipper** *Thymelicus sylvestris* **Essex Skipper** *Thymelicus lineola*

The numbers on Whipsnade Down transect were a considerable increase on the previous year and also the numbers on Totternhoe Quarry remained high again this year. There was a significant increase in the spread of Small skippers which were seen in 58 (38) 1km squares. First seen 9<sup>th</sup> June and peaked at 92 on 6<sup>th</sup> July at Brownage and Louse Woods (SK).

Essex Skippers were seen in 28 (17) 1km squares. First seen 24<sup>th</sup> June and peaked at 30 on 6<sup>th</sup> July.

#### **Large Skipper** *Ochlodes venata*

There was a reduction in numbers seen 953 (2933) which were seen in fewer 76 (87) 1km squares, but these numbers were consistent with previous years, 2002 being exceptionally high. Numbers in transects increased at Priory CP and Sharpenhoe Clappers but were slightly down at Potton Woods transect. First seen 2<sup>nd</sup> June and peaked at 100 on 29<sup>th</sup> June at Chicksands Wood (JA).

**Dingy Skipper** *Erynnis tages*

Numbers increased to 145 (93), and were seen in 14 (12) 1km squares. Numbers slightly down at Sharpenhoe and Totternhoe Quarry transects. First seen 23<sup>rd</sup> April and peaked at 29 on 7<sup>th</sup> May at Sundon Chalk Quarry (PG).

**Grizzled Skipper** *Pyrgus malvae*

Numbers increased to 43 (24), but were seen in only 6 (6) 1km squares. First seen 4<sup>th</sup> May and peaked at 20 on 2<sup>nd</sup> June at Dunstable and Whipsnade Downs (AR). Numbers were well down at Whipsnade transect 2 (18).

**Swallowtail** *Papilio machaon*

A singleton seen at Ickwell Green on 12<sup>th</sup> August.

**Whites****Wood White** *Leptidea sinapis*

Two reports for 2003. (None seen in previous two years). Clapham Park wood 4<sup>th</sup> June (MH), and Maulden Wood 28<sup>th</sup> June (BE).

**Clouded Yellow** *Colias croceus*

Numbers seen decreased to 11 (37), seen in 11 (13) 1km squares. First seen on 26<sup>th</sup> June.

**Pale Clouded Yellow** *Colias hyale*

One unconfirmed at Flitwick allotments on 11<sup>th</sup> October (JPK).

**Brimstone** *Gonepteryx rhamni*

Increased numbers and more widespread 654 (486) seen in 138 (101) 1km squares. First seen 21<sup>st</sup> February and peaked at 14 on 31<sup>st</sup> May at Pegsdon (SP).

**Large White** *Pieris brassicae*

Numbers seen were 1293 (1070) in 122 (93) 1km squares. Seen from 30<sup>th</sup> May through to 10<sup>th</sup> October peaking at 21 on 27<sup>th</sup> August.

**Small White** *Pieris rapae*

Large increase in numbers were seen 2597 (1290) in 132 (101) 1km squares. Peaking at 104 on 20<sup>th</sup> August. Numbers were well up on all transects.

**Green-veined White** *Pieris napi*

Decrease in numbers seen 1382 (2037) from 119 (148) 1km squares. Peaking at 30 on 30<sup>th</sup> April. Numbers on transects increased at Whipsnade Downs and Totternhoe Quarry but were down at Potton Wood.

**Orange Tip** *Anthocharis cardamines*

Slight decrease in numbers 308 (329) but more widespread, being seen in 111 (95) 1km squares. First seen on 27<sup>th</sup> March, and peaked at 10 on 22<sup>nd</sup> April at Stevington (TS). Numbers were down at Whipsnade Downs and Priory CP transects.

**Hairstreaks****Green Hairstreak** *Callophrys rubi*

Slight decrease in numbers seen 55 (81) and in range, recorded in 9 (12) 1km squares. First seen 15<sup>th</sup> April. Numbers were well down at Whipsnade Downs, Totternhoe Quarry and Sharpenhoe transects.

**Purple Hairstreak** *Neozephyrus quercus*

Decreased numbers seen 18 (35) and in fewer 1km squares 8 (10). First seen 25<sup>th</sup> June and peaked at 3 on 29<sup>th</sup> June. These are known to be under recorded due to difficulty in seeing them in the treetops.

**White-letter Hairstreak** *Satyrrium w-album*

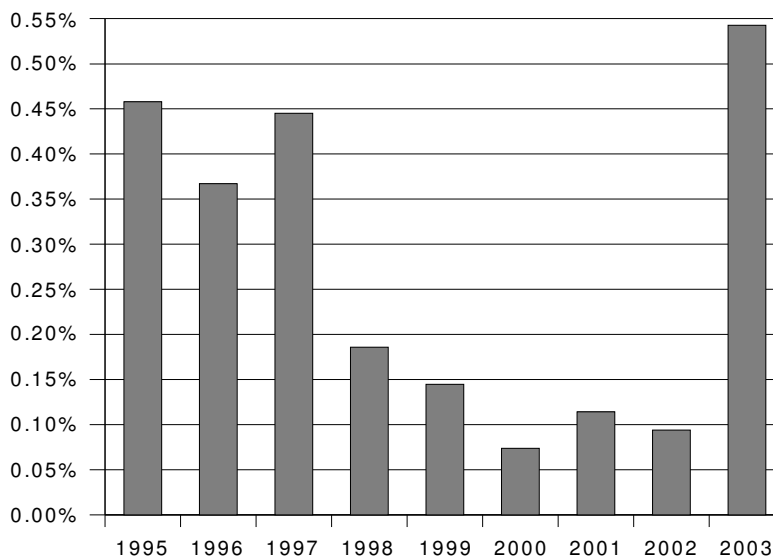
Increased numbers recorded, 72 (29) but seen in only 6 (6) 1km squares. First seen 28<sup>th</sup> June and peaked at 28 on 15<sup>th</sup> July at Chicksands Wood (JA).

**Black Hairstreak** *Satyrrium pruni*

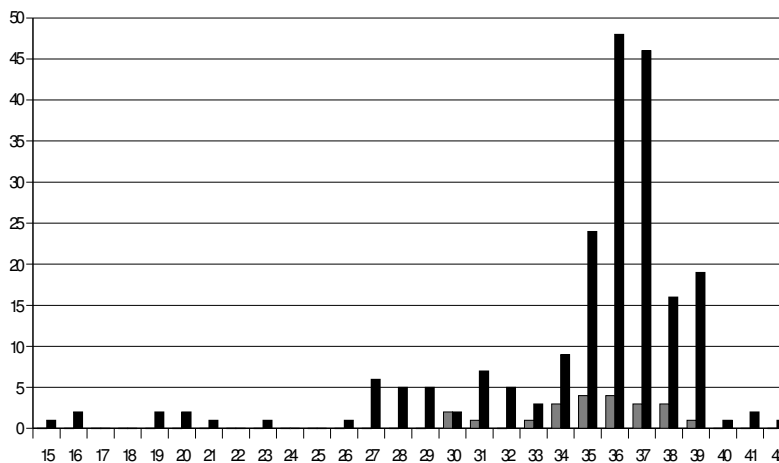
Peak number of 2 seen on 14<sup>th</sup> June at Marston Thrift, its only reported site.

**Coppers, Blues and Metalmarks****Small Copper** *Lycaena phlaeas*

Large increase in numbers 215 (29) and widespread, seen in 51 (20) 1 km squares. First seen 13<sup>th</sup> April and peaked at 30 on 5<sup>th</sup> September at Coopers Hill (RR). Reappeared at Potton Wood transect after absence of 5 years and numbers increased at Whipsnade Downs transect.



**Small Copper totals as a percentage of totals for all species, for all sites, indicate a strong recovery in 2003 after several years of decline.**



**Small Copper weekly totals. All sites shown dark, transect-only sites shown light. The peak around standard week 36 (3/9 to 9/9) was mostly reported from non-transect sites.**

**Large Copper *Lycaena dispar***

Singleton seen on 22<sup>nd</sup> July at Priory CP (JB,JL&SG).

**Small Blue *Cupido minimus***

Slight increase in numbers with 2,112 (1,831) being seen in 9 (11) 1km squares. First seen 7<sup>th</sup> May. The main site for Small Blue is the northwest face of the Totternhoe new chalk quarry where 825 were seen on 17<sup>th</sup> June (GWH), also reappeared at Whipsnade Downs transect (see butterfly transect report 2003).

**Brown Argus *Aricia agestis***

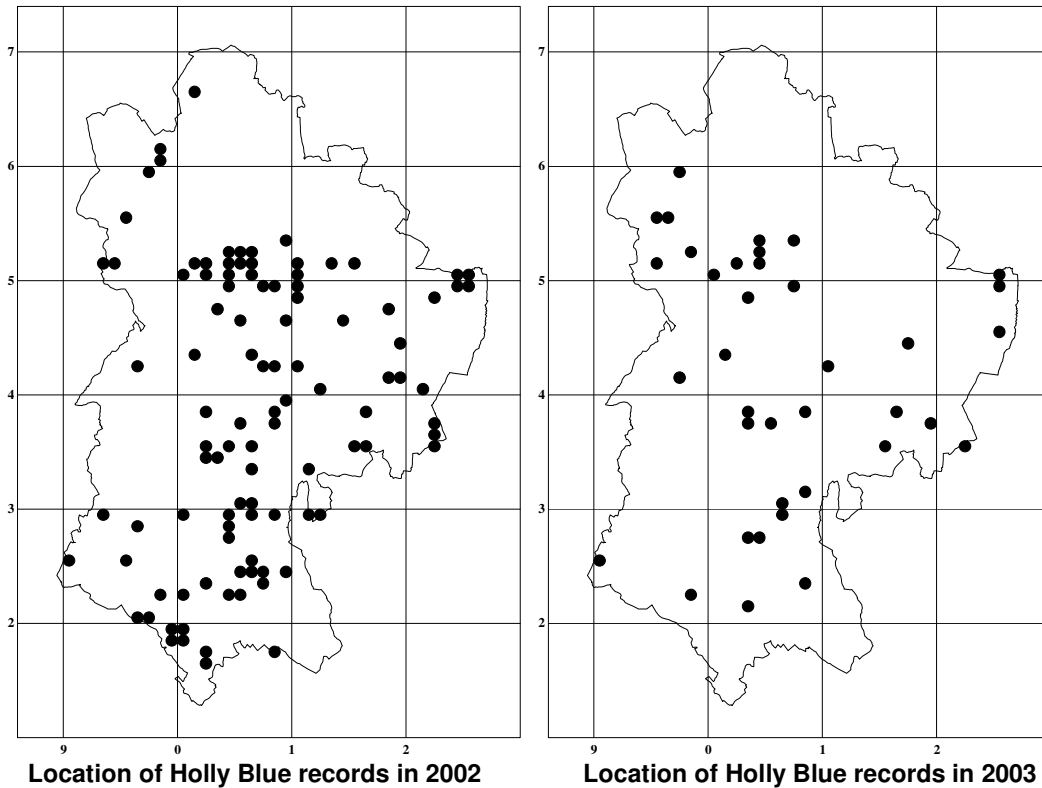
Significant increase in numbers with 317 (125) seen in 38 (26) 1km squares. First seen 7<sup>th</sup> May and peaked at 24 on 25<sup>th</sup> September. Numbers were well up at Whipsnade Downs, Sharpenhoe Clappers and Potton Wood transects.

**Common Blue *Polyommatus icarus***

Large increase in numbers with 2,417 (957) recorded in 80 (56) 1km squares. First seen 7<sup>th</sup> May and peaking at 78 on 8<sup>th</sup> August at Bromham Lake (PA). Numbers were well up on all transects.

**Chalkhill Blue *Polyommatus coridon***

Large increase in numbers 3,649 (2,050) and spread, being seen in 19 (12) 1km squares. First seen 4<sup>th</sup> July and peaked at 180 on 9<sup>th</sup> August at Harlington Hill Quarry (PG). Large numbers seen on transect walks at Sharpenhoe Clappers 1,157 and Totternhoe Old Chalk Quarry 1,272.



#### **Holly Blue** *Celastrina argiolus*

Significant decrease in numbers 90 (405) and spread, being seen in 38 (102) 1km squares. First seen 16<sup>th</sup> April and peaked at 5 on 4<sup>th</sup> May. Numbers were down on all transects. The down turn forecast in **The Bedfordshire Naturalist 57** was confirmed county wide in 2003 and was consistent across all transects. This is due to the regular parasitic cycle.

#### **Duke of Burgundy** *Hamearis lucina*

Increase in numbers to 62 (43) seen in 2 (4) 1km squares. First seen 23<sup>rd</sup> April and peaked at 6 on 3<sup>rd</sup> May at Totternhoe Chalk Quarry (KB). Annual total seen on transect walks at Totternhoe Old Quarry was 33 (20) and Whipsnade Downs 9 (13).

#### **Nymphalids**

##### **White Admiral** *Limenitis camilla*

Large increase in numbers recorded at 32 (10), seen in 4 (3) 1km squares. First seen 21<sup>st</sup> June and peaked at 19 on 11<sup>th</sup> July at West Wood (TS).

##### **Purple Emperor** *Apatura iris*

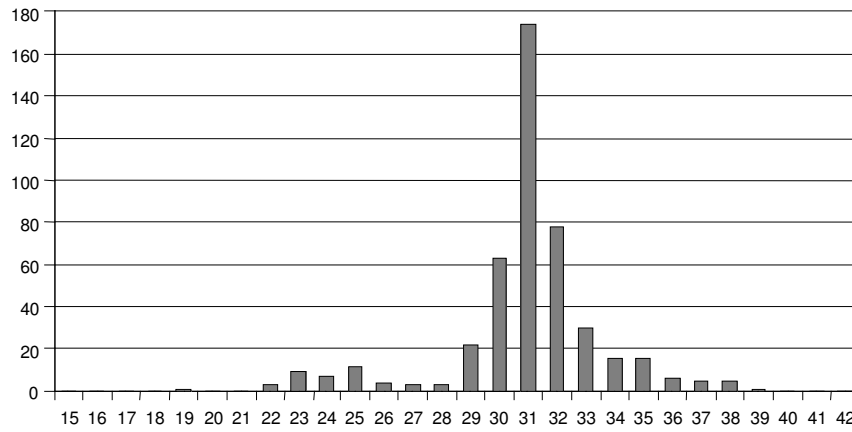
An unconfirmed singleton was reported from Biggleswade on 18<sup>th</sup> August.

##### **Red Admiral** *Vanessa atalanta*

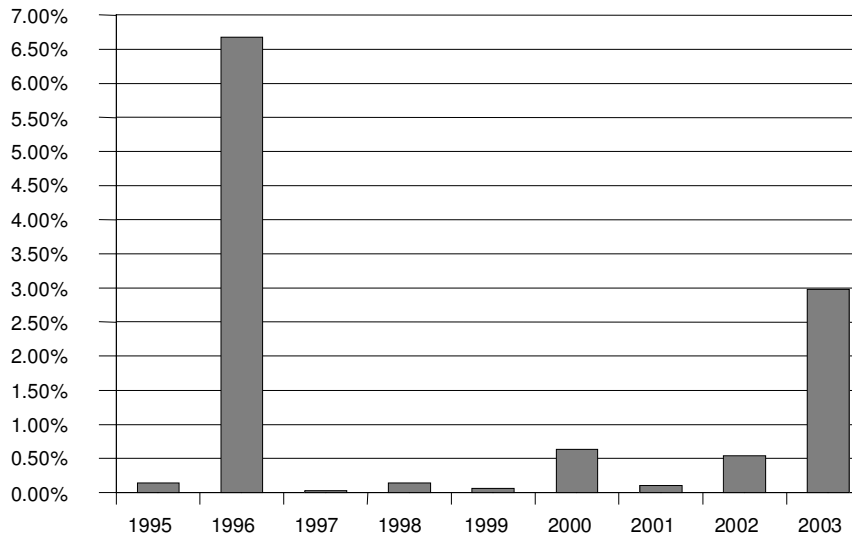
Large increase in numbers 730 (255) and widespread, seen in 121 (79) 1km squares. First seen 31<sup>st</sup> March and peaking at 20 on 31<sup>st</sup> August. Large increase in numbers reported from all transects.

##### **Painted Lady** *Vanessa cardui*

Very large increase in numbers to 1,288 (185) and wide spread, being seen in 148 (65) 1km squares. First seen 27<sup>th</sup> March and peaked at 150 on 2<sup>nd</sup> June. Large increase in numbers reported from all transects.



**Painted Lady weekly totals over all transects. The peak was standard week 31 (30<sup>th</sup> July to 5<sup>th</sup> August).**



**Painted Lady totals as a percentage of totals for all species, for all sites. This suggests that although 2003 was a very good year it fell below the excellent year of 1996.**

**Small Tortoiseshell *Aglais urticae***

Very large increase in numbers to 1,213 (429) and widespread, being seen in 179 (119) 1km squares. First seen 21<sup>st</sup> February and peaked at 31 on 3<sup>rd</sup> August at Bromham Lake (PA). Large increase in numbers reported from all transects.

**Peacock *Inachis io***

Slight rise in numbers to 1,219 (1,181) and seen in 130 (125) 1km squares. First seen 25<sup>th</sup> January and peaked at 79 on 3<sup>rd</sup> August at Potton Wood (IPW). Numbers up slightly at Whipsnade transect but noticeably down on Priory CP and Potton Wood transects.

**Comma *Polygonia c-album***

Increase in numbers to 735 (410) and widespread seen in 110 (86) 1km squares. First seen 21<sup>st</sup> February and peaked at 31 on 30<sup>th</sup> August at Potton Wood (IPW).

**Fritillaries**

**Dark Green Fritillary *Argynnis aglaja***

Increase in numbers to 214 (135) and wider spread, seen in 10 (4) 1km squares. First seen 10<sup>th</sup> June and peaked at 28 on 17<sup>th</sup> June at Smithcombe and Sharpenhoe Clappers (DC). Large increase in annual numbers on Sharpenhoe Clappers transects 170 (60).

**Silver-washed Fritillary *Argynnis paphia***

Two seen in 2 (2) 1km squares on 28<sup>th</sup> July and 5<sup>th</sup> August.

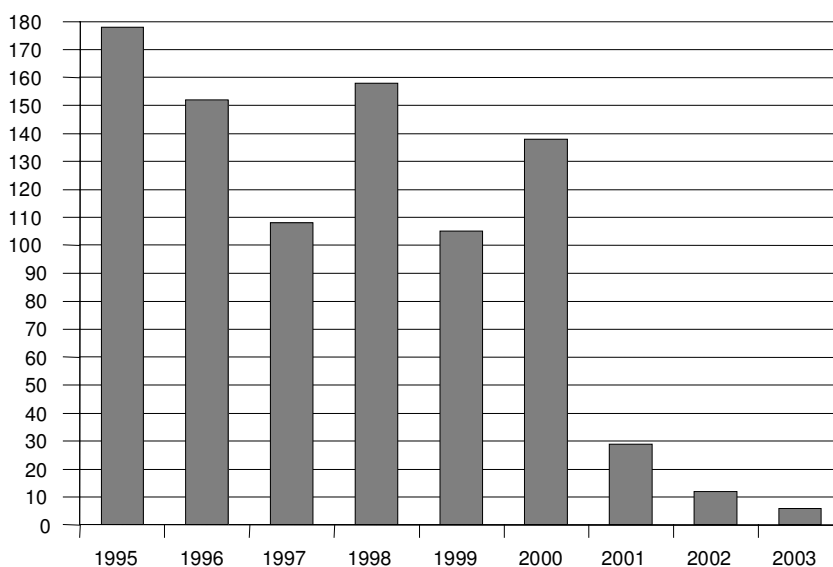
**Browns**

**Speckled Wood *Pararge aegeria***

Slight decrease in numbers 1,700 (1,929) seen in 138 (136) 1km squares. First seen 4<sup>th</sup> April and peaked at 50 on 5<sup>th</sup> May. Large increase in numbers at Priory CP transects and decrease at Potton Wood transects.

**Wall Brown** *Lasiommata megera*

Worrying decline in numbers continues with only 6 (12) seen in 5 (10) 1km squares. First seen on 6<sup>th</sup> July.



**Number of Wall Browns reported for all sites, showing the reduction from 178 adults in 1995 to just six in 2003.**

**Marbled White** *Melanaria galathea*

Slight increase in numbers to 2052 (1889) and seen in 56 1km squares. First seen 10<sup>th</sup> June and peaked at 100 on 7<sup>th</sup> July at Totternhoe (TS & JK). Large increase on Whipsnade Downs transects and slight increase on Totternhoe Quarry transects.

**Gatekeeper** *Pyronia tithonus*

Increase in numbers to 4273 (3012) and seen in 125 (127) 1km squares. First seen 19<sup>th</sup> June and peaked at 500 on 4<sup>th</sup> August. Large increase in numbers on Whipsnade Downs, Totternhoe Quarry and Priory CP transects.

**Meadow Brown** *Maniola jurtina*

Increase in numbers to 7121 (5052) and seen in 142 (151) 1km squares. First seen 5<sup>th</sup> June and peaked at 200 on 28<sup>th</sup> June at Chicksands Wood (SP). Large increase in numbers on Whipsnade Downs transect 846 (360) and Potton Wood transect 709 (393).

**Ringlet** *Aphantopus hyperantus*

Decrease in overall numbers reported 3092 (4171) but significant increase in numbers in all transects. Seen in 77 (89) 1km squares, first seen 16<sup>th</sup> June and peaked at 400 on 28<sup>th</sup> June.

**Small Heath** *Coenonympha pamphilus*

Very large increase in numbers to 1082 (262) and wider spread, being seen in 34 (26) 1km squares. First seen 29<sup>th</sup> April and peaked at 36 on 20<sup>th</sup> June. Numbers were well up on the Whipsnade Downs, Sharpshoe Clappers and Totternhoe Quarry transects.

**ACKNOWLEDGEMENTS**

We are very grateful for the efforts of those 122 (99) people listed here who reported their sightings, either direct or increasingly via the newsgroups. We are pleased to receive your records either as paper copies by post, or on the Butterfly Recording Spreadsheet on the BNHS web site [www.bnhs.org.uk](http://www.bnhs.org.uk).

We apologise if any name has been inadvertently omitted.

J Abbott, J Adams, N Agar, P A Almond, D Anderson, G Anderson, B Anderson, K Anderson, V W Arnold, P M Baker, C R B Baker, K Balmer, C Banks, A M Banthorpe, M G Banthorpe, J B Barnwell, R Bashford, R Bates, J Bishop, S Blain, C Boon, C Bowler, K Bromerley, S Brooke, A Bucknall, M Butler, L Carman, C Carpenter, K Cavanagh, P Cavanagh, A Chandler, D Chandler, D Cleary, B Clutten, J Comont, A J Darrington, M Davis, D F Dawson, I K Dawson, R Dazley, B Ellis, B Fensome, D Fisher, J

Fisher, A Fleckney, G Fleckney, R Gibbons, L Giddings, P Glenister, D Goddard, S Gorman, J Green, H Griffiths, S Halton, G Herbert, M Holloway, R Hume, A Hurst, F James, P Jones, V Judd, S Kimsey, J Kight, J Knowles, M Lawrence, J Leadley, D Manning, M McCarrick, C McLennan, D McNiven, C Morris, B S Nau, P Newbury, E Newman, B Nightingale, D Odell, D Pain, A Palmer, K Parsons, T Payne, A Paynter, S Penn, J E Perry, D R Perry, A Phillips, M Phillips, M Piper, S Pittman, J Pitts, T Ploszajski, A Plumb, S Plummer, R Radford, N Radcliffe, N Renwick, R Revels, P Rhodes, A Riley, H Robb, M Russell, T Sharrock, M Sheridan, L Simons, C Simons, D Smith, T Smith, P Smith, B Squires, P G Stapleton, K Taylor, S Thompson, C M Towner, M Walton, G Warne, M Weeden, K Weeden, M Williams, M B Williams, K Winder, D Withers, I P Woiwood, N Wood.

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#### **REFERENCE**

Herbert G. W. 2003 Bedfordshire Butterfly Transect Report, Beds and Northants Branch of Butterfly Conservation. 12p,

**Peter Glenister and Keith Balmer are the Society's honorary joint butterfly recorders having taken over this year from Charles Baker who was the society's honorary butterfly recorder from 1993 to 2002.**