

BUTTERFLIES 2005
by Peter Glenister and Keith Balmer

The mild winter weather brought the over wintering butterflies out early and the spring butterflies were generally out a week or so early. A cold wet spell in June affected the summer butterflies and delayed their emergence. Generally first broods were good and some later broods were lower than previous years. The migrants Clouded Yellow and Painted Lady numbers were extremely low.

The total sightings and numbers of species () for the long running transects were:

	2000	2001	2002	2003	2004	2005	
Hill Rise, Bedford	425 (19)	496 (19)	364 (20)	392 (19)	351 (17)	285 (15)	B & YA
Potton Wood	2305 (17)	2575 (20)	2872 (22)	3560 (25)	2511 (24)	3284 (22)	IPW & BF
Priory Country Park	1332 (20)	1083 (16)	913 (19)	1591 (19)	1933 (19)	1799 (18)	RB & EN
Sharpenhoe Clappers	5335 (30)	5677 (30)	5441 (30)	7640 (29)	7364 (31)	7227 (27)	DC
Totternhoe Quarry	2712 (30)	2158 (25)	2666 (28)	3880 (26)	4958 (28)	4567 (26)	GWH
Whipsnade Downs	4615 (28)	*	1842 (27)	3949 (27)	4671 (30)	2842 (29)	GWH

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

Three other transects were walked in 2005 at, Foster Hill Road Cemetery Bedford, Old Warden Tunnel CWS and Pegsdon Hills NR.

Records were received from all the 23 10Km squares in the county except for SP82, TL07 and TL16. At the time of analysis (16/02/06) 9,175 records had been received, reporting 44,495 butterflies seen in 353 1km squares, all have been entered into the BNHS computer database. Records were analysed at this date but may be subject to minor revision.

The most sightings recorded were for Meadow Brown 8950, Gatekeeper 5429, Chalkhill Blue 4537, Common Blue 2400, Marble White 2367, Ringlet 2256, Peacock 2038.

The most widespread recorded throughout the county seen in 1km squares were: Green Vein White 156, Meadow Brown 155, Speckled Wood 144, Small White 144, Gatekeeper 136.

The following have decreased in 2005 relative to 2004. Several species recorded their highest numbers in 2004 and have returned to their long-term average during 2005.

	2004	2005	
Small Skipper	1798	890	similar to longer term average
Dingy Skipper	276	205	this is the second highest number recorded
Grizzled Skipper	104	86	
Clouded Yellow	35	7	
Brimstone	1142	948	
Large White	1916	1634	
Small White	4245	1988	similar to longer term average
Green Veined White	2848	1865	
Small Copper	278	65	similar to longer term average
Small Blue	218	157	these are the lowest numbers since 1998
Duke of Burgundy	147	82	previous year was exceptionally high
Painted Lady	261	16	
Small Tortoiseshell	1012	463	similar to longer term average
Speckled Wood	2190	1435	
Wall Brown	44	9	of concern in Bedfordshire
Marbled White	3749	2367	
Gatekeeper	7864	5429	similar to longer term average
Meadow Brown	9966	8950	
Ringlet	3084	2256	

Some species recorded their highest numbers in 2005 and some had particularly large increases recorded from 2004 to 2005 as follows:

	2004	2005
Orange Tip	582	601 highest recorded
Green Hairstreak	125	241 second highest recorded
White-letter Hairstreak	42	96 highest recorded
Common Blue	1923	2400
Chalkhill Blue	4434	4537 highest recorded since 1997
Holly Blue	476	569
White Admiral	37	74 highest recorded since 1999
Peacock	1208	2038
Dark Green Fritillary	305	337 second highest recorded

In all cases below numbers in () refer to the previous year 2004. 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 back to the longer term average after the large increase last year and also the numbers on Totternhoe Quarry reduce to the longer term average this year. There was a decrease in the spread of Small skippers which were seen in 56 (79) 1km squares. Essex Skippers were seen in only 22 (30) 1km squares.

Large Skipper *Ochlodes venata*

There was a reduction in numbers seen 1329 (1504) which were seen in fewer 75 (85) 1km squares, but these numbers were consistent with previous years. First seen 15th May and peaked at 500 on 12th July at Chicksands Wood (JA).

Dingy Skipper *Erynnis tages*

Numbers decreased to 205 (276), and were seen in 20 (24) 1km squares. Another good year although numbers down but 2004 was an exceptionally good year. Peaked at 15 on 27th May at Markham Hills.

Grizzled Skipper *Pyrgus malvae*

Numbers decreased to 86 (104), and were seen in only 19 (28) 1km squares. Peaked at 7 on 29th May at Whipsnade Downs (PG). Numbers were back up at Whipsnade transect 23 (3). Two new sites were found at Tempsford level crossing and near Brogborough.

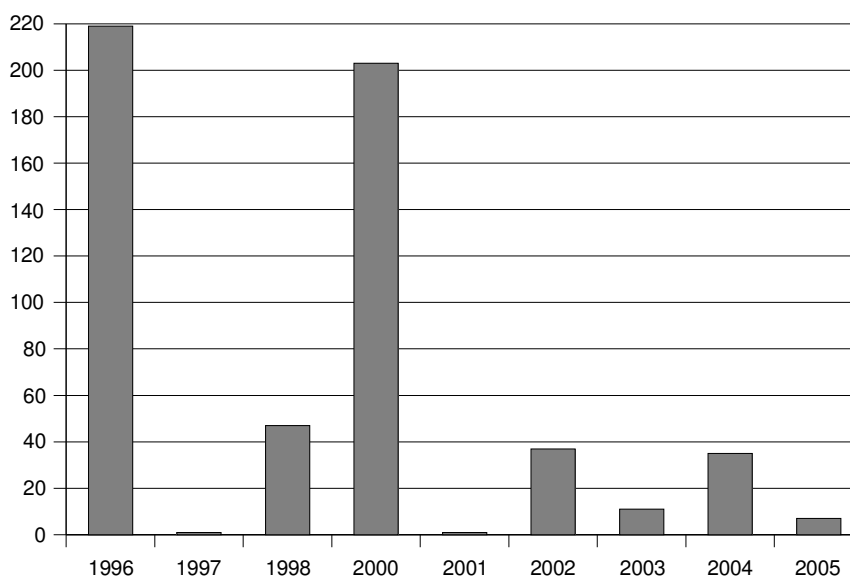
Whites

Wood White *Leptidea sinapis*

Two reports for 2005. One at Old Warden Tunnel and one at Marston Thrift, both by (KB).

Clouded Yellow *Colias croceus*

A very poor year decreased to 7 (35), seen in 6 (14) 1km squares. The best year was 1996 when 219 were seen.



Number of Clouded Yellow adults reported over the last decade.

Brimstone *Gonepteryx rhamni*

Decreased numbers but more widespread 948 (1142) seen in 131 (121) 1km squares. Numbers still above the ten-year average. Peaked quite early in March April and again in August.

Large White *Pieris brassicae*

Large drop in numbers seen 1865 (2848) in 156 (174) 1km squares. Numbers similar to long term average.

Small White *Pieris rapae*

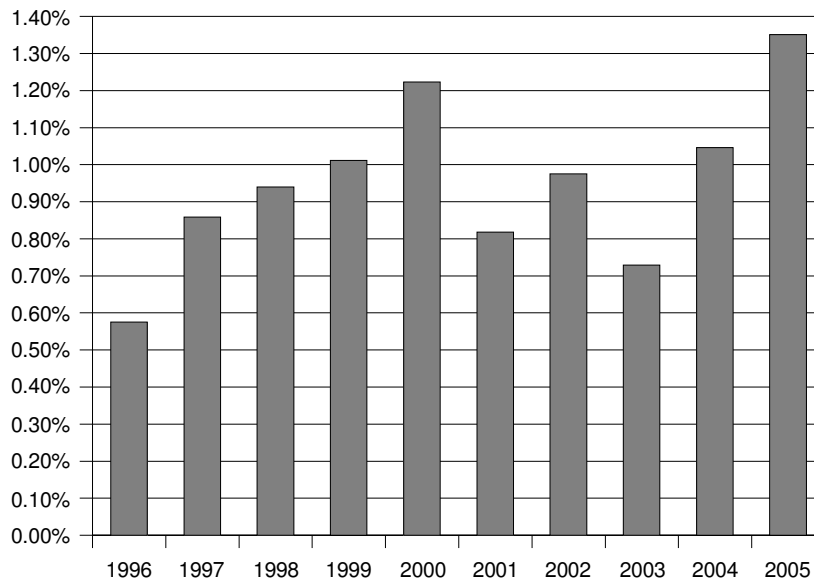
Numbers seen were 1634 (1916) in 125(120) 1km squares these are above the five year average. Peaking at 100 on 15th August at Sharnbrook (TS).

Green-veined White *Pieris napi*

Large drop in numbers seen 1988 (4245) in 144 (161) 1km squares. Numbers similar to long term average.

Orange Tip *Anthocharis cardamines*

Had another very good year with highest numbers reported in a decade 601 (582) and still widespread, being seen in 114 (117) 1km squares. May was well above the ten year average.

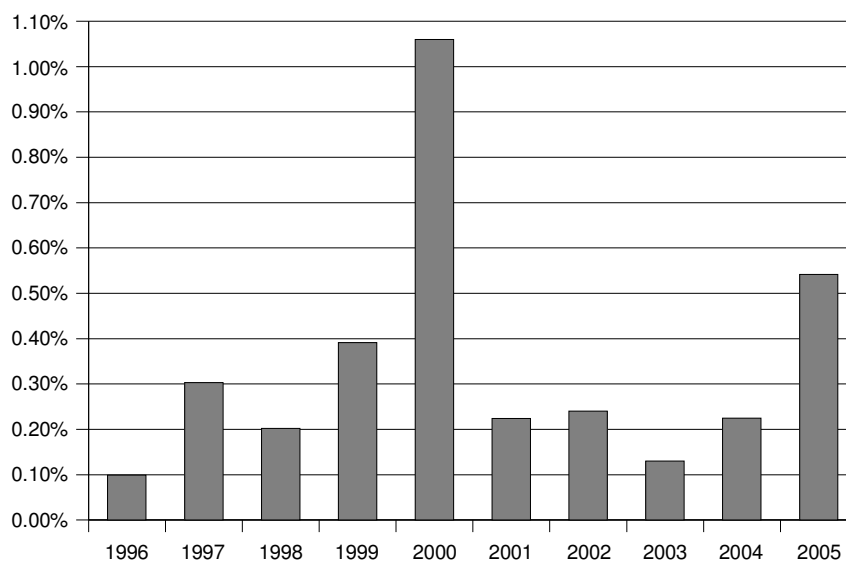


Number of Orange Tip adults reported as a percentage of the adults for all species, showing 2005 to have been a very good year for the species.

Hairstreaks

Green Hairstreak *Callophrys rubi*

Record numbers reported 241 (125) but still recorded in only 17(17) 1km squares. Numbers were well up at Whipsnade Downs but none seen at Totternhoe Quarry transect. Peaked at 60 on 15th May at Bison Hill (SL, IH, RP) Numbers in May were well above the ten-year average.



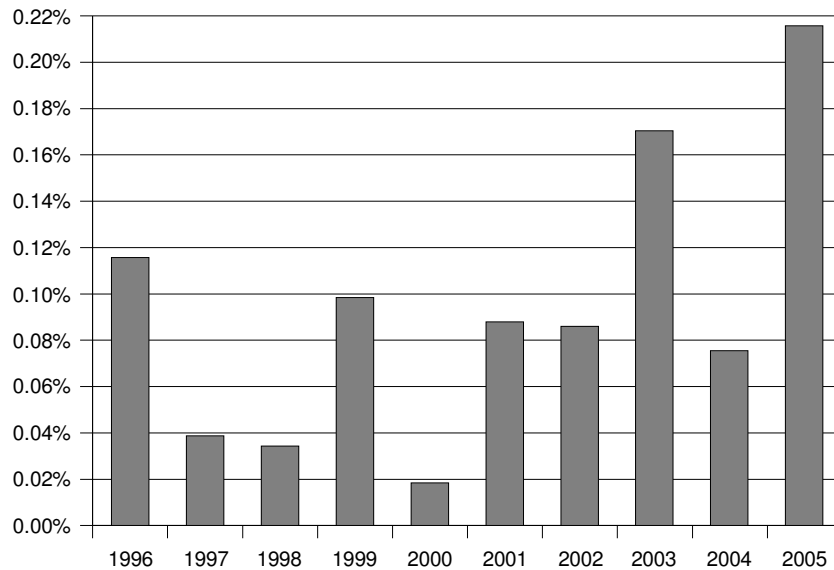
Number of Green Hairstreak adults reported as a percentage of the adults for all species, showing 2005 to have been a relatively good year for the species.

Purple Hairstreak *Neozephyrus quercus*

Decrease in numbers seen 23 (120) and in fewer 1km squares 13 (28), after the record year in 2004. These are known to be under recorded due to difficulty in seeing them in the treetops.

White-letter Hairstreak *Satyrium w-album*

Considerable increase in numbers recorded, 96 (42) and seen in 10 (5) 1km squares. Peaked at 16 on 26th June at Chicksands Wood (KB) and 15 at Home Wood Northill 26th June (RW) Appeared much earlier in June and in higher numbers than the ten year average.



Number of White-letter Hairstreak adults reported as a percentage of the adults for all species, showing 2005 to have been a good year for the species.

Black Hairstreak *Satyrium pruni*

8 reported in June from two sites at Marston Thrift and Wootton Wood, it's only known sites.

Coppers, Blues and Metalmarks

Small Copper *Lycaena phlaeas*

Numbers well down on previous two years 65 (278) and spread, seen in 30 (75) 1 km squares but numbers are well down on the ten year average.

Small Blue *Cupido minimus*

Considerable decrease in numbers over the two previous years 157 (218) being seen in 10 (24) 1km squares. Peaked at 30 on 29th May at Totternhoe Quarry (KS & SS) and 27 on 7th June at Sundon Quarry (PG).

Brown Argus *Aricia agestis*

Numbers are similar to the previous year with 454 (457) seen in 45 (45) 1km squares. Second brood continued in higher than average numbers into August.

Common Blue *Polyommatus icarus*

Increase in numbers and distribution, 2400 (1923) recorded in 90 (80) 1km squares, numbers similar to year 2003 (2417). Peak number seen 125 on 7th June at Sundon Quarry (PG).

Chalkhill Blue *Polyommatus coridon*

Increased in number reported this year 4537 (4434) and spread, being seen in 19 (17) 1km squares. Large numbers seen at Houghton Regis Quarry, Sundon Quarry and on transect walks at Sharpenhoe Clappers and Totternhoe Old Chalk Quarry. Numbers are higher than the ten-year average.

Holly Blue *Celastrina argiolus*

Significant increase in numbers 569 (476) being seen in 111 (112) 1km squares. The first brood was higher than the second brood this may be due to the wet weather in June or the start of the parasitic cycle, which affects Holly Blue.

Duke of Burgundy *Hamearis lucina*

Numbers are back to the previous lower level after last years increase to 82 (147) seen in 4 (5) 1km squares. Annual total seen on transect walks at Totternhoe Old Quarry was 9 (20) and Whipsnade Downs 27 (19). Scrub clearance has been carried out during the last two years to assist conservation of the species.

Nymphalids

White Admiral *Limenitis camilla*

Large increase in numbers recorded at 74 (37), seen in 13 (11) 1km squares. This being the highest number since 1999.

Red Admiral *Vanessa atalanta*

Increase in numbers 422 (319) and again widespread, seen in 112 (92) 1km squares. 20 seen at RSPB Sandy on 29/7 by DFD and IKD. Numbers in July were above the ten-year average, also appeared much later in the year into November.

Painted Lady *Vanessa cardui*

Dramatic drop in numbers to only 16 (261) and from the very high number 1288 in 2003. Seen in only 13 (72) 1Km squares.

Small Tortoiseshell *Aglais urticae*

Numbers down to the long-term average after the two previous very good years. 463 (1012) seen in 122 (153) 1Km squares. Later brood in July August was considerably below the ten-year average.

Peacock *Inachis io*

Peacock had a very good year number increased to 2038 (1208) spread was similar to previous years 133 (131) 1km squares. There were higher than average numbers in August.

Comma *Polygonia c-album*

Maintained numbers to 536 (559) and widespread seen in 108 (99) 1km squares. 12 seen at Chicksands Wood on 2/4 (JA). There were higher than average numbers in April.

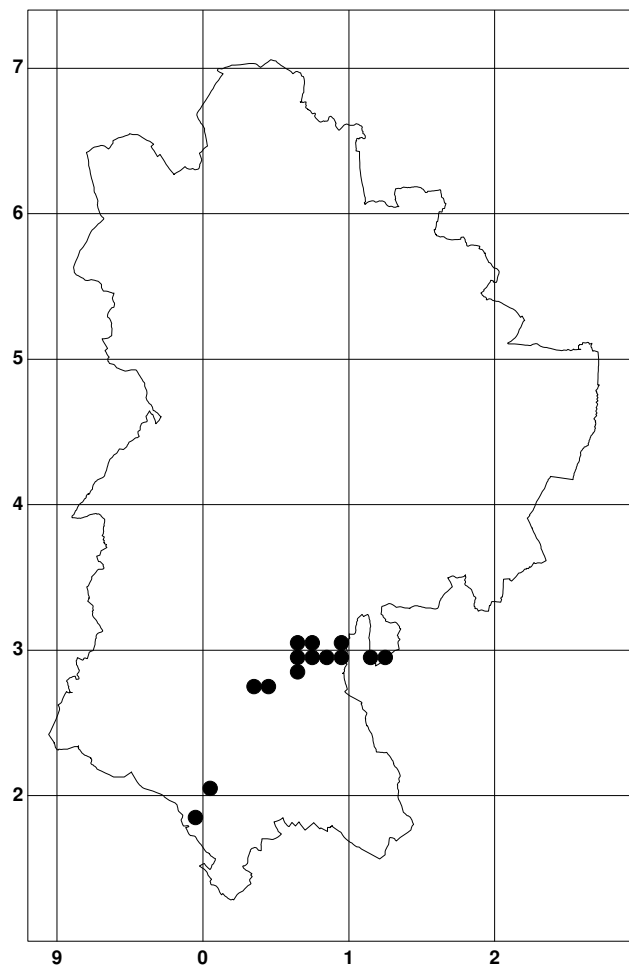
Fritillaries

Dark Green Fritillary *Argynnis aglaja*

Increase in numbers again to 337 (305) and widespread. Large increase in annual numbers on Sharpenhoe Clappers and reported from 14 1km squares the largest ever. Now spreading both east and west across the chalk downland from Sharpenhoe. A rare aberrant nearly all brown was seen at Sharpenhoe Clappers on 4th July by Kevin Earp This is judged to be *AB.wimani* Holmgren.

Silver-washed Fritillary *Argynnis paphia*

Only 3 (9) seen in 3 (4) 1km squares, after record number in 2004.



Map showing the 1km squares in which Dark Green Fritillary was recorded in 2005.

Browns

Speckled Wood *Pararge aegeria*

Decrease in numbers 1435 (2190) seen in 144 (158) 1km squares. Highest number reported was 30 on 14th June at Wootton Wood on a BNHS visit. Numbers in July August were well below the ten year average.

Wall Brown *Lasiommata megera*

Now of considerable concern in Bedfordshire only 8 (44) reported from 6 (14) 1km squares in the Marston Vale area, plus one record from Stopsley (JF).

Marbled White *Melanaria galathea*

Decrease in numbers after record year last year 2367 (3749) still seen in 57 1km squares. Peaked at 98 on 1st July at Bromham Lake (PA).

Gatekeeper *Pyronia tithonus*

Decrease in numbers after record year last year to 5429 (7864) but widespread seen in 136 (122) 1km squares. Peaked at 150 on 4th August at Chicksands Wood (JA).

Meadow Brown *Maniola jurtina*

Maintaining high numbers at 8950 (9966) and seen in 155 (148) 1km squares. Peaked at 200 on 4th August at Chicksands Wood (JA) and 118 on 20th July at Yellnow New Wood (IK & SK). Numbers were above the ten-year average particularly in August.

Ringlet *Aphantopus hyperantus*

Decrease in numbers reported 2256 (3084) and decrease in 1Km squares seen in only 68(95).

Small Heath *Coenonympha pamphilus*

Continuing to maintain increase in numbers 1734 (1687) this being the highest number recorded since 1997 also maintaining spread at 62 (62) 1Km squares. Peaked at 50 on 31st May at Marston Vale CP (CC).

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We apologise if any name has been inadvertently omitted.

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Maps produced using DMAP.

Peter Glenister and Keith Balmer are the Society's honorary joint butterfly recorders a position they have held since 2003.

