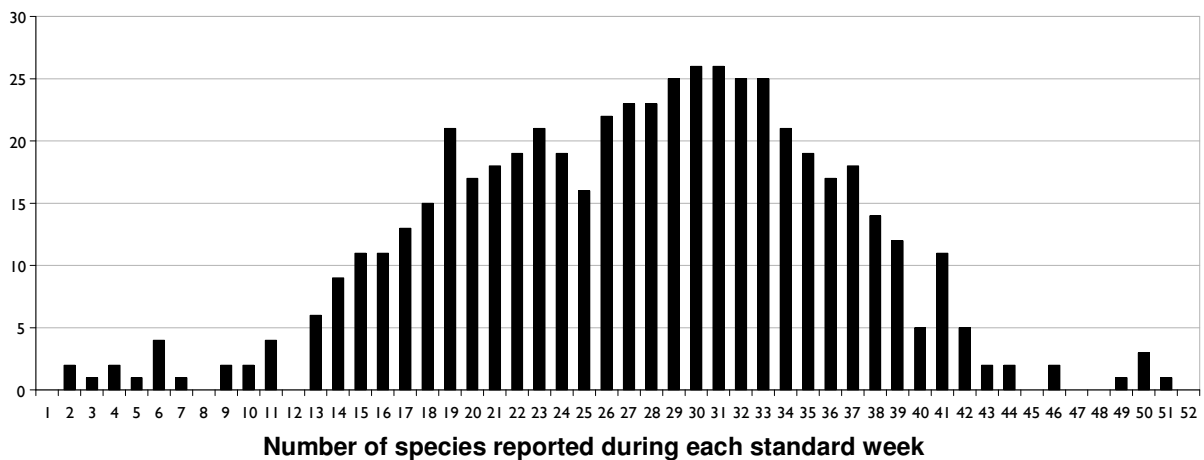
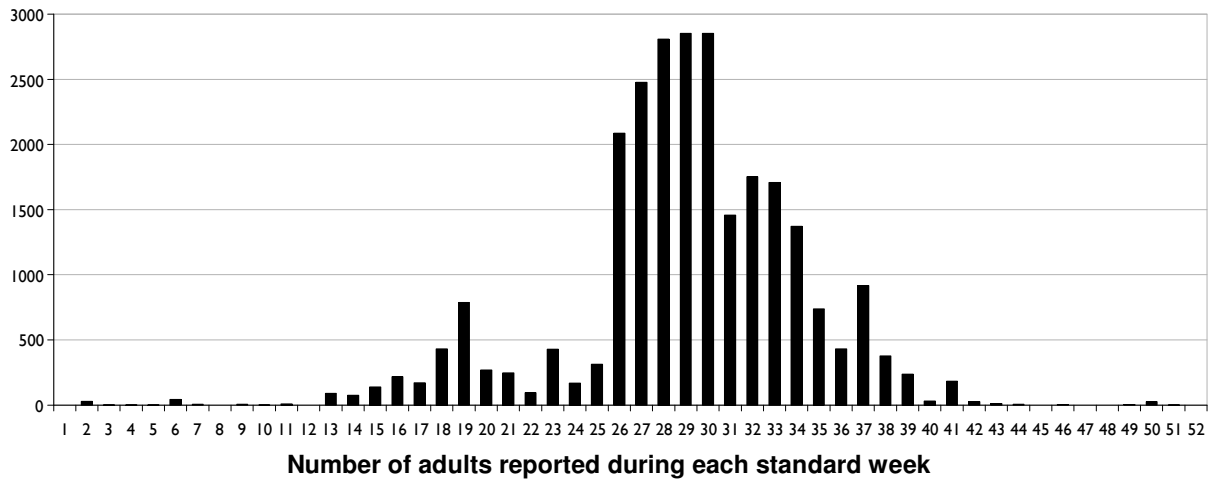


Butterflies 2008
Keith Balmer and Peter Glenister

The overall impression left by 2008 was of another season of unsettled weather that challenged butterflies and observers alike. Species however were able to take advantage of brief spells of finer weather and overall did slightly better than in 2007. A few indeed revelled in the conditions, Ringlet for example, having a particularly successful season. Most however struggled and showed in smaller numbers than usual, with some such as Small Copper and Brown Argus largely entrenched in their traditional habitats.

The June dip between spring and summer butterflies was exceptionally deep when it was possible to go through a day without seeing a butterfly, but this ended abruptly in standard week 26 (25th June to 1st July) when the summer species and broods began to appear.

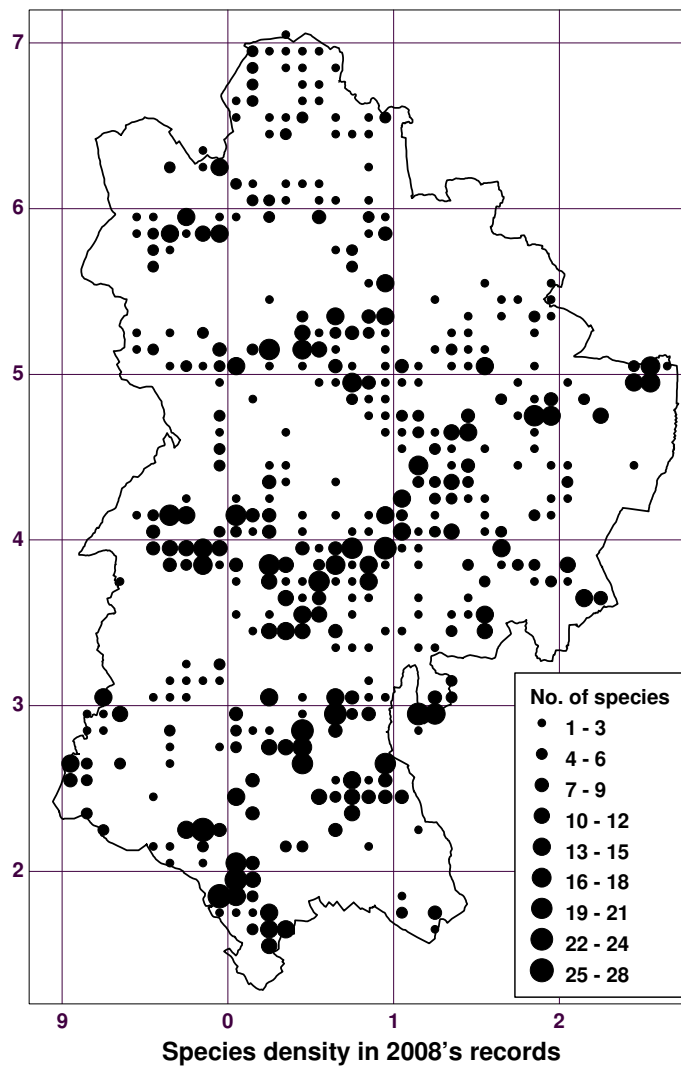


Hopes that Silver-washed Fritillary might have established in 2006 were largely dashed, but a couple were seen in King's Wood Heath and Reach. It was better news though for Purple Emperor, with four reported this year, extending hopes of its residence in the county.

All other species known to be resident in the county were again reported, and it is pleasing to note that Wall Brown continues to survive, chiefly in the clay pits of Marston Vale, though in very small numbers.

It was a very poor year for the migrants Painted Lady and Clouded Yellow, which barely showed, but Red Admiral did rather better, possibly supported by breeding from over-wintered stock. A migration of Small Tortoiseshells may have contributed to raised numbers in the autumn, counteracting effects of the parasitoid fly *Sturmia bella* now confirmed in the county.

We are grateful to all that recorded butterflies and submitted reports to us during another difficult season. Those participating in bird surveys boosted the geographical distribution, and as a result, we are particularly pleased to have received records of common species from areas that few normally visit to record butterflies.



Analysis of Data

At the time of analysing records for this report (1st February 2009) 7,492 records had been received and computerised, containing reports of 26,395 adults from 418 1km squares. Records were analysed at this date and may be subject to minor revision.

Transects

The total number of adults and numbers of species () for the long-running transects were:

	2004	2005	2006	2007	2008	
Bedford Old Cemetery	427 (20)	534 (17)	394 (16)	152 (13)	209 (13)	BA & YA
Hill Rise, Bedford	351 (17)	285 (15)	305 (17)	119 (14)	147 (13)	BA & YA
Old Warden Tunnel	665 (23)	570 (20)	879 (24)	616 (22)	565 (17)	KBa
Potton Wood	2511 (24)	3284 (22)	2477 (22)	2553 (20)	2069 (18)	IPW & BFe
Priory Country Park	1933 (19)	1799 (18)	*	*434 (20)	562 (16)	RBa & ECN & JB & NM & DF
Totternhoe Quarry	4958 (28)	4567 (26)	3506 (30)	1313 (25)	2364 (25)	GWH & CRBB
Whipsnade Downs	4671 (30)	2842 (29)	2970 (31)	1320 (25)	1956 (27)	GWH & CRBB

* The transect at Priory Country Park was walked for only seven weeks in 2006 and 11 weeks in 2007.

Six of the seven transects reported the lowest number of species in recent years, as migrants didn't arrive, weak populations were possibly lost and fewer wanderers sought new sites. The generally low numbers of adults reflect another poor summer for most species of butterfly (though slightly better than 2007) especially considering that Ringlet boosted the numbers at most sites.

Our thanks go to those that consistently walk and record these transects for 26 weeks each year, allowing scientific year-on-year comparisons to be made. These data are also combined at the national level with data from other transects as part of the Butterfly Monitoring Scheme.

Species Reports

In the following species reports "5ya" and "10ya" are abbreviations for "5-year average" and "10-year average" respectively.

Skippers

Small Skipper *Thymelicus sylvestris*

Data from transects suggest the species did slightly better in 2008 than 2007, but their combined total of 121 adults was still well below the 5ya of 266. The overall reported distribution was 62 1km squares (10ya 59) and it is still found county-wide, but as a percentage of all records it has declined steadily year by year, from 4.25% in 1995 to 1.86% in 2008. The largest report was of 48 from the Claphampark Wood area on 10th August (AM).

Essex Skipper *Thymelicus lineola*

Always reported in lower numbers than Small Skipper, and from fewer sites, it seemed harder than usual to find in 2008. The combined total from transects was just five, well below the 5ya of 27. Alex McLennan over a period of a week in early August netted and released about 50 small-sized skippers to determine the ratio of Small to Essex in the Claphampark Wood area, finding only two Essex amongst them. Countywide, 444 Small Skippers were reported versus 36 Essex.

Large Skipper *Ochlodes venata*

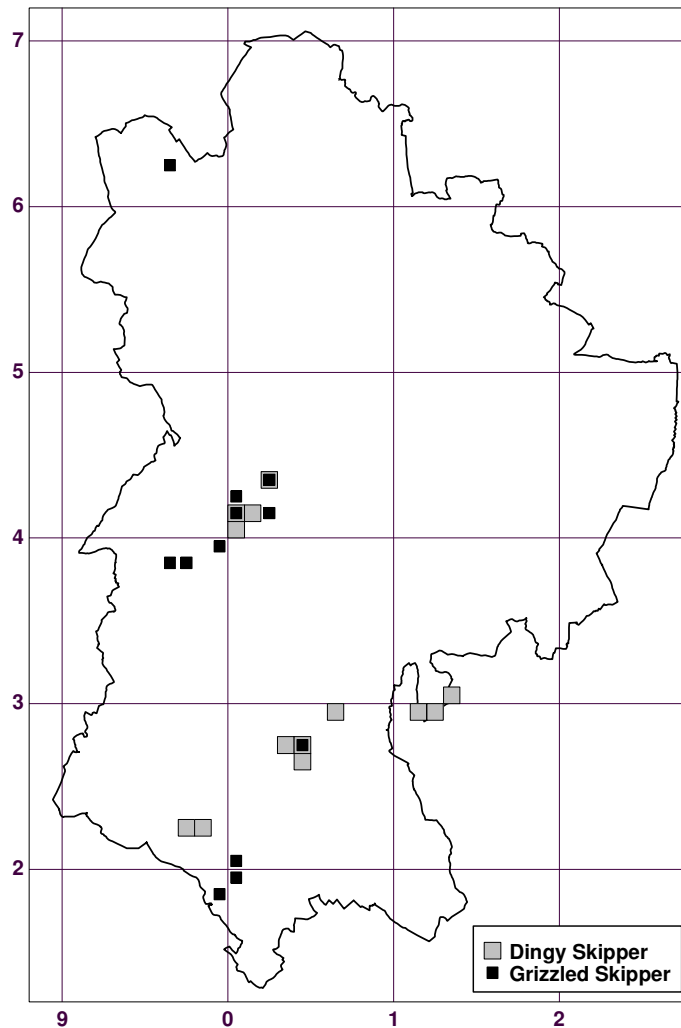
Peak reports are usually in the hundreds, but this year it was just 18, on 13th July in Sundon Chalk Pits (PGI) and only six records were double-digit reports, mostly from woodland rides as usual. The total of 34 from the Potton Wood transect was exactly half the 10ya. It is still well distributed over the county, but the total of 54 1km squares was only one greater than the foot-and-mouth year of 2001 and well down on the peak of 136 in 1995. The flight period from 7th June to 23rd August was normal.

Dingy Skipper *Erynnis tages*

Although not appreciably increasing its range, reported numbers from existing sites have slowly risen over recent years. This may possibly be due to increased reporting however, as the 22 counted on the Totternhoe Quarry transect was close to the 10ya of 18. All reports came either from chalk sites, in particular Totternhoe Knolls, Totternhoe Quarry, Sundon Chalk Pits, Pegsdon Hills and Knocking Hoe, or from the clay pits of Marston Vale where 28 were counted during a circuit of Stewartby Lake on 13th May (SHe). Ten were counted at Knocking Hoe on 14th May (EG). With the first not seen until 9th May and the last on 11th June, their season was more compressed than usual.

Grizzled Skipper *Pyrgus malvae*

The Whipsnade Downs transect was, as usual, the only one to report the species, and its total of 27 was the highest since 1999 (40) and well above the 10ya of 14. All reports came either from chalk sites (Whipsnade and Dunstable Downs; Sundon Chalk Pits) or Marston Vale (near Brogborough; Coronation Pit; near Lidlington; Marston Vale Millennium Country Park) with one exception, CBA seeing one on 26th April at the northern end of Sharnbrook Summit, where there is a remote colony. The flight period of 26th April to 23rd June was typical.



Comparison of Dingy and Grizzled Skipper record distributions in 2008

Whites

Wood White *Leptidea sinapis*

None were reported again this year. It seems unlikely that the species is currently resident in the county.

Clouded Yellow *Colias croceus*

Only two were reported and one of these was on 9th May, rather early in the year and possibly a case of mistaken identity. The other was from below Sharpnose Clappers on 15th August (AR).

Brimstone *Gonepteryx rhamni*

Although the count of 717 was the lowest since 2003 (654) the species continues to do well relative to others, having slowly increased its share of records steadily over the last decade. Its distribution map correlates well with the distribution of all records, suggesting it can be found almost anywhere in the county, the bright yellow colouring of the male allowing easy identification at a distance. As usual, the peak of reports was from standard week 19 (7th-13th May) during which 94 were counted.

Large White *Pieris brassicae*

Even though every transect showed a rise in numbers over 2007's the overall total of 292 still failed to reach the 5ya of 489. Numbers from overall recording were similarly depressed, but the reported distribution of 134 1km squares was slightly above the 10ya of 127. AW reported an estimated 15 from Whipsnade Downs on 27th July.

Small White *Pieris rapae*

Potton Wood, Totternhoe Quarry and Whipsnade Downs transects showed strong recovery from 2007's very low numbers, but the total across all transects of 415 was still well below the 5ya of 788. Total numbers from all recording were amongst the lowest in the last decade. Large White and Green-veined White's numbers both peaked in standard week 30 (23rd-29th July) whereas Small White's numbers were still building then, its peak coming three weeks later (13th-19th August). Reported from 174 1km

squares (the largest on record, looking back as far as 1995) the geographical distribution of Small and Green-veined White's records was very similar, both being widespread. PGI reported an estimated 30 from the Sundon-Streatley road on 30th July.

Green-veined White *Pieris napi*

Unlike the recovery shown on transects by Small White, Green-veined White's total were largely unchanged from 2007's except at Potton Wood, which declined to 291 (from 468 in 2007) and well below the 10ya of 552. Reported from 168 1km squares, just above the 10ya of 157, the total of 1,072 adults was well below the 10ya of 1,971. The peak record of at least 30 on 13th September was at Castle Mill Pit (NDW).

Orange Tip *Anthocharis cardamines*

Whilst 30th March and 10th June delimited the flight period, the peak was short-lived with the majority of reports coming from standard weeks 18 and 19 (30th April to 13th May), the onset of May's unsettled weather curtailing the season. Reported from 100 1km squares (10ya 104) it remains widespread and abundance holds steady despite the recent trend for wet Mays.

Hairstreaks

Green Hairstreak *Callophrys rubi*

As usual, most reports came from chalky sites: Kensworth Quarry, Whipsnade Downs, Totternhoe Quarry, Sundon Quarry, Sharpenhoe Clappers, Knocking Hoe and Pegsdon Hills. A total of three were also reported from around Stewartby Lake in Marston Vale, the other main region (PGI and SHe). A female was seen laying on birds-foot trefoil on 10th May at the seemingly isolated population at Sandhouse Lane NR (KBa). The reported flight period of 26th April to 14th June was typical. The peak record of 15 came from the BNHS field trip to Pegsdon Hills on 11th May and EG reported 10 from nearby Knocking Hoe on 14th May.

Purple Hairstreak *Neozephyrus quercus*

With just 11 records reporting 27 adults in nine 1km squares this is one of the poorest seasons for reports of this species in recent years. The largest record from each site was: Chicksands Wood (4, AW), Dedmansey Wood (private) (not counted, CRBB), King's Wood, Heath and Reach (8, KBa), Holywell Wood, Studham (1, CRBB), Studham Common (1, CRBB), RSPB Sandy (2, DFD and IKD), West Wood (3, JTRS and DFi). All records were made between 16th July and 2nd August, an exceptionally narrow time span.

White-letter Hairstreak *Satyrrium w-album*

With just 18 adults from nine records in four 1km squares, the species was clearly not easy to find this year. (Only 2000 was a worse year in recent times, when only nine were reported). In 2006 427 were reported, which goes to show how quickly fortunes change. The largest record from each site was: Chicksands Wood (3, KBa and AW), Home Wood, Northill (4, KBa), Maulden Wood (1, SR), Great Early Grove, Renhold (1, GWa). The earliest and latest records were 29th June and 30th July, which is fairly typical.

Black Hairstreak *Satyrrium pruni*

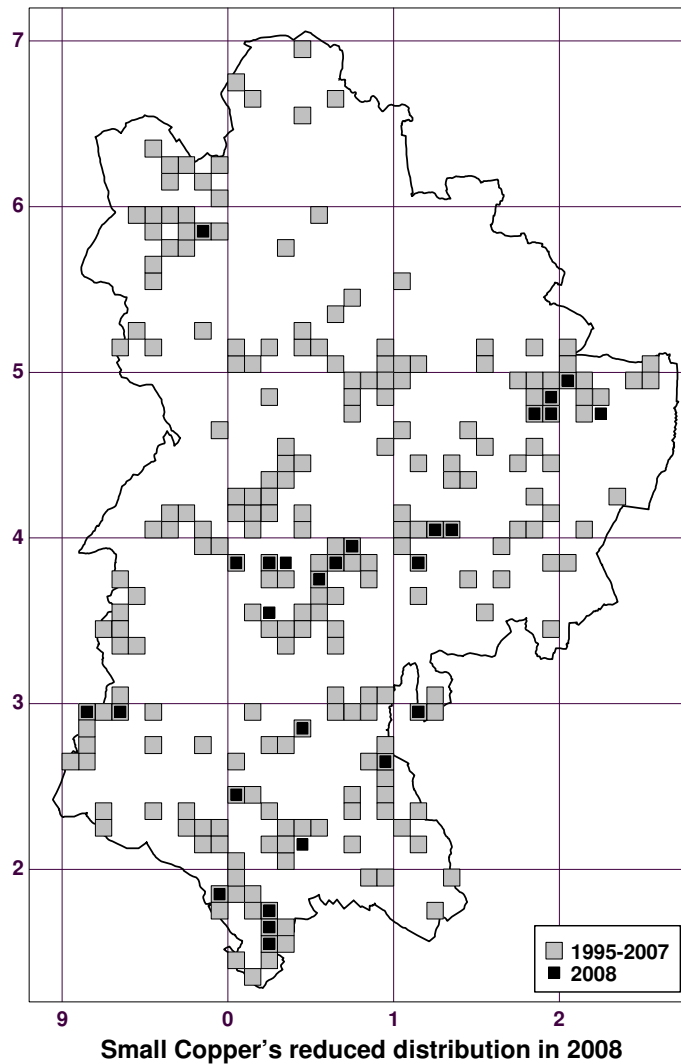
On the BNHS field trip to Marston Thrift on 20th June one positively identified adult was seen by all present as it obligingly sat on foliage in the manner of the species. In the car park later the party met LC who said he had just seen one at a different place in the wood, making at least two at large there that day. At Wootton Wood (private) the party later had a positive sighting of another, plus a probable second when an unidentified hairstreak quickly vanished behind shrubbery.

No reports for Black Hairstreak were received for 2007 in time for its report, but two records have since come to light. One was on the main ride of Marston Thrift seen by LC (date unknown), the other, a short way along the cycle track towards Holcot Wood from Marston Thrift, on 13th June 2007 by AH.

Coppers, Blues and Metalmarks

Small Copper *Lycaena phlaeas*

For a species that is considered to do worse in cool years Small Copper actually had a fair season with numbers building steadily throughout the summer. In standard week 39 (24th-30th September) 32 were reported, mostly from sandy sites like Ampthill Park, Maulden Heath, Rowney Warren and RSPB Sandy. The peak record of 16 was from RSPB Sandy on 10th September (AMB and MGB). Reported from 27 1km squares (10ya 39), their range has contracted primarily to sandy or chalky sites.



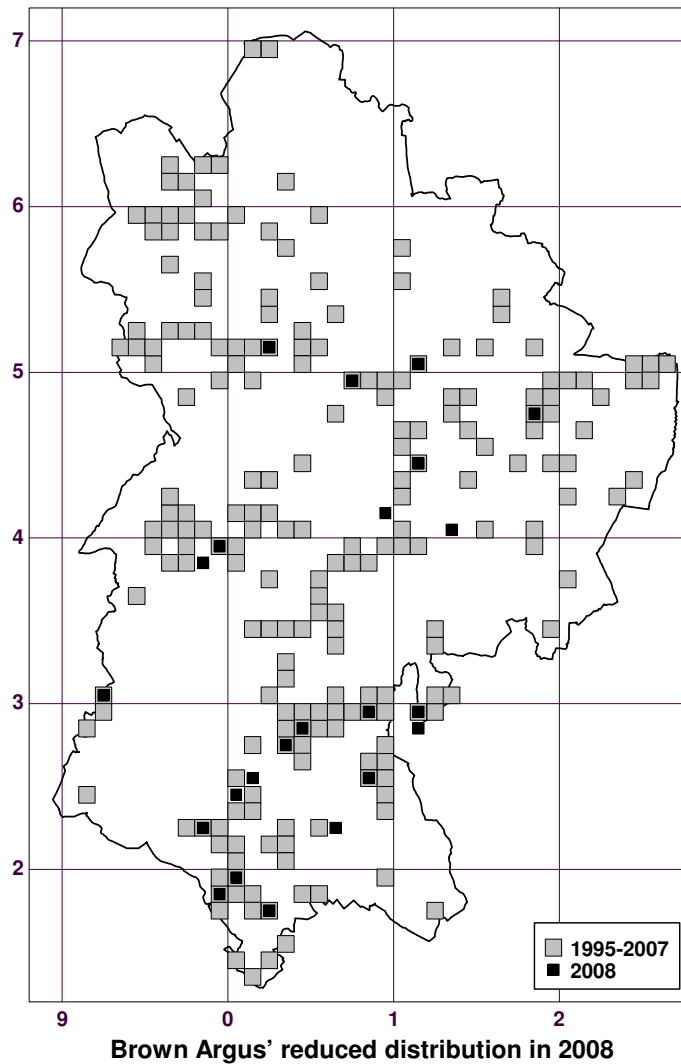
Small Copper's reduced distribution in 2008

Small Blue *Cupido minimus*

The species was not seen on the Whipsnade Down transect for the first time since 2002, though it is usually only present in small numbers there. The eight seen on the Totternhoe Quarry transect was well below the five- and ten-year averages of 24. It was reported from a normal range of chalk sites: Kensworth Chalk Pit, Totternhoe Knolls, Totternhoe Quarry, Sundon Chalk Pit, Harlington Hill Chalk Pit, Sharpenhoe Clappers and Galley and Warden Hills, but as sometimes happens with this species there were a couple of unexplained sightings at odd locations. This year one was in Marston Vale Millennium Country Park on 21st May (PGI) and two in Ampthill Park on 15th August (SRP). KBa looked for these two shortly after they were reported, but in bad weather they could not be relocated. The largest reports were of 35 on 9th June at Kensworth Chalk Pit (PGI) and 265 on 5th June by Greg Herbert on his usual evening roost count along the foot of the large cliff at Totternhoe.

Brown Argus *Aricia agestis*

This species has fared worse than many during the last two unsettled summers. In 2008 only 106 adults were reported (10ya 311) from only 23 1km squares (10ya 38). Only 49 were recorded across all transects compared with 325 in 2006 and their 5ya of 179. Of the 49, 47 were at Whipsnade Downs, and just one each at Totternhoe Quarry and Old Warden Tunnel. It was not seen at all on the Potton Wood transect where 129 were recorded in 2006, and it also didn't show on the Bedford Old Cemetery and Hill Rise transects, which usually report a handful each. Although records were well distributed, the majority came from calcareous or sandy sites, probably representing safer havens in times of stress.



Common Blue *Polyommatus icarus*

Despite having a slightly better season than 2007, 2008 was still amongst the worst years on record for abundance (looking back to 1995). Across all transects only 159 were reported against the 5ya of 421, and in overall recording the 10ya average of 1579 was well above this year's 879, 415 of these reported by PGI, mostly from the chalk pits at Harlington Hill, Kensworth and Sundon, at the latter seeing 217 on 24th August, understandably giving him the impression that the species was having a good year. AM noted about 30 from a fresh emergence in the Claphampark Wood area on 7th August. Reported distribution remained reasonable at 63 1km squares versus the 10ya of 75, with reports well distributed across the county, mostly from grasslands and brown field sites.

Chalkhill Blue *Polyommatus coridon*

The first flight wasn't until 19th July, making a late start to its season. 436 were counted on the Totternhoe Quarry transect (10ya 932) and 53 on the Whipsnade Downs transect (10ya 177). Overall, 737 were reported (10ya 2,931) from 11 1km squares (10ya 18) all statistics indicating another poor year for the species. It was seen at Whipsnade Downs, Dunstable Downs, Totternhoe Quarry, Houghton Regis Chalk Pit, Harlington Hill Chalk Pit, Sharpenhoe Clappers, Pegsdon Hills and Galley and Warden Hills.

Holly Blue *Celastrina argiolus*

With 195 reported adults, the first brood was much more abundant than the second with only 78. (One record was undated so couldn't be ascribed to a brood). As usual a high proportion of records came from towns and villages where it was spotted flying around shrubbery in ones and twos, often in observers' gardens. The first flight on 12th April (MS) preceded the second by ten days when the bulk of reports started from the 22nd onwards, two to three weeks later than we have recently come to expect.

Duke of Burgundy *Hamearis lucina*

The reported season was extremely short, 5th to 21st May. The Whipsnade Downs transect reported 9 (10ya 13) and the Totternhoe Quarry transect 19 (10ya 19) suggesting a fairly average year despite the

compressed season. Ed Turner of the Wildlife Trust, continuing his studies of the species at Totternhoe Quarry, thought it had done quite well despite the unsettled weather during the flight period. Most sightings as usual were at Totternhoe Quarry or Whipsnade Downs, but one was seen on Totternhoe Knolls on 13th May (KBa).

Nymphalids

White Admiral *Limenitis Camilla*

The reported flight period of 29th June to 8th August was similar to normal. The largest report from each wood was: Chicksands Wood (5, PGI), College Wood (1, AM), Dedmansey Wood (private) (1, CRBB), Flitwick Moor (1, Wildlife Trust mid-week team), Home Wood, Northill (1, KBa), King's Wood, Heath and Reach (2, AW), Maulden Wood (1, SR & SRP & JOS), Odell Great Wood (2, WP), Stockgrove Country Park (1, LM), West Wood (8, JTRS and DFi).

Purple Emperor *Apatura iris*

Four were reported this year, three of these photographed. Chicksands Wood again was the focus of attention with one seen on the main ride near the northern monument on 4th July (AH), and a female in good condition on 13th July, spending most of her time 10-15 feet up on sallows on the ride east of the southern monument from about 11:50 to 12:20, observed and photographed by IW. She was not seen to lay. AW photographed another on the boulder clay rides of King's Wood, Heath and Reach on 1st August, distracting his attention from watching two Silver-washed Fritillaries! It's anyone's guess where the male, photographed on 13th July on a fig tree in the Harlington garden of SB and MB, came from.

Red Admiral *Vanessa atalanta*

In a year when other migrants barely showed it is tempting to wonder how many of those reported were home grown from over-wintering stock. The species however had its third or fourth best year (depending on which statistics are used) since 1995, and the shape of the graph of weekly reported abundance was that of a typical year, so it seems likely that migration played a role as usual. Local abundance was modest with most records in single figures, but MJS on 24th August reported counting about 50 in one day on a white buddleia in Upper Stondon.

Painted Lady *Vanessa cardui*

With just 24 adults reported, many bemoaned their absence this season as migration patterns took them elsewhere. SH was therefore excessively fortunate to see three on a buddleia in Wilden on 18th August. All were seen between 11th June and 14th September, four reported from widely scattered locations on this final day.

Small Tortoiseshell *Aglais urticae*

Only 15 were recorded across all transects, having declined steadily from the peak of 236 in 2003. Although recorded from only 92 1km squares (10ya 129) a seemingly stronger second brood suggested a slight revival, with several reports of double-digit abundance, resulting in a more optimistic mood among observers. Nationally however there were reports of immigration around this time that could have raised numbers.

From 30 second-brood pupae bred through from larvae taken from KBa's Bedford garden on 23rd August, only one adult butterfly resulted. Through the wing cases of the other 29 pupae a total of 54 maggots of the parasitoid fly *Sturmia bella* emerged, descended on short threads and dropped off, to pupate within a few hours. Dr Owen Lewis and Nia Hamer of The Department of Zoology of Oxford University, who were undertaking research on the effects of *S.bella* on Small Tortoiseshell populations, confirmed the identification, as did Chris Raper on the Diptera.info forum when KBa posted photographs of a fly which emerged on 13th September. It remains to be seen what long-term effects this newly established parasitoid will have on local populations of Small Tortoiseshell and other Nymphalids.

Large Tortoiseshell *Nymphalis polychloros*

There was an unconfirmed report of one between Cranfield and Marston Thrift on 1st July by DB if correct, probably an escape or unauthorised release of captive stock.

Camberwell Beauty *Nymphalis antiopa*

None were reported this year.

Peacock *Inachis io*

628 records is the largest annual total for the species, and the reported distribution of 187 1km squares (10ya 144) was the largest since 1999 (195) and second only to Meadow Brown. On transects the total of 580 compares favourably with the 5ya of 491. The species therefore continues to do well. An average of 24 adults were found hibernating in icehouses, tunnels and other structures by the

Bedfordshire Bat Group during three winter hibernation checks and RL found seven hibernating beneath the A1 bridge at The Riddy on 13th October.

Comma *Polygonia c-album*

Over the last six years the trend on the transects has been steadily downwards, from a total of 237 in 2003 to 104 this year (although up slightly from last year's 89). In overall recording though the trend appears different. In 2008 4.5% of all records were of this species, the highest looking back as far as 1995. The number of reported Comma adults as a percentage of adults of all species has also risen steadily since 1995, suggesting it may be fairing better than other species. The largest reports were from Chicksands Wood on 30th July (15, AW) and Maulden Wood on 8th October (13, SEB and BSN). Records were well distributed across the county.

Fritillaries

Dark Green Fritillary *Argynnis aglaja*

The species had a much-compressed season, with all reports between 28th June and 28th July. As usual the area around Sharpenhoe Clappers was the stronghold, with all but four adults reported from there. Abundance seemed typical with most records quoting 15 to 30, but MR stated 50 on 5th July. Two adults were reported from Pegsdon Hills on 30th June (KW) and one on Dunstable Downs on 28th July (WP). A large fritillary, thought to be a Dark Green, was seen in Tartlett's Close near Cranfield on 15th July (ABu and SBu).

Silver-washed Fritillary *Argynnis paphia*

After the large numbers seen in the county in 2006 hopes were high that the species would become well established here. Sadly, reports in 2008 came from only one site, King's Wood, Heath and Reach, where two were seen on the boulder clay rides on 1st August (AW), followed by one on the 3rd (RAD and JL) and two (one male, one female) seen separately on the 6th by LC and RAD.

Browns

Speckled Wood *Pararge aegeria*

With 6.61% of all adult butterflies reported being Speckled Woods (its largest annual proportion looking back to 1995) the species continued to do well with respect to others. On the Potton Wood transect the total of 315 was well above normal (10ya 197) and its strongest showing there since 1998 (364), but conversely the total of 43 was the lowest ever for the Old Warden Tunnel transect (well below its average of 73). The other transects fell somewhere in between, suggesting a mixed performance overall. It was reported from 138 well-scattered 1km squares, just one below the 10ya. The peak number of about 50 from the Claphampark Wood area was counted by SW on 15th September, when numbers of the third brood, the largest, were near their peak. The latest, and oddest, report came from well inside Old Warden Tunnel on 13th December when one was spotted with open wings on the tunnel roof by the Bedfordshire Bat Group during hibernation checks, at the time suspected to be moth, but photographs later confirmed the identification. Although it was probably dead it is a matter of speculation how and why it was there.

Wall Brown *Lasiommata megera*

Only five were reported this year. Four were in the Marston Vale, at Rookery Pit (one first brood by KBa, and two second brood by AW) and one first brood in Coronation Pit (RAN). The fifth was a first brood sighting at Totternhoe Quarry (ET) showing the species' ability to pop up unexpectedly. With so few sightings, usually in brown field sites threatened by development, the species' future in the county continues to remain uncertain.

Marbled White *Melanargia galathea*

Whilst numbers have fallen slightly during these unsettled years (transect total of 426 versus the 5ya of 679) as a proportion of all records it has held its own relative to other species and the 1km square count has remained roughly constant over the last decade (62 versus 10ya of 60). Colonies are well scattered across the county, wherever semi-decent grassland exists, but less so towards the north. The largest report was from Bromham Lake LNR on 4th July, where PA counted 164. The flight period of 4th June to 15th August was normal.

Gatekeeper *Pyronia tithonus*

With 916 reported across all transects (5ya 1,583) abundance was higher than in 2007 (654), but numbers were below average on every transect. It still remains one of our most recorded species with 10.0% of all adults reported, and widely scattered, from 153 1km squares. The first record wasn't until 28th June (SRP and JOS), a week or so later than usual.

Meadow Brown *Maniola jurtina*

This species still holds the number one spot for the number of adults, percentage of records and 1km squares. It has suffered though during the last two unsettled seasons, with only 1,283 adults counted

across all transects compared with the 5ya of 2,228. The high number of 1km squares (208) is thanks in part to Tim Sharrock, who recorded the species in 74 1km squares while surveying for birds, particularly in northern parts of the county where few go looking for butterflies, thus adding greatly to the geographical coverage for this and other common species.

Ringlet *Aphantopus hyperantus*

A species unfazed by light rain, it has fared better than most during the last two unsettled seasons. The average of nearly 12 adults per record demonstrates its high local abundance, about twice that of Meadow Brown, but reported from only 99 1km squares versus 209 for Meadow Brown, it remains more localised. The total of 1,444 recorded across all transects exceeds 2007's total of 1,109 and is well above the 5ya of 896. The peak flight period during standard weeks 26 to 29 (25th June to 22nd July) was typical.

Small Heath *Coenonympha pamphilus*

The species had a second consecutive poor year. The total of 74 across all transects was well below the 5ya of 236, Whipsnade Downs contributing 67 of these, the other 7 from Totternhoe Quarry. The overall distribution of 50 1km squares was however normal (10ya 47). They were reported mostly from chalk grassland, but quite a few records came from brown field sites, especially in the Marston Vale, and a scattering from semi-decent grasslands across the county.

ACKNOWLEDGEMENTS

We are very grateful for the efforts of the 138 people listed here who reported their sightings, either directly or via the newsgroups. We apologise if any name has been inadvertently omitted.

J.Albone, L.Allan, Mrs.Almond, P.Almond (PA), B.Anderson (BA), D.Anderson, Y.Anderson (YA), J.Andrews, L.Bacon, A.Bahn, D.Bahn, C.R.B.Baker (CRBB), P.M.Baker, K.Balmer (KBa), A.Banthorpe (AMB), M.Banthorpe (MGB), J.Barnard, C.Barnes (CBa), R.Bashford, R.Bates (RBa), G.Bellamy, P.Bellamy, J.Bishop (JB), S.Blain, N.Bourn, S.E.Brooke (SEB), M.Brown (MB), S.Brown (SB), A.Bucknall (ABu), C.Bucknall (CBu), D.Bungard (DB), L.Campbell, L.Carman (LC), C.Carpenter, G.Castle, S.Cham, D.Chandler, J.Chapman, B.Clutten, P.Cope, R.Cope, B.Cornes, M.Davies, D.F.Dawson (DFD), I.K.Dawson (IKD), R.A.Dazely (RAD), L.Downton, E.Dunn, R.Durham, R.Edwards, B.Ellis, J.Ellis, M.Ellis, S.Ellis, V.Ellis, J.England, D.Fellman (DF), D.Fisher (DFi), N.Folkard, L.Giddings, P.Glenister (PGI), D.Goddard, E.Goodyear (EG), H.Griffiths, S.Halton (SH), A.Hards (AH), A.Harley, C.Harrington, I.Hayward, S.Hearle (SHe), G.Herbert (GWH), B.Holland, G.Horn, F.James, G.Johnson, I.Kimsey, J.Knight, D.Kramer, R.Lawrence (RL), C.Le Boutillier, P.Le Boutillier, M.Lloyd, J.Lynch (JL), G.Madge, P.Madgett, R.Madgett, G.Manners, D.McCarrick, M.McCarrick, R.McGregor, S.McLaren, A.McLennan (AM), K.Middleton, L.Millbank (LM), N.Monsey (NM), R.Morrissey, B.S.Nau (BSN), C.Nelson, B.Nightingale, R.A.Nye (RAN), J.O'Sullivan (JOS), D.Oakley-Martin, A.Outen, T.Payne, N.Phalasuk, G.Pickerill, S.Pittman, J.Pitts, S.Plummer (SRP), W.Powell (WP), S.Raven (SR), P.Rhodes, A.Richardson, A.Robertson (AR), C.Rowley, M.Rubin (MR), J.Schneider, J.T.R.Sharrock (JTRS), M.Sheridan (MS), H.A.Smith, M.J.Stafford (MJS), A.Strutt, S.Thompson, E.Turner (ET), M.Ward, G.Warne (GWa), K.Weedon, M.Weedon, A.Whitfield, E.Whitfield, A.Whitney (AW), Wildlife Trust Mid-week Team, S.Williams (SW), N.D.Willits (NDW), K.Winder (KW), D.Withers, I.Woiwod (IW), R.Woolnough

and members of the Beds and Northants Branch of Butterfly Conservation, The Bedfordshire Bat Group and others who helped with transect walks and surveys.

Maps produced using DMAP.

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

A brief note about locations of some Bedfordshire butterfly collections

Sydney Humphrey who died in 2007 left his butterflies and the Kershaw butterfly collection to Malcolm Simpson who currently lives in Cambridgeshire. Within these are quite a number of specimens from Bedfordshire, mostly dating from the 1950s and 1960s.

Bernard West's butterfly collection is held at Bedford Museum.

Summary of 2008's records of adults at 1st February 2009

Species	Records	Adults	Squares		Records (%)	Adults/All-species adults ¹ (%)				
			10km	1km		2004	2005	2006	2007	2008
Small Skipper	139	444	18	62	1.86%	3.26	1.98	1.63	1.60	1.71
Essex Skipper	26	36	12	23	0.35%	0.31	0.26	0.17	0.14	0.14
Small/Essex Skipper	14	107	11	12	0.19%	0.31	0.11	0.50	0.03	0.41
Large Skipper	155	335	17	54	2.07%	2.73	2.98	2.66	3.20	1.29
Dingy Skipper	50	136	5	14	0.67%	0.50	0.45	0.35	0.28	0.52
Grizzled Skipper	31	65	6	12	0.41%	0.19	0.19	0.15	0.24	0.25
Wood White	0	0	0	0	0.00%	0.00	0.02	0.00	0.00	0.00
Clouded Yellow	2	2	2	2	0.03%	0.07	0.02	0.11	0.07	0.01
Brimstone	449	717	18	125	5.99%	2.06	2.14	1.72	3.53	2.76
Large White	503	950	21	134	6.71%	3.51	3.67	3.00	3.37	3.66
Small White	500	1109	20	174	6.67%	7.65	4.59	3.63	4.43	4.28
Green-veined White	538	1072	19	168	7.18%	5.19	4.18	2.42	6.12	4.13
Small/G.V. White	31	168	6	10	0.41%	0.56	0.14	0.36	0.14	0.65
Orange Tip	208	322	19	100	2.78%	1.03	1.39	0.80	1.45	1.24
Green Hairstreak	28	72	7	11	0.37%	0.23	0.53	0.34	0.29	0.28
Purple Hairstreak	11	27	6	9	0.15%	0.22	0.05	0.32	0.06	0.10
White-letter Hairstreak	9	18	3	4	0.12%	0.08	0.21	0.97	0.12	0.07
Black Hairstreak	4	6	1	2	0.05%	0.02	0.02	0.10	0.01	0.02
Small Copper	73	182	10	27	0.97%	0.50	0.15	0.45	0.41	0.70
Small Blue	33	564	5	11	0.40%	0.40	0.35	1.92	0.79	2.1
Brown Argus	61	106	10	23	0.81%	0.84	1.01	1.59	0.94	0.41
Common Blue	219	879	15	63	2.92%	3.51	5.35	4.12	1.87	3.39
Chalkhill Blue	94	737	5	11	1.25%	8.14	10.05	6.30	3.54	2.84
Holly Blue	228	274	17	90	3.04%	0.86	1.43	0.48	1.09	1.06
Duke of Burgundy	34	65	3	4	0.45%	0.31	0.18	0.22	0.12	0.25
White Admiral	21	36	8	12	0.28%	0.07	0.16	0.26	0.12	0.14
Purple Emperor	4	4	4	4	0.05%	0.00	0.00	0.01	0.01	0.02
Red Admiral	301	534	18	100	4.02%	0.57	0.99	5.40	3.28	2.06
Painted Lady	22	24	13	18	0.29%	0.48	0.04	5.55	0.77	0.09
Small Tortoiseshell	170	289	19	92	2.27%	1.78	1.07	0.66	1.17	1.11
Camberwell Beauty	0	0	0	0	0.00%	0.00	0.00	0.01	0.00	0.00
Peacock	628	1539	20	187	8.38%	1.96	4.56	3.69	6.56	5.93
Comma	337	561	20	103	4.50%	1.02	1.22	1.94	1.82	2.16
Dark Green Fritillary	18	199	4	7	0.24%	0.54	0.80	0.71	0.19	0.77
Silver-washed Fritillary	4	5	1	2	0.05%	0.02	0.01	0.23	0.03	0.02
Speckled Wood	642	1715	20	138	8.57%	3.96	3.25	3.32	4.79	6.61
Wall Brown	5	5	2	4	0.07%	0.08	0.02	0.03	0.02	0.02
Marbled White	206	1522	17	62	2.75%	6.79	5.27	7.33	5.03	5.87
Gatekeeper	460	2594	20	153	6.14%	14.25	12.16	9.98	8.95	10.00
Meadow Brown	720	4482	22	208	9.61%	17.32	20.02	17.92	14.92	17.28
Ringlet	350	4167	18	99	4.67%	5.65	5.05	6.84	17.96	16.07
Small Heath	141	326	15	50	1.88%	3.06	3.92	1.80	1.20	1.26
Overall	7469	26395	22	418						

¹ These values show the number of adults reported for each species relative to the number of adults reported for all species, allowing crude year-on-year comparisons to be made using data partially acquired by casual recording.