

1999

WEST MIDLANDS

BUTTERFLY AND MOTH

ANNUAL REVIEW

First & Last Butterfly sightings 1999

Name of Species	First Sighting	Last Sighting
Small Skipper	29/6 Floggin DWh (25/6/98)	29/8 West Malvern C&HD (23/9/98)
Essex Skipper	17/7 Windmill Hill GF (21/6/98)	5/9 Nr. Mathon C&HD (18/7/98)
Large Skipper	29/5 Castlemorton IGD (24/5/98)	14/8 West Table Hill C&HD (12/8/98)
Dingy Skipper	3/5 Mathon PG (8/5/98)	N/A (21/6/98)
Grizzled Skipper	2/5 Wyre Forest via MJW (17/5/98)	27/5 Nr. Willersey IJD (12/6/98)
Wood White	3/5 Monkwood F/trip (28/4/98)	11/8 Monkwood DWh (15/8/98)
Clouded Yellow	N/A (21/6/98)	N/A (11/10/98)
Brimstone	19/1 Worcester via PAW (9/1/98)	18/10 Perry Wood PAW (23/10/98)
Large White	1/4 Perry Wood PAW (31/3/98)	14/10 Perry Wood PAW (1/10/98)
Small White	17/3 Areley Wood TJH (18/3/98)	18/10 Ripple C&HD (25/9/98)
Green-veined White	9/4 Nr. Blaenau JA (31/3/98)	14/10 Perry Wood PAW, Droitwich DWh
Orange Tip	1/4 Pedmore DSw (31/3/98)	1/6 Dunstall Common C&HD, Perry Wood
Green Hairstreak	28/4 Penny Hill Bank TJH (2/5/98)	25/6 West Sugarloaf Hill C&HD (21/6/98)
Brown Hairstreak	5/8 Nr. Stock Green RSt (18/8/98)	30/8 Stock Green RM (22/9/98)
Purple Hairstreak	26/6 Perry Wood PAW (4/7/98)	9/9 Floggin DWh (23/9/98)
White letter Hairstreak	25/6 Hawford TBu (3/7/98)	5/8 Perry Wood PAW (15/8/98)
Small Copper	4/5 Chase End IGD (2/5/98)	19/10 Ryall Farm C&HD (21/10/98)
Silver-studded Blue	N/A (N/A)	N/A (N/A)
Brown Argus	26/5 Ryall Farm C&HD (18/5/98)	11/9 Nr. Trumpet PG (1/10/98)
Northern Brown Argus	N/A (N/A)	N/A (N/A)
Common Blue	22/5 Hereford AN (13/5/98)	17/9 Floggin DWh, Ryall Farm C&HD
Holly Blue	17/3 Nr. Wellington JK (30/3/98)	6/10 Droitwich DWh (30/9/98)
White Admiral	25/6 Monkwood TJH (21/6/98)	5/8 Nr. Stock Green RSt (19/8/98)
Red Admiral	14/3 Upper Welland IGD (13/2/98)	21/12 Kidderminster PL (11/11/98)
Painted Lady	11/6 Ryall Farm C&HD (19/5/98)	19/10 Ryall Farm C&HD (9/10/98)
Small Tortoiseshell	13/3 Stourport TJH (8/2/98)	12/11 Ryall Farm C&HD (10/10/98)
Peacock	5/1 Worcester via PAW (8/1/98)	3/11 Baynhall Bogs C&HD (6/11/98)
Comma	13/3 Perry Wood PAW (13/2/98)	6/11 Worcester TBu (10/11/98)
Small Pearl-bordered	29/5 Ewyas Harold SY (23/5/98)	24/6 Wyre Forest TJH (3/7/98)
Pearl-bordered Fritillary	3/5 Wyre Forest PH/MT (6/5/98)	24/6 Wyre Forest TJH (4/6/98)
High Brown Fritillary	20/6 Malverns CP (28/6/98)	13/7 Nr. Aymestrey JT (23/7/98)
Dark Green Fritillary	N/A (N/A)	N/A (28/7/98)
Silver-washed Fritillary	23/6 Wyre Forest MT (3/7/98)	2/9 Wyre Forest TJH (30/8/98)
Marsh Fritillary	25/5 Trench Wood KHT(27/5/98)	N/A (N/A)
Speckled Wood	17/3 Perry Wood PAW (19/3/98)	3/11 Perry Wood PAW (18/10/98)
Wall Brown	1/6 Chase End IGD (23/5/98)	N/A (N/A)
Marbled White	22/6 Nr. Penny Hill DWh (19/6/98)	7/8 West Malvern C&HD (10/8/98)
Grayling	10/7 The Bog RSw/PH/DJ (27/7/98)	N/A (16/8/98)
Gatekeeper	2/7 Malvern FH, Perry Wood PAW	4/9 Hagley Wood DWh (17/9/98)
Meadow Brown	11/6 Malvern FH (28/5/98)	14/9 Floggin DWh (25/9/98)
Ringlet	20/6 Bredon CCM (25/6/98)	20/8 Perry Wood PAW (19/8/98)
Small Heath	19/5 Ryall Farm C&HD (9/5/98)	9/9 Upper Dingle, W. Malvern C&HD
Large Heath	N/A (16/6/98)	N/A (N/A)

West Midlands Top Ten (1998 position and totals in brackets)

1. Meadow Brown	(1)	13,256 (7,662)
2. Ringlet	(3)	7,839 (6,122)
3. Gatekeeper	(4)	7,787 (6,114)
4. Speckled Wood	(2)	5,612 (6,620)
5. Green-veined White	(5)	2,462 (4,210)
6. Peacock	(6)	2,056 (2,161)
7. Marbled White	(8)	1,618 (1,838)
8. Large Skipper	(9)	1,348 (1,525)
9. Large White	(7)	1,163 (2,050)
10. Small Skipper	(-)	1,079 (801)

National Top Ten (1998 position and totals in brackets)

1. Meadow Brown	(1)	60,195 (61,255)
2. Gatekeeper	(3)	12,898 (10,192)
3. Ringlet	(2)	11,540 (10,315)
4. Green-veined White	(4)	9,349 (9,442)
5. Speckled Wood	(5)	6,822 (6,956)
6. Small Skipper	(11)	6,633 (4,803)
7. Common Blue	(10)	6,618 (4,832)
8. Small Heath	(6)	6,200 (6,495)
9. Chalkhill Blue	(8)	6,183 (6,334)
10. Marbled White	(7)	5,551 (6,345)

Butterfly of the Year awards

Butterfly of the Year: Meadow Brown (Runner-up: Comma)

Most improved performance: Ringlet

Wooden spoon: High Brown Fritillary (Runner-up: Small Copper)

Migrant of the Year: Withheld

1999 Weather Summary

1999 was notable for a return to wetter weather, this being the wettest in 17 years and the fifth wettest year this century. The summer months of **April**, **June**, **August** and **September** were particularly wet with these last two months being the second and third wettest this century respectively. **July** and **September** were the only months with above average sunshine. However it was generally mild with **June** being the only month with below average temperatures. **January** began the year with a very wet start having twice the monthly average. **February** and **March** tried to redress this imbalance but didn't help much with only slightly less than average themselves. All three months were slightly warmer than average with about average sunshine.

April had a lot of rainfall but most of it fell on four or five days and so with warm temperatures and average sunshine there were quite a lot of potential flying days (see below). In **May** total sunshine hours were down yet it was dry and there were quite a lot of available flying days. After a sequence of dull wet **June** months in previous years this **June** also started on a wet note and ended with below average temperatures and was the dullest since 1983. **July** was the driest and sunniest since 1990 and showed a return to one of those dry hot and

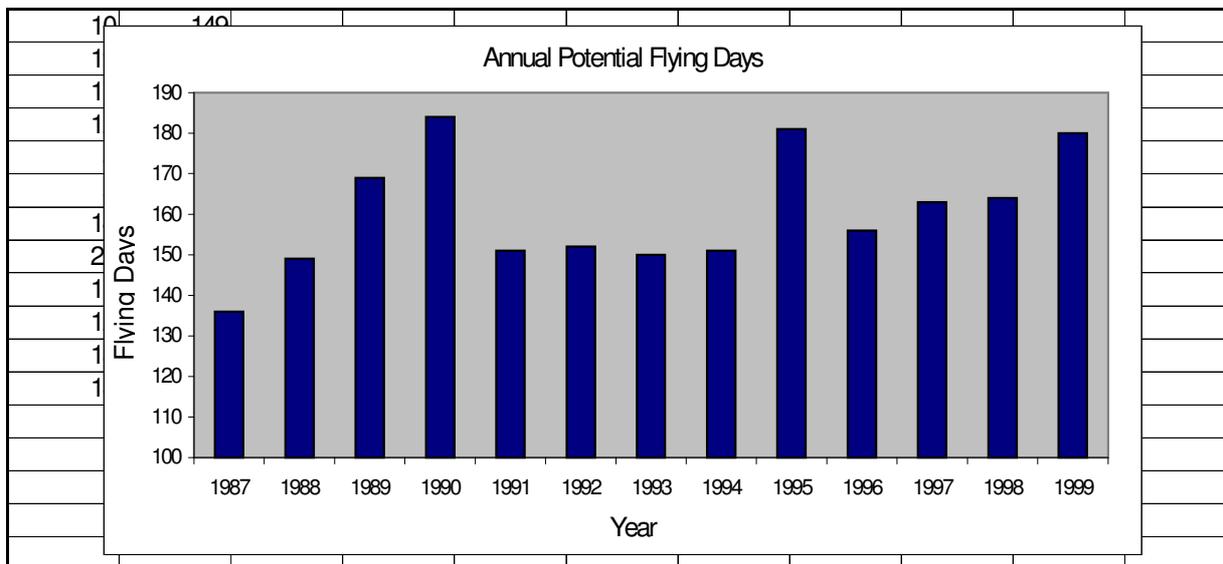
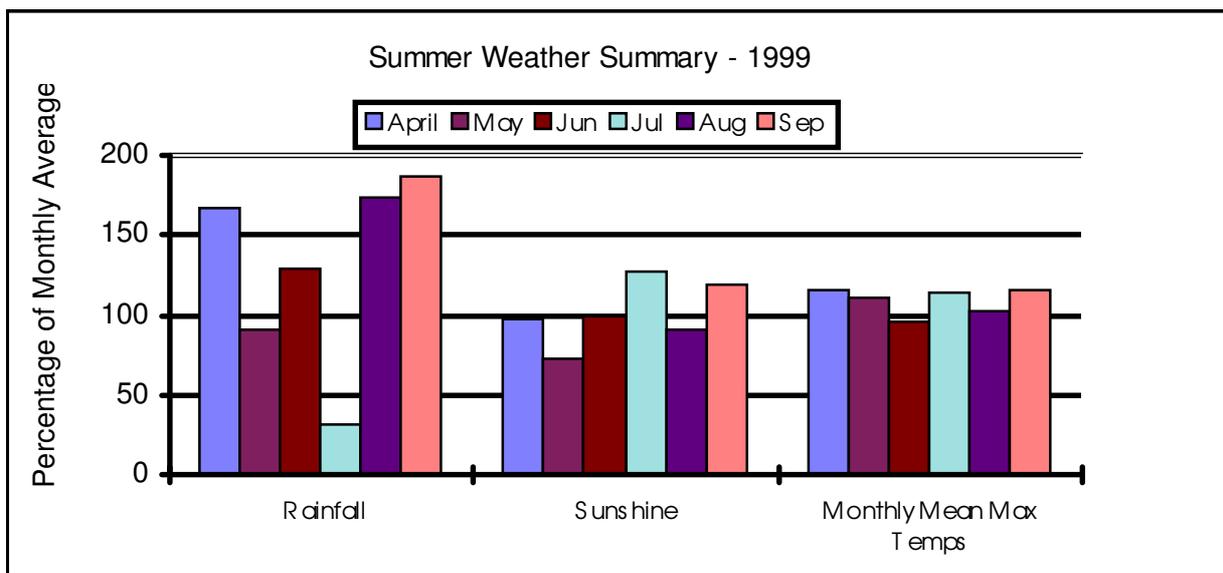
Table showing the number of Rainfall and Sunshine days as well as the number of Potential Butterfly Flying Days - 1999 (WEST MIDLANDS)

	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Days with >1.0mm rainfall	13	13	11	13	4	10	15	9
Days with >1.0mm rainfall 10-1700 (BST)	7	8	5	6	0	4	4	3
Days with >1.0mm rainfall 10-1700- weekends	3	0	1	3	0	2	1	2
No of days with at least 1 hours sunshine	20	21	25	25	31	24	26	23
No of days with at least 1 hrs sunshine & 13 C or dull & 17 C (Potential adult flying days)	8	13	25	27	31	30	28	18

very sunny months giving the maximum flying days possible of 31. Those conditions abruptly ended in **August** with a very wet period which resulted in a lot of dull conditions. Wet weather occurred again in **September** from mid month onwards but sunshine and temperatures were kept above average. Rounding off the butterfly year, **October** saw a lot of sunny weather producing an Indian summer for the late species.

As a reminder about the last 13 years, the final table summarizes the total number of potential butterfly flying days

Weather Summary for the Summer 1999 (Values expressed as a percentage of monthly average)								
		APR	MAY	JUN	JUL	AUG	SEP	
Monthly Rainfall		167	91	129	32	173	187	
Monthly Sunshine		97	72	99	128	91	119	
Monthly Mean Maximum Temp		116	111	96	114	102	115	



given the usual criteria of each day reaching at least 17 degrees C or 13 degrees C with one hour of sunshine. The reason that 1999 did so well was that March and October were quite mild and so extended the season markedly. This means that the year was not such a bad end to the last century as the rain might make you to believe!

Mike Averill

Butterfly Roundup

Certainly not the best of years to round off the old century with no real highlights in what was on the whole a fairly depressing year for the region's butterflies. Although as always there were sites and species which bucked the trend. Perry Wood in Worcester, for example, turned in its highest ever butterfly count (PAW) as did Rodborough Common in Gloucestershire (MTO), although the latter can be mainly explained by the phenomenal numbers of **Chalkhill Blues**, while in Perry Wood the standout species were **Ringlet, Gatekeeper and Speckled Wood**. Generally, the Satyrid family had a reasonably good year especially **Meadow Brown**, although this fact was rather overlooked at the time. Transect figures don't lie, however, and the numbers recorded were almost 75% up on the previous year providing ample justification for making this species butterfly of the year. Last year's winner, the **Holly Blue**, was nowhere to be seen, collapsing in its first generation and almost invisible in its second. Sadly some of our rarer species fared much less well and their flight season often seemed to coincide with the worst of the weather. With the notable exception of Haugh Wood, **Pearl bordered Fritillary** did abysmally with very low numbers at its few remaining sites. Haugh Wood, in contrast, thanks to some sterling work by Forest Enterprise, produced its best figures since the early nineties (JA) proving once again the importance of beneficial management even in a generally poor season. Of interest was a report east of the Severn near Bewdley (MEW), the first in about ten years. If anything, **Small Pearl bordered** did even worse than their larger cousins with the only saving grace coming from the Stiperstones where they were reported locally in some strength (JJ). **Silver-washed** numbers were also nothing to write home about but did show some recovery on the previous year. There was a report from Monkwood (via CET) which was pleasing after a blank in 1998. **Dark Green Fritillary** certainly did better in places, with some really good numbers at some Cotswold sites but poorer elsewhere, with a very disappointing performance on the new transect at Ewyas Harold (SY). A new report for this species came from a site near Bishop's Castle (AN).

I can hardly bring myself to report on **High Brown Fritillary** which again did appallingly. If 1998 was an "unmitigated disaster" for this species, as described in last year's report, I'm not sure what words are left to describe its performance in 1999 with none seen at all at Chase End and the lowest ever totals at its other remaining sites (DJW, BP, PHy et al). Despite all our efforts, extinction is staring this butterfly in the face as far as the West Midlands are concerned. We can but hope that the new initiative on the Malverns reported in our last newsletter and continuing management efforts at other sites may be in time to turn the situation around but there is little room for optimism.

On a brighter note, at least one species of Fritillary did well within the region with the most successful year since monitoring began at the **Marsh Fritillary** site in Gloucestershire. Good spring larval accounts were followed by the highest adult emergence on record and evidence of very good breeding success, despite sometimes dubious weather conditions during the flight season (MTO). There was some evidence of possible dispersal with reports from Rodborough Common. The introduced colony in Worcestershire also survived another season with similar numbers of larval webs in the autumn as the previous year suggesting that they will survive another season.

Other species to do reasonably well in the Spring included **Green Hairstreak** which was out before the end of April and was reported from a number of new locations on the Malverns (C&HD) as well as its usual haunts. For the first time, it turned up inside the boundaries of Monkwood NR after the sighting on Monkwood Green in 1998. There was also confirmation of a small colony at the Floggin in Halesowen (DWh) proving once again the increasing value of old industrial sites in urban areas. **Grizzled Skipper** continues to thrive under sympathetic management in a small area of Wyre Forest (FL et al) and a more surprising report came of a new site near the base of Ankerdine Hill (TS). **Dingy Skipper** was in fairly short supply in 1998 and is another species for which urban settings are becoming increasingly important. Strenuous efforts are being made to conserve the newly discovered colony at Anchor Meadow in Walsall (see newsletter). **Wood White** figures were similar to the previous year with some encouraging new records from Herefordshire near Aconbury and Checkley (JA) and a few reported from near the Royal Ordnance site in Wyre Forest (TBu). The status of **Wood White** within Wyre is rather baffling with specimens being seen in widely scattered locations for a few years, only to then disappear and reappear elsewhere. There was a reasonably strong second brood at Monkwood with several August sightings (CET, DWh et al.).

Moving into Summer, **White Admirals** generally did badly with the lowest numbers on the Monkwood transect since 1989 and poor numbers elsewhere. **Ringlet** and **Gatekeeper**, in contrast, did better and it was encouraging to also see an improved performance from **Small Skipper**. The fact that there were more **Small Skippers** around also improved the chances of finding **Essex** amongst them and so it proved with reports, this time backed up by photographs, from Windmill Hill and Redditch (GF). Although there is obviously more work to be done, it is looking increasingly as if the main penetration into Worcestershire is coming from the east. **Speckled Wood** also did well at some sites although overall numbers fell back slightly on 1998. **White-letter Hairstreak** numbers were generally similar to the previous year and once again there were further outbreaks of Dutch Elm. New records came from Hill Croome and West Sugarloaf Hill on the Malverns (C&HD). There were also new reports of **Purple Hairstreak** from the same recorders at Clenchers Mill and Cold Elm and also a September record from the Floggin (DWh). It is always difficult to judge how this species performed overall but most of the transects where it is well represented showed a decline. The spread eastwards of **Marbled White** seems to be continuing with a first record from a site near the Clent Hills

(DWh). **Northern Brown Argus** appeared to have a very good season if the numbers at Castern Wood on the July field trip were anything to go by.

Of the doubled brooded species, it was a pretty poor year for **Large White** with the lowest figure since 1985 on the transect at Perry Wood (PAW). **Green-veined White** also did poorly although there was an interesting report of ab. *Sulphurea* near Bridgnorth (RSw) in July. It was generally a disappointing year for **Small Heath** although there were one or two new records for Worcs (PD, DWh, C&HD). **Brimstone**, while reasonable in the Spring, did badly in the Autumn and overall showed a decline on 1998. **Small Tortoiseshell** again were very thin on the ground but **Comma** did much better and it was good to see the West Midlands branch symbol finish the old millennium with a bit of a flourish. Very few reports were received of **Brown Argus**, although the one seen on Monkwood Green (CET) was the first report from this location for seven years. **Common Blue** appeared to do worse regionally than nationally and numbers were generally low with the worst season in fifteen years of monitoring at Perry Wood (PAW). The same might be said of **Small Copper** which showed an overall decline of 40% on West Midlands transects (ID).

Migrants were generally poor with no records of **Clouded Yellow** from the region, very few **Painted Lady**, and generally low numbers of **Red Admiral** although once again a number of the latter species appeared to get through the winter. Several species lasted quite well into the Autumn with some very late sightings for **Painted Lady**, **Holly Blue**, **Red Admiral** and **Speckled Wood**. **Brown Hairstreak** was again fairly hard to come by but the subsequent egg count around Grafton Wood showed a slight improvement on the previous year.

Mike Williams

Garden Butterflies in the Midlands, 1999

A year of improvement

Most of our garden butterflies showed an improvement on the somewhat dismal results of 1998. There were no spectacular increases, except for the **Marbled White** which visited an extra 11% of gardens in 1999 compared with 1998 and showed its highest percentage ever. Gains of 5-10% were quite common, including **Brimstone**, **Comma**, **Gatekeeper**, **Large White**, **Meadow Brown**, **Ringlet**, **Small Copper**, **Small Skipper** and **Speckled Wood**. Even the **Wall** showed a modest gain of 5%, although still far below its abundance in 1995. The most serious loss was the reduction by 28% in the number of gardens recording the **Holly Blue**, but we know that this is part of the cyclic nature of this species' abundance and no cause for alarm. In fact 1999 set no alarm bells ringing, in my ears at least!

Is the **Peacock** a Midlands speciality?

This was the question I asked in 1996 and 1997, when the answer appeared to be, "Yes", the **Peacock** being recorded in more Midlands gardens than nationally. Although reduced to 96% in 1998, the 1999 result of 99% is yet more evidence that the Midlands is a stronghold for this species, as far as garden visits are concerned.

The ups and downs over five years

In this report I have compared the results for the past five years, 1995-1999. There is very little of significance when comparing the data for the common garden butterflies, mostly just a gentle rocking! However, the **Large White** appears to be increasing its visits, possibly not a welcome finding for vegetable gardeners!

The cyclic nature of visits is plain to see from Table 2: **Brimstone** begins and ends the five years almost at the same value and all the species show a regular pattern of up and downs.

In 1997 I stated that if the **Wall Brown** continued its decline in the Midlands at the present rate it will no longer be a

Table 1: The most common garden butterflies % total number of gardens in the Midlands

Species	1995	1996	1997	1998	1999
Large White	88	88	92	91	96
Small White	95	91	90	90	91
Red Admiral	95	97	91	87	89
Small Tortoiseshell	97	98	98	95	96
Peacock	96	98	100	96	99

garden visitor by the time we reach the millennium. Happily I was wrong, as after reaching an all-time low in 1998 a modest increase was recorded in 1999. Hopefully, this will continue, but beware a severe summer drought. In fact if you are one of the lucky people to have a **Wall** visit your garden it could be worth trying to discover where the

species is breeding and watering the grasses gently in a drought. I also stated in 1997 that the **Marbled White** was behaving in the opposite way to the **Wall**, as it was showing a gradual increase in garden visits, which had more than

Table 2: The less common garden butterflies % of total number of gardens in the Midlands

Species	1995	1996	1997	1998	1999
Brimstone	74	78	35	67	75
Green-veined White	62	63	88	73	70
Orange-tip	74	72	87	87	89
Common Blue	44	59	60	33	37
Holly Blue	20	59	69	91	63
Painted Lady	61	99	23	50	47
Comma	73	75	86	76	86
Speckled Wood	63	58	62	76	85
Gatekeeper	79	87	80	74	82
Meadow Brown	81	76	68	77	86

doubled since 1993. There was a dramatic drop in 1998, but this was more than compensated for with the rise in 1999 (Table 3). Most of the species in this table show a similar cyclic pattern, but **Large Skipper** seems to have settled at 23%, while variations in **Small Heath** visits are small, indicating stable breeding populations in the few places where this butterfly visits gardens.

Altogether Midland gardens recorded 35 species in 1999. Rare visitors included **Clouded Yellow**, **Essex Skipper**, **White Admiral**, **Silver-washed Fritillary**, **Dark Green Fritillary**, **Pearl-bordered Fritillary**, **Chalkhill Blue**, **Wood White** and **Green, Purple and White-letter Hairstreak**. There was even an authenticated **Large Tortoiseshell**!

Table 3. The least common garden butterflies % of total number of gardens in the Midlands

Species	1995	1996	1997	1998	1999
Small Skipper	45	48	33	19	31
Large Skipper	29	39	23	23	23
Small Copper	47	48	37	22	30
Wall	30	12	8	7	12
Marbled White	10	12	15	8	19
Small Heath	11	13	10	9	11
Ringlet	30	27	23	21	36

Thank you to all Midlands recorders who make this garden survey so interesting.

Margaret Vickery

County Moth Reports

Herefordshire

1999, after the mildest winter that I have seen in 35 years, then ushered in a prolonged cold and wet spring and early summer from March to early July. A warm spell of weather then ensued lasting into August.

In 1998, Phyllis King of Little Dewchurch recorded a single example of a **Peacock Moth** which appeared at her light trap on 9th August. This is a welcome return of a moth for which I have only a few records during the 1960s with the last seen in 1975. I must apologise to her and readers for my failure to report this last year.

The two colonies of the **Scarlet Tiger** reported in 1998 were seen again during 1999 but no new colonies were seen. Much of the Comfrey searched in April grows near or on the edge of the River Wye and suffers from annual winter flooding which may prove to be a limiting factor in distribution of the moth, as well as the importance of a very warm microclimate.

Despite the tribulations of the weather, several new or rediscovered moths, many indigenous, were seen during 1999. Of interest was the first sighting of the small *Phyllonorycher ulicolella* when several were seen flying around Gorse on 14th June near the village of Dinmore. Curiously, there were only five or six bushes of Gorse on the limestone grassland site but, despite the paucity of foodplant, the moths were undoubtedly of indigenous origin. The same can be reasonably claimed for the following two micros: first the Occophorid, *Denisia similella*, a single fresh specimen of which was found on an Alder trunk in the Olchon Valley in July, which must be the most southerly station to date in the UK; and second, *Assara terebrella*, a nationally rare Pyralid moth which was recorded at light by Ian Duncan and myself at High Vinnalls near Ludlow in August, a site dominated by commercial coniferisation but containing still

some old Norway Spruce. The larva feeds over two years in the cones of this tree only.

Another species of Phyllonorycter *P. lencographella*, and a recent coloniser of the county, first appeared in Ledbury in October 1998. This moth is spreading rapidly and I have seen mines of leaves in *Pyracantha* bushes from towns and villages in eastern Herefordshire from Ross to the city of Hereford.

Cherry Greenway continues to record interesting species at light near Storridge which have included in 1999 the local **Dingy Shell** and the **Waved Black**.

Visits to Haugh Wood in June and July and to the Great Doward on 28th July with Butterfly Conservation and colleagues produced interesting species including **Buff Footman** at both sites and also the rediscovery of **Lesser-spotted Pinion** at the latter site after a period of 31 years absence from the county.

A monitoring night of trapping at Queens and Dymock Wood was held on 7th July in order to contrast oak mature forest in Gloucestershire and mixed young coppice in the Herefordshire side of the wood. We failed to see the **Great Oak Beauty** on either side and this remains unrecorded now for many years. The **Orange Moth**, however, was seen in both sectors, while the **Beautiful Snout** and the **Lead-coloured Pug** were seen on the Herefordshire side, the former is a new record for the wood. Roger Gaunt, the Gloucestershire recorder, saw **White-line Snout** on the Gloucestershire sector of Dymock Wood. This last species was also seen for the first time in Bears Wood near Haugh Wood in August 1999.

On 12th July and accompanied by Ian Duncan a two day field trip in the Olchon Valley was held and two M/V traps were used in the valley. On the second day, a single fairly fresh male **Silurian** was found in a trap situated at 300-400 metres altitude. This is a new record for Herefordshire and also for England! Discovered originally in 1972 near Abergavenny in Monmouthshire by Dr. Neil Horton, he suggested many years ago that the Olchon high ground could prove to harbour the species and he has been proved correct. The same night also attracted single moths of the **Scarce Silver Y** and the **Northern Rustic**, both of which are only occasionally seen at this site but good confirmation that they are likely to be breeding here.

Michael Harper

Shropshire

The survey at Royal Ordnance in Wyre Forest was concluded this year, although unfortunately a number of nights were adversely affected by the weather including a spectacular electrical storm in July. Standout species for the year included **Leopard moth**, **Satin Lutestring**, **Clay Triple Lines**, **Bilberry Pug**, **Alder moth**, **Beautiful Hook-tip** and **Beautiful Snout** (AGB, FL).

Other county records of note include **Lobster** moth seen at Dudmaston, a species hardly known in the county outside Wyre. **Obscure Wainscot** was again seen at Hopton Heath after the first county record in 1998. A county first amongst the micros was **Lobesia littoralis** whose larvae feed on thrift. Perhaps not surprisingly this moth is mainly coastal in distribution and its appearance in a garden at Alveley suggests that the moth was accidentally imported on thrift plants bought from a south Yorkshire garden centre (AGB).

Jenny Joy has embarked on a moth survey of the Stiperstones NNR with funding from English Nature. This is a two year project and a report will be produced at the end of 2000. Considerable management work is underway on this site as part of a major heathland restoration project supported through the Heritage Lottery Fund and it will be interesting to assess the impact of this on moth populations.

I am grateful to Godfrey Blunt and Frank Lancaster for providing the information on which this report is based.

Mike Williams

Staffordshire

No report.

Worcestershire

Last year two new species of Macrolepidoptera and six new species of Microlepidoptera were recorded in Worcestershire and quite a number of other important and interesting records were made by an increasing number of recorders. Also the Butterfly Conservation Worcestershire Mothers' Group started a programme of countywide recording meetings which succeeded in finding some of our target species and making a number of other excellent records.

Cypress Pug, seen by Peter Holmes at actinic light at Malvern Wells on 17th August was a first for the county and was either a migrant or just possibly has now arrived here courtesy of global warming. At least twelve **Small Rufous** flying

at dusk and coming to light at Wilden Marsh on 30th July (Mothers' group) was also a county first. The **Dotted Chestnut** seen by Peter Holmes at Malvern Wells on 23th March was last recorded in 1834 and was listed as extinct by myself but has been spreading into Monmouthshire and Herefordshire in the past three years and has now arrived with us. It will be interesting to see if it continues to move north and east.

The Mothers' Group also succeeded in confirming that the **Festoon** still occurs at Trench Wood with two on 10th July as well as five **Mere Wainscot**. Two **Square-spots**, courtesy of Peter Holmes, at Shrawley Wood on 14th May were only the second records for the county.

Migrants were few but by far the best was a **Four-spotted Footman** at King's Heath (D. Grundy) on 20th September and only our second record. He also had **Convolvulus Hawk** on 17th September and there was another near Pershore (J.W. Meiklejohn) on 27th September. There was one **Bordered Straw** at Holywood near Birmingham on 10th September (G. Fellows).

Among other good non-migrant records were **Dark Pinion** at King's Heath and **Heath Rustic, Pine Carpet, Clouded Magpie** and **Light Brocade**, all at Willow Bank near Bewdley (R. Winnall). **Six-belted Clearwing** was swept at Lower Smite by Harry Green and by myself at Windmill Hill in July.

Amongst the micros, the six new species to the county list were:

Phaulernis dentella 6/6/99 on Chaerophyllum flowerheads at Tiddesley Wood.

Commophila aeneana 6/6/99 on Lias and Rhaetic clay roadside banks near Craycombe Hill and Windmill Hill, both near Evesham.

Cochylis atricapitana 30/7/99 to light at Wilden Marsh.

Sitochroa palealis 14/8/99 caught by Peter Garner at Castlemorton Common.

Phycitodes maritima 29/5/99 at Windmill Hill

Salebriopsis albicilla 11/9/99 & 15/9/99 five larvae found at Shrawley Wood on Small-leaved Lime by Michael Harper and myself were the first records outside the Lower Wye Valley area of Gloucestershire and Monmouthshire.

Also *Cochylimorpha straminea* was found at Windmill Hill on 29th May, the last record being 1902 in Wyre Forest.

All in all a good year in the county for moth recording despite much wet weather and the paucity of migrants.

Tony Simpson

Acknowledgements

JA	Jeff Andrews	PL	Pat Lancaster	MJW	Mike Williams
AGB	Godfrey Blunt	RM	Rob Mabbett	PAW	Phil Williams
TBU	Trevor Bucknall	CCM	Charles Morgan	DWh	Dave White
PD	Peter Darch	BP	Beryl Petters	DJW	Digby Wood
C&HD	Colin & Helen Dowling	CP	Corinna Philpott	SY	Sue Young
IGD	Ian Duncan	AN	Andy Nicholls		
GF	Gary Farmer	MTO	Matthew Oates		
PG	Peter Garner	TS	Tony Simpson		
PH	Paul Healy	DSw	Debbie Southwell		
TJH	Terry Higgins	RSw	Richard Southwell		
FH	Frank Hill	RSt	Bob Steele		
PH	Phil Hopson	MT	Mike Taylor		
DJ	Dave Jackson	JT	Jim Timms		
JJ	Jenny Joy	CET	Claire Turner		
JK	Joan King	KHT	Ken Thomas		
FL	Frank Lancaster	MEW	Mary Williams		