

Butterfly Transect 2011

As in previous years, 13 trained volunteers planned to walk the same route ("transect") every week from the beginning of April to the end of September. In the event the weather was too poor for butterflies to be flying in three of the weeks, and several other transects were carried out in marginal conditions. The unsettled summer, with frequent spells of poor weather, was presumably the main reason for considerably lower numbers than the last couple of years – 1,679 compared with over 2,000 in 2009 and 2010, although not all species were affected equally and some had a good year. The number of different species seen this year, moreover, was the highest we have ever had on the transect at 27, due to the presence of some of our rarer species, even though it was a poor year for immigrants like Painted Lady and Clouded Yellow (no sightings) and there were very few reports of the main immigrant moths like Silver Y and Hummingbird Hawkmoth. Another immigrant, the Red Admiral, on the other hand, had quite a reasonable showing.

After the first week in April, when conditions were not really suitable on any count, it was generally sunny, though cool and windy until the end of May. This kept numbers of butterflies down to a maximum of 65 and sometimes single figures, averaging 34. Through June and July the weather was mixed, with transect volunteers able to find sunny days, decently warm and little wind in seven out of ten weeks, but adverse conditions in three of the intervening weeks, in two of which it was impossible to carry out the transect at all. These two bad weeks occurred in June and kept the average number for the first four weeks in June down to a very poor 26, even though the first week had good conditions and the highest spring total of 79. The poor weather in this crucial part of the developmental cycle seems to have depressed numbers even through most of July and the average from the last week in June to the end of July was just 148, when it was several hundreds in 2010.

Only in the last week in July did numbers rise above 200. Conditions in August were less sunny, often cool, and somewhat windy, and, although we reached our maximum of 274 in the second week, the average was no more than 104, the last week being totally overcast and plummeting down to 13. The first week in September was too poor to attempt transect and all the other weeks, except a sunnier third one, were little better, so that we ended with an abysmal average of 8 for the month. Numbers of meadow brown, which usually dominate the summer figures, were very much down on past years.

The **Meadow Brown**, with 570 records, nevertheless remained our commonest butterfly. This year it appeared earlier than usual with 33 seen on 3 June on one of our best days and it lasted until the penultimate week of the season, being seen at some time in every transect part. Unlike previous years, however, its numbers never got into several hundreds, with 133 being the maximum on 5 July, a very hot, sunny and windless day.

The next two commonest species were **Small White** and **Green-veined White**. Taking the two species together (total 318), as it is not always possible to separate them as they fly past quickly, they were recorded in every section and in one more week (18) than the meadow browns, as they begin flying much earlier. They were seen from late April to early June and then from mid-July to the end of September. The gap coincided with a spell of disturbed weather, but the usual interval between the spring and summer broods occurs around then in any case, the weather merely causing the interval to be longer and more pronounced than normal. The smaller whites were 38% up on last year when they were lower than common blue and ringlet in numbers, so they managed to buck the overall decreasing trend. In fact this was the best year so far for both the small whites and for their close relative the **Orange-tip**. The **Large White** also had an above-average year with 177 records, the only other species to get over 100 records this year. The **Common Blue** came close with 96, though less than a quarter of last year's total. Records were almost entirely confined to two periods, a spring brood early May to mid-June, and a summer brood late July to late August.

This year was notable, however, for small numbers of species too rare to be easily picked up by the transect method, usually demanding concentrated searching and patience. **Dingy Skipper** was spotted three times (four individuals) at the Picnic Site from 23 April to 7 May (this species has a well established colony there). I also saw one on 6 May (not as part of transect) in neighbouring Meadsgarden Field, where

its food-plant, common birdsfoot trefoil, also grows, so it is likely that there is now an extension of the colony there. The closely related **Grizzled Skipper** is much rarer, but seen fairly regularly at the Picnic Site, and it was probably that species which was picked up by transect on 2 May as I was able to confirm it there on 2 June. **Green Hairstreak** is another Picnic Site regular, though never before featuring on transect, but it was seen on 23 April and independently a fortnight before by Susan Devlin. The green flash of its underwings in flight in sunlight is a real delight (and makes it one of the easiest of all our butterflies to identify). **Brown Argus** also occurs every year on the Picnic Site, but it is told from a female common blue only with some difficulty. Even so our volunteers usually pick up one or two and this year was no exception, with records from 2 May and 14 August (spring and summer broods respectively). The transect walk has been picking up the odd **Duke of Burgundy** for some years and we suspected a colony of this butterfly, which is a national conservation priority because of large declines in its populations. It was definitely confirmed this year that its caterpillars had been feeding on cowslip leaves at the Picnic Site and there is probably a colony on Meadsgarden Field as well. Three individuals were seen on two occasions, 2 and 7 May, one at the Picnic Site (on the day it was also seen there by Butterfly Conservation expert Tom Dunbar) and one in Meadsgarden Field. What was thought to be a **Dark Green Fritillary** was seen on the transect in 2010 (Meadsgarden Field) and further sightings of a fritillary, which I have again put down as that species because of the dates, occurred on 2 May and 26 June at the Picnic Site and Stonygreen Bank. They are strong fliers and do not hang about, so it is difficult to get real confirmation by the detail on the under-wing, so we are still waiting full proof from a luckier sighting, but it has been definitely recorded at Speen this year and was a Picnic Site regular in the past, so I am sure they are still around, apparently at several spots – usually chalk grassland at woodland edges with their food plants, violets. That leaves the most exciting new record of all, never before recorded in our area, although I always suspected it was around, as there are colonies not so far away and its food plant, hedgerow sloe, is common enough. This is the **Brown Hairstreak** and its habit, like most hairstreaks, of not often flying and usually remaining at the tops of hedgerows, makes it an unlikely candidate for the transect. It also flies late in the year – late August and early September – when there are fewer butterflies around. We picked it up on 11 September on a truly awful overcast, cold and windy day at the top of Well Field by a hedgerow that does indeed contain some sloe. I saw two that counted towards transect and spotted a few others when I stopped to watch.

Totals across all butterflies are somewhat misleading, as it is a rare year when no species does exceptionally well (although we did have one those years in 2008!). This year's total was low-ish but a number of species did much better than average – the small whites, including orange-tip, comma, small tortoiseshell and speckled wood. If they could do so well, numbers are obviously not a simple matter of the weather, and it does appear that populations of different species have natural fluctuations, a phenomenon that is well known for the holly blue, which goes from abundant to

virtually non-existent over a few years because of the effect of a particular parasite. In fact one could denominate years by the butterfly (or –flies) that does particularly well. So:

2006 was the Year of the Meadow Brown,
2007 the Year of the Peacock,
2008 the Year to Forget,
2009 the Year of the Ringlet,
2010 the Year of the Common Blue,
and 2011 the Year of the Small Whites (oh, unhappy cabbages!).

What will it be in 2012? Please submit your guesses to me by the end of March and I will contribute a prize at the end of the year to any member who gets it right!

ony Marshall

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Mean Temp		17.00	17.00	25.00	18.00	19.00	18.00	15.00	20.00		20.00		28.00	23.00	23.00	18.00	20.00	21.00	18.00	18.00	20.00	20.00		15.00	16.00	19.00	
Mean Sun		100.00	50.00	92.00	75.00	75.00	60.00	70.00	99.00		90.00		100.00	90.00	70.00	50.00	97.00	95.00	60.00	50.67	81.33	33.00		40.00	74.67	21.33	
Small Skipper																1											
Essex Skipper														2				13						1			
Small/Essex Skipper											2		3						4	1							
Large Skipper									10																		
Dingy Skipper				2	1	1																					
Grizzled Skipper					1																				1		
Brimstone		11	1	1	6	2		6							6	1	2	4		1	2					1	
Large White			6	6	18	5		4	12		1		2	21	15	5	29	12	13	30	2	1					
Small White			14	14	4	4	2	6	11			3			10	12	39	29	14	48	3	3			2	1	
Green-veined White								1	1			5			6	6	21	57		2		3	1				
Orange-tip		17	6	28	10	6		1																			
Green Hairstreak				1																							
Brown Hairstreak																								2			
Small Copper																2		2			7				3		
Brown Argus					2																1						
Common Blue					6	2	1	13	6		4			6			1	3	5	43	6						
Holly Blue				1												1		4									
Duke of Burgundy					2	1																					
Red Admiral					1	1							1			3	8	3							1	1	
Small Tortoiseshell		7		1				2			1		1	5		1											
Peacock				1		1									1	1	4			1							
Comma			2	3									3	3	4	1	4	5		3					1	1	
Dark Green Fritillary					2																						
Speckled Wood			4	1	1	1	1	4	5		1			1	1	5	5	4	8	19	6	1		6	6	1	
Marbled White									1				2	14	3												
Gatekeeper															2	5	3	33		16	2	4					
Meadow Brown									33		17		48	133	43	13	46	73	43	95	20	1		1	2		
Small Heath														1	1	1				7	1						
Ringlet												44		5	19	3	5										
Section Totals	0	35	9	62	64	24	4	37	79	0	26	0	112	191	110	61	167	242	87	274	42	13	0	11	17	4	1671