

## Butterfly Survey by Dr Owen K Wilby



Proud as a Peacock butterfly

Walking the dog, walking off your lunch or just walking – if you take a regular route then you can contribute to the National Butterfly Survey.

At least once a week during the summer, providing it's a sunny day with only light winds, I take a "walk on the wild side" around the rough grass and shrubbery areas on the HLS Occold site and record the butterflies I see on the wing or feeding on the wild flowers. You can do the same for your patch, large or small, garden or estate. All you need is good eyesight, a notebook and pencil and a good reference book. I use the Reader's Digest **Field Guide to the Butterflies and other Insects of Britain** and sometimes a pair of binoculars to get a close-up of something I don't want to disturb – they are not only for bird watching!

To give you an idea of what I've found, my monthly totals are summarised in the table below.



Meadow Brown - one spot

So what does all this tell us?

The particular species that I have found reflect the habitats I have surveyed - old grassland with lots of wildflowers surrounded by hedges and shrubbery - different habitats will have different characteristic species. The relative abundance at different times of the year also reflects the different breeding habits of particular groups of butterflies.

For example, the **Skippers** and the **Browns (Gatekeeper, Meadow Brown, Ringlet and Small Heath)** have only one generation a year, appearing in summer. These butterflies mate and lay eggs in late summer, which hatch into caterpillars that feed from autumn to spring, hibernating during the worst of the winter in the long grass of wild-flower meadows, pupating in late spring to hatch in summer; none of these adults ever survives the winter.



Gatekeeper or Hedge Brown - two spots

The **Blues** have a similar overwintering strategy, but with two generations a year. Their caterpillars pupate and hatch earlier, giving a late spring population of adults that mate and die, leaving eggs that hatch, eat, grow, pupate and hatch into a late summer population flitting amongst the clover flowers, whose caterpillars survive the next winter down among the grass stems.

The **Whites** also have two generations a year, but the second-generation caterpillars that have decimated your cabbages and sprouts over winter as chrysalises in sheltered spots such as the eaves of your garden shed, hatching to give an early flush of adult butterflies.

These lay eggs on wild relations of your brassicas that eventually give rise to the clouds of white butterflies seen in your vegetable garden in late summer, their numbers swollen by continental visitors.



The Brimstone "butter coloured fly"

Another group has only one generation, but hibernate as adults. This includes the **Small Tortoiseshell**, the **Peacock** and the **Comma**, all of which you may find in the roof of your shed or behind the curtains of your spare room. In spring they emerged from hibernation, tattered and dusty, mate, lay eggs on nettles, and die. Their caterpillars give us the glorious butterflies of high summer and early autumn, sipping on the nectar of the buddleia bushes until it is time to hibernate for the winter.

Joining them on the buddleia is the last main group of butterflies that we see – the migrant **Red Admirals** and **Painted Ladies** – and the occasional **Clouded Yellow**. Each year in spring these strong flying species wing in from Continental Europe and Northern Africa.

Once here, they produce the eggs that give rise to a magnificent, but doomed, resident generation – they sup from our flowers and rotting fruit, but wither and die with the first frosts, only to be replaced the next year by another wave of legal immigrants.

The whole group of butterfly names also tells us something of our folk history: the very name "butterfly" is a contraction of "butter coloured fly", the original name for the sulphur yellow butterfly we now call the **Brimstone** (itself an old name for sulphur).



The admirable Red Admiral

The much-admired “**Red Admiral**” was the “**Red Admirable**” in the 18th century or, from its resemblance to the livery of noblemen, “**The Alderman**”.

There are two orange-brown butterflies that I frequently find fluttering and settling along the hedges and grassland paths – the **Meadow Brown** and the **Hedge Brown**. These are fairly easily distinguishable close up by the number of eyespots on their fore-wings: the **Meadow Brown** has one, the **Hedge Brown**, two, looking like a double-yoked egg. However, they also have different habits – the male **Hedge Browns** are very territorial and defend their patch against all comers, which has earned them the common name of **Gatekeeper**.

Incidentally, the **Meadow Brown** is Britain’s commonest butterfly, a statistic born out by the totals on my table. It is closely followed by the **Large White** which, before the introduction of organic insecticides in the 1940’s, was a major agricultural pest!

<b>Butterfly Table</b>								
Species 2003/04/05	Mar	Apr	May	Jun	Jul	Aug	Sep	<b>Total</b>
Small Skipper				11	36	11		<b>58</b>
Large Skipper				3	2	2		<b>7</b>
Clouded Yellow						1		<b>1</b>
Brimstone	1	2						<b>3</b>
Large White	1	2	3	5	92	73	51	<b>227</b>
Small White	1	6	13	3	12	26	18	<b>79</b>
Green-veined White					1			<b>1</b>
Orange Tip		1	7	3				<b>11</b>
Small Copper						2		<b>2</b>
Common Blue		1	6	32	23	106	21	<b>189</b>
Holly Blue				1		3		<b>4</b>
Red Admiral				2	8	19	11	<b>40</b>
Painted Lady			1	10	17	14	1	<b>43</b>
Small Tortoiseshell	14	11	2	14	34	41	18	<b>134</b>
Peacock	7	17	1	3	16	34		<b>78</b>
Comma	4	2		1	4	2	2	<b>15</b>
Speckled Wood				3	2	1		<b>6</b>
Gatekeeper					46	76		<b>122</b>
Meadow Brown				87	103	45	4	<b>239</b>
Ringlet				1	4	1	1	<b>7</b>
Small Heath					45	10	1	<b>56</b>

