Manor Woods Valley Local Nature Reserve

Butterfly Report

2026

Cover Photo: Gatekeeper on Bramble

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Manor Woods Valley Group

1. Introduction and Methodology

Manor Woods Valley Group member, Peter Loy-Hancocks, undertook three butterfly survey visits in Manor Woods Valley Local Nature Reserve during the summer of 2026. This was the eighth consecutive survey year. In order to facilitate comparisons within and between years, seven transects were established within the site in 2019 (see figure 1). These same transects were followed in subsequent years.

Figure 1: Butterfly survey transects within Manor Woods Valley

The numbers of each butterfly species within a 'virtual' approximately 6m wide and 6m long box, centred on the surveyor as they walked, were noted on to field recording forms. These records form the basis of this report. All relevant records were submitted to Bristol Regional Environmental Records Centre (BRERC).

Additional records were obtained through casual observations made by the surveyor and others at different times throughout the year.

2. Results

Three survey visits were made in 2026. The first was conducted around mid-day on 26th June, under a clear sky, at 27ºC, with a light breeze. A total of 127 butterflies of at least eleven, and possibly twelve, species were recorded (see Table 1).

Species	Transect							Total
	1	2	3	4	5	6	7	
Large White	9	2	2		2	9	5	29
Small White	1	2				2	2	7
Common Blue					1			1
Red Admiral				1			1	2
Painted Lady			1					1
Comma	1				1	1	3	6
Marbled White					5			5
Meadow Brown	2	5	22	4	9	5	2	49
Speckled Wood	2							2
Small/Essex Skipper						2		2
Large Skipper	2		2	5	7	3	2	21
?Fritillary	1					1		2
	17	9	27	10	25	22	15	127

Table 1: Butterfly counts on 26 June 2026

The second survey was conducted in mid-late morning on 11th July, under a mainly clear sky and at a temperature of 23ºC with a gusty breeze. A total of 115 butterflies of fifteen species were recorded (see Table 2).

Species	Transect							Total
	1	2	3	4	5	6	7	
Large White	0	2	0	0	1	1	6	10
Small White	0	0	0	0	0	4	0	4
Small Copper	0	0	0	0	1	0	0	1
Holly Blue	0	0	0	0	1	0	0	1
Common Blue	0	1	15	0	0	0	1	17
Red Admiral	3	0	0	0	1	2	1	7
Comma	1	0	0	0	0	0	1	2
Peacock	0	0	0	0	0	0	2	2
Marbled White	0	0	0	0	1	0	0	1
Meadow Brown	5	4	26	4	4	6	5	54
Gate Keeper	1	0	0	0	0	2	2	5
Ringlet	0	0	0	0	0	0	1	1
Speckled Wood	0	1	0	0	3	1	0	5
Small/Essex Skipper	0	0	0	0	1	0	0	1
Large Skipper	0	0	0	0	4	0	0	4
	10	8	41	4	17	16	19	115

Table 2: Butterfly counts on 11 July 2026

The third survey was conducted around mid-morning on 11th August, under a clear sky, in light gusty breeze and at 25ºC. A total of 46 butterflies of eight species were recorded (see Table 3).

Species	Transect							Total
	1	2	3	4	5	6	7	
Large White	4	1	1	0	1	3	5	15
Small White	0	0	0	0	0	2	2	4
Small Copper	2	0	0	0	0	0	0	2
Common Blue	1	0	2	2	0	0	1	6
Comma	0	0	1	0	0	0	0	1
Meadow Brown	0	4	5	1	2	1	3	16
Gate Keeper	0	0	1	0	0	0	0	1
Speckled Wood	0	0	0	0	1	0	0	1
	7	5	10	3	4	6	11	46

Table 3: Butterfly counts on 11 August 2026

The overall total, of at least sixteen, and possibly seventeen, species, of butterflies recorded during the 2026 survey was 288 (see Table 4).

Species	26-Jun	14-Jul	11-Aug	Total
Large White	29	10	15	**54**
Small White	7	4	4	**15**
Small Copper	0	1	2	**3**
Holly Blue	0	1	0	**1**
Common Blue	1	17	6	**24**
Red Admiral	2	7	0	**9**
Painted Lady	1	0	0	**1**
Comma	6	2	1	**9**
Marbled White	5	1	0	**6**
Meadow Brown	49	54	16	**119**
Gate Keeper	0	5	1	**6**
Ringlet	0	1	0	**1**
Speckled Wood	2	5	1	**8**
Small/Essex Skipper	2	1	0	**3**
Large Skipper	21	4	0	**25**
Peacock	0	2	0	**2**
Fritillary	2	0	0	**2**
	127	115	46	**288**

Table 4: Total butterflies in each transect 2026

Brimstones, Orange Tips and Holly Blues were note earlier in the year, before the monitoring visits took place. At least one Clouded Yellow and one Painted Lady were present in the Orchard Triangle during the survey period, but not a survey occasion.

3. Discussion

As a mostly highly visible group of insects, with a limited range of UK species, butterflies are relatively easy to identify and count. Their numbers can vary greatly from year to year, but when monitored over a number of years, general

population trends can be determined. In this context, butterflies are a good way of monitoring the general heath of the natural environment.

The results of Butterfly Conservation's 2026 Big Butterfly Count have revealed it was ‘a great summer for butterflies …’. Across the UK, 2025 was an average year, ranking 20th out of 50 years of recording, with no species showing their worst results for the UK. In contrast, 2024 was the 4th worst year for butterfly abundance since the first year of the UKBMS (United Kingdom Butterfly Monitoring Scheme), with 9 species showing their worst year on record (JNCC, 2006; https://jncc.gov.uk/our-work/official-statistic-on-abundance-of-uk-butterflies/).

In the short term (10 years); across the UK, 33 of the 58 species monitored (57%) are decreasing in abundant while 25 species (43%) are increasing in abundance. In the long term (maximum 50 years); across the UK, 20 species of 58 monitored (34.5%) show decreasing population abundance over time, while 18 species (31%) show increased population abundance. Twenty species (34.5%) show no long-term change in abundance.

Weather conditions can create noticeable fluctuations in butterfly populations from one year to the next as they impact butterfly development and activity directly. Butterflies are ectothermic, and require sunshine in order to function and be active. Sunshine hours will impact butterfly activity levels, timing of the flight period, and how many generations are produced in a year. Low sunshine hours and adverse weather (i.e. rain and cloudiness) can have deleterious impacts on butterfly populations that can take years to recover from.

In July 2026, the Met Office published a report, ‘State of the UK Climate in 2025’. In this report they stated that ‘The UK is warming: 2025 was the warmest year in the UK series from 1884, with the last four years in the top five warmest.’, that ‘Extremes are increasing…’’ and that there was ‘Increased sunshine…’.

According to bistolweather.org, which runs a weather station in nearby Totterdown, 2024 was the 10th wettest year since data for Bristol started in 1853, with 126% of the average rainfall; however, the summer was still the equal 4th warmest since Bristol temperature records started in 1891. It was the dullest year from records starting in 2005 with only 37% of the maximum sunshine recorded.

The weather in 2025 was very different to that of the previous year. Spring was the warmest since the data started for the city in 1891 and was the 5th driest out of 144 years of local data. July 2025 was the 5th warmest July since continuous data started in Bristol in 1891 and rainfall was only 38.8% of the 30year average for the month. During the period December 2024 to July 2025 inclusive, the total rainfall was only 74% of the 30year average for this period.

Locally 2026 had even more exceptional (=extreme!) weather than 2025. April was the 5th warmest since records began in 1891, with rainfall only 47.21% of the 30year average. May was the third warmest on record, with rainfall 73.4%

of the 30year average. June had a wet and cool start, then a heatwave took temperatures to the highest ever recorded for the Totterdown monitoring site, i.e. since 1937. July broke many local meteorological records; it as the driest July for at least 145 years, the hottest average temperature since 1983, it was the sunniest month on record and had the highest average air pressure since these records began in 1974.

August was the driest month of any since June 1925. The average temperature of 20.7°C was 2.6°C above the 30year average (1991-2020) of 18.1°C for Bristol and it was the 4th warmest August since continuous records began in 1891.

With nearly 1800 recorded butterfly sightings, over an eight-year period, it's possible to draw some conclusions about butterfly habitat preferences, numbers and species compositions in Manor Woods Valley.

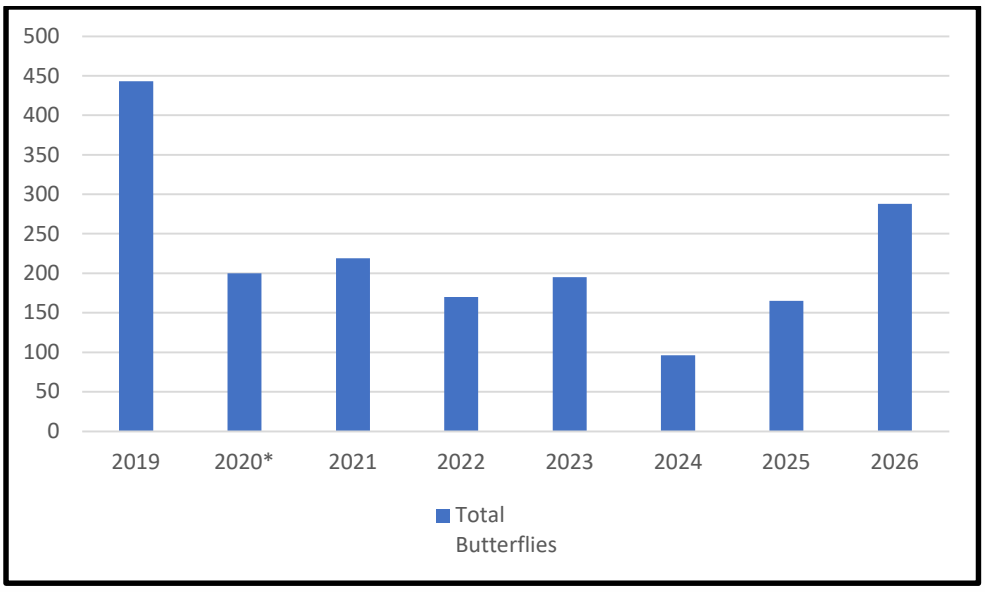
The first survey year, 2019, was a particularly good year for butterflies in Manor Woods Valley; with 443 being recorded in that year compared with 202 (adjusted for three visits) in 2020, 219 in 2021, 170 in 2022, 195 in 2023, a meagre 96 in 2024, and improved 165 in 2025 and an excellent 288 in the current year (see Table 5). The 2024, 2025 and current year's results from Manor Woods Valley reflect the national results described above.

Butterflies	Transect							
Year	1	2	3	4	5	6	7	Total Butterflies
2019	42	19	236	29	55	35	27	443
2020*	46	7	40	31	37	30	9	200
2021	36	19	69	20	33	28	14	219
2022	19	13	35	34	34	14	21	170
2023	18	11	96	31	18	9	12	195
2024	4	2	61	11	7	7	4	96
2025	16	4	51	15	19	29	31	165
2026	35	22	78	17	46	45	45	288
Total	216	97	666	188	249	197	163	1776
Transect length (m)	675	350	700	160	235	650	750	3520
Butterflies/100m	32	28	95	118	106	30	22	50

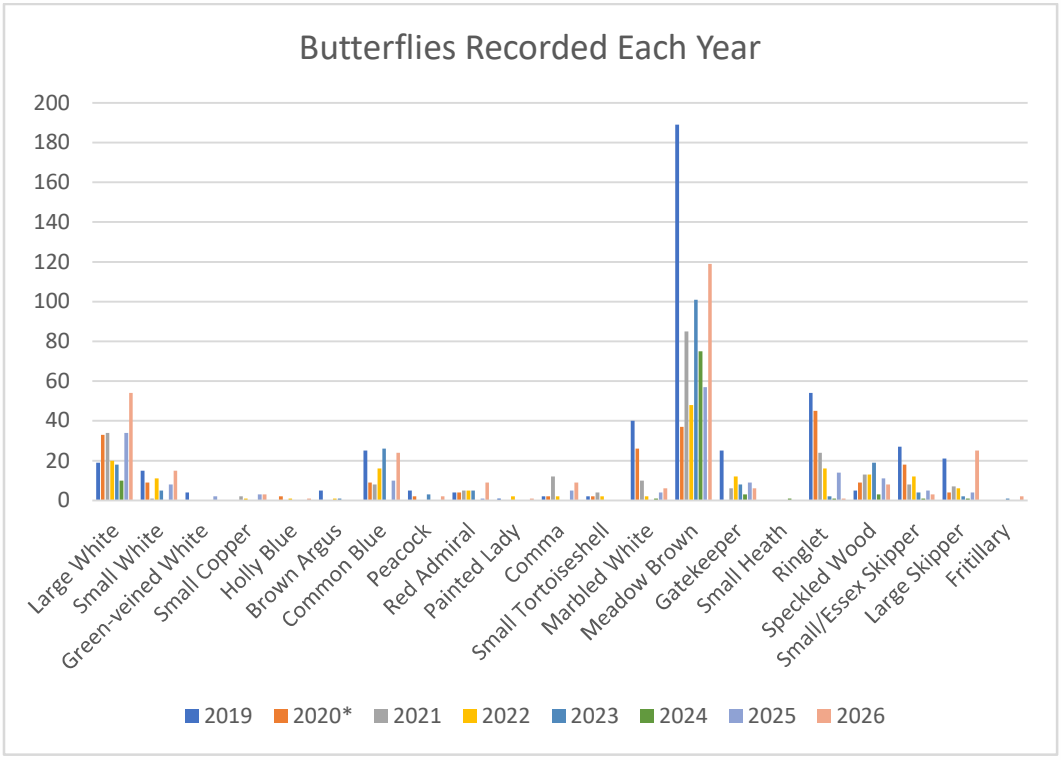
Table 5: Butterfly counts per transect per year, and per 100m length of transect

This 'good butterfly weather' in 2025 resulted in a remarkable recovery in overall butterfly numbers - to something like the level of the four years prior to 2024. The current year could have been an even better one than it was in Manor Woods Valley; however, the large Wildflower Meadow was mown between the last two survey dates so there was very little good butterfly habitat left in transect 3 (see Table 3 above) and the extremely hot and dry conditions burned-off many of the larval and adult food plants across the site before the

final survey (see Graph 1). Without these latter two factors, there is every chance that the current year could have been as good as 2019, when the main reason that that was such a good year for butterflies was due to the exceptional number of Meadow Browns present in the large Wildflower Meadow that year (see Graph 2).

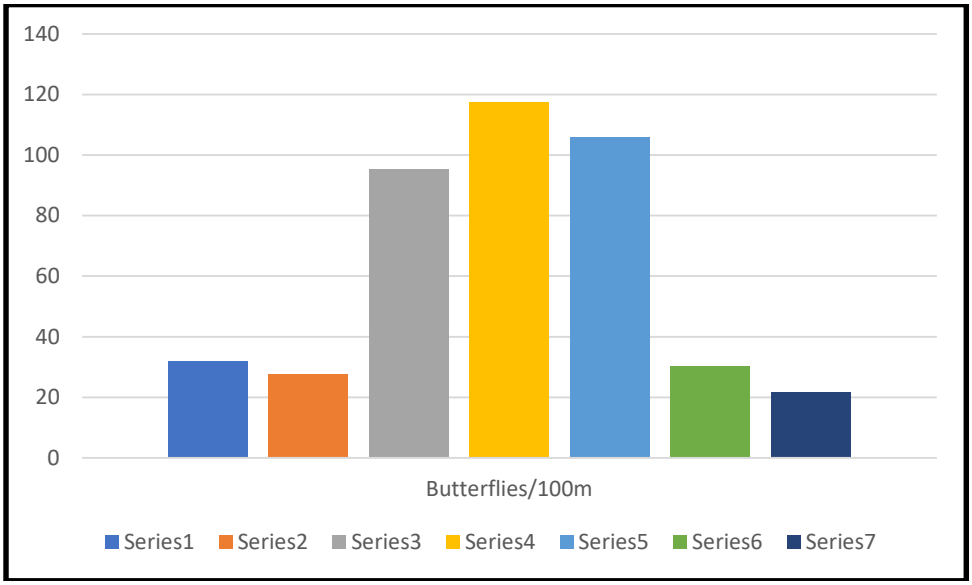


Graph 1: Total butterfly counts for each survey year



Graph 2

The survey transects vary in length; when this is factored-in and the number of butterflies per 100m of transect length is calculated, it is evident that across the period 2019 to 2026, overall transects 3, 4 and 5 are significantly more attractive to butterflies than the other transects (see Graph 3), These three transects cover the Wildflower Meadow, Rabbit Field and Manor Woods Orchard respectively, and demonstrate the importance of sunny flower-rich meadows to butterflies.



Graph 3: Butterfly counts per 100m of each transect over all survey years

Over the eight-year period 2019-2026, transects 1 and 6 have very similar relative butterfly levels. They have similar habitat types, i.e. predominantly woodland edges combined with regularly mown amenity grassland.

Transect 2 is mainly woodland and hence les sunny and cooler.

The lowest average count in transect 7 is no doubt due to the predominance of regularly mown amenity grass and a more shaded north-facing aspect along this transect.

The UK has 60 species of butterflies – 58 resident species and two regular migrants – the Painted Lady and Clouded Yellow. New species may be appearing due to the warming climate. Several resident species have a limited geographical distribution. 38 species have been recorded in the Bristol region since 2014 and reported to the BRERC online database. A new to Manor Woods Valley species, namely Small Heath, was recorded during 2024; therefore, 20 of the 38 locally occurring species - including one migrant, Painted Lady, have been recorded in Manor Woods Valley during the butterfly monitoring surveys (see Table 6).

	Year								
Species	**2019**	**2020***	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Large White	19	33	34	20	18	10	34	54	222
Small White	15	9	1	11	5	0	8	15	64
Green-veined White	4	0	0	0	0	0	2	0	6
Small Copper	0	0	2	1	0	0	3	3	9
Holly Blue	0	2	0	1	0	0	0	1	4
Brown Argus	5	0	0	1	1	0	0	0	7
Common Blue	25	9	8	16	26	0	10	24	118
Peacock	5	2	0	0	3	0	0	2	12
Red Admiral	4	4	5	5	5	0	1	9	33
Painted Lady	1	0	0	2	0	0	0	1	4
Comma	2	2	12	2	0	0	5	9	32
Small Tortoiseshell	2	2	4	2	0	0	0	0	10
Marbled White	40	26	10	2	0	1	4	6	89
Meadow Brown	189	37	85	48	101	75	57	119	711
Gatekeeper	25	0	6	12	8	3	9	6	69
Small Heath	0	0	0	0	0	1	0	0	1
Ringlet	54	45	24	16	2	1	14	1	157
Speckled Wood	5	9	13	13	19	3	11	8	81
Small/Essex Skipper	27	18	8	12	4	1	5	3	78
Large Skipper	21	4	7	6	2	1	4	25	70
Fritillary	0	0	0	0	1	0	0	2	3
Total	443	202	219	170	195	96	167	288	1780

Table 6: Butterfly counts for all survey years

Two resident species, Brimstone and Orange Tip, occur frequently in Manor Woods Valley, but their peak numbers tend to pass before the summer survey window opens. An additional migrant species, the Clouded Yellow, has been recorded twice since 2019, but not on survey occasions. Therefore, a total of 23 of our 38 locally occurring resident or regular migrant butterfly species are confirmed as having been recorded in Manor Woods Valley since 2014.

On one occasion in each of two of the survey years a large orange butterfly was seen to fly across the transect route, near the interceptor. These were probably Silver-washed Fritillaries. Further survey work may reveal a colony on the site.

There are a few butterfly species that have not been recorded in Manor Woods (since 2019), but which could occur. These include the Wall which favour open habitats, and various Hairstreaks which favour woodlands and woodland edges.

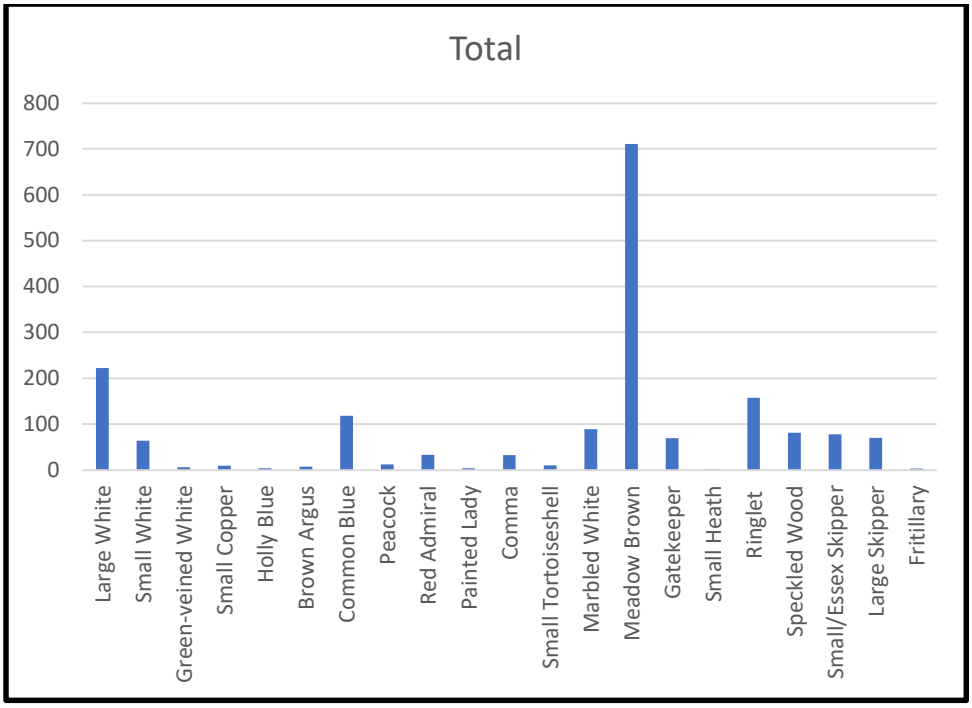
A dedicated Purple Hairstreak survey carried out in August 2021 failed to find any of this species; however, during the current year a dead Purple Hairstreak was found in a greenhouse within 500m of Manor Woods Valley.

A third of the butterfly species that have been recorded in Manor Woods Valley have no particular habitat preferences, a third are grassland specialists and a third are scrub or hedgerow (including woodland edge) specialist. Only one recorded species, the Speckled Wood, actively prefers woodlands. This breakdown reflects the range of habitats that occur on the site and likely under-recording of woodland specialist species (see Table 7).

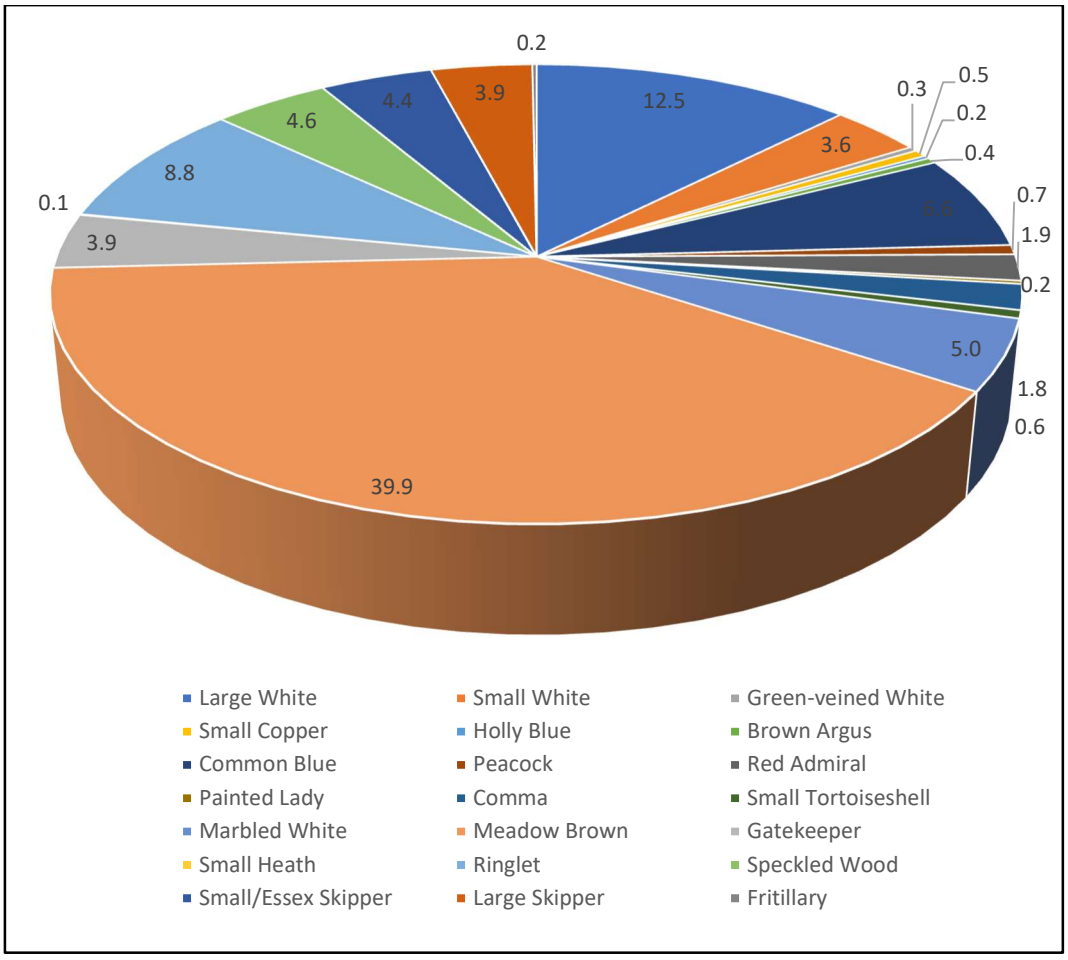
	Habitat			
Species	**Flowery Grassland**	**Scrub/ Hedges**	**Woods**	**All**
Large White				✓
Small White				✓
Green-veined White				✓
Small Copper		✓		
Holly Blue		✓		
Brown Argus	✓			
Common Blue	✓			
Peacock				✓
Red Admiral				✓
Painted Lady				✓
Comma		✓		
Small Tortoiseshell		✓		
Marbled White	✓			
Meadow Brown	✓			
Gatekeeper		✓		
Small Heath	✓			
Ringlet		✓		
Speckled Wood			✓	
Small/Essex Skipper	✓			
Large Skipper	✓			

Table 7: Butterfly species habitat preferences

A comparison of the numbers of each butterfly species recorded each year demonstrates the abundance of Meadow Browns on the site (see Graph 4). The aforementioned species composes nearly 40% of all butterfly records for the site (see Pie Chart 1).



Graph 4: Total butterflies of each species recorded during 2019-26 incl.



Pie Chart 1: Total butterflies species composition 2019-26 incl.