

Manor Woods Valley Local Nature Reserve



Butterfly Report

2020

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1. Introduction and Methodology

Environmental science student and Manor Woods Valley Group member, Rachael Harvey, undertook three butterfly surveys in Manor Woods Valley Local Nature Reserve during the summer of 2019 and two during 2020. In order to facilitate comparisons between surveys within the years, and between years, the surveyor established and followed seven transects within the site in 2019 (see figure 1) and followed the same transects in 2020.

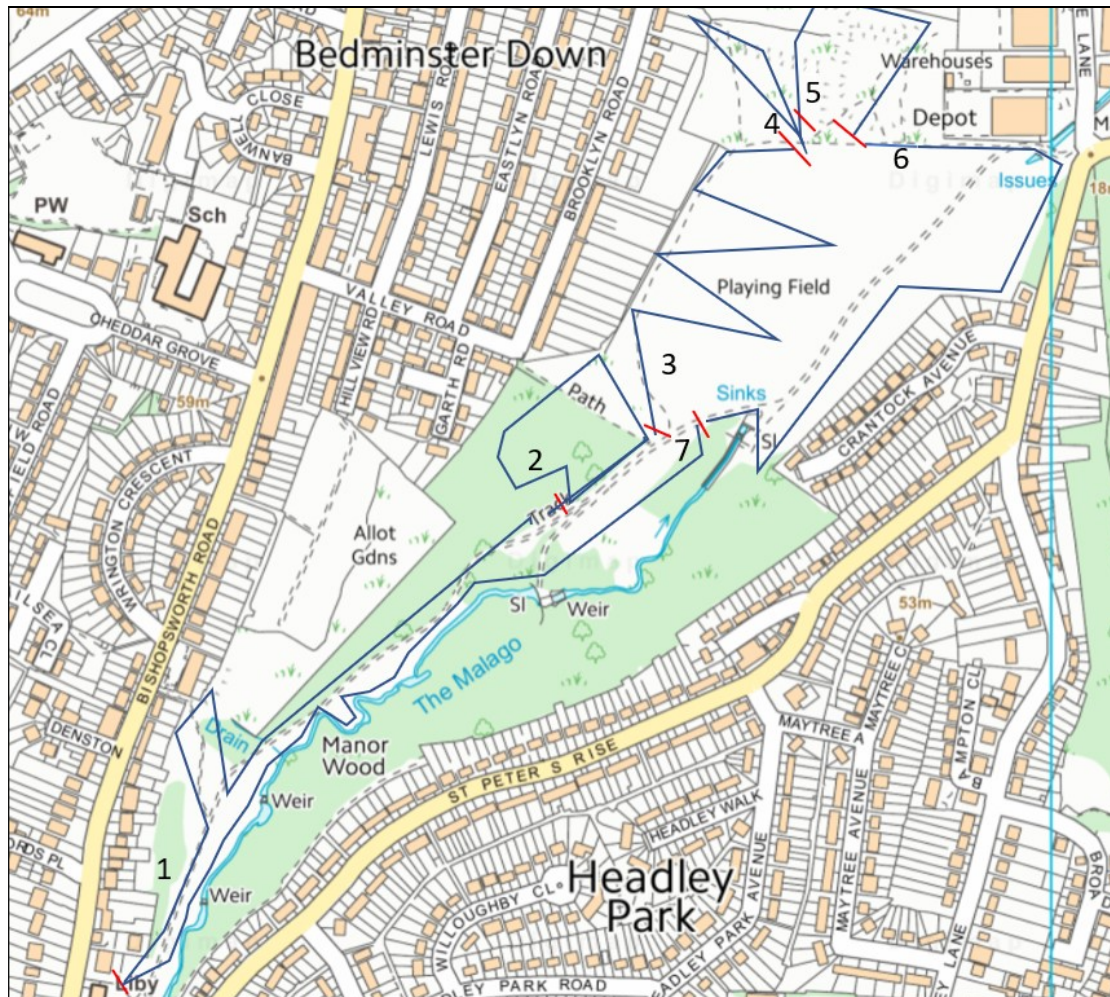


Figure 1: Butterfly survey transects within Manor Woods Valley

The numbers of each butterfly species within transects were noted on to field recording forms. These records form the basis of this report. All 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 2019 and 2020.

2. Results

Two survey visits were made in 2020.

The first survey was conducted during the mid-afternoon of 1st July, under 8/10 cloud cover. A total of 70 butterflies of ten species were recorded. The counts are summarised in table 1.

Species	Transect							Total
	1	2	3	4	5	6	7	
Common Blue			1			1		2
Holly Blue							1	1
Large White	4	1	2	3	2		1	13
Marbled White			4	5	5	3		17
Meadow Brown	2		6					8
Peacock					1			1
Red Admiral						1		1
Ringlet	5	2	1	3	2	3	1	17
Large Skipper	2							2
Small/Essex Skipper			2	3	3			8
	13	3	16	14	13	8	3	70

Table 1: Butterfly counts on 1 July 2020

The second survey was conducted during the late-morning of 11th July, under 2/10 cloud cover. A total of 65 butterflies of twelve species were recorded. These counts are summarised in table 2.

Species	Transect							Total
	1	2	3	4	5	6	7	
Comma	1							1
Common Blue	2		2					4
Large White	3	2	2			1	1	9
Marbled White				1				1
Meadow Brown	2		6	2		5	2	17
Red Admiral	2							2
Ringlet	3			1	7	2		13
Large Skipper				1				1
Small/Essex Skipper			1	1	1	1		4
Small Tortoiseshell	1							1
Small White	3			1	1	1		6
Speckled Wood	1				3	2		6
	18	2	11	7	12	12	3	65

Table 2: Butterfly counts on 11 July 2020

The total number of butterflies recorded in each transect are summarised in table 3.

No. Butterflies	No. Species	Transect							Total
		1	2	3	4	5	6	7	
01-Jul	10	13	3	16	14	13	8	3	70
11-Jul	12	18	2	11	7	12	12	3	65
Total		31	5	27	21	25	20	6	135

Table 3: Total butterflies in each transect 2020

Casual records of day flying moths during the 2020 surveys included a hawk moth, 6-spot Burnet Moths and a Cinnabar Moth.

Other casual records include numerous Holly and Common Blues, including a third generation of the latter in early October, and Marbled Whites in the Orchard Triangle (in transects 4 and 5). In early October there was a notable sighting of a Clouded Yellow in the Orchard Triangle and adjoining part of the Wildflower Meadow (see cover photo). This individual, of this highly migratory species, may have emerged from a pupa in Southern Europe or even North Africa!

3. Discussion

Since 1976, the unsmoothed habitat specialist butterflies index has fallen by 68% and for species of the wider countryside has fallen by 30% (<https://jncc.gov.uk/our-work/ukbi-c6-insects-of-the-countryside/>).

There were fewer butterflies recorded in Manor Woods Valley in 2020 compared with 2019. At first glance this may reflect the aforementioned trend, but we only have two year's worth of survey data and large fluctuations in numbers between years are typical features of butterfly populations, principally in response to weather conditions; therefore no conclusion can yet be reached with regards to between year population trends.

In 2019 it was clear that the Wildflower Meadow (transect 3), was especially important for butterflies especially Meadow Browns, Marbled Whites and Ringlets (see table 4). This was not reflected in the 2020 data, when all of the meadow areas had similar numbers of butterflies, with Meadow Browns and Ringlets predominating.

No. Butterflies	Transect							Total
	1	2	3	4	5	6	7	
07-Jun	6	1	67	8	14	1	2	99
06-Jul	16	10	104	6	29	14	10	189
25-Jul	20	8	65	15	12	20	15	155
Total	42	19	236	29	55	35	27	443

Table 4: Total butterflies in each transect 2019

Meadow Browns occur in grasslands, including downland, heathland, coastal dunes, undercliffs, hay meadows, roadside verges, hedgerows, waste ground and woodland rides and clearings, Ringlets in woodland rides and glades and

damp grassland where grasses are lush and tall (it likes damp situations with partial shade), and Marbled Whites in unimproved grassland with tall sward especially chalk or limestone grasslands but other habitats such as; woodland rides and clearings, coastal grassland, road verges and railway embankments are also used (<https://butterfly-conservation.org/>).

The common factor across these three species is the importance of tall grasses. It is to be hoped that the introduction of a coppicing regime and tree planting will lead to an increase in butterfly numbers and species that prefer woodland edges and areas of ruderal vegetation.