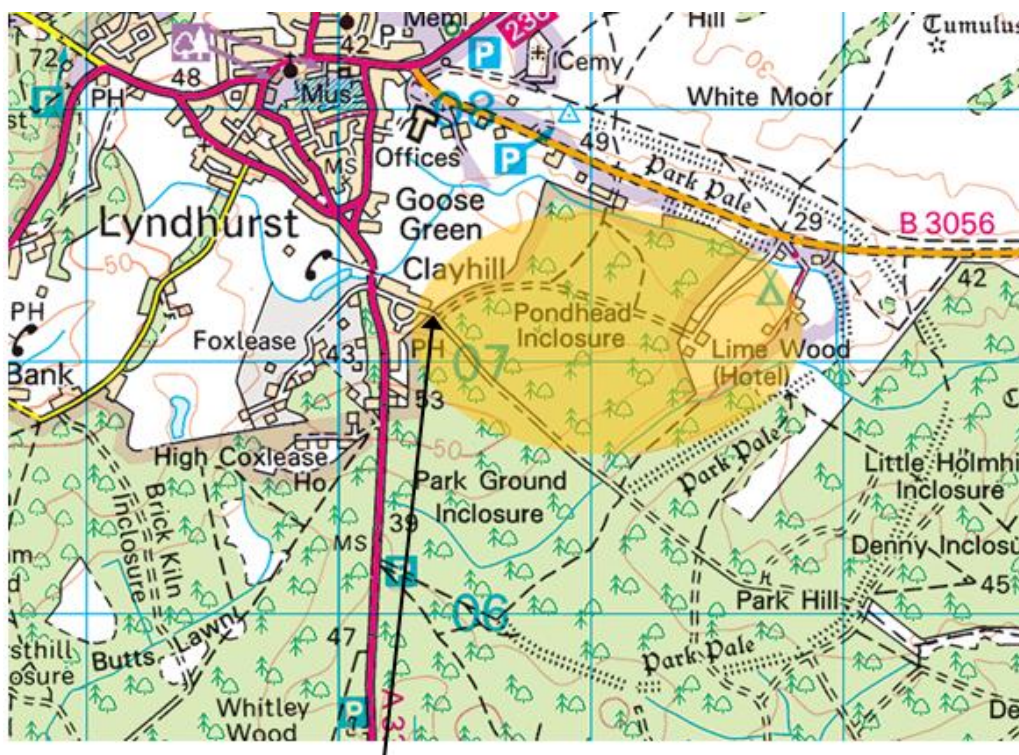


Team Leader:	Trevor Bumfrey	
Transect Team:	Maggie Adams	Sheila Green
	Sue Austin	Mike Green
	Linda Bradshaw	Phil Morgan

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## Location:



Park at end of Beechen Lane

## Part 1 – Introduction, Acknowledgements & Transect Route

### A) Introduction

The following report summarises the findings of the weekly butterfly transects undertaken by the New Forest Transect Group in Pondhead Wood during 2019.

The route was established in 2015.

Pondhead Conservation Trust have been provided with the full data in order that they can complete their own more detailed analysis.

Recording protocols are in accordance with UKBMS Guidelines.

By adopting Butterfly Conservation terminology, the term 'index' is used throughout though, for most purposes, this is synonymous with 'count'.

A more detailed analysis, together with the raw data, is available to Pondhead Conservation Trust, Group Members and Landowners on request.

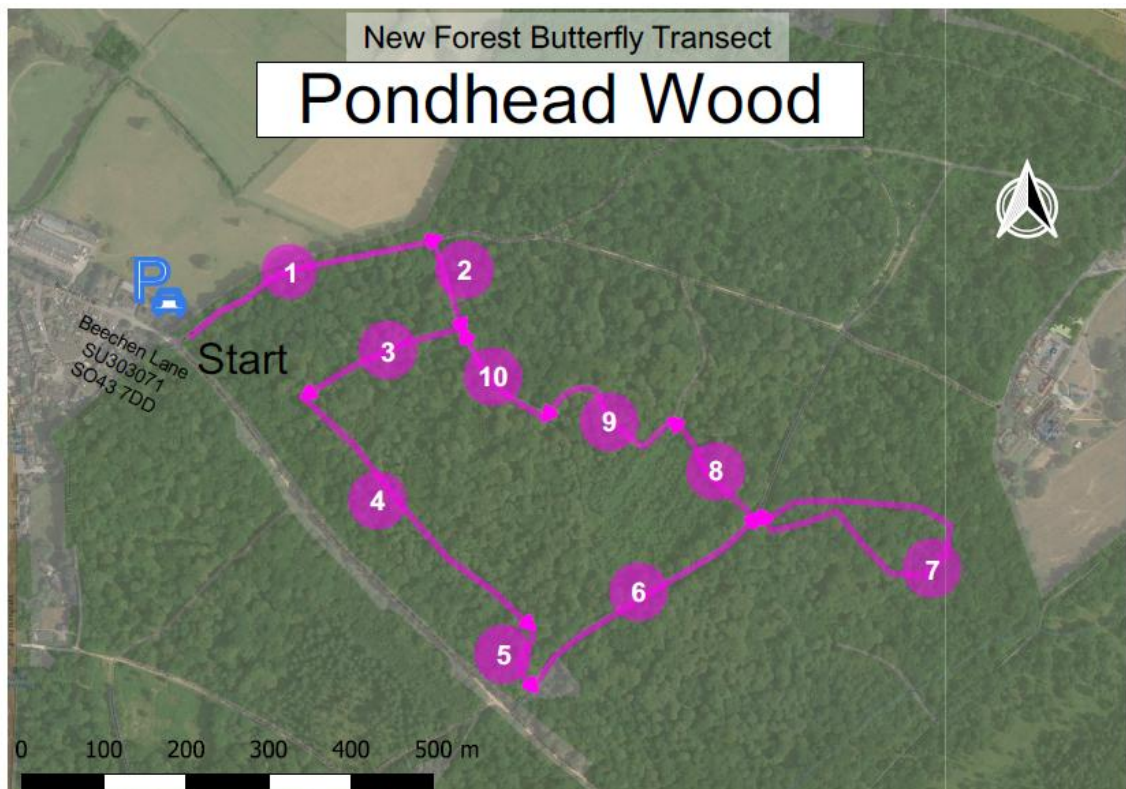
### B) Acknowledgements

This report was compiled by Bob Annell, with the assistance of Derek Hankinson, Trevor Bumfrey and checked by Jean Annell.

We are grateful for the support of Zoe Cox, Christine Wilks & Alan Stride from Forestry England, also the Pondhead Conservation Trust.

The images have been supplied by team members.

### C) Transect Route



## **Part 2 - Overall Summary**

2019 was a good year for butterfly numbers on this transect, with a 16% increase in abundance to give a similar total to 2017, although 44% of them were recorded in section 6, which is a very sunny, wide, grass ride.

The main contributors to the increase were Gatekeeper, Ringlet and the Skippers which exhibited their highest abundance since records began.

Speckled Wood, Silver-washed Fritillary and Meadow Brown were seen in good numbers.

White Admiral and Large Whites showed a decrease in numbers from the peak in 2018.

## Part 3 - Flight Periods

2019 Flight Periods																											
Week Number	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	Totals
Week Commencing	1/4	8/4	15/4	22/4	29/4	6/5	13/5	20/5	27/5	3/6	10/6	17/6	24/6	1/7	8/7	15/7	22/7	29/7	5/8	12/8	19/8	26/8	2/9	9/9	16/9	23/9	
Small/Essex Skipper													6		7	14	13	3	3								46
Large Skipper														34	15	5	10	4									68
Brimstone	7	4	15	3	1	1	2									1		4	2								40
Large White							5									5	1						2				13
Small White			2	1											1			4				1	3				12
Green-veined White					2									2													4
Orange-tip								2				2															4
Holly Blue																				2		1		2			5
White Admiral													2	7	2												11
Red Admiral									3			1	1			1								1			7
Painted Lady														1													1
Peacock				1			1									1											3
Comma															5												5
Silver-washed Fritillary												1	1	32	4	20	16	6	5								85
Speckled Wood		3	16	11	9	5	6	2	7	9	8	2	3	13	1	7	17	17	9	9	10	15	8	21	17	6	231
Marbled White															1												1
Gatekeeper												1			5	59	53	39	21	2	1						181
Meadow Brown												10	30	85	20	8	9	9	2	1							174
Ringlet														29	72	90	49	11	3								254
DIFFERENT SPECIES	1	2	3	4	3	2	4	2	1	2	1	6	6	8	11	11	9	8	7	4	2	3	3	3	1	1	19
TOTALS - 2019	7	7	33	16	12	6	14	4	7	12	8	17	43	203	133	211	172	93	45	14	11	17	13	24	17	6	1145
TOTALS - 2018		6	10	0	4	6	15	2	3	21	19	47	96	140	179	152	88	47	22	26	38	13	14	15	22	1	986
TOTALS - 2017	7	13	0	16	16	4	6	3	5	5	5	32	102	218	190	301	68	39	29	19	12	21	11	4	2	10	1138
	Hants Flight Periods Alan Thornbury							Transect record within normal Hants flight period										Transect record outwith normal Hants flight period									

It's not considered significant when a species is observed just outside its perceived normal flight period, as local weather conditions can influence the emergence dates. It's also noticeable that no observations were made during a large part of the expected flight period.

Apart from week 1, Speckled Wood were recorded in every week.

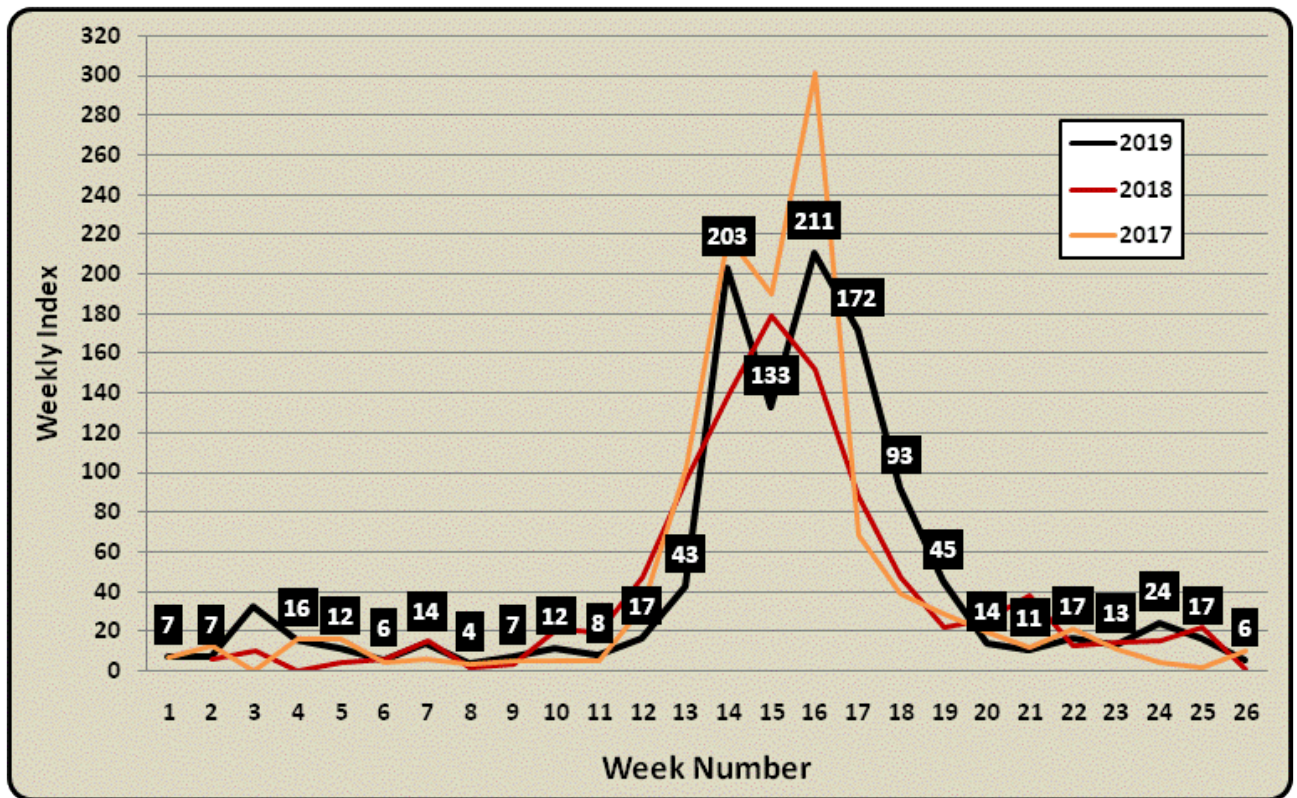
The majority of Brimstone were recorded at the start of the season as overwintering adults.

All of the above observations are in line with those in Alan Thornbury's Hampshire Flight Chart

[www.purple-emperor.co.uk](http://www.purple-emperor.co.uk)

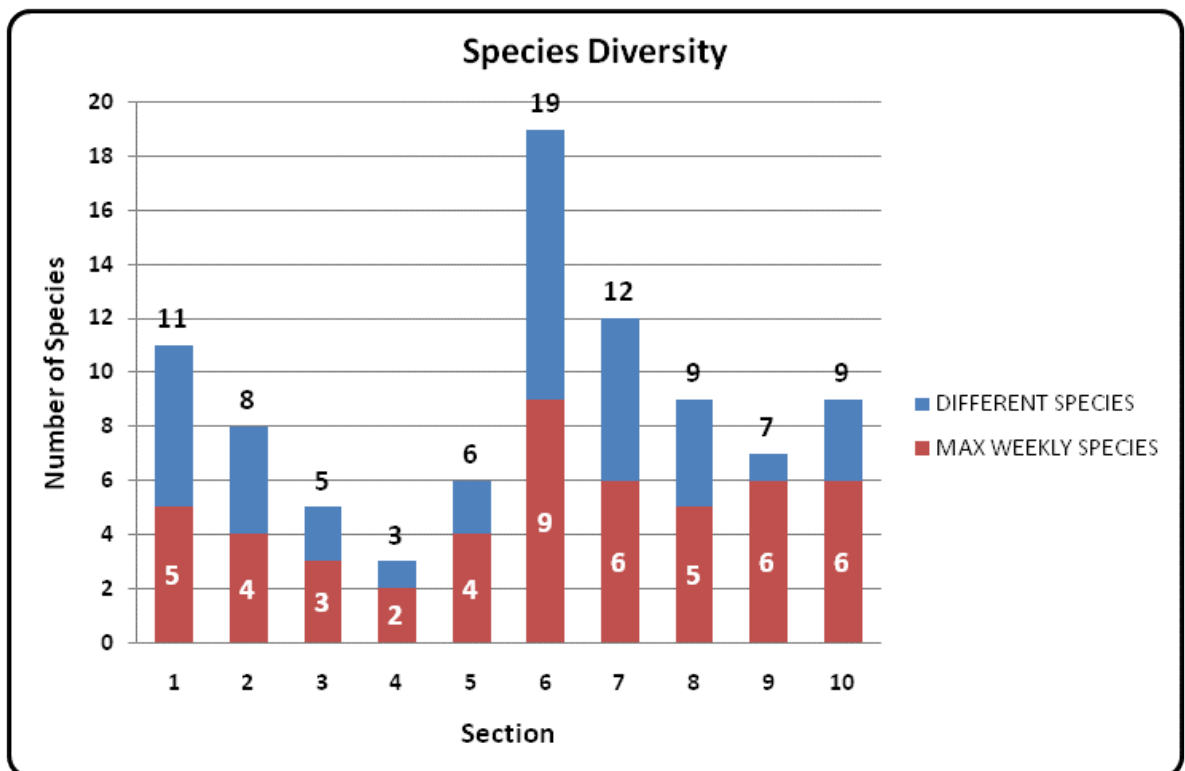
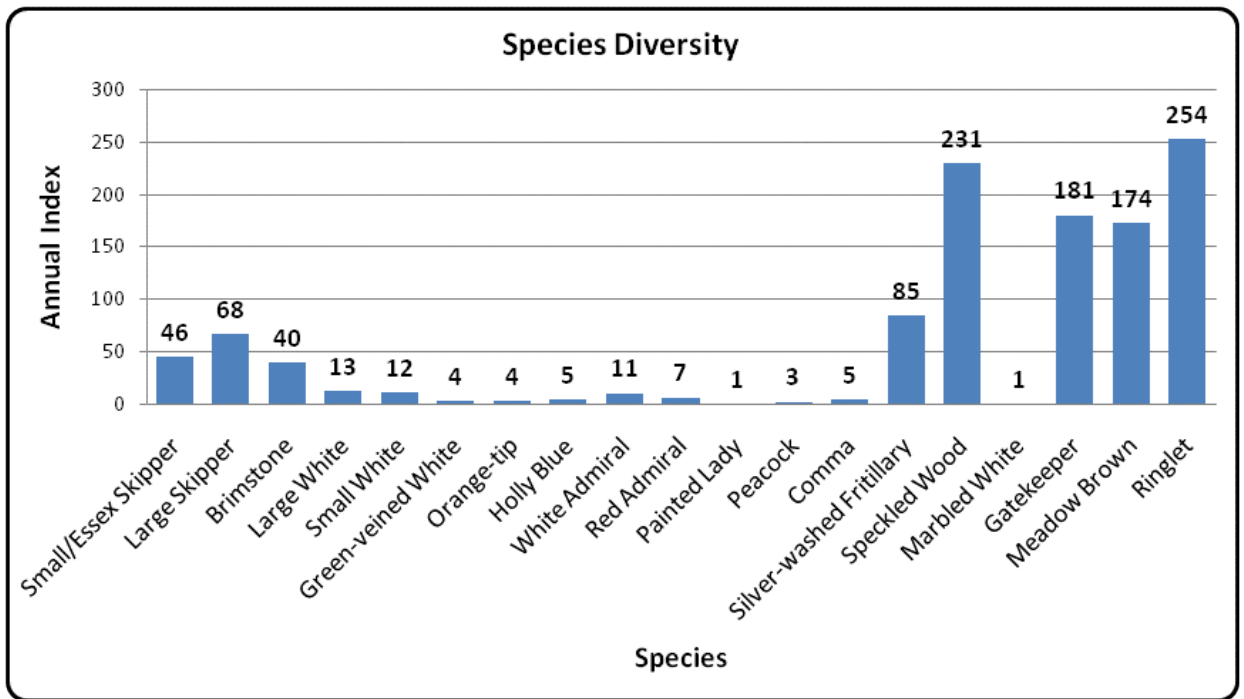


## Part 4 - Weekly Indices

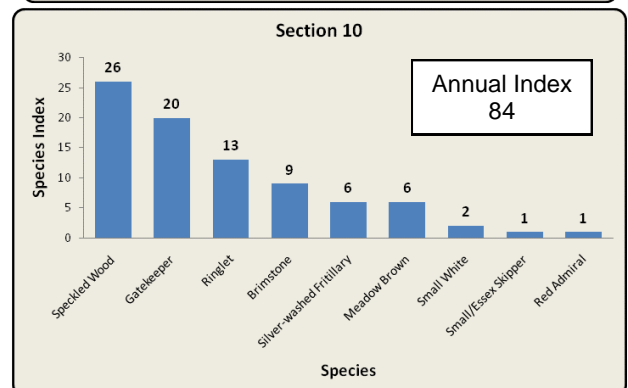
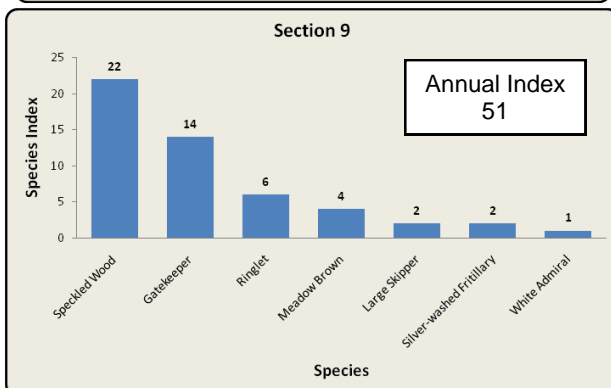
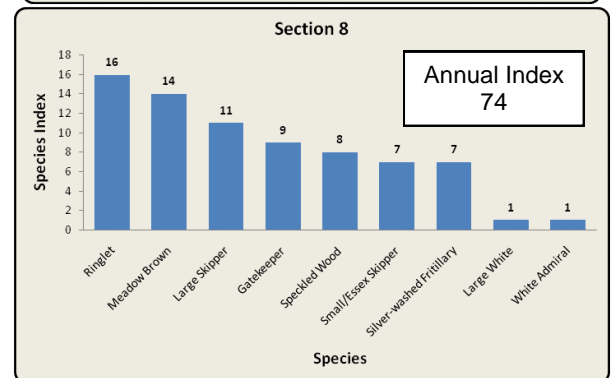
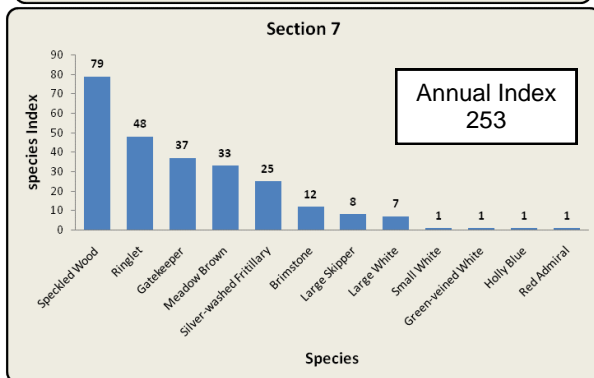
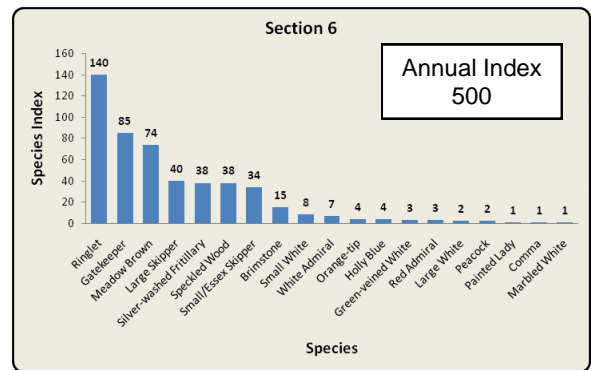
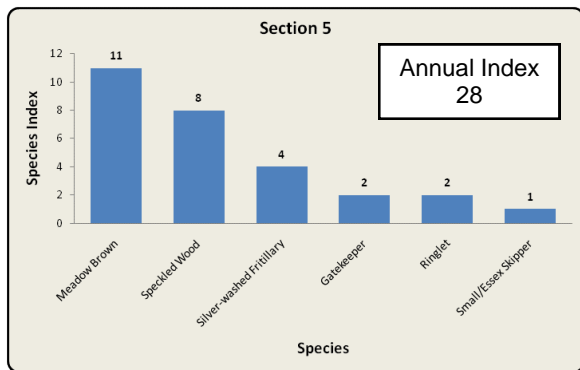
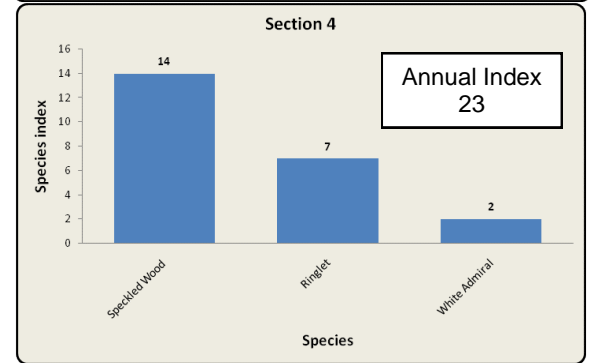
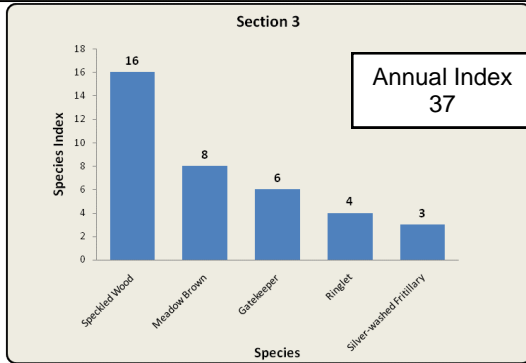
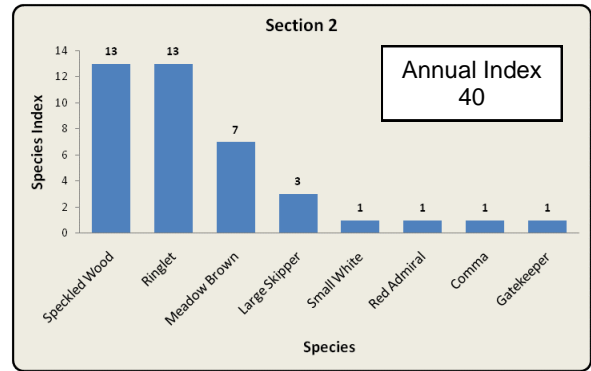
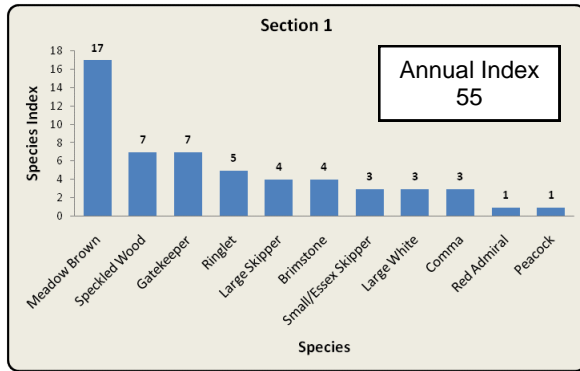


The summer peak occurred in Week 14 due to the emergence of Ringlet and Large Skippers. This increase in numbers was also seen in the same week last year. A second peak occurred in Week 16 with the emergence of Gatekeeper.

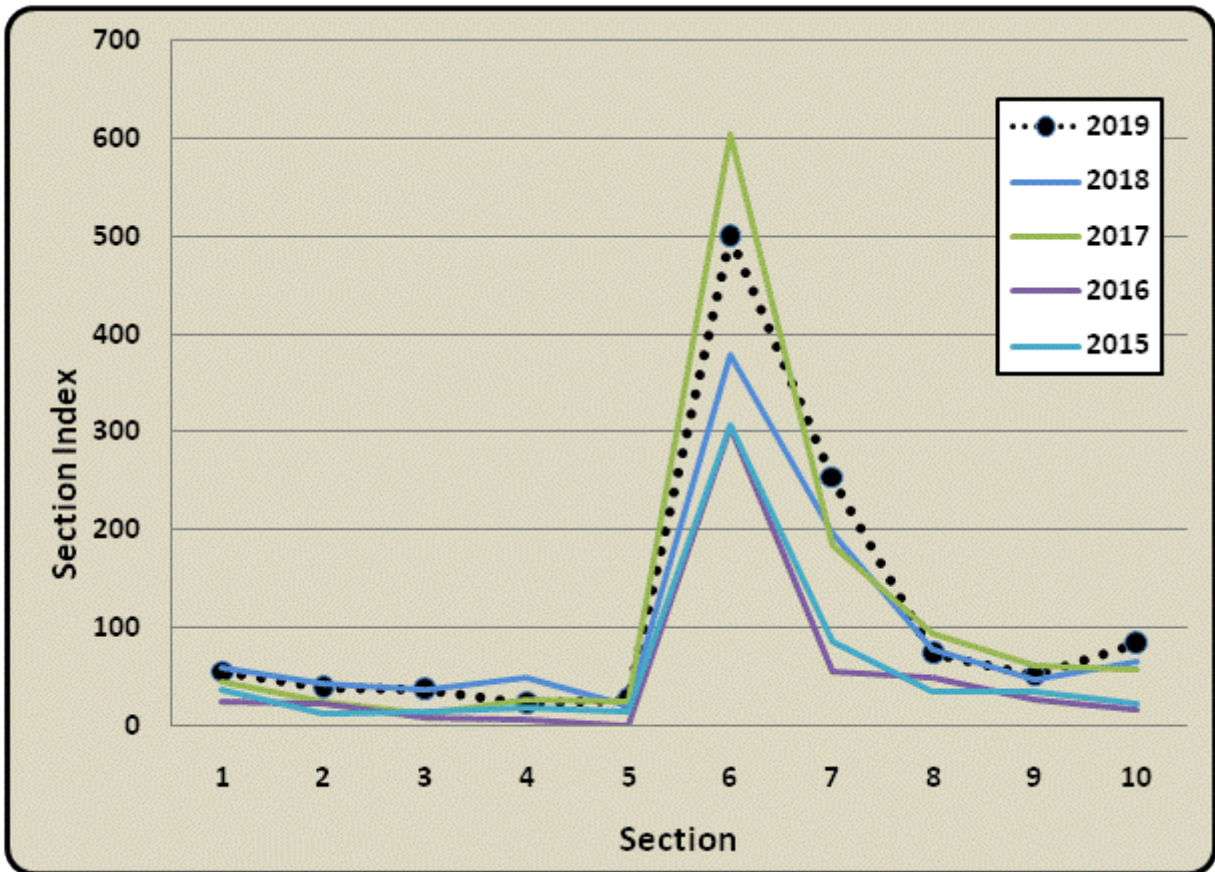
## Part 5 - Species Overview



## Part 6 - Species per Section



## Part 7 - Annual Comparison Indices



Much of this transect goes through shady woodland.

To encourage more butterflies conservation work was undertaken during the winter of 2017/18 to widen Sections 3 and 4 and create some sunny glades. The count was maintained in Sections 3 and 5, but declined in section 4 from the maximum seen in 2018.

The Browns increased in abundance in Section 7, Stokes Close, which was cleared a few years ago and has been left undisturbed since then.

Only White Admiral, Speckled Wood and Ringlet were recorded in Section 4 this year leading to a decrease in species diversity compared to 2018, but more in line with that seen in previous years.

Annual Species Diversity										
Year	Section									
	1	2	3	4	5	6	7	8	9	10
2015	12	4	3	6	6	17	12	11	10	6
2016	8	6	4	3	1	15	9	11	11	7
2017	9	9	3	4	7	19	10	10	6	15
2018	11	11	6	10	6	14	12	11	9	13
2019	11	8	5	3	6	19	12	9	7	9



## Part 8 - Annual Species Variation

Highest species counts/annum highlighted by red shaded box

↓ indicates decrease

↑ indicates increase

= indicates no change

Species	2015	2016	2017	2018	2019	Diff 2018-2019	
Small Skipper	0	0	1	0	0	0	=
Small/Essex Skipper	31	16	37	31	46	+15	↑
Large Skipper	14	22	52	38	68	+30	↑
Brimstone	42	45	44	47	40	-7	↓
Large White	24	17	18	37	13	-24	↓
Small White	15	11	9	7	12	+5	↑
Green-veined White	4	10	10	1	4	+4	↑
Orange-tip	3	0	2	0	4	+4	↑
Small Copper	0	0	1	0	0	0	=
Common Blue	0	0	1	1	0	0	=
Holly Blue	12	10	0	7	5	-2	↓
White Admiral	0	2	6	31	11	-20	↓
Red Admiral	6	5	4	0	7	+7	↑
Painted Lady	0	0	0	0	1	+1	↑
Small Tortoiseshell	0	0	1	0	0	0	=
Peacock	13	2	2	3	3	0	=
Comma	8	0	1	3	5	+2	↑
Pearl-bordered Fritillary	0	2	0	0	0	0	=
Dark Green Fritillary	0	0	2	0	0	0	=
Silver-washed Fritillary	30	24	91	92	85	-7	↓
Speckled Wood	106	84	177	259	231	-28	↓
Marbled White	2	0	1	0	1	+1	↑
Gatekeeper	80	59	172	90	181	+91	↑
Meadow Brown	117	89	267	138	174	+36	↑
Ringlet	74	127	239	165	254	+89	↑
TOTALS	581	525	1138	986	1145	+159	↑
DIFFERENT SPECIES	17	16	22	16	19	+3	↑

The difference in abundance from 2018 to 2019 has been included for interest, but due to the nature of transect recording, care must be taken when drawing any conclusions. This is especially true when low numbers have been recorded.

A single Painted Lady found its way into this transect following the increased numbers of this species making it across the Chanel. Red Admiral and a single specimen of Marbled White led to an increase in diversity compared to 2018.

Gatekeeper, Ringlet and the Skippers exhibited their highest abundance since records began.

Speckled Wood, Silver-washed Fritillary and Meadow Brown were seen in good numbers.

White Admiral and Large Whites showed a decrease in numbers from the peak in 2018.

## Appendix 1 - Weather

### Southern England Weather Oct 2018 - Sept 2019

October 2018 experienced close to average rainfall with a wider than normal variation between max and min temperatures due to the clear skies. November was warmer than average with average rainfall.

December, January and February temperatures were higher than average with cold days at the end of January and the beginning of February. January and February had more sunshine than normal with February being the second warmest on record. December rainfall was close to average with January and February much drier than average.

March and April were warmer than average with May close to the average temperature. Sunshine was slightly higher than average. March was very unsettled and wetter than average with April and May drier.

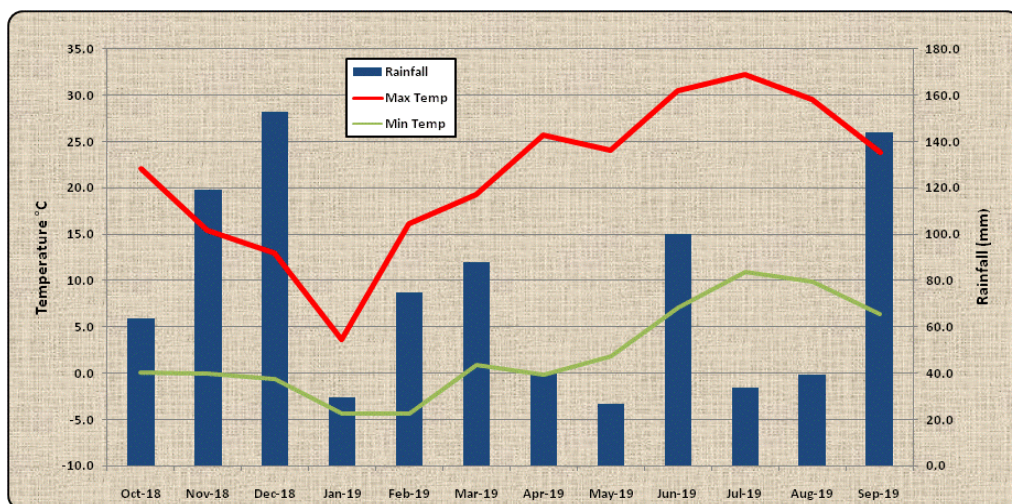
June was cooler and wetter than average, with July more settled and warmer than average. August was again wet but with some long sunny and warm periods. Sunshine levels were lower than average in June but increased through July and August.

September started wet but settled to give a warm and sunny month.

This was the twelfth warmest and seventh wettest summer since 1910.

<http://www.metoffice.gov.uk/climate/uk/summaries>

### Local Weather - Southampton



<http://www.southamptonweather.co.uk/wxhistory.php>

### Transect Weather

Week No	1	2	3	4	5	6	7	8	9	10	11	12	13
Wind Direction	E	S	NE	SE	SE	S	E	NW	SE	SW	SW	E	NE
Wind Force	1	1	1	1	1	1	1	1	1	3	1	1	3
Temperature °C	13	13	22	17	13	14	14	18	21	18	15	21	21
% Sun	100	69	100	100	62	100	100	100	100	99	61	95	100

Week No	14	15	16	17	18	19	20	21	22	23	24	25	26
Wind Direction	N	SW	NE	SW	SW	W	W	SW	SW	NW	NE	SE	SW
Wind Force	1	1	1	1	0	2	4	1	1	1	2	0	2
Temperature °C	19	23	20	20	20	21	20	19	23	18	18	18	18
% Sun	100	74	99	0	36	97	87	3	39	92	100	100	49

## Appendix 2 - Photographs



Holly Blue (f) – Phil Morgan



Green-veined White – Phil Morgan



Large Skipper (m) – Trevor Bumfrey



Meadow Brown (m) – Trevor Bumfrey



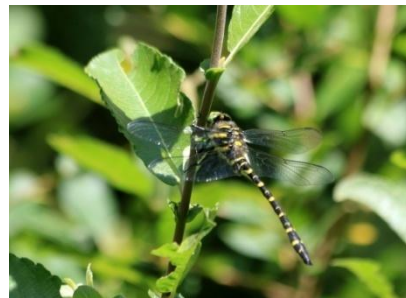
White Admiral – Trevor Bumfrey



Silver-washed Fritillary – Trevor Bumfrey



Speckled Wood – Trevor Bumfrey



Golden-ringed Dragonfly – Trevor Bumfrey



Black/Yellow Longhorn Beetle – Trevor Bumfrey



Greater Stitchwort – Trevor Bumfrey