

BARTON COMMON TRANSECT REPORT 2023



Team Leader:	Trevor Bumfrey	
Transect Team:	Mike Barnes Terry Clark	Dave Hunt Mick Long
	Anne Gorman	Eric & Tani Read

Contents:

Section	Title	Page
1	Introduction and Transect Background	2
2	Season Highlights	3
3	Weekly Flight Periods and Indices	4
4	Section Species and Comparison Indices	5
5	Annual Species Variation	6
6	Moths recorded on Transect	7

Acknowledgements

Thanks go to the transect team, listed above, for their dedication in undertaking walks and identifying and recording the butterflies and moths seen throughout this year's monitoring period.

Many thanks also to those listed below for allowing walks to take place and for their support in producing this report.

New Milton Town Council:	Joanna Hayward
Transect History:	John French
Report Preparation:	Bob Taylor/John French
Report Narrative:	Trevor Bumfrey
Image manager:	Trevor Bumfrey
Moths Summary:	Jacky Adams
Transect Map:	Neil Smith
UKBMS Database Entry:	Trevor Bumfrey

Section 1 – Introduction and Transect background

This report summarises the findings of the weekly butterfly transects undertaken at Barton Common in 2023, providing comparison with previous years' walks where possible. It is designed to provide feedback to the landowner and land managers who have allowed this transect walk to take place and to the volunteers who have carried it out. The transect has been walked since 2013.

Monitoring walks have been carried out using the Fixed-route (Pollard Walk) transect methodology as promoted through the United Kingdom Butterfly Monitoring Scheme (UKBMS). This involves walking a fixed route each week during the recording season which runs for 26 weeks from 1st April to 30th September, recording all butterflies within a 5m cube ahead of the walker. This produces an index for the numbers of each butterfly species seen, which may also be referred to in the report by various terms, such as 'count' or 'record'. Adopting this methodology means that it is possible to make a meaningful comparison of species indices and, over time, identify trends in their abundance. A more detailed analysis, together with the raw data is available to Group Members and Landowners on request.

Transect walkers are also encouraged to record any moths seen on transect that they can identify in the field, in the same way as they do for butterflies. They may also record any other sightings of note which can be entered into UKBMS and are passed to the relevant conservation body.

Transect Description

Barton Common transect is situated south of the New Forest on the cliff top adjacent to a golf course and managed by New Milton Town Council. Conservation activities started in 2015/6 to return the common to two thirds grassland and one third scrub and woodland. That habitat ratio is maintained by grazing ponies and a conservation group which was established in the Autumn of 2022. 5 sections traverse open grasslands, 2 sections (6 and 8) go through mature woods, 1 section (3) is a scrub lined track across the golf course and 1 (4) is a short section on the cliff top.

New Forest Butterfly Transect Barton Common 7 OS Grid Ref. 8 State State 9 1 2 2 3 4 3 4 3

Transect Route

Section 2 – Season Highlights

2023 Weather Summary

The winter was marginally milder and drier than average, but with alternating cold, settled spells and milder, wetter weather. However, February was the driest since 1993 whilst the southern half of the UK had more than double the average March rainfall. March and April alternated between colder and milder spells of weather, with a cold spell in March and a chilly spell in late April. Spring temperatures were slightly above average, mainly due to a warm May. June was warm, dry, and settled with high pressure dominating. It was the UK's warmest and fourth sunniest June on record. In contrast, July and August were unsettled. July was very cool, dull and was the sixth wettest July on record. August included two named storms, Antoni and Betty, bringing unseasonably wet and windy weather. September temperatures were above average, with the maximum temperature 3.5° C above average. 2023 and 2006 were the equal-warmest Septembers since 1884

The 2023 NFBTG Season

2023 was a record year in terms of overall numbers recorded. 68948 exceeded the 67567 recorded in 2019, although the density was higher in 2019 as less transects were walked. This represents a 40% increase over 2022. Much of the increase is down to a very warm dry June which resulted in large numbers of summer browns. It also meant that less common summer species such as White Admiral had a spectacular year. We also recorded our first Purple Emperors since 2002 and Red Admirals were everywhere in the late summer. Record numbers of Meadow Brown and Gatekeeper made up nearly 50% of the total and both Small/Essex and Large Skippers had record years. Brimstone, Peacock did well in spite of the cool spring and Brown Argus and Small Copper also thrived after a poor 2022. On the down side Small Tortoiseshell, Common Blue and Grayling had poor years partly due to the cool, wet July and August. Most surprising was that Ringlet were 36% down on average and we barely recorded 50% of the 2022 total.

2023 Highlights

The overall abundance was 20% higher than the average and 30% higher than 2022, but the 10 year trend shows a decline.

The summer peak was bimodal in nature caused by the fluctuating numbers of Gatekeeper recorded.

Section 3, the scrub lined path across the golf course, had the highest abundance.

Gatekeeper were the dominant species with the highest number recorded since records began. Red Admiral and Holly Blue also had their highest abundance since 2013.









Essex Skipper

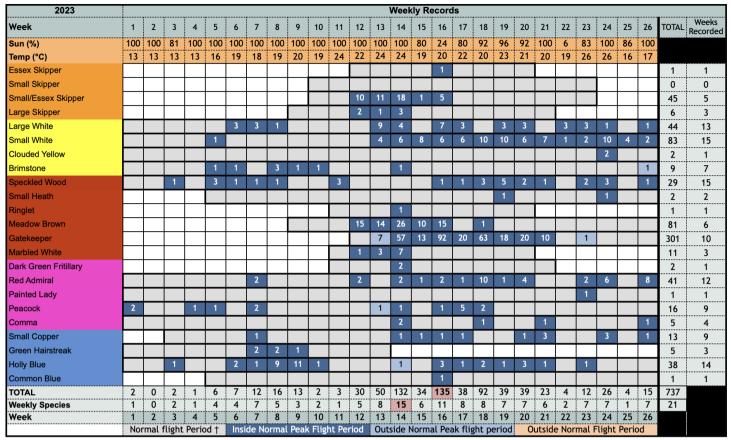
Gatekeeper

Green Hairstreak

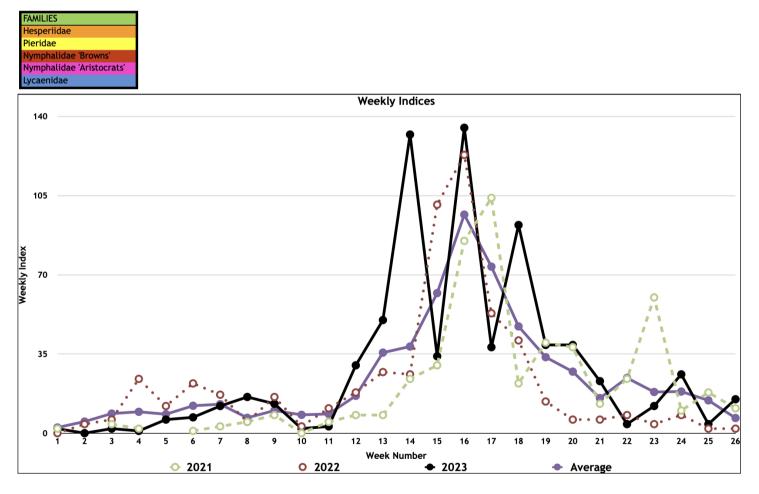
Small Copper – Mick Long

Section 3 – Weekly Flight Periods and Indices

Flight periods are based on New Forest Transect Group historic data supplemented by Alan Thornbury's Hampshire Flight Chart.



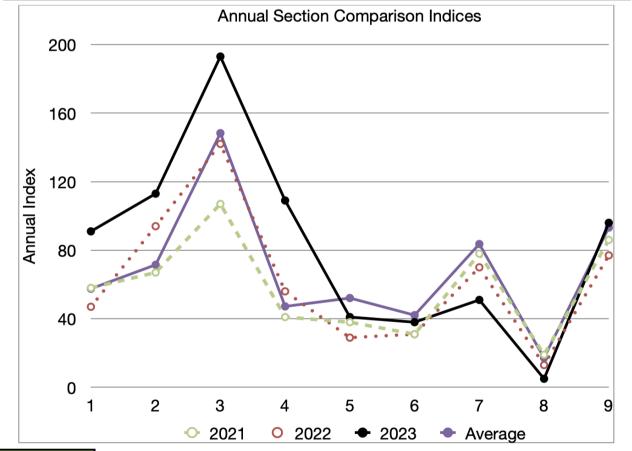
+ Normal Flight Period is derived from actual New Forest sightings from 2011 to 2018 and Hants Flight Periods by Alan Thornbury



Summary of Tra	insect	Indic	es by	Week																				High	nest Ir	ndex	
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	Totals
2013		0	2	2	11	8	15	12	17	30		30	12	8	56	282	81	45	108	126	43	91	11	16	20	0	1,026
2014	1	5	13	3	15	19	15	3	3	8	20	7	22	38	90	63	153	90	18	9	11	14	9	26	20	14	689
2015	5	3	13	17	1	13	5	10	13	21	7	12	14	50	70	31	39	124	33	16	19	11	7	10	3	7	554
2016	2	2	1	6	4	5	16	15	6	0	0	0	5	12	8	39	35	24	22	7	6	16	6	6	1	8	252
2017	4	14	11	13	6	3	4	7	3	3	3	16	63	33	23	65	14	39	35	28	8	22	32	10	18	12	489
2018	6	4	10	5	4	15	17	5	21	6	12	27	131	130	88	111	93	24	6	4	12	7	6	37	5	8	794
2019	0	9	18	13	14	23	28	1	5	3		5	28	28	82	95	132	43	22	16	33	30	26	46	40	4	744
2020							8	5	8	7	10	42	46	34	71	72	32	20	38	22	4	21	21	15	18	1	495
2021	2		4	2		1	3	5	8	0	5	8	8	24	30	85	104	22	40	38	13	24	60	10	18	11	525
2022	0	4	6	24	12	22	17	5	16	3	11	18	27	26	101	123	53	41	14	6	6	8	4	8	2	2	559
2023	2	0	2	1	6	7	12	16	13	2	3	30	50	132	34	135	38	92	39	39	23	4	12	26	4	15	737
Average	3	5	9	9	8	12	13	7	10	8	9	17	36	38	62	97	74	47	34	27	16	24	18	18	15	7	622

Species↓ Section→	S1	S2	S 3	S4	S5	S6	S7	S8	S9	Total	No. Sections
Essex Skipper			1							1	1
Small/Essex Skipper	1		11	20	1		3		9	45	6
Large Skipper	1			1			2		2	6	4
Large White	7	4	13	7	2	2	3	2	4	44	9
Small White	15	9	20	5	8	4	12		10	83	8
Clouded Yellow		1			1					2	2
Brimstone	1	1				1	3		3	9	5
Speckled Wood		2	17	1		7	2			29	5
Small Heath				1					1	2	2
Ringlet			1							1	1
Meadow Brown	8	11	16	13	1	2	9		21	81	8
Gatekeeper	29	66	84	49	19	12	12		30	301	8
Marbled White	1		1	4	1		1		3	11	6
Dark Green Fritillary			2							2	1
Red Admiral	13	6	7	3	3	3	2	2	2	41	9
Painted Lady	1									1	1
Peacock	8		1			3	1		3	16	5
Comma	1	1	1			1			1	5	5
Small Copper			3	2	1				7	13	4
Green Hairstreak		2	2		1					5	3
Holly Blue	5	10	13	2	3	3	1	1		38	8
Common Blue				1						1	1
Total	91	113	193	109	41	38	51	5	96	737	
No. Species	13	11	15	13	11	10	12	3	13	21	

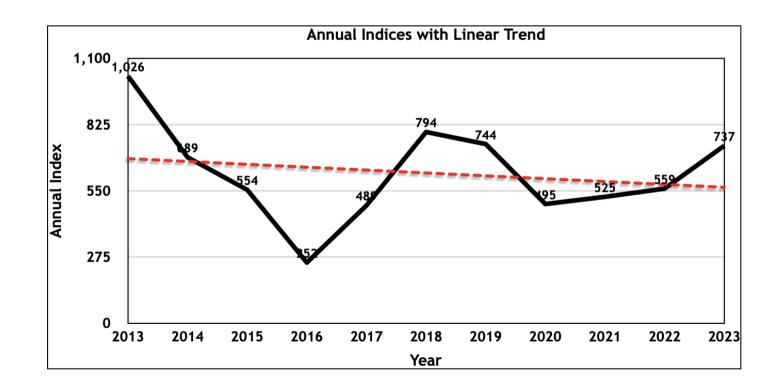
Section 4 – Section Species and Comparison Indices



Annual Sectio	on Indices														
Section↓	Year→	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average Excl Current Year	Change 2023 v Average	Change 2022 v 2023
	1	127	66	38	17	35	56	54	77	58	47	91	58	34	1
	2	87	73	36	21	67	118	102	50	67	94	113	72	42	1
	3	155	209	191	75	122	192	202	88	107	142	193	148	45	1
	4	60	55	36	36	36	53	52	47	41	56	109	47	62	Ť
	5	86	66	67	26	31	44	93	41	38	29	41	52	-11	1
	6	89	48	45	21	29	41	49	37	31	31	38	42	-4	1
	7	195	75	62	15	79	128	71	63	78	70	51	84	-33	Ļ
	8	8	10	12	6	27	38	24	15	19	13	5	17	-12	Ļ
	9	219	87	67	35	63	124	97	77	86	77	96	93	3	1
Annı	ual Index	1,026	689	554	252	489	794	744	495	525	559	737	613	124	1

Section	5 –	Annual	Species	Variation
---------	-----	--------	---------	-----------

	_		CCIIO				peon	55 V U	induc	///				
Annual Indices														
Species↓ Year→	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average Excl Current	Change 2023 v Average	Change 2022 v 2023
Essex Skipper											1			
Small Skipper														
Small/Essex Skipper	66	63	20	6	12	37	4	7	9	11	45			
Small & Essex Skipper Total	66	63	20	6	12	37	4	7	9	11	46	24	23	Ť
Large Skipper	52	13	15	5	1	14	2	3			6	13	-7	↑
Orange-tip		1					2		3	2		2	-2	Ļ
Large White	120	14	33	20	31	72	85	75	31	41	44	52	-8	↑
Small White	68	14	10	19	10	46	57	55	98	29	83	41	42	↑
Green-veined White	5	3	6	2	24	20	8	13	1	1		8	-8	Ļ
Clouded Yellow	3	2	2	1		1		1			2	2	0	↑
Brimstone	15	27	44	18	6	9	24	2	4	23	9	17	-8	Ļ
Speckled Wood	80	101	45	12	92	96	64	13	42	60	29	61	-32	Ļ
Small Heath	120	35	22	4	18	36	28	36	27	17	2	34	-32	Ļ
Ringlet	7		2		7	4	1	1	1		1	3	-2	Ť
Meadow Brown	126	75	54	30	113	150	90	74	92	83	81	89	-8	Ļ
Gatekeeper	208	237	198	64	84	188	248	139	142	205	301	171	130	↑
Marbled White	103	31	28	7	12	29	26	22	17	12	11	29	-18	Ļ
Silver-washed Fritillary	1	1	1		7	1	2	4	1	4		2	-2	Ļ
Dark Green Fritillary								4			2	4	-2	Ť
Red Admiral	3	10	5	14	16	3	12	10	20	15	41	11	30	Ť
Painted Lady					2		6		2	1	1	3	-2	\leftrightarrow
Peacock	20	22	21	7	23	21	15	2	14	10	16	16	1	Ť
Small Tortoiseshell	1	6	3	2	4					1		3	-3	Ļ
Comma	3		8	4	5	8	1		2	4	5	4	1	Ť
Small Copper	2	7	6	9	10	25	14	13	8	1	13	10	4	Ť
Purple Hairstreak						1						1	-1	\leftrightarrow
Green Hairstreak	7	17	13	8	5	12	28	4	4	11	5	11	-6	Ļ
Holly Blue	11	1	14	20	5	15	26	16	1	21	38	13	25	↑
Common Blue	5	9	4		2	6	1	1	6	7	1	5	-4	Ļ
Tota		689	554	252	489	794	744	495	525	559	737	613	124	↑
Different Specie	s 22	21	22	19	22	22	22	21	21	21	21	21	-0	\leftrightarrow
Max. Weekly Specie	s 9	10	10	11	11	12	11	11	13	10	15	11	4	Ť
FAMILIES														
Hesperiidae	118	76	35	11	13	51	6	10	9	11	52			
Pieridae	211	61	95	60	71	148	176	146	137	96	138			
Nymphalidae 'Browns'	644	479	349	117	326	503	457	285	321	377	425			
Nymphalidae 'Aristocrats'	28	39	38	27	57	33	36	203	39	35	65			
Lycaenidae	25	34	37	37	22	59	69	34	19	40	57			
Lycaemaac	2.5	34	37	3,		3,	0,	34		-10	3,			



Section 6 – Moths recorded on Transect

Transect walkers are encouraged to record any moths seen within their standard transect 'cube' that are distinctive enough to be identified in the field. The records below provide an insight into moth species that are around during the daytime, including a number that will be missed or under-represented through more traditional methods of moth recording.

Unlike butterflies, this is not a comprehensive record of the moths that are in the area. Many more moth species are likely to be present but either not seen as they are not active during the day or not recognised as they may be too small or not distinctive enough to be identified accurately during a transect walk.

Given that the numbers of moths spotted on individual transects is generally quite low, an overview report, collating data from all NFTG transects, is also produced to give context to sightings and provide sufficient data to identify trends in more common species seen in the daytime. The overview report is available on request.

Species	2018	2019	2020	2021	2022	2023	
Meadow Long-horn		1					
Humming-bird Hawk-moth	3					2	
Cream Wave		1					
Yellow Shell				1			
Orange Underwing				1			
Brown Silver-line	4	1	2	2		3	
Cream-spot Tiger				1			
Jersey Tiger		1					
Cinnabar	2		2				
Silver Y	1						
Total	10	4	4	5	0	5	
Number of Species	4	4	2	4	0	2	
Total Species (2018-2023)							10