

ENGLAND Summary of changes table 2023. Summary of species abundance changes in England from 2022 to 2023 and long-term (over the entire time series; no. yrs max = 48) and short-term (last 10-years) changes. Significance of trends: * P < 0.05 (significant), ** P < 0.01 (highly significant), ***P < 0.001 (very highly significant). Red text has been used to highlight those species that had their worst year of the series in 2023, and blue text for those species that had their best year of the series in 2023.

Species	Start Year	No. years with Index in 2023	No. sites monitored in 2023	2023 rank	% change 2022-2023	Series trend (%)	10-year trend (%)
Swallowtail	1976	47	17	41	-44	12	-5
Dingy Skipper	1976	48	698	38	-41	2	3
Grizzled Skipper	1976	48	429	46	-15	-47***	9
Chequered Skipper	N/A	N/A	1	N/A	N/A	N/A	N/A
Essex Skipper	1977	47	1232	25	39	-21	-19
Small Skipper	1976	48	2185	31	16	-72***	-29
Lulworth Skipper	1992	32	20	4	70	-64*	87
Silver-spotted Skipper	1979	45	75	30	-48	476***	-27
Large Skipper	1976	48	2162	34	17	-25	-36*
Wood White	1979	45	72	15	14	-80***	43
Orange-tip	1976	48	1967	17	-11	27*	5
Large White	1976	48	2542	26	17	-32	24
Small White	1976	48	2549	19	24	-11	54
Green-veined White	1976	48	2400	42	-11	-25	-32
Clouded Yellow	1979	45	943	26	-82	585*	-57
Brimstone	1976	48	2159	1	63	40**	16
Wall	1976	48	767	40	-28	-86***	33
Speckled Wood	1976	48	2476	16	0	93***	-9
Large Heath	N/A	N/A	10	N/A	N/A	N/A	N/A
Small Heath	1976	48	1824	29	29	-48**	61
Mountain Ringlet	N/A	N/A	1	N/A	N/A	N/A	N/A
Scotch Argus	1995	29	13	29	-69	-79***	-17
Ringlet	1976	48	2388	35	-39	296***	-43*
Meadow Brown	1976	48	2557	6	48	2	19
Gatekeeper	1976	48	2411	9	59	-41**	40
Marbled White	1976	48	1583	3	26	84***	2
Grayling	1976	48	274	42	-6	-58***	30
Pearl-bordered Fritillary	1978	46	150	45	-18	-75***	-8
Small Pearl-bordered Fritillary	1978	46	153	46	-13	-67***	-50**
Silver-washed Fritillary	1976	48	1147	11	-7	290***	-9
Dark Green Fritillary	1976	48	733	20	-50	543***	68
High Brown Fritillary	1978	46	48	17	69	-62**	-2
White Admiral	1976	48	423	30	0	-60***	6
Purple Emperor	1979	45	143	12	-38	133**	28
Red Admiral	1976	48	2537	1	318	326***	114
Painted Lady	1976	48	2171	26	-48	87	47
Peacock	1976	48	2493	18	58	4	-9
Small Tortoiseshell	1976	48	2351	48	-50	-82***	-69*
Comma	1976	48	2374	3	41	186***	20
Marsh Fritillary	1982	42	154	16	-15	-58*	-24
Glanville Fritillary	1989	35	13	2	124	223	269*
Heath Fritillary	1981	43	39	20	138	-88***	223**
Duke of Burgundy	1979	45	121	13	21	-35*	12
Small Copper	1976	48	2116	22	85	-36*	42
Brown Hairstreak	1983	41	195	15	15	-2	26
Purple Hairstreak	1976	48	786	15	48	-19	81
Green Hairstreak	1976	48	767	42	-36	-38**	-4
White-letter Hairstreak	1976	48	348	35	-6	-78***	38
Black Hairstreak	1995	29	17	3	152	528**	277
Small Blue	1979	45	364	16	-13	2	93*
Holly Blue	1976	48	2199	3	164	186*	162
Large Blue	1983	41	23	1	12	2391***	175*
Silver-studded Blue	1984	40	133	13	-15	22	111**
Brown Argus	1976	48	1418	2	168	35	44
Northern Brown Argus	1979	45	47	41	14	-62***	-25
Common Blue	1976	48	2312	36	-11	-19	-27
Adonis Blue	1979	45	209	31	-13	89*	-3
Chalk Hill Blue	1976	48	329	37	-49	-1	44

SCOTLAND Summary of changes table 2023. Summary of species abundance changes in Scotland from 2022 to 2023 and long-term (over the entire time series; no. yrs max = 45) and short-term (last 10-years) changes. Significance of trends: * P < 0.05 (significant), ** P < 0.01 (highly significant), ***P < 0.001 (very highly significant). Red text has been used to highlight those species that had their worst year of the series in 2023, and blue text for those species that had their best year of the series in 2023.

Species	Start Year	No. years with Index in 2023	No. sites monitored in 2023	2023 rank	% change 2022-2023	Series trend (%)	10-year trend (%)
Dingy Skipper	N/A	N/A	3	N/A	N/A	N/A	N/A
Chequered Skipper	2003	21	12	1	23	155*	640***
Small Skipper	N/A	N/A	34	N/A	N/A	N/A	N/A
Large Skipper	N/A	N/A	9	N/A	N/A	N/A	N/A
Orange-tip	1999	25	156	7	-4	354***	21
Large White	1979	45	168	8	44	94*	126
Small White	1979	45	175	15	-5	97*	64
Green-veined White	1979	45	197	45	-19	-12	-46
Clouded Yellow	N/A	N/A	0	N/A	N/A	N/A	N/A
Wall	1999	25	43	6	-24	787***	244
Speckled Wood	2001	23	105	1	109	283***	440**
Large Heath	2003	21	22	1	124	-11	33
Small Heath	1979	45	136	27	-14	131**	9
Mountain Ringlet	N/A	N/A	1	N/A	N/A	N/A	N/A
Scotch Argus	1990	34	28	33	43	-16	-41
Ringlet	1996	28	182	17	-26	254***	1
Meadow Brown	1979	45	187	8	26	15	88
Grayling	1990	34	25	31	-37	-91***	2
Pearl-bordered Fritillary	2002	22	20	6	35	201***	53
Small Pearl-bordered Fritillary	1979	45	58	23	2	110***	17
Dark Green Fritillary	1979	45	85	31	-21	16	33
Red Admiral	1980	43	188	1	224	998***	166
Painted Lady	1980	40	146	26	-64	109	23
Peacock	1995	29	190	3	23	232***	60
Small Tortoiseshell	1979	45	189	40	0	-60**	-21
Comma	2006	18	83	1	170	152	-15
Marsh Fritillary	2006	18	45	3	489	-72	-33
Small Copper	1979	45	156	39	14	-45	-34
Purple Hairstreak	N/A	N/A	1	N/A	N/A	N/A	N/A
Green Hairstreak	1990	34	35	3	79	23	32
Small Blue	2005	19	25	13	87	-37	-48
Holly Blue	N/A	N/A	15	N/A	N/A	N/A	N/A
Northern Brown Argus	1981	43	21	26	-17	36	55
Common Blue	1979	45	127	33	8	31	-18

WALES Summary of changes table 2023. Summary of species abundance changes in Wales from 2022 to 2023 and long-term (over the entire time series; no. yrs max = 48) and short-term (last 10-years) changes. Significance of trends: * P < 0.05 (significant), ** P < 0.01 (highly significant), ***P < 0.001 (very highly significant). Red text has been used to highlight those species that had their worst year of the series in 2023, and blue text for those species that had their best year of the series in 2023.

Species	Start Year	No. years with Index in 2023	No. sites monitored in 2023	2023 rank	% change 2022-2023	Series trend (%)	10-year trend (%)
Dingy Skipper	2004	20	28	20	-44	-34	-81**
Grizzled Skipper	N/A	N/A	3	N/A	N/A	N/A	N/A
Essex Skipper	N/A	N/A	6	N/A	N/A	N/A	N/A
Small Skipper	1984	40	71	39	-25	-17	-80***
Large Skipper	1977	47	64	41	18	-65***	-59*
Orange-tip	1978	46	56	16	-11	335***	-20
Large White	1976	48	84	21	39	-16	28
Small White	1976	48	85	19	-7	-40*	93
Green-veined White	1976	48	73	33	-19	115**	-49*
Clouded Yellow	N/A	N/A	3	N/A	N/A	N/A	N/A
Brimstone	1998	26	45	3	25	66*	26
Wall	1976	48	54	34	4	-59***	26
Speckled Wood	1978	46	82	15	7	233***	-18
Large Heath	N/A	N/A	3	N/A	N/A	N/A	N/A
Small Heath	1976	48	61	22	44	-6	-11
Ringlet	1983	41	73	29	-36	196***	-66***
Meadow Brown	1976	48	87	18	55	3	-11
Gatekeeper	1978	46	79	23	15	22	-19
Marbled White	N/A	N/A	4	N/A	N/A	N/A	N/A
Grayling	1976	48	32	30	-28	-93***	-10
Pearl-bordered Fritillary	1997	27	12	7	7	256***	-26
Small Pearl-bordered Fritillary	1992	32	17	12	8	-67*	24
Silver-washed Fritillary	1995	27	19	25	-59	-80*	-63*
Dark Green Fritillary	1979	45	40	36	-45	-78***	16
High Brown Fritillary	1995	20	10	15	-31	-1	-46
Red Admiral	1976	48	85	7	104	161**	54
Painted Lady	1977	46	71	37	-70	16	5
Peacock	1976	48	80	33	81	-44**	-52
Small Tortoiseshell	1976	48	83	46	-51	-49	-50
Comma	1992	32	64	2	100	191**	17
Marsh Fritillary	1990	34	15	22	-3	-60	-46
Small Copper	1976	48	72	21	23	-47*	38
Brown Hairstreak	2004	20	10	16	-17	-42*	-32
Purple Hairstreak	2002	22	15	9	184	-51	4
Green Hairstreak	1993	31	18	11	-28	230**	-43
White-letter Hairstreak	N/A	N/A	3	N/A	N/A	N/A	N/A
Small Blue	N/A	N/A	5	N/A	N/A	N/A	N/A
Silver-studded Blue	N/A	N/A	8	N/A	N/A	N/A	N/A
Holly Blue	1999	25	55	3	109	27	112*
Brown Argus	1997	27	20	2	189	95	77
Common Blue	1976	48	79	37	-10	-32	-13

NORTHERN IRELAND Summary of changes table 2023. Summary of species abundance changes in Northern Ireland from 2022 to 2023 and long-term (over the entire time series; no. yrs max = 20) and short-term (last 10-years) changes. Significance of trends: * P < 0.05 (significant), ** P < 0.01 (highly significant), ***P < 0.001 (very highly significant). Red text has been used to highlight those species that had their worst year of the series in 2023, and blue text for those species that had their best year of the series in 2023.

Species	Start Year	No. years with Index in 2023	No. sites monitored in 2023	2023 rank	% change 2022-2023	Series trend (%)	10-year trend (%)
Dingy Skipper	N/A	N/A	1	N/A	N/A	N/A	N/A
Cryptic Wood White	2009	15	20	14	-40	-2	-47
Orange-tip	2007	17	38	9	-21	-7	-5
Large White	2006	18	49	13	46	-57**	-34
Small White	2006	18	51	9	53	-64**	2
Green-veined White	2005	19	53	19	-30	-22	-59
Clouded Yellow	N/A	N/A	0	N/A	N/A	N/A	N/A
Wall	N/A	N/A	1	N/A	N/A	N/A	N/A
Speckled Wood	2007	17	53	2	12	53*	27
Large Heath	N/A	N/A	2	N/A	N/A	N/A	N/A
Small Heath	2004	20	23	17	-8	-38	5
Ringlet	2006	18	53	14	-31	31	-50*
Meadow Brown	2009	15	54	1	81	-26	-2
Grayling	N/A	N/A	0	N/A	N/A	N/A	N/A
Silver-washed Fritillary	N/A	N/A	7	N/A	N/A	N/A	N/A
Dark Green Fritillary	N/A	N/A	8	N/A	N/A	N/A	N/A
Red Admiral	N/A	N/A	39	N/A	N/A	N/A	N/A
Painted Lady	N/A	N/A	8	N/A	N/A	N/A	N/A
Peacock	2006	18	51	3	145	73	241
Small Tortoiseshell	2010	14	53	2	18	102	263*
Marsh Fritillary	2004	20	19	12	5	41	36
Small Copper	2005	19	35	14	61	-48	93
Purple Hairstreak	N/A	N/A	1	N/A	N/A	N/A	N/A
Green Hairstreak	N/A	N/A	1	N/A	N/A	N/A	N/A
Holly Blue	N/A	N/A	19	N/A	N/A	N/A	N/A
Common Blue	2005	19	29	15	18	-43	-68*