

ENGLAND Summary of changes table 2016. Summary of species abundance changes in England from 2015 to 2016 and long-term (over the entire time series; no. yrs max = 41) 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 2016, and blue text for those species that had their best year of the series in 2016.

Species	Start Year	No. years with Index in 2016	No. sites monitored in 2016	2016 rank	% change 2015-2016	Series trend (%)	10-year trend (%)
Swallowtail	1976	37	4	34	-22	45	-28
Dingy Skipper	1976	41	323	22	-19	-8	54
Grizzled Skipper	1976	41	221	41	-23	-43**	-36
Essex Skipper	1977	40	843	37	-53	-88***	40
Small Skipper	1976	41	1556	37	-47	-76***	87
Lulworth Skipper	1992	25	15	19	-61	-75**	252
Silver-spotted Skipper	1979	38	44	17	-44	839***	66
Large Skipper	1976	41	1563	36	-38	-16	27
Wood White	1979	38	49	30	7	-90***	5
Orange-tip	1976	41	1336	18	-5	1	56
Large White	1976	41	1879	27	-4	-29	-18
Small White	1976	41	1869	27	13	-25	6
Green-veined White	1976	41	1804	27	9	-16	2
Clouded Yellow	1979	38	391	16	34	799*	231
Brimstone	1976	41	1444	15	-28	7	60
Wall	1976	41	592	41	-28	-91***	-30
Speckled Wood	1976	41	1800	18	12	77**	-9
Large Heath	N/A	N/A	2	N/A	N/A	N/A	N/A
Small Heath	1976	41	1186	38	-24	-64***	19
Mountain Ringlet	N/A	N/A	1	N/A	N/A	N/A	N/A
Scotch Argus	1995	22	12	20	-18	-77***	-16
Ringlet	1976	41	1735	6	-11	393***	43
Meadow Brown	1976	41	1880	39	-31	-6	11
Gatekeeper	1976	41	1735	40	-48	-47**	-7
Marbled White	1976	41	1009	13	-22	59*	121**
Grayling	1976	41	145	41	-25	-49***	-17
Pearl-bordered Fritillary	1978	39	87	38	-47	-63***	-15
Small Pearl-bordered Fritillary	1978	39	82	35	-9	-46**	9
Silver-washed Fritillary	1976	41	477	19	-46	164***	13
Dark Green Fritillary	1976	41	304	17	-34	393***	8
High Brown Fritillary	1978	39	52	26	0	-66*	116
White Admiral	1976	41	223	41	-59	-65***	-52
Purple Emperor	1979	38	73	28	-16	44	-24
Red Admiral	1976	41	851	8	90	258***	1
Painted Lady	1976	41	702	19	-8	139	-56
Peacock	1976	41	1808	36	-48	13	-2
Small Tortoiseshell	1976	41	1779	37	-47	-75***	146
Comma	1976	41	1669	27	-28	139***	-23
Marsh Fritillary	1982	35	58	31	-17	-79**	-79
Glanville Fritillary	1989	25	7	11	10	-31	-51
Heath Fritillary	1981	36	34	36	-27	-91***	-82***
Duke of Burgundy	1979	37	104	11	19	-40*	90*
Small Copper	1976	41	1379	40	7	-44*	-46
Brown Hairstreak	1983	34	78	33	-50	-26	-14
Purple Hairstreak	1976	41	461	32	12	-58*	-11
Green Hairstreak	1976	41	343	40	-25	-46**	-28
White-letter Hairstreak	1976	41	211	41	-45	-96***	-72*
Black Hairstreak	1995	21	11	10	-47	-30	-59
Small Blue	1979	38	158	16	44	-33	17
Holly Blue	1976	41	1385	21	-36	46	-24
Large Blue	1983	34	27	2	38	1472***	111
Silver-studded Blue	1984	33	67	18	10	-27	54
Brown Argus	1976	41	812	32	-27	-25	29
Northern Brown Argus	1979	35	27	28	10	-67***	40
Common Blue	1976	41	1607	38	-53	-22	36
Adonis Blue	1979	38	92	27	-18	140*	-32
Chalk Hill Blue	1976	41	188	39	-40	8	56

SCOTLAND Summary of changes table 2016. Summary of species abundance changes in Scotland from 2015 to 2016 and long-term (over the entire time series; no. yrs max = 38) 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 2016, and blue text for those species that had their best year of the series in 2016.

Species	Start Year	No. years with Index in 2016	No. sites monitored in 2016	2016 rank	% change 2015-2016	Series trend (%)	10-year trend (%)
Dingy Skipper	N/A	N/A	1	N/A	N/A	N/A	N/A
Chequered Skipper	2003	10	21	8	28	-86***	-76*
Small Skipper	N/A	N/A	3	N/A	N/A	N/A	N/A
Large Skipper	N/A	N/A	0	N/A	N/A	N/A	N/A
Orange-tip	1999	18	109	7	-21	213**	6
Large White	1979	38	100	38	-13	-25	-75
Small White	1979	38	102	36	-12	-28	-48
Green-veined White	1979	38	169	23	41	19	25
Clouded Yellow	N/A	N/A	0	N/A	N/A	N/A	N/A
Wall	1999	18	10	11	62	-71	47
Speckled Wood	2001	16	46	9	62	0	-18
Large Heath	N/A	N/A	10	N/A	N/A	N/A	N/A
Small Heath	1979	38	113	25	-43	186***	-26
Mountain Ringlet	N/A	N/A	2	N/A	N/A	N/A	N/A
Scotch Argus	1990	27	34	21	-28	32	36
Ringlet	1999	18	125	14	-40	64*	3
Meadow Brown	1979	38	136	31	-41	-4	-24
Grayling	1990	18	5	18	-61	-82***	-79*
Pearl-bordered Fritillary	2002	11	37	8	-54	54	1
Small Pearl-bordered Fritillary	1979	34	8	1	109	40	4
Dark Green Fritillary	1979	36	11	31	8	-38	-66*
Red Admiral	1980	30	15	22	-15	73	-49
Painted Lady	1980	22	15	10	362	-69	-82
Peacock	1995	22	132	18	-40	140*	-44
Small Tortoiseshell	1979	38	139	36	-48	-49*	2
Comma	2006	11	33	10	-73	-61	-67
Marsh Fritillary	N/A	N/A	4	N/A	N/A	N/A	N/A
Small Copper	1979	38	82	27	13	-37	-41
Green Hairstreak [#]	N/A	N/A	12	N/A	N/A	N/A	N/A
Small Blue	2005	12	3	8	161	0	-42
Holly Blue	N/A	N/A	2	N/A	N/A	N/A	N/A
Northern Brown Argus	1981	21	5	5	38	57	5
Common Blue	1979	38	90	24	-29	95	31

[#] Green Hairstreak trend was included in 2015 summaries for Scotland but with too few data in 2016 has been removed

WALES Summary of changes table 2016. Summary of species abundance changes in Wales from 2015 to 2016 and long-term (over the entire time series; no. yrs max = 41) 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 2016, and blue text for those species that had their best year of the series in 2016.

Species	Start Year	No. years with Index in 2016	No. sites monitored in 2016	2016 rank	% change 2015-2016	Series trend (%)	10-year trend (%)
Dingy Skipper	2004	7	13	6	-38	-63	-57
Grizzled Skipper	N/A	N/A	3	N/A	N/A	N/A	N/A
Essex Skipper	N/A	N/A	2	N/A	N/A	N/A	N/A
Small Skipper	1984	33	65	19	-53	19	252*
Large Skipper	1977	40	54	29	-29	-73***	93
Orange-tip	1978	39	49	11	-21	314***	9
Large White	1976	41	85	35	46	-61***	-61*
Small White	1976	41	83	40	43	-75***	-20
Green-veined White	1976	41	84	24	12	67	-19
Clouded Yellow	N/A	N/A	0	N/A	N/A	N/A	N/A
Brimstone	1998	19	29	7	-7	1	59
Wall	1976	41	48	41	-48	-49*	-11
Speckled Wood	1978	39	81	16	14	103**	-10
Large Heath	N/A	N/A	2	N/A	N/A	N/A	N/A
Small Heath	1976	41	61	39	-43	14	15
Ringlet	1983	34	75	4	-24	239***	133*
Meadow Brown	1976	41	84	39	-54	13	10
Gatekeeper	1978	39	73	31	-39	27	-11
Marbled White	N/A	N/A	5	N/A	N/A	N/A	N/A
Grayling	1976	30	11	30	-80	-86***	-44
Pearl-bordered Fritillary	1997	19	14	10	-23	208**	121
Small Pearl-bordered Fritillary	1993	17	9	17	-59	-54**	-37
Silver-washed Fritillary	1995	16	9	11	24	-91**	34
Dark Green Fritillary	1979	22	16	18	-43	-71***	69
High Brown Fritillary	1995	13	9	8	-47	16	70
Red Admiral	1976	41	27	18	24	125	-45
Painted Lady	1977	28	21	10	10	-37	-33
Peacock	1976	41	79	39	-53	-55**	19
Small Tortoiseshell	1976	41	82	35	-44	-42	49
Comma	1992	25	55	16	-54	106	-30
Marsh Fritillary	1990	27	21	20	-60	-78*	613*
Small Copper	1976	41	65	40	-48	-61**	-26
Brown Hairstreak	2004	13	18	7	17	-15	-7
Purple Hairstreak	2002	15	11	14	-52	-75	-80
Green Hairstreak	1993	22	9	3	10	268*	26
White-letter Hairstreak	N/A	N/A	2	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	6	N/A	N/A	N/A	N/A
Holly Blue	1999	18	48	16	-44	-48	-62*
Brown Argus	1997	20	13	13	5	31	-31
Common Blue	1976	41	71	40	-44	-26	-34

NORTHERN IRELAND Summary of changes table 2016. Summary of species abundance changes in Northern Ireland from 2015 to 2016 and long-term (over the entire time series; no. yrs max = 13) 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 2016, and blue text for those species that had their best year of the series in 2016.

Species	Start Year	No. years with Index in 2016	No. sites monitored in 2016	2016 rank	% change 2015-2016	Series trend (%)	10-year trend (%)
Dingy Skipper	N/A	N/A	1	N/A	N/A	N/A	N/A
Cryptic Wood White	N/A	N/A	5	N/A	N/A	N/A	N/A
Orange-tip	2007	10	26	6	9	-41	-41
Large White	2006	11	35	10	7	-53	-59
Small White	2006	11	37	10	44	-69*	-67*
Green-veined White	2005	12	41	8	38	67	10
Speckled Wood	2007	10	39	5	44	5	5
Small Heath	2006	11	21	8	0	-71*	-70*
Ringlet	2006	11	42	7	-24	128	176*
Meadow Brown	2009	8	40	7	-13	-35	-35
Grayling	N/A	N/A	1	N/A	N/A	N/A	N/A
Silver-washed Fritillary	N/A	N/A	3	N/A	N/A	N/A	N/A
Dark Green Fritillary	N/A	N/A	6	N/A	N/A	N/A	N/A
Red Admiral	N/A	N/A	11	N/A	N/A	N/A	N/A
Painted Lady	N/A	N/A	6	N/A	N/A	N/A	N/A
Peacock	2006	11	30	10	-21	-79*	-64
Small Tortoiseshell	2010	7	41	7	-43	-71**	-71**
Marsh Fritillary	2004	13	9	11	-11	-28	-61
Small Copper	2005	12	21	12	-33	-70	-68
Green Hairstreak	N/A	N/A	2	N/A	N/A	N/A	N/A
Holly Blue	N/A	N/A	3	N/A	N/A	N/A	N/A
Common Blue	2005	12	15	8	-61	-24	77