

## Long Meadow Butterflies 2018

Small skipper	20/6, 27/6(4), 4/7(3), 10/7(3)
Essex skipper	27/6(2), 4/7(7), 10/7(8), 18/7(2)
Small/Essex skipper	20/6(2), 27/6(12), 4/7(18), 10/7(2)
Large skipper	13/6 (5), 20/6, 27/6(6), 4/7(3)
Brimstone	4/5, 28/5 (22 caterpillars on buckthorn s12 & 5 on buckthorn s11), 27/6 F
Large white	5/5, 18/7(3), 25/7(2), 31/7(2), 17/8
Small white	25/4, 27/6, 4/7(5), 10/7(2), 18/7(5), 25/7(2), 31/7(3)
Green-veined	25/4, 1/5, 5/5(3), 8/5, 23/5, 27/6, 4/7(3), 10/7(7), 18/7(9), 25/7(5), 31/7(7)
Whites	8/5(10), 23/5(9), 28/5(2), 20/6(4), 27/6(10), 4/7(13), 10/7(2), 18/7(7), 25/7(21), 31/7(6), 17/8(4), 22/8(5)
Orange tip	25/4(9), 5/5(5), 8/5(5), 28/5(3)
Small copper	18/7, 25/7, 31/7, 4/9, 18/9(2), 25/9(2)
Brown argus	18/7(11), 25/7(14), 31/7(18), 8/8(3), 17/8(14), 22/8(5), 28/8(5)
Common blue	10/7(2), 18/7(18), 25/7(23), 31/7(16), 8/8(6), 17/8, 22/8, 28/8(3), 4/9(2), 18/9(2), 25/9
Holly blue	25/4, 1/5(2) 4/5, 5/5(2), 8/5(3), 28/5, 4/7, 10/7, 18/7(2), 31/7(2)
Red admiral	23/5, 26/7
Painted lady	
Small tortoiseshell	
Peacock	
Comma	27/6, 4/7
Speckled wood	1/5(2), 5/5, 8/5(6), 23/5(5), 28/5, 13/6 (6), 20/6(11), 27/6(3), 10/7(3), 18/7(11), 25/7(8), 31/7(9), 8/8(7), 17/8(5), 22/8(12)
Marbled white	27/6(2), 4/7(3)
Gatekeeper	4/7(6), 10/7(35), 18/7(28), 25/7(9), 31/7(8), 8/8
Meadow brown	13/6 (56), 20/6(119), 27/6(66), 4/7(41), 10/7(42), 18/7(16), 25/7(3), 31/7(8), 8/8(2), 17/8(2), 22/8(3)
Ringlet	20/6(7), 27/6(10), 4/7(5), 10/7(9)
Small heath	

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Species (19)	First date	Peak count	Peak date	Last date	Total	Status and Habitat	Larval food plant
Small skipper	20/6	4	27/6	10/7	11	Resident in grassland	grasses
Essex skipper	27/6	8	10/7	18/7	19	Resident in grassland	grasses
Small/essex skipper	20/6	18	4/7	10/7	34	Resident in grassland	grasses
Large skipper	13/6	6	27/6	10/7	15	Resident of woodland edge	grasses
Brimstone	4/5	1	---	27/6	2	Mobile in woodland & grassland	buckthorn
Large white	5/5	3	18/7	17/8	9	Mobile & widespread	crucifers
Small white	25/4	5	4/7,18/7	31/7	19	Mobile & widespread	crucifers
Green-veined white	25/4	9	18/7	31/7	39	Mobile & widespread	crucifers
Whites	8/5	21	25/7	22/8	93	Mobile & widespread	crucifers
Orange tip	25/4	9	25/4	28/5	22	Mobile & widespread	crucifers
Small copper	18/7	2	18/9	25/9	8	Resident in grassland	sorrel/dock
Brown argus	18/7	18	31/7	28/8	70	Resident in grassland	rockrose
Common blue	10/7	23	25/7	25/9	75	Resident in grassland	birdsfoot trefoil
Holly blue	25/4	3	8/5	31/7	16	Mobile & widespread	holly/ivy
Red admiral	23/5	1	---	26/7	2	Mobile & widespread	nettles
Painted lady					---	Mobile & widespread	thistles
Small tortoiseshell					---	Mobile & widespread	nettles
Peacock					---	Mobile & widespread	nettles
Comma	27/6	1	---	4/7	2	Mobile & widespread	nettles
Speckled wood	1/5	12	22/8	22/8	90	Resident of woodland edge	grasses
Gatekeeper	4/7	35	10/7	8/8	86	Resident of woodland edge	grasses
Meadow brown	13/6	119	20/6	22/8	358	Resident in grassland	grasses
Ringlet	20/6	10	27/6	10/7	31	Resident in damper grassland	grasses
Marbled white	27/6	3	4/7	4/7	5	Resident in grassland	grasses

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Section	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Small skipper		x	x					x				x		x		5
Essex skipper												x	x	x	x	4
Small/essex skipper										x	x	x	x	x		5
Large skipper		x								x		x		x		4
Brimstone											x		x			2
Large white		x						x				x		x		4
Small white		x			x			x	x	x	x	x	x	x	x	10
Green-veined white		x	x			x			x	x		x	x	x		8
Whites		x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Orange tip	x	x			x			x	x	x	x	x	x	x		10
Small copper											x	x		x		3
Brown argus			x							x	x	x	x	x		6
Common blue			x					x		x	x	x	x	x		7
Holly blue	x	x			x			x	x	x			x	x	x	9
Red admiral									x					x		2
Painted lady																0
Small tortoiseshell																0
Peacock																0
Comma		x		x												2
Speckled wood	x	x	x	x	x	x	x	x	x	x	x	x		x		13
Marbled white												x		x	x	3
Gatekeeper		x	x	x	x				x	x	x	x	x	x		10
Meadow brown	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15
Ringlet		x	x	x		x		x	x	x	x	x	x		x	11
Small heath																0
Species per section	4	12	8	6	6	4	3	9	9	12	11	15	11	16	6	

## **Long Meadow Butterflies 2018**

### **Summary and Management Plans**

During 2018 some species including brown argus, common blue and meadow brown were present in much bigger numbers than seen in the previous five years. Most populations have recovered from the low point of 2016. The flight season of some species such as the skippers and whites was curtailed probably due to the long hot dry summer.

There were nearly twice as many skippers as in 2017 but their flight season finished a week earlier than in 2017. Brimstone was present in low numbers and 27 caterpillars were found on the alder buckthorns. There were nearly three times as many whites as in 2017 with more flying earlier but their flight season finished some two weeks earlier than in 2017. Orange tips were on the wing during the spring in small numbers.

The favoured areas for small copper, brown argus and common blue were again excluded from the annual hay cut this summer to allow them to breed and feed without disturbance. For common blues the 2018 peak count was 23 compared to the 2013-17 average peak count of 8 and the 2018 total count was 75 compared to the 2013-17 average total count of 20. For brown argus the 2018 peak count was 18 compared to the 2013-17 average peak count of 2 and the 2018 total count was 70 compared to the 2013-17 average total count of 4. It was a poor year for small coppers with lower numbers than average over the last 5 years. Holly blue numbers were a little higher than in 2017.

Only two of each of comma and red admiral were seen during the year and painted lady, small tortoiseshell and peacock were not seen at all.

Speckled wood was present in similar numbers as in 2017 and was very widespread throughout the meadow. Meadow browns, the bread and butter butterflies of grassland, emerged later than in 2017 in greater numbers than previously recorded in the meadow with a one day count on 20<sup>th</sup> June of 119, more than twice the highest previous count, they were also the most widely distributed species. Gatekeepers were present in similar numbers as in 2017. Ringlets more than doubled their numbers.

Marbled whites maintained a toe-hold and were recorded on two dates, a total of five individuals being seen. As in 2017 perhaps the early signs of a small colony establishing.

The most butterfly rich areas were sections 10-14 on the warmer sunnier side of the meadow where the grasses are finer and shorter and there are more flowering plants to provide nectar. Section 12 is especially butterfly rich with a higher density of flowering, nectar providing plants and was again excluded from the annual hay cut for this reason. It was cut during the autumn after all butterfly activity had ceased. Section 2, incorporating the backwater, was also butterfly rich as it also receives a lot of warm sun and contains nectar sources.

Some 5-10 years of data will be required to be confident of any meaningful changes in numbers, flight periods and distributions. Butterfly populations can fluctuate widely from one year to the next due to environmental variations so trends only emerge over many years.

Management work to prevent scrub encroachment into the grassland will be carried out during the autumn and winter. Additionally some tree thinning to reduce shading and allow more sunlight and warmth to reach the grassland will be undertaken. This work maintains a balance between grassland and woodland edge both of which are key habitats for the butterfly species that live in and visit this site.