

## Long Meadow Butterflies 2017

Small skipper	18/6, 7/7(2), 12/7(3), 25/7
Essex skipper	7/7(4), 12/7(5), 25/7
Small/Essex skipper	21/6, 7/7(2), 18/7(13)
Large skipper	7/6(2), 14/6(2), 21/6(4), 7/7
Brimstone	3/4, 24/5
Large white	18/7, 25/7(4)
Small white	12/7, 18/7, 25/7, 12/9(3)
Green-veined	19/4(2), 2/5(2), 7/7
Whites	9/4(2), 19/4(3), 23/4(3), 2/5, 10/5(4), 24/5, 1/6, 7/7(3), 18/7(9), 25/7(2), 1/8(3), 10/8(4), 16/8(2), 23/8(2), 29/8
Orange tip	6/4, 19/4(7), 23/4(7), 10/5
Small copper	7/7, 12/7, 25/7(4), 1/8(4), 29/8, 12/9
Brown argus	25/7(3), 1/8(2), 10/8(3), 16/8
Common blue	7/6, 7/7, 12/7, 18/7(5), 25/7(11), 1/8(13), 10/8(7), 16/8
Holly blue	19/4(2), 23/4, 2/5, 13/5, 7/6, 25/7
Red admiral	23/4, 13/5, 7/6(5), 14/6(2), 7/7(2), 12/7(4), 18/7(2), 10/8
Painted lady	3/4
Small tortoiseshell	9/4
Peacock	19/4
Comma	9/4, 19/4, 10/5, 14/6, 7/7(2), 12/7(6), 18/7, 25/7(3), 10/8(2), 29/8
Speckled wood	9/4(4), 19/4(7), 23/4(9), 2/5, 24/5(2), 1/6(3), 7/6(4), 14/6(3), 21/6, 7/7(3), 12/7(5), 18/7(5), 25/7(7), 1/8, 10/8(8), 16/8(7), 23/8(10), 29/8(2), 12/9
Marbled white	14/6, 7/7(3), 12/7(2)
Gatekeeper	7/7(3), 12/7(37), 18/7(11), 25/7(24), 1/8(9), 10/8(7), 16/8(6), 23/8(3), 29/8
Meadow brown	1/6(3), 7/6(21), 14/6(41), 21/6(58), 7/7(39), 12/7(36), 18/7(22), 25/7(22), 1/8(10), 10/8(9), 16/8(7)
Ringlet	14/6(2), 21/6(3), 7/7(2), 12/7(5)
Small heath	19/6

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Species (22)	First date	Peak count	Peak date	Last date	Total	Status and Habitat	Larval food plant
Small skipper	18/6	3	12/7	25/7	7	Resident in grassland	grasses
Essex skipper	7/7	5	12/7	25/7	10	Resident in grassland	grasses
Small/essex skipper	21/6	13	18/7	18/7	16	Resident in grassland	grasses
Large skipper	7/6	4	21/6	7/7	9	Resident of woodland edge	grasses
Brimstone	3/4	1	-	24/5	2	Mobile in woodland & grassland	buckthorn
Large white	18/7	4	25/7	25/7	5	Mobile & widespread	crucifers
Small white	12/7	3	12/9	12/9	6	Mobile & widespread	crucifers
Green-veined white	19/4	2	19/4&2/5	7/7	5	Mobile & widespread	crucifers
Whites	9/4	9	18/7	29/8	41	Mobile & widespread	crucifers
Orange tip	6/4	7	19&23/4	10/5	16	Mobile & widespread	crucifers
Small copper	7/7	4	25/7&1/8	12/9	12	Resident in grassland	sorrel/dock
Brown argus	25/7	3	25/7&10/8	16/8	9	Resident in grassland	rockrose
Common blue	7/6	13	1/8	16/8	40	Resident in grassland	birdsfoot trefoil
Holly blue	19/4	2	19/4	25/7	7	Mobile & widespread	holly/ivy
Red admiral	23/4	5	7/6	10/8	18	Mobile & widespread	nettles
Painted lady	3/4	1	-	3/4	1	Mobile & widespread	thistles
Small tortoiseshell	9/4	1	-	9/4	1	Mobile & widespread	nettles
Peacock	19/4	1	-	19/4	1	Mobile & widespread	nettles
Comma	9/4	6	12/7	29/8	19	Mobile & widespread	nettles
Speckled wood	9/4	10	23/8	12/9	83	Resident of woodland edge	grasses
Gatekeeper	7/7	37	12/7	29/8	101	Resident of woodland edge	grasses
Meadow brown	1/6	58	21/6	16/8	268	Resident in grassland	grasses
Ringlet	14/6	5	12/7	12/7	12	Resident in damper grassland	grasses
Marbled white	14/6	3	7/7	12/7	6	Resident in grassland	grasses

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<b>Section</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>Total</b>
Small skipper		x									x	x	x			<b>4</b>
Essex skipper			x									x	x	x		<b>4</b>
Small/essex skipper		x	x									x	x			<b>4</b>
Large skipper				x							x	x		x		<b>4</b>
Brimstone									x			x				<b>2</b>
Large white					x								x			<b>2</b>
Small white				x								x		x		<b>3</b>
Green-veined white									x				x	x		<b>3</b>
Whites	x	x	x	x	x			x	x	x	x	x	x	x		<b>12</b>
Orange tip			x		x		x		x	x	x	x				<b>7</b>
Small copper											x	x		x		<b>3</b>
Brown argus											x	x	x	x		<b>4</b>
Common blue		x	x								x	x	x	x	x	<b>7</b>
Holly blue					x			x	x		x	x		x		<b>6</b>
Red admiral	x				x	x	x	x	x	x		x		x		<b>9</b>
Painted lady					x											<b>1</b>
Small tortoiseshell									x							<b>1</b>
Peacock							x									<b>1</b>
Comma		x		x	x	x		x	x	x	x	x		x		<b>10</b>
Speckled wood	x				x	x	x	x	x	x	x	x	x	x	x	<b>12</b>
Marbled white										x	x	x	x	x		<b>5</b>
Gatekeeper		x	x	x	x					x	x	x	x	x	x	<b>10</b>
Meadow brown	x	x	x	x	x		x	x	x	x	x	x	x	x	x	<b>14</b>
Ringlet		x				x	x	x			x	x	x			<b>7</b>
Small heath												x				<b>1</b>
Species per section	<b>4</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>10</b>	<b>8</b>	<b>14</b>	<b>20</b>	<b>13</b>	<b>15</b>	<b>4</b>	

## **Long Meadow Butterflies 2017**

### **Summary and Management Plans**

2017 was a year of mixed fortunes for the meadow's butterflies. Some populations have recovered from the low point of 2016 whereas others are still showing declines from the good year of 2015. Several species emerged earlier than normal probably due to favourable spring weather.

The skippers emerged earlier than in the previous two years and in comparable numbers. Brimstone was present in low numbers but there were no signs of breeding in 2017. The whites were present in lower numbers than in 2015 and 2016 with no spring generation of small or large white.

Orange tips were on the wing earlier than in 2015 and 2016 though in similar numbers to last year.

The favoured areas for small copper, brown argus and common blue were excluded from the annual hay cut this summer to allow them to breed and feed without disturbance. All three species responded well to this adjustment to the management regime with numbers of small copper and brown argus back to their 2015 levels and numbers of common blue higher than in 2015. Holly blue numbers were still as low as in 2016.

Comma and red admiral were seen over a long flight season and in higher numbers than in previous years. However, there was just one each of painted lady, small tortoiseshell and peacock.

Speckled wood showed a partial reversal of the decline in 2016 but was not as numerous as in 2015. In contrast meadow browns emerged earlier than normal in greater numbers than previously recorded in the meadow, they were also the most widely distributed species. Gatekeepers reversed their 2016 decline. Ringlets also emerged earlier than normal but their numbers were still as low as in 2016.

Marbled white were recorded on several dates, a total of six individuals being seen. Perhaps the early signs of a small colony establishing.

For the first time a small heath was seen in the richest section (12) of the meadow for butterflies.

The most butterfly rich areas were sections 11-14 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 excluded from the annual hay cut for this reason. It was cut during the autumn after all butterfly activity had ceased.

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.