

## Butterflies of the Calf

The recording of butterflies occurring on the Calf was rather sporadic during the first 25 years of the Bird Observatories history, however since 1984 more detailed records have been maintained. Since 2006, a formalised butterfly survey has been undertaken, although this was modified and shortened in 2018, following difficulties experienced in completing the monthly survey.

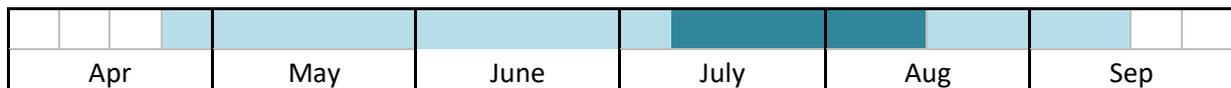
A total of just 20 species have been confirmed as recorded, with 11 of these considered to be either common or abundant. Of the other nine species, Wall, Grayling and Small Heath have small resident populations but are uncommonly recorded, Clouded Yellow occur irregularly as migrants, whilst Orange-tip, Speckled Wood, Comma and Monarch are rare visitors.

### **Clouded Yellow** *Colias croceus*

Following two seen on 7<sup>th</sup> September 1941, there have been records in just 16 seasons since the Observatory began in 1959. Most records refer to singles, seen up to three times although larger numbers were recorded in 1992, when there were 14 records and in 2000, when following singles on 17<sup>th</sup> & 27<sup>th</sup> June, there was then regular sightings between 24<sup>th</sup> August - 4<sup>th</sup> October, with maximum counts of 21 on 31<sup>st</sup> August and 18<sup>th</sup> & 19<sup>th</sup> September. During this 'invasion' a pale *helice* form was recorded on 25<sup>th</sup> & 30<sup>th</sup> September.

### **Large White** *Pieris brassicae*

Recorded almost annually, although numbers vary quite significantly from year to year, perhaps due to the complexity of identification of the *Pieris* group, which may also explain the absence of records in 2015. In most seasons, up to 20 records are made between end of April to mid-September, although in 2018 numbers were significantly higher with 45 records and 143 individuals recorded.



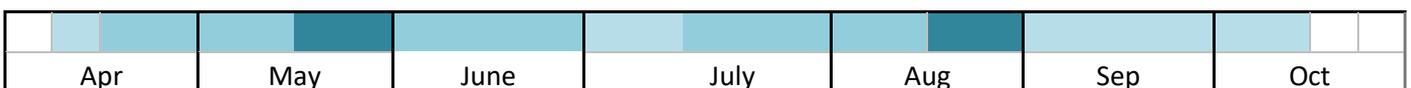
### **Small White** *Pieris rapae*

As with the previous species, the complexity of identification may explain the fluctuation in numbers and occurrence, or lack of, in some years. Sightings have occurred between mid-April to mid-October, with most records involving five or fewer individuals. Record numbers were recorded in 2006, when double-figure counts were made between 6<sup>th</sup> – 11<sup>th</sup> May, with a maximum of 30 on 9<sup>th</sup> May.



### **Green-veined White** *Pieris napi*

An abundant species and common sight between April to mid-October. Counts of up to 30 individuals are recorded in most years, with up to 50 recorded in several years. The maximum count of 60 individuals was recorded on 15<sup>th</sup> May and 4<sup>th</sup> August 2007.



### **Orange-tip** *Anthocharis cardamines*

There have been just six records which include a count of four individuals on 29<sup>th</sup> May 1962, then singles on 7<sup>th</sup> & 12<sup>th</sup> June 1970, 7<sup>th</sup> May 1971, 27<sup>th</sup> June 2006, and 29<sup>th</sup> April 2008.

### Small Copper *Lycaena phlaeas*

A common species recorded regularly between May and early October, although it would appear, perhaps, that a shift in timing of flight periods has occurred during the past decade, with a slightly later emergence in spring and records now regularly continuing through to the third week of October.

This diminutive species is likely to be over-looked due to its small size and tendency to fly low to the ground, with most records involving five or less individuals. There are two distinct brood periods (May-June & August-September) when counts of between 15 – 35 individuals are recorded most years. Maximum counts were 41 on 7<sup>th</sup> August 2009 and 36 on 19<sup>th</sup> August 2013.



### Common Blue *Polyommatus icarus*

Considered to be relatively common in both 1959 & 1960, the species was not recorded again until singles were seen in 1969 & 1970, with several sightings in 1971, 1972 and 1978. Following six individuals in 1984 and four in 1987 there were no records then until two in 1995, whereafter the species was commonly recorded during the next six years, with several counts of up to 29 and a maximum of 80+ on 29<sup>th</sup> August 1989. The species was not recorded in 2002, then up to nine individuals were seen annually between 2003 – 2005 and then was again absent until 2011. Since 2011 the species has been recorded each year, except for 2015 – 2017, and occurs in small numbers with up to five individuals recorded in two distinct flight periods.



### Holly Blue *Celastrina argiolus*

A female near the Observatory on 14<sup>th</sup> May 2005 was the first documented Calf record – although there is a previous record in the Millennium Atlas of Butterflies which cannot be verified in Calf data. The 2005 female is assumed to have laid eggs, as on 11<sup>th</sup> May 2006 a brood of 12 individuals were located. The only other record was of another female seen in the Observatory back garden on 26<sup>th</sup> July 2016.

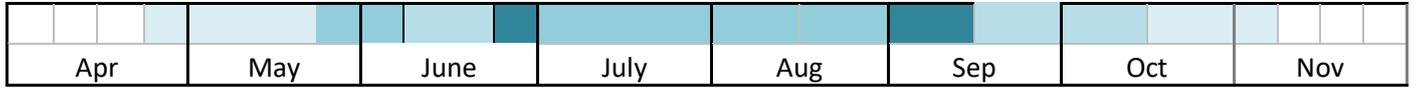
### Red Admiral *Vanessa atalanta*

A commonly recorded species from mid-March to early October, although usually more abundant in autumn. Records in spring are most normally of 1 – 6 individuals, however 30 on 27<sup>th</sup> May 2017 and 20 the following day were exceptional. From late June, records become more frequent and counts of up to 30 individuals are frequent during July and August, whilst in some year's peak counts of up to 60 occur in September and early October. Occasionally, higher numbers occur with 200 on 23<sup>rd</sup> & 24<sup>th</sup> September 2008, 83 on 6<sup>th</sup> October 2015 and 91 on 19<sup>th</sup> September 2020 being the maximum counts.



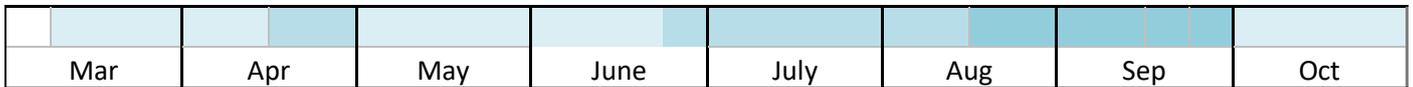
**Painted Lady *Vanessa cardui***

Numbers occurring on the Calf, of this highly migratory species, vary significantly from being absent in 1972, 1984 and 1993 to large influx's during 1980, 2004 and 2019. Counts of up to 10 individuals are most regular, although up to 50 are recorded during influx years, with 200 on 8<sup>th</sup> September 2004 being the maximum prior to 2019. An unprecedented influx occurred during 2019, with the first arrival at the end of June being followed by a huge influx from late July to mid-August. The peak count was on 2<sup>nd</sup> August 2019 when at least 1500 were present, with almost 7000 recorded during the season.



**Small Tortoiseshell *Aglais urticae***

Often one of the first and last species of butterflies to be seen each season, records extend from 9<sup>th</sup> March to 26<sup>th</sup> November. Generally, records involve five or less individuals, although up to 15 are recorded in most years during mid-August to mid-September. Maximum counts are of 20 on 22<sup>nd</sup> September 2012 & 14<sup>th</sup> September 2016, 30 on 24<sup>th</sup> August and 22 on 26<sup>th</sup> August 2020.



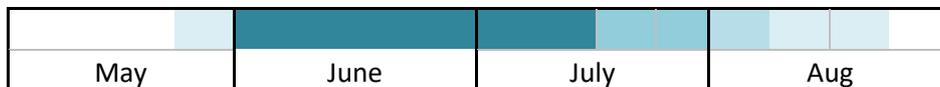
**Peacock *Nymphalis io***

Despite being one of the largest and most striking of our butterflies, the species is rarely recorded in any numbers with most records being of one to three individuals. During the mid-80's and early 1990's numbers recorded were particularly low, with just single records in 1986, 1991 & 1992 and no records in five years. 2006 would appear to have been an exceptional year, with double-figure counts on ten dates during August, with a peak of 49 on 4<sup>th</sup> August 2006. The only other high count was 16 seen on 13<sup>th</sup> August 2019.



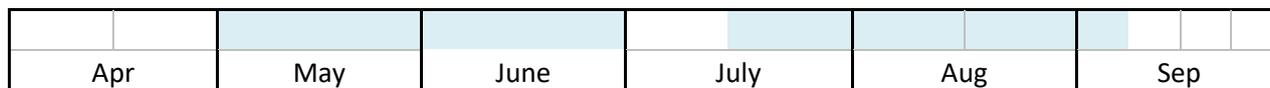
**Dark Green Fritillary *Speyeria aglaja***

This large and powerful butterfly is somewhat of a Calf speciality and can be seen in large numbers during the summer months, with counts of between 100 and 200 being frequent in most years during June and July.



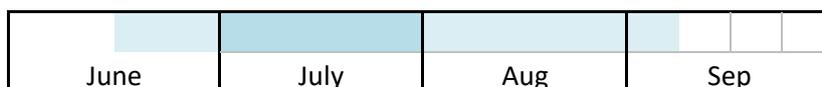
### Wall *Lasiommata megera*

A small population exists on the Calf, with two distinct flight periods. Between one and four individuals are recorded relatively regularly in most years during May & June and mid-July & early September, although in both 2007 and 2014 the species was not recorded at all. The maximum single count was 15 on 25<sup>th</sup> April 2005 and it is likely that the species is often over-looked.



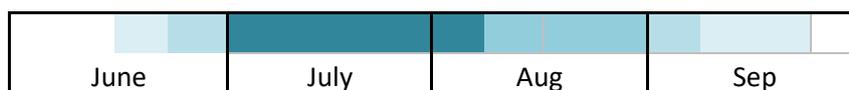
### Grayling *Hipparchia semele*

As with the previous species, the Grayling is likely to be under-recorded in most years. Most records occur during July with up to 10 individuals recorded. Higher counts include 21 on 16<sup>th</sup> July 2005, 28 on 24<sup>th</sup> July 2007 and 16 on 31<sup>st</sup> July 2007.



### Meadow Brown *Maniola jurtina*

An abundant species during summer, with up to 100 individuals recorded regularly during most seasons and occasional higher counts of up to 150. Maximum counts were 200 on 26<sup>th</sup> July 2006, 153 on 28<sup>th</sup> July 2013 and 160 on 13<sup>th</sup> July 2018.



### Small Heath *Coenonympha pamphilus*

A small population of this diminutive species exists, with the first record for the Calf being of one described by Dr.J Harold Bailey on 23<sup>rd</sup> June 1907. The species has been recorded in just 18 years since the Observatory was established, with records mostly involving one or two individuals in any year, although five were recorded in 1959 and nine in 1960. The species is undoubtedly under-recorded and would benefit from more detailed survey to understand their true abundance.

### Speckled Wood *Pararge aegeria*

The first Calf record was a single present in the back garden of the Observatory on 25<sup>th</sup> August 1980, however it took another 30 years for another to be seen, on 11<sup>th</sup> October 2010. Two singles were seen in 2014, on 22<sup>nd</sup> September and 12<sup>th</sup> October, whilst an influx in 2016 saw the first spring record on 10<sup>th</sup> May and autumn records of a single on 24<sup>th</sup> August, two on 15<sup>th</sup> & 17<sup>th</sup> September, with three on 16<sup>th</sup> and singles on three further dates up to 24<sup>th</sup> September. Further singles have been recorded on 16<sup>th</sup> September 2018, 6<sup>th</sup>-7<sup>th</sup> June 2019, 14<sup>th</sup> July 2019, 16<sup>th</sup> September 2020, and 20<sup>th</sup> September 2020. The latter record involved a single seen on Kitterland.

### Comma *Polygonom c-album*

There have been just two records of singles seen in the Observatory garden, on 30<sup>th</sup> September 2011 and 14<sup>th</sup> September 2019.

### Monarch *Danaus plexippus*

There have been two records of this large and highly migratory North American species, with one seen on 18<sup>th</sup> October 1981 and another seen flying in off the sea at South Harbour on 9<sup>th</sup> October 2001.

Acknowledgement:

I am grateful to Manx National Heritage for allowing records from the Calf of Man Bird Observatory reports to be accessed and used for the purpose of writing this review. I would also like to acknowledge the help of several other people in undertaking this review, particularly Christa Worth for her assistance in collating and checking the historical records and Garry Curtis for providing constructive comment on this paper.

Photo Credits:

Red Admirals on banana	-	Breeshey Harkin
Dark Green Fritillary	-	Rob Fisher