

# The Status of Butterflies at Sandwich Bay

## Small Skipper Essex Skipper

*Thymelicus sylvestris*

*Thymelicus lineola*

Small Skipper is common over rough grassland throughout the area from late June to mid-August, exceptionally emerging earlier (17<sup>th</sup> June in 2010 and 2<sup>nd</sup> June in 2011). The latest date recorded was 9<sup>th</sup> September 1981. There has been some indication of a decrease in recent years and in Kent it appears to be less widespread than Essex Skipper (Kent Field Club 1993). Essex Skipper is plentiful over rough grassland from early July to late August, often emerging a little later than Small Skipper, tending to replace it in some areas. It is generally more common, both locally and in Kent (Kent Field Club 1993). Extreme dates are 2<sup>nd</sup> June 2011 and 7<sup>th</sup> September 1985. Both species commonly feed at purple flowers of Knapweed, Vetch, Mint and Bramble in preference to yellow composites. For the purposes of the Butterfly Transect they are recorded together, since separation requires time-consuming inspection of the underside of the tips of the antennae. The 'small' skippers were the most numerous, or second most numerous species on the Transect in the five years from 2007-2011.

## Large Skipper

*Ochlodes sylvanus*

Formerly common over areas of rough, scrubby grassland this species declined markedly in the 1970s when there was often a complete absence of any records. A slight recovery took place in the 1980s when there were up to 20 sightings annually, mainly on the Sampher and the Estate. Although it subsequently declined again at least 12 individuals were recorded in 2009, with at least 20 individuals in 2010 and 2011. The main areas of abundance were the Whitehouse paddock, Middle Field, the Big Gully and on brambles adjacent to the Elms. The flight period has been noted from 30<sup>th</sup> May to 7<sup>th</sup> August.

## Grizzled Skipper

*Pyrgus malvae*

The only record is of one along the Ancient Highway on 27<sup>th</sup> May 1967 (Batchelor 1985).

## Swallowtail

*Papilio machaon*

Specimens of the continental form have been recorded at irregular intervals in the Sandwich area, including two in July 1964, one on the reserve on 8<sup>th</sup> May 1971 and a very worn individual in Pegwell on 9<sup>th</sup> July 1976 (Batchelor 1985). One flew across Pegwell on 15<sup>th</sup> September 2011 and in an influx in 2013 that produced several East Kent records, singles were seen at the hoverport on 4<sup>th</sup> August and along the Delf Stream on 6<sup>th</sup> August.

## Pale Clouded Yellow

*Colias hyale*

This species is a scarce migrant of irregular occurrence that occurred in six years between 1967 and 1984. Records were usually in July and August but in 1983 singles were seen on 24<sup>th</sup> and 26<sup>th</sup> June (Batchelor 1985).

## Berger's Clouded Yellow

*Colias alfacariensis*

The rare and difficult-to-identify species was recorded only in the 'great Clouded Yellow year' of 1946 when one was caught on Prince's dunes and one or two were reported in the locality during August (Batchelor 1985).

## Clouded Yellow

*Colias croceus*

This species is an almost annual migrant from North Africa that reaches our shore in very variable numbers; sometimes not at all. Although never so numerous as in 1946, in 1967 over 80 were counted on some days in July and it remained fairly numerous until mid September. There were one-five records in most other years until 1983 when it was regular from 15<sup>th</sup>-28<sup>th</sup> June and from 26<sup>th</sup> July through August with a further series of records throughout October, including a peak of 28 on August 14<sup>th</sup>. One-six were recorded in most subsequent years and the most significant recent immigrations occurred in 1991 (32), 1994 (25) and 1996 (33). First arrivals have occurred as early as May 11<sup>th</sup> but are more usual in late May or early June. Offspring from these appear from early July onwards when further immigration may occur. In good years, a second local brood appears in September/October which lasts until the first frosts; the latest were recorded on 2<sup>nd</sup> November 2009 and 13<sup>th</sup> November 2013. Examples of the pale form *helice* occur in most good years, most frequently in the later brood.

## Brimstone

*Gonepteryx rhamni*

A local wanderer here, records are almost always of males. Although occasional in February-April most records are in May or early June and July-September, the maximum number of records in any one year being seven in 1975 and ten in 1992. In 1987, eleven well-grown larvae were discovered on Alder Buckthorn in Downsbridge on 11<sup>th</sup> June; the only evidence of breeding in the immediate area.

## Large White

*Pieris brassicae*

Although this species can be common, it is very erratic in its occurrence and sometimes does not exceed single figures on any one day. However, immigration is frequent, occasionally in May but more often during July-August, and may involve very large numbers. Notable migration years occurred in 1967, 1970, several years in the 1980s and again in 1992. Flight periods last from late April to June and again from July to September in two broods. Extreme dates are 10<sup>th</sup> April 1991 and 1993 and 29<sup>th</sup> October 2011.

## Small White

*Pieris rapae*

Generally much more regular than the last species and fairly common annually, this species is less reliant on immigration to sustain numbers. However, migrants have often been recorded, particularly in 1970, 1981, 1985 and 1992. It occurs in two or three broods from May through to October with extreme dates of 19<sup>th</sup> March 1998 and 13<sup>th</sup> November 2011.

## Green-veined White

*Pieris napi*

Quite common in most years, this species has been noted in two broods from mid-April to June and again from mid-July to end of September, favouring damper areas and dune slacks, extreme dates being 29<sup>th</sup> March 1991 and 28<sup>th</sup> October 1992. Some immigration has been noted on a small scale in high summer and a partial third brood in good years.

## Bath White

*Pontia dapladice*

A Mediterranean species that is very rare in Britain, one was seen in the Whitehouse on 12<sup>th</sup> August 1983 and it, or another, was reported in the Little Gully the next day (Batchelor 1985).

## Orange Tip

*Anthocharis cardamines*

Scarce but regular in small numbers during the immediate post-War years, frequenting damper scrubland and Cuckoo-flowered pastures, it became virtually absent from the 1950s until one in 1979. It then gradually became re-established, perhaps as a result of taking to Honesty *Lunaria annua* as a food plant. Since the early 1990s numbers have increased, with up to twenty individuals annually. It was particularly numerous in 2009 when there were 18 along Worth track on April 29<sup>th</sup> and up to eight on the Estate and four on New Downs in the first week of May. The flight period has been noted from 8<sup>th</sup> April to 20<sup>th</sup> June, with exceptionally late individuals in 2013 to 27<sup>th</sup> June.

## Green Hairstreak

*Callophrys rubi*

Although small colonies are known to exist nearby this species had not been found within the recording area since 1948 when a small colony existed in the gorse and bramble at Mary Bax (Batchelor 1985). However, one appeared on the Observatory car park on 21<sup>st</sup> April 2011, with subsequent singles on the Sampher section of the riverbank on 10<sup>th</sup> May and the Delf Stream on May 20<sup>th</sup>.

## Small Copper

*Lycaena phlaeas*

Well distributed throughout rough grassland areas but patchy and considerably less common than formerly during the 1970s. However, as with the next species, numbers appear recently to have recovered and it was particularly abundant in 2007, when it was the sixth most numerous species on the Butterfly Transect, including 37 on 23<sup>rd</sup> June. Also, in 2009 peak counts included 30 on 13<sup>th</sup> July and 42 on 8<sup>th</sup> September. Extreme dates are 14<sup>th</sup> April in 2012, 15<sup>th</sup> April in 2009 and 2011 and 6<sup>th</sup> November in 1986. There is a succession of broods throughout the flight period, with four in the best years. Specimens of the blue-spotted form *ab.caeruleopunctata* were once frequent along the Ancient Highway and have also been recorded in recent years about the Estate.

## Long-tailed Blue

*Lampides boeticus*

In an influx that was evident along much of the south coast in 2013 one was seen on the hoverpad at Pegwell on 16<sup>th</sup> August.

## Brown Argus

*Aricia agestis*

A species of rough grassland whose numbers have fluctuated greatly, it was formerly common and widespread becoming very much scarcer during the 1960s and 1970s, with none between 1972 (two records) and 1978, although it was possibly overlooked at times. It had recovered significantly by the 1990s and in 1996 there were counts of 180 on the Estate and similar numbers along Princes dunes and on New Downs "set aside" fields. However, it has recently become less common and daily counts of 10-15 on the Estate and New Downs are more usual. Flight periods of the two broods extend from late May to the end of June and again from July through to the end of September. An individual in which the usual orange spots are replaced by cream-yellow (*ab.pallidior*) was seen at the edge of the Haven on August 25<sup>th</sup> 2008. Extreme dates are 29<sup>th</sup> April 2011 and 9<sup>th</sup> October 2013.

## Common Blue

*Polyommatus icarus*

Normally plentiful over all areas of rough grassland in two broods from May to early July and again from August to late September, this species has probably decreased in numbers over the past decade or so. However, numbers fluctuate considerably from year to year and in five years of the Estate Butterfly Transect from 2007-2011 it was consistently the 5<sup>th</sup>-7<sup>th</sup> most numerous butterfly each year. Peak counts in 2010, the best of those five years, included 65 on the Estate, 40 on Worth and 18 on New Downs in late July and early August. There were also 60 in the dunes alongside Princes in late May. There are two broods each year, usually extending from mid May to early July and from late July into September, though there is evidence of a partial third emergence in the warmest years and extreme dates are 27<sup>th</sup> April 1983 and 29<sup>th</sup> October 2011.

## Holly Blue

*Celastrina argiolus*

There are small and ephemerally viable colonies on the Estate and outside the area towards Sandwich but numbers fluctuate widely from year to year, rarely reaching double-figures, although totals of 10-15 were estimated in three years between 2007-2011. The years 1988 to 1991 were exceptionally good but numbers were subsequently very low until a recovery in 1995-1997. First brood insects normally occur from early May to early June and the second brood between mid-July and early September, with a small third emergence in the warmest years. Extreme dates are 1<sup>st</sup> April 1990 and 12<sup>th</sup> October 1989.

## Red Admiral

*Vanessa atalanta*

A fairly common insect in most years. Rarely, assumed hibernators have occurred in January and February but the first immigrants usually appear in late April or May in very small numbers, more commonly in June-July. Locally bred imagines then emerge in late July/August and, augmented by further arrivals, may become plentiful throughout the autumn. Both immigration and emigration are often noted in September and October with occasional records from the moth trap at the Observatory. Records have continued as late as 5<sup>th</sup> December 1994.

## Painted Lady

*Vanessa cardui*

Annual in highly variable numbers, this species is periodically numerous as in 1967, 1969, 1972, 1975, 1977, 1980, 1985, 1988 and notably in 1996 which saw the largest butterfly immigration of the 20<sup>th</sup> century. Huge numbers were also recorded in 2009, when one field on New Downs, dominated by clover, held a conservative estimate of 2,500-3,000 on May 26<sup>th</sup>. First arrivals usually appear in late May/ and June, sometimes earlier as in 1985 when there were a number of early records from 3<sup>rd</sup> April, and there are then successive broods, augmented by further immigrants until the first frosts. The latest date is 17<sup>th</sup> November 2009.

## Small Tortoiseshell

*Aglais urticae*

A generally common insect throughout the area that may be encountered in any month of the year on fine, sunny days. Usually the first, hibernated insects appear in March and larval nests are found on nettles in April-May. First brood butterflies appear in June, with a second brood in August, by which time immigrants may augment the local stock. Although this species could become abundant through the autumn and into December numbers declined during the 1990s and counts of more than 40-50 are now notable.

## Large Tortoiseshell

*Nymphalis polychloros*

A colony once existed in the Elms, but the last insects were seen there in 1949. Since then, singles were recorded in the Whitehouse in April 1952 and April 1961 and on Stonar Industrial Estate on 19<sup>th</sup> September 1980 (Batchelor 1985).

## **Marbled White**

*Melanargia galathea*

After declining severely in the 1970's and nearing extinction here, this butterfly has experienced a welcome recovery since 1984 when about 20 individuals were recorded on the Estate. Its numbers have continued to increase and it is currently abundant over most areas of rough grassland, particularly on the Golf Courses, the Oasis/Whitehouse area and Restharrow Dunes, with records from the Sampher and Riverbank. At least 250 were recorded on the Estate and adjacent parts of Royal St.George's golf course on 29<sup>th</sup> June 2009 and in early July 2010 at least 550 were evident over the same areas. It has been recorded from 7<sup>th</sup> June to 27<sup>th</sup> August.

## **Grayling**

*Hipparchia semele*

Formerly found sparsely along the Ancient Highway and on Royal Cinque Ports Golf Course, this species that has become rare in Kent was last seen in 1952 (Batchelor 1985).

## **Gatekeeper**

*Pyronia tithonus*

First recorded in this area at Sandwich in 1976, since when it has become firmly established and common in scrubby areas of rough grassland, notably along the riverbank to the Sampher and about the Estate. It is now one of our commonest butterflies, finishing each season from 2007-2011 as one of the four most numerous species on the Butterfly Transect. The flight period lasts from early July (1<sup>st</sup> July in 2011) until late August and occasionally as late as 13<sup>th</sup> September. The previously recorded earliest date of 19<sup>th</sup> June is questionable, to say the least.

## **Meadow Brown**

*Maniola jurtina*

This summer butterfly is abundant over rough grassland throughout the area. Although it is probably our commonest butterfly, there has been recent evidence of a decline; from one of the most plentiful species on the Butterfly Transect to the 6<sup>th</sup>-7<sup>th</sup> most numerous in 2010 and 2011. The flight period extends from the first half of June until mid September; exceptionally 1<sup>st</sup> June to 20<sup>th</sup> September and, remarkably, 7<sup>th</sup> October in 2010 and 24<sup>th</sup> October 2012.

## **Small Heath**

*Coenonympha pamphilus*

Usually common throughout the area over rough grassland, appearing from late April to mid May and producing a succession of broods until October, with extreme dates of 22<sup>nd</sup> April and 17<sup>th</sup> October and an unprecedented record on 13<sup>th</sup> November 2011. In most years it tends to be most numerous in the second half of August, but it can be commoner earlier in the season, mostly in late June. Impressions of a decrease in recent years may arise from an unusual variability in numbers; peak weekly counts on the Butterfly Transect between 2007-2011 varied from 85 in 2009 to only 27 in 2011. However, in all but one of these five years it was the second or third most numerous species on the Transect.

## **Ringlet**

*Aphantopus hyperantus*

Surprisingly, perhaps, for a species that is quite numerous at least as close as Kingsdown, the only record is of one in the Whitehouse on 12<sup>th</sup> July 1983 (Batchelor 1985).

## Peacock

*Inachis io*

Generally well distributed and fairly common, hibernated insects normally appear from March onwards, exceptionally in January if the weather is mild. Recent peak spring counts included 35 on the Estate, New Downs and Worth in early April 2011. Larval nests may be found on nettles in June and the resulting imagines emerge in July. They may then be abundant (170 on the Estate on 20<sup>th</sup> July 2009, for example) feeding at purple composites such as buddleia but most seem to enter early hibernation and adults are infrequent through September and October, with the latest on 15<sup>th</sup> November 1992. Some immigration has been observed in July-August.

## Comma

*Polygonia c-album*

A scarce insect locally but, after a complete absence in 1978/79, has become a little more frequent in recent years. Occasional hibernated insects appear in April but most records are for summer brood insects during the period July to September, including 17 on the Estate on 12<sup>th</sup> July 2009 and similar numbers in late August 2010. Seen ovipositing on wild hop in the Observatory garden in June 1970. Extreme dates 4<sup>th</sup> March 1992 and 25<sup>th</sup> November 2010.

## Dark Green Fritillary

*Argynnis aglaja*

Formerly occasional on the dunes and along the Ancient Highway to Deal it was locally absent from 1956 (Batchelor 1985) until singles were seen on the Estate on 30<sup>th</sup> July 1998 and on Worth track, opposite the farmhouse, on July 19<sup>th</sup> 2007, previously having been nectaring on *buddleia* at the Observatory.

## Silver-washed Fritillary

*Argynnis paphia*

One was seen and photographed in the Elms on July 5<sup>th</sup> 2011.

## Speckled Wood

*Pararge aegeria*

Occasional specimens that were recorded on the Estate in the 1960s suggested colonisation, but records petered out in 1967 and apart from one on the Green Wall in May 1970, no more were recorded until one-two appeared in 1986. It subsequently became annual in small numbers, with up to twelve frequenting the taller stands of trees such as the Whitehouse willows and the Elms. This increase has continued, including counts of 30 in the Elms on 13<sup>th</sup> April 2007 and 43 on New Downs on 25<sup>th</sup> August 2009. Uniquely among British butterflies, Speckled Wood has a dual wintering strategy, with part of the population spending the winter in the larval stage, while the rest do so as pupae. The flight period has been recorded mainly from 28<sup>th</sup> March to 29<sup>th</sup> June and again from 27<sup>th</sup> July to 18<sup>th</sup> October, with extreme dates of 15<sup>th</sup> February 1998 and 6<sup>th</sup> November 2007.

## Wall

*Lasiommata megera*

Fairly common most years, usually from May to September, but with exceptional early and late dates of 16<sup>th</sup> April (1971) and 24<sup>th</sup> October (1994). Formerly favouring the Estate margins, Mary Bax and riverbank localities a decrease was noted in the late 1980's and a slight recovery in 1992 was not sustained. It currently occurs in low numbers (rarely more than three in a day) and its distribution within the recording area appears to have contracted, with no recent records from Mary Bax, although there were singles in 2011 along Worth track, near the railway. An example of the straw-coloured variety *ab. bradenfelda* was recorded on the Estate on 10<sup>th</sup> August 1997.

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