

Review of butterfly, moth and other natural history sightings 2019

January

January started dry and settled but mostly cloudy with high pressure dominant, and it remained generally dry and often mild during the first half of the month. The second half became markedly cooler with overnight frosts and the last week saw a little precipitation, some which was occasionally wintry.

With the mild weather continuing from December 2018 there were a small number of migrant moths noted in January, comprising a Dark Sword-grass at Seabrook on the 5th, a Silver Y there on the 13th and 2 *Plutella xylostella* (Diamond-back Moths) there on the 15th, whilst a very unseasonal Dark Arches at Hythe on the 4th may have been of immigrant origin.



Dark Sword-grass at Seabrook (Paul Howe)



Dark Arches at Hythe (Ian Roberts)

More typical species involved *Epiphyas postvittana* (Light Brown Apple Moth), Satellite, Mottled Umber, Winter Moth, Chestnut, Spring Usher and Early Moth.



Early Moth at Seabrook (Paul Howe)



Spring Usher at Seabrook (Paul Howe)

The only butterfly noted was a Red Admiral at Nickolls Quarry on the 1st but the mild weather encouraged single Buff-tailed Bumblebees to appear at Seabrook on the 7th and Mill Point on the 8th, whilst a Minotaur Beetle was attracted to light at Seabrook on the 6th.

A Common Seal and two Grey Seals were noted regularly off Folkestone, whilst at Hare was seen near Botolph's Bridge on the 1st and a Mink was noted there on the 17th.

February

After a cold start to the month it was generally mild from the 5th onwards. It was unsettled until the 10th but very mild and sunny weather developed between the 13th and 15th and again between the 21st and 27th, with record-breaking daytime temperatures in the latter spell (in Kent temperatures approached 20°C and this was exceeded elsewhere in the UK for the first time in February). With clear skies it quickly became much cooler in the evenings and frost and fog developed on some nights.

The only migrant moth noted was a single *Plutella xylostella* (Diamond-back Moth) at Seabrook on the 19th, but seven species of micro and 15 species of macro were added to the year list.

The more noteworthy additions included Small Brindled Beauty at Seabrook on the 11th (the first record locally since 2013), Dotted Border at Cheriton and *Tortricodes alternella* (Winter Shade) at Seabrook on the 22nd, Red Chestnut at Seabrook on the 23rd, Early Grey at Cheriton on the 24th, *Agonopterix alstromeriana* (Brown-spot Flat-body) at Seabrook on the 26th, Bloxworth Snout at Hythe on the 27th and Early Thorn and Twin-spotted Quaker at Seabrook on the 28th.



Small Brindled Beauty at Seabrook (Paul Howe)



Red Chestnut at Seabrook (Paul Howe)

The unseasonably mild weather led to some particularly early emergences of butterflies, with the earliest ever records of Brimstone (one at Hythe on the 23rd, with a further five at Asholt Wood on the 26th) and Small White (at Seabrook on the 23rd), whilst Comma and Peacock at Seabrook on the 23rd and Small Tortoiseshell there on the 25th were also new for the year.

March

The first three weeks of the month were dominated by a westerly airflow and it was very windy at times, particularly during the second week, with some light rain or showers on most days. Daytime maxima were generally into low double figures and overnight temperatures remained above zero. The last ten days saw much drier and sunnier weather due to the influence of high pressure but daytime temperatures were similar until the very end of the month, when there were a few very mild days and 18°C was exceeded. The clear skies though made for chillier nights, with some frosts.

The high pressure system enabled a few migrant moths to arrive, with five Silver Ys at Hythe from the 21st, a Hummingbird Hawk-moth at Seabrook on the 24th and a **Blossom Underwing** at Seabrook (about the 6th area record) on the 27th.

Milder conditions towards the end of the month encouraged a couple of exceptionally early emergences, with two Dew Moths at Abbotscliffe on the 26th and a *Pyrausta despicata* (Straw-barred Pearl) at Hythe Ranges on the 30th, both of which were the earliest ever county records.



Blossom Underwing at Seabrook (Paul Howe)



Pyrausta despicata at Hythe Ranges (Ian Roberts)

A further 12 species of micro and 15 species of macro were also added to the year list with the more notable including *Dahlica inconspicuell*a (Lesser Lichen Bagworm) at Abbotscliffe on the 8th, *Acleris notana* (Rusty Birch Button), *Ypsolopha ustella* (Variable Smudge), Shoulder Stripe and Lead-coloured Drab at Paraker Wood and Tawny Pinion at Hythe on the 9th, *Acrolepia autumnitella* (Bittersweet Smudge) at Seabrook on the 14th, Pale Pinion there on the 17th, Oak Nycteoline there on the 19th, Mottled Grey at Folkestone Warren and Samphire Hoe on the 20th, Streamer and Brindled Beauty at Hythe on the 26th, Early Tooth-striped and Scorched Carpet at Folks' Wood on the 29th and *Agonopterix rotundella* (Rolling Carrot Flat-body) at Samphire Hoe on the 30th.



*Dahlica inconspicuell*a at Abbotscliffe (Ian Roberts)



Lead-coloured Drab at Paraker Wood (Ian Roberts)

The butterfly highlight was an exceptionally early Clouded Yellow at Samphire Hoe on the 18th – the earliest ever local record, perhaps having over-wintered at the site, whilst a Small Copper there on the 26th was also the earliest ever locally.

The first Green-veined White at Seabrook on the 24th and Large White at Abbotscliffe on the 27th were more typical. A Red Admiral at Seabrook on the 14th and two Brimstones there on the 24th were also of note.

A Harbour Porpoise was seen off Samphire Hoe on the 8th when another was found dead having been washed ashore on Sandgate Beach.

On the 1st March several flowering examples of a Mediterranean form of White Ramping-fumitory (a plant only previously noted at two sites in the county) were found along the Lower Leas and cluster of the scarce Navelwort was discovered on the roof of the St Mary and St Eanswythe's church.



Mottled Grey at Folkestone Warren (Ian Roberts)

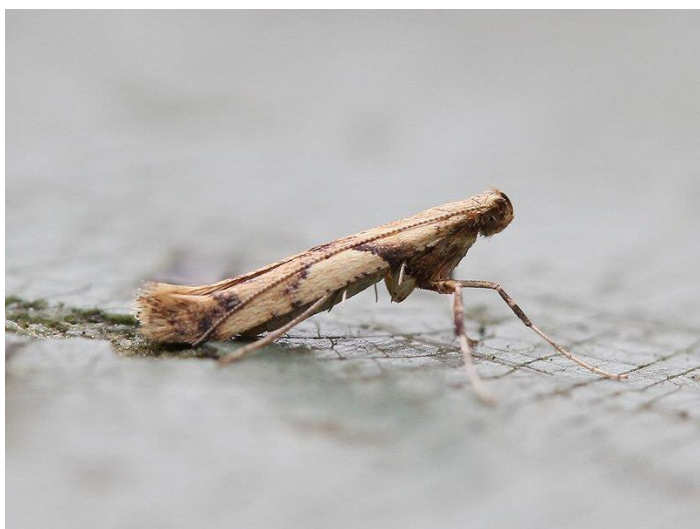


The Streamer at Seabrook (Paul Howe)

April

The first nine days of the month were fairly cool and unsettled with winds mostly from the easterly quadrant. It was drier from the 10th and the easterly winds persisted, with daytime temperatures gradually increasing though it remained disappointingly cold at night. It became very warm over the Easter weekend, exceeding 20°C for the first time this year and overnight temperatures also improved. The last week was cooler and more unsettled however, with variable winds.

The outstanding highlight of the month was the first British record of *Caloptilia honoratella* (Pale Maple Slender), which was trapped at Cheriton on the 16th (an article detailing the sighting was published in Atropos 64: 24-29 and is provided as appendix 1 at the end of this review), whilst the second **Blossom Underwing** of the year (about the 7th area record) was taken at Hythe on the 18th. The captures of *Cydia strobilella* (Spruce Seed Moth) at Hythe, Seabrook and Folkestone Warren (four) on the 22nd perhaps also related to an arrival from the continent.



Caloptilia honoratella at Cheriton (Brian Harper)



Cydia strobilella at Seabrook (Paul Howe)

Following from the early emergences in March there was an exceptional count of **10 White Spots** at Folkestone Warren on the 22nd (there had only been one previous April record in Kent, on the 30th in 2009).

Three further species of micro moth were added to the area list in April: an *Acleris logiana* (Grey Birch Button) at Hythe on the 21st, a *Ypsolopha mucronella* (Spindle Smudge) at Cheriton on the 23rd and a mine of *Paracrania chrysolepidella* (Small Hazel Purple) on Hornbeam at Bargrove Wood on the 25th.



White Spot at Folkestone Warren (Ian Roberts)



Ypsolopha mucronella at Cheriton (Brian Harper)

Another 34 micros were new for the year including the second area record of *Eriopsela quadrana* (Four-spot Bell) at Folkestone Warren on the 22nd, *Acleris literana* (Lichen Button) at Cheriton on the 7th, *Agonopterix pallorella* (Pale Flat-body) at Holy Well on the 11th, *Caloptilia elongella* (Pale Red Slender) at Seabrook on the 15th and *Caloptilia betuilcola* (Red Birch Slender) there the following night, *Agonopterix purpurea* (Small Purple Flat-body) at Folkestone Warren on the 22nd and the mines of four species of Eriocraniidae (*cicatricella*, *semipurpurella*, *sangii* and *unimaculella*) at Folks' Wood on the 27th.



Eriopsela quadrana at Folkestone Warren (Ian Roberts)



Acleris literana at Cheriton (Brian Harper)

A further 62 macros were new for the year with many notably early emergence dates. The following species were recorded on the earliest date compared to the previous decade: Lesser Swallow Prominent (5th), Pale Mottled Willow (7th), Garden Carpet (8th), Common Pug and the Mullein (11th), Mottled and Lime-speck Pugs (16th), Iron Prominent (19th), Dark Spectacle (21st), Common Carpet, Broken-barred Carpet, Green Carpet, Purple Bar, Scalloped Hazel, Clouded Silver, Orange Footman, Bordered Sallow, Light Brocade and Light Feathered Rustic (22nd), The Seraphim (23rd), Vine's Rustic (29th) and the Nutmeg (30th).

The only migrant butterflies noted were the second and third Clouded Yellows of the year at Samphire Hoe on the 16th and 20th. There were six additions to the year list in April but in contrast to the macro moths none of these were on notably early dates: Orange-tip (1st), Speckled Wood (10th), Dingy Skipper, Green Hairstreak and Wall (16th) and Holly Blue (18th).

Other sightings of note included up to two Harbour Porpoises at Samphire Hoe on several dates and a Great Silver Diving Beetle attracted to mercury vapour light at Seabrook on the night of the 23rd.



Broken-barred Carpet at Folk. Warren (Ian Roberts)



Dingy Skipper at Samphire Hoe (Phil Smith)

May

After a mild first day with a light southerly breeze, the wind switched to the north-west and it became cooler and mostly dry apart from some heavy showers on the 3rd. A spell of southerly winds followed from the 7th and it became slightly milder but also wetter. Northerly winds then dominated from the 11th and it became settled though still fairly cool, particularly overnight. Another spell of southerlies from the 21st enabled temperatures to struggle to 20°C but the last few days of the month were cooler again and more unsettled.

Highlights included the fourth area record of **Portland Ribbon Wave** at Samphire Hoe on the 17th (following singles at Seabrook in May 2017, August 2017 and August 2018) and the fifth and sixth area records of **Blair's Mocha** at Seabrook on the 18th and 19th (following singles at Saltwood in August 2012, Hythe and Chesterfield Wood in June 2017 and Samphire Hoe in October 2018). Both species are being noted with increasing frequency in Britain and could be potential colonists locally. Other migrant moths comprised a *Udea ferrugalis* (Rusty-dot Pearl) at Samphire Hoe on the 28th and totals of 16 Silver Ys and nearly 70 *Plutella xylostella* (Diamond-back Moths).



Portland Ribbon Wave at Samphire Hoe (Darren Taylor)



Blair's Mocha at Seabrook (Paul Howe)

Following from the exceptional count of White Spots in April, one was trapped some distance from the normal range in a garden in Cheriton on the 2nd and there was a further record total, with **23** taken at Samphire Hoe on the 17th. A **Dusky Hook-tip** was trapped at the breeding site near Saltwood on the 22nd, with four recorded there later in the month.

Other notable residents included the first **Four-spotted** of the year at Hythe Roughs on the 18th and an ***Agrotera nemoralis*** (Beautiful Pearl) at Heane Wood on the 30th, whilst a peak of 31 Dew Moths were counted at Abbotscliffe on the 24th. ***Elachista subocellea*** (Brown-barred Dwarf) and ***Platyptilia gonodactyla*** (Triangle Plume) at Samphire Hoe on the 17th, and ***Luffia ferchaultella*** (Virgin Bagworm) at Hythe, were new species for the area and a further 85 micros were new for the year including the second area records of ***Cochylidia heydeniana*** (Blue-fleabane Conch) at Samphire Hoe on the 17th and ***Phalonidia manniana*** (Water-mint Conch) at West Hythe on the 26th.

Also of note were ***Aproaerema anthyllidella*** (Vetch Sober) at Seabrook on the 14th, ***Eupoecilia ambiguella*** (Vine Moth), ***Parectopa ononidis*** (Clover Slender) and ***Mecyna asinalis*** (Coastal Pearl) at Samphire Hoe on the 17th, ***Carpatolechia proximella*** (Black-speckled Groundling) at Casebourne Wood on the 18th, ***Epinotia tedella*** (Common Spruce Bell) and ***Ancylis mitterbacheriana*** (Red Roller) at Saltwood on the 22nd, ***Anerastia lotella*** (Sandhill Knot-horn) at Hythe Ranges on the 24th, ***Lobesia reliquana*** (Oak Marble) and ***Ptycholoma lecheana*** (Brindled Twist) at West Hythe on the 26th, and ***Cochylis nana*** (Birch Conch), ***Argyresthia glabratella*** (Spruce Argent), ***Plutella porrectella*** (Grey-streaked Diamond-back Moth) and ***Cryptoblabes bistriga*** (Double-striped Knot-horn) at Heane Wood on the 30th.



Eupoecilia ambiguella at Samphire Hoe (Darren Taylor)

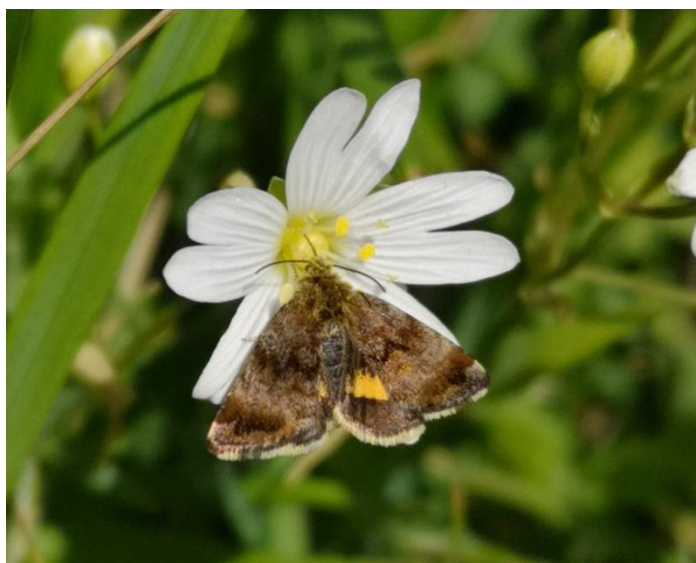


Plutella porrectella at Heane Wood (Ian Roberts)

A further 99 macros were also added to the year list including Chocolate-tip at Samphire Hoe on the 2nd, Chamomile Shark at Seabrook on the 5th, Small Yellow Underwing at Folkestone Downs and Toadflax Brocade at Hythe on the 13th and Barred Hook-tip, Fox Moth and Galium Carpet at Samphire Hoe on the 17th, Dingy Shell and Grey Birch at Casebourne Wood on the 18th, Channel Islands Pug at Hythe and Seabrook on the 20th, Clay Triple-lines and Tawny-barred Angle at Hythe on the 25th, and Barred Red, Brindled White-spot and Green Arches at Heane Wood on the 30th.



Chamomile Shark at Seabrook (Paul Howe)



Small Yellow Underwing at Folk. Downs (Brian Harper)

Migrant butterflies were restricted to a few Clouded Yellows at Folkestone Downs but the most significant record involved a **Grizzled Skipper** seen at Round Hill, the first local record since 1952. Six other species were added to the year list: Adonis Blue (1st), Small Heath (3rd), Brown Argus (6th), Common and Small Blue (18th) and Meadow Brown (30th).

Late Spider Orchids were flowering at Folkestone Downs by the end of the month and the rare Bedstraw Broomrape was discovered at Samphire Hoe on the 16th (with 30 spikes present in June, when another was found in Folkestone Warren).

June

The month began fine and warm but it soon turned cooler and more unsettled again, and it was particularly cool, cloudy and wet between the 10th and the 13th, with overnight lows into single figures. Warm air moving up across France on the night of the 18th/19th brought with it some spectacular thunderstorms before a ridge of high pressure formed, leading to dry, sunny weather on the 21st and the 22nd. The rest of the month was mainly warm and humid and temperatures climbed above 30°C on the 29th, with overnight lows approaching 20°C on a few nights.

The last week of the month produced no fewer than three new macro moths for the area, with the ninth county record of **Cloaked Pug** at Folkestone Downs on the 25th (presumably of immigrant origin, with several others found on the English coast at a similar time), a **Scarlet Tiger** at Casebourne Wood on the 27th (seemingly part of an influx away from the normal range) and a **Brown Scallop** at Hythe on the 29th.



Cloaked Pug at Folkestone Downs (Ian Roberts)



Scarlet Tiger at Casebourne Wood (Ian Roberts)



Brown Scallop at Hythe (Sean Clancy)



Elegia similella at Hythe (Sean Clancy)

Other particularly notable records included the first modern area record of **Large Nutmeg** at Samphire Hoe on the 6th, the second area record of the **Concolorous** there on the 14th, the second area record of ***Elegia similella*** (White-barred Knot Horn) at Hythe on the 24th, the third to fifth area records of **Grass Rivulet** (at Seabrook on the 3rd and 6th, and Cheriton on the 4th), the fourth area record of ***Acrobasis tumidana*** (Scarce Oak Knot-horn) at Seabrook on the 24th, and an excellent sequence of **Netted Pug** sightings, with singles at Peene and Samphire Hoe on the 1st, and Hythe Ranges on the 2nd, whilst a Buttoned Snout at the latter site on the same night was another unusual record.



Grass Rivulet at Seabrook (Paul Howe)



Netted Pug at Hythe Ranges (Ian Roberts)

The more regular migrant species were represented by singles of Gem at Hythe on the 8th and Pearly Underwing there on the 11th, two Hummingbird Hawk-moths (at Abbotscliffe on the 6th and Cheriton on the 19th), two *Udea ferrugalis* (Rusty-dot Pearl) (at Seabrook on the 3rd and Cheriton on the 17th), two Small Ranunculus (at Hythe on the 17th and 25th), three Delicates (at Samphire Hoe on the 6th, Hythe on the 25th and Cheriton on the 27th), and totals of 30 Silver Ys and over 520 *Plutella xylostella* (Diamond-back Moth), including 79 at Hythe/Seabrook on the 28th.

The formerly rare immigrant ***Catoptria verellus*** (Marbled Grass-veneer) must certainly now be breeding locally as a record total of 12 were trapped at Casebourne Wood on the 27th, whilst earlier in the month there were two at West Hythe on the 19th and one at Folkestone Downs on the 25th. Clancy's Rustic also appears to be resident, with numerous records from Cheriton, Hythe and Seabrook (from the 9th), as does Four-spotted Footman (recorded from Seabrook on the 26th and Hythe on the 29th), Red-necked Footman (with a total of eight recorded from several sites from the 23rd) and *Sciota adelphella* (Willow Knot-horn) (with singles at Seabrook on the 21st and 24th, and Nickolls Quarry on the 23rd).



The Gem at Hythe (Ian Roberts)



Catoptria verellus at West Hythe (Fred Butcher)

The recently described *Anarsia innoxia* (Acer Sober) was added to three tetrad lists during the month TR13 N (Chesterfield Wood), TR13 S (Hythe) and TR13 Y (Cheriton) and *Agrotera nemoralis* (Beautiful Pearl) continues to spread, with the first record from Folks' Wood on the 21st (it is now known from five woodland areas locally), whilst a likely immigrant was trapped in a garden in Hythe on the 19th.

A further 192 micros were new for the year including the first area records of *Glyphipterix thrasonella* (Speckled Fanner), *Coleophora pennella* (Bugloss Case-bearer) and *Bactra robustana* (Saltern Marble) at Samphire Hoe on the 1st, *Phyllocnistis saligna* (Willow Bent-wing) at Seabrook on the 19th, *Elachista triatomea* (Meadow Dwarf) and *Epiblema cirsiana* (Knapweed Bell) at Nickolls Quarry on the 23rd, *Epiblema scutulana* (Thistle Bell) at Seabrook on the 25th and *Luquetia lobella* (Sloe Flat-body) at West Hythe on the 29th.



Epiblema cirsiana at Nickolls Quarry (Ian Roberts)



Elachista triatomea at Nickolls Quarry (Ian Roberts)

Also of particular note were *Hellinsia carphodactyla* (Citron Plume) at Peene and *Endothenia oblongana* (Downland Marble) at Samphire Hoe on the 1st, *Pseudosciaphila branderiana* (Great Marble) and *Strophedra nitidana* (Little Oak Piercer) at Folks' Wood on the 21st, *Cosmopterix lienigiella* (Fen Cosmet) and *Brachmia inornatella* (Fen Crest) at Nickolls Quarry on the 23rd, *Carpatolechia fugitivella* (Elm Groundling) at Hythe on the 24th, *Triaxomera fulvimitrella* (Four-spotted Clothes Moth), *Monochroa cytisella* (Bracken Neb) and *Batrachedra pinicolella* (Pine Cosmet) at Chesterfield Wood and *Delplanqueia dilutella* (Powdered Knot-horn) at Seabrook on the 29th and *Sophronia semicostella* (White-shouldered Sober) at Hythe on the 30th.

A further 112 macros were new for the year including Yarrow Pug at Samphire Hoe on the 1st, Clouded Buff at Folkestone Downs on the 6th, Fiery Clearwing at Folkestone Warren on the 11th, Cream Wave at Samphire Hoe on the 17th, Rest Harrow at Folkestone Warren and Samphire Hoe on the 18th, Water Ermine at West Hythe on the 19th, Broom Moth and Northern Rustic at Samphire Hoe on the 21st, Silky Wainscot at Nickolls Quarry on the 23rd, Bordered White at Hythe on the 23rd, The Miller at Hythe on the 24th, Twin-spot Carpet at Casebourne Wood on the 27th, Gold Swift and Olive Crescent at Chesterfield Wood on the 29th and Sussex Emerald at Hythe on the 30th.



Water Ermine at West Hythe (Fred Butcher)



Northern Rustic at Samphire Hoe (Darren Taylor)

Single Painted Ladies were seen at Samphire Hoe and Seabrook on the 11th, marking the beginning of a small influx of around a dozen. The first Large Skipper was at Samphire Hoe on the 1st and the first Marbled White at Seabrook on the 17th, whilst a White-letter Hairstreak was an unusual capture at mercury vapour light at Seabrook on the 25th.

A Fragrant Orchid at Samphire Hoe was a new record for the site whilst counts of the regular orchid species included 170 Pyramidal and 5,000 Common Spotted. A few Lizard Orchids were seen at the usual site at Pedlinge.

July

The first half of the month was mostly dry and settled with unremarkable temperatures before the third week saw a few thundery showers, preceding an exceptionally hot spell between the 22nd and 25th which saw record-breaking temperatures in the UK, and in excess of 37°C locally, with overnight lows exceeding 20°C on a couple of nights.

There were once again a number of very significant immigrant moths recorded, particularly during and after the 'heatwave', including the first record of **Crescent Dart** at Saltwood on the 12th, the second record (but the first since 1955 and only about the 24th for Britain) of **Three-humped Prominent** at Samphire Hoe on the 25th, the second area record (but the first since 1946) of **Brussels Lace** at Cheriton on the 29th, the second record of ***Loxostege sticticalis*** (Diamond-spot Pearl) at Heane Wood on the 24th, the second and third records of ***Sciota hostilis*** (Scarce Aspen Knot-horn) at Seabrook on the 11th and 25th and the fifth and sixth records of ***Acrobasis tumidana*** (Scarce Oak Knot-horn) at Cheriton on the 25th (two) and Heane Wood on the 31st (where a total of four were trapped, suggesting that they may have been locally bred).



Crescent Dart at Saltwood (Colin Dunster)



Three-humped Prominent at Samphire Hoe (Tony Rouse)



Brussels Lace at Cheriton (Brian Harper)



Loxostege sticticalis at Heane Wood (Brian Harper)

The fifth to seventh records of **Dark Crimson Underwing** were at Folkestone Warren on the 22nd (two), Hythe on the 24th and Cheriton on the 29th, whilst the seventh and eighth records (following two in May) of **Blair's Mocha** were at Hythe on the 27th and Saltwood on the 28th, and the 13th area record (but only the 21st for Britain) of **Pale-shouldered Cloud** was trapped at Cheriton on the 12th (all of these sightings have occurred since 2007, with 11 in the last 13 years which strongly suggests that the species is locally established).



Dark Crimson Underwing at Cheriton (Brian Harper)



Pale-shouldered Cloud at Cheriton (Brian Harper)

An excellent supporting cast of scarce migrants included singles of Bordered Straw at Hythe on the 14th, *Palpita vitrealis* (Olive-tree Pearl) there on the 19th, the Delicate at Folkestone Warren on the 22nd, the Vestal at Hythe on the 23rd, Small Mottled Willow there on the 29th and Latticed Heath at Heane Wood on the 31st.

Single Golden Twin-spots were at Seabrook on the 19th and 26th, with two Gypsy Moths at Cheriton on the 21st, *Cydalima perspectalis* (Box Tree Moth) at Seabrook on the 4th, Hythe on the 11th and Saltwood on the 23rd and *Cydia amplana* (Vagrant Piercer) at Cheriton on the 25th, Seabrook and Hythe (2) on the 29th and Heane Wood on the 31st, whilst there was an excellent total of 17 Tree-lichen Beauties. Following the presumed immigrant *Agrotera nemoralis* (Beautiful Pearl) at Hythe in June, a further single was recorded from a different garden in the town on the 11th.



Golden Twin-spot at Seabrook (Paul Howe)



Gypsy Moth at Cheriton (Brian Harper)

More regular migrants comprised totals of six *Nomophila noctuella* (Rush Veneer), seven Dark Sword-grass, ten *Udea ferrugalis* (Rusty-dot Pearls), over 100 Silver Ys and over 400 *Plutella xylostella* (Diamond-back Moths).

A **Dotted Fan-foot** at the Aldergate Bridge on the 5th was a new species for the area however this, together with a **Clay Fan-foot** trapped there on the same night (the first area record since 2001), is presumably a rarely encountered resident.

Following the records in June, *Catoptria verellus* (Marbled Grass-veener) was noted from a further four potential breeding sites, with presumed immigrants at Samphire Hoe on the 1st and Hythe on the 16th. The second generation of **Dusky Hook-tips** were noted at the breeding site from the 24th, with four at a different site on the 29th. There was an excellent count of **70** Sussex Emeralds at Hythe Ranges on the 9th, with up to nine recorded at Hythe and a single at Seabrook (on the 24th) and Straw Belles were also noted in good numbers, with a peak of 23 at Folkestone Downs on the 29th.



Dotted Fan-foot at the Aldergate Bridge (Ian Roberts)



Clay Fan-foot at the Aldergate Bridge (Ian Roberts)

Eight new species of micro were recorded, with a *Pempelia palumbella* (Heather Knot-horn) at the Aldergate Bridge on the 5th and singles of *Pediasia aridella* (Saltmarsh Grass-veener) at Peene Quarry on the 22nd and at Hythe on the following night perhaps relating to migrant individuals, whilst *Pseudatemelia josephinae* (Orange-headed Tubic) at Kiln Wood on the 4th, *Caryocolum alsinella* (Narrow Groundling) and *Aristotelia brizella* (Thrift Neb) at Hythe Ranges on the 9th, *Carpatolechia notatella* (Sallow-leaf Groundling) at Hythe on the 21st, *Gelechia senticetella* (Cypress Groundling) at Hythe on the 26th and and *Coleophora hemerobiella* (Black-stigma Case-bearer) at Hythe on the 26th more likely related to previously undetected residents. The second area (and county) records of the adventive *Blastobasis rebeli* (Marsh Dowd) at Folkestone Warren on the 22nd and the apparent recent colonist *Cosmopterix scribaiella* (New Marsh Cosmet) at the Aldergate Bridge on the 5th, and the second area record of the immigrant (or perhaps scarce resident) *Celypha rufana* (Lakes Marble) at Samphire Hoe on the 1st were also of particular note.

A further 92 micros were added to the year list including *Eudonia lineola* (White-line Grey), *Oxyptilus parvidactyla* (Small Plume) *Stenoptilia zophodactylus* (Dowdy Plume) and *Delplanqueia inscriptella* (Brown Powdered Knot-horn) at Samphire Hoe and *Acleris kochiella* (Elm Button) at Seabrook on the 1st, *Cnaemidophorus rhododactyla* (Rose Plume) and *Dichomeris alacella* (Lichen Crest) at the Aldergate Bridge and *Eana incanana* (Bluebell Shade) at Hythe on the 5th, *Ypsolopha sequella* (Pied Smudge) at Saltwood on the 6th, *Eudonia truncicolella* (Ground-moss Grey) at Seabrook on the 7th, *Scoparia subfusca* (Large Grey) and *Caryocolum vicinella* (Coast Groundling) at Hythe Ranges on the 9th, *Assara terebrella* (Dark Spruce Knot-horn) at Seabrook on the 11th, *Acleris umbrana* (Dark-streaked Button) there on the 12th, and *Anania verbascalis* (Golden Pearl) at Cheriton and *Rhodophaea formosa* (Beautiful Knot-horn) at Seabrook on the 14th.

The latter half of July saw *Pempeliella ornatella* (Ornate Knot-horn) and *Moitrelia obductella* (Kent Knot-horn) at Folkestone Warren on the 16th, *Plodia interpunctella* (Indian Meal Moth) at Saltwood on the 17th, *Pammene aurita* (Sycamore Piercer) at Hythe on the 19th, *Bucculatrix thoracella* (Lime Bent-wing) at Hythe, *Pyrausta nigrata* (Wavy-barred Sable) and *Depressaria badella* (Brown Flat-body) at Peene Quarry on the 21st, *Apodia bifractella* (Dark Fleabane Neb) and *Acompsia schmidtellus* (Marjoram Crest) at Capel-le-Ferne, *Batrachedra preangusta* (Poplar Cosmet) at Seabrook and *Ancylosis oblitella* (Saltmarsh Knot-horn) at Samphire Hoe on the 23rd, *Recurvaria leucatella* (White-barred Groundling) and *Coleophora salicorniae* (Glasswort Case-bearer) at Hythe on the 24th, *Clavigesta sylvestrana* (Small Pine Shoot) at Hythe on the 25th, *Cosmopterix pulchrimella* (Pellitory Cosmet) at Hythe on the 28th, *Mompha propinquella* (Marbled Cosmet), *Ypsolopha nemorella* (Hooked Smudge) and *Syncopacma larseniella* (White-strap Sober) at Folks' Wood on the 29th and *Acompsia cinerella* (Ash-coloured Crest) at Saltwood on the 31st amongst the more notable additions.



Pempelia palumbella at Aldergate Bridge (Ian Roberts)



Pempeliella ornatella at Folk. Warren (Kevin Button)



The Suspected at Samphire Hoe (Ian Roberts)



The Gothic at Aldergate Bridge (Ian Roberts)



Sub-angled Wave at Peene (Brian Harper)



The Blackneck at Peene (Brian Harper)

A further 67 macros were added to the year list including the Suspected and Orange Moth at Samphire Hoe on the 1st, the Spinach at Seabrook on the 2nd, Dark Umber at Kiln Wood on the 4th, Orange-tailed Clearwing and Grass Emerald at Hythe and Bordered Beauty and the Gothic at the Aldergate Bridge on the 5th, Pigmy Footman at Hythe Ranges on the 9th, Scarce Silver-lines at Cheriton on the 10th, Chalk Carpet at Cheriton Hill and Sub-angled Wave at Folkestone Warren on the 16th, the Blackneck at Peene and Hoary Footman at Seabrook on the 17th, Webb's Wainscot at Hythe on the 19th, Brown-veined Wainscot and Double Lobed at Seabrook on the 22nd, the Annulet and Wormwood at Capel-le-Ferne and Southern Wainscot at Hythe on the 23rd, Dotted Footman at Cheriton on the 24th, Twin-spotted Wainscot at Hythe and Seabrook and the Olive at Cheriton on the 26th and Reed Dagger at Seabrook on the 31st.

A **Silver-washed Fritillary** at Folks' Wood on the 17th and a **Chalk Hill Blue** at Round Hill on the 26th (with one at Samphire Hoe on the 30th) were the most noteworthy butterflies to be recorded, whilst further additions to the year list involved Gatekeeper, Ringlet and Small Skipper at Peene Quarry on the 11th and Essex Skipper at Folkestone Downs on the 13th. The only migrants noted were a small number of Painted Ladies.

Few notable records of other taxa were received however the persistence of the colony of Italian Wall Lizards at Folkestone Warren was of interest.



Chalk Hill Blue at Samphire Hoe (Phil Smith)



Painted Lady at Samphire Hoe (Phil Smith)

August

After a settled start to the month deep depressions brought wet and windy weather on the 9th/10th and 14th to 16th. A hot spell developed from the 21st to the 27th, setting new record high temperatures (in excess of 31°C locally) for the Bank Holiday weekend. Conditions then turned cooler and more unsettled again from the 28th.

It was another exciting month for immigrant moths with the second and third area records of **Beautiful Marbled** at Samphire Hoe on the 2nd and 27th (following two at the same site on the 16th October 2018), the third record of **Oak Processionary** at Hythe on the 10th (following singles at Saltwood in August 2014 and Hythe in July 2018), the fifth record (but the first since 1955) of **Bedstraw Hawk-moth** at Seabrook on the 7th, and the 11th record (but only the second since 1951, following one at Hythe in June 2015) of **Striped Hawk-moth** at Samphire Hoe on the 1st.

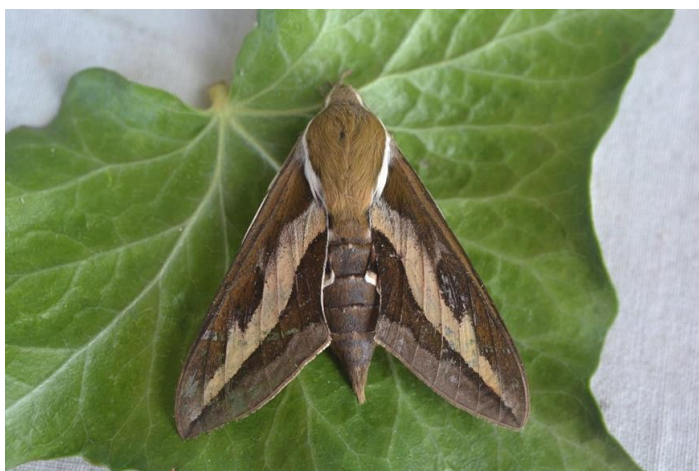
Scarce migrants comprised a Bordered Straw at Folkestone Warren on the 27th, Small Mottled Willows at Hythe on the 26th and Folkestone Warren on the 27th, *Cydalima perspectalis* (Box Tree Moths) at Samphire Hoe and Seabrook on the 27th, Latticed Heaths at Seabrook on the 11th and Folkestone Warren on the 27th, a Gem at Peene on the 21st, a Delicate at Seabrook on the 24th and Scarce Bordered Straws at Samphire Hoe on the 24th, Hythe on the 26th, Folkestone Warren and Samphire Hoe on the 27th, and Hythe on the 31st, whilst a Four-spotted at Hythe on the 1st was also presumably an immigrant. Following the two captures in July there was an exceptional influx of Golden Twin-spots, with 15 being recorded (bringing the total for 2019 to 17, thereby doubling the total number that have ever been recorded locally). There were singles at Seabrook on the 7th and 24th, with two there on the 27th, two at Hythe on the 26th (with another on the 30th) and an incredible count of eight at Folkestone Warren on the 27th. There were also excellent totals of seven *Palpita vitrealis* (Olive-tree Pearl), 12 *Cydia amplana* (Vagrant Piercer) and over 25 Gypsy Moths.



Beautiful Marbled at Samphire Hoe (Ian Roberts)



Oak Processionary at Hythe (Sean Clancy)



Bedstraw Hawk-moth at Seabrook (Paul Howe)



Striped Hawk-moth at Samphire Hoe (Tony Rouse)

The more regular migrants involved totals of four *Nomophila noctuella* (Rush Veneers), nine Dark Sword-grass, 44 *Udea ferrugalis* (Rusty-dot Pearls), over 220 Silver Ys and over 330 *Plutella xylostella* (Diamond-back Moths), but just a single Hummingbird Hawk-moth (at Hythe on the 21st), whilst there was another excellent total of 45 Tree-lichen Beauties.

One new macro moth was added to the area list, an **Archer's Dart** at Samphire Hoe on the 24th, whilst a **Scarce Chocolate-tip** at West Hythe on the 4th was the first local record since 1908. Additions to the micro list involved a *Stenolechia gemmella* (Black-dotted Groundling) at Cheriton on 6th, *Caloptilia populetorum* (Clouded Slender) at Hythe on 10th, *Ancylis comptana* (Little Roller) at Cheriton on 24th and *Phyllonorycter tenerella* (Hornbeam Midget) at Seabrook on 26th. These may have been wanderers or originated from undetected populations.



Latticed Heath at Seabrook (Paul Howe)



Scarce Chocolate-tip at West Hythe (Ian Roberts)

Single Dusky Hook-tips in coastal traps at Hythe on the 2nd and Seabrook on the 8th may have been immigrants, whilst inland records included a count of 17 on the 6th (and there have now been records from four woodland sites in 2019 as this species continues to become established locally). Conversely there was just a single record of White-banded Carpet this year, at Seabrook on the 2nd (compared to a total of 18 in 2018), which is rather concerning.



Dusky Hook-tip at Seabrook (Paul Howe)



White-banded Carpet at Seabrook (Paul Howe)

A further 25 micros were added to the year list including *Acleris rhombana* (Rhomboid Tortrix), *Agdistis bennetii* (Saltmarsh Plume) and *Ypsolopha horridella* (Dark Smudge) at Samphire Hoe on the 1st (with the latter also noted at Seabrook on the same night), *Nemapogon clematella* (Barred White Clothes Moth) at West Hythe and *Cochylimorpha alternana* (Kentish Conch) at Samphire Hoe on the 4th, *Ypsolopha dentella* (Honeysuckle Moth) at Cheriton on the 6th, *Hypatima rhomboidella* (Square-spot Crest) at Peene on the 21st, *Epermenia falciformis* (Large Lance-wing) and *Mirificarma mulinella* (Gorse Groundling) at Hythe on the 25th, *Agonopterix liturosa* (Large Purple Flat-body) at Samphire Hoe and *Epinotia caprana* (Large Sallow Bell) at Hythe on the 27th.



Ypsolopha horridella at Seabrook (Paul Howe)



Nemapogon clematella at West Hythe (Ian Roberts)

A further 16 macros were added to the year list including Pimpinel Pug, Barred Rivulet and Dog's Tooth at Samphire Hoe on the 1st, the Crescent there on the 2nd, Bulrush Wainscot and Small Scallop at West Hythe on the 4th, Six-striped Rustic at Seabrook on the 20th, Hedge Rustic at Samphire Hoe on the 24th, and Dotted Clay at Folkestone Warren on the 27th.

The most significant butterfly record involved a pair of **Long-tailed Blues** discovered at Folkestone Warren on the 15th, the female of which was observed laying eggs and at least 21 of these were later found to have hatched onto the flowers of Everlasting Pea. This was only the second area record (following a female taken on Folkestone Downs in September 1957).

Good numbers of Painted Ladies were also recorded, with a peak of 70 at Samphire Hoe on the 3rd, whilst single Silver-spotted Skippers were seen at Folkestone Warren on the 15th and Cheriton Hill on the 29th.



The Crescent at Samphire Hoe (Ian Roberts)



Long-tailed Blue at Folkestone Warren (Alfred Gay)

The Flame-shouldered Blister Beetle colony was noted again at Palmarsh and single Western Conifer Seed Bugs were seen at Hythe on the 26th and Folkestone Warren on the 27th.

September

The first week was dominated by westerly winds and it was mild with a few showers. A settled fortnight followed, with light winds and dry conditions, before the weather turned wetter, with stronger south-westerly winds.

The month started extremely well when a **Clifden Nonpareil** was seen at Heane Wood on the 1st. The only definite local record of this magnificent insect prior to 2018 related to one found by day at the Seabrook Lodge School in Hythe in 1934, although Chalmers-Hunt (1968) also listed two earlier examples from the “Neighbourhood of Folkestone” (in 1874 and 1895) and another in 1953, but these lack specific details regarding their location. However this sighting, which follows one at Beachborough in September last year, raises hope that it could be starting to become established locally as part of a pattern of apparent colonisation nationally (Clancy, 2019).

An **Oak Lutestring** at Seabrook on the 15th appears to only be the third local record (following one in Folkestone Warren in 1893 and one at West Hythe in 1998) and may have been of migrant origin (another was noted at Littlestone in early October and was the tenth for the Dungeness recording area). Highlights amongst the other immigrants included the fifth area records of **Pale-lemon Sallow** at Hythe on the 20th (following singles at Saltwood in 2011, 2012 and 2014, and Hythe in 2018) and **Dewick’s Plusia** at Samphire Hoe on the 28th (following singles at Hythe in 2009 and 2018, and Saltwood in 2014 and 2015).

There were exceptional numbers of *Cydalima perspectalis* (Box Tree Moths), with up to 13 at Hythe (including a record count of five on the 16th) and singles at Seabrook and Cheriton, increasing the total for the year to 20, which exceeds the total previous sightings (singles in 2014, 2015 and 2017, and an influx of 12 in 2018). The unprecedented arrival of Golden Twin-spots continued with up to eight recorded (up to seven at Hythe and one at Seabrook).

Convolvulus Hawk-moths were noted at Seabrook on four dates from the 12th, and at Hythe on the 16th and 28th, and there were singles of Bordered Straw at Hythe on the 16th and *Palpita vitrealis* (Olive-tree Pearl) there on 29th, whilst totals of up to 15 Scarce Bordered Straws and 22 Delicates were of note. A Dusky Hook-tip at Seabrook on the 3rd might have been an immigrant, or a wanderer from the local population.

The more regular migrants involved totals of two *Nomophila noctuella* (Rush Veneers), two Pearly Underwings, three Dark Sword-grass, 15 Hummingbird Hawk-moths, at 23 *Udea ferrugalis* (Rusty-dot Pearls), over 80 Silver Ys and nearly 100 *Plutella xylostella* (Diamond-back Moths).



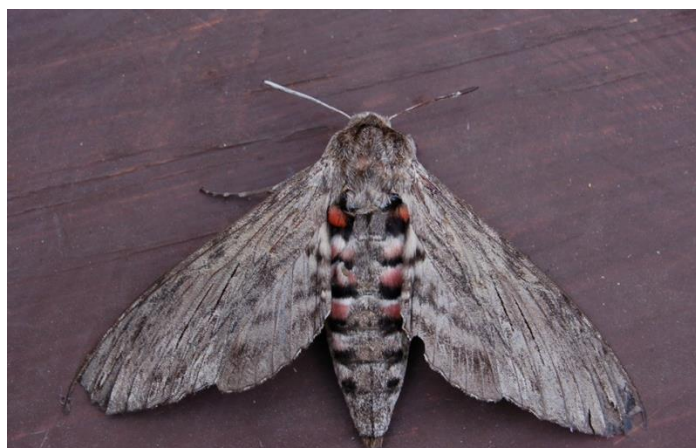
Oak Lutestring at Seabrook (Paul Howe)



Pale-lemon Sallow at Hythe (Ian Roberts)



Cydalima perspectalis at Hythe (Sean Clancy)



Convolvulus Hawk-moth at Seabrook (Paul Howe)

A total of 47 micros were added to the year list of which 43 were leaf mines, and seven of these were new for the area: *Antispila metallella* (Four-spot Lift) at Casebourne Wood on the 5th, *Stigmella viscerella* (Plain Elm Pigmy) at West Hythe on the 13th, *Heliozela sericiella* (Oak Satin Lift) at Brockhill Country Park on the 21st, and *Stigmella lapponica* (Drab Birch Pigmy), *Stigmella confusella* (Pale Birch Pigmy), *Stigmella luteella* (Short-barred Pigmy) and *Ectoedemia occultella* (Large Birch Pigmy) at Folks' Wood on the 27th.



Stigmella viscerella at West Hythe (Ian Roberts)



Ectoedemia occultella at Folks' Wood (Ian Roberts)

Also of note were *Phyllonorycter comparella* (Winter Poplar Midget) at Hythe on the 2nd, *Ectoedemia erythrogenella* (Coast Bramble Pigmy) at Copt Point and *Phyllonorycter lantanella* (Viburnum Midget) at Folkestone Warren on the 18th, *Bucculatrix albedinella* (Elm Bent-wing) at Princes Parade on the 20th and *Bucculatrix cidarella* (Alder Bent-wing) at Brockhill Country Park on the 21st.



Phyllonorycter comparella at Hythe (Ian Roberts)



Phyllonorycter comparella ex. mine (Ian Roberts)

The imago (adult) moth species comprised *Ypsolopha parenthesella* (White-shouldered Smudge) at Folks' Wood and *Stigmella samiatella* (Chestnut Pigmy) at Seabrook on the 15th, *Agonopterix conterminella* (Sallow Flat-body) at Hythe on the 17th and *Agriphila latistria* (White-streak Grass-veneer) at Hythe on the 20th.

A further 17 macros were added to the year list including Frosted Orange at Hythe on the 12th, Brindled Green at Cheriton, Feathered Brindle at Hythe and Orange Sallow at Seabrook on the 15th, the Sallow at Hythe on the 16th, Brown-spot Pinion at Saltwood and Seabrook on the 21st, Large Wainscot at Hythe on the 23rd, Deep-brown Dart at Hythe on the 26th and Dusky-lemon Sallow at Hythe on the 27th.



Feathered Brindle at Seabrook (Paul Howe)



Brown-spot Pinion at Seabrook (Paul Howe)

Good numbers of Painted Ladies were noted, and one was attracted to light at Hythe on the 30th. A Southern Oak Bush-cricket was seen at Seabrook on the 2nd. Small numbers of Harbour Porpoise and Grey Seal were noted offshore.

October

The jet stream tracked over southern Britain for most of October, resulting in a largely cloudy and often wet month, but it also meant that overnight temperatures were typically in double figures, although the last week was more settled and cooler.

The highlight of the month was the first area record of **Radford's Flame Shoulder**, which was trapped at Samphire Hoe on the 16th. Other rarities included the sixth area records of **Dewick's Plusia** at Hythe on the 4th and **Pale-lemon Sallow** there on the 6th (which very quickly follow the fifth records in September). A **Blair's Mocha** at Hythe on the 3rd was the ninth area record but the fifth to be seen this year (after two in both May and July).



Radford's Flame Shoulder at Samphire Hoe (Ian Roberts)

Dewick's Plusia at Hythe (Ian Roberts)

Oak Rustics were trapped at Hythe on the 18th, Saltwood on the 22nd and 24th, and Hythe again on the 31st (two). There had only been eleven previous records (three in 2017 and eight in 2018) but this Holm Oak specialist might now be locally established.

The exceptional influxes of *Cydalima perspectalis* (Box Tree Moth) and Golden Twin-spot petered out, with just one of the former at Seabrook on the 1st and one of the latter at Hythe on the 7th.

Convolvulus Hawk-moths were noted at Seabrook on four dates between the 2nd and 14th, and a single Vestal was trapped there on the 13th. A total of ten *Palpita vitrealis* (Olive-tree Pearl) were recorded, with two at Seabrook, three at Hythe and four at Cheriton, and there were also ten Scarce Bordered Straws; one at Cheriton, three at Seabrook and six at Hythe, whilst there was an excellent arrival of the Delicate, with one at Saltwood, 14 at Seabrook and 35 Hythe (with a peak of six on the 8th), increasing the total for the year to date to a record 77.

The more regular migrants involved totals of two Hummingbird Hawk-moths, three Pearly Underwings, five Dark Sword-grass, 12 *Nomophila noctuella* (Rush Veneers), over 50 Silver Ys, over 100 *Udea ferrugalis* (Rusty-dot Pearls) and over 150 *Plutella xylostella* (Diamond-back Moths), including 34 at Seabrook on the 28th.

A **Flounced Chestnut** at Samphire Hoe on the 22nd appears to have been only the second area record (following one at Folkestone Warren in October 2008), although it is presumably a scarce resident rather than an immigrant.

Continued study of the local leaf miners yielded a total of seven new species for the area: *Stigmella obliquella* (Willow Pigmy), *Stigmella crataegella* (Common Thorn Pigmy) and *Phyllonorycter froelichiella* (Broad-barred Midget) at Nickolls Quarry and *Stigmella trimaculella* (Black-poplar Pigmy) and *Phyllonocnistis unipunctella* (Poplar Bent-wing) at Bargrove on the 1st, *Parornix carpinella* (Hornbeam Slender) at Bargrove Wood on the 4th and *Ectoedemia minimella* (Broken-barred Pigmy) at Folkestone Sports Centre on the 13th. A further 12 species were new for the year list.



Oak Rustic at Hythe (Ian Roberts)



Flounced Chestnut at Samphire Hoe (Steve Cutt)



Stigmella trimaculella at Bargrove (Ian Roberts)



Phyllonocnistis unipunctella at Bargrove (Ian Roberts)



Parornix carpinella at Bargrove Wood (Ian Roberts)



Ectoedemia minimella at Folkestone (Ian Roberts)

A further 12 species were added to the macro year list, including Large Ranunculus at Hythe on the 1st, Merveille du Jour and Green-brindled Crescent at Bargrove Wood at Seabrook on the 3rd, Yellow-line Quaker at Heane Wood on the 4th, Blair's Shoulder-knot at Cheriton on the 5th, Pink-barred Sallow at Seabrook on the 9th, Feathered Thorn at Hythe on the 21st, December Moth there on the 27th and the Sprawler at Bargrove Wood on the 31st.



Merveille du Jour at Bargrove Wood (Ian Roberts)



The Sallow at Seabrook (Paul Howe)

A Clouded Yellow flew west at Seabrook on the 20th and small numbers of Painted Ladies were noted. A Western Conifer Seed Bug was found at the Civic Centre in Folkestone on the 7th.

November

The jet stream continued to track further south than usual, bringing more spells of cloudy and wet weather for much of November and temperatures were mostly below average.

Further **Oak Rustics** were trapped at Hythe on the 2nd, 3rd (two), 6th and 9th, and Cheriton on the 23rd. The total of eleven for the year is a new record and continues the upward trend for this species. A late Golden Twin-spot at Hythe on the 3rd was something of a surprise, coming after a gap of nearly four weeks and bringing the total for the year to a record 27. The 3rd also produced a *Palpita vitrealis* (Olive-tree Pearl) at Hythe and a Hummingbird Hawk-moth at Seabrook, whilst a *Palpita vitrealis* (Olive-tree Pearl) was seen earlier at Hythe on the 1st.

The more regular migrants involved a single Dark Sword-grass at Seabrook on the 17th, at least 12 Silver Ys, at least 40 *Plutella xylostella* (Diamond-back Moths) including 11 at Seabrook on the 5th, and 45 *Udea ferrugalis* (Rusty-dot Pearls), with a peak of six at Hythe on 1st.

Following the second area (and county) record of ***Cosmopterix scribaiella*** (New Marsh Cosmet) at the Aldergate Bridge in July, a mine was found at West Hythe on the 1st – the first occurrence of the larval stage in Kent and confirmation of local breeding.

Other early stages located at West Hythe on the 1st included no less than ten new species for the area: *Stigmella perpygmaeella* (Least Thorn Pigmy), *Stigmella suberivora* (Holm-oak Pigmy), *Ectoedemia intimella* (Black-spot Sallow Pigmy), *Ectoedemia angulifasciella* (Bent-barred Pigmy), *Bucculatrix demaryella* (Birch Bent-wing), *Recurvaria nanella* (Brindled Groundling), *Coleophora gryhipennella* (Rose Case-bearer), *Coleophora lineolea* (Woundwort Case-bearer), *Coleophora alticolella* (Common Rush Case-bearer) and *Elachista gangabella* (Yellow-barred Dwarf).

There were a further six additions to the micro year list including *Parornix finitimella* (Pointed Slender), *Phyllonorycter sorbi* (Rowan Midget) and *Bedellia somnulentella* (Bindweed Bent-wing).

The only other micro year tick involved *Diurnea lipsiella* (November Tubic) at Bargrove Wood on the 3rd, which was the first sighting since 2012, though quickly followed by another at Seabrook on the 17th. An Autumnal Moth at Hythe on the 1st and a Scarce Umber at Cheriton on the 16th were the only new macros of the year. A Pale Mottled Willow at Hythe on the 29th was of note, being the latest Kent record by several weeks.



Cosmopterix scribaiella at West Hythe (David Shenton)



Diurnea lipsiella at Bargrove Wood (Ian Roberts)



Scarce Umber at Cheriton (Brian Harper)



Pale Mottled Willow at Hythe (Ian Roberts)

Also of note were several Goose Barnacles found at Samphire Hoe on the 19th.

December

After a settled and fairly cool start to the month it quickly turned milder as westerly winds brought in a series of bands of rain. This pattern persisted until Christmas, after which it became calmer and drier.

The only migrant moths to be recorded were singles of *Plutella xylostella* (Diamond-back Moth) at Samphire Hoe on the 3rd and *Udea ferrugalis* (Rusty-dot Pearl) at Hythe on the 12th. Other moths of note included a late Black Rustic at Samphire Hoe on the 3rd, a very late Pale Mottled Willow (possibly the same individual seen in November) at Hythe on the 6th and the first Pale Brindled Beauty of the winter at Seabrook on the 30th, but there were no further additions to the year list.

The only butterfly to be reported was a Red Admiral found in a shed at Lypne on the 31st. Grey Seals were seen off Princes Parade and Sandgate during December.

Acknowledgements

I am very grateful to David Shenton for undertaking genitalia determination of *Caloptilia honoratella* and to Graeme J. Smith for undertaking genitalia determination of *Pseudatemelia josephinae*, *Caryocolum alsinella*, *Syncopacma larseniella*, *Coleophora hemerobiella*, *Coleophora salicorniae*, *Stenoptilia zophodactylus*, *Phalonidia manniana*, *Celypha rufana*, *Epiblema cirsiaria* and *Delplanqueia inscriptella*.

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Folkestone and Hythe Moth List

The full list of species recorded at Folkestone and Hythe in 2019 and other years is available at:
www.folkestonebirds.com/moth-list

Summary tables

Migrant micro moths	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019	2018	2017	2016	2015	2014
<i>Plutella xylostella</i>	2	1	0	1	69	521	407	336	98	154	40	1	1,630	1,150	151	14,783	263	1,716
<i>Cydia amplana</i>	0	0	0	0	0	0	5	12	0	0	0	0	17	15	2	3	0	12
<i>Udea ferrugalis</i>	0	0	0	0	1	2	10	44	23	104	45	1	230	23	183	231	98	296
<i>Palpita vitrealis</i>	0	0	0	0	0	0	1	7	1	10	2	0	21	65	44	18	58	38
<i>Nomophila noctuella</i>	0	0	0	0	0	0	6	4	2	12	0	0	24	24	81	614	287	4
<i>Cydalima perspectalis</i>	0	0	0	0	0	0	3	2	15	1	0	0	21	12	1	0	1	1
Total	2	1	0	1	70	523	432	405	139	281	87	2	1,943	1,304	472	15,684	758	2,068

Figure 1: Migrant micro moths in the Folkestone and Hythe area in 2019

Migrant macro moths	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019	2018	2017	2016	2015	2014
Convolvulus Hawk-moth	0	0	0	0	0	0	0	0	6	4	0	0	10	5	1	33	2	2
Hummingbird Hawk-moth	0	0	1	0	0	2	0	1	15	2	1	0	22	5	17	8	15	11
The Vestal	0	0	0	0	0	0	1	0	0	1	0	0	2	7	20	6	70	1
The Gem	0	0	0	0	0	1	0	1	0	0	0	0	2	6	2	5	9	6
Golden Twin-spot	0	0	0	0	0	0	2	15	8	1	1	0	27	6	1	0	1	7
Silver Y	1	0	5	1	16	31	106	227	81	54	12	0	534	1,097	318	665	750	373
Bordered Straw	0	0	0	0	0	0	1	1	1	0	0	0	3	1	3	3	63	0
Scarce Bordered Straw	0	0	0	0	0	0	0	5	15	10	0	0	30	5	101	10	39	5
Tree-lichen Beauty	0	0	0	0	0	0	17	45	1	0	0	0	63	13	5	6	5	12
Small Mottled Willow	0	0	0	0	0	0	1	2	0	0	0	0	3	3	3	4	42	0
Oak Rustic	0	0	0	0	0	0	0	0	0	5	6	0	11	8	3	0	0	0
Small Ranunculus	0	0	0	0	0	2	0	1	0	0	0	0	3	5	0	4	7	12
The Delicate	0	0	0	0	0	3	1	1	22	50	0	0	77	59	37	8	8	3
White-speck	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5	0	0
Pearly Underwing	0	0	0	0	0	1	0	0	2	3	0	0	6	3	20	11	39	16
Dark Sword-grass	1	0	0	0	0	0	7	9	3	5	1	0	26	76	84	77	84	84
Total	2	0	6	1	16	40	136	308	154	135	21	0	819	1,553	751	844	1,207	529

Figure 2: Migrant macro moths in the Folkestone and Hythe area in 2019

Total species	2019	2018	2017	2016	2015	2014	2013	2012	2011	Total area list
Micro	568	479	475	325	336	309	286	256	219	749
Macro	479	461	452	399	418	386	370	338	321	610
Total	1,047	940	927	724	754	695	656	594	540	1,359

Figure 3: Total moth species recorded in the Folkestone and Hythe area in 2019

First butterfly dates	2019	2018	2017	2016	2015	2014	2013	2012
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Dingy Skipper	16-Apr	01-May	08-Apr	19-Apr	21-Apr	01-Apr	26-May	30-Apr
Grizzled Skipper	30-May	-	-	-	-	-	-	-
Essex Skipper	13-Jul	26-Jun	27-Jun	-	07-Jul	28-Jul	16-Jul	-
Small Skipper	11-Jul	22-Jun	17-Jun	28-Jun	25-Jun	21-Jun	22-Jul	03-Jul
Silver-spotted Skipper	15-Aug	06-Aug	15-Aug	15-Aug	-	-	02-Sep	17-Aug
Large Skipper	01-Jun	06-Jun	29-May	27-May	05-Jun	20-May	25-Jun	19-Jun
Orange Tip	01-Apr	16-Apr	30-Mar	02-May	13-Apr	05-Apr	28-Apr	13-May
Large White	27-Mar	18-Apr	05-Apr	12-Apr	13-Apr	08-Apr	03-May	22-Mar
Small White	23-Feb	10-Apr	24-Mar	15-Mar	17-Mar	08-Mar	03-May	24-Mar
Green-veined White	24-Mar	06-Apr	31-Mar	28-Apr	07-Apr	11-Apr	07-May	22-Mar
Clouded Yellow	18-Mar	17-Apr	19-Apr	11-Apr	28-Apr	11-Apr	25-Jun	-
Brimstone	23-Feb	14-Mar	25-Mar	25-Mar	17-Mar	09-Mar	14-Apr	Spring
Wall	16-Apr	01-May	11-Apr	28-Apr	24-Apr	17-Apr	12-May	30-Apr
Speckled Wood	10-Apr	20-Apr	05-Apr	08-Apr	10-Apr	01-Apr	05-May	28-Mar
Small Heath	03-May	15-May	07-Apr	07-May	13-May	22-Apr	26-May	12-May
Ringlet	11-Jul	23-Jun	17-Jun	04-Jul	29-Jun	15-Jun	06-Aug	26-Jun
Meadow Brown	30-May	17-Jun	10-Jun	26-May	20-Jun	12-Jun	13-Jul	20-Jun
Gatekeeper	11-Jul	10-Jul	04-Jul	08-Jun	07-Jul	28-Jun	15-Jul	24-Jul
Marbled White	17-Jun	17-Jun	16-Jun	03-Jul	25-Jun	06-Jun	22-Jul	26-Jun
Grayling	-	08-Aug	-	-	-	10-Aug	10-Aug	11-Aug
Silver-washed Fritillary	17-Jul	22-Jun	16-Jun	20-Jul	11-Jul	-	-	-
Dark Green Fritillary	-	-	09-Jun	-	-	07-Jul	-	-
White Admiral	-	22-Jun	17-Jun	03-Jul	11-Jul	-	-	-
Red Admiral	01-Jan	25-May	11-Apr	08-May	04-Mar	16-Mar	05-May	11-Jan
Painted Lady	11-Jun	16-Apr	02-Apr	04-Jun	02-Apr	08-Jun	28-Apr	24-May
Peacock	23-Feb	11-Jan	14-Feb	13-Mar	01-Jan	04-Mar	14-Mar	24-Feb
Small Tortoiseshell	25-Feb	14-Mar	09-Jan	11-Mar	27-Feb	02-Jan	06-Mar	01-Mar
Comma	23-Feb	06-Apr	09-Mar	25-Jan	17-Mar	05-Mar	05-Mar	01-Mar
Small Copper	26-Mar	04-May	02-Apr	11-Apr	27-Apr	03-Jul	01-May	22-May
Purple Hairstreak	-	23-Jun	-	-	-	-	-	17-Aug
Green Hairstreak	16-Apr	19-Apr	11-Apr	28-Apr	04-May	11-Apr	16-May	29-May
White-letter Hairstreak	25-Jun	23-Jul	14-Jun	15-Jul	03-Jul	-	12-Aug	-
Long-tailed Blue	15-Aug	-	-	-	-	-	-	-
Small Blue	18-May	13-May	11-May	17-May	25-May	17-May	15-Jun	28-May
Holly Blue	18-Apr	20-Apr	30-Mar	18-Apr	09-Apr	13-Apr	03-May	29-Mar
Brown Argus	06-May	25-May	13-Jul	17-Aug	-	18-May	01-Sep	05-Jun
Common Blue	18-May	15-May	11-May	06-May	13-May	05-May	05-May	22-May
Adonis Blue	01-May	08-May	27-Apr	17-May	08-May	13-May	18-Jun	23-May
Chalk Hill Blue	26-Jul	23-Jul	01-Aug	01-Aug	11-Sep	-	27-Jul	09-Aug

Figure 4: First dates for butterflies at Folkestone and Hythe in 2019

Appendix 1

The first British record of *Caloptilia honoratella* (Rebel, 1914) at Folkestone, Kent

Introduction

This article sets out to describe the capture and identification of an example of *Caloptilia honoratella*, a micro-moth species not previously recorded in the British Isles, at a garden light-trap in Folkestone, Kent, in April 2019.

Until very recently BH had been fully absorbed in the world of birding, concentrating on his patch in and around the Folkestone and Hythe area, his interest in what was to be seen locally brought about the discovery of the "Folkestone & Hythe Birds" website run by IR. Over time, as his contact with IR became more frequent, he began to exchange information and photographs for inclusion on the latest sightings page of this website. It was through this contact that he was introduced to the world of moths.

IR would often post images of moths that he and fellow contributors were catching locally in their back gardens; the sheer variety of size, shape and colour intrigued BH, fuelling his interest further. August 2016 saw BH take his first steps into the world of moth recording with the purchase of a 125w MV Skinner trap. He was initially selective about which nights he chose to run the trap, preferring to actually be in the garden and record the moths as they came in. More often than not he would turn the trap off each night before going to bed. Things have changed considerably since those early days and BH now runs a 125w Robinson every night complemented by a small actinic from April through to October.

The site

In the few years since BH began recording he has been lucky enough to attract a large variety of moths to his garden. Much of that can be attributed to its geographical location in the south-east corner of Kent. The garden is in an area known as Cheriton on the outskirts of the small seaside town of Folkestone. The view from the garden is dominated by the limestone Kent Downs approximately one mile to the north. The urban sprawl infills to the foot of the Downs for about a mile and similarly to the south where it meets the English Channel; continental Europe is then only 25 miles as the crow flies. The main town of Folkestone lies predominately to the east. The landscape is more appealing to the west where areas of woodland open out and adjoin grazing and recreational land. In many ways BH is ideally positioned to pick up on any migration activity but equally likely to benefit from the variety of species available from being close to chalk downland and numerous ancient woodlands.

BH's house sits in the middle of a row of Victorian terraced houses, which offers limited suitable garden space for a bright 125w MV trap. In consideration of neighbours the trap is sited in a confined, paved area at the bottom of the garden bordered north/south by 6ft high panel fencing and east/west by two sheds. Amongst various highlights single **Pale-shouldered Cloud** in May and July 2017 are particularly significant.

In the nights leading up to 16 April 2019 the area had been subjected to a prolonged period of east/north-easterly winds with relatively low overnight temperatures. The average temperature in the preceding week recorded in the garden was around 6°C. However, there was some improvement that night as the wind swung round to a more south-westerly direction with partial cloud cover and an overnight low of 9°C. Given that overnight temperatures had been generally low throughout much of April, BH was only running one trap on the night, the 125w MV.

The capture

BH's initial impression as he inspected the trap on the morning of 17 April was positive as there were plenty of moths inside. The last moth in the trap was what he initially thought to be *Gracillaria syringella* (Common Slender) that appeared stuck to the bottom. On closer inspection it was obviously paler than anything seen that morning so it was retained for a closer look under the hand lens.

BH thought it to be a *Caloptilia* species initially and given that it was well patterned, nicely coloured and relatively fresh thought it would be easy to identify using the internet. However, he made little progress so it was photographed. Learning from mistakes made in the past, BH always takes a couple of record shots of the moth still securely inside the pot.

This he duly did before tapping it out onto the top of his wheelie bin and taking a few more without the distortion of the glass. The images were sent to IR, who like BH was unable to identify it with certainty, so decided to post it on one of the Facebook forums. He quickly came back to BH with *C. hemidactylella* (Sycamore Slender) and asked if he had retained the specimen as it can resemble *C. falconipennella* (Scarce Alder Slender). BH had not, having released it several hours earlier. Both were potentially very good records in their own right but dissection would be required as confirmation. However, and quite remarkably, when BH returned to where he had released it, there it was still on top of the bin some four hours later. After securing it for the second time BH saw IR's follow up message. "You've got the Facebook world in a frenzy. *C. honoratella* is now being mooted, a potential UK first!" Subsequent research seemed good for *C. honoratella* and IR confirmed that the suggestion had originated from a couple of experienced and respected contributors on the forum, with Harry Rutherford being the first to put a name to it.



The trap site at Cheriton (Brian Harper)

As circumstances would have it, BH and IR had arranged to trap in Folkestone Warren that evening, one of their favoured sites locally, so the specimen was brought along to that session. Forward arrangements were already in place for one of IR's contacts, David Shenton, to conduct the genitalia determination. He completed the dissection on 23 April, confirming the specimen as a male *C. honoratella*—the first to be recorded in the UK. It has been allocated the number 15.0131 in the British checklist.

Identification

C. honoratella has a typical *Caloptilia* shape and is similar in size and general appearance to *C. hemidactylella*. The head, palps, antennae, thorax and legs appear to be identical, with separation relying on the pattern of the forewing. Prick *et al.* (2017) describe the differences as follows: "*C. hemidactylella* has warm hues, from ochre-yellow to fox-brown, whereas with *C. honoratella* a cooler straw-yellow dominates, with grey-brown to almost black accents. Both species have a light, triangular costal patch, which is generally sharper on the distal side in *C. honoratella*. The basal and distal boundaries of the costal patch in *C. honoratella* contain blackish scales that contrast with the background, and these also occur towards the apex. With *C. hemidactylella*, the color transitions are more diffuse". The same authors warn that the forewing pattern of both species is so variable that not every individual can be identified with certainty.

C. falconipennella is also a potential confusion species but does not have such a well-defined triangular costal patch and lacks the blackish scales at the apex.



***Caloptilia honoratella* (Pale Maple Slender)** at Cheriton (Brian Harper)

The *Lepiforum* website (www.lepiforum.de/lepiwiki.pl?Caloptilia_Honoratella) provides a good series of photos, including the type specimens from Austria and preparations of the genitalia.

Distribution and biology

The Austrian entomologist Professor Hans Rebel first described *Caloptilia honoratella* in the German entomological journal *Iris* (Rebel, 1914), based on two specimens housed in the Imperial Natural History Museum in Vienna that had been obtained from the Schlossberg (a tree-clad hill) in Graz, Austria. The first, a female, was captured by M. Schieferer in October 1891, and the second, a male, was taken on 26 May 1907.

It appeared to have gone unrecorded in Europe during the twentieth century until research following the first sighting for the Netherlands in 2016 (Prick *et al.*, 2017) uncovered records from Macedonia in the 1950s and Italy in 1995. Since the turn of the last century it has appeared in several European countries and Prick *et al.* also gave details of the first national records in Hungary, the Czech Republic, Croatia, Slovakia, Slovenia, Spain, Germany and France. A series of records have recently emerged from Belgium since 2006 (De Prins *et al.*, 2018), in which year it was also rediscovered in Austria (Rist & Stark, 2012).

It is notable that in all of the countries listed there have been just a small number of records of one or a very few individuals. It is only Germany that has produced slightly more numerous sightings but even here it remains rare and localities are widely scattered (Prick *et al.*, 2017)

Prick *et al.* (2017) concluded from analysis of the distribution that the pattern was typically Mediterranean and matched that of its host plants, Montpellier Maple *Acer monspessulanum* and Sycamore *A. pseudoplatanus*. It was suggested that the species would have spread north from the Mediterranean refugia on the three large European peninsulas (the Balkans, Italy and Iberia) in the post-glacial period and some DNA evidence is provided in support of this theory. It was considered that this spread was unlikely to have been a recent event and it was concluded that the apparent expansion of the species across Europe was probably due to an increased focus on micro-moths, driven by more accessible literature. It is not known outside of Europe.

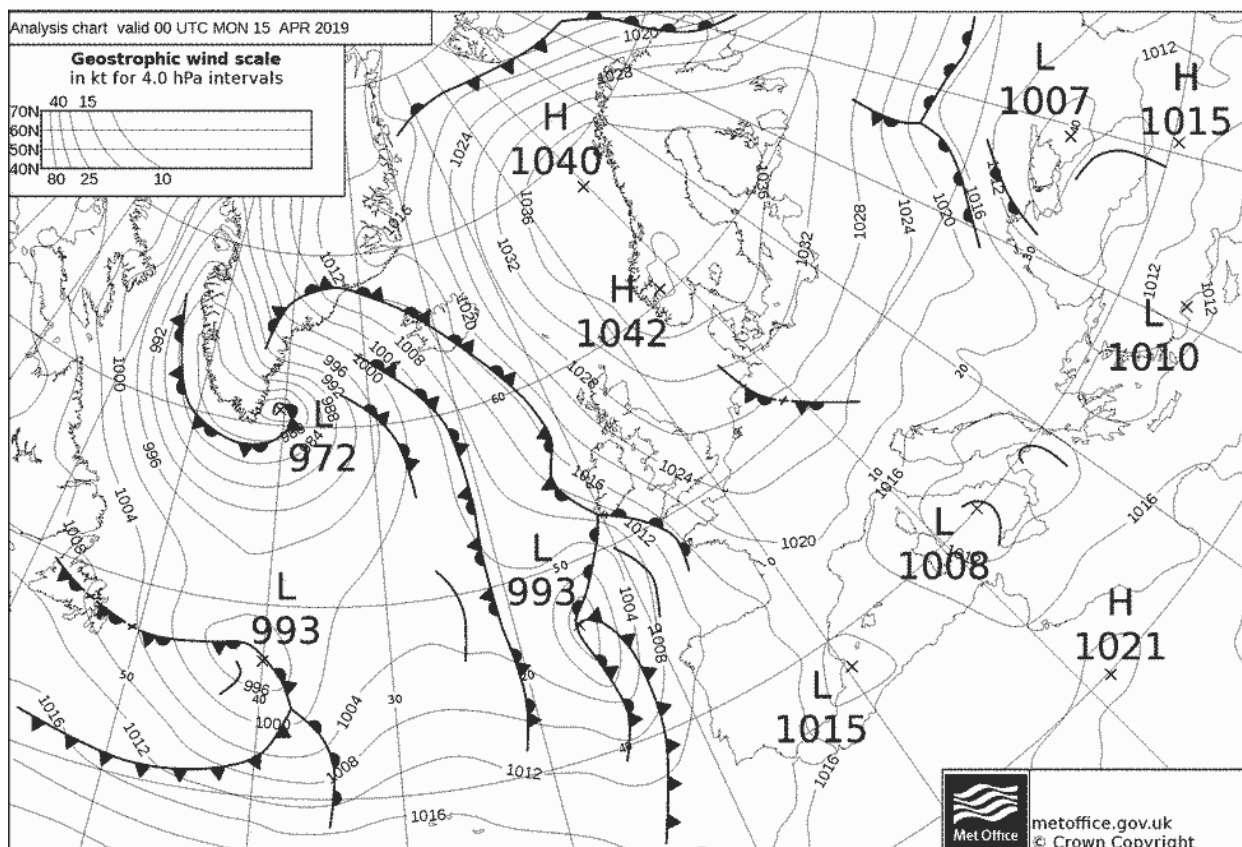
The female lays an egg on the underside of the leaf of the host plant. The larva makes a small underside mine then creates a leaf cone, the first of two or three in a sequence until pupation occurs. Rist & Stark (2012) state that there were no discernible differences between the feeding signs of *C. honoratella* and other *Caloptilia* that feed on maple, so in a British context the early stages could be overlooked as *C. rufipennella*. In central Europe *C. honoratella* flies from the end of August, hibernates as an adult and becomes active again in the spring (De Prins *et al.*, 2018).

Possible origins of the Folkestone moth

The first Dutch records of *C. honoratella* occurred in Geulle and the Vijlenerbossen which are in the Province of Limburg in the extreme south of the country (Prick *et al.*, 2017). It has also been recorded from two provinces that are adjacent to this across the border in Belgium: Liège and Limburg (which shares the name with its counterpart in the Netherlands). Further to the west in Belgium it has been noted in the Antwerpen and Oost-Vlaanderen provinces (De Prins *et al.*, 2018).

Most of the German records have occurred in the south of the North Rhine-Westphalia state (particularly to south of Bonn), in a region neighbouring Belgium and the Netherlands. (Prick *et al.*, 2017). The Dutch records are the most northerly to date.

The species is therefore known to occur reasonably close to the coast in Belgium and the week prior to the capture had been dominated by east to north-easterly winds, which could be considered as favourable conditions for a moth to drift across the North Sea to Kent. Figures 1 to 3 show the weather charts at midnight between 15 and 17 April.



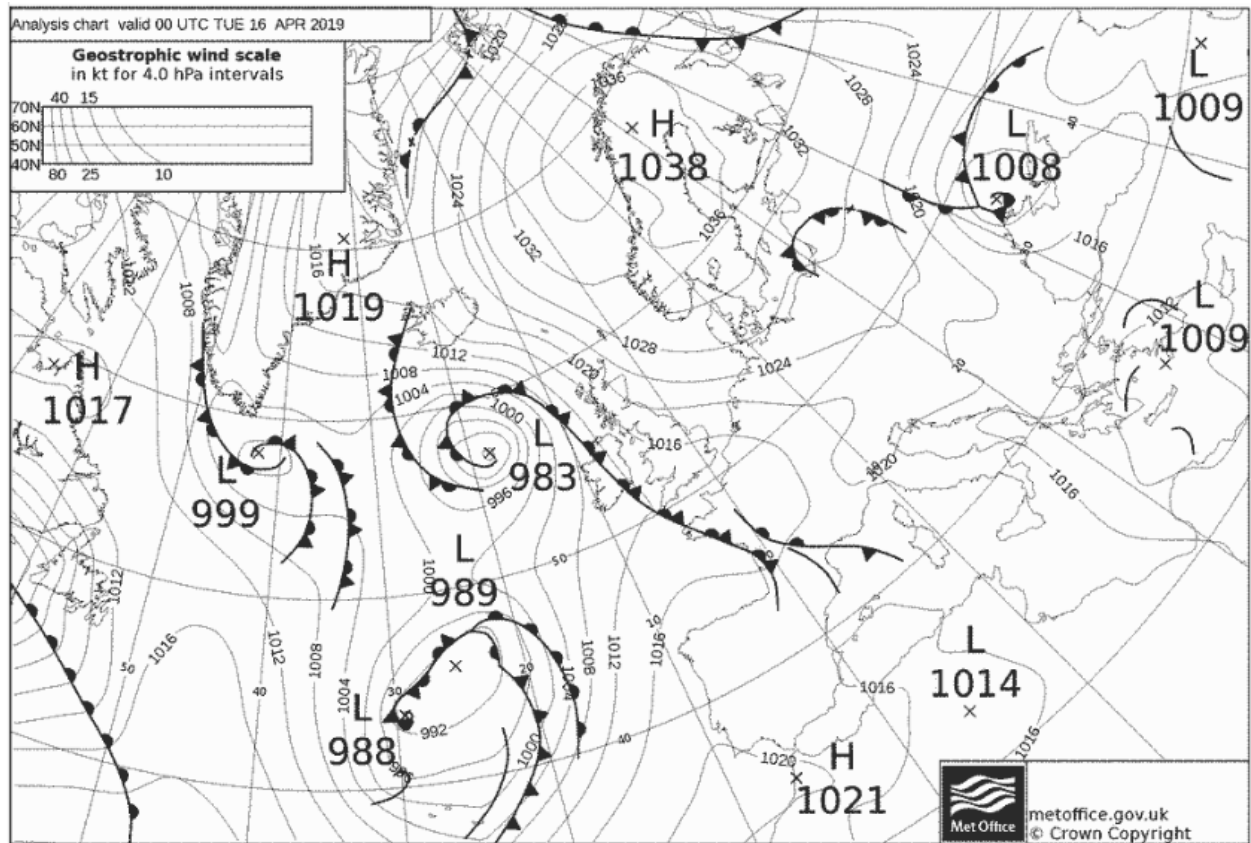


Figure 2. Weather chart for 00.00hrs, 16 April 2019. © Crown copyright, 2019, chart supplied by the Met Office.

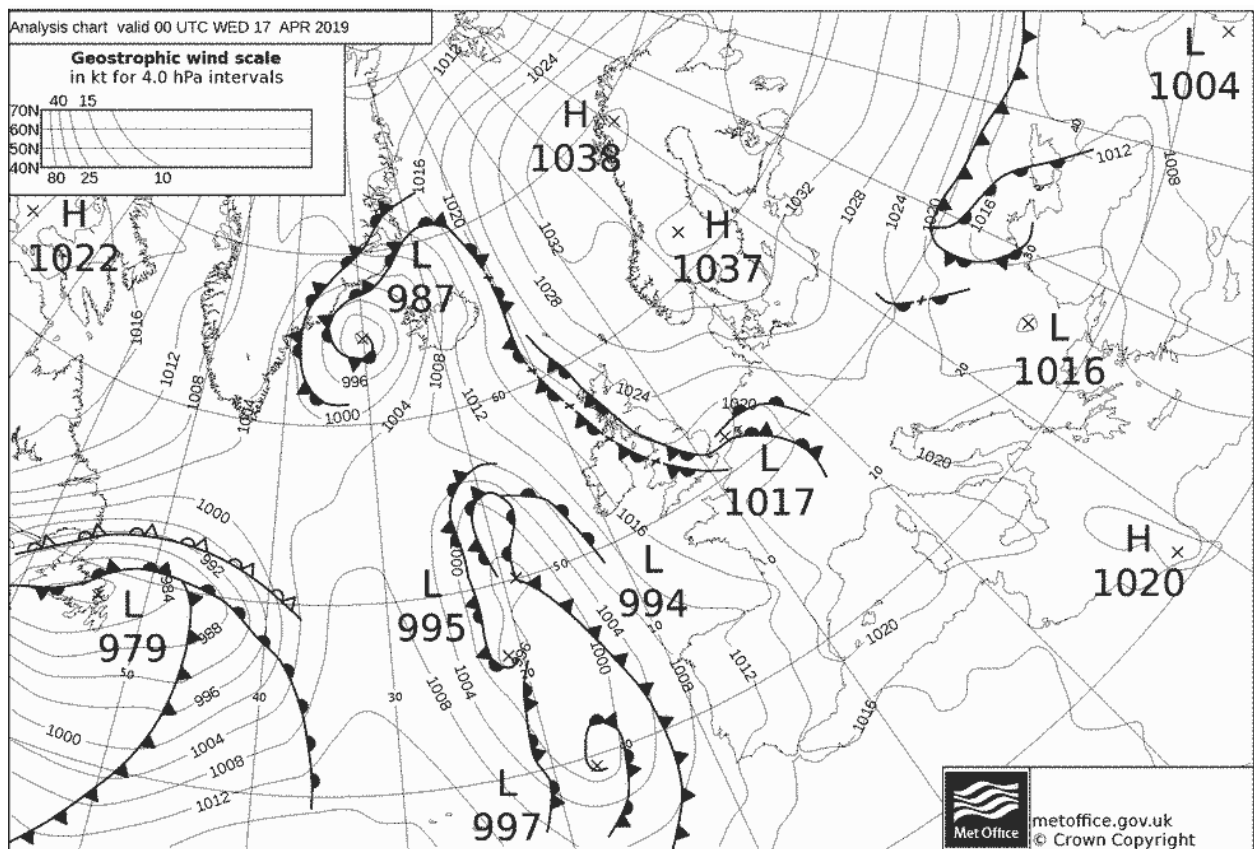


Figure 3. Weather chart for 00.00hrs, 17 April 2019. © Crown copyright, 2019, chart supplied by the Met Office.

There was little immigrant activity noted in the county at the time, though single **Blossom Underwing** at Sandwich Bay on 15 April (the fourth observatory record) and at Hythe on 18 April (the seventh Folkestone and Hythe record) were thought likely to be of continental origin. There were no other migrants caught in the trap that night.

C. honoratella is still a very rare species in Belgium, though potentially under-recorded. Prick *et al.* concluded that the apparent spread across Europe was due to an increased focus on micro-moths, rather than being the result of range extension, however they also described significant changes in the distribution of the foodplant in the Netherlands and in northern Belgium in recent years and they considered that this could have had presented opportunities for the species to expand into the area.

Prick *et al.* conclude that much is still unknown about *C. honoratella* and question whether the major gaps in the distribution pattern are real. Could it have been overlooked in Britain until now?

Vernacular Name

In the Netherlands it has been ascribed the vernacular name 'Bleke esdoornsteltnot' which translates as Pale Maple Moth. As the other Caloptilia species are known as 'slenders' in Britain it is proposed that the Dutch translation could form the basis of the English common name 'Pale Maple Slender'.

Acknowledgements

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Brian Harper and Ian Roberts