



## **Sandwich Bay Bird Observatory Trust**

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Guilford Road, Sandwich Bay, Sandwich, Kent CT13 9PF  
[info@sbbot.org.uk](mailto:info@sbbot.org.uk) [www.sbbot.org.uk](http://www.sbbot.org.uk)  
Registered Charity no. 289343

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# **A systematic list of the Moths of Sandwich Bay**

**(Updated to 31<sup>st</sup> December 2017)**

# A Systematic List of the Moths of Sandwich Bay

(to 31 December 2017)

## Introduction

This list was first prepared by Peter and Pauline Heathcote in 2003, detailing records of 436 macros and 292 micros up to the end of 2002. They updated the list to include records to the end of 2008 and the list was augmented with records for 2009. It was subsequently reviewed by Francis Solly in November/December 2009 and some records for which confirmatory details were required, or which clearly resulted from misidentification, were removed. Details of these species can be found in the appendix at the back of this report. In 2018 it has been further updated by Ian Hunter, Macro Moth recorder for Kent, with advice from Dave Shenton, Micro Moth recorder for Kent, in the light of the specific evidence requirements of the National Moth Recording Scheme published in 2016.

The National Status for each moth is shown to give an indication of how rare or otherwise the species is in a National context. As a broad guide for moths their status is based on their UK distribution measured in terms of occurrence in 10-kilometre squares per the National Grid system as follows;

RDB1	Endangered.	Usually in five or fewer 10-km squares.
RDB2	Vulnerable.	Small populations and declining.
RDB3	Rare.	Usually in 15 or fewer 10-km squares.
Na	Notable A	Found in 16 to 30 10-km squares.
Nb	Notable B	Found in 31 to 100 10-km squares.
Na	Local	Found in 101 to 300 10-km squares.

The flight period for each macro species is as it is at Sandwich Bay and for micros in accordance with data taken from Langmaid et al 2018.

### A Brief History of Moth Recording at the Bay

Interest in moths at Sandwich Bay has waxed and waned in proportion to the level of interest and expertise of local observers and the developing standard and accessibility of identification material. The influences of Bernard Skinner's 1984 guide and the more recent guides by Paul Waring and Martin Townsend, illustrated by Richard Lewington first published in 2003 and the *Field Guide to the Micro-moths of Great Britain and Ireland* by Phil Sterling and Mark Parsons, illustrated by Richard Lewington first published in 2012 have been major factors in expanding interest in moths together with more recent publications noted in the reference section.

227 moth species (excluding the *pyrales*) were listed in a *Checklist of the Lepidoptera of Sandwich Bay* in the 1970 report and in 1985 the late Dennis Batchelor published his landmark *SBBO Butterflies and Moths Report*, containing updates on the status of some 420 species of moth (both micros and macros) recorded at the Bay. 1984 had brought a major leap forward with the publication of Bernard Skinner's *Colour Identification Guide to Moths of the British Isles*. Although the illustrations were of pinned specimens it made the identification of moths accessible to a growing band of amateur naturalists and by 1993 the total of moth species recorded at the Bay had reached 420 macros and 245 micros. The micro total included 112 species that were added in 1993 alone through the expertise of the late Eric Bradford.

260-270 macros were recorded in 1993 and 1994 and a record 308 in 1995; the highest annual total achieved in the Observatory's history to that date. Trapping in that year was carried out on 254 nights, mainly by means of a Mercury Vapour trap at the Observatory, supplemented by the use of a portable 'actinic' trap in the Elms, the Whitehouse and the Haven. However, in 1996 trapping sessions were limited to the operation of the MV trap at the Observatory and the number of species recorded began to decline, although a portable actinic trap was again used frequently during August and September at many sites around the Bay in 1998. 1999 was another quiet year with records of only 176 species of macro moth from the MV trap and only 183 species were recorded in 2000.

Recording in 2009 involved the operation of two MV traps at the Observatory and two actinic traps at several sites around the Estate. The recently published photographic guide by Chris Manley and the UK Moths website <http://ukmoths.org.uk/> were of great help, particularly in the identification of micro moths, and a record 346 species of macro moth were recorded in 2009, bringing the total of macro species recorded to date to 466, while the number of micro moth species reliably recorded at the Bay was 407.

Recording in 2010 reached an unprecedented level, with the operation of up to five MV traps at the Observatory and at several sites around the Estate. 370 macro species were recorded during the year, including 11 new to the recording area, increasing the Bay's list of macro moth species to 477. More significantly, perhaps, 52 new species of micro were added, bringing the number of micro moth species so far recorded at the Bay to 459. 12 new macro species were added in 2011 and seven species were added in 2012. At the end of 2012, following review of some records (such as a record of Scarce Arches from 1867 that pertained to Deal, not Sandwich), the Bay's macro list stood at 493 and the number of micros satisfactorily described at 483.

2013 was a record year, in which 375 macros species were recorded, 7 of which were new, bringing the Bay macro list to 500 species (However, see the notes preceding the macro moths later in this summary). This record was broken again in 2014 when 389 macro species were trapped and 9 new species brought the Bay macro list to 509 species. Sadly, it also included

the passing of John 'Badger' Beugg, who had been pivotal to this return of interest in moths at the Bay.

Ian Hunter returned to the task of trapping in 2015, with help from a few others at the Observatory, and although his efforts were of necessity less intensive than Badger's he still managed to record 349 macro species, including 5 new for the SBBO list, which was elevated to 515 as a result. 3 more macro species were added in 2016 bringing the total to 518. After the work to bring the list up to date for the 2016 report and further work in 2017 the current reliably identified macro total is 533 and for micros it is 569.

Francis Solly, Tony Davis and Dave Shenton (Micro Moth recorder for Kent) have increased the number of particularly leaf-mining species reliably recorded at Sandwich Bay through their regular observations of leaf-mines in the field. Tony Davis and Dave Shenton have also helped by carrying out Determination by Genitalia Examination (gen det) on a variety of species.

Specimens are only taken when absolutely necessary for identification purposes.

In the lists below the **RES number in red** indicates new for the Bay this year – including species brought into the main list from the appendix.

## A Systematic List of Micro-moths at the Bay

The systematic list follows Agassiz, Beavan & Heckford (2013) and the numbering system used in this summary follows the numbering system introduced by Agassiz *et al.* The numbers applied by Bradley (2000) are shown in brackets.

### MICROPTERYGOIDAE

- 1.004 (4) *Micropteryx aruncella* (Linnaeus). Common. May-Jun.  
Recorded by day in the Whitehouse on 11 (3M + 1F) & 18 (8M 1F) June 2016 (FS)
- 1.005 (5) *Micropteryx calthella* (Linnaeus). Common. May-Jun.  
One in the Whitehouse on 07 June 2014 (FS).

### ERIOCRANIIDAE

- 2.001 (6) *Dyseriocrania subpurpurella* (Haworth) Common. Apr-May.  
Singles at HQ light on 07 & 14 April 2011 (FS) and 07 [Elms] and 21 [Whitehouse gen det TD] April 2017 (SZW)
- 2.003 (8)** *Eriocrania unimaculella* (Zetterstedt), Well-distributed. Mar-Apr.  
Observation of five tenanted mines in The Elms 22 April 2017 (DS)
- 2.006 (11) *Eriocrania cicatricella* (Zetterstedt), Widespread. Apr.  
Occupied mines found in the Oasis on 15 May 2009 (FS) and 10 tenanted leaf-mines in The Elms 22 April 2017 (DS)
- 2.007 (13)** *Eriocrania semipurpurella* (Stephens), Widespread. Mar-Apr.  
15 tenanted leaf-mines recorded in The Elms on 22 April 2017 (DS)
- 2.008 (12)** *Eriocrania sangii* (Wood) Well-distributed. Mar-Apr.  
An adult recorded at light on 30 March (gen det TD) and three tenanted leaf-mines recorded in The Elms on 22 April (DS) 2017.

### HEPIALIDAE

- 3.001 (15) **Orange Swift** *Triodia sylvina* (Linnaeus) 19 July – 15 September  
Small numbers (up to nine in August 2009, 21 in August 2010, 19 in August 2011, 25 on 02 September 2012, up to 11 in August 2013, totals of 18 in August 2016 and 38 in August 2017 including 10 in the Whitehouse on 21 August) recorded at light.
- 3.002 (17) **Common Swift** *Korscheltellus lupulinus* (Linnaeus) 23 April – 17 July  
Common at light (up to 52 in June 2010). Recorded annually up to 2017
- 3.005 (14) **Ghost Moth** *Hepialus humuli* (Linnaeus) 12 May – 24 August  
Fairly regular at light in small numbers. None recorded at light in 2016. Singles recorded at light on 4 dates in June 2017. Also in 2017 a single on 06 June and six on 05 July were recorded in the field.

### NEPTICULIDAE

- 4.002 (116) *Stigmella lapponica* (Wocke) May  
Leaf-mine on 27 July 2016 (DS).

- 4.006 (113) *Stigmella sakhalinella* (Puplesis), Scarce and local. May-Jun.  
Leaf-mines in Birch on 12 October 1994 (EB) and on 20 October 2017 (DS).
- 4.008 (114) *Stigmella glutinosae* (Stainton) Aug  
Tenanted leaf-mine recorded in the Whitehouse on 20 October 2017 (DS)
- 4.009 (115) *Stigmella alnetella* (Stainton) Aug  
Vacated leaf-mine recorded on 20 September 2012 (TD) and tenanted leaf-mine recorded in the Whitehouse on 20 October 2017 (DS)
- 4.010 (111) *Stigmella microtheriella* (Stainton), Common. May and Aug.  
Leaf-mines found by FS on Hazel in Elms 22 October 2008 and near Field Centre on 20 October 2017 (DS)
- 4.012 (102) *Stigmella aceris* (Frey) Widespread in southern England  
Two leaf-mines found in The Elms on 27 November 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.014 (98) *Stigmella catharticella* (Stainton), Local. May/June and July/Aug.  
A vacated leaf-mine found on Purging Buckthorn in Middle Field on 11 December 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.015 (92) *Stigmella anomalella* (Goeze), Common. May and Aug.  
One trapped at Observatory on 25 July 2009. Leaf-mines found on Dog Rose (FS) and in The Elms and at the Tollgate on 27 November 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.018 (80) *Stigmella ulmivora* (Fologne), Common. Jun.  
Leaf-mines taken on 14 September 1993 (EB) and in The Elms on 27 November 2015 (DS) and 20 October 2017 (DS)
- 4.019 (95) *Stigmella viscerella* (Stainton) Locally common. May-Jun.  
Leaf-mines in Elm on 12 October 1994 (EB) and in The Elms on 27 November 2015 (DS) and 20 October 2017 (DS)
- 4.023 (108) *Stigmella crataegella* (Klimesch), Common. May-Jun.  
Leaf-mines in Hawthorn on 12 October 1994 (EB)
- 4.026 (100) *Stigmella oxyacanthella* (Stainton), Common. Jun.  
Leaf-mines in Hawthorn on 12 October 1994 (EB), on Hawthorn in The Elms on 1 November 2009 (FS) and near Field Centre on 20 October 2017 (DS)
- 4.030 (99) *Stigmella hybnerella* (Hübner), Common. Apr-May, Jul-Aug.  
Leaf-mines in Hawthorn on 12 October 1994 (EB) and seven in The Elms and five at the Tollgate on 27 November 2015 (DS)
- 4.032 (75) *Stigmella floslactella* (Haworth), Common. May and Aug.  
Leaf-mines found by FS on Hazel in Elms 22 October 2008 and near Field Centre on 20 October 2017 (DS)
- 4.035 (68) *Stigmella salicis* (Stainton), Common. Apr-May, Jul-Aug.  
Leaf-mines in Sallow on 12 October 1994 (EB) and vacated mines in the Little Gully on 3 November 2015 (TD). This record concerns egg underside. (relevant if species split). Leaf-mine recorded in the Whitehouse on 20 October 2017 (DS)
- 4.037 (71) *Stigmella zelleriella* (Snellen), **RDB1**. May, Aug.  
Larvae bred in 1957 from leaf-mines, from Creeping Willow in the Little Gully, were later identified as *Stigmella zelleriella* (Emmett, A., 1977) who relocated it in the Little Gully on 19 July and 03 October 1976. Mines were also recorded on 08 September 1985 and 30 September 1986 and by FS on 23 September 2011 and DS in the Gullies on 27 November 2015. At least two vacated mines were recorded on 31 October 2016 in the Little Gully (TD). Tenanted leaf-mines recorded at Restharrow Scrape on 20 October 2017 (DS)  
This is the only known location in Britain.
- 4.038 (70) *Stigmella obliquella* (Heinemann) Widely distributed May, Aug  
On 20 September 2012 vacated mine recorded on *Salix babylonica* (TD), Leaf-mine recorded on 3 November 2015 (TD), two leaf-mines in the Gullies and two near the Observatory on 27 November 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.042 (67) *Stigmella plagiolella* (Stainton), Local. May-Jun, Aug.  
Recorded on 28 August 1960 and in leaf-mines in Blackthorn on 12 October 1994 (EB), and 15 leaf-mines near the Observatory building and 15 at the Tollgate on 27 November 2015 (DS) and near Field Centre on 20 October 2017 (DS)

- 4.043 (63) *Stigmella lemniscella* (Zeller), Common. May and Aug.  
Leaf-mines in Elm on 12 October 1994 (EB), 1 November 2009 (FS), vacated mines on 20 September 2012 (TD), in the Elms on 27 November 2015 (DS) and on 20 October 2017 (DS)
- 4.045 (50) *Stigmella aurella* (Fabricius), Common. May, Aug-Sep.  
Leaf-mines in Bramble on 12 October 1994 (EB) 1 November 2009 and 09 March 2010 (FS), vacated mines recorded on 20 September 2012 (TD) and November/ December 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.053 (78) *Stigmella incognitella* (Herrich-Schaffer) local in southern England May, Aug  
Two leaf-mines found in The Elms on 27 November 2015 (DS) and 20 October 2017 (DS)
- 4.054 (79) *Stigmella perpygmaeella* (Doubleday), Common. May, Aug.  
Leaf-mines in Hawthorn on 12 October 1994 (EB) and at Prince's plantation on 27 July 2016 (DS)
- 4.056 (65) *Stigmella speciosa* (Frey) Jun, Aug  
Six leaf-mines in The Elms on 27 November 2015 (DS) and in Middle Field on 20 October 2017 (DS)
- 4.057 (85) *Stigmella suberivora* (Stainton) Local in southern England  
Four leaf-mines in The Cellars gardens on 27 November 2015 (DS)
- 4.071 (40) *Bohemannia pulverosella* (Stainton) Well distributed  
Two leaf-mines in the Elms on 27 November 2015. Exit slit examined to confirm ID (DS)
- 4.078 (42) *Fomoria septembrella* (Stainton), Common. May-Jun, Aug.  
Leaf-mines found on St. John's Wort by FS in Whitehouse November 2009 and August 2010 and by DS on 11 December 2015
- 4.088 (36a) *Ectoedemia heringella* (Mariani) Late Jun-early Aug  
Leaf-mines recorded in Middle Field on 20 October 2017 (DS)
- 4.089 (37) *Ectoedemia albifasciella* (Heinemann) Jun  
Leaf-mines recorded in Middle Field on 20 October 2017 (DS)
- 4.094 (28) *Ectoedemia angulifasciella* (Stainton) Jul  
Leaf-mines recorded in Middle Field on 20 October 2017 (DS)
- 4.095 (29) *Ectoedemia atricollis* (Stainton), Common. Jun.  
Leaf-mines in Hawthorn on 12 October 1994 (EB), 20 September 2012 (TD), two on 27 November 2015 (DS) and near Field Centre on 20 October 2017 (DS)
- 4.099 (34) *Ectoedemia occultella* (Linnaeus), Common May-Jul.  
Leaf-mines in Birch on 12 October 1994 (EB).

#### OPOSTEGIDAE

- 5.001 (119) *Opostega salaciella* (Treitschke), Widespread but local. Jun-Aug.  
Recorded on 05 August 1981, 09 and 25 June 1993, in the Whitehouse on 25 June 2009, in the Oasis on 26 June and 10 July 2010 (FS), at HQ light on 04 July 2012 and 11 (three) and 12 July 2014 (DG). Up to four at HQ light in 2015. Field record of 2 on 11 June 2016 (FS). A single taken at light in St George's Bushes on 16 July (SZW) and 11 individuals recorded at HQ light over seven nights between 27 May and 09 July 2017 (IDH/SZW)

#### HELIOZELIDAE

- 6.004 (156) *Heliozela resplendella* (Stainton) Widespread and locally common  
One leaf-mine in The Elms 27 November 2015 (DS) and in Whitehouse and Middle Field on 20 October 2017 (DS)

#### ADELIDAE

- 7.001 (148) *Nemophora degeerella* (Linnaeus), Common. May-Jul.  
Abundant in the Whitehouse paddock bushes during June 1985 and recorded almost annually since. Peak counts since 2009 include 200 in Middle Field, 120 in the Elms, 500 in the Oasis/Whitehouse/Haven and up to 15 in Waldershare Gully. 10 recorded in the Whitehouse on 01 June and several taken at light across the recording area on 08 June 2017
- 7.004 (144) *Nemophora fasciella* (Mann) Jun-Jul  
A female was photographed in Middle Field on 12 Jun 2016 (SN).

- 7.006 (150) *Adela reaumurella* (Linnaeus), Common. Apr-Jul.  
Common on the Estate between 21 April and 07 June since 1990. At least 600 were fluttering around the Elms on 16 May 2010. Two were recorded on the Estate in Middle Field on 15 May 2016 (AML) and a single on 28 and 20 on 30 April 2017 (SZW)
- 7.008 (151) *Adela croesella* (Scopoli), Local. May-Jun.  
One recorded on the Estate on 25 June 1936, six in the Whitehouse on 22 May 2011, up to three in May 2014, one on 19 June 2015 and one on 29 May 2017 in the Waldershare Gully (SZW)
- 7.009 (153) *Cauchas fibulella* (Denis & Schiffermüller), Local. May-Jun  
Found in the Whitehouse on 15 May 2009, 19 May 2010 and 22 May 2011 (FS) and two on 11 May and four on 18 May 2014. One recorded on the Estate on 11 June 2016 (FS).
- 7.012 (141) *Nematopogon schwarziellus* (Zeller), Relatively Common May-Jun  
Two recorded at light on 22 June 2016. (IDH)
- 7.014 (143) *Nematopogon metaxella* (Hübner), Local May- Jun.  
Recorded on four dates between 09 -20 June 1993, up to five between 02 June – 04 July 2009, up to seven between 02 June – 07 July 2010 and five on 25 May 2011, one on 11 June 2012, up to six in June 2015 (IDH) and in 2017 nine individuals were recorded at HQ light over five dates between 25 May and 19 June and a further two were recorded at light in the Elms on 08 June.
- 7.015 (140) *Nematopogon swammerdamella* (Linnaeus), Generally distributed Apr-Jun  
Taken at light in the Elms on 11 May and a field record on 15 May 2017 (SZW)

#### INCURVARIIDAE

- 8.002 (130) *Incurvaria masculella* (Denis & Schiffermüller) Common. Apr-Jun  
Recorded on the Estate on 16 May 2005, in the Whitehouse on 21 and 30 April 2009, at Mary Bax on 12 April 2014 (FS), on the Estate 01 May 2016 (FS) and near the Field Centre on 12 April 2017 (SZW)

#### TISCHERIIDAE

- 10.001 (123) *Tischeria ekebladella* (Bjerkander) Fairly common May-Jun, Aug-Sep  
Leaf-mines recorded in Middle Field on 20 October 2017 (DS)
- 10.003 (125) *Coptotriche marginea* (Haworth), Common, May-Jul, Late Jul-Oct.  
Leaf-mines in Bramble on 12 October 1994 (EB), 7 November 2009 (FS), 20 September 2012 (TD), November/December 2015 (DS) and in Middle Field on 20 October 2017. Singles at HQ light in July-Sept 2015 and on 30 July and 04 August (six) 2017

#### PSYCHIDAE

- 11.012 (186) *Psyche casta* (Pallas), Common. May-Jul.  
Recorded on the Estate on 31 May 1983. Larval cases found by FS in the Whitehouse and Elms 27 September 2009.
- 11.014 (189) *Epichnopteryx plumella* (Denis & Schiffermüller) Very local. Apr-Jun.  
Recorded on the Estate on 25 May 1963, 31 May 1983 (NH) and 01 May 2000. In 2009 at least 20 were found at Dickson's Corner on 30 April, with three in the same area on 06 May (JGCB). Small numbers since up to 2017 in Whitehouse, Middle Field and at Mary Bax.

#### TINEIDAE

- 12.010 (196) *Morphaga choragella* (Denis & Schiffermüller) Local Jun-Aug  
One recorded at light 09 July 2016 (IDH).
- 12.012 (224) *Triaxomera parasitella* (Hübner)  
One in the Whitehouse on 12 June 2015 (FS).
- 12.027 (240) *Tinea pellionella* (Linnaeus), Common. Apr-Oct.  
Six recorded between May and September 1993 (IF gen det EB)
- 12.028 (243) *Tinea dubiella* (Stainton), Unknown. May-Sep.  
A local and scarce case-bearing clothes moth with two found in an observatory bunk-room on 08 July 1977, one bred from a case (DFH confirmed GSR) constituting a new County record.
- 12.032 (246) *Tinea semifulvella* (Haworth), Common. May-Oct.  
Small numbers in 1993, in the Whitehouse in 2009 (FS) and 08 June 2017 (PF) and at HQ light in 2010, 2011 and 2013-2017 between 03 May and 05 September.

- 12.033 (247) *Tinea trinotella* (Thunberg), Common. Apr-Jun, Jul-Sep  
Small numbers at HQ light in 2010, 2011-2014 and 2016-2017 between 21 May and 09 September. A single was recorded to light in the Elms on 16 May 2017
- 12.034 (237) *Niditinea fuscella* (Linnaeus), Local. May-Sep.  
Recorded on 20 May and 23 July 1993 (IF & EB). A well marked specimen recorded indoors at the Observatory building on 24 June 2005 (TD confirmed JL). Also recorded on 17 August 2010 (PDH/JGCB).
- 12.035 (238) *Niditinea striolella* (Mats.), Unknown. Jun-Aug  
Recorded on 27 May 1993. (IF gen det EB)
- 12.036 (227) *Monopis laevigella* (Denis & Schiffermüller) Common. Mar-Sep.  
Small numbers in June 1994 (EB), August 2013 and 2014 between 01 June and 04 September. One recorded at HQ light 13 August 2016 (IDH) and a single to light in the Whitehouse on 04 August (FS) and a single to HQ light 16 July 2017.
- 12.037 (228) *Monopis weaverella* (Scott), Common. Apr-Oct.  
Singles at HQ on 10 August 2009 and 20 May and 09 August 2010. Small numbers since in 2012, 2013, 2014, 2015 and 2016 between 18 May and 05 September. In 2017 one was recorded to light in the Whitehouse on 22 May, and to HQ light three in May and six over five nights in August
- 12.038 (229) *Monopis obviella* (Denis & Schiffermüller) Common. May-Oct.  
Recorded on 24 and 26 May 1993, 09 June 1993, 25 July 2009 (JGCB) and small numbers since in 2010, 2012, 2014 and 2015 between 22 May and 09 September.
- 12.039 (230) *Monopis crocicapitella* (Clemens) May-Oct  
Two were recorded at HQ light on 08 June 2017 (IDH)
- 12.041 (232) *Monopis monachella* (Hübner), Local. May-Sep.  
Recorded in the dunes near the sea on 12 August 1995 (DA, MPa, BS).
- 12.046 (277) *Oinophila v-flava* (Haworth), pRDB3. Jul-Sep.  
Single caught on the Estate on 17 May 1993. (EB)

#### BUCCULTRICIDAE

- 14.001 (265) *Bucculatrix cristatella* (Zeller), Unknown. May-Jun, Jul-Aug.  
Adult found by FS in the Whitehouse on 2 June 2010.
- 14.002 (266) *Bucculatrix nigricomella* (Zeller), Unknown. May-Jun, Jul-Sep.  
Mines on Ox-eye Daisy found by DS at HQ on 5 March 2016. A single adult recorded to light on 09 July 2017.
- 14.007 (271) *Bucculatrix albedinella* (Zeller), Local. Jun.  
Leaf-mines taken on 14 September 1993 and in Elms on 27 November 2015 (DS).
- 14.008 (272) *Bucculatrix cidarella* (Zeller), Widely distributed May-Jun  
Leaf-mines recorded in the Whitehouse and Middle Field on 20 October 2017 (DS)
- 14.009 (273) *Bucculatrix thoracella* (Thunberg), Unknown. Jun (Aug)  
Single recorded at HQ light 21 May 2016. (IDH)
- 14.010 (274) *Bucculatrix ulmella* (Zeller) Fairly common Apr-Jun Jul-Sep  
Leaf-mines recorded in the Middle Field on 20 October 2017 (DS)
- 14.012 (275) *Bucculatrix bechsteinella* (Bechstein & Scharfenberg) Fairly common May-Jun, Aug  
An adult recorded at HQ light on 04 August and leaf-mines recorded near the Field Centre on 20 October 2017 (DS)

#### GRACILLARIIDAE

- 15.004 (282) *Caloptilia elongella* (Linnaeus), Common. Jun, Sep-May.  
Larval leaf-rolls found by FS on Alder in Haven 19 September 2009, adult bred from same source in September 2011 and found on Alder in The Elms on 22 September 2013 and Middle Field on 18 May 2014 (FS). Larval feeding signs recorded on 20 September 2012 (TD). Leaf-mines recorded in the Middle Field on 20 October 2017 (DS)
- 15.006 (284) *Caloptilia rufipennella* (Hübner), Common. Jul-May.  
Singles at HQ light on 16 July 2010 and in the Elms on 10 April 2014 (FS). Mines found in The Elms on 27 November 2015 (DS). In 2017 to HQ light on 12 August and mines in the Middle Field on 20 October (DS).

- 15.008 (286) *Caloptilia alchimiella* (Scopoli), Common. May-Jul.  
Attracted to light at HQ on 4 July (2), 24 and 25 July and mines found in the Gullies on 27 November 2015 (DS) ID confirmed from pupal morphology.
- 15.009 (287) *Caloptilla robustella* (Jackh), Common. Apr-Jun, Jul-Oct  
A female to HQ light on 30 May 2017 (gen det TD)
- 15.010 (288) *Caloptilla stigmatella* (Fabricius), Common. Jun-Jul, Aug-May.  
Recorded in the Elms 24 June 2005 and recorded in small numbers in 2009 and annually from 2010-2017 between 14 March and 04 October, with late examples to 05 November in 2013 and 15 November in 2016. 15 leaf-mines recorded from around the Estate on 27 November 2015 (DS). Leaf-mines recorded in the Whitehouse and Middle Field on 20 October 2017 (DS). Larval feeding signs recorded on 20 September 2012 (TD).
- 15.011 (289) *Caloptilia falconipennella* (Hübner), pRDB3. Sep-Apr.  
Singles at HQ light on 06 April 2010 (PDH, IPH confirmed FS) and 20 September 2013. Larval feeding signs recorded on 20 September 2012 (TD).
- 15.012 (290) *Caloptilia semifascia* (Haworth), Local. Late Jun-Aug, Sep-May.  
Singles at HQ light on 01 October 2010, 06 and 22 September 2013 and 01 August and 24 September 2017. Leaf-mines in The Elms on 27 November 2015 (DS). Leaf-mine recorded 27 July 2016 (DS) and in Middle Field on 20 October 2017 (DS).
- 15.014 (293) *Gracillaria syringella* (Fabricius), Common. Mar-Nov.  
Leaf-mines found on 14 September 1993 (EB), in the Elms on 22 September 2013 and widely around the Estate on 27 November 2015 (DS). Adults recorded on 01 June 1994 and in the Elms on 10 April 2014. Adult to light on 22 August 2016. There was a field record of a single adult near the Field Centre on 12 April and a record to HQ light on 15 July 2017
- 15.015 (294) *Aspilapteryx tringipennella* (Zeller), Common. Apr-Oct.  
Seven records on the Estate from 1957-2005 between 07 May and 05 August. Since 2010 small numbers in 2011, 2013, 2015 and 2016 including up to 10 in the Whitehouse in 2014.
- 15.016 (297) *Euspilapteryx auroguttella* (Stephens), Local. May-Aug.  
Leaf-mines found by FS on St. John's Wort in Whitehouse November 2009
- 15.019 (313) *Acrocercops brongniardella* (Fabricius), Local. Year round.  
Leaf-mines found by FS on Holm Oak in The Cellars October 2010 and October 2011, four leaf-mines in The Cellars gardens on 27 November 2015 (DS) and leaf-mine recorded in Middle Field on 20 October 2017 (DS).
- 15.021 (314) *Leucospilapteryx omissella* (Stainton), Unknown. May-Jun, Jul-Sep  
Occupied mines found on Mugwort on Restharrow Scrape on 28 June 2012 (FS) and several mines recorded on 3 November 2015 (TD).
- 15.022 (310) *Callisto denticulella* (Thunberg) Widely distributed Apr-Jul  
Leaf-mine recorded in the Elms on 20 October 2017 (DS).
- 15.025 (301) *Parornix betulae* (Stainton) Common Apr-Jun, Jul-Oct  
Leaf-mine recorded near the Field Centre on 20 October 2017 (DS).
- 15.028 (303) *Parornix anglicella* (Stainton), Common. Apr-May, Aug.  
Leaf-mines taken on 14 September 1993 (EB), 01 November 2009 (on hawthorn FS), 18 July 2010 (FS), 20 July 2011 (FS), 27 November 2015 (DS) and 27 July 2016 (DS). Larval feeding signs recorded on 20 September 2012 (TD). Recorded at HQ light in May (gen det TD) and leaf-mine recorded near the Field Centre on 20 October 2017 (DS).
- 15.029 (304) *Parornix devoniella* (Stainton), Common. May-Jun, Jul-Aug.  
Leaf-mines found by FS on Hazel in Elms November 2009 and leaf-mine recorded near the Field Centre on 20 October 2017 (DS).
- 15.032 (308) *Parornix finitimella* (Zeller) Reasonably widely distributed Apr-Jun, Jul-Sep  
Leaf-mine recorded near the Field Centre on 20 October 2017 (DS).
- 15.033 (309) *Parornix torquillella* (Zeller) Widely distributed Apr-Jun, Jul-Sep  
Leaf-mine recorded near the Field Centre on 20 October 2017 (DS).
- 15.034 (315) *Phyllonorycter harrisella* (Linnaeus), Fairly Common. May-Jun and Autumn.  
Leaf-mine (pupal cremaster examined) found in the Gullies on 27 November 2015 (DS). Singles recorded at light on 20 and 21 July 2016 (IDH). Leaf-mine (pupal cremaster examined) found in Middle Field on 20 October 2017 (DS).



- 15.037 (318) *Phyllonorycter tenerella* (Joann), Unknown. May, Aug.  
Recorded on 01 June 1994 (ACJ confirmed EB).
- 15.039 (320) *Phyllonorycter quercifoliella* (Zeller) Common Apr-Jun, Jul-Sep  
Five leaf-mines (pupal cremaster examined) found in the Gullies on 27 November 2015 (DS) and in Middle Field on 20 October 2017 (DS).
- 15.040 (321) *Phyllonorycter messaniella* (Zeller), Common. Apr-Nov.  
Leaf-mines found by FS on Oak in Elms November 2009 and by DS on Holm Oak in The Cellars on 27 November and in the Whitehouse on 11 December 2015 and in Middle Field on 20 October 2017 (DS).
- 15.043 (323) *Phyllonorycter oxyacanthae* (Frey), Common. Apr-Jun, Jul-Sep  
Leaf-mines in Hawthorn on 12 October 1994 (EB) and November 2009 (FS), November/December 2015 (DS), 27 July 2016 at Prince's plantation (DS) and near the Field Centre on 20 October 2017 (DS).
- 15.049 (329) *Phyllonorycter spinicolella* (Zeller), Common. May-Jun, Aug.  
Leaf-mines found by FS on Blackthorn in Elms and Oasis November 2009, by DS in November 2015 and near the Field Centre on 20 October 2017 (DS).
- 15.050 (330) *Phyllonorycter cerasicolella* (Herrich-Schaffer), Fairly common in the south. May, Jul-Aug  
Leaf-mine recorded in Middle Field on 20 October 2017 (DS).
- 15.051 (331) *Phyllonorycter lantanella* (Schrank), Local. May, Aug.  
Leaf-mines found by FS on Wayfaring Tree in Elms November 2009 and by DS in November 2015.
- 15.052 (332) *Phyllonorycter corylifoliella* (Hübner), Local. Apr-Jun, Jul-Oct  
Leaf-mines taken on 14 September 1993 (EB) and on Hawthorn in November 2009 (FS), 20 September 2012 (TD), November 2015 (DS), 27 July 2016 at Prince's plantation (DS) and near the Field Centre on 20 October 2017 (DS).
- 15.053 (332a) *Phyllonorycter leucographella* (Zeller), Naturalised. May-Oct.  
Leaf-mines found by FS on *pyracantha* at Observatory November 2009, mines on 20 September 2012 (TD), mines and adults 2014 (DG), mines 2016 (DS) and adults to HQ light on 19 and 21 July and 22 August and leaf-mines near the Field Centre on 20 October 2017 (DS)
- 15.054 (333) *Phyllonorycter viminiella* (Sircom), Common. Apr-Jun, Jul-Sep.  
Leaf-mine collected in Middle Field on 20 October 2017 and reared to adult (DS/FS).
- 15.056 (335) *Phyllonorycter salicicolella* (Sircom), Common. May, Aug.  
Recorded on 30 July 1965, 01 June 1994 raised to adult (EB), taken as leaf-mines in Sallow on 12 October 1994 (EB) and adult bred from mines found on Sallow in November 2009 (FS).
- 15.057 (366) *Phyllonorycter dubitella* (Herrich-Schaffer) Mainly southerly distribution. May-Jun, Aug  
Leaf-mine collected from *Salix* at SBBO in 2015 and reared to adult on 11 April 2016 (DS).
- 15.064 (342) **Nut Leaf Blister Moth** *Phyllonorycter coryli* (Nicelli), Common. May, Aug.  
Leaf-mines found by FS on Estate on Hazel November 2009 and near the Field Centre on 20 October 2017 (DS).
- 15.066 (344) *Phyllonorycter strigulatella* (Leinig & Zeller), Nb. May, Jul-Aug  
Leaf-mines found by FS on Grey Alder on New Downs 22 October 2008.
- 15.067 (345) *Phyllonorycter rajella* (Linnaeus), Common. May, Aug.  
Leaf-mines on Alder in Haven 22 October 2008 (FS), in Elms and Whitehouse in November/December 2015 (DS) and in the Whitehouse on 20 October 2017 (DS).
- 15.070 (348) *Phyllonorycter quinqueguttella* (Stainton), Very local. May, Aug.  
Recorded on the Estate on 21 August 1957, 08 August 1985 and 30 September 1986. Mines found fairly commonly on Dwarf Sallow in Little Gully in November 2009 (FS), one leaf-mine recorded in the Little Gully on 16 September 2011 (TD), mines present on 20 September 2012 from which one adult was reared (TD), on 12 July and 2 October 2014 (TD), July (TD) and November 2015 (DS & TD) and on 31 October 2016 (TD). Four tenanted mines were recorded on Restharrow Scrape on 20 October 2017 (DS). Restricted in Kent to Sandwich Bay and Dungeness.
- 15.074 (352) *Phyllonorycter schreberella* (Fabricius), Common. May, Aug.  
Leaf-mines found by FS on Elm in Elms November 2009, on 20 September 2012 (TD), November 2015 (DS) and in Middle Field on 20 October 2017 (DS).
- 15.075 (353) *Phyllonorycter ulmifoliella* (Hübner), Common. Apr-May, Late Jun - Sep

Leaf-mines found by FS on Birch in Oasis November 2009, Gullies in November 2015 (DS) and near the Field Centre on 20 October 2017 (DS).

- 15.076 (354) *Phyllonorycter emberizaepenella* (Bouche), Common. May, Aug.  
Adult recorded at light on 23 May 1993 (IF confirmed EB). Tenanted leaf mines found by DS on Snowberry near Middle Field in November 2015 and in the Elms on 20<sup>th</sup> October 2017 (DS).
- 15.078 (356) *Phyllonorycter tristrigella* (Haworth), Common. May, Aug.  
Leaf-mines in Elm on 12 Oct 1994 (EB) and in Elms in November 2009 (FS), November 2015 (DS) and in Middle Field on 20<sup>th</sup> October 2017 (DS).
- 15.079 (357) *Phyllonorycter stettinensis* (Nicelli), Common. May, Aug.  
Leaf-mines found by FS on Alder in Haven November 2009, on 20 September 2012 (TD), in Elms in November 2015 (DS) and in Whitehouse and Middle Field on 20 October 2017 (DS). Six adults in Middle Field and Haven on 18 May 2014 (FS)
- 15.080 (358) *Phyllonorycter froelichiella* (Zeller) Reasonably widespread May-Jun, Aug  
Leaf-mine recorded in the Whitehouse on 20 October 2017 (DS).
- 15.081 (359) *Phyllonorycter nicellii* (Stainton), Common. Apr-May, Jul-Oct  
Leaf-mines found by FS on Hazel in Elms November 2009 and near the Field Centre on 20 October 2017 (DS).
- 15.082 (360) *Phyllonorycter kleemannella* (Fabricius), Common. Apr-Jun, Jul-Aug.  
Leaf-mines found by FS on Alder in Elms and Haven November 2009, in Elms in November 2015 (DS) and in the Whitehouse on 20 October 2017 (DS). One-two adults in Middle Field on 16 May 2013, 18 May 2014 (FS) and to HQ light on 04 August 2017 (IDH).
- 15.083 (361) *Phyllonorycter trifasciella* (Haworth), Local. Apr-Nov.  
Leaf-mines found by FS on Honeysuckle in Whitehouse and kept until adult emergence 2009 and 2010. Adult in Oasis/Whitehouse on 23 April 2011
- 15.084 (362) *Phyllonorycter acerifoliella* (Zeller), Common. May-Jun, Jul-Aug.  
Leaf-mines found by FS on Field Maple in Elms November 2009, by DS in November 2015 and in Middle Field on 20 October 2017 (DS). Adult recorded at light 20 July 2016.
- 15.086 (364) *Phyllonorycter geniculella* (Ragonot), Common. Apr-May, Jul-Aug, late Aug-Oct  
Leaf-mines in Sycamore on 12 October 1994 (EB) and on Sycamore in Elms in November 2009 (FS), November 2015 (DS) and in Middle Field on 20 October 2017 (DS).
- 15.089 (366a) **Horse-chestnut Leaf-miner** *Cameraria ohridella* (Deschka & Dimi), Naturalised. Apr-Jun, Jul-Sep  
First recorded in the UK in 2002. Its leaf-mines were found regularly on the Estate on Horse-chestnut from 2005 onwards and an adult at light in the Whitehouse on 02 August 2014 (FS). Seven adults were recorded to HQ light over five dates from 06 July to 01 August 2017.
- 15.090 (367) *Phyllocnistis saligna* (Zeller) Local in south and south-east Jun-Jul, Sep-Apr  
Leaf-mine recorded in the Whitehouse on 20 October 2017 (DS)
- 15.092 (368) *Phyllocnistis unipunctella* (Stephens), Common Jul, Sep-Apr.  
Mines found by FS on Black Poplar on 27 September 2009 and in Middle Field in June 2010. Two adults in the Elms on 18 May and one in the Whitehouse on 07 June 2014 (FS).
- 15.093 (369) *Phyllocnistis xenia* (Hering), Rare. Jul-Aug, Sep-Apr.  
Now (2016) common across Kent on White Poplar. Recorded on the Estate on 29 June 2006 and in the Oasis/Whitehouse on 23 April 2011, leaf-mines recorded on 20 September 2012 (JL, TD), 25 August 2013 (P&PH), in the Elms on 10 April and 11 May 2014 (FS) and in Middle Field on 20 October 2017 (DS). Adults were recorded in 2017 as a field observation in the Elms on 07 April (DS) and to light in the Whitehouse on 04 August (FS).

#### YPONOMEUTIDAE

- 16.001 (424) **Bird-cherry Ermine** *Yponomeuta evonymella* (Linnaeus), Common. Jun-Sep.  
Recorded in July 1994 and 1995 (abundant in the Elms) and up to 37 trapped at HQ in June 2009, with up to six in July 2012, 16 in July 2013 and nine in July 2014. 47 individuals were recorded at HQ light over nine dates between 17 June and 10 August 2017 with a maximum of 30 on 21 June.
- 16.002 (425) **Orchard Ermine** *Yponomeuta padella* (Linnaeus), Common. Jul-Aug.  
Singles at light on the Hundred Acre Field on 03 August 1985 and at HQ light on 25 June 2002. In 2009 up to four recorded at HQ light on seven dates from 20 July – 22 August, up to three on four dates from 14-24 Jul

2011 and small numbers in 2012 and 2015. In 2016 recorded at HQ light on 4 dates from 06 to 15 July (IDH). In 2017 larval tents were recorded in the Oasis on 13 April (SZW) and a single adult to HQ light on 09 July (IDH).

- 16.004 (427) **Spindle Ermine** *Yponomeuta cagnagella* (Hübner), Common. Jun-Sep.  
Recorded on the Estate on 12 August 1985 and up to three at HQ light 01 July – 20 August 2010. At least 40 larvae and tents in Middle Field on 15 June 2010. Two in the Whitehouse on 09 August 2013 and up to six in 2015. Singles recorded at HQ light on 16 and 27 July 2016 (IDH). Larvae were recorded in Middle Field on 22 April (DS), ten adults in Middle Field on 08 July (FS), one or two adults were recorded at HQ light over three dates from 10 to 19 July (IDH) and three to light in the Whitehouse on 04 August (FS) 2017.
- 16.005 (428) **Willow Ermine** *Yponomeuta rorrella* (Hübner), **pRDB3**. Migrant and relatively local Jul-Aug.  
Three at HQ light on 13 July 2010, up to four at HQ light on three dates from 19-25 July 2011, up to 10 at HQ in July 2013 and four in July 2014. Single recorded at HQ light on 5 August 2016 (IDH) and larval webs frequent in 2016 (FS). A single adult to light in the Whitehouse on 04 August 2017 (FS).
- 16.007 (430) *Yponomeuta plumbella* (Denis & Schiffermüller), Local. Jul-Aug.  
Recorded on the Estate on 12 August 1995, at HQ light on 25 July 2008, Larval feeding signs recorded in Middle Field on 22 April (DS) and recorded on Spindle on 08 July 2017 (FS).
- 16.008 (431) *Yponomeuta sedella* (Treitschke), Nb. Very local. Apr-May, Jul-Aug.  
Recorded on the Estate in August 1993 (IF confirmed EB)
- 16.010 (435) *Zelleria hepariella* (Stainton) Widespread but local Jul-Apr  
A single to HQ light on 16 July 2017 (IDH/SZW)
- 16.014 (436) *Pseudoswammerdamia combinella* (Hübner), Common. Mar-Jun.  
Up to three at MV light on six dates from 26 April – 23 May 2010 and one in the Whitehouse on 10 April 2014 (FS).
- 16.015 (437) *Swammerdamia caesiella* (Hübner), Common. May-Jun, Jul-Aug.  
Fresh singles recorded at HQ MV light on 16, 24 and 31 July 2016 (IDH) and on 17 June 2017.
- 16.017 (438) *Swammerdamia pyrella* (Villers), Common. Apr-Sep.  
Leaf-mines in Hawthorn on 12 October 1994 (EB), at HQ MV light and at Elms on 25 June 2005 and one-two in Whitehouse on 09 August 2013 (FS) and 07 August 2015
- 16.018 (439) *Swammerdamia compunctella* (H.-S.), Unknown. Jun-Jul.  
Recorded on the Estate on 10 August 1993 (IF confirmed EB)
- 16.019 (440) *Paraswammerdamia albicapitella* (Scharfenberg), Common. May-Sep.  
One in the Whitehouse on 25 June 2009, two in the Whitehouse on 08 July 2010 and singles at HQ light on 13 July 2014, 01 July 2015, 09 and 26 July 2016 (IDH) and 22 June 2017.
- 16.020 (441) *Paraswammerdamia nebulella* (Haworth), Common. Jun-early Oct.  
Recorded on the Estate in August/September 1993. 10 were recorded in the Whitehouse on 08 July 2010, two there on 11 June 2011 and 09 August 2013 (FS). Singles at HQ light on 21 June 2014, 09 July 2015 with fresh individuals recorded in the field on 24 June and six other dates in 2015, two recorded to HQ light on three dates in July 2016 (IDH) and nine recorded over five dates between 06 and 21 July 2017
- 16.023 (444) *Ocnerostoma piniariella* (Zeller)  
Leaf-mine and larval spinning with pupa found near the Elms on 27 November 2015 (DS) confirmed from microscopic examination of pupa. Whilst adults require gen det, the two *Ocnerostoma* species can be separated based on pupal morphology.

#### YPSOLOPHIDAE

- 17.001 (451) *Ypsolopha mucronella* (Scopoli), Local. Jun-Aug, Oct-May  
Singles at HQ light on 17 May 2013 and 15 March and 02 April 2014, 23 March and 05 April 2016 (IDH) and 03 May 2017.
- 17.002 (452) *Ypsolopha nemorella* (Linnaeus), Local. Jun-Aug.  
Recorded on the Estate on 23 June and 04 July 1993 and in the Whitehouse on 25 June 2009 (FS) and 15 July 2016 (FS) and to light in the Whitehouse 08 June 2017 (PF).
- 17.003 (453) *Ypsolopha dentella* (Fabricius), Common. Jun-Sep.  
Recorded on the Estate in August 1993 and on 31 July 2010.
- 17.005 (455) *Ypsolopha scabrella* (Linnaeus), Common. Jul-Sep.  
Recorded on the Estate on 06 July 2001, 23 July 2002 and at HQ MV light on 21 July 2004. Since recorded

in small numbers in 2009 (up to nine) and 2010 to 2017 between 05 July and 29 August.

17.008 (458) *Ypsolopha alpella* (Denis & Schiffermüller), Local. Jul-Oct.

One at HQ light on 05 September 2013 (JGCB).

17.010 (460) *Ypsolopha parenthesella* (Linnaeus), Common. Jul-Oct.

One at HQ light on 18 August 2010 (PDH/JGCB).

17.012 (462) *Ypsolopha sequella* (Clerck), Common. Jul-Oct.

One at HQ light on 10 August 2010

#### PLUTELLIDAE

18.001 (464) **Diamond-back Moth** *Plutella xylostella* (Linnaeus), Migrant. Mar-Dec

A very common migrant, attracted to light most years up to 2017 from 14 Mar – 10 December. Extremely abundant in 2009, when at least 7,500 were attracted to an MV trap in the HQ car park on 02 July, with further influxes including 120 on 05 September. Peak counts in 2014 included 1,154 on 12 July and 2,400 on 18 July and in 2016 included 1,700 on 07 June and 3,800 on 08 June at HQ light and 2,000+ field records on St Georges on 07 June (IDH).

18.007 (469) *Eidophasia messingiella* (Fischer von Röslerstamm.), Local. Jun-Jul.

Recorded on the Estate in June 1989, 1993 (up to three), several to light in The Elms on 24 June 2005 (TD), on 12 and 23 (TD) June 2006 (TD) and in small numbers in 2009, 2010, 2012 -2015, 2017 between 01 June and 26 July.

#### GLYPHIPTERIGIDAE

19.001 (470) *Orthotelia sparganella* (Thunberg), Local. Jul-Aug.

Recorded on the Estate in small numbers in 1950, 1975, 1993, 2003, 2006, 2009, 2010, 2012-2017 between 14 July and 05 September.

19.002 (397) *Glyphipterix thrasonella* (Scopoli), Common. May-Aug.

One trapped at Observatory on 6 July 2009. (JGCB)

19.003 (396) *Glyphipterix fuscoviridella* (Haworth), Common. Apr-Jun.

Singles recorded on 23 May 1993 and 15 May 2005. Two in the Elms on 28 May 2015 and found to be abundant by day, especially in the Oasis field and Whitehouse area in 2009 and 2014 (FS). Two recorded in the field on 01 May 2016 (FS).

19.007 (391) *Glyphipterix simplicella* (Stephens), Common. May-Jul.

Common in grassland throughout the area (FS) and recorded on the Estate in 1993, 2003, 2005, 2009, 2010 and 2014 between 23 May and 17 August. In 2017 there was an estimate of c2000 along the Green Wall on 14 May.

19.010 (472) *Digitivalva pulicariae* (Klimesch). Local. Year round.

One in the Whitehouse on 09 August 2013 and three at HQ light on 16 July 2014, with singles on 19 July and 25 and 27 October. One at HQ light on 14 April 2015. In 2016 two adults were recorded at HQ light on 16 and 17 July and singles on six dates between 15 July and 14 September (IDH). Singles were recorded at HQ light on 16 July and 04 August 2017.

19.014 (476) *Acrolepia autumnitella* (Curtis), Local. Year round.

Recorded on the Estate on 08 September 1985. Mines found on Bittersweet in November 2009 (FS) and June 2010 (FS), November 2015 and 27 July 2016 at Prince's plantation (DS). Singles at HQ light on 06 April 2011 and the Elms on 10 April 2014 (FS). A leaf-mine was recorded in Middle Field on 20 October 2017 (DS)

#### ARGYRESTHIIDAE

20.005 (409a) *Argyresthia trifasciata* (Staudinger), Naturalised. Apr-Jun, late Jul-Aug.

Taken at MV light in Middle Field on three dates between 04-24 June 2010 and singles at HQ light on 05 May and 02 August (FS) 2014 and 22 May 2017 (IDH).

20.007 (409b) *Argyresthia cupressella* (Walsingham), Adventive. May-early Aug

First recorded in Britain in 1997. First record for SBBOT a single field observation in Middle Field on 21 June 2016 (FS). In 2017 16 individuals were recorded at HQ light over eight dates between 29 May and 06 July with a maximum of five on 07 June.

20.011 (410) *Argyresthia brockeella* (Hübner), Common. May-Aug.

Recorded on St George Golf links on 23 June 2002 and nine, mostly at light in the Oasis, on 10 July 2010. Singles at light in the Oasis on 25 June 2011 and in Restharrow on 12 July 2014 (DG). In 2016 an adult was recorded in the Haven on 02 August (SZW) and one at HQ light on 15 July (IDH) and a single on 06 July 2017

- 20.012 (411) *Argyresthia goedartella* (Linnaeus.), Common. Jun-Sep.  
Taken at light on 08 July 1977, 12 August 1995, 27 August 2006 and on four dates between 20 July and 23 August 2009. Recorded in small numbers since in 2010, 2012, 2013, and 2015 to 2017 between 08 July and 12 September.
- 20.013 (412) *Argyresthia pygmaeella* (Denis & Schiffermüller) Common, late May-early Sep.  
Recorded on 08 July 1977, 21 June 1993 and in small numbers in 2010, 2011 (on Sallow in the Whitehouse/Haven) and 2013 to 2017 between 08 June and 17 July.
- 20.015 (414) *Argyresthia curvella* (Linnaeus), Local. Jun-Jul.  
Found in the Whitehouse on 25 June 2009. Common on Apple in the Whitehouse/Oasis/Haven on 11 June 2011 (FS). Small numbers since from 2014–2016 (FS)
- 20.016 (415) *Argyresthia retinella* (Zeller). Common. Jun-Jul.  
One at light on 26 June 2010. Common on Birch in the Whitehouse/Oasis/Haven on 11 June 2011 (FS) and three in the Haven on 15 June 2014 (FS).
- 20.018 (417) *Argyresthia spinosella* (Stainton), Common. May-Jul.  
Recorded on 01 June 1994 (EB) and small numbers on Blackthorn in the Oasis on 26 June 2010 and 11 June 2011 and at HQ light on 03 and 28 June 2015, 27 June 2016 (IDH) and singles on six dates between 16 and 30 May 2017.
- 20.019 (418) *Argyresthia conjugella* (Zeller). Common. May-Jul.  
One on Apple in the Whitehouse/Haven on 11 June 2011 (FS).
- 20.021 (418) Cherry Fruit Moth *Argyresthia pruniella* (Clerck). Common. late May-Sep  
One at HQ light on 06 July 2016 (IDH) and 25 May 2017
- 20.022 (421) *Argyresthia bonnetella* (Linnaeus), Common. Jun-Sep.  
Singles 04 July 1993, 01 July 1994, in the Oasis on 26 June 2010 and in the Whitehouse on 15 June 2014 and 19 June 2015 (FS). In 2017 singles were recorded at HQ light on four dates between 12 June and 21 July, two were observed in the Whitehouse on 12 June and two were trapped in the Whitehouse on 04 August.
- 20.023 (422) *Argyresthia albistria* (Haworth), Common. Jun-Sep.  
An adult in the Elms on 8 August 2009 (FS).

#### LYONETIIDAE

- 21.001 (263) *Lyonetia clerkella* (Linnaeus), Common. Jun, Jul-Sep, Oct-May  
Leaf-mines on Birch on 12 October 1994 (EB) Small numbers at HQ light between 28 June and 06 September in 2009, 2010, 2013 and 2017. In 2012 an adult was identified in the Little Gully on 3 August and a vacated mine on 20 September (TD), 11 leaf-mines in The Elms on 27 November 2015 (DS) and leaf-mines near the Field Centre and in Middle Field on 20 October 2017 (DS).
- 21.002 (262) *Lyonetia prunifoliella* (Linnaeus), Rare. Aug-May  
Once thought extinct in the UK but now resident in a few southern counties of England. Recorded in Kent for the first time in 2015. Recorded at HQ light on 14 September 2016 (M gen det TD)
- 21.008 (260) *Leucoptera malifoliella* (Costa). Local. Jun-Jul  
Leaf mines in Middle Field on 20 October 2013 (FS).

#### PRAYDIDAE

- 22.002 (449) *Prays fraxinella* (Bjerkander), Common. May-Oct.  
Singles at HQ light on 27 August 2006 and in the Elms on 12 July 2014 (DG) and Whitehouse on 17 July 2015 (FS). A single recorded at HQ light on 19 July 2016.

#### BEDELLIIDAE

- 24.001 (264) *Bedellia somnulentella* (Zeller), Scarce. Aug, Oct-May.  
Larval feeding signs found on Hedge Bindweed in Haven by FS in November 2009 and on Hedge Bindweed in Whitehouse on 20 August 2011. Leaf-mines were recorded in Middle Field on 20 October 2017 (DS)

#### SCYTHROPIIDAE

- 25.001 (450) **Hawthorn Moth** *Scythropia crataegella* (Linnaeus), Local. Jun-Jul, Aug-Sep.  
Three trapped at Observatory on 7 August 2009 (AC/PDH) and singles on 11 July 2010 (PDH/JGCB/JJS) and 28 June 2011 (JGCB).

#### DOUGLASIIDAE

- 26.001 (398) *Tinagma ocnerosomella* (Stainton), Local. May-Jul.  
Recorded on the Estate on 05 June 1975, 01 June 1981, 09 June 1993 and 16 June 2006. Adults found among Viper's Bugloss on seafront in 2009, 2010, 2014 between 29 May and 01 July (FS) and a single on 23 May and 10 on 21 June 2016 (FS) and larvae in Cellars in November 2015 (DS).
- 26.002 (399) *Tinagma balteolella* (Fischer von Röslerstamm), RDB1, May-Jun.  
Recorded on the Estate on 05 June 1975 and on Viper's Bugloss (food plant) near the sea on 16 May 2005, 29 May 2014 and 23 May 2016 [four] (FS).

#### AUTOSTICHIDAE

- 27.001 (870) *Oegoconia quadripuncta* (Haworth), Common. Jul-Aug.  
Recorded on the Estate on 09 June 1993 (ACJ & IF gen det EB)
- 27.002 (871a) *Oegoconia caradjai* (Popescu-Gorj & Căpușe), Nb. Scarce. Jun-Aug.  
First recorded at light in Gullies/ Elms area on 01 and 21 June 1993 (ACJ & IF gen det EB)

#### OECOPHORIDAE

- 28.009 (648) **White-shouldered House-moth.** *Endrosis sarcitrella* (Linnaeus), Common. Year round.  
Commonly seen in the HQ building, at light and on the Estate between 23 February and 23 October up to 2017.
- 28.010 (647) **Brown House-moth** *Hofmannophila pseudospretella* (Stainton), Common. Year round.  
Common in HQ building and at light and recorded from 1981 to 2017 between 10 March – 21 October.
- 28.012 (644) *Borkhausenia fuscescens* (Haworth), Common. Jun-Sep.  
One in August 1993 (IF confirmed EB) and one observed in the Elms on 15 July 2017 (FS)
- 28.014 (642) *Crassa unitella* (Hübner), Common. Jun-Aug.  
Recorded on the Estate on 14 August 1975 and in small numbers in 2010 and annually from 2012-2017 between 21 June and 27 August (2016 IDH)
- 28.015 (640) *Batia lunaris* (Haworth), Common. Jun-Aug.  
One in the Haven (FS) and up to three at HQ light in July 2010 and singles at light in Restharrow on 12 July 2014 (DG) and 10 July 2015. Singles were recorded at HQ light on 15 July 2016 (IDH) and 21 June and 06 July 2017.
- 28.019 (649) *Esperia sulphurella* (Fabricius), Common. Apr-Jun.  
Singles in 1993, 1994, 2009, 2010, 2011, 2012, 2014, 2016 and 2017 between 06 April and 01 June.
- 28.022 (652) *Alabonia geoffrella* (Linnaeus). Common. May-Jun.  
One on Bramble near Middle Field on 30 May 2014 (JK photo)

#### CHIMABACHIDAE

- 29.001 (663) *Diurnea fagella* (Denis & Schiffermüller), Common. Mar-May.  
Small numbers at HQ light in 2010 to 2014 and 2017 between 10 March and 15 April.

#### PELEPODIDAE

- 31.001 (658) *Carcina quercana* (Fabricius), Common. Jul-Aug.  
Common in the area and at light. Two on the Estate in August/September 1993 and up to 11 annually from 2009 to 2017 between 13 June and 20 September.

#### DEPRESSARIIDAE

- 32.003 (668) *Luquetia lobella* (Denis & Schiffermüller), Nb. Local. May-Jul.  
A single on 23 June 2006 (TD) and on 21 June 2010 at HQ light (PDH/JGCB), then small numbers in 2012 to 2014 and 2017 between 30 May and 04 July.
- 32.007 (701) *Agonopterix ocellana* (Fabricius), Common. Aug-May.  
Singles trapped at Observatory on 11 and 14 August 2009 and small number since, mainly between 16 March and 30 September. In 2017 a single recorded at HQ light on 29 May 2017.
- 32.009 (691) *Agonopterix purpurea* (Haworth), Local. Aug-Jun.  
Small numbers at HQ light in 2010 to 2017 between 30 March and 05 October.
- 32.010 (710) *Agonopterix conterminella* (Zeller), Local. Jul-Sep.  
Recorded on 02 August 1987 (IDH gen det CP)

- 32.015 (692) *Agonopterix subpropinquella* (Stainton), Common. Jul-May  
Small numbers in 2009, 2010 and 2013 to 2017 between 25 April and 25 September.
- 32.016 (696) *Agonopterix propinquella* (Treitschke), Local. Sep-Jul.  
Two recorded in August/September 1993 and one at HQ light on 07 April 2011 (FS).
- 32.017 (697) *Agonopterix arenella* (Denis & Schiffermüller), Common. Aug-Jun.  
Singles recorded on 10 May 1987, in August/September 1993 and small numbers in 2010 to 2017 between 21 July and 29 May. On 3 August 2012 a larva was recorded on Lesser Burdock (TD).
- 32.018 (688) *Agonopterix heracliiana* (Linnaeus), Common. Jul-May  
Recorded on the Estate in 1987 (IDH M gen det CP). One at light in August 1993 (IF gen det EB). This moth requires the hind wing to be photographed to distinguish from *ciliella*.  
Undifferentiated *Agonopterix heracliiana/ciliella* are recorded regularly throughout the year to HQ light and in the field.
- 32.026 (698) *Agonopterix kaekeritziana* (Linnaeus) Fairly common Jul-Sep  
Recorded in small numbers in 1958, 1975, 1989, 2009, 2013, 2014 and 2015 and recorded at HQ light on 15 July (IDH) and to light in the Whitehouse on 04 August (FS) 2017
- 32.029 (705) *Agonopterix umbellana* (Fabricius), Local. Aug-Apr.  
Adults at HQ light on 23 April and 17 August 2010 and 26 November 2015.
- 32.030 (706) *Agonopterix nervosa* (Haworth), Common. Jul-Sep.  
Recorded on the Estate in 1950.
- 32.031 (695) *Agonopterix alstromeriana* (Clerck), Common. Aug-Apr.  
Recorded in 1961, 1993, 1995, 2002 and annually (up to six) from 2009 to 2017 (up to two on 18 dates in 2016) between 17 February and 09 October.
- 32.034 (690) *Agonopterix cnicella* (Treitschke), **Nb.** Local. Jun-Jul.  
A species of coastal dunes and shingle beaches occasionally recorded (up to three in 2009) from 1927 to 2009 between 21 May and 30 July. Larva on Sea Holly 21 May 2009 (FS).
- 32.035 (714) *Agonopterix yeatiana* (Fabricius), Local. Aug-Jun.  
Recorded in 1961 and on 16 April and 09 June 1993, with small numbers in 2014 to 2017 between 07 March and 23 September.
- 32.036 (672) **Parsnip Moth** *Depressaria radiella* (Goeze), Common. Year round.  
First recorded in May 1987 and regular in small numbers (up to six in 2013) since up to 2017, between 02 February and 28 September. In 2016 recorded on 10 dates. (IDH)
- 32.039 (670) *Depressaria daucella* (Denis & Schiffermüller), Common. Jul-Apr.  
Numerous larvae in Hemlock Water Dropwort flowers in Hundred Acre Field 28 June 2010 (FS) and adults at HQ light on 16 March, 07 June and 05 September 2014.
- 32.042 (676) *Depressaria pulcherrimella* (Stainton) Widespread but local late Jun-Sep  
A female to light in the Whitehouse on 26 August 2017 (SZW) (gen det TD)

#### ETHMIIDAE

- 33.001 (718) *Ethmia dodecea* (Haworth), **Nb.** Very local. May-Aug.  
Singles at HQ light on 02 July 2010, 03 July 2013, 04 July 2014, 27 Aug 2016 and 17 June 2017
- 33.002 (719) *Ethmia quadrilella* (Goeze) **pRDB3.** Very local. May-Jul  
One at HQ light on 24 August 2013 (JGCB).
- 33.004 (717) *Ethmia terminella* (Fletcher), **pRDB2.** Rare. Jun-Jul.  
A species of vegetated shingle, chalk downs and dunes on the coast of SE England. Recorded in small numbers on the Estate in 2006, 2010, 2014 and 2015 between 29 May and 22 June, on 21 June 2016 (FS) and 19 and 21 June 2017 (IDH).
- 33.006 (720) *Ethmia bipunctella* (Fabricius), **pRDB2.** Rare. May-Jun, Aug-Sep.  
Inhabits coastal shingle and chalk cliffs in SE England. Recorded in 1993, 1995, 2002, 2003, 2004, 2006 and annually from 2009-2015 between 23 April and 02 September. There were five singles recorded at HQ light (IDH) and to light in The Elms (SZW) between 11 May and 23 August 2017.

#### COSMOPTERIGIDAE

- 34.004 (898) *Limnaecia phragmitella* (Stainton), Common. late Jun-early Sep  
One in August/September 1993 with further records on 27 July 2002 and in small numbers in 2009, 2010 and 2012 to 2017 between 21 June and 29 August.
- 34.005 (896b) *Cosmopterix pulchrimella* (Chambers) Southerly distribution May-Nov  
In Middle Field six adults identified on 27 August (FS) and up to 56 in October (CW/SZW/DS) and a leaf-mine on 20 October (DS) and on 09 November a leaf-mine by the Haven (SZW) 2017.
- 34.010 (897) *Cosmopterix lienigiella* (Zeller), Common. May-Oct.  
Uncommon in Kent, Sandwich Bay is only the third known site for this species in the county. Singles recorded at HQ light on 07 and 31 July 2016 (IDH)

## GELECHIIDAE

- 35.003 (844) *Syncopacma larseniella* (Gozmány)  
An adult male netted in the Little Gully on 30 June 2009 (TD gen det) and found in the Whitehouse on 19 June (FS) and probable singles at light on three dates between 28 June and 02 July 2015. A single recorded in the field on 18 June 2016 (FS).
- 35.010 (843) *Aproaerema anthyllidella* (Hübner), Common. Apr-Jun, Jul-Oct  
Recorded at light on 02, 04, 05, 13 and 27 (M gen det TD) September 2016 (IDH) (For future reference-This species is under review for splitting and this was a large genitalia species). Probables are recorded at light regularly e.g. in 2017 12 individuals were recorded over 10 dates between 15 May and 28 September with a maximum of three on 21 August.
- 35.026 (855) *Acompsia cinerella* (Clerck), Common. late May-early Sep.  
Four in the Whitehouse on 09 August 2013 (FS) and singles on 02 August 2014 (FS), 07 August 2015, 15 July 2016 (FS) and three in the Whitehouse on 14 July 2017 (FS).
- 35.028 (866) *Brachmia blandella* (Fabricius) Common. Jun-Aug.  
Recorded on 05 August 1981, 04 and 23 July 1993, to light in the Elms on 24 June 2005 (TD) and in small numbers including to HQ light in 2010 and 2014 to 2017 (up to six on six dates) between 21 June and 27 July.
- 35.029 (867) *Brachmia inornatella* (Douglas), **Nb.** Scarce. Jun-Jul.  
Singles at HQ light on 19 July 2010 (PDH/JGCB/JJS)
- 35.031 (868) *Helcystogramma rufescens* (Haworth), Common. Jun-Aug.  
Recorded on the Estate in 1965, 1983, 1985, 1993, 1995, 2009 and 2012 to 2017 between 09 June and 23 August.
- 35.032 (809) *Pexicopia malvella* (Hübner), Scarce. Jun-Aug.  
One at HQ light on 24 July 2010 (FS).
- 35.033 (808) *Platyedra subcinerea* (Haworth), Scarce. Aug-Jun.  
Recorded on the Estate on 26 May 1993 and at HQ light on 22 May 2012 (FS).
- 35.035 (746) *Chrysoesthia drurella* (Fabricius), Local. May-Sep.  
Recorded on the Estate on 29 June 2006 and common amongst Fat Hen in the Elms on 26 August 2012 (FS). In 2016 leaf-mine recorded at Prince's plantation on 27 July (DS) and also at HQ light on 13 August (IDH)
- 35.036 (747) *Chrysoesthia sexguttella* (Thunberg), Common. May-Jun, Aug  
Occupied mines in The Elms on 26 August 2012 (FS) and 14 June 2014 (FS).
- 35.038 (789) *Bryotropha domestica* (Haworth). Common. May-Sep.  
Singles at HQ light on 22 September 2013 (JGCB), in The Elms on 14 June 2014 and at HQ light on 10 August 2015.
- 35.040 (787) *Bryotropha terrella* (Denis & Schiffermüller), Common. May-Aug.  
Small numbers on the Estate in 1984, 1989, 1993, 1995, 2010, 2013, 2014 and 2015 between 26 May and 12 August, with 15 in the Whitehouse on 09 August 2013. Singles recorded at HQ light on 4 dates in 2016 (IDH) and singles or twos on seven dates in 2017 plus singles to three recorded in St George's Bushes, Big Gully (SZW) and Whitehouse (FS) on three dates.
- 35.041 (786) *Bryotropha desertella* (Douglas), Common. May-Aug.  
Recorded on the Estate in 1954, 1966 (Ent Rec: RF) 1969, 1977 (F gen det) (EB).
- 35.046 (782) *Bryotropha senectella* (Zeller), Common. Jun-Sep.  
Recorded on the Estate in 1954, 21 July 1957, 22 July 2014 (JGCB) and 11 August 2017.
- 35.047 (779) *Bryotropha affinis* (Haworth), Common. May-Sep



Small numbers 1993, 1995, 2010, 2012, 2014 and 2015 between 22 May and 12 August. Recorded at HQ light on 17 and 19 July 2016 (IDH) and on 17 May 2017

- 35.048 (781) *Bryotropha umbrosella* (Douglas), Local. May-Jun.  
Recorded on the Estate in 1954, 21 July 1957, in 1965 and 12 August 1995 (DA, MPa, BS).
- 35.056 (724) *Metzneria lappella* (Linnaeus), Common. Jun-Jul.  
Recorded on 26 June and 04 and 08 July 1993, then small numbers between 15 June – 07 August annually from 2009-2017 (IDH).
- 35.058 (726) *Metzneria metzneriella* (Stainton), Common late May-mid Aug.  
Recorded at the Elms on 24 and 25 June 2005, recorded at light on 23 June 2006 (TD) and at HQ light in 2010, 2011, 2013 to 2015 (JGCB) and 2017 between 24 June and 21 July.
- 35.060 (730) *Apodia bifractella* (Duponchel), Common. Jul-Aug.  
Small numbers found on Common Fleabane in August in the Whitehouse and Middle Field and to light including at HQ since 2010. Probably overlooked, given the abundance of its foodplant (FS).
- 35.061 (748) *Ptocheuusa paupella* (Zeller) Southern England Jun, Aug-Sept  
Recorded on 24 June 2004 (TD)
- 35.071 (736) *Monochroa lucidella* (Stephens), Common. Jun-Jul.  
Recorded on the Estate in 2003 (FS).
- 35.073 (737) *Monochroa palustrella* (Douglas), Very local. Jun-Sep  
Small numbers recorded on the Estate in 1989, 2007 and annually from 2009-2017 between 21 June and 09 September.
- 35.079 (733) *Eulamprotes wilkella* (Linnaeus), **Nb.** Local. Jun, Aug.  
Recorded on the Estate in 1954, 1971, 1983, 1989, 1993, 1995, 2005 (frequent to light on the beach on 23 June and on 24 June in The Elms (TD)), 2009, 2010, 2014 and 2015 between 10 June and 12 August. Two recorded on 15 July 2016 (FS)
- 35.085 (762) *Athrips moufetella* (Linnaeus), Local. Jun-Sep  
One in the Whitehouse on 09 August 2013 and singles in the Whitehouse on 17 July and at HQ light on 07 September 2015.
- 35.091 (841) *Sophronia semicostella* (Hübner), Common. Jun-Jul.  
Recorded on the Estate in 2003 (FS).
- 35.093 (792) *Mirificarma mulinella* (Zeller), Common. Jul-Sep.  
Recorded on the Estate on 12 August 1995 (DA, MPa, BS)
- 35.094 (796) *Aroga velocella* (Zeller). Local late Apr-May, Jul-early Sep  
Recorded on the Estate in 1983, 1993, 1995, 2004, 2010 to 2012 and 2014 to 2017 between 18 May and 01 September, with five in the Oasis/Whitehouse on 23 April in 2011, three there on 09 August 2013 and a single on 15 July 2016 (FS)
- 35.095 (791) *Chionodes distinctella* (Zeller), Local. Jun-Aug.  
Recorded on the Estate in 1954 and June 1989 and on the Golf Course on 03 July 2015 (gen det) (MH)
- 35.109 (822) *Scrobipalpa acuminatella* (Sircom). Common. Apr-Sep.  
First recorded on 24 May 1993 (ACJ & IF gen det EB) and a leaf-mine recorded in the Middle Field on 20 October 2017 (DS)
- 35.118 (814) *Scrobipalpa octellatella* (Boyd), Local. May-Oct.  
A single to HQ light on 23 August 2017 (gen det SP)
- 35.123 (819) *Scrobipalpa costella* (Humpreys & Westwood), Common. Apr-Jun, Jul-Nov  
In 1993, singles on 26 May, 21 July, with two in August, then small numbers in 1995, 2009 to 2011, 2013 to 2017 between 14 April and 29 October.
- 35.128 (827) *Caryocolum alsinella* (Zeller), **Nb.** Local. Jul-Aug.  
Recorded on the Estate in 1949, 1977, 1983 (English Nature, 1991), 1994 and 1995 between 15 May – 12 August mostly as larvae or bred from larvae. A single record was recorded on 03 July 2015 (gen det) (MH)
- 35.131 (829) *Caryocolum marmorea* (Haworth), Common. May-Aug.  
Found in 1948 (LTF), 1954 and 05 August 1981.

- 35.132 (830) *Caryocolum fraternella* (Douglas), Common. Jun-Aug.  
Two at light end of August and early September 1993 (ACJ & IF gen det EB)
- 35.136 (835) *Caryocolum blandulella* (Tutt), **pRDB1**. Very rare. Jul-Aug.  
A species restricted to sand dunes in Kent and Carmarthen where it feeds on Little Mouse-ear, taken on 20 August 1978, in 1982 bred from larvae (DA), 1983 bred from larvae (NH)
- 35.141 (765) *Teleiodes vulgella* (Denis & Schiffermüller), Common. May-Aug.  
Found in the Whitehouse in 2009 and one-two at light at HQ and in the Elms in 2010 to 2012, 2014 to 2017 between 14 June and 10 August.
- 35.146 (776) *Teleiopsis diffinis* (Haworth), Common. May- Oct.  
Recorded on the Estate in 1955, 1974, 1993, 1995, 2010 to 2013, 2015 to 2017 between 21 May and 26 September.
- 35.148 (772) *Carpatolechia fugitivella* (Zeller), Common. Jun-Jul.  
Recorded on the Estate on 30 July 1983 (JMC-H).
- 35.150 (768) *Carpatolechia notatella* (Hübner), Common. May-Jun.  
Recorded on the Estate in 1929 as bred (RFra) and in 2005 (TD).
- 35.157 (758) *Recurvaria leucateella* (Clerck), Local. Jun-Aug.  
One trapped at Obsevatory on 3 July 2009.
- 35.159 (760) *Exoteleia dodecella* (Linnaeus). Common. Jun-Jul.  
Recorded in the Elms on 25 June 2005 (TD) and at least 20 in the Elms on 14 June 2014 (FS).

#### BATRACHEDRIDAE

- 36.001 (878) *Batrachedra praeangusta* (Haworth), Common. Jun-Aug.  
One at HQ light on 19 July 2010, two in the Whitehouse on 09 August 2013 (FS), one in the Haven on 10 July 2014 (DG), one in the Whitehouse on 07 August 2015 and on 15 July 2016 (FS) and at HQ light on 22 July 2016 (IDH)
- 36.002 (879) *Batrachedra pinicolella* (Zeller). Common. Jun-Aug.  
One in the Elms on 14 June 2014 (FS).

#### COLEOPHORIDAE

- 37.002 (487) *Coleophora lutarea* (Duponcheel), Common. May.  
Two recorded in the Whitehouse on 15 July 2016 (FS)
- 37.015 (493) *Coleophora serratella* (Duponcheel), Common. Jun-Jul.  
Recorded on the Estate on 04 June 1993. Larval cases seen on Birch and Alder in the Oasis and Haven on 15 May 2009 and April 2011 (FS). One emerged on 21 June 2010 from case collected on Alders in Haven in spring. A larval case identified on 20 September 2012 (TD). Larval cases identified on 22 April 2017 in the Gullies (30), Whitehouse (30) and Elms (15) (DS)
- 37.022 (504) *Coleophora lusciniaepennella* (Treitschke), Common. Jun-Jul.  
Recorded on the Estate on 10 June 1969. Larval cases found on *Salix* in the Whitehouse on 07 June 2009 and in the Haven on 26 April 2010 (FS). Larval cases identified on 22 April 2017 in Middle Field (three) and Whitehouse (one) (DS)
- 37.030 (512) *Coleophora binderella* (Kollar), Common. Jun-Jul  
Larval cases found by FS on Grey Alder on New Downs May 2009 (adults emerged on 16 June 2009) and 2010 and on 22 April 2017 in the Whitehouse (DS)
- 37.032 (515) *Coleophora albitarsella* (Zeller), Common. Jun-Aug.  
One at HQ light on 20 July 2010 (FS, PDH, JGCB).
- 37.033 (516) *Coleophora trifolii* (Curtis), Common. Jun-Jul.  
Recorded on the Estate in 1967, 1969, 1981, 1993, 2003 and 2013 between 15 June and 11 July. Recorded at HQ light on 27 June 2016 (IDH)
- 37.035 (517)** *Coleophora alcyonipennella* (Kollar) Widely distributed May-Jun, Jul-Sep  
A male at HQ light on 12 May 2017 (IDH) (gen det TD)
- 37.038 (522) *Coleophora lineolea* (Haw.), Unknown. Jul-Aug.  
Recorded on the Estate on 05 August 1981 and 30 June 1993. In November and December 2015 larval cases

were recorded from various sites across the Bay (DS). In 2016 an adult was recorded at HQ light 28 August (M gen det TD) and six cases recorded on Black Horehound in the Middle Field 01 May (FS). 120 larval cases found in Middle Field on 22 April 2017 (DS)

- 37.039 (523) *Coleophora hemerobiella* (Scopoli) Jul-Aug.  
One in the Whitehouse on 07 August 2015 (FS).
- 37.044 (547) *Coleophora discordella* (Zeller), Common. Jun-Aug.  
Found by FS in Whitehouse 25 June 2009 and one at HQ light on 15 July 2017.
- 37.046 (519) *Coleophora deauratella* (Lienig and Zeller), Common. Jun-Jul.  
A single field observation on 21 June 2016 (FS).
- 37.048 (518) *Coleophora mayrella* (Hübner), Common. Jun-Jul.  
Recorded on the Estate on 05 August 1981 and in the Whitehouse on 25 June 2009 (FS), with up to three at HQ light between 17 June – 10 July 2010, one at HQ light on 30 April 2011 and one at HQ light on 15 July 2017.
- 37.049 (533) *Coleophora anatipennella* (Hübner), Common. Jun-Jul.  
Case recorded on the Estate on 28 May 1981 (NH).
- 37.050 (532) *Coleophora albidella* (Denis & Schiffermüller), Common. Jun-Jul.  
Case recorded on the Estate on 03 August 1957 (JMC-H).
- 37.063 (544) *Coleophora albicosta* (Haworth), Common. Jun-Jul.  
Singles at HQ light on 07 and 08 June 2010 and at Mary Bax on 23 April 2011. A single recorded at HQ light on 10 May 2016 (IDH)
- 37.065 (549) *Coleophora pennella* (Denis & Schiffermüller), Local. Jun-Jul.  
Recorded on the Estate on 05 July 1977, in June 1989 and 07 June 2003. Adults found among Viper's Bugloss on seafront on 23 June 2005 (TD), 21 June 2008, 20 June 2009, 21 June 2010 and 29 May 2014. Two cases recorded on 17 July 2013 (TD). Two adults recorded in the field 21 June 2016 (FS).
- 37.084 (566) *Coleophora sternipennella* (Zett.), Unknown. Jul-Aug. G4/C4  
Recorded on 09 and 25 June, 21 July and in August/ September 1993 (IF gen det EB) with another on 20 July 1994 (ACJ gen det EB).
- 37.087 (572) *Coleophora vestianella* (L.), Nb. Jun-Jul. G4/C4  
Recorded on 07 July 1993 (ACJ & IF gen det EB).
- 37.093 (559) *Coleophora peribenanderi* (Toll) Widely distributed Jun-Jul  
One adult male attracted to MV light on 25 June 2004 (TD gen det)
- 37.095 (556) *Coleophora trochilella* (Duponchel) Widely distributed Jun-Jul  
One adult female netted on the Estate on 17 July 2013 (TD gen det)
- 37.102 (563) *Coleophora argentula* (Stephens), Common. Jul-Aug.  
Recorded on the Estate in 1955, on 30 July 1965 and 05 August 1981. Very easily confused as an adult, given several similar species, but larval cases seen in the area including Middle Field on 10 April 2014 (FS), Whitehouse in November 2015 (DS) and on 20 October 2017 (DS).
- 37.103 (555) *Coleophora follicularis* (Vallot), Common. Jun-Aug.  
Larval cases found by FS on Fleabane on Prince's May 2009 and the Whitehouse on 12 April 2014.
- 37.108 (588) *Coleophora salicorniae* (Heinemann & Wocke), Local. Jul-Aug  
Singles at HQ light on 19 and 26 July 2010 (FS *et al*) and 25 July and 14 August 2015.

## ELACHISTIDAE

- 38.004 (610) *Elachista argentella* (Clerck), Common. Apr-Aug.  
Recorded in small numbers on the Estate or to HQ light in 1971, 1983, 1989, 1993, 2003, 2005, 2009 to 2011, 2013 to 2017 between 20 April and 09 August.
- 38.025 (597) *Elachista atricomella* (Stainton), Common. May-Sep.  
Recorded on 09 June 1993, 24 June 2005 (TD gen det), 25 June 2009, 10 July 2010, at Mary Bax on 23 April 2011 and in the Whitehouse on 09 August 2013, 19 June 2015 (FS) and in 2016 on 18 June and three on 15 July (FS). Recorded at light in the Whitehouse on 07 (SZW) and 14 (FS), HQ on 15 (IDH) and Big Gully on 19 July 2017
- 38.030 (601) *Elachista albifrontella* (Hübner), Common. mid May-Jul.

Identified by FS on 25 April 2010, one at HQ light on 19 July 2014 and to light in the Whitehouse on 20, 24 and 26 May 2017 (SZW).

38.038 (608) *Elachista rufocinerea* (Haworth), Common. Apr-Jun.  
Singles recorded on 26 May 1993, in the Elms on 16 May 2005 and in the Whitehouse on 26 April 2009 (FS). At least 100 recorded in Middle Field at dusk on 23 April 2010 and 15 in the Whitehouse area on 23 April 2011. In 2016 a single was recorded in the field on 01 May (FS). Field records in the Whitehouse on 17 and 21 April 2017 (SZW)

38.039 (609) *Elachista maculicerusella* (Bruand), Local. May-Aug.  
Recorded in small numbers on the Estate in 1960, 1965, 1982, 1985, 1992, 1993, 1995, 2009, 2010, 2012, 2014 and 2015 between 26 May and 10 August. Singles recorded at HQ light on 10 June and 18 July 2016 (IDH)

#### PARAMETRIOTIDAE

39.001 (905) *Blastodacna hellerella* (Duponchel), Common. May-Aug.  
Small numbers at HQ light or in the Elms in 2010, 2011, 2014 to 2017 between 09 June and 31 July.

39.003 (904) *Spuleria flavicaput* (Haworth), Local. May-Jun.  
Recorded on the Estate on 01 June 1994 (EB) and on 30 May 2012 (FS).

#### MOMPHIDAE

40.002 (886) *Mompha ochraceella* (Curtis), Common. late May-Jul.  
Recorded in small numbers in 1993, 2009 (FS), 2010, 2011, 2014 to 2017 between 13 June and 19 July.

40.008 (892) *Mompha subbistrigella* (Haworth), Common. Year round.  
Small numbers at HQ light in 2010, 2011, 2012, 2013 and 2014 between 19 April and 25 June and on 27 and 28 September. Singles recorded at HQ light on 04 and 16 July and 14 September 2016 (IDH) (F gen det TD) and 09 May in Middle Field (M gen det TD) and at HQ light on 17 May and 12 August 2017

40.010 (893) *Mompha epilobiella* (Denis & Schiffermüller), Common. Year round.  
First recorded in 1981 and subsequently in small numbers in 2006, 2007 and from 2009 to 2015 between 16 May and 07 August (up to 25 in July 2015). In 2016 50 individuals were recorded at HQ light between 08 May and 15 September (IDH). In 2017 45 individuals were recorded mainly to light at HQ and around the Estate between 30 March and 29 August including a F (gen det TD) on 30 March and M (gen det TD) on 13 May with maxima of five on 16 May at HQ light and eight on 04 August in the Whitehouse.

#### BLASTOBASIDAE

41.002 (873) *Blastobasis adustella* (Walsingham), Naturalised Adventive. Common. Jun-Oct.  
Recorded in 1981, 1983, 1993, 2002, 2005 (the Elms) and in small numbers (up to 10) annually from 2010 to 2015 between 03 June and 25 October. Exceptionally up to 70 in July 2014. In 2016 32 individuals were recorded at HQ light over 20 dates from 20 June to 05 September with a maximum of seven on 05 August (IDH). 38 individuals were recorded mainly at HQ light over 21 dates from 06 July to 21 August 2017 with maxima of four in the Big Gully on 19 July and five at HQ light on 01 August.

41.003 (874) *Blastobasis lacticolella* (Rebel), Common. May-Dec.  
First recorded in Kent in 1946, originally from Madeira. Recorded on the seafront on 23 July 1985, with small numbers in 1993 (including three in the White House on 20 June) annually from 2009 to 2015 between 17 May and 30 October. In 2016 individuals were recorded on 24 dates with a maximum of 14 on 06 August (IDH). 54 individuals were recorded at light at HQ and across the Estate over 33 dates between 21 May and 15 November with a maximum of five on 21 June 2017

#### STATHMOPODIDAE

42.002 (877) *Stathmopoda pedella* (Linnaeus), **Nb.** Local. Jun-mid Aug.  
First recorded in 2010 when singles were found in the Whitehouse on 19 June, on Alder in Middle Field on 23 June, in the Haven on 08 July, at HQ light on 19 and 20 July and at light on Worth marshes on 27 July. One in the Haven on 28 June 2015 (FS) and one to HQ light on 15 July 2017.

#### ALUCITIDAE

44.001 (1288) **Twenty-plume Moth** *Alucita hexadactyla* (Linnaeus), Common. Year round.  
Small numbers at light from 2009 to 2017 between 30 March and 02 October.

#### PTEROPHORIDAE

- 45.001 (1488) **Saltmarsh Plume** *Agdistis bennetii* (Curtis), Local. May-Jun, Jul-Sep.  
A local salt marsh species, recorded in small numbers at HQ and in the Whitehouse annually from 2009 to 2017 between 28 May and 20 August.
- 45.004 (1501) **Triangle Plume** *Platyptilia gonodactyla* (Denis & Schiffermüller) Common. May-Jun, late Jul-early Oct  
Found by FS in the Whitehouse on 25 June 2009, at HQ light on 05 August 2015 and two observed in Middle Field on 22 April 2017 (DS).
- 45.008 (1504) **Yarrow Plume** *Gillmeria pallidactyla* (Haworth), Common. Jun-Aug.  
Small numbers on the Estate from 1921 - 2017 (one-two on eight-10 dates in 2013 and 2014 and a maximum of 25 observed in the Whitehouse on 12 June 2017) between 31 May - 08 August. Four individuals recorded at HQ light on 15 July 2016 (FS) and 13 individuals recorded over eight dates between 01 June and 15 July with a maximum of five on 15 July 2017.
- 45.010 (1497) **Beautiful Plume** *Amblyptilia acanthodactyla* (Hübner), Common. Year round  
Recorded on the Estate in 1921 with only five further records to 2000. Has become slightly more numerous recently with a further 18 records to 2010 between 14 May and 29 August, then small numbers annually from 2011 to 2015. Recorded between 14 May and 01 September. In 2016 individuals recorded at HQ light on 4 dates from 22 June to 01 September (IDH). Singles recorded at HQ light on three dates between 07 and 29 August 2017 and on 15 November 2017.
- 45.011 (1498) **Brindled Plume** *Amblyptilia punctidactyla* (Haworth) Widely distributed. Year round  
One observed in the Elms on 15 July 2017 (FS)
- 45.012 (1509) **Brown Plume** *Stenoptilia pterodactyla* (Linnaeus), Common. Jun-Aug.  
Recorded in small numbers at HQ windows on 30 June 1980, 13 - 18 July 1985, and 20 June 1989. More frequent since, with up to 20 on the Estate in June 2009, at least 100 on 04 July 2010 and 25 in the Whitehouse on 09 August 2013, for example. In 2016 a single was recorded in the field on 18 June also recorded at light on 8 dates between 15 July and 05 September mainly at HQ but a maximum of 10 on both 15 July and 05 August were recorded at light in the Whitehouse (FS). Similar pattern in 2017.
- 45.013 (1508) **Twin-spot Plume** *Stenoptilia bipunctidactyla* (Scopoli), Common. May-Oct.  
Recorded at MV light on 10 dates between 01 July and 01 August 1982, on 30 July 1983 and at Sandown Road on 20 June 2003 (IDH).
- 45.022 (1496) **Rose Plume** *Cnaemidophorus rhododactyla* (Denis & Schiffermüller), **Na** Local. Jul-Aug.  
One at HQ light on 09 July 2010 (PDH/JGCB/JJS/FS).
- 45.023 (1495) **Crescent Plume** *Marasmarcha lunaedactyla* (Haworth), Common. Jun-Aug.  
Recorded on the Estate in 1936 with 32 further records of small numbers to 2015 between 14 June and 09 August. Recorded at light in the Whitehouse on 15 July and at HQ on 19 July 2016. Recorded at HQ light on 21 June (two) and 15 July 2017.
- 45.025 (1490) **Small Plume** *Oxyptilus parvidactylus* (Haworth), Local. May-Aug.  
One on Royal St. George's golf course on 21 May 2009 (FS).
- 45.026 (1491) **Breckland Plume** *Crombrugghia distans* (Zeller) **Nb**. Very local. May-Aug.  
Recorded on the Estate from 1920 - 2009 and 2012 - 2016 between 21 May and 02 September.
- 45.030 (1513) **White Plume** *Pterophorus pentadactyla* (Linnaeus), Common. Jun-Sep.  
A common plume moth often seen about the area. Attracted to light most years between 22 May and 24 August up to 2017. Observed in Middle Field and Haven in late May and mainly singles recorded at HQ light on five dates between 26 May and 08 August with two on 15 July 2017.
- 45.037 (1523) **Dusky Plume** *Oidaematophorus lithodactyla* (Treitschke), Local. Jun-Aug.  
Recorded at light on the Estate on 30 July 1984, on 24 July 2014 (JGCB), and in the Whitehouse on 02 August 2014 (FS), 03 August 2015 and five on 15 July 2016 (FS).
- 45.039 (1519) **Citron Plume** *Hellinsia carphodactyla* (Hübner) local May-Jul, Aug-Sep  
A single attracted to light in the Elms on 14 August 2017 (SZW)
- 45.040 (1518) **Mugwort Plume** *Ovendenia lienigianus* (Zeller), Very local. Jun-Sep.  
Larva found by FS on Mugwort on 21 May 2009 and at HQ light on 09 July 2012.
- 45.043 (1517) **Hemp Agrimony Plume** *Adaina microdactyla* (Hübner), Common. May-Sep.  
Recorded at HQ on 26 June 2004 (TD gen det), 20 July and 8 August 2009, on four dates between 26 June - 22 July 2010, on three dates between 28 June and 24 July 2013, on 02 August 2015, on 19, 21 and 27 (two) July 2016 (IDH) and on 14 and 15 July 2017

- 45.044 (1524) **Common Plume** *Emmelina monodactyla* (Linnaeus), Common. Year round.  
11 records on the Estate from 1960 - 2006 between 04 April - 20 September. Recorded in small numbers since 2009 (up to five annually). In 2016 individuals were recorded on 17 dates between 08 June and 28 October with a maximum of 20 on 27 August (IDH). One individual was identified as a Female through gen det on 25 August (TD). Recorded to light around the Estate and at HQ between 05 February and 14 November with a maximum of five on 04 August 2017.

#### EPERMENIIDAE

- 47.005 (483) *Epermenia chaerophyllella* (Goeze), Common. Jul-Sep, Oct-Apr  
One trapped at Observatory on 8 August 2009, singles at Mary Bax on 23 April and at HQ light on 18 May 2011 and one in Middle Field on 10 April 2014. A mine was recorded at Prince's plantation on 27 July 2016 (DS). Two adults were recorded in the Elms on 01 April 2017 (SZW)

#### CHOREUTIDAE

- 48.001 (385) **Nettle-tap** *Anthophila fabriciana* (Linnaeus), Common. Apr-Jul, Aug-Nov.  
First recorded in 1978 and almost annual since 1988 in the Elms, Middle Field and the Whitehouse between 12 April and 22 July and 15 August and 22 October. In 2017 four adults were observed in Middle Field on 05 April, 25 larvae recorded in the Whitehouse and five larval cases in the Gullies on 22 April (DS), 30 adults observed on the Green Wall on 14 May (SZW), two to light in the Whitehouse on 08 June and a single to HQ light on 15 July.
- 48.005 (386) *Tebenna micalis* (Mann) Jun-Aug  
A scarce migrant to southern counties, one was found on Fleabane in the Whitehouse on 20 September 2015 (Photo FS).
- 48.007 (389) **Apple Leaf Skeletonizer** *Choreutis pariana* (Clerck). Local. Jun-Mar.  
One at HQ light on 02 October 2013 and one on 06 September 2016

#### TORTRICIDAE

- 49.004 (1010) **Red-barred Tortrix** *Ditula angustiorana* (Haworth), Common. May-Aug.  
Recorded on the Estate in 1977, 2002 (two) and 2005 (Elms). Small numbers at HQ light and the Whitehouse in 2009, 2010 (up to nine), 2013-2017 (a single on 15 July) between 05 June and 09 August.
- 49.005 (1006) *Epagoge grotiana* (Fabricius), Common. Jun-Aug.  
Singles at HQ light on 13 June 2009, 13 July 2010, 05 July 2012 and 16 July 2013.
- 49.013 (977) **Large Fruit-tree Tortrix** *Archips podana* (Scopoli), Common. May-Sep.  
Small numbers at HQ MV light in 1983, 1988, 1993, 1994, 2000, 2001, 2002, 2003 (Willows), 2005 (Elms), and annually from 2008 to 2017 between 24 May - 28 September.
- 49.015 (980) **Variiegated Golden Tortrix** *Pandemis xylosteana* (Linnaeus), Common. May-Aug.  
Singles at HQ light on 25 July 2008, 02 July 2009 (PDH), 09 August 2013 (JGCB) and 11 July 2015.
- 49.018 (983) *Choristoneura hebenstreitella* (Mull.), Unknown. Jun-Jul.  
Recorded at HQ light on 09 June 1993 (IF, ACJ confirmed EB), several attracted to light on the beach on 23 June (TD) and in the Elms on 24 June 2005.
- 49.023 (971) *Pandemis cinnamomeana* (Treitschke). Common. Jul-Sep.  
One trapped on 25 June, two on 25 July 2009 (P&PH) and a single recorded at light in the Whitehouse on 04 August 2017 (FS)
- 49.024 (969) **Chequered Fruit-tree Tortrix** *Pandemis corylana* (Fabricius), Common. Jul-Sep.  
Small numbers at HQ light in 2008, 2009, 2010 and annually from 2012 to 2016 between 12 June and 25 September. None were recorded in 2017.
- 49.025 (970) **Barred Fruit-tree Tortrix** *Pandemis cerasana* (Hübner), Common. Jun-Aug.  
Recorded at light in 1993, 1994 (HQ), 2005 (Elms), 2006 (Willows) and annually in small numbers from 2008 to 2017 (IDH) between 06 June - 21 September.
- 49.026 (972) **Dark Fruit-tree Tortrix** *Pandemis heparana* (Denis & Schiffermüller), Common. May-Sep.  
Recorded on the Estate in 1927, 1955, 1977, 1983, 1988, 1993 - 1995, 2004, 2006 and annually in small to moderate numbers from 2009 to 2015, including up to 17 in 2013 and up to 25 in 2014, and in 2016 36 individuals over 16 dates with maxima of eight on 15 July and 10 on 05 August in the Whitehouse (FS) between

09 June and 22 September. In 2017 28 individuals were attracted to light on 19 dates between 04 June and 20 September with maxima of four on 15 July at HQ light and five in the Whitehouse on 04 August.

- 49.028 (986) *Syndemis musculana* (Hübner). Common. Apr-Jul.  
One trapped at HQ light on 22 May 2009 and up to four on three dates between 15 and 20 May 2010.
- 49.029 (1002) *Lozotaeniodes forsterana* (Fabricius), Common. Jun-Jul.  
Recorded on 23 June 2002, 11 July 2013 and at HQ light on 12 June and 15 July 2017 (IDH)
- 49.030 (985) **Carnation Tortrix** *Cacoecimorpha pronubana* (Hübner), Common. Year round.  
Singles recorded on the Estate in 1982 and at HQ light in 2005, 01 August 2009, 13 September 2010, 02 October 2013 and 11 August 2015.
- 49.031 (989) **Timothy Tortrix** *Aphelia paleana* (Hübner), Common. May-Aug.  
Recorded on the Estate in 1954 with subsequent records at HQ in 1989, 1993 (four), 2002 (golf course) and on the Estate in 2005 (TD), 2006 and annually from 2009 to 2017 between 17 May and 28 August.
- 49.033 (988) **Bilberry Tortrix** *Aphelia viburnana* (Denis & Schiffermüller), Common. Jul-Sep.  
One on Hundred Acre Field on 23 July 2010 (FS et al).
- 49.037 (993) **Cyclamen Tortrix** *Clepsis spectrana* (Treitschke), Common. May-Sep.  
Recorded on the Estate in small numbers in 1950, 1984, 1987, 1988, 1993 (up to eight), 2001, 2002, 2005 and annually from 2009 to 2017, including up to 17 in 2014, between 29 April and 27 September.
- 49.038 (994) *Clepsis consimilana* (Hübner), Common. Late May-Aug, Sep-Oct.  
Recorded on the Estate in 1961, 1981, 1989, 1993 (five), in the dunes near the sea in 1995, at HQ light in 2004, in The Elms in 2005 (TD), at HQ light in 2010 (up to five), 2011, 2013 (up to eight), 2014, 2016 and 2017 between 07 June – 18 October.
- 49.039 (998) **Light Brown Apple Moth** *Epiphyas postvittana* (Walker), Common. Year round.  
First found in Kent in 1986 (naturalised from Australia) and now common and widespread. Recorded on the golf course in 2002 and at HQ in 2004. Since then there have been many records between 08 March and 11 January up to 2017, with peak counts of 73 on 31 August 2009, 55 on 22 September 2013 and 33 on 06 September 2016.
- 49.040 (1001) *Lozotaeniodes formosanus* (Frölich), Common. May-Aug.  
Recorded on the Estate in 1951, 1954, 1967, 1981, 1993, 1994 (three) 1995, 2002, 2003 and 2005. Small numbers annually from 2009 to 2017 between 15 June and 18 August, with one on 19 April 2011. Exceptionally, 13 at light on the Estate on 04 July 2015.
- 49.041 (999) **Summer Fruit Tortrix** *Adoxophyes orana* (Fischer von Röslerstamm), **Nb.** Very local. Jun, Aug-Oct.  
One at HQ light on 23 August 2012, up to three between 25 August and 21 September 2013, one on 23 & 24 July 2014, one on 19 August 2016 (IDH) and one on 14 June 2017.
- 49.042 (1027) *Neosphaleroptera nubilana* (Hübner). Local. end Jun-Aug.  
First record from Ramsgate Hoverport in numbers to pheromone lure on 24 June 2005 (TD). One in the Whitehouse on 09 August 2013 (FS) and one field record on 11 June 2016 (FS).
- 49.044 (1025) *Torticodes alternella* (Denis & Schiffermüller), Common. Feb-Apr.  
Nine at HQ light on 11 February 2011 (JGCB)
- 49.049 (1024) **Light Grey Tortrix** *Cnephasia incertana* (Treitschke), Common. May-Aug.  
Recorded on the Estate on 08 and 09 July 1977 (BM (NH)). 10 attracted to the MV light between 26 May and 04 July 1993 (ACJ gen det EB). A larva recorded in the Whitehouse on 22 April 2017 (DS).
- 49.051 (1021) **Flax Tortrix** *Cnephasia asseclana* (Denis & Schiffermüller), Common. May-Aug.  
Singles on the Estate on 08 - 09 July 1977 (BM (NH) gen det.
- 49.052 (1022) *Cnephasia pasiuana* (Hübner), Local. Jun-Jul.  
Eight recorded between 03 and 24 July 1993 (ACJ gen det EB)
- 49.057 (1016) *Cnephasia longana* (Haworth), Common. Jun-Aug.  
Recorded on the Estate in 1960, 1965, 1971, 1977, 1979, 1981, 1983, 1985, 1989, 1993, 2001, 2002 and annually in small to moderate numbers from 2009 to 2016, including 15 on 20 July 2010 and up to 23 in July 2014 between 01 June and 01 September. Two recorded at light in the Whitehouse on 15 July 2016 (FS)
- 49.059 (1033) **Green Oak Tortrix** *Tortrix viridana* (Linnaeus), Common. May-Jul.  
One of the best known tortricids, quite common in the area and regularly attracted to light from 30 May – 21 July, including 3 on the beach on 23 June 2005 (TD), 72 on 13 June 2009, up to 23 in June 2010 and up to

20 in June 2011, but only one in 2013. In 2017 nine were recorded on 17 June at HQ light.

- 49.060 (1032) *Aleimma loeflingiana* (Linnaeus), Common. Jun-Aug.  
Small numbers at HQ light in 2008 to 2011, 2014 and 2015 between 13 June and 25 July. In 2017 singles were recorded at HQ light on 14 and 22 June and 15 July.
- 49.061 (1037) *Acleris holmiana* (Linnaeus), Common. July -Sep.  
Two at HQ light on 4 July 2009 and one on 06 August 2013.
- 49.062 (1036) *Acleris forsskaleana* (Linnaeus), Common. Jun-Sep.  
Recorded in 1993, 2002 and 2006, then small numbers annually from 2008 to 2016 between 11 July and 23 August. In 2017 singles were recorded at HQ light on 17 and 22 June and 10 and 19 July.
- 49.063 (1035) *Acleris bergmanniana* (Linnaeus). Local. Jun-Aug.  
One-two at HQ light on three dates between 07 and 14 July 2013.
- 49.065 (1039) **Strawberry Tortrix** *Acleris comariana* (Lienig & Zeller), Common. Jun-Jul and Oct-Nov.  
Small numbers on the Estate in 1950 (larvae) (HCH). Recorded at HQ MV light on 23 and 25 June 1993 (ACJ gen det EB)
- 49.069 (1041) *Acleris sparsana* (Denis & Schiffermüller), Common. Aug-Jan.  
One at HQ light on 07 October 2013 and again on 07 October 2016 (IDH)
- 49.070 (1042) **Rhomboid Tortrix** *Acleris rhombana* (Denis & Schiffermüller), Common. Jun-Nov.  
Recorded in small numbers in 1984, 2009, 2011, 2013, 2014 and 2016 between 14 August and 14 October. In 2017 singles were recorded on five dates between 26 July and 18 October.
- 49.073 (1047) *Acleris schalleriana* (Linnaeus). Local. Jun-Aug, Sep-May.  
One at light on 03 July 2014. The larva has been found on Wayfaring Tree in Middle Field (FS). One adult to the HQ light on 21 Oct 2016 (IDH) and on 09 March 2017
- 49.076 (1054) *Acleris cristana* (Denis & Schiffermüller), Local. Aug-Apr.  
Recorded at HQ light on 26 August 2007 and 23 and 29 March and 16-17 July 2010. Seven records of up to three in 2011, singles on 03 May and 02 October 2013 and 03 July 2015.
- 49.077 (1048) **Garden Rose Tortrix** *Acleris variegana* (Denis & Schiffermüller), Common. Jun-Nov.  
Recorded on the Estate in small numbers in 1974, 1982, 1983, 1993, 1994, 1995 and annually from 2004 to 2016, including 20 on 22 September 2013 between 08 June and 28 October. In 2017 30 individuals were recorded over 25 dates between 09 July and 31 October.
- 49.080 (1053) *Acleris hastiana* (Linnaeus), Common. Jun-Aug, Sep-Apr.  
Many records on the Estate from 1921-1985 between 06 May and 02 April. More recently, small numbers annually from 2009 to 2016 between 11 March and 02 November. One recorded at HQ light 07 October 2016 (F gen det TD). In 2017 mainly singles were recorded on 10 dates between 17 October and 19 March plus a couple of individuals in July.
- 49.085 (1050) *Acleris kochiella* (Goeze) Southerly distribution. Jun-Aug, Sep-Apr  
A larval spinning recorded on 20 September 2012 (TD). One adult at HQ light on 11 July 2015 (DG).
- 49.090 (1015) *Eulia ministrana* (Linnaeus), Common. Apr-Jul.  
A woodland species, recorded at HQ light on 05 June 2010. (JGCB)
- 49.091 (1011) *Pseudargyrotoza conwagana* (Fabricius), Common. May-Aug.  
Recorded at HQ light on 03 July 1988 and in small numbers in 2009-2011, and 2014-2016 between 19 May and 21 July. In 2017 mainly singles were recorded on eight dates between 17 May and 15 July.
- 49.092 (921) *Phtheochroa inopiana* (Haworth), Local. May-Aug.  
Recorded on the Estate in 1950, on 30 July and August/September 1993, on 13 June 2009 and in small numbers from 2010-2017 between 12 June and 15 August.
- 49.095 (925) *Phtheochroa rugosana* (Hübner), Local. Apr-Aug.  
Small numbers at HQ light in 2011 and 2014-2017 between 12 June and 15 July.
- 49.097 (936) *Cochylimorpha straminea* (Haworth), Common. May-Jun, Aug-Sep.  
Singles at HQ light on 14 August 1988 and 25 June 2009, then small to moderate numbers in 2010, 2011, 2013, 2014 (up to 15), 2015 (up to 20), 2016 and 2017(20 on 15 July at HQ light and 60 on 04 August in the Whitehouse) between 30 May and 06 September.



- 49.098 (935) *Cochylimorpha alternana* (Steph.), **Nb.** Local to Kent Jul-Aug.G3  
Recorded on the Estate and golf links on 30 August 1974 and 18 June 1977. Attracted to light on the beach on 23 June 2005 (TD).
- 49.103 (932) *Phalonia affinitana* (Douglas), Local. Jun-Aug.  
Three on Sampher saltmarsh on 28 June 2010 (FS *et al*) and five-six at HQ light on 25/26 July 2013.
- 49.108 (930) *Gynnidomorpha alismana* (Ragonot), **Nb.** Local. May-Aug.  
Recorded on the Estate in 1950 bred from larva (HCH).
- 49.109 (937) *Agapeta hamana* (Linnaeus), Common. May-Sep.  
Common at MV light and recorded in 1975, 1994, 1995 and annually from 2000-2017 between 08 May - 01 October, including up to 81 in July 2010 and up to 42 in July 2013.
- 49.110 (938) *Agapeta zoegana* (Linnaeus), Common. May-Aug.  
Singles at HQ MV light on 14 August 1988, 26 July 1994, 11 August 1995, 18 July 2009, 23 August 2012, 12 August 2014, 21 July 2015, 15, 28 and 30 July 2016 and 04 August (Whitehouse) and 14 and 19 July and 01 and 04 August at HQ light 2017.
- 49.111 (954) *Eupoecilia angustana* (Hübner), Common. Jun-Sep.  
Recorded at HQ light in 1982, 1983, 1989, 1993 (2), at the Elms in 2005 and in small numbers at HQ annually from 2009 to 2016 between 31 May – 02 September. In 2017 25 individuals were recorded at HQ light and in the Whitehouse over nine dates between 16 May and 25 August with a maximum of 12 on 04 August.
- 49.112 (955) **Vine Moth** *Eupoecilia ambiguella* (Hübner), **Nb.** Very local. May-Sep.  
Two trapped at HQ on 10 August 2009 (JGCB), with one-two on 10 and 12 August 2012 (JGCB) and one on 23 August 2013 (JGCB).
- 49.116 (944) *Aethes williana* (Brahm), Very local. May-Aug.  
Found by FS on the Estate on 15 May 2009.
- 49.118 (948) *Aethes margaritana* (Haworth), Rare. Jul-Aug.  
Restricted to chalk downs and shingle beaches. Recorded on the Estate in 1922, 1948, 1964 and 1969, 1981 (English Nature, 1991), 1989 and 1993, 2001, 2005 (beach (TD)) 2006 (golf course), 2010, 2012-2014 and at HQ light in 2016 (IDH) between 22 June – 09 August. Singles on 10 July 2017 at HQ light and 14 July in the Whitehouse.
- 49.120 (947) *Aethes smeathmanniana* (Fabricius), Widespread but Local. May-early Jul, late Jul-Oct  
Recorded on the Estate in 1955, 1982, 1983, 1987 (4), 1993 (12) and in small numbers in 2009-2011, 2013-2015 and in 2016 at HQ light on 23 dates involving 47 individuals with maxima of 14 on 05 August and five on 06 September (IDH) between 10 May – 06 September and similar numbers in 2017.
- 49.121 (939) *Aethes tesserana* (Denis & Schiffermüller), Common. May-Aug.  
First recorded on the Estate in July 1960, then four between 17 May - 24 June 1993 and a single at HQ light on 24 June 2000.
- 49.123 (951) *Aethes beatricella* (Walsingham), **Nb.** Local. Jun-Jul.  
Recorded on the Estate in June 1989, several attracted to light in The Elms on 24 June 2005 (TD), on 13 and 14 June 2009 (P&PH) and in small numbers in 2010, 2013 to 2015 and 2017 between 29 May and 16 July.
- 49.124 (950) *Aethes francillana* (Fabricius), Local. Jun-Sep.  
Recorded on the Estate on 5 August 1981 and at HQ light on 25 July 2008, then small numbers in 2009, 2010 (up to nine), 2011, 2012, 2013 and 2014 (up to 11). In 2016 recorded at HQ light on 22 June (8) and 23 June (2) (IDH) Recorded between 01 June and 31 August. None were recorded in 2017.
- 49.127 (945) *Aethes cricana* (Westwood), Common. Jun-Jul.  
Recorded on the Estate in 1950, at HQ light on 01 August 2011 and in small numbers in 2012-2017 (IDH) between 22 May and 05 August.
- 49.128 (946) *Aethes rubigana* (Treitschke), Common. Jun-Aug.  
Recorded at HQ light on 19 July 1988 with two on 17 July 1993 (IDH confirmed CP) and singles on 30 August 2013, 02 August 2014 and on 22 July and 08 and 12 (2) August 2016 (IDH).
- 49.132 (956) *Cochylidia implicitana* (Wocke), Local. May-Aug.  
One-two at HQ light on 24 May (PDH) and 31 July (PDH/JGCB) 2010, 24 July 2011 (JGCB), 12 August 2012 and 01 August 2014.
- 49.134 (962) *Cochylis roseana* (Haworth), Common. May-Aug  
Singles at light at HQ on 20 July 2011 (FS), in the Whitehouse on 15 July 2016 (FS) and at HQ light on 26 Jul 2017 (F gen det TD)

- 49.136 (965) *Cochylis hybridella* (Hübner), Local. Jul-Aug.  
Recorded on the Estate in June 1989, at HQ in 1993, 1994 and 2007, then small numbers annually from 2008 to 2017 between 05 May and 17 September. In 2017 23 individuals were recorded over 17 dates between 29 May and 21 August with a maximum of six on 20 August.
- 49.137 (964) *Cochylis dubitana* (Hübner), Local. May-Aug.  
Recorded on 02 and 09 June 1993, 13 August 1994 in The Elms on 24 June 2005 (TD) and in the Whitehouse on 25 June 2009. Also at HQ light in 2009, 2010, 2013, 2015 and 2016 (IDH) between 18 May and 27 August.
- 49.138 (964a) *Cochylis molliculana* (Zeller), Local. May-Jun, Jul-Sep.  
Small numbers at HQ light in 2010, 2011, 2013-2017 (IDH) between 15 May and 22 September.
- 49.139 (966) *Cochylis atricapitana* (Stephens), Common. Apr-Jun, Jul-Sep.  
Recorded on the Estate in 1974, 1977, 1983, 1988, 1993, 2002, 2004, 2006 and annually from 2008 to 2017 between 20 April and 28 September.
- 40.143 (1114) *Eudemis porphyrana* (Hübner) Southerly distribution Jul-Aug  
Recorded at HQ light on 09 July 2017 (SZW/IDH)
- 49.144 (1113) *Eudemis profundana* (Denis & Schiffermüller), Common. Jul-Sep.  
Singles at HQ light on 14 August 2009 (PDH/AP), 08 August 2012 (JGCB), 04 July 2014(JGCB) and 05 July 2015.
- 49.150 (1093) *Apotomis betuletana* (Haworth), Common. Jun-Sep.  
Singles at HQ light on 12 July 1988 (IDH confirmed CP), at light in the Oasis 25 June 2011 (FS), and two on 02 September 2012 and singles at light on 09 and 10 August 2014.
- 49.154 (1087) *Orthotaenia undulana* (Denis & Schiffermüller), Common. May-Jul.  
Recorded on the Estate in 1955, 08 June 1958 and in the Elms on 24 June 2005 (two) (P&PH)
- 49.155 (1086) *Hedya salicella* (Linnaeus), Local. Jun-Sep  
One in the Whitehouse on 08 July 2010 (FS), one at HQ light on 26 July 2013, five in the Whitehouse on 17 July 2015 (FS), six on 15 July and one at HQ light on 16 July 2016 (IDH) and singles on 12 June (Whitehouse), 15 July and 02 September (HQ) 2017.
- 49.156 (1083) **Marbled Orchard Tortrix** *Hedya nubiferana* (Haworth), Common. May-Aug.  
Small numbers at HQ light, the Whitehouse and the Elms in 1984, 2005, 2006 (TD) and annually from 2009 to 2017 between 28 May and 22 August.
- 49.157 (1082) **Plum Tortrix** *Hedya pruniana* (Hübner), Common. May-Aug.  
Recorded on the Estate in 1993 (two), 1994 (four), 2003, 2006 (TD) and annually in small numbers from 2009 to 2017 between 13 May – 31 July.
- 49.158 (1084) *Hedya ochroleucana* (Frölich), Common. Jun-Jul  
Singles at HQ light on 13 (FS) and 21 June (JGCB) 2011 and 13 July 2013 (JGCB).
- 49.161 (1063) *Celypha striana* (Denis & Schiffermüller) Common. May-Sep.  
There were eight records at light in four years from 1984 – 2006. More numerous recently, with up to four in 2009, over fifty records of up to 14 in 2010, up to seven on over forty dates in 2011 and up to 22 on fifty dates in 2012. From 2013-2017 continuing to be recorded regularly between 16 May and 14 September.
- 49.162 (1064) *Celypha rosaceana* (Schläger), Local. Jun-Sep.  
Small numbers in 1993, 1995 (DA, MPa, BS), 2010, 2012 - 2014 (JGCB) and 2015 (DG) between 08 June and 12 August. There was a single record of two on 15 July 2017.
- 49.164 (1067) *Celypha cespitana* (Hübner), Local. late May-early Sep  
Recorded on the Estate on 12 June and 7 July (DB/JGCB) 2009, 18 and 19 July (PDH/JGCB/JJS) 2010 and 27 May 2017.
- 49.166 (1076) *Celypha lacunana* (Denis & Schiffermüller), Common. May-Sep, end Aug-early Nov.  
Recorded on the Estate in 1969, 1977 and many years between 1984 and 2017 between 28 April and 08 October. Now quite common, with 43 at HQ light on 20 August 2009, 37 on 03 September 2010, 26 on 27 August 2011 and 21 on 27 August and 17 on 06 September 2016 (IDH), for example. A larva was recorded in the Whitehouse on 22 April 2017 (DS).
- 49.180 (1079) *Piniphila bifasciana* (Haworth), Common. Jun-Aug.

Recorded on the Estate on 19 July 1994 (EB), 14 July 2014 and 27 July 2016 (IDH).

- 49.183 (1108) *Lobesia abscisana* (Doubleday), Common. late Apr-May, late Jun-Aug.  
Recorded in small numbers in 1981, 1983, 1993, 2004, 2007 and annually from 2009 to 2017 between 07 May and 04 September.
- 49.186 (1097) *Endothenia gentianaeana* (Hübner), Common. May-Aug.  
An adult emerged on 31 May 2010 from a pupa collected from Teasel seedhead at Restharrow Scrape (FS).
- 49.188 (1099) *Endothenia marginana* (Haworth). Common. May-Jun, Jul-Sep  
One at HQ light on 15 July 2016 (IDH) and on 21 June and 15 July 2017
- 49.193 (1104) *Endothenia quadrimaculana* (Haworth), Common. Jun-Aug.  
Recorded in small numbers on the Estate on 30 July 1983, 30 July 2010, 22 July and 05 September 2014 and 30 August 2015.
- 49.194 (1111) *Bactra lancealana* (Hübner), Common. May-Oct.  
Recorded on the Estate on 13 August 1979, 05 August 1981 and 04 July 2013, with up to six in August 2014 and small numbers in 2015. Recorded between 17 June and 29 August. In 2016 singles were recorded on three dates between 22 June and 12 August (IDH). In 2017 recorded in the Whitehouse on 04 August and in the Elms on 14 August 2017.
- 49.195 (1110) *Bactra furfurana* (Haworth). Local. Jun-Aug.  
Singles at HQ light on 07 June and 11 July 2014 (confirmed by FS), 12 June and 05 August 2016 (IDH) and 15 July 2017.
- 49.197 (1112) *Bactra robustana* (Christoph), **Nb.** Very local. May-Sep.  
Recorded on the Estate in 1993, 2005 (TD M gen det), 2009, 2010, 2013, 2014, 2016 (IDH) and a single record on 29 May 2017. Recorded between 29 May and 02 August.
- 49.205 (1116) *Ancylis comptana* (Frölich). Local. Apr-Sep.  
One at light on 09 June (FS).
- 49.214 (1126) *Ancylis badiana* (Denis & Schiffermüller), Common. Apr-Oct.  
Recorded the Estate on 05 April 1981 (NH)
- 49.215 (1115) *Ancylis achatana* (Denis & Schiffermüller), Local. May-Aug.  
Recorded at light on 23 June 2006 (TD) and in the Whitehouse on 25 June 2009 (FS) and at light in small numbers in 2010, 2011, 2013-2017 between 22 May and 19 July.
- 49.219 (1204) *Thiodia citrana* (Hübner), Local. Jun-Aug.  
Mostly small numbers on the Estate in 1965, 1981, on the seafront in 1985, 1993, at HQ MV light in 1988 (two), 1989 1997, 2002, 2005 (two), in the Elms in 2005, at HQ light annually in small to moderate numbers from 2009 to 2017, (including 35 on 10 July 2010), between 01 June and 09 August
- 49.223 (1159) **Holly Tortrix** *Rhopobota naevana* (Hübner). Common. May-Sep.  
Four in the Whitehouse on 02 August (FS) and singles at HQ light on 02 August and 05 September 2014.
- 49.224 (1205) **Bud Moth** *Spilonota ocellana* (Denis & Schiffermüller), Common. May-Sep.  
Regularly recorded in small numbers from 1955 to 2017 between 25 May – 20 September.
- 49.229 (1154) *Epinotia caprana* (Fabricius), Common. Jul-Oct.  
Recorded on the Estate in 1935 (RFra) and 1950 (HCH).
- 49.230 (1151) *Epinotia trigonella* (Linnaeus), Common. Jul-Sep.  
Recorded on the Estate in August/September 1993 (EB) and 1994 (EB) and on 25 July 2010 (PDH/JGCB/JJS) and 23 August 2011 (FS).
- 49.234 (1150) *Epinotia abbreviana* (Fabricius), Common. May-Aug.  
Recorded on the Estate on 08 July 1977, 19 July 2007, two on 15 July 2016 (FS) and two larvae in the Elms on 27 April 2017 (SZW).
- 49.238 (1147) **Willow Tortrix** *Epinotia cruciana* (Linnaeus), Common. May-Aug.  
Recorded on the Estate on 03 June 1925, in 1954, on 09 July 1976, on 08 July 1977 and a male was recorded in the Recording Area on 17 July 2013 (TD gen det)
- 49.240 (1136) *Epinotia immundana* (Fischer von Röslerstamm), Common. Apr-Sep.  
Recorded on the Estate in August/September 1993. Since 2009, small numbers (up to four) annually between

10 April and 22 September. Recorded at HQ light on 06 September 2016 (IDH) and a single field observation on 12 April 2017 in the Elms (SZW).

- 49.248 (1139) **Nut Bud Moth** *Epinotia tenerana* (Denis & Schiffermüller) Common and widespread Jun-early Oct  
Three singles at HQ light between 13 June and 15 July 2015 (IDH) and a single on 16 June 2017.
- 49.249 (1134) *Epinotia ramella* (Linnaeus). Common. Jul-Oct.  
One-two on five dates from 15 to 29 October 2014. Two recorded at HQ light on 17 July 2016 (IDH)
- 49.254 (1133) *Epinotia bilunana* (Haworth), Common. May-Aug.  
Small numbers at light in the Elms in 2005, at light in the Oasis in 2010, 2011 and 2017, at HQ light in 2013 and 2014 between 18 June and 10 July.
- 49.255 (1138) *Epinotia nisella* (Clerck), Common. Jul-Sep.  
Recorded in small numbers in 1987, 2009, 2010, 2012, 2013 (up to three, with 20 in the Whitehouse on 09 August), 2014, 2015 (up to 12), 2016 (one field record and eight to HQ light) and 2017 between 06 July and 09 September.
- 49.260 (1165) *Zeiraphera isertana* (Fabricius), Common. Jul-Aug.  
Singles recorded on 31 July - 02 August 1987 and in small numbers annually from 2010 to 2016 (IDH) between 28 June and 12 September.
- 49.261 (1157) *Crociosema plebejana* (Zeller) Frequent in the south and range expanding. Year round  
Recorded in small numbers at HQ light in 2005, 2010, 2012-2017 (on 18 dates with up to five individuals (27 August) in 2016 (IDH)). Increasing in regularity between 12 May and 15 November.
- 49.264 (1202) *Eucosma obumbratana* (Lienig & Zeller), Local. Jun-Aug.  
Recorded in small numbers in 1981, 1983 and one adult on 26 June 2004 (TD) and annually from 2010 to 2017 between 04 July and 19 August.
- 49.265 (1201) *Eucosma cana* (Haworth), Common. May-Sep.  
Recorded on the seafront MV light in 1985, 1993 (18) and at HQ light and the Elms in 2002, 2004, 2005, 2009-2014 (up to 10), 2015 (up to 19), 2016 (up to 15) and 2017 between 16 May and 08 September.
- 49.266 (1200) *Eucosma hohenwartiana* (Denis & Schiffermüller), Common. Jun-Aug.  
Recorded in small numbers at MV light in 1984, 1985, 2003, 2009, 2010 (up to 10), 2011, 2012, 2014 and 2015 (25 in the Whitehouse on 17 July) between 14 June and 05 September. In 2016 recorded on 4 dates at HQ light (IDH) and 30 on 15 July in the Whitehouse (FS). Six recorded in the Whitehouse on 14 July 2017.
- 49.269 (1197) *Eucosma campoliliana* (Denis & Schiffermüller), Common. May-Sep.  
Recorded in small numbers in 1955, 1977, 1981, 1983, 2001, 2002 and annually from 2009 to 2017 between 16 June and 16 August.
- 49.272 (1193) *Eucosma tripoliana* (Barrett), Local. Jul-Sep.  
Two at light at HQ (PDH/JGCB/JJS) and two at light in the Oasis on 10 July 2010 (FS) and at HQ light on 03 July and 14 August 2012. One at light in the Whitehouse on 05 August 2016 (FS) and 10 in the field in Hundred Acre on 14 August 2017 (SZW)
- 49.274 (1196) *Eucosma metzneriana* (Treitschke), Rare. May-Jul.  
Singles at HQ light on 02 July 2012, 02 July 2015 and one in the Whitehouse on 15 July 2016 (FS)
- 49.275 (1192) *Eucosma conterminana* (Guenée), **Nb.** Very local. Jun-Sep.  
Recorded on the Estate in August/September 1993, 24 July 2010 (FS), 02 August 2012, 19 May 2014 and 06 September 2016. (KH/JAJ)
- 49.276 (1190) *Eucosma aspidiscana* (Hubner), Relatively common. Apr-Jun.  
Recorded at HQ light on 04 July 2016 (IDH).
- 49.278 (1171) *Gypsonoma minutana* (Hübner), **Nb.** Very local. Jul-early Sep.  
Singles recorded at HQ light on 19 & 26 (PDH/JGCB/JJS) July 2010, 28 June 2011, 01 August 2014, 13 August 2015 and 05 August 2016. Singles recorded to light in the Big Gully on 19 July and to HQ light on 22 June and 14 July 2017
- 49.279 (1169) *Gypsonoma dealbana* (Frölich), Common. May-Sep.  
Small numbers in 1981, 2009, 2011, 2013 (up to five) to 2017 between 10 June and 05 August. Larval feeding signs recorded in Middle Field on 20 October 2017 (DS).
- 49.281 (1168) *Gypsonoma sociana* (Haworth), Locally fairly common. mid May-early Aug.  
Small numbers in 1989, 1993, 2009-2011, 2013-2017 (maximum of 9 on 15 July 2016 (FS)) between 22 May

and 10 August.

- 49.283 (1167) *Gypsonoma aceriana* (Duponchel), Local. Jun-Aug.  
Small numbers in 1977, 1983, 2010, 2013, 2014, 2016 (IDH) and 2017 (a single on 19 July in the Big Gully was the only 2017 record) between 21 June and 31 August.
- 49.288 (1183) *Epiblema foenella* (Linnaeus), Common. Jun-Sep.  
Small numbers (up to nine) on the Estate in 1981, 1987, 1993, 1994, 2001 and annually from 2009 to 2017 between 13 June and 18 August.
- 49.289 (1187) *Epiblema costipunctana* (Haworth), Common. May-Aug.  
Singles in the Whitehouse on 02 and 12 June 2010 (FS et al) and 18 June 2016 (FS) and at HQ light on 08 June 2011.
- 49.292 (1174) *Notocelia cynosbatella* (Linnaeus), Common. May-Jul.  
Recorded on the Estate in small numbers in 1989, 1993 and annually from 2009 to 2017 between 28 April and 07 July.
- 49.294 (1175) **Bramble Shoot Moth** *Notocelia uddmanniana* (Linnaeus), Common. May-Sep.  
Small numbers (up to 11) at HQ in 1989, 1993 and annually from 2009 to 2017 between 15 May – 04 September.
- 49.295 (1178) *Notocelia roborana* (Denis & Schiffermüller), Common. Jun-Aug.  
Found by FS in the Whitehouse 25 June 2009 and recorded at HQ light in small numbers in 2010, 2012-2016 between 23 June and 13 August.
- 49.297 (1177) *Notocelia rosaecolana* (Doubleday), Common. May-Aug.  
Recorded on the Estate on 08 July 1977, June 1989, 09 and 20 June 1993, 24 June 2005 (Elms) and in small numbers in 2009, 2012, 2013, 2015 and 2016 (IDH). Recorded between 07 June and 25 July.
- 49.298 (1176) *Notocelia trimaculana* (Haworth), Common. May-Aug.  
An adult male attracted to light on 23 June 2006 (TD gen det) and in the Whitehouse 25 June 2009 (FS). Small numbers at HQ light in 2010 (up to nine), 2011 and annually from 2013-2017 between 11 May and 14 July.
- 49.304 (1207) **Pine Leaf-mining Moth** *Clavigesta purdeyi* (Durrant), Common. Jun-Sep.  
Singles at HQ light on 25 July 2010 (PDH/JGCB/JJS) and 2 from Princes Golf Course on 7 July 2016 (FS)
- 49.305 (1210) **Pine Shoot Moth** *Rhyacionia buoliana* (Denis & Schiffermüller), Common. Jun-Aug.  
Singles at HQ light on 03 July 2010 and in the Elms on 14 June 2014 (FS).
- 49.306 (1211) *Rhyacionia pinicolana* (Doubleday), Common. Jun-Sep.  
Singles at HQ light on 12 and 20 July 2010 and from Princes Golf Course on 27 July 2016 (FS)
- 49.307 (1212) **Spotted Shoot Moth** *Rhyacionia pinivorana* (Lienig & Zeller), Common. May-Jul.  
Recorded on the Estate on 09 June 1993, at least 20 in the Elms on 14 June 2014 (FS) and a single at HQ light on 27 May 2017 (F gen det TD).
- 49.311 (1287) *Dichrorampha aeratana* (Pierce & Metcalfe) Relatively common in the south. May-Jun  
Single on 25 May 2017 at light at HQ feeders (M gen det TD)
- 49.315 (1281) *Dichrorampha simpliciana* (Haworth) Local Jul-Sept  
An adult was recorded in May 1987 (IDH gen det CP)
- 49.316 (1278) *Dichrorampha sequana* (Hübner), Local. May-Jun.  
Adults found by FS in Whitehouse on 10 June 2007, 07 June 2009, 21 June 2010 and 11 June 2016.
- 49.318 (1284) *Dichrorampha vancouverana* (McDunnough) Widely distributed. Jun-Jul  
An adult female netted on 17 July 2013 (TD gen det)
- 49.320 (1274) *Dichrorampha alpinana* (Treitschke) Fairly common. May-Aug  
Single to HQ light on 27<sup>th</sup> May 2017 (M gen det TD)
- 49.321 (1273) *Dichrorampha petiverella* (Linnaeus), Common. May-Aug.  
Small numbers on the Estate in 2003, 2007, 2009 and 2010 between 07 June and 01 August. Common in the Whitehouse on 07 June 2014 (FS), 12 there on 28 June 2015 (FS), 50 on 11 June 2016 (FS). Four by the Haven on 31 May and 70 around the Whitehouse on 12 June 2017.
- 49.322 (1276) *Dichrorampha plumbagana* (Treitschke), Common. May-Jun.

Recorded on the Estate on 31 May, 1983, 28 May 1985 and 16 June 2006 and HQ light on 01 June 1993, 15 May 2005, 21 May 2009, 21 June 2010 and 90 in Middle Field on 09 May 2017 (SZW) (M gen det TD). This is a species reported regularly but required gen det for confirmation.

- 49.324 (1257) **Pea Moth** *Cydia nigricana* (Fabricius), Common. May-Aug.  
Recorded on the Estate on 4 June 1993, and at light in the Oasis on 20 July 2010 (PDH/JGCB/JJS).
- 49.325 (1255) *Cydia ulicetana* (Haworth), Common. Apr-Jun, Jul-Sep.  
Very common on Gorse in the area, particularly at Mary Bax, but not readily attracted to light, though singles at HQ on 01 and 11 July in 2009. Recorded between 10 April and 21 May. Two recorded in the Middle Field on 01 May 2016 (FS), two on 22 April and 30 on 09 May 2017 in Middle Field.
- 49.327 (1220) *Cydia microgrammana* (Guenée), Local. May-Jul.  
Recorded to MV light on the beach on 24 June 2006 (TD) and also recorded on 29 May 2014 (FS)
- 49.338 (1261) **Codling Moth** *Cydia pomonella* (Linnaeus), Common. May-Sep.  
Well known as an orchard pest by the farming community. Regular at HQ light and on the Estate from 1984 - 2017 between 09 June – 21 August.
- 49.341 (1260) *Cydia splendana* (Hübner), Common. Jun-Sep.  
Small to moderate numbers in 1983, 1985, 1993, 2010 (up to eight at light on many dates between 19 July and 03 September) and annually from 2011 to 2017, including up to 36 in July 2014, between 26 June and 03 September.
- 49.343 (1262) *Cydia amplana* (Hübner), Migrant. Jun-Aug.  
One at HQ light on 14 August 2010 (PDH/JGCB), one-two on five dates between 29 July and 27 August 2012 and singles on 23 July and 09 August 2014 (JGCB).
- 49.345 (1219) *Lathronympha strigana* (Fabricius), Common. May-Sep.  
Recorded on the Estate on 26 May 1993, 21 June 2008, 03 July 2012, 23 August 2013, 02 August 2015, 21 July and 05 August (two) 2016 and 17 May 2017.
- 49.347 (1241) *Grapholita compositella* (Fabricius), Common. May-Jun, Aug.  
Recorded at light near the sea on 16 May 2005, in the Whitehouse on 26 April 2009 (FS), on the seafront on 29 May 2014 and in the Whitehouse on 28 June 2015 (FS).
- 49.349 (1242) *Grapholita internana* (Guenée), Local. Apr-Jun.  
Found by FS in Gorse along Ancient Highway on 26 April and 9 May 2009 and on 09 May 2010. Only the third site in Kent since 1954, one of which (Weatherlees, near Richborough) was destroyed around 2010. At least 15 at Mary Bax on 23 April 2011 and two there on 10 April 2014.
- 49.352 (1253) *Grapholita orobana* (Treitschke), **pRDB3**. Jul-Aug.  
Recorded on the Estate on 21 July 1957, 26 June 2003, 19 July 2008, 30 June 2010 (FS) and 18 June 2016 (FS)
- 49.354 (1251) *Cydia jungiella* (Clerck), Common. Apr-Jun, Aug.  
Recorded in small numbers in 1993, 2009, 2010, in the Whitehouse/Oasis (up to six) in 2011, in Middle Field in 2013, the Whitehouse in 2014 between 12 April and 19 May, in the Middle Field 01 May 2016 (FS) and four field records from the Haven on 08 April, 09 April at HQ light and 22 April 2017 in the Middle Field.
- 49.356 (1249) *Grapholita lobarzewskii* (Nowicki) Scarce local. May-Jul  
First record at MV light in the Whitehouse 17 June 2017 (FS)
- 49.359 (1245) *Grapholita janthinana* (Duponcheel), Common. Jun-Aug.  
Recorded on the Estate on 03 July, August/Sept 1993, 19 and 26 July 2010 (PDH/JGCB/JJS), at HQ light on 26 June 2012 (PTO/SWT) and larva examined from Hawthorn near HQ on 20 October (DS).
- 49.367 (1236) *Pammene fasciana* (Linnaeus), **Nb**. Common. Jun-Aug.  
Singles at light at HQ and in the Oasis on 10 July 2010 (FS/JGCB)
- 49.371 (1239) *Pammene rhediella* (Clerck) Widespread Apr-Jun  
A single at HQ on 27 April 2017 (SZW)
- 49.376 (1233) *Pammene aurita* (Razowski), Common. Jun-Aug.  
Small numbers at HQ light in 2010, 2011, 2012, 2014 and 2015 between 27 June and 06 August.
- 49.379 (1272) *Pammene aurana* (Fabricius), Widespread but local. May-Aug.  
Trapped at HQ on 24 July 2009. July 2016 (photo SN) and field observations on 06 July (two, Middle Field) and 07 July 2017 (two, Haven) (SZW).

## COSSIDAE

- 50.001 (162) **Goat Moth** *Cossus cossus* (Linnaeus) **Nb** 19 June – 23 July  
Recorded on 21 July 1975 (Big Gully), 15 and 23 July 1983 (HQ light), 13 July 1995 (fence), 19 June 2002 and at HQ light in 2009 on 12 June and 25 June (two), 28 and 29 June 2010 and 25 June 2012. Larvae collected from dead Sallow stumps in the Big Gully in July 1970, April 1995 and September 2001 and in the Haven in October 2010. In 2015, singles at HQ light on 19 June and at light in the Whitehouse on 14 July, three lured by pheromones on 16 and 17 July and larvae seen on the Observatory track and at the Elms in September. In 2016 individuals were attracted to pheromones on 8 dates between 01 & 22 July (AO). A single was recorded on 18 June 2017 (CM)
- 50.002 (161) **Leopard Moth** *Zeuzera pyrina* (L.) 26 June – 07 August  
Taken at light in small numbers in 1984, 1985, 1993, 1997 and in 11 years from 2000 to 2015. None were recorded in 2016 or 2017.

## SESIIDAE

- 52.003 (371) **Lunar Hornet Moth** *Sesia bembeciformis* (Hübner)  
Two were caught in Whitehouse mist-nets on 16 July 1989 (IDH/JNH) with another on 19 July 1995. The larvae feed on Sallows and exit holes have occasionally been noted.
- 52.008 (380) **Red-tipped Clearwing** *Synanthedon formicaeformis* (Esper) **Nb**  
A moth of boggy places and osier beds recorded for this area by J.M. Merst at the turn of the 19th/20th centuries. A larva from the Big Gully was reared to emergence on 15 July 1995 (TR). All subsequent records refer to pheromone lures. One in the Haven on 01 July 2011 (photo JK), five in the Haven on 17 July 2014 (FS), a single on 05 August 2016 (FS) and in 2017 a single on 17 June in the Whitehouse (AT) and three on 07 July in the Haven (SZW).
- 52.011 (379) **Red-belted Clearwing** *Synanthedon myopaeformis* (Borkh.) **Nb**  
A larva from near the toll-gate was reared to emergence on 29 May 1995 (TR)
- 52.014 (382) **Six-belted Clearwing** *Bembecia ichneumoniformis* (Denis & Schiffermüller) **Nb**  
Four were attracted to pheromones in the Oasis on 10 July 2010 (JDS, PDH) and two were similarly recorded on 03 July 2011 (FS).

## LIMACODIDAE

- 53.001 (173) **Festoon** *Apoda limacodes* (Hufnagel) **Nb**  
Singles at HQ light on 02 July 2010 (JGCB) and 03 July 2013.

## ZYGAENIDAE

- 54.002 (163) **Forester** *Adscita statices* (Linnaeus) 12 June – 21 July  
Regular in small numbers since 1970 in the Whitehouse, the adjacent rough of St George's Golf course, Little and Waldershare Gullies and Restharrow Dunes. Singles trapped at MV light on 13 June 1982 at HQ and in the Little Gully on 10 July 2005. In July 2015 up to 13 males were attracted to pheromones in the Whitehouse and seven were found in Restharrow Dunes on 30 July. In 2016 one sight record in the Whitehouse on 28 June (FS), 15 on 13 July in Restharrow Dunes nectaring on Ragwort (CW) and two males attracted to pheromones on 15 & 20 July (AO). In 2017 singles were recorded in the field on 19 June (AML) and 04 July (IPH).
- 54.008 (169) **Six-spot Burnet** *Zygaena filipendulae* (Linnaeus) 10 June – mid August  
Previously abundant throughout the area. Recent records include up to eight in July 2009, an emergence of 300 evident on 05 July 2010. Adults were recorded on 17 July 2013 (TD) and 175 were lured to pheromones in the Whitehouse on 28 July 2015. One record in the Whitehouse on 15 July (FS) and up to 119 individuals to pheromones in Restharrow Dunes on 5 dates in 2016 (AO). In 2017 three were recorded on New Downs 10 June (SZW), 10 days earlier than previous earliest date
- 54.009 (171) **Narrow-bordered Five-spot Burnet** *Zygaena loniceræ* (Scheven) 02 June – 03 August  
Plentiful throughout the area up to 2017. In 2009 hundreds were seen emerging in the Oasis/Whitehouse area on 13 June and at least 150 were present around St. George's bushes on 30 June. In 2016 a single was recorded in the Whitehouse on 21 June (AML) and pheromones lures were successful in the Whitehouse between 15 to 22 July with a maximum of 17 on 16 July (AO).
- 54.010 (170) **Five-spot Burnet** *Zygaena trifolii* (Esper) July – August  
Confirmed in the past (JMC-H) but probably extinct since the early 1950s. Subsequent records almost certainly

refer to *Zygaena lonicerae*.

## PYRALIDAE

- 62.001 (1428) **Bee Moth** *Aphomia sociella* (Linnaeus), Common. Apr-Sep.  
This species was recorded in seven years from 1983 – 1995 and annually in small numbers from 2000-2017 between 24 May and 13 August. 12 were recorded to light in the Elms on 08 June 2017 (SZW)
- 62.002 (1429) **Large Dune** *Aphomia zelleri* (Joannis), **pRDB3**. Rare. Jun-Aug.  
Found on coastal sandhills in Kent and East Anglia and recorded on the Estate on 08 July 1930 with many records of small numbers to 2017 between 14 June and 21 August. Occasionally slightly more numerous: eg up to seven in July 2010, up to eight in July 2014, up to four on six dates in July 2016 and 25 individuals over five dates to HQ light between 21 June and 17 July with maxima of nine on 15 and 16 July 2017.
- 62.005 (1426) **Lesser Wax Moth** *Achroia grisella* (Fabricius), Local. Jun-Oct.  
Recorded at light on the Estate on 14 July 1982, 15 June 1983, 27 July 2010, 14 September 2016 (IDH) (F gen det TD) and singles on 14 July (HQ light) and 14 August (to light in the Elms) 2017.
- 62.006 (1425) **Wax Moth** *Galleria mellonella* (Linnaeus), Common. Jun-Oct.  
Five recorded between 04 July - 26 August 1995 and since recorded in small numbers from 2009-2014 between 21 June and 30 September. In 2017 there were records to HQ light on 11 August (two) and 16 August.
- 62.012 (1451) *Matilella fusca* (Haworth), Local. May-Sep.  
Recorded at HQ light on 16 July 1986 (NO et al) and in the Whitehouse on 21 July 2017 (SZW). This species feeds on Heathers including garden varieties.
- 62.013 (1444) *Moitrelia obductella* (Zeller), **pRDB2**. Rare. Jul-Aug.  
Found on chalk downs and quarries in Kent, feeding on Marjoram. One at HQ light on 06 August 2010 (PDH/JGCB).
- 62.014 (1463) *Pempeliella ornatella* (Denis & Schiffermüller), **pRDB3**. Rare. Jun-Aug.  
One recorded on the beach on 26 June 1993 (IF, AJC confirmed EB) and one at HQ light on 07 July 2012 (JGCB)
- 62.017 (1447a) *Sciota adelphella* (Fischer von Roslerstamm), Scarce. May-Sep.  
Recorded at light in the Elms on 24 June 2005 (TD), then mostly in small numbers (up to 14) from 2009 to 2017 (including at HQ light) between 01 June and 25 August.
- 62.019 (1453) *Pima boisduvaliella* (Guenée), **pRDB3**. Rare. May-Aug.  
A local sandhill and shingle species which feeds on Bird's Foot Trefoil and Spiny Restharrow. One-two were recorded on Princes Golf Course in 1921, 1937 and on Restharrow in July 1952 (CG) but not since.
- 62.021 (1441) *Oncocera semirubella* (Scopoli), **Nb**. Very local. Jun-Oct.  
Recorded on the Estate on 28 July 2002 and in small numbers at HQ light in 2009, 2010 and 2013-2017 between 29 June and 25 September.
- 62.022 (1443) *Pempelia genistella* (Duponchel), **Na**. Very local. Jun-Sep.  
Recorded in small numbers on the Estate in 2010 and 2013-2017 between 12 July and 05 August. Also breeds in Gorse at Mary Bax, where 20 recorded on 23 April 2011 (FS).
- 62.024 (1445) *Rhodophaea formosa* (Haworth), Local. May-Sep.  
Recorded on the Estate in 1993 and at HQ annually in small numbers from 2008 to 2014 between 08 June and 23 August. In 2017 a single was recorded at HQ light on 09 July.
- 62.025 (1454b) *Dioryctria sylvestrella* (Ratzeburg), Very local. Jun-Oct.  
Singles at HQ light in 2010 on 10, 24 and 28 July and 09 September and in 2016 on 27 July at Prince's Pine plantation (DS) and at HQ light on 30 July (IDH)
- 62.027 (1455) *Dioryctria simplicella* (Heinemann), Local. Apr-Sep.  
Trapped at HQ on 15 August 2009 (PDH/AP) and 08 August 2012 (JGCB).
- 62.028 (1454) *Dioryctria abietella* (Denis & Schiffermüller), Common. May-Oct.  
Six recorded between 01 and 24 July 1994, three singles between 08 and 25 July 2013, singles on 31 July and 16 September 2014 (IDH) and at HQ light on 29 and 30 May 2017.
- 62.029 (1452) *Phycita roborella* (Denis & Schiffermüller), Common. Jun-Sep.  
Recorded at HQ on 27 August 2006 then in small numbers in 2009-2012 and 2014-2017 between 21 June



and 18 August.

- 62.030 (1457) *Hypochoalcia ahenella* (Denis & Schiffermüller), Local. Jun-Aug.  
Recorded in small numbers at light in 16 years from 1981 – 2017 between 09 June and 15 August including 13 and 14 July 1988 (IDH confirmed CP).
- 62.032 (1465) *Nephtopterix angustella* (Hübner), **Nb.** Very local. Apr-Oct.  
Small numbers at HQ light in 2011, 2013-2017 between 29 May and 20 October.
- 62.033 (1435) *Acrobasis tumidana* (Denis & Schiffermüller)  
A scarce migrant to the UK, one was attracted to HQ light on 14 August 2015 (IDH)
- 62.034 (1436) *Acrobasis repandana* (Fabricius), Common. Jul-Sep.  
One trapped in the Observatory reed bed on 26 July 2008 and singles at HQ light on 06 June 2011 (FS), with two on 17 August 2012, singles on 12 and 14 July 2015 and 06 (two) and 14 July 2017.
- 62.035 (1439) *Acrobasis advenella* (Zincken), Common. Jun-Sep.  
Locally common on old Hawthorn and found in 1989, 1994/5, 1998 and then annual with increasing regularity from 2000 to 2017 at HQ (peaks of 12-13 in 2010, 2013 and 2015) between 30 June and 04 September. In 2016 51 individuals were recorded over 27 dates with maxima of four on 25 and 30 July. In 2017 46 individuals were recorded over 24 dates with a maximum of five on 04 August in the Whitehouse.
- 62.036 (1438) *Acrobasis suavella* (Zincken), Local. Jun-Aug.  
A local moth of stunted Blackthorn in open country and recorded in small numbers on the Estate in 18 years from 1983 to 2017 between 26 June and 31 August.
- 62.037 (1440) *Acrobasis marmorea* (Haworth), Local. May-Sep.  
Another local species recorded at HQ on 05 August 1981, on the Estate on 12 July 1989, then in small numbers in 2009-2011, 2013-2017 between 06 June and 04 September.
- 62.038 (1437) *Acrobasis consociella* (Hübner), Common. May-Aug.  
One at HQ light on 19 July 2012 and on 20 July 2016 (IDH).
- 62.042 (1458) **Thistle Ermine** *Myelois circumvoluta* (Fourcroy), Common. May-Sep.  
Well distributed and fairly common in small numbers at HQ light up to 2017 between 18 May and 02 August.
- 62.043 (1464) *Gymnancyla canella* (Denis & Schiffermüller) **pRDB2.** Scarce. May-Sep.  
Occasionally recorded on the Estate from 1982 to 1992 between 16 July and 12 August, one adult recorded on the beach on 23 June 2005 (TD) and annually in small numbers from 2012 to 2016 between 19 May and 19 August. In 2017 there was a single record from the Big Gully on 19 July (SZW).
- 62.048 (1470) *Euzophera pinguis* (Haworth), Local. Jun-Sep.  
Singles recorded at HQ light on 13 August 1994, 14 August 1998, then small numbers in 2011-2014 between 15 July and 02 September. In 2017 singles were recorded at HQ light on three dates between 22 June and 20 August.
- 62.050 (1469) *Euzophera cinerosella* (Zeller), **Nb.** Very local. May-Aug.  
One in the Whitehouse on 08 July 2010 (FS), and singles at HQ light on 10 August 2012 and 13 July 2013.
- 62.051 (1468) *Nyctegretis lineana* (Scopoli), **Nb.** Rare. Jun-Sep.  
Occasional records, mainly from coastal sand hills, from 1920 - 1995 and in 2010 and from 2012-2017 between 20 June and 30 August including at HQ light. Photos taken 2016 (IDH).
- 62.053 (1467) *Ancylosis oblitella* (Zeller), **Nb.** Very local. May-Oct.  
Recorded on the Estate on 12 August 1995, 17 August 1996, 11 September 1997, 17 July 2014 (JGCB) and 27 and 28 August 2017.
- 62.054 (1481) *Homoeosoma sinuella* (Fabricius), Local. May-Sep.  
12 records on the Estate from 1960 - 2000 but more regular since. Recorded between 21 May and 21 August up to 2017 with peak counts of seven in 2009, 19 in 2010 and 2013, up to 82 in July 2014, 23 on 15 July 2016 (FS).
- 62.055 (1480) *Homoeosoma nebulella* (Denis & Schiffermüller). Reasonably widely distributed. May-Sep.  
Recorded at HQ light on five dates in 2016 from 27 May (three individuals) to 13 August (four) (IDH).
- 62.058 (1483) *Phycitodes binaevella* (Hübner), Common. May-Sep.  
Recorded occasionally in small numbers on the Estate from 1936 - 2014 between 20 May and 08 August. In 2016 singles recorded on 09 and 15 July and 05 August (IDH). In 2017 singles recorded at HQ light on 14 and

17 June and 15 July.

- 62.061 (1478b) *Vitula biviella* (Zeller). Scarce. Jun-Aug.  
One in the Whitehouse on 02 August 2014 (FS) and singles at HQ light on 15 July (IDH) and at Prince's Pine plantation 27 July (DS) 2016 and at HQ light on 27 May 2017.
- 62.062 (1479) **Indian Meal Moth** *Plodia interpunctella* (Hübner), Synanthropic. Jun-Sep.  
Recorded on 25 June, 02 July 2009 and 13 May 2010, possibly having originated from the Observatory seed store.
- 62.064 (1473) **Cacao Moth** *Ephestia elutella* (Hb.), Common. Jun-Oct.  
Taken at light on 30 June 1965, on 08/09 July 1977 (BM (NH)) and on the beach on 26 June 1993 (EB).
- 62.069 (1432) *Anerastia lotella* (Hübner), Local. May-Sep.  
A grass moth favouring the coastal sandhills, collected in 1952 with a further five records to 1993 and attracted in large numbers to light on 23 June 2005 (TD), then small numbers annually from 2010 to 2017 between 03 June and 21 August.
- 62.070 (1414) **Slender Dune** *Synaphe punctalis* (Fabricius), **Nb.** Very local. May-Sep.  
Almost annual in small numbers (up to 15) at light from 1984 to 2017 between 02 June and 04 September. Abundant in 2010, including 119 on 12 July and in 2014 when up to 81 in July, with up to 73 in July 2015.
- 62.072 (1417) **Meal Moth** *Pyralis farinalis* (Linnaeus), Common. May-Oct.  
Recorded in small numbers most years to 2017 (singles on 17 dates in 2010 and up to three in 2013) between 20 May and 08 October.
- 62.074 (1421) **Large Tabby** *Aglossa pinguinalis* (Linnaeus), Local. Jun-Jul.  
Recorded at light on 20 August 1984, on 06 July 1987 (Cellars), on 24 June 2005 (HQ) and at HQ light on 11 dates between 08 June and 11 August 2010.
- 62.075 (1413) **Gold Triangle** *Hypsopygia costalis* (Fabricius), Common. May-Nov.  
Fairly regular in small numbers at MV light and annually from 2009 to 2017 between 18 June and 21 October.
- 62.076 (1415) *Hypsopygia glaucinalis* (Linnaeus), Common. May-Nov.  
Recorded in small numbers on the Estate at MV light in 1950, 1955, 1979, 1987, 1989, 1993, 1995, 2001, 2002, 2006, 2009 and annually from 2011 to 2017 between 08 June and 28 October. Adults were bred from pupae found in old nests of House Sparrows on 04 July 1979.
- 62.077 (1424) *Endotricha flammealis* (Denis & Schiffermüller), Local. Jun-Sep, Oct  
Recorded on the Estate in 19 years from 1983 to 2017 between 21 June and 25 September (Peaks of eight-10 in 2010, 2011, 2012 and 2013).

#### CRAMBIDAE

- 63.002 (1368) *Loxostege sticticalis* (Linnaeus), Migrant. Aug-Oct.  
A scarce migrant recorded at HQ light on 16 July 1986, 23 August 2012 and 26 July 2014.
- 63.005 (1365) *Pyrausta despicata* (Scopoli), Common. Mar-Sep.  
A local species, first recorded on 21 July 1957, with up to eight in several years to 2016. Occasionally more numerous, with up to 15 in August 2010 and 13 in August 2015. In 2017 63 individuals recorded over 30 dates between 06 April and 04 September with a maximum of 15 on 04 August to light in the Whitehouse. Recorded between 06 April and 28 September.
- 63.006 (1361) *Pyrausta aurata* (Scopoli), Common. Apr-Jun, Jul-Sep  
Singles at HQ light in 1985, 1988, 1989, 1995, 1999, 2008 (three) and annually in small numbers from 2010 to 2017 between 10 May and 05 September.
- 63.007 (1362) *Pyrausta purpuralis* (Linnaeus), Common. Apr-Jun, Jul-Sep  
Singles in the Observatory garden on 03 August 1995 and 11 August 2002, on the Estate on 12 August 1995, then in small numbers at light in 2010 and annually from 2012 to 2017. Recorded between 12 June and 06 September.
- 63.013 (1387) *Nascia ciliaris* (Hübner). Very local. May-Aug.  
Very local in Kent, singles were recorded at HQ light on 20 May 2014 and in the Whitehouse on 19 June 2015 (FS).
- 63.014 (1370) *Sitochroa palealis* (Denis & Schiffermüller), **Nb.** Very local. Jun-Sep.

Recorded at light on the Estate on 28 and 31 July 1995, on 03 August 1995 (the Elms), at HQ light on 28 July 2002 and 21 July 2005. Recorded in the Oasis on 25 June 2009 and in the Recording Area and at HQ light in small numbers between 2011 and 2017 between 25 June and 27 August.

- 63.016 (1386) *Anania fuscalis* (Denis & Schiffermüller), Common. May-Aug.  
Recorded at lighted windows on the Estate during June/July 1980 (MAA & TB) and at MV light on 13 June 1987 (IDH). Larvae were found feeding on the seed heads of Yellow Rattle in the Whitehouse in July 1981 (DMB).
- 63.017 (1377) *Anania lancealis* (Denis & Schiffermüller), Local. May-Aug.  
Two recorded at HQ light on 15 July 1985, one in the Whitehouse on 25 June 2009 (FS), two on 04 July 2015 and one in the Whitehouse on 14 July 2017.
- 63.018 (1378) *Anania coronata* (Hufnagel), Common. May-Sep.  
Recorded at lighted windows in 1969 and in Elder thickets about the Estate in 1980 but few records until recent times. Small numbers at HQ light and on the Estate from 2009 to 2017 between 13 June and 25 August, with one on 06 September, and four in the Whitehouse on 17 July 2015.
- 63.020 (1380) *Anania perlucidalis* (Hübner), Local. May-Sep.  
Recorded on the Estate in small numbers 1987, 1993, 1994, 1995, 2005 (Elms (TD)) and at HQ light in 2009-2011, 2013-2017 between 02 June and 04 September.
- 63.022 (1385) *Anania crocealis* (Hübner), Common. May-Sep  
Recorded on the Estate at MV light in 1988 and annual in small numbers to 2017 between 29 May and 22 September. In 2017 16 individuals recorded to light on the Estate and at HQ in ones or twos on 12 dates between 29 May and 29 August.
- 63.025 (1376) **Small Magpie** *Anania hortulata* (Linnaeus), Common. May-Aug.  
An abundant species throughout the Estate wherever beds of Nettles occur and a frequent visitor to the moth trap up to 2017 during the period 21 May to 03 September. In 2017 singles to threes recorded on 31 dates between 24 May and 04 August.
- 63.028 (1375) **European Corn-borer** *Ostrinia nubilalis* (Hübner), Local. May-Sep  
Formerly a casual immigrant and now well established in the south. Recorded from 30 June - end August 1983 when small numbers appeared at light. From 2000-2017 not uncommon between 28 May and 21 September. In 2017 59 individuals recorded over 25 nights between 29 May and 21 September with a maximum of 19 on 15 July.
- 63.031 (1395) **Rusty Dot Pearl** *Udea ferrugalis* (Hübner), Migrant. Year round.  
A migrant, recorded in small numbers in most years between 1979 and 2017 between 29 May and 29 November. Exceptionally numerous in 2010, when a total of about 170 was recorded, including peak counts of eight on 26 August, eight-nine on 12-13 September and 10 on 26 September). Early records of up to three on six dates between 28 April and 29 May in 2012, when a total of 56 recorded (including 23 between 19 and 24 October). 30 recorded in 2013, between 09 August and 13 November and 53 recorded in 2015. In 2016 187 individuals were recorded at the HQ light over 49 nights between 26 June and 5 November with a maximum of 18 on 27 August. In 2017 87 individuals were recorded over 45 nights between 29 May and 16 November with a maximum of nine on 18 October.
- 63.033 (1388) *Udea lutealis* (Hb.), Common. Jul-Aug. G1  
Recorded on the Estate on 31 July - 01 August 1987 (IDH gen det CP) and 26 and 29 July 1995 (ACJ).
- 63.034 (1390) **Blackthorn Moth** *Udea prunalis* (Denis & Schiffermüller), Common. May-Aug.  
Recorded at light in the Whitehouse on 11 July 1989, at a lighted window on the Estate on 06 July 1993 and at HQ light on 30 August 2009 and in Restharrow on 12 July 2014 (D Grundy). In 2016 recorded at HQ light on 09 July.
- 63.037 (1392) *Udea olivalis* (Denis & Schiffermüller), Common. May-Aug.  
Common throughout the area and small numbers (eg up to five in 2009, seven in 2011, 11 in 2013 and 13 in 2014) attracted to light most years up to 2017 between 22 May and 23 July.
- 63.038 (1405) **Mother of Pearl** *Pleuroptya ruralis* (Scopoli), Common. Jun-Sep.  
Regular in small numbers at the MV light from 09 June to 03 October up to 2017 (11 on 20 July 2009, 17 on 26 August 2010, 20 on 24 August 2013, 10 on 24 August 2016 and 22 on 14 August 2017) and found commonly in bushy clumps and wherever thick beds of Nettles grow. Sometimes particularly numerous in the Elms. There was a field record of 27 on 02 August 2016 (SZW).
- 63.044 (1403) *Diasemiopsis ramburialis* (Duponchel), Migrant. Jun-Oct.  
A scarce migrant, recorded at HQ light on 05 October 2013 (JGCB).
- 63.048 (1408) *Palpita vitrealis* (Rossi), Migrant. Jun-Nov.

A scarce migrant from S. Europe recorded at HQ light on 19 October 1990, 10 November 2011 and 22 and 25 October 2012. Particularly numerous in 2013 when singles on three dates between 4 and 25 October and two on 01 November. One on 24 October 2014. In 2017 singles were recorded at HQ light on five nights between 11 August and 15 November.

- 63.050 (1399) *Dolicharthria punctalis* (Denis & Schiffermüller), **Nb.** Very local. Jun-Oct.  
A local, and strictly coastal species, with singles recorded in a seafront trap on 23 July 1985 (JW) and 15 July 1988.
- 63.052 (1398) **Rush Veneer** *Nomophila noctuella* (Denis & Schiffermüller), Migrant. Year round.  
A well-known migrant, this species can often be found in large numbers on the coast and it has been recorded at light from 15 May to 29 November annually to 2017. Peak counts include 51 on 19 August and 73 on 07 September 2009, 40 on 08 July, 87 on 26 August and 67-83 on 09-10 September 2010, 40 on 23 October 2012, 49 on 04 October 2013, 45 on 25 September 2016 and 18 on 23 August 2017.
- 63.056 (1359) *Cynaeda dentalis* (Denis & Schiffermüller), **pRDB3.** Rare. Jun-Aug, Sep-Oct.  
On coasts of south England, feeding on stems of Viper's Bugloss with records in 1985, 1987, 1990, 1995 (six), 1997, 2002, 2009 (four), 2010 (two), 2011, 2013 (four), 2015 and 2017 (two) between 28 June – 21 September.
- 63.057 (1356) **Garden Pebble** *Evergestis forficaris* (Linnaeus), Common. Apr-Sep  
Commonly recorded at light on the Estate and HQ between 08 May and 14 September up to 2017 with small numbers often flying to Observatory lighted windows at night.
- 63.058 (1357) *Evergestis extimalis* (Scopoli), **Nb.** Scarce. Apr-Sep.  
Formerly an irregular immigrant and colonist to SE England, now well established, with a total of 36 records at MV light from 1950 to 2014 (six in 2014) between 24 May - 27 September. None recorded 2014-2017.
- 63.059 (1356a) *Evergestis limbata* (Linnaeus), Scarce. Jul-Aug.  
First recorded on the Isle of Wight in 1994 and now established along the south coast. Small numbers at HQ light annually from 2012 to 2017 between 08 June and 07 September.
- 63.062 (1332) *Scoparia subfusca* (Haworth), Common. May-Sep.  
Recorded on the Estate on 5 August 1981 with a further nine records to 2006. Recorded in 2010 (up to four), 2011, 2012, 2013 (up to two), 2016 and 2017. Recorded between 06 July and 26 August.
- 63.063 (1334a) *Scoparia basistrigalis* (Knaggs), Local. May-Aug.  
Recorded on the Estate on 05 July 1985, 02 July 2010 (FS/JGCB).
- 63.064 (1334) *Scoparia ambigualis* (Treitschke), Common. Apr-Aug.  
First recorded in 1987 and subsequently in small numbers in most years to 2017 between 05 May and 24 August.
- 63.066 (1333) *Scoparia pyralella* (Denis & Schiffermüller), Common. May-Aug.  
Recorded on the Estate on 30 July 1983 with a further 15 records to 2009 between 16 May -12 July. Subsequently in small numbers in 2010, 2011, 2013, 2014 and 2016 between 29 May and late June, including 12 in the Whitehouse on 19 June 2015 (FS).
- 63.067 (1338) *Eudonia lacustrata* (Panzer), Common. May-Sep.  
Recorded at light in the Elms on 24 June 2005. Found in the Whitehouse on 25 June (FS) and in small numbers at HQ light in 2009, 2010, 2011, 2013 to 2017 between 29 May and 30 August.
- 63.069 (1342) *Eudonia angustea* (Curtis), Common. Year round.  
Recorded on the Estate in 1987 and small numbers (up to 11 in 2013) regularly to 2017 between 12 April and early November. In 2017 24 individuals were recorded at HQ light over 18 dates between 12 May and 25 October with a maximum of four on 16 May.
- 63.074 (1344) *Eudonia mercurella* (Linnaeus), Common. Jun-Sep.  
Recorded on the Estate in 1983 with many records to 2017 between 21 June and 28 August (up to 17 in July 2014). In 2017 singles were recorded on nine dates between 09 July and 12 August mainly at HQ light but including one in the Whitehouse.
- 63.075 (1336) *Eudonia pallida* (Curtis), Local. May-Sep.  
Recorded on the Estate in 1950, 1992 (golf course), 2005 (the Elms and two on the beach (TD)) and 2006 (Sandown Road). Small numbers (up to 12 in 2013 and 16 in 2014) at HQ light in 2004, 2005 and 2008-2017 between 16 May and 05 October, with one on 03 November 2015. In 2016 recorded on 26 dates from 08 June to 18 September comprising 141 individuals with maxima of 33 on 27 August and 22 on 05 September. In 2017 55 individuals were recorded over 28 nights between 16 May and 21 September with a maximum of 12 on 29 May.
- 63.077 (1290) *Chilo phragmitella* (Hübner), Local. May-Sep.  
Fairly common about reedbeds and often seen flying over Worth Marshes ditches in the evening wherever

*phragmites* occurs. First identified in 1950 and taken at light most years between 02 June and 15 September up to 2017.

- 63.079 (1292) *Calamotropha paludella* (Hübner), **Nb.** Local. Jun-Oct.  
Recorded on the Estate in 1983, 1993 (six), 1994, 1995, 1998 (three), 2000, 2004, 2005 (TD), 2006 (six) and annually in small numbers from 2009 (up to 11) to 2017 between 18 June and 10 September.
- 63.080 (1293) *Chrysoteuchia culmella* (Linnaeus), Common. May-Oct.  
Recorded regularly from 1957 and annually from 2011-2017 between 22 May – 06 September, including captures of 169 on 02 July and 172 on 20 July in 2009, 1,584 on 15 July 2010.
- 63.081 (1294) *Crambus pascuella* (Linnaeus), Common. May-Sep  
Common in the damper grassy areas of the Estate and adjacent golf courses, throughout June and July, usually resting head downwards on grass stems from which it is readily disturbed. Occasionally recorded in the moth trap between 09 June and 27 August up to 2017. In 2016 nine individuals recorded over six dates from 02 July to 27 August.
- 63.085 (1300) *Crambus pratella* (L.), **Nb.** Local Jun-Sep  
Recorded on 17 June 1993 (EB).
- 63.086 (1301) *Crambus lathoniellus* (Zincken), Common. May-Aug.  
Abundant over rough grassland throughout the area. Small to moderate numbers (up to 20) regularly at light in 1967, 1983, 1988, 1989, 1993, 1995, 1999 and 2002 - 2017 between 06 May and 27 August.
- 63.088 (1302) *Crambus perlella* (Scopoli), Common. May-Sep.  
Abundant in the area. Recorded at Mary Bax in July/August 1951 and regularly at light in moderate to large numbers from 1975 - 2017 between 18 May – 07 September (eg 34 on 25 July 2009, 58 on 04 July 2010, 35 on 27 June 2012, 54 on 20 July 2013 and 155 on 11 July 2014). Examples of the variant *Crambus perlella warringtonella* are common.
- 63.089 (1305) *Agriphila tristella* (Denis & Schiffermüller), Common. Jun-Oct.  
Common over grassy areas and regular at light in small to moderate numbers up to 2017 between 05 July – 19 October, though can be numerous eg 108 on 19 August and 118 on 23 August 2009 and 165 on 23 August 2011.
- 63.090 (1306) *Agriphila inquinatella* (Denis & Schiffermüller), Widespread. May-Sep.  
The only records are at HQ light on 12 August 1988 (IDH confirmed CP), 11 July 2010 (PDH/JGCB/JJS), up to four in July to 15 August 2015 and on 27 May 2017 (SH/IDH).
- 63.091 (1307) *Agriphila latistria* (Haworth), Local. Jul-Sep.  
Recorded on 30 August 1974 (Emmett, A., 1977) and at HQ light on 20 August 1989, 01 September 1998. and on 31 August 2016 (IDH)
- 63.092 (1303) *Agriphila selasella* (Hübner), Local. Jun-Sep.  
A saltmarsh species only recorded at HQ light on 16 August 1998, 16 August 2004 and 30 July 2010 (FS), though eight at light on 11 August 2015, singles on 05 (FS) and 12 (IDH) August 2016 and in 2017 mainly singles recorded on 20, 21, 23, 24 (three) and 30 August.
- 63.093 (1304) *Agriphila straminella* (Denis & Schiffermüller), Common. Jun-Sep.  
One of the commonest grass moths in the area and found abundantly over the golf courses with many records including at light from 1960-2017 between 09 June - 16 September.
- 63.095 (1309) *Agriphila geniculea* (Haworth), Common. Jul-Oct.  
Widespread on coastal sandhills. Recorded occasionally at HQ light, from 1981-2012 from 10 July to 09 October. Sometimes more numerous eg up to 26 at HQ light in 2009 and up to 17-18 in 2010 and 2013-2015. In 2016 a maximum of 38 on 06 September (IDH). In 2017 52 individuals recorded to light on the Estate and at HQ over 24 nights between 02 June and 01 October with a maximum of 11 on 06 September.
- 63.099 (1313) *Catoptria pinella* (Linnaeus), Common. Jun-Sep.  
Recorded on the Estate on 07 July 1989 and at HQ light on 19 July 2016 (IDH)
- 63.102 (1316) *Catoptria falsella* (Denis & Schiffermüller), Common. Jun-Sep.  
Recorded at HQ light between 05 July and 07 September annually from 2009 to 2017. In 2017 a single recorded to HQ light on 14 July (IDH).
- 63.103 (1317) *Catoptria verellus* (Zincken), Migrant. May-Jul.  
One at HQ light in July 2014. Singles on 21 and 31 July 2016 (Photographed IDH) and on 10 July 2017.

- 63.107 (1321) *Thisanotia chrysonuchella* (Scopoli), **Nb.** Very local Apr-Jun.  
A local species of dry grassland and noted on the golf-courses, recorded on 8 June 1950 then occasionally on the Estate and in the HQ trap on many dates to 2017 between 09 May - 14 July. In 2009, six on 13 May and four on 15 May then one-two on six dates to 25 June. In 2016 four on 09 June 2016 and one-two on five other dates (photos IDH). In 2017 10 were recorded in the field on 09 May in Hundred Acre, a single to light in the Whitehouse and four in the field on 10 May, a single in the HQ trap on 11 May and a single to light in St Georges Bushes on 02 June.
- 63.109 (1323) *Pediasia contaminella* (Hübner), **Nb.** Local. Jun-Oct.  
Recorded on the Estate on 12 August 1995, at HQ light on 26 July 2004, 19 July 2007 and 03 July and 08 August (two) 2009. Annual from 2010 (62 on 25 July) to 2017. Recorded between 19 June and 01 October.
- 63.110 (1324) *Pediasia aridella* (Thunberg), **Nb.** Very local. Jun-Aug.  
Recorded on the riverside saltings at Sampher and Hundred Acre Field in August 1956 and at least 20 on the Sampher saltmarsh on 28 June 2010 (FS). At HQ light small numbers in 2009, 2010, 2014, 2015 and 2016 between 25 June and 20 August. None in 2017.
- 63.111 (1326) *Platytes cerussella* (Denis & Schiffermüller), Local. Jun-Jul.  
Recorded in 1908, 1936 and in 16 years from 1960 to 2016 between 29 May and 06 July, including at least 60 in the dunes from Prince's northwards on 21 and 28 June 2010. In 2016 four were recorded in the Oasis on 18 June (FS) and at HQ light on 2 dates in June.
- 63.112 (1325) *Platytes alpinella* (Hübner), **pRDB3.** Rare. Jun-Sep.  
A very local sandhill-loving species taken on Cinque Ports and St Georges Golf Courses in 1935 – 1937 (Emmett A, 1977), 1948 – 1950, 1954, 12 August 1995 and 18 July 2006. Small numbers at HQ light in 2010 and 2012 to 2017 between 09 July and 23 August.
- 63.114 (1345) **Brown China-mark** *Elophila nympeata* (Linnaeus), Common. May-Oct.  
Attracted to light in many years from 1981 to 2017 (nine in 2009 and 10 in 2010) between 13 June and 13 September.
- 63.115 (1331) **Water Veneer** *Acentria ephemerella* (Denis & Schiffermüller), Common. May-Oct.  
Moderate to large numbers between 23 April and 10 September on the Estate in 1983, 1997, 2002, 2009, 2010 (up to 52 in July), 2012 (up to 35 in August), 2013 (200 in the Whitehouse on 09 August), 2014 (up to 85 in July), 2015, 2016 (up to 108 in July and 97 in August to HQ light) and 2017.
- 63.116 (1354) **Small China-mark** *Cataclysta lemnata* (Linnaeus), Common. May-Sep.  
Not uncommon at light on the Estate and annual in small numbers up to 2017 between 18 May and 13 September. There was a field record for Worth of four on 19 May 2016.
- 63.117 (1348) **Ringed China-mark** *Parapoynx stratiotata* (Linnaeus), Local. May-Aug.  
Recorded at light in 1936 and subsequently regularly to 2017 (up to nine in 2009, eight in 2011 and 2012, 28 in 2013, 30 in 2014 and 51 in 2015). Recorded between 18 May and 18 September.
- 63.118 (1350) **Beautiful China-mark** *Nymphula nitidulata* (Hufnagel), Common. May-Sep.  
Small numbers (up to nine) on the Estate in 1936, 1957 and at HQ from 1984 to 2017 between 01 June and 22 September.
- 63.120 (1328) *Schoenobius gigantella* (Denis & Schiffermüller), **Nb.** Local. May-Sep.  
Recorded on the Estate in 1950 and in small numbers at light in most years to 2017 (IDH) between 28 May and 21 September.
- 63.121 (1329) *Donacaula forficella* (Thunberg), Local. May-Sep  
Recorded on the Estate in 1950, 1990 and regular since to 2017 at HQ between 31 May and 10 September (up to 31 in July 2010).
- 63.122 (1330) *Donacaula mucronella* (Denis & Schiffermüller), Local. Jun-Sep  
Singles of this reed/sedge species were taken at HQ light on 14 July and 05 August 1983, 24 July 1994, 25 August 2008, 03 July 2009 (two), 15 August 2012 and 16 July 2014 (JGCB)

## A Systematic List of Macro-moths at the Bay

The following list presents a summary of the status of macro moths recorded at Sandwich Bay at the end of 2016. The scales of abundance applied to each species are intended to reflect the recent frequency and scale of their occurrence within the

Sandwich Bay recording area as accurately as possible. However, they should be treated with a degree of caution as it is clear that considerable and significant changes are taking place within the populations of an increasing number of species. In some cases they may reflect the influence of climate change, while in others habitat transformation has been more influential, particularly as scrub and woodland on the Estate continues to mature, creating a link between the Estate and the world beyond that did not exist three or four decades ago. It is also clear that intensive trapping and exploration since 2009 has been of considerable significance in providing a fuller appreciation of the occurrence of many species. The scales of abundance are as follows:

Ab	Abundant	100 or more may be expected in a night or in daytime
C	Common	20 or more may be expected in a night or during daytime, or more than 20 records may be expected annually
F	Frequent	Up to 20 records may be expected annually
O	Occasional	Fewer than 5 records annually
R	Rare	Fewer than 10 records in the area
x	Extinct	Historically resident but no longer so

Notes are provided in bold type where a species has been designated a degree of vulnerability by the Joint Nature Conservation Committee. Red Data Book species are described as RDB1 (endangered), RDB2 (vulnerable) or RDB3 (rare) and species described as Na or Nb are regarded as nationally scarce to a greater or lesser degree. Flight periods are applicable to the Sandwich Bay recording area.

The taxonomic treatment of some families represents a significant change from previous lists, particularly in respect of the *Cossidae* (the leopards and Goat Moth), *Sesiidae* (clearwings), *Limacodidae* (Festoon) and *Zygenidae* (burnets and foresters). These are now placed within the moths more familiarly regarded as micros, between the *Tortricidae* and *Pyralidae*. However, since these families have mostly been regarded as macros, for reasons of consistency they will continue to be included within the macros for the purposes of annual totals.

For some species/groups of species the only reliable way of determining the species is by Determination by Genitalia Examination indicated in the text by 'gen det'.

#### DREPANIDAE

- 65.002 (1646) **Oak Hook-tip** *Watsonalla binaria* (Hufnagel) 27 May – 06 September F  
Recorded at HQ light on 17 June 1986, 09 August 1991 and in 1995 on 30 August, 01 September and on the golf course on 05 September. Small numbers recorded at light in 2010 and 2012 to 2017.
- 65.003 (1647) **Barred Hook-tip** *Watsonalla cultraria* (Fabricius) R  
A locally common Beech-feeding species, recorded at light on 25 and 31 July 1982 (IDH) and 28 July 1992 (PB et al).
- 65.004 (1649) **Dusky Hook-tip** *Drepana curvatula* (Borkhausen) R  
A rare migrant recorded at HQ light on 10 August 2011 (JGCB) and on four dates between 01 and 15 August 2014 (JGCB).
- 65.005 (1648) **Pebble Hook-tip** *Drepana falcataria* (Linnaeus) 16 April – 17 September F  
Small numbers (up to eight in August 2009, six in July 2010 and 10 in August 2012) recorded annually from 1992 – 2017. In 2017 the date range was extended by a week at both the beginning and end of the flight period.
- 65.007 (1651) **Chinese Character** *Cilix glaucata* (Scopoli) 30 March – 30 September C  
Recorded annually to 2017 at light in small to moderate numbers (up to 11 in July 2010, 13 in August 2013 and 23 in September 2014). The adult on 30 March 2017 was our earliest by 3 days.
- 65.008 (1652) **Peach Blossom** *Thyatira batis* (Linnaeus) 30 May – 01 September O/F  
Recorded on the Estate on 21 July 1991 and singles at MV light in 2004, 2009 (two), 2010, 2012, 2013 (three), 2014, 2015 (two), 2016 (six), 2017 (four) one of which was our earliest by 12 days.
- 65.009 (1653) **Buff Arches** *Habrosyne pyritoides* (Hufnagel) 11 June – 18 August F  
Up to seven recorded at HQ light in most years to 2017 (14 in July 2013 and 12 in July 2015). Attracted to sugar in the Elms in July 1968.
- 65.010 (1654) **Figure of Eighty** *Tethea ocularis* (Linnaeus) 30 April – 20 July F  
Small numbers (up to five in 2009 and seven in 2016) annually at MV light from 1983 to 2017.
- 65.011 (1655) **Poplar Lutestring** *Tethea or* (Denis & Schiffmüller) R  
Recorded in 2009 in the Whitehouse on 25 June (FS) and at HQ light on 02 July (PDH, JGCB, AP).
- 65.012 (1656) **Satin Lutestring** *Tetheella fluctuosa* (Hübner) R  
Recorded at HQ light on 20 July 1991, on the golf course on 07 August 2002 and at HQ light on 07 July 2009, 30 June 2013 (JGCB) and 15 July 2014 (JGCB).

- 65.013 (1657) **Common Lutestring** *Ocropacha duplaris* (Linnaeus) 12 June – 15 August O  
Recorded occasionally, mainly from the Elms and the golf course from 1981 – 2015 and 2017 (five on 10 July 2010 and up to three in July 2015 (DG)).
- 65.014 (1658) **Oak Lutestring** *Cymatophorima diluta* (Denis & Schiffermüller) R  
Singles trapped at HQ on 30 September 2009 (JGCB) and 26 September 2010 (JGCB).

#### LASIOCAMPIDAE

- 66.001 (1631) **December Moth** *Poecilocampa populi* (Linnaeus) 03 November – 21 December F  
One-five recorded at MV light in most years from 1982 to 2017. In 2017 the latest date was extended by nine days.
- 66.003 (1634) **Lackey** *Trichodia neustria* (Linnaeus) 02 July – 06 September R  
The larval stage of this moth was often extremely common, frequently defoliating whole bushes of Hawthorn at Samfer and Stonelees. It was quite common between 1981 and 1987 but only six records since, though two were recorded in August 2013.
- 66.004 (1635) **Ground Lackey** *Trichodia castrensis* (Linnaeus) Na R  
A very local saltmarsh species mainly restricted to coastal sites from Kent to Suffolk. Long known to occur in Pegwell Bay but two on the Samfer saltmarsh on New Downs on 13 July 2000 (DMB) were the first records within the Recording Area. A larva was found in the same area on 21 June 2010 (PDH).
- 66.007 (1637) **Oak Eggar** *Lasiocampa quercus* (Linnaeus) 12 July – 25 August F  
Up to four at light most years, or observed in the area, to 2015 (nine). Single larvae were found in the Observatory Garden on 17/18 June 1978. In 2016 seven individuals were recorded over 4 dates. Nine were recorded over 8 dates in 2017.
- 66.008 (1638) **Fox Moth** *Macrothylacia rubi* (Linnaeus) 07 May – 16 June F  
One or two recorded at light in most years to 2017. Field observations of adults are regular and larvae are common over the golf course rough from the end of August into November and the first three months of the year.
- 66.010 (1640) **Drinker** *Euthrix potatoria* (Linnaeus) 21 May – 26 September C  
Recorded annually at MV light and often seen flying through the area on sunny days. Larvae frequently found along ditches and damp slacks on *phragmites*. In 2009, recorded from very early on 21 May to 27 August with four-six at HQ light on seven dates between 12 July and 01 August. Up to 11-12 in August 2010 and July 2011 and peaks of 13-15 in July/August 2012, 23 in August 2013, 25 in July 2014, nine in August 2016 and eight in July 2017.
- 66.012 (1642) **Lappet** *Gastropacha quercifolia* (Linnaeus) R  
Larvae found on Hawthorn on the Samfer and St Georges in July 1971. Singles at light on 11 July 1981 (DMB) and 18 July 1984 (IDH).

#### SATURNIIDAE

- 68.001 (1643) **Emperor Moth** *Saturnia pavonia* (Linnaeus) 02 April – 28 May F  
A female was ovipositing on Bramble at the Samfer in 2000, two were at HQ in 2004, singles were seen in 2005, a larva was found on Bramble near Middle Field in August 2007 and singles recorded at light in the Whitehouse on 18 April 2009, up to four were recorded in April 2012, though only singles were recorded in 2013, 2014, 2016 and 2017.

#### SPHINGIDAE

- 69.001 (1979) **Lime Hawk-moth** *Mimas tiliae* (Linnaeus) 13 May – 02 August O  
A few at light from 1978 to 1999. Annual in small numbers from 2000 to 2006 and from 2009 to 2016. None recorded in 2017.
- 69.002 (1980) **Eyed Hawk-moth** *Smerinthus ocellata* (Linnaeus) 26 April – 28 August F  
Not uncommon in the area and moths turn up on the Sallows in the Whitehouse. Up to 15 attracted to the MV light annually up to 2016.
- 69.003 (1981) **Poplar Hawk-moth** *Laothoe populi* (Linnaeus) 21 April - 09 September C  
Regularly attracted to the MV light with up to 20 annually in recent years up to 2016. Larvae found on the Poplars of St Georges and in gardens on the seafront in June/July. In 2016 79 individuals were recorded at HQ light with maxima of five on 08 June and 05 August. In 2017 85 individuals were recorded.
- 69.004 (1972) **Convolvulus Hawk-moth** *Agrius convolvuli* (Linnaeus) 06 July – 14 October O  
A noted migrant. Over 20 were collected from amongst myriads of moths attracted to the searchlight battery at the Bay in 1942 and several were taken in September 1946. Since then records have been sporadic until



2006. More recently records include one at HQ light in 2006, two in 2008, one on 19 September 2009, four singles in 2010 and 2011, two singles in 2012, one-two on five dates in 2014, three singles in 2015, seven singles in 2016 and one in 2017. Larvae were found on New Downs on 10 August 1995 and in a maize field around 23 August 2000.

- 69.005 (1973) **Death's-head Hawk-moth** *Acherontia atropos* (Linnaeus) R  
A scarce migrant from S Europe, Africa and the Middle East, a number were collected at light in 1942 and several were reported in the area in October 1959. Pupae were discovered in a potato field at Sandown Farm in 1945/46 from which adult moths emerged the following year. Otherwise the only records were one found on the Bay road, apparently having been struck by a car, on 10 October 1982 (IDH et al), two reported on the Estate in September 2003 and a dead individual found in a house on Sandown Road on 04 October 2017 (TO/CM confirmed IDH).
- 69.006 (1976) **Privet Hawk-moth** *Sphinx ligustri* (Linnaeus) 16 May – 11 August F  
Recorded in a Worth hedgerow in 1969 (two) and found annually in small numbers at HQ light and on the Estate from 1997 – 2017. In 2017 the earliest previous date was exceeded by five days. Several larvae were on the privet at the Tollgate on 18 September 1970, two larvae were found near the HQ on 25 September 1998 and one was recorded on 04 September 2016.
- 69.007 (1978) **Pine Hawk-moth** *Sphinx pinastri* (Linnaeus) 30 May – 19 August O  
Recorded in a light trap in the reedbed near the Observatory on 25 July 2008. Singles at HQ light on 09 and 11 July 2009 and on 04 June with one-two on five dates between 10-28 July 2010, singles on nine dates from 07 June – 22 July 2011, one on 19 August 2012, six singles in 2013 and three singles in 2014 and 2015 are fairly typical. None were recorded in 2016. There were two singles in 2017.
- 69.008 (1982) **Narrow-bordered Bee Hawk-moth** *Hemaris tityus* (Linnaeus) X  
Recorded here in 1908 (Emmett, 1977). A bee hawk-moth species, seen by Astor's Fence on 12 July 1976, was most likely to have been a Broad-bordered Bee Hawk-moth *H. fuciformis* (FS).
- 69.010 (1984) **Hummingbird Hawk-moth** *Macroglossum stellatarum* (Linnaeus) 12 March – 10 November C  
An erratically common immigrant species recorded around the Estate during the day. Large immigrations were recorded in 1974, 1984, 1986 and 2006. Early records in March and early April suggest that some may overwinter. A female was seen ovipositing on Lady's Bedstraw on 11 August 2014. A freshly-emerged adult was found in the Whitehouse on 07 September 2015. Six individuals were recorded from 24 June to 13 September in 2016. 79 were recorded in 2017 from 20 April to 01 November.
- 69.013 (1986) **Spurge Hawk-moth** *Hyles euphorbiae* (Linnaeus) R  
Singles were recorded on Sandwich Bay Estate on 27 July 1971 and at HQ light on 30 June 2010 (JGCB). Remarkably, 72 larvae were discovered along the beach north of Prince's old clubhouse on 28 July that year (IPH). Larval records of this species are exceedingly rare in the UK, with only nine records of up to three in the twentieth century (Atropos vol 41:58-59). Singles at HQ light on 29 June 2012 and 05 and 07 July 2014.
- 69.014 (1987) **Bedstraw Hawk-moth** *Hyles gallii* (Rottemberg) 02 July – 21 August R  
A migrant from S and E Europe, recorded in 1971, 1972 (three), 1976, 1989, 1995 (17 July), 1998 (21 August), 2000 and 2014.
- 69.015 (1990) **Striped Hawk-moth** *Hyles livornica* (Esper) R  
A migrant, singles were recorded at HQ light on 09 and 11 June 2004.
- 69.016 (1991) **Elephant Hawk-moth** *Deilephila elpenor* (Linnaeus) 14 May – 23 August C  
Annual at light up to 2017, up to nine in June - July 2009, 11 in July 2015. 47 individuals were recorded between 09 June and 05 August 2016 and in 2017 46 were recorded between 25 May and 01 August.
- 69.017 (1992) **Small Elephant Hawk-moth** *Deilephila porcellus* (Linnaeus) 22 April – 20 August C  
Regular at light, with up to 14 in June 2009 and, exceptionally, in 2010, 329 individuals were attracted to HQ light. Up to 29 were recorded in June 2015 and 32 in 2016. In 2017 190 were recorded with a maximum of 26 on 08 June.

## GEOMETRIDAE

- 70.003 (1696) **Bright Wave** *Idaea ochrata* (Scopoli) RDB1 13 June – 23 July C  
This is one of the Bay's specialities, currently restricted in the UK to the coast between Pegwell and Kingsdown. It can be common in June or July over the sand dunes and golf courses (60 along Prince's beach on 21 June 2009, 72 on 21 June 2010, 95 on 29 June and 01 July 2011 and 537 on 17 June 2017). One-two have been recorded at light in most years. In 2016 23 individuals were recorded at light over seven dates in July with a maximum of six on 15 July. In 2017 37 individuals were recorded at light over seven dates from 13 to 22 June with maxima of 5 on 17 June and 20 on the beach on 21 June (CM).
- 70.004 (1699) **Least Carpet** *Idaea rusticata* (Denis & Schiffermüller) 10 June – 17 September C  
Recorded at light in many years from 1977 - 2017 and regular in small numbers (usually up to a total of seven, exceptionally up to 16 in August 2013, 13 in July 2014 and 18 in June/July 2017).

- 70.006 (1705) **Dwarf Cream Wave** *Idaea fuscovenosa* (Goeze) 16 June – 18 August F  
Small numbers (up to eight in July 2009 and 19 in July 2010) recorded most years at HQ light up to 2017.
- 70.008 (1707) **Small Dusty Wave** *Idaea seriata* (Schrank) 26 May – 19 July, 03 August – 23 October C  
Increasingly regular from 1982 to 2017(10 individuals). Usually small numbers, but sometimes numerous (24 in 1995 and 2005, 15-16 in 2009 and 2010 and 28 in 2013).
- 70.009 (1709) **Satin Wave** *Idaea subsericeata* (Haworth) 15 May – 25 July, 04 August – 06 September F  
Up to six at light in 16 years from 1980 – 2017 (8).
- 70.011 (1708) **Single-dotted Wave** *Idaea dimidiata* (Hufnagel) 29 May – 20 September C  
Recorded in 1976 and annually from 1982 to 2017. Recent annual totals include up to 15 in August 2012, 14 in July 2013, 12 in 2015, 50 in 2016 with a maximum of 8 on 15 July and 53 in 2017 with a maximum of seven in the Big Gully on 19 July.
- 70.012 (1711) **Treble Brown Spot** *Idaea trigeminata* (Haworth) 09 June – 20 July F  
Regular in small numbers at HQ light and the Elms from 1989 – 2017 (four individuals over 2 nights at HQ and Whitehouse lights).
- 70.013 (1702) **Small Fan-footed Wave** *Idaea biselata* (Hufnagel) 07 June – 13 September F  
Recorded in Slazengers in 1967 then almost annually on the Estate and at HQ light in small numbers between 1985 and 2017 (11).
- 70.015 (1712) **Small Scallop** *Idaea emarginata* (Linnaeus) R  
One in the Whitehouse on 25 June 2009 and singles at HQ light on 04 and 07 August 2012, 29 July 2013 and on three dates from 11 July to 02 August 2014.
- 70.016 (1713) **Riband Wave** *Idaea aversata* (Linnaeus) 30 May – 27 August C  
Not uncommon on the Estate and at light up to 2017 (peak counts of 24 in July 2009, 49 in July 2010, 20 in August 2012, 46 in July 2013, 24 in July 2014, 14 in July 2016 and 12 in July 2017).
- 70.020 (1684) **Sub-angled Wave** *Scopula nigropunctata* (Hufnagel) **RDB2** R  
A rare species that breeds in Kent and occurs as a migrant, one was recorded at HQ light on 26 July 2013 (JGCB).
- 70.022 (1688) **Tawny Wave** *Scopula rubiginata* (Hufnagel) **RDB3** R  
The British population is resident on breckland areas of Norfolk and Suffolk, so singles at light on 09 August 1969 (JMC-H), 15 August 1980 (TH) and 23 August 1984 were presumably migrants.
- 70.023 (1689) **Mullein Wave** *Calothysanis marginepunctata* (Goeze) 18 May – 11 September O/F  
Numerous records were cited by Chalmers-Hunt to 1962. Recorded almost annually since up to 2015 in small numbers. No records in 2016 and two individuals recorded in 2017.
- 70.024 (1690) **Small Blood-vein** *Calothysanis imitaria* (Hübner) 09 June – 11 September O  
Small numbers at HQ light in 13 years from 1976 – 2015. None recorded in 2016 and four individuals recorded on three dates in July 2017.
- 70.025 (1692) **Lesser Cream Wave** *Calothysanis immutata* (Linnaeus) 23 May – 09 August O  
Recorded on the Reserve in Princes buffer zone on 25 June 1985, at HQ trap on 29 July 1985, in the Whitehouse on 25 June 2009 and in small numbers at HQ light in 2010, 2013, 2014, 2015 and 2017 (five individuals over four dates with the earliest being two weeks earlier than the previous record). Infrequent on coastal marshes but listed by Chalmers-Hunt who suggested it had been adversely affected by sea floods in 1953.
- 70.027 (1693) **Cream Wave** *Scopula floslactata* (Haw.), Local. May-Jun. O  
An adult seen on rough pasture on 03 May 1969 (TMR), on Whitehouse bushes on 25, 28 and 29 May 1985 (DMB, MP) several between 01 June and 28 June 1986 (NO et al) and singles on 26 and 29 June 2002.
- 70.028 (1691) **Rosy Wave** *Calothysanis emutaria* (Hübner) **Nb** 09 June – 24 August. O  
There were 16 records of one or two in 13 years from 1970 – 2010, then in small numbers in 2013, 2014, 2015 and singles in 2016 and 2017. A generally uncommon species of boggy coastal areas.
- 70.029 (1682) **Blood-vein** *Timandra comae* (Schmidt) 06 May – 20 September C  
Recorded annually in small numbers up to 2014 (nine), then in higher numbers - 29 individuals in 2016 and 55 in 2017 mainly at HQ light. Regularly disturbed by day from clumps of Elms and Willows around the Estate.
- 70.036 (1680) **Maiden's Blush** *Codonia punctaria* (Linnaeus) 21 April – 22 September O  
Recorded in the Cellars in 1993 and at HQ light in 2000, 2004, 2005, 2008, 2010, 2011, 2012, 2013 (six), 2014, 2016 (two) and 2017 (one plus one in the Whitehouse).

- 70.037 (1681) **Clay Triple-lines** *Codonia linearia* (Hübner) 16 May – 08 September R  
Recorded at HQ light on 29-30 June 2004 and singles in 2008, 2010, 2011, 2013, 2014 (two), 2015 (two) and 2017 (one) this one was a 1<sup>st</sup> generation individual recorded on 16 May at HQ light (SZW/IDH).
- 70.038 (1716) **Vestal** *Rhodometra sacraria* (Linnaeus) 29 June – 02 November F  
A migrant species of which there were 33 records in eleven years from 1983 – 2012 (including seven singles in 2010 and one-two on four dates in 2012). Totals of 40 were recorded in 2013, including nine on 04 October, 65 in 2015, including 18 on 30 August, seven in 2016 and 27 in 2017 (including 12 in the week after the previous latest record and a maximum of six on 25 October).
- 70.039 (1718) **Oblique Striped** *Phibalapteryx virgata* (Hufnagel) **Nb** 10 April – 10 September C  
A local species normally plentiful on the coastal dunes and the golf courses (eg 17 on 10 July 2010 and up to 32 in June and 50 in July 2011). Small numbers attracted to light annually from 1986 – 2017 (In 2016 a total of 20 individuals were recorded with a maximum of six on 05 August and in 2017 47 were recorded with a maximum of five on 17 June).
- 70.041 (1734) **July Belle** *Scotopteryx luridata* (Hufnagel) R  
One was found on the track near the sailing club on 16 August 2012 (AML, IPH {photo} confirmed by FS).
- 70.043 (1731) **Chalk Carpet** *Scotopteryx bipunctaria* (Denis & Schiffermüller) **Nb** R  
A chalkland species (and possible migrant) with one recorded on 18 September 1954 (JMC-H) and one in 2002.
- 70.045 (1732) **Shaded Broad-bar** *Scotopteryx chenopodiata* (Linnaeus) 03 June – 12 October C  
Small to moderate numbers at light almost annually from 1992 – 2017 (exceptionally, up to 28 in July 2010 and up to 47 in August 2013). In 2016 there were field records of 12 on 09, two on 10 and 14 on 16 August. In 2017 there was a maximum count of 20 in the Hundred Acre field on 01 August and 69 records to light mostly on the Estate (13 at HQ light) with the previous latest date being extended by three weeks.
- 70.046 (1719) **Oblique Carpet** *Orthonoma vittata* (Borkhausen) R  
Singles at light on St Georges Golf Course in 1961 (JMC-H) and HQ on 07 August 2002, with two on 03 July 2003 and one on 29 May 2011.
- 70.047 (1720) **Gem** *Nycterosa obstipata* (Fabricius) 08 May – 02 December F  
An immigrant species recorded in 1936 (two), 1961, 1967, 1969 and 1969 (JMC-H), 1987, 1993, 1994 (nine), 1995, 1997, 1998, 2006, 2008, 2009, 2010 (11) and 2011. Particularly numerous in 2012 when 20 recorded between 20 October – 12 November, including 10 on 23 October, and also in 2013 when 16 were recorded, followed by seven in 2014 and three in 2015. In 2016 there was an exceptionally early record of a single on 08 May followed by six singles between 24 August and 04 November. In 2017 there were just two individuals on 16 May and 16 July.
- 70.049 (1728) **Garden Carpet** *Xanthorhoe fluctuata* (Linnaeus) 22 April – 18 October C  
Common, with small numbers attracted to light annually between 1986 and 2017. In 2017 for example eight individuals were recorded over seven days.
- 70.051 (1724) **Red Twin-spot Carpet** *Xanthorhoe spadicearia* (Denis & Schiffermüller) 11 April–02 September C  
Fairly common at HQ and the Elms up to 2012; small numbers (up to seven) regularly attracted to light, but exceptionally numerous in 2013 when up to 23 recorded in August, with up to 16 in August 2015 and 30 in August 2016. In 2017 the earliest record was 10 days ahead of the previous earliest date and 53 individuals were recorded over 44 dates from 11 April to 26 July.
- 70.052 (1725) **Dark-barred Twin-spot Carpet** *Xanthorhoe ferrugata* (Clerck) 21 April – 05 September O  
Formerly quite common, with small numbers regularly attracted to light, but not recorded between 2002 and 2010. In 2011 there was a single record to light on 21 April, two on 09 August 2013, singles on 09 May 2014 and 07 August 2015 and singles on 09 May, 15 July and 05 and 24 August 2016. None were recorded in 2017.
- 70.053 (1722) **Flame Carpet** *Xanthorhoe designata* (Hufnagel) R  
One at HQ light on 10 July 2015 and on 05 August 2016 (IDH).
- 70.054 (1727) **Silver-ground Carpet** *Xanthorhoe montanata* (Denis & Schiffermüller) 05 May – 02 July O  
Recorded at light between 05 - 07 June 1980 (three), in the Elms between 24 and 31 May 1987 (up to seven) then almost annually at light in small numbers to 2015. In 2017 singles were recorded on five dates between 15 May and 03 June.
- 70.055 (1726) **Large Twin-spot Carpet** *Xanthorhoe quadrifasiata* (Clerck) R  
Two were trapped in the Elms on 13 July 1995, a single at HQ light on 26 June 2016 (IDH) and on 10 July 2017.
- 70.057 (1735) **Ruddy Carpet** *Catarhoe rubidata* (Denis & Schiffermüller) **Nb** 06 June – 11 August O

Singles recorded on 09 July 1992 (HQ building), 20 July 1994 (the Elms), at MV light on 29 - 30 July 1995 and 06 June and 11 August 2004, then small numbers at light from 2009 – 2016. None were recorded in 2017.

- 70.059 (1742) **Yellow Shell** *Camptogramma bilineata* (Linnaeus) 15 May – 26 September C/A  
Common to abundant throughout the area up to 2017 and at times hundreds may be disturbed from bushes around the Estate. In 2017 there were a total of 111 recorded over 26 days mainly field observations [101 individuals over 18 dates (including 3 days earlier and 3 weeks later than any previous records)].
- 70.061 (1738) **Common Carpet** *Epirrhoe alternata* (Müller) 20 April – 27 September C  
Small to moderate numbers fairly regularly at light to 2017 (up to 22 in August 2009, 19 in August 2012 and 26 in August 2016). In 2017 58 individuals were recorded over 35 dates between 20 April and 07 September with a maximum of eight on 29 May. Frequently found during the day resting in clumps of Sallows around the Estate.
- 70.062 (1739) **Wood Carpet** *Epirrhoe rivata* (Hübner) 26 May – 11 August O/R  
Recorded on the Estate on 26 May 1993, at HQ light on 03 July 2009 then one-two on nine dates in 2010, one-two on three dates in 2011, singles on three dates in 2012, one on 14 July 2013 and singles on 21 and 25 June 2014.
- 70.063 (1740) **Galium Carpet** *Epirrhoe galiata* (Denis & Schiffermüller) R  
Formerly regarded as fairly common over the rough grassland of the coastal sandhills, although the only records at light were on 06 July 1980 and 07 July 1985, with one in the Whitehouse on 02 August 2014 (FS).
- 70.064 (1793) **Cloaked Carpet** *Euphyia biangulata* (Haw.), Nb. Jul.  
A local hedgerow species recorded at light on 06 June 1982 and 25 June 1983 (IDH).
- 70.066 (1746) **Shoulder Stripe** *Earophila badiata* (Denis & Schiffermüller) 18 March – 15 May O  
Singles at MV light on 12 May 1983, 28 April 1987 (four in Slazenger's), 15 May 1989, 06 April 1995, 16/17 April 2004 and annual in small numbers from 2010 – 2013. In 2017 six individuals were recorded at light over five dates from 26 March to 27 April including on the Estate and at HQ.
- 70.067 (1747) **Streamer** *Anticlea derivata* (Denis & Schiffermüller) 09 April – 07 May R  
One near the outside light at HQ on 03 May 2005, two at HQ light on 28 April 2010 and singles on 07 May 2012, 18 April 2014 and 09 April 2015. Two singles were recorded on 09 (nine days earlier than previous earliest record) and 20 April 2017 to actinic light in the Elms and Whitehouse (SZW)
- 70.069 (1749) **Dark Spinach** *Pelurga comitata* (Linnaeus) 05 July – 03 September O  
Small numbers at HQ light, but less than annually. None recorded in 2016 or 2017.
- 70.070 (1745) **Mallow** *Larentia clavaria* (Haworth) 18 September – 12 November F  
Recorded frequently from 1982 to 2017 (totals of 17 in October 2010, 12 in October 2013, 27 in October 2016 and 46 in October 2017 with a maximum of seven on 17 October).
- 70.074 (1777) **July Highflyer** *Hydriomena furcata* (Thunberg) 02 June - 08 August C  
Common and regular at HQ light and in the Whitehouse in small numbers up to 2017 (totals of nine in July 2009 and July 2015, 13 in July 2016 and 18 in June and 4 in July 2017 the first being 11 days earlier than the previous earliest record).
- 70.075 (1778) **May Highflyer** *Hydriomena impluviata* (Denis & Schiffermüller) 18 May - 10 July C  
Recorded at MV light in 1995 and regular in small numbers (up to seven) from 2001 to 2016. 21 individuals were recorded in 2017 with a maximum of 12 in the Whitehouse on 16 June (FS).
- 70.077 (1767) **Pine Carpet** *Pennithera firmata* (Hübner) 19 May – 31 October O  
Recorded at light on 08 August 1975 (two), 10 August 1975 and on five dates at HQ and the Elms in 2009, then small numbers in 2010, and from 2012 to 2016. Exceptionally, up to 12 in June 2014. In 2017 23 individuals were recorded over 15 dates with a maximum of five on 22 September in the Elms and the latest date was extended by nine days.
- 70.079 (1769) **Spruce Carpet** *Thera britannica* (Turner) 10 April – 29 June, 27 August – 13 November O  
Recorded on 10 and 24/25 October 1994, in Green Barn Pines on 24 June 1995. Annual in small numbers between 2009 – 2015, including up to eight in June 2010 and five in September 2013. None were recorded in 2016 or 2017
- 70.081 (1768) **Grey Pine Carpet** *Thera obeliscata* (Hübner) 30 April – September/October O  
Recorded in small numbers in 15 years from 1984 – 2015, mostly at HQ light (exceptionally, up to 10 in September 2013). None were recorded in 2016. In 2017 a single was recorded at HQ light on 02 October.

- 70.083 (1771a) **Cypress Carpet** *Thera cupressata* (Geyer) 22 May - 28 June and 31 July – 14 November O/F  
A recent colonist, first recorded in Sussex in 1984 that appears to be increasing. Singles at HQ light on 08 June 2010, 18 October 2012 and 31 July 2013, then exceptional numbers in 2014, including one-two on eight dates between 22 May and 21 June and on 16 October, followed by up to five in October 2015. In 2016 there were a total of 15 individuals recorded comprising first generation singles on six dates in June and one to two second generation individuals recorded on six dates in October. In 2017 there were again a total of 15 individuals comprising four first generation individuals over two dates in June and in September to November singles were recorded on nine dates plus two in the Elms on 18 October and the latest record was extended by 2 weeks.
- 70.084 (1766) **Blue-bordered Carpet** *Plemyria rubiginata* (Denis & Schiffermüller) R  
An Alder/Birch species. Singles at MV light on 19 July 1983, 05 July 2009, 04 July 2010, 26 June 2011 and and 30 June and 13 July 2013.
- 70.085 (1765) **Barred Yellow** *Cidaria fulvata* (Forster) 26 May – 24 August O  
Recorded in Slazengers in 1976, on a sea-front fence in 1982 then one-two almost annually to 2009 then up to four in July 2010, five in July 2013 and June 2014, five in June/July 2016 and a total of six in June 2017 with three recorded in the Whitehouse on 16 June (FS).
- 70.087 (1752) **Purple Bar** *Cosmorhoe ocellata* (Linnaeus) 24 April – 15 July, 25 July – 13 September F  
Common and regular at light in small numbers (up to seven) in most years to 2016. In 2017 a total of 25 individuals were recorded over 18 dates in April to June and in August, the first record being 11 days earlier than the previous earliest record.
- 70.089 (1754) **Phoenix** *Eulithis prunata* (Linnaeus) O  
Formerly locally common with several records from Worth in the 1960s (JMC-H). Less regular now - singles at MV light on 10 August 1981, 12 July 1994, 24 July 1995 (Elms), 21 July 2009 and 29 July and 1 August 2013.
- 70.090 (1755) **Chevron** *Eulithis testata* (Linnaeus) 1 July – 21 September O  
Up to three attracted to the HQ MV light in seven years from 1975 – 2002 and 21 recorded in the Whitehouse on 29 July 1995. Small numbers in 2010, 2011, 2013, 2015 and 2016 (one).
- 70.092 (1757) **Spinach** *Eulithis mellinata* (Fabricius) R  
Formerly fairly regular with one-three at light most years to 1981, but only in 1986 and 2002 since.
- 70.093 (1758) **Barred Straw** *Gandaritis pyraliata* (Denis & Schiffermüller) 03 June – 17 September C  
Generally common and recorded annually up to 2017 with up to 19 at MV light (totals of 30 in July 2015 and 43 in July 2016). In 2017 a total of 42 were recorded with a maximum of six on 21 June and the latest record was extended by 10 days.
- 70.094 (1759) **Small Phoenix** *Ecliptopera silaceata* (Denis & Schiffermüller) R  
Singles at light in the Elms on 22 July 1989 and at HQ light on 27 July 2011 (JGCB), 27 April and 09 August 2014 and 15 July 2016 (IDH).
- 70.095 (1760) **Red-green Carpet** *Chloroclysta siterata* (Hufnagel) 03 April – 01 June, 21 September – 17 November O  
Recorded at HQ light on 27 September 1994 and annual at light in small numbers from 2009 – 2017. In 2017 only recorded in the later flight period.
- 70.097 (1764) **Common Marbled Carpet** *Dysstroma truncata* (Hufnagel) 20 May – 12 July, 16 August – 24 October F  
Recorded annually from 1981 – 2017. In 2017 there were singles recorded at light on five dates in May and June plus one field observation on 27 May and six dates in September and October – extending the latest date by two days.
- 70.100 (1776) **Green Carpet** *Colostygia pectinataria* (Knoch) 01 May – 13 July, 16 August – 16 September F  
Recorded annually in small numbers up to 2017; exceptionally up to seven in May and eight in August 2012. In 2017 there were 14 individuals recorded over eight dates in May, one in August and one in September at the HQ light, plus 23 individuals attracted to light in various areas of the estate on 10 dates between 11 May and 15 June and another six on four dates between 21 to 25 August.
- 70.106 (1799) **Winter Moth** *Operophtera brumata* (Linnaeus) 16 November – 02 May C  
Recorded in small numbers (up to four) in 14 years from 1982 – 2017, mostly in December and often at lighted windows.
- 70.1071 (1795x) **November Moth (agg)** 14 October – 15 November C  
A complex including November Moth *Epirrita dilutata*, Pale November Moth *E chrystyi* and Autumnal Moth *E*

*autumnata* indistinguishable except by gen det so recorded here as an aggregate. Recorded regularly at light in 14 years from 1977 – 2017.

- 70.107 (1795) **November Moth** *Epirrita dilutata* (Denis & Schiffermüller) R  
An individual is recorded as gen det in early November 1987 (CP).
- 70.109 (1797) **Autumnal Moth** *Epirrita autumnata* (Borkhausen) R  
One was trapped at HQ light on 25 October 2014 (M gen det IDH).
- 70.112 (1874) **Dingy Shell** *Euchoeca nebulata* (Scopoli) 12 May – 22 August O  
One at light on 07 July 1993, one outside the Observatory in early evening on 12 May 1994 and in small numbers annually at HQ light and in the Whitehouse between 2009 and 2017.
- 70.113 (1877) **Waved Carpet** *Hydrelia sylvata* (Denis & Schiffermüller) **Nb** R  
One at HQ light on 10 July 2010 (PDH, JGCB).
- 70.114 (1876) **Small Yellow Wave** *Hydrelia flammeolaria* (Hufnagel) R  
Recorded at light on 28 June 1954 (JMC-H), 03 July 1994, 13 June 2009, 23 and 24 July 2013 and 14 June and 11 July 2014.
- 70.118 (1791) **Brown Scallop** *Philereme vetulata* (Denis & Schiffermüller) R  
Mostly found on chalk downs, singles were recorded at HQ light on 10 July 2010 (PDH, JGCB, AP) and 10 July 2015 (DG).
- 70.119 (1792) **Dark Umber** *Philereme transversata* (Hufnagel) R  
Another species mainly found on chalk downs, one was recorded at HQ light on 16 July 2014 (JGCB).
- 70.121 (1789) **Scallop Shell** *Hydria undulata* (Linnaeus) O  
Singles in the Whitehouse on 25 June 2009, at HQ light on 16 July 2013 and at light on 21 June and 11 July 2014, 10 and 15 July 2015 and 15 July 2016.
- 70.126 (1781) **Small Waved Umber** *Horisme vitalbata* (Denis & Schiffermüller) 19 May - 25 August O  
Recorded annually in small numbers, but apparently decreasing, with just one in 2009, one-two on two dates in 2010, two singles in August 2012, three singles in July/August 2013, one in July 2014 and one on 28 August 2015.
- 70.127 (1782) **Fern** *Horisme tersata* (Denis & Schiffermüller) 03 July – 11 September O  
Recorded in the Haven on 26 July 1995, at HQ light on 26 August 2006 (two) and annually in small numbers (up to four) from 2009 – 2013. In 2020 Cryptic Fern was confirmed in UK so care now needs to be taken with any Fern species encountered.
- 70.128 (1784) **Pretty Chalk Carpet** *Melanthia procellata* (Denis & Schiffermüller) R  
Recorded on the HQ front door on 16 July 1995 and at HQ light on 10 September 2011, 10 August 2012, 24 August 2013 and 14 June 2014.
- 70.131 (1809) **Twin-spot Carpet** *Mesotype didymata* (Linnaeus) O/R  
Common at light in July - September 1980, August and September 1981 and on Hundred Acre Field in 1984. Now rare, with records on 19 July 1991, 06/07 August 2000, 29 July 2002, 06 August 2004 and 21 August 2016.
- 70.132 (1802) **Rivulet** *Perizoma affinitata* (Stephens) R  
Recorded at MV light on 30 May 1987 (AJM, AS).
- 70.133 (1803) **Small Rivulet** *Perizoma alchemillata* (Linnaeus) O  
Recorded in 1967, at MV light in 1983 (two), at MV light and also in Waldershare Gully in 1995 and in singles at HQ light in 2010, 2011, 2013, 2015 and on 19 and 20 July 2016.
- 70.134 (1804) **Barred Rivulet** *Perizoma bifaciata* (Haworth) 09 July – 24 September O  
A larva was taken on Red Bartsia at Sandwich Bay in 24 September 1949 (JMC-H). Recorded at HQ in 1973, 1981, 1993 (the Haven), 1995 (eight at MV light and two in the Whitehouse), 1998, 2002, 2005, 2008 and annually in small numbers from 2009 – 2017.
- 70.137 (1807) **Grass Rivulet** *Perizoma albulata* (Denis & Schiffermüller) 08 May – 31 July C  
Formerly common in small numbers but scarcer since about 2000. Resurgent in 2009/10 when up to 30 daily in the Whitehouse/Oasis, up to 15 in May 2014 and 200 in the Whitehouse on 19 June 2015. In 2016 there were 30 recorded over two dates in the Whitehouse and 64 over 25 dates at light in the Whitehouse and at HQ with maxima of nine on 11 June and 10 on 15 July. In 2017 273 individuals were recorded over 38 dates at light in the Whitehouse and at HQ with a maximum of 100 on 16 June and a field count of 80 on 29 May in the Whitehouse.

- 70.138 (1808) **Sandy Carpet** *Perizoma flavofasciata* (Thunberg) 14 May - 18 August F  
Frequent along the Ancient Highway and Restharrow Dunes Reserve with small numbers regularly attracted to light including at HQ up to 2017 (up to eight in June 2010 and nine in June 2012).
- 70.141 (1862) **Double-striped Pug** *Gymnoscelis rufifasciata* (Haworth) 14 March – 07 September F  
Small numbers recorded at light in most years to 2017 (up to six in August 2010 and 2012 and in 2016 a total of 18 over 11 dates with a maximum of five on 15 July). In 2017 the first record was 2 weeks earlier than the previous earliest date and 27 individuals were recorded over 22 dates with a maximum of three on 12 August.
- 70.142 (1858) **V-Pug** *Chloroclystis v-ata* (Haworth) 02 April – 05 September C  
Widespread in small numbers in many places on the Estate and golf course in almost overlapping broods. In 2016 one to four recorded on 11 nights at HQ light between 07 July and 04 August and in 2017 one to two on six dates between 04 April and 07 August.
- 70.144 (1860) **Green Pug** *Pasiphila rectangulata* (Linnaeus) 23 May – 27 July F  
Recorded sporadically from 1976 – 1995, but more numerous and widespread since 2001 and annual in small numbers (up to 11 in June 2014) from 2009 – 2017. In 2016 27 were recorded over 12 nights at light in June and July (maximum of seven on 15 July) and two on 06 September. In 2017 seven individuals were recorded over four nights from 29 May to 10 June.
- 70.146 (1813) **Haworth's Pug** *Eupithecia haworthiata* (Doubleday) R  
Recorded in the Observatory garden on 29 July 1995, in the Whitehouse on 25 June 2009 (FS) and at HQ light on 4 July 2014 and 15 July 2016 (IDH).
- 70.147 (1811) **Slender Pug** *Eupithecia 10uiata* (Hübner) 04 June – 11 August F  
Recorded at HQ light in 1989, 1994, 1995 (six) and in small numbers from 2009 – 2017. In 2016 18 were recorded over nine nights with a maximum of seven on 15 July at light in the Whitehouse and at HQ and in 2017 nine were recorded over 6 dates with a maximum of three on 16 June.
- 70.148 (1812) **Maple Pug** *Eupithecia inturbata* (Hübner) R  
One trapped on the golf course on 07 August 2002. (JP)
- 70.150 (1816) **Toadflax Pug** *Eupithecia linariata* (Denis & Schiffermüller) R  
Recorded at HQ MV light on 05 July 2001 (DMB)
- 70.151 (1817) **Foxglove Pug** *Eupithecia pulchellata* (Stephens) 24 May – 14 August R  
Recorded at Slazengers on 14 August 1977 and at HQ light on 20 July 2009, 24 and 25 June 2010, on 13 and 20 July 2011, 09 August 2012, 20 June 2013, 24 May 2014 and 08 June 2016.
- 70.152 (1855a) **Channel Islands Pug** *Eupithecia ultimaria* (Boisduval) R  
First discovered in Guernsey in 1984 it has since become fairly well established along parts of the south coast of England. One at light on 25 August 2016 (F gen det TD).
- 70.153 (1814) **Lead-coloured Pug** *Eupithecia plumbeolata* (Haworth) **Nb** 22 May - 14 July F  
Recorded in 1983 (Emmet, 1977) with singles at HQ MV light on 07 June 1993, netted in Little Gully on 01 June 1995 and small numbers (up to six) at HQ light annually from 2010-2016. In 2017 there were 40 individuals recorded over 11 dates from 22 May (a week earlier than previous earliest record) to 17 June with a maximum of 10 on 16 June and including a male on 28 May (gen det TD).
- 70.156 (1852) **Brindled Pug** *Eupithecia abbreviata* (Stephens) 30 March – 18 June O  
Singles at HQ light on 02 June 1994, 30 April 2009 and 04 June 2010. An exceptional series of records between 06 April – 07 May in 2011 including eight on 20 April. Small numbers in 2012 – 2014, 2016 and 2017 (two singles in May).
- 70.157 (1853) **Oak-tree Pug** *Eupithecia dodoneata* (Guenée) 05 April – 03 June O  
Recorded in the Elms on 22 May 1989 and at HQ light on 03 June 1995 and in small numbers in 2009, 2011, 2014, 2015 and 2016. In 2017 a single was recorded in the Whitehouse on 20 April (SZW)
- 70.159 (1855) **Cypress Pug** *Eupithecia phoeniceata* (Rambur) 14 June – 20 September F  
One to four recorded at light on the Estate in 14 years from 1997 – 2017 (up to seven in August 2012 and a total of seven in August/September 2016).
- 70.160 (1835) **White-spotted Pug** *Eupithecia tripunctaria* (Herrich-Schäffer) 30 April – 09 September F  
Recorded at light in 1988 with sporadic records of small numbers from 1993 – 2017, though not every year (up to eight in August 2013). In 2017 the latest date was exceeded by over two weeks.
- 70.163 (1856) **Larch Pug** *Eupithecia lariciata* (Freyer) R  
Recorded at HQ light on 18 June 2002 (DMB).
- 70.165 (1845) **Pimpinel Pug** *Eupithecia pimpinellata* (Hübner) O

Recorded at light at HQ on 13 July 1994 (ACJ) and 29 July 1995 (ACJ). Adults were bred from larvae taken from Burnet Saxifrage at the Whitehouse (FS) and there were light records from the same site in 2013 - 2017 (six on 09 August 2013, eight on 07 August 2015 (FS) and three on 04 August 2017 [FS]).

- 70.166 (1842) **Plain Pug** *Eupithecia simpliciat*a (Haworth) 22 June – 09 August F  
Recorded at light on 09 August 1981, 16 July 1985, 22 June 1993, 06 July 1993, 26 July 1995, on seven dates from 29 June – 30 July 2010, on 26 June and 26 July 2011, 12 and 26 July 2014, eight over seven nights from 08 July to 05 August 2016 and one in the Whitehouse on 14 July 2017.
- 70.168 (1846) **Narrow-winged Pug** *Eupithecia nanata* (Hübner) R  
Recorded at light on 13 August 1988 (IDH, confirmed CP), 16 June 1993 and 16 May 2017 (IDH).
- 70.169 (1849) **Angle-barred Pug** *Eupithecia innotata* f. *fraxinata* (Crewe) 06 May - 18 August O  
*E. innotata* is a rather complex taxonomic group, consisting of a number of forms previously thought to be separate species, but now believed to be different forms of the same species using different foodplants. One-two recorded in 1995, 1998, 2002, 2003 and annually from 2010 to 2015. In 2017 four were recorded over three dates.
- 70.173 (1825) **Lime-speck Pug** *Eupithecia centaureata* (Denis & Schiffermüller) 27 April – 23 September C  
Plentiful throughout the area and up to 10 regularly attracted to light up to 2017, with up to 16 in August 2012 and 14 in June and August 2013. In 2017 95 individuals were recorded over 53 dates with a maximum of nine on 15 July.
- 70.174 (1820) **Pinion-spotted Pug** *Eupithecia insigniata* (Hübner) Nb 30 April – 05 June O  
Fairly scarce with about 19 records from 1982 - 2013. A single recorded at HQ light on 23 May 2016 (IDH).
- 70.176 (1827) **Freyer's Pug** *Eupithecia intricata* ssp. *arceuthata* (Freyer) 19 May – 03 July O  
First recorded in Kent in 1951 and spreading with records on the Estate in 1983 and annually between 1993 and 2008. The next record was a single to light in St George's bushes on 02 June 2017 (SZW)
- 70.179 (1830) **Wormwood Pug** *Eupithecia absinthiata* (Clerck) 24 May – 27 August F  
Small numbers at HQ light from 1976 – 2017 (six singles in July 2009, up to five in August 2013 and singles on 14, 15 and 21 July 2017).
- 70.180 (1833) **Bleached Pug** *Eupithecia expallidata* (Doubl.), Nb. Jun-Aug. R  
Recorded at the Elms on 12 July 1989 (PB), in the Whitehouse on 21 July 1989 (PB), at lighted windows on 02 August 1994 (ACJ) and in Little Gully on 30 July 1995 (ACJ). A woodland species associated with Golden Rod, also reported from coastal scrub.
- 70.182 (1832) **Currant Pug** *Eupithecia assimilata* (Doubleday) Nb 12 May – 03 July, 7 July – 01 September F  
Recorded in small numbers in 1994, 1995 (Whitehouse), 2004 and annually from 2008 – 2015. In 2017 singles were recorded on the Estate on 09, 13 and 20 April and 23 and 25 August.
- 70.183 (1834) **Common Pug** *Eupithecia vulgata* (Haworth) 24 April – 07 August F  
A common species with small numbers at light annually up to 2017 (up to 15 in June 2010), though only singles in 2015. In 2017 singles or twos were attracted to light on 23 dates.
- 70.184 (1819) **Mottled Pug** *Eupithecia exiguata* (Hübner) 17 May – 14 July F  
20 records in seven years from 1982 – 2007. There were up to four at HQ light on five dates in 2009, up to three on 10 dates in 2010 and small numbers annually from 2011 – 2017. In 2017 there were singles on three dates.
- 70.186 (1841) **Yarrow Pug** *Eupithecia millefoliata* (Rössler) Nb 31 May – 20 August O  
One of the first British records was at Sandwich in July 1939. Occasional singles were recorded in six years from 1980 – 2004, with small numbers in 2011, 2012, 2013, 2014, 2016 and 2017 (three singles).
- 70.187 (1838) **Tawny Speckled Pug** *Eupithecia icterata* (Villers) 16 July – 14 September O  
Small numbers recorded annually at light up to 2017. In 2017 seven individuals were recorded over six dates.
- 70.188 (1839) **Bordered Pug** *Eupithecia succenturiata* (Linnaeus) 13 June – 23 August F  
First recorded in 1969 with one-six almost annually at light from 1980 – 2016. None were recorded in 2017.
- 70.189 (1840) **Shaded Pug** *Eupithecia subumbrata* (Denis & Schiffermüller) 11 May – 17 July C  
Recorded in 1976, 1987 and annually at light between 2000 and 2017 in small to moderate numbers, with up to 15 in June 2009, up to 22 in July 2010 and 31 in July 2013. In 2017 46 individuals were recorded over 23 nights with maxima of six on 02 and 16 June between 11 May (earliest date by about a week) and 21 June
- 70.190 (1837) **Grey Pug** *Eupithecia subfuscata* (Haworth) 09 May – 02 August, 18 October C  
Probably much overlooked with records at HQ light in 1976, 1988 and 11 records from 1993 – 2007 (most identified by genitalia). There were 12 records of about 21 individuals at HQ light in 2009, including six on 25



June, and small numbers since up to 2017, with a remarkably late individual on 18 October 2013. In 2017 23 individuals were recorded over 12 dates between 15 May and 16 June with a maximum of eight on 16 June.

- 70.192 (1867) **Treble-bar** *Aplocera plagiata* (Linnaeus) 06 May – 19 June, 27 July – 20 September F  
Small numbers taken annually at light between 1981 and 2017. A single on 01 September was the only record in 2016. In 2017 three individuals were recorded on 16 May, 23 August and 09 September
- 70.193 (1868) **Lesser Treble-bar** *Aplocera efformata* (Guenée) 07 May – 27 September O  
Recorded at HQ light on 18-19 May 2004 and in small numbers annually from 2009 – 2014. In 2016 a single was recorded at HQ light on 03 August and one was recorded on New Downs on 26 May. In 2017 singles were recorded on 14 August (Elms) and 21 August (Whitehouse) (SZW).
- 70.195 (1864) **Streak** *Chesias legatella* (Denis & Schiffermüller) R  
One at HQ light on 28 October 2011 (JGCB).
- 70.196 (1865) **Broom-tip** *Chesias rufata* (Fabricius) **Nb** O  
Recorded at light in July 1982 (IDH) and one-four on seven nights between 18 June and 05 July in 1983 (IDH)
- 70.198 (1879) **Seraphim** *Lobophora halterata* (Hufnagel) R  
Two on 22 April (JGCB) and one on 21 May 2011 (FS).
- 70.199 (1882) **Small Seraphim** *Pterapherapteryx sexalata* (Retzius) 13 May – 27 August F  
Nine records between 1976 and 1994 and 22 in 1995. Since then singles at HQ MV light on 01 June 2004 and on the Estate on 20 June 2005, then 12 in the Whitehouse on 25 June 2009 and annually in small numbers at HQ light from 2010-2017. In 2017 30 individuals were recorded over 14 dates with a maximum of 12 on 16 June.
- 70.200 (1883) **Yellow-barred Brindle** *Acasis viretata* (Hübner) 05 May – 05 July, 08 August – 04 September O  
Recorded on the Estate in small numbers from 1980 – 2017 (eg up to three in June 2014). In 2017 ones or twos were recorded on four dates – 26 May, 02 and 17 June and 25 August
- 70.201 (1880) **Barred Tooth-striped** *Trichopteryx polycommata* (Denis & Schiffermüller) R  
A scarce species, mostly found on the chalk, one was recorded at HQ light on 08 March 2014 (JGCB, IPH).
- 70.202 (1881) **Early Tooth-striped** *Trichopteryx carpinata* (Borkhausen) R  
One trapped at HQ on 12 April 2009 (PCH, PH).
- 70.205 (1884) **Magpie** *Abraxas grossulariata* (Linnaeus) 05 June – 31 August O  
Recorded annually in the Elms or bushy areas of Whitehouse and in small numbers annually at HQ light up to 2017 (up to 10 in June 2014). In 2017 seven individuals were recorded over six dates between 12 and 29 June.
- 70.206 (1885) **Clouded Magpie** *Calospilos sylvata* (Scopoli) R  
Recorded at HQ light on 26 July 1985, 16 August 2012 (JGCB) and 19 July 2017 (IDH).
- 70.207 (1887) **Clouded Border** *Lomaspilis marginata* (Linnaeus) 09 April – 05 September C  
Frequent about clumps of Sallows and common at light with occasional second generation moths into August/September up to 2017. Up to 19 at HQ light in June 2009, up to 29 in July 2010, 35 in July 2013, 42 in July 2015, 22 in July 2016 and maxima of 20 on 16 June and 30 on 04 August in 2017.
- 70.208 (1888) **Scorched Carpet** *Ligdia adustata* (Denis & Schiffermüller) 27 April – 11 September O  
Recorded at HQ light on 30 August 1994, 18 August 2002, 25 August 2006, in Slazengers on 19 July 1995 and in the Cellars on 05 May with one-two at HQ light on three dates in 2009, 11 dates in 2010, three dates in 2013, five in 2014 and just one in 2015. None were recorded in 2016. In 2017 two were recorded on 30 March then eight singles between 21 June and 25 August.
- 70.211 (1889) **Peacock Moth** *Macaria notata* (Linnaeus) 09 May – 29 August O  
Recorded on 05 August 1992 and 2000 with small numbers since. Records of up to 10 in July and seven in August 2009. It was absent in 2013 and only one-two singles were recorded in 2014 - 2017.
- 70.212 (1890) **Sharp-angled Peacock** *Macaria alternata* (Denis & Schiffermüller) 09 April – 08 September C  
A local species recorded on 11 August 1969 and almost annually at light between 1980 and 2017. Increasing, with 23 records of up to four at light and 10 in the Whitehouse on 25 June in 2009, up to 15 at light in August 2010, up to 24 in August 2012, 14-17 in 2013 and 2014 and 20 in 2015. In 2016 66 were recorded over 30 nights between 08 May and 04 September. In 2017 180 were recorded over 66 dates between 14 May and 02 September with a maximum of 35 on 04 August.
- 70.214 (1893) **Tawny-barred Angle** *Macaria liturata* (Clerck) 07 May – 28 August O  
Recorded in the 1920's, at Slazengers in 1976 and small numbers at HQ light in 1988, 1993, 2002, 2010, 2012

- 2015. None were recorded in 2016. In 2017 mainly singles were recorded on seven dates.

- 70.217 (1896) **Rannoch Looper** *Macaria brunneata* (Thunberg) **Na** **R**  
An unprecedented influx into south-east England took place in 2009. Seven were present in Big Gully on 09 June, with one-two there and in Middle Field on the next two days and at light at HQ on 12 and 30 June. Records in 2010 of three on 17 June, one on 24 June and two on 26 June suggested that breeding may have taken place locally. One-three were recorded on three dates between 03 and 10 June 2011.
- 70.218 (1894) **Latticed Heath** *Chiasmia clathrata* (Hübner) 20 April – 21 September **C**  
A common species over rough grassland and regular in small numbers at light up to 2017. In 2017 54 were recorded over 24 dates between 02 May and 25 August with a maximum of nine on 23 August.
- 70.222 (1902) **Brown Silver-line** *Petrophora chlorosata* (Scopoli) 23 April – 07 July **O**  
A species associated with Bracken, with up to four recorded in 1982, 1993, 1995, 2002, 2003, 2009 and annually to 2014, with up to 19 in May 2010 and 14 in May 2011. Scarcer since, probably as a result of more diligent bracken control. In 2016 four were recorded on 08 May in the Whitehouse (IPH) and singles recorded at HQ light on 10 and 15 June (IDH). In 2017 two were recorded at HQ light on 16 May (IDH) and singles recorded at light on 22 and 24 May (Middle Field and Whitehouse [SZW]) and on 16 June in the Whitehouse (FS).
- 70.224 (1904) **Scorched Wing** *Plagodis dolabraria* (Linnaeus) 20 May – 19 July **O**  
Recorded at HQ light on 19 and 30 June 2000, 17 and 23 June 2002, 23 June 2006 and in small numbers from 2009 – 2016, though unrecorded in 2012 and 2017.
- 70.226 (1906) **Brimstone Moth** *Opisthograptis luteolata* (Linnaeus) 13 April – 03 October **C**  
Common throughout the area and one-five regular at light in two - three generations. Increasingly numerous and recorded annually between 2009 and 2017 (with maxima of 14 at HQ light in 2009, 21 in August 2010, 16 in August 2011, 39 in August 2012, 31 in August 2013, 20 in September 2014 and 23 in August, 22 in September 2016 and 13 in August 2017)
- 70.227 (1907) **Bordered Beauty** *Epione repandaria* (Hufnagel) 14 June – 11 October **F**  
First recorded on 17 August 1969 with records until 1998 then annually to 2017 in small numbers (up to six).
- 70.229 (1909) **Speckled Yellow** *Pseudopanthera macularia* (Linnaeus) May – September **X**  
Formerly common in the Elms and other bushy areas of the Estate and occasional at light. However, the only record since 1984 was on 09 July 1991.
- 70.230 (1924) **Orange Moth** *Angerona prunaria* (Linnaeus) **R**  
One was trapped in Prince's plantation on 04 July 2015 (confirm IDH).
- 70.231 (1910) **Lilac Beauty** *Apeira syringaria* (Linnaeus) **R**  
Recorded at HQ light on 16 and 31 July 2004, 02 July 2009 and two in Restharrow on 12 July 2014.
- 70.232 (1911) **Large Thorn** *Ennomos autumnaria* (Werneb.)Nb 05 August – 02 October **O**  
East Kent is a favoured area of this locally common moth which appeared at light almost annually from 1982 - 2010 (up to three in 2009) and in 2013 and 2014. In 2017 two were recorded on 26 August at HQ light (IDH)
- 70.233 (1912) **August Thorn** *Ennomos quercinaria* (Hufnagel) 26 July – 23 September **R**  
Recorded at light on 14 August 1981 (DMB), 07 and 23 September 1982 (IDH), 23 August and 05 September 1983 (IDH). One on 26 July 2013.
- 70.234 (1913) **Canary-shouldered Thorn** *Ennomos alniaria* (Linnaeus) 09 July – 09 October **F**  
Small numbers recorded at light up to 2017 (eg up to five in August 2010 and 2013 and in July 2014). In 2017 18 were recorded over 13 dates with a maximum of five on 04 August.
- 70.235 (1914) **Dusky Thorn** *Ennomos fuscantaria* (Haworth) 16 July – 07 October **F**  
Recorded at light on 13 August 1975, 25 October 1977 and 24 and 29 September 1980, with small numbers annually between 2009 and 2017 (up to seven in September 2013). In 2017 ones or twos were recorded on 22 dates from 14 July to 26 September.
- 70.236 (1915) **September Thorn** *Ennomos erosaria* (Denis & Schiffermüller) **R**  
Three recorded at light between 04 and 24 September 1980 (DMB) and one on 18 August 2001.
- 70.237 (1917) **Early Thorn** *Selenia dentaria* (Fabricius) 14 March – 09 May, 04 July – 04 September **F**  
Recorded at light in 1969 and annually in small numbers from 1978 – 2017. In 2017 there were 17 records over nine dates from 20 March to 11 April and singles on four dates between 13 July and 04 September.
- 70.238 (1918) **Lunar Thorn** *Selenia lunularia* (Hübner) **R**

Singles at HQ light on 18 August 2012, 17 July 2014, 03 August 2016 (IDH) and 15 July 2017(IDH).

- 70.239 (1919) **Purple Thorn** *Selenia tetralunaria* (Hufnagel) 15 -17 April, Mainly July – August O  
Recorded in small numbers in nine years from 1969 – 2011.
- 70.240 (1920) **Scalloped Hazel** *Odontopera bidentata* (Clerck) R  
Recorded at light on 01 June 1983, 27 May 1985 and 16 and 19 May 2014 (JGCB).
- 70.241 (1921) **Scalloped Oak** *Crocallis elinguaris* (Linnaeus) 01 June – 24 September F  
Recorded in 1969 with up to eight annually from 1975 to 2017. During July and August 2017 there were 12 individuals recorded over eight dates with a maximum of 4 on 10 July.
- 70.243 (1922) **Swallow-tailed Moth** *Ourapteryx sambucaria* (Linnaeus) 14 June – 12 August F  
Fairly common with up to 20 recorded annually up to 2017 at light. In 2017 a total of three individuals were recorded - two on 05 July and another late one on 07 October (IDH).
- 70.244 (1923) **Feathered Thorn** *Colotois pennaria* (Linnaeus) 09 September - 02 December F  
Small numbers recorded in 18 years from 1983 – 2017. Between 01 October and 15 November 2017 there were 21 individuals recorded over 14 dates.
- 70.245 (1663) **March Moth** *Alsophila aescularia* (Denis & Schiffermüller) 15 February – 23 April F  
Small numbers regular at light from 1983 – 2017 (up to 12 in April 2010). In 2017 there were 30 individuals recorded over 13 dates between 10 March and 17 April with a maximum of 8 on 14 March.
- 70.246 (1925) **Small Brindled Beauty** *Apocheima hispidaria* (Denis & Schiffermüller) R  
One at HQ light on 25 February 2015 (IDH).
- 70.247 (1926) **Pale Brindled Beauty** *Apocheima pilosaria* (Denis & Schiffermüller) 16 December – 20 March F  
Recorded at an outside doorway light on 27 February 1987 with another on 06 February 1995 and small numbers (up to six) annually from 2010 to 2015. None were recorded in 2016. In 2017 there were four individuals recorded over three dates in February (IDH) and March.
- 70.248 (1927) **Brindled Beauty** *Lycia hirtaria* (Clerck) 08 April - 12 May O  
Recorded in 1983 and almost annually since up to 2016 in ones and twos. There were none in 2017.
- 70.251 (1930) **Oak Beauty** *Biston strataria* (Hufnagel) 10 March – 17 April O  
Recorded at light on 09 April 1983, 17 April 1984, 18, 25 and 28 March 2004 and 23 March 2005, then in small numbers annually from 2010-2014. Singles recorded on 15 and 29 March 2017 (IDH)
- 70.252 (1931) **Peppered Moth** *Biston betularia* (Linnaeus) 13 May – 12 August C  
Fairly common in the area with small numbers at light up to 2017 (up to nine at HQ light in June 2009, eight in July 2014, seven on 15 July 2016 and in 2017 49 individuals were recorded over 26 days from 16 May to 27 July with a maximum of 12 on 30 May). Melanistic and light forms were about equally common but increasingly the light form predominates. Mixed pairs were seen in 1970 and 1982 and an intermediate variety was taken at light in 1984.
- 70.253 (1932) **Spring Usher** *Agriopis leucophaearia* (Denis & Schiffermüller) R  
One at HQ light on 16 February 2012 (JGCB) and one on 16 February 2017 (IDH).
- 70.254 (1933) **Scarce Umber** *Agriopis aurantiaria* (Hübner) 30 October – 28 November R  
Singles at HQ light on 15 November 2009 (PDH, AP, JGCB), 30 October 2010 (JGCB), 04 and 28 November 2011 (JGCB) and two on 17 November 2012.
- 70.255 (1934) **Dotted Border** *Agriopis marginaria* (Fabricius) 15 February – 26 April F  
Occasionally seen feeding at Sallow catkins in spring, with small numbers at HQ light annually from 2009 – 2017. In 2017 there were singles on five dates between 11 March and 13 April at light at HQ and in the Elms.
- 70.256 (1935) **Mottled Umber** *Erannis defoliaria* (Clerck) 10 October – 10 January O  
Recorded on the HQ wall on 22 December 1994 and at light on 10 October 1998, with two on 09 and 10 January and one on 21 December 2012 and small numbers in 2013, 2014 and 2015. In 2017 a single was recorded at HQ light on 14 November (SZW)
- 70.257 (1936) **Waved Umber** *Menophra abruptaria* (Thunberg) 21 April – 20 June, 26 August O  
Recorded in small numbers in 15 years from 1982 – 2017. In 2017 singles were recorded at light on the Estate and at HQ on four dates between 11 May and 08 June.
- 70.258 (1937) **Willow Beauty** *Peribatodes rhomboidaria* (Denis & Schiffermüller) 06 May – 01 November C  
Recorded at light in 1969 and fairly common most years from 1981 – 2017 eg up to 12 in June 2009. In 2017 84 individuals were recorded over 48 dates between 15 May to 30 September at light widely across the Estate and at HQ light with a maximum of seven on 02 June).

- 70.265 (1941) **Mottled Beauty** *Alcis repandata* (Linnaeus) 28 May – 18 August F  
Recorded in 1976 and annually in small to moderate numbers from 1981 – 2006 and from 2009 – 2017 (up to six in June 2009, 25 in June 2014 and in 2017 30 individuals were recorded at light over 10 dates from 28 May to 20 June with a maximum of 12 on 13 June in the Elms).
- 70.268 (1944) **Pale Oak Beauty** *Hypomecis punctinalis* (Scopoli) 08 May – 22 July O  
Recorded in 1975 and 1993 but more frequently in small numbers in 13 years from 2002 to 2016 (exceptionally up to 10 in June 2014). In 2017 singles were recorded on three dates from 29 May to 21 June.
- 70.270 (1947) **Engrailed** *Ectropis crepuscularia* (Goeze) 11 February – 12 September F  
Recorded in July/August in 1981, 1987, 1989 (Whitehouse), 1995 (Elms) and 2005. Small numbers annually at HQ light between 2009 and 2016. In 2017 15 individuals were recorded at light over 12 dates from 10 March to 26 August with a maximum of three on 23 August.
- 70.276 (1954) **Bordered White** *Bupalus piniaria* (Linnaeus) 07 May – 20 July O  
A species associated with pine, recorded on the Hundred Acre Field on 10 June 1986 and in the Green Barn Pines on 24 June 1995 (two). At HQ there have been occasional records from 1983 with small numbers annually from 2009 – 2012 and in 2015 but none since.
- 70.277 (1955) **Common White Wave** *Cabera pusaria* (Linnaeus) 21 April – 14 September C  
Occasionally seen in clumps of Sallows about the Estate with up to six recorded annually at light up to 2015. More frequent in 2009 when up to 14 were recorded at HQ light in June, with up to eight in July. In 2016 21 were recorded over 17 nights between 10 June and 25 August with a maximum of five on 15 July. In 2017 34 were recorded over 20 nights between 21 April and 29 August with a maximum of six on 16 June.
- 70.278 (1956) **Common Wave** *Cabera exanthemata* (Scopoli) 21 April – 14 September C  
More common than the preceding species and small numbers attracted to MV light annually up to 2016. More frequent in 2009 when up to 11 were recorded at HQ light in June, with up to five in July and a peak count of 25 on 20 August. Since then, up to 20 in August 2013 and 26 in August 2014. In 2016 86 were recorded over 56 nights between 23 May and 13 September with a maximum of six on 05 August. In 2017 191 were recorded at light over 65 dates between 10 May and 02 September with maxima of 11 on 21 and 22 August.
- 70.280 (1958) **Clouded Silver** *Lomographa temerata* (Denis & Schiffermüller) 30 April – 07 August C  
One or two attracted to light from 1976 onwards. More numerous from 2009 when 18 were attracted to HQ light on 22 June and 36 were recorded on 25 June including 19 by day in the Whitehouse, nine at HQ light and eight at light in the Elms. Up to 28 in June 2014, 15 in June 2015, in 2016 a total of 78 over 25 nights between 06 June and 19 July with maxima of nine on 11 June and eight on 07 July and in 2017 there were 34 individuals recorded over 16 dates between 15 May and 10 July with a maximum of 15 in the Whitehouse on 08 June.
- 70.282 (1960) **Early Moth** *Theria primaria* (Haworth) 24 January – 16 March O  
Recorded on the Observatory kitchen window on 26 February 1985 and at light on 08, 14 and 16 March 1986. Larvae were found feeding on Hawthorn on the Estate on 08 July 1986. One at HQ light on 11 February 2011, up to four in February 2012, two on 15 February 2013 and singles on 16 and 18 February 2017 (IDH).
- 70.283 (1961) **Light Emerald** *Campaea margaritata* (Linnaeus) 15 May – 08 October C  
Singles attracted to light almost annually from 1976 - 2006. Apparently increasing since 2009 when there were eight counts of 10 or more, including a peak of 21 on 22 August. Subsequently annual in small to moderate numbers from 2011 to 2016, including up to 26 in September 2013 and in 2016 totals of 38 in August and 31 in September with maxima of 10 on 27 August and 06 September. In 2017 there were records of 128 individuals attracted to light over 55 dates from 15 May to 29 September with maxima of 8 on 21 August at HQ and on 23 August in the Elms.
- 70.284 (1962) **Barred Red** *Hylaea fasciaria* (Linnaeus) 14 June – 25 September F  
Recorded at light on 15 July 1987 and at Gullies light on 14 June 1989 (two) with a late example of the green form *H.f. prasinaria* on 25 September 1998. One at HQ light on 09 July 2010, an example of the green form on 27 June 2011, one on 07 September 2012 then annual in small numbers to 2015. After none in 2016, four individuals over three dates from 22 August to 09 September 2017 were attracted to light in the Elms and at HQ. Recent records are mostly the green form.
- 70.288 (1945) **Brussels Lace** *Cleorodes lichenaria* (Hufnagel) R  
One was attracted to HQ light on 09 June 2014 (JGCB, IPH).
- 70.293 (1967) **Straw Belle** *Aspitates gilvaria* (Denis & Schiffermüller) R  
One at HQ light on 31 July 2013 (JGCB) may well have been an immigrant.
- 70.294 (1968) **Yellow Belle** *Napuca ochrearia* (Rossi) 24 April – 07 July, 01 August - 29 September C  
Common throughout the area up to 2017 with up to 10 regularly attracted to light (up to 16 in May 2010 and 15 in July 2015). In 2016 many recorded at HQ light as well as a single recorded as a sight record on 17 May on the spillway at New Downs and three on 16 August. There was a similar pattern in 2017 with sight records of three individuals on 16 May at Restharrow Dunes and a single on 25 August at New Downs. In the early

period there were 21 individuals recorded over nine dates between 02 May and 08 June at HQ light with a maximum of nine on 16 May and in the later period, between 21 August and 02 September, 10 individuals were recorded over eight dates.

- 70.296 (1664) **Rest Harrow** *Aplasta ononaria* (Fuessly) **RDB3** 28 May – early September C  
 Something of a Bay speciality. Common along the dunes and rough grassland from Stonelees to Deal (eg. 18 on Prince's beach on 21 June 2010 and 56 at the Point on 16 August 2016 (SZW)). Only occasionally taken at light. However, in 2016 27 individuals were recorded over 15 nights between 05 and 28 August (a maximum of seven on 23 August). In 2017 over the wider recording area 63 individuals were recorded between 28 May and 21 August with a very early record of a single on 28 May on the beach (IPH) and maxima of 18 at Princes on 17 June, and 12 on 01 August and 14 on 14 August in the Hundred Acre area. At HQ light mainly singles were recorded over seven dates from 18 June to 26 August.
- 70.297 (1665) **Grass Emerald** *Pseudoterpna pruinata* (Hufnagel) R  
 Recorded on the Estate in 1969 (JMC-H) and on 27 June 1990.
- 70.299 (1666) **Large Emerald** *Geometra papilionaria* (Linnaeus) 01 June – 09 August O  
 An uncommon moth with only 11 records of one or two from 1976 – 2013.
- 70.302 (1673) **Small Emerald** *Hemistola chrysoprasaria* (Esper) 07 June – 10 August O  
 Up to four almost annually from 1976 – 1987 and in 1995, 1997, 2002 (two), 2009 (three), 2011, 2012 (two), 2013 (five), 2014, 2015, 2016 (four on 15 July) and 2017 (singles on 09 and 14 July).
- 70.303 (1674) **Little Emerald** *Jodis lactearia* R  
 One at HQ light on 28 May 2012 (JGCB).
- 70.304 (1672) **Sussex Emerald** *Thalera fimbrialis* (Scopoli) **RDB1** R  
 One at HQ light on 03 July 1992 (PAB et al) was either an immigrant or a wanderer from the Dungeness colony; the only breeding site in the county at the time. A worn individual was recorded at HQ light on 01 July 2015 (IDH).
- 70.305 (1669) **Common Emerald** *Hemithoa aestivaria* (Hübner) 06 June – 28 August F  
 Almost annual in small numbers (typically up to five-six, but up to 13 in July 2015) from 1982 - 2017.

#### NOTODONTIDAE

- 71.001 (2022) **Oak Processionary** *Thaumetopoea prcessionea* (Linnaeus) R  
 One at light on 05 August 2016 in the Whitehouse (FS).
- 71.003 (1995) **Puss Moth** *Cerura vinula* (Linnaeus) 12 April – 10 August O/F  
 Small numbers recorded at light in most years up to 2017. Larvae often encountered on Poplars around the area and less frequently on salix in June/July. In 2017 there was a single record on 24 May.
- 71.005 (1997) **Sallow Kitten** *Furcula furcula* (Clerck) 27 April – 24 August F  
 Recorded at light in 1967, 1969 and in most years from 1982 – 2017 (up to eight in August 2010, 14 in August 2015, a maximum of 13 in August 2016). In 2017 mainly singles were recorded on nine dates from 16 June to 24 August.
- 71.007 (1998) **Poplar Kitten** *Furcula bifida* (Brahm) 19 May – 12 August O  
 Recorded feeding at Privet flowers in the HQ garden in the evening in 1979 then at light in 1983, 1984, 1992, 2000 (seven), 2004, 2009, 2015, 2016 and 2017 (a single record on 01 August). Larva found in a Poplar hedge on New Downs in 1994.
- 71.009 (1999) **Lobster** *Stauropus fagi* (Linnaeus) R  
 A larva, found on Hawthorns in the Elms in July 1967, was reared and produced an adult moth on 06 June 1968 (DMB).
- 71.012 (2000) **Iron Prominent** *Notodonta dromedarius* (Linnaeus) 21 April – 05 September F  
 Recorded from 1968 – 1988, then more frequently in small numbers from 1992 – 2016 (up to six-seven in 2010 and 2014). In 2017 mainly singles were recorded on seven dates from 16 June to 10 August.
- 71.013 (2003) **Pebble Prominent** *Notodonta ziczac* (Linnaeus) 30 March – 28 August. C  
 First recorded in 1969 and up to 12 annually at light between 1980 and 2016; more frequently in recent years. In 2016 87 recorded at HQ light over 40 nights between 03 May and 13 August with a maximum of eight on 05 August. In 2017 75 were recorded over 54 dates between 02 April and 24 August with a maximum of five on 16 May.
- 71.015 (2002) **Three-humped Prominent** *Tritophia tritophus* (Denis & Schiffermüller) R  
 A very rare immigrant recorded at HQ light on 24 August 2013 (JGCB, IPH).

- 71.017 (2007) **Swallow Prominent** *Pheosia tremula* (Clerck) 09 April – 08 September C  
Recorded in 1969, 1970 and small numbers annually since 1980. More numerous between 2009 and 2016 when up to 20 in July and 23-24 on 15 and 16 August 2009, and up to 15 in August 2012. In 2016 92 recorded over 41 nights between 03 May and 04 September with a maximum of 27 on 31 July. In 2017 between 14 April and 26 August 70 were recorded over 37 dates with a maximum of 10 on 14 August.
- 71.018 (2006) **Lesser Swallow Prominent** *Pheosia gnoma* (Fabricius) 12 May – 01 September O  
Recorded at HQ light in 1980, 1994 then annually in small numbers (up to eight) in 13 years from 2001 to 2016. None were recorded in 2017.
- 71.020 (2011) **Pale Prominent** *Pterostoma palpina* (Clerck) 30 March – 29 August F  
Two generations now overlap. Recorded almost annually from 1976 – 2015. In 2016 34 were recorded over 23 nights between 06 May and 27 August. In 2017 between 04 April and 14 August 57 individuals were recorded over 39 dates with a maximum of four on 24 July.
- 71.021 (2008) **Coxcomb Prominent** *Ptilodon capucina* (Linnaeus) 14 June – 22 August O  
One in Slazengers in 1969 and up to eight in seven years from 1978 – 2004, but not recorded since.
- 71.022 (2009) **Maple Prominent** *Ptilodon cucullina* (Denis & Schiffermüller) 26 May – 26 August O  
Recorded in small numbers (up to nine) in 1977, 1982, 1990, 1993, 1994 and 2001 then annually in small numbers from 2008 to 2016. In 2017 there was a single record on 13 June from the Elms (SZW)
- 71.025 (1994) **Buff-tip** *Phalera bucephala* (Linnaeus) 24 April – 08 August C  
A common species attracted to light annually in small numbers up to 2017 (up to 11 in July 2010). Between 16 May and 22 July 2017 a total of 16 individuals were recorded in ones or twos on 13 dates. Larvae often found on the Estate Sallows and occasionally on Birches in August/September.
- 71.027 (2019) **Chocolate-tip** *Clostera curtula* (Linnaeus) 04 April – 23 August F  
Recorded at HQ light on 17 May 2004 and at HQ on 25 July 2008 (two). More numerous since 2009 when one-two at HQ light on 10 dates, with up to three on 22 dates in 2010, one-two on 21 dates in 2012, up to four on 20 dates in 2013, up to three on 19 dates in 2014, one-two on three dates in 2015, singles on 7 dates in 2016 and one-two on 13 dates in 2017 including a very early one on 04 April (IDH).
- 71.028 (2017) **Small Chocolate-tip** *Clostera pigra* (Hufnagel) Nb R  
Several specimens attracted to the lighted bungalow in August 1968 (DFH) and HQ MV light on 11 August 1982 (IDH).
- 71.029 (2018) **Scarce Chocolate-tip** *Clostera anachoreta* (Denis & Schiffermüller) RDB1  
08–23 May, 19 July–01 September O  
Recorded in 1876, 1912 (Emmett, 1977), on 03 August 2005, 19 July 2007, on 21 July and daily from 27-31 July 2009 including three on 31 July. Up to three in August 2010, four singles in 2011 and 2012, one-two on five dates in 2013, four singles in 2014 and a single on 29 August 2017 (IDH).

## EREBIDAE

- 72.001 (2469) **Herald** *Scoliopteryx libatrix* (Linnaeus) 16 March – 06 June, 05 July – early November F  
One-three have been recorded in most years at light between 1967 and 2016 (up to five were taken at HQ light in July 2009 and July 2013). In 2016, 12 were recorded over eight nights with maxima of three on 15 July and 05 August. Mainly singles were recorded on 12 dates in 2017.
- 72.002 (2474) **Straw Dot** *Rivula sericealis* (Scopoli) 11 May – 24 October C  
Recorded in 1969 and 1986 then small numbers until 2002, since when it has become more common (up to 13-15 in 2009, 2010 and 2012, up to 30 in August 2013, 39 in August 2014 and 30 in June 2015). In 2016 211 were recorded over 64 nights between 04 June and 03 October with maxima of 11 on 22 June and 29 on 05 August. In 2017 between 16 May and 24 October (latest date by three weeks) 234 individuals were recorded over 86 dates with maxima of 15 on 16 June and 10 on 04 August in the Whitehouse and 10 on 19 July at HQ.
- 72.003 (2477) **Snout** *Hypena proboscidalis* (Linnaeus) 18 May – 06 October C  
Regularly attracted to light up to 2017 (eg up to 10 in August 2009, 31 in September 2012, 21 in July 2015 and a maximum of 24 on 06 September 2016). In 2017 between 21 May and 29 September 248 individuals were recorded over 80 dates with a maximum of 16 on 22 August.
- 72.004 (2480) **Buttoned Snout** *Hypena rostralis* (Linnaeus) Nb O  
Recorded at light on three nights between 11 and 18 September 1981, on 20 September 1982, 25 September 1985 and 01 June 1994 and on three dates between 17 July and 11 October 2013, on four dates in 2014 and

two dates in 2015. An adult was bred from larvae collected from Hops in the Elms in spring 2014. None have been recorded since 2015.

- 72.009 (2031) **White Satin Moth** *Leucoma salicis* (Linnaeus) 07 June – 10 August O  
Formerly common, but the only records since 1988 were singles at HQ light on 17 July 2004 then annual small numbers from 2011 to 2017. Between 14 June and 14 July 2017 one-two were recorded on 12 nights.
- 72.010 (2033) **Black Arches** *Lymantria monacha* (Linnaeus) R  
Singles at HQ light on 11 August 2013, 20 July 2015 and 04 August 2016.
- 72.012 (2029) **Brown-tail** *Euproctis chryssorrhoea* (Linnaeus) 19 June – 30 August Ab  
Recorded at light annually in small numbers, but larvae abundant in most years, often defoliating whole bushes of Sea Buckthorn, Sloe and Hawthorn. The appearance of 51 at light on 26 June 2011 and 157 on 04 July 2015 were probably related to an emergence of adults nearby. In 2016 74 were recorded over 12 nights between 15 July and 12 August with a maximum of 18 on 15 July. In 2017 20 larval webs were counted in the Hundred Acre area on 03 April (SZW) and 43 Adults were recorded over 16 nights between 19 June and 16 August with a maximum of 11 in the Elms on 10 July (SZW).
- 72.013 (2030) **Yellow-tail** *Euproctis similis* (Fuessly) 22 June – 28 September C  
Regular at light in small to moderate numbers up to 2017 (up to 14 in July 2010 and 29 in August 2013). In 2017 one-two were recorded over 18 nights with late records on 26, 27 and 28 September (almost a month later than the previous latest date). Larvae, which feed singly before pupating, are often found wandering and are not as damaging as the Brown-tail.
- 72.015 (2028) **Pale Tussock** *Calliteara pudibunda* (Linnaeus) 07 May – 27 June O  
Up to three have been recorded almost annually from 1984 to 2016. In 2017 there were singles on six dates in May. Three larvae were found in the Cellars in October 1988.
- 72.017 (2026) **Vapourer** *Orgyia antiqua* (Linnaeus) 04 July – 02 November F  
Larvae found in most years but only a few records of day flying adults recorded in the Elms in most years from 1972 – 2002. One was taken at HQ light on 25 July 2009, with four singles in 2010 between 29 July – 01 October and up to five by day in October 2011; since then up to 2016 recorded annually with similar frequency. In 2017 there were 11 sight records across the recording area on six dates between 17 August and 14 October
- 72.019 (2061) **Buff Ermine** *Spilosoma lutea* (Hufnagel) 29 April – 29 August C  
Previously regarded as more common than the following species (though less so in 2009, 2011 and 2013 when up to nine were recorded). In 2016, 65 were recorded over 33 nights between 02 June and 05 August with a maximum of five on 05 July. In 2017 101 recorded over 47 nights from 16 May with a maximum of 10 on 13 June and a latest ever date of 29 August.
- 72.020 (2060) **White Ermine** *Spilosoma lubricipeda* (Linnaeus) 28 April – 22 August C  
Often taken at light up to 2017 (up to 29 in June 2009). In 2017 150 individuals were recorded over 45 nights from 29 April to 24 June with maxima of 10 on 29 and 30 May. Larvae commonly seen in the gardens of the Estate from July - September.
- 72.021 (2062) **Water Ermine** *Spilosoma urticae* (Esper), 04 May – 28 August F  
A marshland insect, favouring boggy areas and ditches on Worth and New Downs. Up to three annually at light up to 2016. In 2017 17 individuals were recorded at light on eight dates between 28 May and 21 June with maxima of 4 at HQ on 8 June and in the Whitehouse on 16 June
- 72.022 (2063) **Muslin Moth** *Diaphora mendica* (Clerck) 01 April – 10 June F  
Small to moderate numbers regularly attracted to light up to 2017 (up to nine in May 2010 and 11 in May 2011). In 2017 64 individuals were recorded over 36 nights between 01 April (earliest date by 10 days) and 24 May with maxima of 6 on 22 and 27 April and a larva was seen on the Estate on 12 October. A remarkable gynandromorphic individual was trapped on 09 May 2014, patterned as male on one side and female on the other. (photo JVDD)
- 72.023 (2059) **Clouded Buff** *Diacrisia sannio* (Linnaeus) R  
Singles on Royal Cinque Ports Golf Course on 25 June 1971 (DMB 1985) and a very fresh male at HQ light on 03 September 2010 (PDH, JGCB).
- 72.024 (2064) **Ruby Tiger** *Phragmatobia fuliginosa* (Linnaeus) 07 April – May, 28 June – 27 September C  
Only occasional records of day-flying moths in April/May but second brood fairly common in the area (eg up to 22 in August 2009, 34 in August 2010 and 43 in July 2014, for example). In 2016 113 were recorded over 34 nights between 07 July and 03 September with maxima of 12 on 15 and 26 July. In 2017 there were records of 142 individuals over 38 nights between 05 July and 27 September (over two weeks later than the previous latest record) with a maximum of 29 on 15 July.
- 72.026 (2057) **Garden Tiger** *Arctia caja* (Linnaeus) 15 June – 06 September F

- Fairly frequent at light up to 2017 (eg peaks of 15-18 in July and August 2010, July 2013, July 2014 and July 2016). In 2017 84 were recorded over 33 nights from 20 June to 16 August with a maximum of eight on 24 June and a larva was recorded in Hundred Acre on 21 May. Full grown larvae often seen on Chickweed, Docks and other low weeds in April and May.
- 72.027 (2058) **Cream-spot Tiger** *Arctia villica* (Linnaeus) 14 May – 29 June F  
Formerly more common but one or two moths still taken at light in most years (up to four in June 2010, five in May 2014 and a total of 12 individuals in 2016). In 2017 28 individuals were recorded over 16 nights between 22 May and 08 June with a maximum of four on 29 May and a larva recorded on 25 March. Much more frequent in the reserve and Prince's Golf Course areas and full grown larvae often seen in April and May
- 72.029 (2068) **Scarlet Tiger** *Callimorpha dominula* (Linnaeus) R  
Singles recorded at HQ light on 27 June 1994, 01 July 1994 and 09 July 2004. There were nearby colonies at Ham Fen and Kingsdown.
- 72.030 (2067) **Jersey Tiger** *Euplagia quadripunctaria* Poda) R  
A recent colonist of southern England from mainland Europe and the Channel Islands, one was trapped at light in the Whitehouse on 02 August 2014 (FS) and a rather worn specimen on 05 September 2016
- 72.031 (2069) **Cinnabar** *Tyria jacobaeae* (Linnaeus) 13 April – 10 August C  
Common on ragwort and adults commonly encountered over the dune grassland, with small to moderate numbers attracted to light up to 2017 (eg up to 19 in May and 17 in August 2010). In 2017 there were 74 individuals recorded over 28 dates in the field and to HQ light between 20 April and 18 June with a maximum sight record 15 on the Estate on 01 June.
- 72.032 (2053) **Speckled Footman** *Coscinia cribraria* (Linnaeus) **RDB1** R  
*Coscinia cribraria arenaria* was recorded in July 1914 (Metcalfe, 1914), 1922, 1934 and 07 August 1937 (Bowes, 1961). There are no recent records of this species.
- 72.035 (2037) **Rosy Footman** *Mitochrista miniata* (Forster) 16 June – 12 August O  
Recorded at MV light on 13 and 15 July 1994, then annually in small numbers from 2009 – 2017. In 2017 singles were recorded on five dates between 16 June (three weeks earlier than previous earliest) and 16 July.
- 72.037 (2035) **Round-winged Muslin** *Thumatha senex* (Hübner) 10 June – 11 August F  
Small numbers (up to 12) recorded at light in most years from 1982 – 2017. 17 individuals were recorded over 11 nights from 16 June to 16 July 2017.
- 72.038 (2040) **Four-dotted Footman** *Cybosia mesomella* (Linnaeus) R  
The first record was from MH on 23 June 2006. One at HQ light on 08 July 2010, two on 23 June 2014 (JGCB) and a male on 20 June and a female on 26 September 2017 (IDH).
- 72.039 (2041) **Dotted Footman** *Pelosia muscerda* (Hufnagel) **RDB3** R  
A marshland species that used to occur over Worth. Recorded in 1911 (Chalmers-Hunt) and at MV light on 19 August 1997 and 19 August 2012.
- 72.041 (2051) **Four-spotted Footman** *Lithosia quadra* (Linnaeus) R  
A migrant, recorded for the first time on 08 October 2013 (F) (JGCB), on 02 August 2014 (F) (JGCB, FS) and on 20 June 2017 (IDH).
- 72.042 (2039) **Red-necked Footman** *Atolmis rubricollis* (Linnaeus) R  
First recorded in 2010, when singles on 27 & 29 June, three on 07 July and one on 09 July. Subsequently, singles on 07 July 2013, 12 June 2014, a total of 11 in 2015, including four on 04 July and an early single on 29 May 2017 (SZW).
- 72.043 (2049) **Buff Footman** *Eilema depressa* (Esper) 04 July – 10 August R  
One at HQ light on 13 July 2012 then small numbers annually from 2013 to 2016. None were recorded in 2017.
- 72.044 (2044) **Dingy Footman** *Eilema griseola* (Hübner) 20 June – 13 September C  
Small to moderate numbers annually at light from 1975 – 2017 (up to 29 in July 2010, 44 in August 2012, 48 in August 2013 and July 2014 and a maximum of 24 on 25 July 2016). 240 individuals were recorded over 55 dates between 07 July and 04 September 2017 including a maximum of 20 on 19 July.
- 72.045 (2050) **Common Footman** *Eilema lurideola* (Zincken), 08 May – 29 August. C  
A common species regular at light up to 2017 (up to 87 in July 2010, 45 in July 2011, 52 in July 2012, 144 in July 2013 and 89 in July 2014, for example). In 2017 between 01 June and 31 July 160 individuals were recorded over 36 nights with a maximum of 16 on 10 July.
- 72.046 (2047) **Scarce Footman** *Eilema complana* (Linnaeus) 12 June – 08 September C  
Small to moderate numbers attracted to light in most years. Commoner since 2000, with small to moderate numbers annually from 2009 to 2017, including peak counts of 36 in July 2010, 29 in August 2013, 22 in July



2014 and 19 in July 2016. 197 individuals were recorded on 42 dates between 07 July and 08 September 2017 (two days later than previous latest) with a maximum count of 26 on 14 July

- 72.047 (2045) **Hoary Footman** *Eilema caniola* (Hübner) R  
Singles at HQ light on 23 August 2012 (FS), 21 June 2014 (JGCB) and in the Whitehouse on 04 August 2017 (FS).
- 72.048 (2046) **Pigmy Footman** *Eilema pygmaeola* ssp *pygmaeola* (Doubleday) **RDB3** 03 June – 17 August F  
A local speciality and known as the "Deal Footman". Still not uncommon in dune slacks and damper areas and small to moderate numbers attracted to light most years up to 2017 (up to 21 in July 2010). In 2017 between 19 June and 21 July mainly singles were recorded over nine nights at HQ light and across the Estate area. Larvae were collected from lichen-encrusted bollards on Royal St. George's Golf Course in June 1978.
- 72.049 (2043) **Orange Footman** *Eilema sororcula* (Hufnagel) 30 April – 08 June O  
A woodland species, recorded in the Whitehouse area in May/June 1971 and in small numbers annually at HQ light from 2010 to 2017. In 2017 singles were recorded at HQ light on 17 and 29 May.
- 72.052 (2493) **Dotted Fan-foot** *Macrochilo cribrumalis* (Hübner) **Nb** 09 June – 29 August O  
A very local species recorded on the Estate between 11 June – 14 July in 1980 (two), 1993, 1994, 1995 (three), 2001 (two), 2003 and 2005 (TD). Found to be regular since 2009, with small numbers annually to 2017. Between 10 June and 29 August (latest date by a month) 2017 mainly singles were recorded over five dates.
- 72.053 (2489) **Fan-foot** *Herminia tarsipennalis* (Treitschke) 14 June – 10 August O  
There were seven records from 1982 -2000 and five from 2003 - 2006, then annual in small numbers from 2009-2017. Four singles were recorded between 16 June and 16 July 2017.
- 72.055 (2492) **Small Fan-foot** *Herminia grisealis* (Denis & Schiffermüller) 18 May – 17 September O  
Sporadic records from 1985 – 2010 (four singles in 2010), 2014 (up to three in June), 2015 (three singles in July), a single record on 16 June 2016 and singles in the Whitehouse on 24 May and in the Elms on 16 June 2017.
- 72.057 (2488a) **Plumed Fan-foot** *Pechipogo plumigeralis* (Hübner) R  
Formerly a rare immigrant to the south-east of England, first recorded in the UK in 1995, it has probably now formed small colonies along the south coast. One at HQ light on 26 July 2014 (JGCB) was the first Observatory record. In 2017 a single was recorded on 09 July and four were trapped on 25 September at HQ light.
- 72.061 (2484) **Pinion-streaked Snout** *Schrankia costaestrigalis* (Stephens) 18 June – 08 October O  
Singles at HQ light on 06 September 2009 and annual in small numbers from 2012 to 2015. None were recorded in 2016. Singles were recorded on three dates in August and a late individual on 08 October 2017.
- 72.063 (2466) **Blackneck** *Lygephila pastinum* (Treitschke) 29 May – 28 August F  
First recorded in July 1967 and occasional at light since 1981. Annual in small to moderate numbers between 2009 and 2017, including cumulative totals of 36 in 2009, including 14 in the Whitehouse on 25 June and 11 at HQ light on 02 July, 15 in 2010, 20 in 2013, 21 in 2015, nine in 2016 and 14 in 2017(all singles from earliest ever date of 29 May to 10 July except eight on 16 June in the Whitehouse (FS)).
- 72.069 (2473) **Beautiful Hook-tip** *Laspeyria flexula* (Denis & Schiffermüller) 27 May – 21 July, 14 – 25 September O  
Formerly recorded in a single generation late June to early August but in recent years there has been a second generation in the south late August to early September. Singles recorded in Slazengers on 03 July 1976, at HQ light on 14 July 1985 and 23 June 2014, with one at HQ light on 17 June and six in Prince's conifers on 04 July 2015. In 2016 singles were recorded at HQ light on 17 and 21 July and 18 September. 2017 started with a very early individual on 27 May (three weeks earlier than previous earliest) followed by singles on 09 July and 14 and 25 September.
- 72.073 (2408) **Small Marbled** *Eublemma parva* (Hübner) R  
An occasional migrant from S Europe, recorded for the first time at HQ light on 20 June 2013, with one on 29 August 2015 (FS) swept from Fleabane in the Whitehouse.
- 72.074 (2407a) **Beautiful Marbled** *Eublemma purpurina* (Denis & Schiffermüller) R  
A migrant from the European mainland, first recorded in Britain in 2001. One at HQ light on 26 August 2015 (JK) and another on 22 August 2017 (IDH).
- 72.078 (2452) **Red Underwing** *Catocala nupta* (Linnaeus) 04 August – 19 October O  
One-two attracted to the MV light or found resting on walls in most years up to 2017. Up to four at light in August 2009 and up to six in September 2012. In 2017 five individuals were attracted to light on four dates mainly in September and there were two field records including a single on 19 October (latest ever date) (SZW).

72.083 (2463) **Burnet Companion** *Euclidia glyphica* (Linnaeus) R  
One seen on St George's on 29 May 1995 by ACJ and one seen in the Oasis very close to the Whitehouse fence on 21 June 2016 (AML).

72.084 (2462) **Mother Shipton** *Euclidia mi* (Clerck) 03 April – 20 June F  
Singles seen occasionally on the rough golf course grassland in many years between 1964 and 2017. Larvae were swept from grassland along Prince's upper beach on 02 September 1998. Notably, 10 were recorded in 2009, including singles in Middle Field, New Downs New Pool, St. George's bushes and the North Stream, with three along the foreshore from Prince's to the Hundred Acre Field on 25 May and on New Downs (including Backsand Scrape) on 18 June. Eleven were found in 2010, in much the same areas. In 2017 six individuals were reported by several observers on five dates across the wider recording area from 17 May to 19 June.

## NOCTUIDAE

73.001 (2450) **Spectacle** *Abrostola tripartita* (Linnaeus) 20 April – 19 September F  
Up to seven recorded at light annually (up to 10 in July 2009). Late individuals recorded on 18 October and 13 November in 2012. In 2016 45 were recorded over 32 nights between 09 May and 26 August with a maximum of six on 15 July plus an early sight record at the Observatory building on 20 April. In 2017 47 individuals were recorded over 30 nights between 27 April and 09 September with maxima of four on 24 and 29 August.

73.002 (2449) **Dark Spectacle** *Abrostola triplasia* (Linnaeus) 23 April – 26 September F  
Recorded at light on 17 August 1969 (Chalmers-Hunt), 1998 (three) and 2003. It has become more common in recent years with up to 10 recorded annually to 2015, a total of 17 individuals to HQ light in 2016 and 28 individuals recorded on 19 nights between 14 June and 25 September 2017, maxima of three on 29 August and 04 September.

73.003 (2432) **Ni Moth** *Trichoplusia ni* (Hübner) R  
A migrant from S Europe and N Africa. The first record was from MH on 24 June 2006 and singles were recorded at HQ light on 11 (PDH) and 19 August 2009 (PDH, JGCB) and 28 August 2017 (IDH).

73.008 (2428) **Golden Twin-spot** *Chrysodeixis chalcites* (Esper) R  
A scarce migrant from S Europe, one was recorded at HQ light on 13 September 1991 (twenty third record for Britain) with another trapped on the golf course on 18 August 2002 and singles at HQ light on 22 and 25 October 2012, on three dates in 2013, on six dates in 2014, singles (clearly different individuals) on 12 and 13 August 2016 and on 13 October 2017 (SZW).

73.012 (2434) **Burnished Brass** *Diachrysis chrysitis* (Linnaeus) 08 May – 24 October F  
Recorded at HQ in 1967 and annual at light in small numbers between 1975 and 2017. In 2017 36 individuals were recorded over 25 nights between 23 May and 24 October (latest ever by three weeks) with a maximum of three on 23 August.

73.015 (2441) **Silver Y** *Autographa gamma* (Linnaeus) 21 April - 04 December C  
An erratic immigrant species, supplemented by local breeding, which can be abundant in some years (eg up to 377 in July 2010, maxima of 590 (sight record on 24 July) and 133 to HQ light on 27 August 2016). In 2017 317 individuals were recorded over 97 dates between 21 April (nine days earlier than previous earliest) and 02 November with a maximum of 41 on 19 July. Outside the usual season for migrants, one was recorded on 02 March 2012.

73.016 (2442) **Beautiful Golden Y** *Autographa pulchrina* (Haworth) O  
Uncommon with one or two specimens recorded in May, June and July in eight years since 1975, the most recent of which was on 25 May 2011.

73.017 (2443) **Plain Golden Y** *Autographa jota* (Linnaeus) 25 June – 18 July O  
Singles recorded in 12 years from 1976 – 2014.

73.022 (2439) **Gold Spot** *Plusia festucae* (Linnaeus) 09 May – 18 October C  
Up to eight attracted to light almost annually between 1982 and 2017. In 2016 94 were recorded over 38 nights between 10 May and 29 September with a maximum of 11 on 05 August. 47 individuals were recorded in 2017 in ones to threes over 31 nights between 16 May and 18 October 2017 (10 days later than previous latest).

73.024 (2410) **Marbled White Spot** *Protodeltote pygarga* (Hufnagel.) 24 May – 22 July O  
One taken in Slazengers on 03 July 1976, two in the Elms on 24 May 2005, two at HQ light on 25 June 2009, singles on 08 June and 10 and 12 July 2010, 15 and 22 July 2013, 14 June 2014 and five in 2015, including four at light on Prince's on 04 July. On 16 June 2017 there were three individuals to light in the Whitehouse (FS) and a single in the Elms (SZW).

73.026 (2412) **Silver Hook** *Deltote uncula* (Clerck) R  
The only record is a single moth found on Yellow Flag on Worth Marshes on 06 June 1980 (DMB).

- 73.027 (2413) **Silver Barred** *Deltote bankiana* (Fabricius) **RDB2** 01 June – 10 July **O**  
Singles on the Estate on 06 June 1980, 11 June and 03 July 1993, 08 July 1994, 04 July 1995, 26 June 2001 and annually in small numbers from 2009 to 2017. In 2017 singles were recorded at HQ light on four dates between 01 June and 10 July and two were recorded in the Whitehouse on 16 June (FS).
- 73.031 (2465) **Four-spotted** *Tyta luctuosa* (Denis & Schiffermüller) **Na** **R**  
One at HQ light on 10 August 2009 (PDH, AP). A scarce species in Kent for which there were records from only three 10km squares during 1980-2005 and one in 2006.
- 73.032 (2425) **Nut-tree Tussock** *Colocasia coryli* (Linnaeus) 30 March – 05 August **O**  
Singles at HQ light on 31 July and 03 August 1987, 13 July 1995, 16 and 24 April 2002, 25 and 28 April 2010, daily from 03-05 August 2013, on three dates in 2014, in April and August, on 06 May 2016 (IDH) and on 30 March (a week earlier than previous earliest record) and 17 July 2017.
- 73.033 (2020) **Figure of Eight** *Diloba caeruleocephala* (Linnaeus) **O**  
Recorded annually in October from 1982 – 1986 but only one since, in 1995.
- 73.035 (2290) **Reed Dagger** *Simyra albovenosa* (Goeze) **Nb** 23 April – 01 October **C**  
Several recorded at Worth in 1969 and 1971 but first recorded at HQ light in 1989. This formerly very local species is increasing and recent cumulative totals include 33 in 2005, 44 in 2009, 46 in 2010, 33 in 2011, 60 in 2012, 80 in 2013, only eight in 2015, 11 in 2016 and seven in 2017.
- 73.0381 (2284x) **Dark/Grey Dagger agg** 17 April – 02 September  
Up to three Grey/Dark Dagger were recorded on 17 dates from 26 July – 23 August in 2009 and cumulative totals of 73 in 2010 and 72 in 2013 seem to be fairly typical. In 2016 14 individuals were recorded over 13 nights between 07 July and 27 August. Mainly singles were recorded in 2017 with 22 individuals recorded over 16 nights between 17 April (five days earlier than previous earliest date) and 28 August with a maximum of five on 10 July.
- 73.037 (2283) **Dark Dagger** *Acronicta tridens* (Denis & Schiffermüller)  
A single Dark Dagger larva was found on 06 October 1987 (MBo, MC)
- 73.038 (2284) **Grey Dagger** *Acronicta psi* (Linnaeus)  
Grey Dagger larvae were found on Elms near the Cellars on 01 September 2011 and on Elms on 20 September 2012 (TD) and in the Haven in August 2013. A single adult on 15 June 2017 to HQ light (gen det DS)
- 73.039 (2279) **Sycamore** *Acronicta aceris* (L.) 21 May – 13 August **O**  
Almost annual at light in small numbers from 1981 - 2015. After a year with no records in 2016, a single was recorded on 20 June 2017 (IDH).
- 73.040 (2280) **Miller** *Acronicta leporina* (L.) 03 June – 27 July **O**  
Singles recorded at light in 1976, 1991, 1992, 1993, 1995, 2001 (four), 2002, 2004 and 2005, then annually in small numbers from 2009-2015. A single was recorded on 21 June 2017 (SH/IDH).
- 73.045 (2289) **Knot Grass** *Acronicta rumicis* (Linnaeus) 15 April – 02 October **F**  
Small numbers recorded annually at HQ light up to 2017. Between 11 May and 02 October 2017 (six days later than the previous latest date) 23 individuals were recorded over 16 nights with maxima of three on 10, 14 and 15 July,
- 73.046 (2278) **Poplar Grey** *Subacronicta megacephala* (Denis & Schiffermüller) 20 April – 26 August **F**  
Up to six annually since 1980 (up to eight-nine in July 2010 and July 2014). In 2016 31 individuals were recorded over 21 nights between 11 May and 30 July. Between 23 May and 04 August 2017 18 individuals were recorded over 13 nights with maxima of three on 14 and 24 June.
- 73.047 (2291) **Coronet** *Craniophora ligustri* (Denis & Schiffermüller) 06 May – 31 August **O**  
Singles caught at HQ light on 27 July 2002, 06 and 13 May and 07 August 2009, then small numbers (up to nine) annually from 2011 to 2016 (a total of 11 individuals) and 2017 (seven).
- 73.050 (2211) **Wormwood** *Cucullia absinthii* (Linnaeus) **Nb** 21 July – 18 August **R**  
Recorded on 06 August 1998 and at HQ light on 21 July 2009, 18 August 2012 and 28 July and 01 and 05 August 2013, 27 and 30 July and 07 August 2016 (IDH) and 27 July and 01 August 2017.
- 73.052 (2216) **Shark** *Cucullia umbratica* (Linnaeus) 09 May – 07 September **F**  
Not uncommon and recorded at light in small numbers (up to six in July 2010). In 2016 21 individuals were recorded over 13 nights between 11 June and 07 August and in 2017 27 individuals were recorded over 24

nights with a maximum of three on 24 July. Up to 10 daily found resting on fence posts on the Estate in June-July.

- 73.053 (2214) **Chamomile Shark** *Cucullia chamomillae* (Denis & Schiffermüller) 04 April – 08 June O  
Singles in 1988 and 1992 but almost annual in small numbers between 2001 and 2014.
- 73.055 (2217) **Star-wort** *Cucullia asteris* (Denis & Schiffermüller) 28 June – 11 September O  
Small numbers at light in 1980, 1986, 1989, 1991 and 2006 then annually from 2009-2016. A single on 01 August was the only record in 2017.
- 73.058 (2221) **Mullein** *Cucullia verbasci* (Linnaeus) 06 April – 22 June O  
There have been only 18 records at light to 2016 though it is quite common. Most frequently found as larvae in July and August feeding on Great Mullein growing around the Estate. In 2017 the only record was of two larvae on 12 June (SZW).
- 73.059 (2223) **Toadflax Brocade** *Calophasia lunula* (Hufner) **RDB3** R  
Recorded at light on 12 June 1983 and 15 August 2010 and in the Whitehouse on 22 May, on the bank of the North Stream on 27 May 2012, near the shore on 01 August 2013 and at light on 22 July 2014. A larva was identified in the field on 04 September 2016. An observation in the field was recorded on 23 July 2017 (SZW). Formerly regarded as a rare immigrant but now established on sparsely vegetated shingle beaches in the south-east of England.
- 73.062 (2297) **Copper Underwing** *Amphipyra pyramidea* (Linnaeus) 20 July – 26 September O  
Scarce with one-two occasionally at light since 1975 but annual in small numbers from 2009-2017. Between 20 July (one week earlier than previous earliest date) and 08 September 2017 18 individuals were recorded in ones or twos over 13 nights.
- 73.063 (2298) **Svensson's Copper Underwing** *Amphipyra berbera* (Fletcher) R  
One was trapped at HQ light on 30 July 2014 (IDH).
- 73.064 (2299) **Mouse Moth** *Amphipyra tragopogonis* (Clerck) 26 June – 26 October C  
Frequent at the HQ light up to 2017 (up to nine in July 2009, seven in August 2011 and 19 in August 2012). Between 14 July and 17 September 2017 29 individuals were recorded over 19 nights with maxima of three on two nights in July.
- 73.068 (2245) **Green-brindled Crescent** *Allophyes oxyacanthae* (Linnaeus) 26 September – 09 November F  
Frequent at Ivy blossom around Sandwich in October but scarcer at the Bay with up to 10 (in October 2011). Now annual. In 2016 22 individuals were recorded over 15 nights between 02 October and 04 November. The 2017 total of 18 individuals were recorded over 15 nights between 09 and 27 October.
- 73.069 (2243) **Early Grey** *Xylocampa areola* (Esper) 09 March – 26 May F  
Recorded annually up to 2017 in spring, in small numbers (up to five in April 2014). In 2016 19 individuals were recorded over 14 nights between 23 March and 10 May. Between 10 March and 28 April 2017 25 individuals were recorded in ones or twos.
- 73.070 (2399) **Bordered Sallow** *Pyrrhia umbra* (Hufnagel) 16 May – 18 September F  
First recorded in 1967 and up to eight recorded annually at light between 1981 and 2017. Between 22 May and 16 June 2017 singles were recorded on six nights.
- 73.072 (2401) **Marbled Clover** *Heliothis viriplaca* (Hufnagel) **RDB3** R  
Suspected immigrants were recorded on 13 June 1904 and 03 June 1905 (Chalmers-Hunt) and one at Sandown Road on 02 September 1990 (IDH)
- 73.074 (2403) **Bordered Straw** *Heliothis peltigera* (Denis & Schiffermüller) 04 June – 19 September O  
A noted migrant first caught at light on 15 August 1980, then 1981, 1986, 1994, 1998, 2000, 2005, 2009 and 2010. It has become more regular recently, with records in 2002 (seven), 2004 (four), 2006 (two), 2009 (four), 2010 (three) and 2012 (two), an exceptional total of 26 in 2015, including three on 17 June, in 2016 a single on 25 June and in 2017 14 were recorded at HQ light on 31 July and there was a further single sight record on 11 August.
- 73.076 (2400) **Scarce Bordered Straw** *Helicoverpa armigera* (Hübner) 19 July – 30 October O  
Singles of this immigrant species were recorded sporadically from 1987 – 2004. There were three records in 2006 and 2009 at HQ, one-two on six dates in 2010, two on 09 October 2011, one-two on three dates in 2012, one-two on seven dates in 2013, seven singles in 2014, a total of 12 in 2015 and in 2016 10 singles between 05 August and 08 October. 68 individuals were recorded over 46 nights between 21 July and 25 October 2017 with a maximum of five on 11 August.

- 73.082 (2292) **Tree-lichen Beauty** *Cryphia algae* (Fabricius) 12 July – 27 August F  
 Regarded as an immigrant prior to 2001, since when it has established colonies in Kent and other southern English counties and is clearly increasing locally. One caught at HQ light on 03 August 2004, then annual in small numbers from 2009 to 2017, including cumulative totals of 30 in 2012, 56 in 2013, 40 in 2014, 11 individuals over eight nights between 17 July and 13 August with maxima of three on 27 July and 05 August 2016 and eight individuals over six nights between 14 July and 01 August 2017 with a maximum of three on 19 July.
- 73.083 (2294) **Marbled Grey** *Bryophila raptricula* (Denis & Schiffermüller) R  
 A rare migrant, one was taken at a portable seafront light on 09 August 1969 (Chalmers-Hunt) and one was recorded at HQ light on 12 August 2012 (JGCB).
- 73.084 (2293) **Marbled Beauty** *Bryophila domestica* (Hufnagel) 14 June – 16 September O  
 Small numbers attracted to light almost annually up to 2016. None were recorded in 2017.
- 73.085 (2295) **Marbled Green** *Nictobrya muralis* (Forster) 12 July – 04 September F  
 A local species now on the increase with almost annual records of up to four between 1992 and 2017 (total of eight in 2016). In 2017 singles were recorded on 19 July and 01 August.
- 73.087 (2385) **Small Mottled Willow** *Spodoptera exigua* (Hübner) 01 June – 04 October F  
 An occasional migrant species recorded in most years from 1982 to 2016. Exceptionally, 14 were recorded in 2009 between 01 June – 27 August, including three on 01 and 20 July, but this was surpassed by a total of 123 in 2015, including 12-16 on 10 and 11 July and nine on 03 August. In 2016 two were recorded in June and three singles in August. In 2017 a single was recorded on 21 June, three were recorded in July and two in August.
- 73.092 (2387) **Mottled Rustic** *Caradrina morpheus* (Hufnagel) 06 May – 26 August, 20 September – 12 October C  
 Regular at light in small numbers with occasional individuals in September - October. More numerous since 2009 when up to 15 were attracted to HQ light in June and peak counts in July reached 46 on the 20th, with 19-25 daily from the 1st-4th. Up to 55 were recorded in July 2010, up to 40 were trapped in June 2011, with similar numbers to 2015. In 2016 89 were recorded over 35 nights with a maximum of nine on 15 July. In 2017 between 12 May and 26 July 162 individuals were recorded over 56 nights with a maximum of 10 on 14 June and then four singles were recorded between 20 September and 12 October, almost certainly evidence of second brood activity locally.
- 73.093 (2387a) **Clancy's Rustic** *Platyperigea kadenii* (Freyer) 21 June – 15 October O  
 Singles at HQ light on 10, 13 and 15 October 2009, on 21 June and five dates between 08-14 October 2010, on 01 October 2011, 30 September 2013 and 04 October 2015 (IDH).
- 73.095 (2389) **Pale Mottled Willow** *Caradrina clavipalpis* (Scopoli) 17 April – 25 November C  
 Recorded at light in small to moderate numbers (up to 11 in June and August 2009). In 2016 30 individuals were recorded over 23 nights between 12 May and 29 September with a maximum of four on 19 September. 71 individuals were recorded over 41 nights between 29 April and 31 October 2017 with a maximum of 10 on 29 May.
- 73.096 (2381) **Uncertain** *Hoplodrina octogenaria* (Goeze) 01 June – 11 September C  
 First taken in 1967 and annual between 1980 and 2016. Up to 40 were captured at HQ light in July 2009, up to 98 in July 2010, in 2016 338 individuals were recorded over 49 nights between 22 June and 19 August with a maximum of 29 on 15 July and in 2017 372 individuals were recorded over 56 nights between 08 June and 20 August with a maximum of 19 on 15 July..
- 73.097 (2382) **Rustic** *Hoplodrina blanda* (Denis & Schiffermüller) 30 May – 29 September C  
 A common species with 10-20 attracted to light up to 2016 (up to 62 in July 2010 and 56 in July 2013) on many nights. In 2017 250 individuals were attracted to light over 40 nights between 16 June and 14 August with a maximum of 21 on 15 July.
- 73.099 (2384) **Vine's Rustic** *Hoplodrina ambigua* (Denis & Schiffermüller) 08 May – 23 October C  
 A common species recorded at light in overlapping generations up to 2017. Peak counts include 27 in June and August 2009, 119 in August 2010 and 153 in August 2013. In 2017 1,046 individuals were recorded over 88 dates between 14 May and 26 September with maxima of 72 on 14 and 21 August and 71 on 23 August.
- 73.100 (2391) **Silky Wainscot** *Chilodes maritima* (Tauscher) 04 June – 07 August F  
 A local reed-bed species. Up to four recorded in nine years between 1980 and 2009 and from 2013-2016. In 2017 singles were recorded on 09 and 17 June.
- 73.101 (2380) **Treble Lines** *Charanyca trigrammica* (Hufnagel) 28 April – 15 August C

Taken annually at light up to 2017 (eg up to 35 in May 2009, 136 in June 2010 and 80 in May 2011). In 2017 496 individuals were recorded over 49 dates from 01 May to 26 June with maxima of 53 on 16 May and 52 on 17 May.

- 73.102 (2302) **Brown Rustic** *Rusina ferruginea* (Esper) O  
Three recorded between June and August in 1982 and 1983 followed by singles on 30 June 1987, 08 July 2001, 24/25 June 2005, 11/12 June 2013, 09 June 2014 and 16 June 2017 to light in the Whitehouse (FS).
- 73.105 (2301) **Bird's Wing** *Dypterygia scabriuscula* (Linnaeus) 05 May – 04 August F  
Occasional at light since 1981 and annual in small numbers between 2009 and 2017 with a total of nine in 2009, including four on 25 June, being fairly typical of recent numbers. In 2017 10 individuals were recorded on nine nights in June with another, very late, individual on 04 August (2 weeks later than previous latest record).
- 73.106 (2304) **Orache Moth** *Trachea atriplicis* (Linnaeus) R  
This rare immigrant, formerly resident in the UK, was recorded at HQ light on 26 June 2011 (JGCB), 05 July 2012 (JGCB) and 26 August 2015 (JK).
- 73.107 (2300) **Old Lady** *Mormo maura* (Linnaeus) 04 July – 26 October O  
Recorded at light or in buildings in small numbers in 17 years from 1969 – 2015. In 2017 singles were recorded on 19 July and 23 August.
- 73.109 (2303) **Straw Underwing** *Thalpophila matura* (Hufnagel) 22 July – 07 September O  
One in 1969 and small numbers (up to seven) at light almost annually between 1976 and 2017, with up to 17 in August 2013. In 2017 there were 34 individuals recorded over 19 nights from 04 to 30 August with a maximum of five on 25 August.
- 73.113 (2306) **Angle Shades** *Phlogophora meticulosa* (Linnaeus) 20 January; 17 March - 24 November C  
Recorded at light in two overlapping generations. One was recorded on 20 January 2012. There has been a modest increase in numbers since 2009. In 2016 there was a maximum of 19 on 04 September. In 2017 215 individuals were recorded over 90 nights between 01 April and 16 November (none recorded in July) with maxima of 17 on 29 May and 14 on 25 September.
- 73.114 (2305) **Small Angle Shades** *Euplexia lucipara* (Linnaeus) 24 June – 01 August O  
The only records are singles at light on 15 July 1982, 30 June and 01 August 1987, 11 July 1995 and 24 June 2005.
- 73.119 (2368) **Crescent** *Helotropha leucostigma* (Hübner) 14 July – 17 September F  
Recorded occasionally at light in 16 years from 1981 – 2017 (a cumulative total of 13 in 2012, including three on 16 August, and 15 in 2013). In 2017 singles were recorded on four dates between 23 July and 14 August.
- 73.120 (2352) **Dusky Sallow** *Eremobia ochroleuca* (Denis & Schiffermüller) 03 July – 27 August C  
Regular at light between 1976 and 2017. Up to 49 at HQ light in July 2009, up to 62 in July 2010 and up to 71 in August 2013. In 2016 173 individuals were recorded on 28 nights in July and August with a maximum of 21 on 05 August. 169 individuals were recorded over 25 nights in July 2017 with a maximum of 38 on 15 July.
- 73.121 (2364) **Frosted Orange** *Gortyna flavago* (Denis & Schiffermüller) 14 August – 11 October F  
Small numbers recorded at light between 1981 and 2017. There were cumulative totals of 30 in 2009, 70 in 2010 (including eight on 26 September and 04 October), 42 in 2011, 32 in 2012, 49 in 2013, and 20 in 2015. In 2017 between 21 August and 16 October (five days later than previous earliest date) 47 individuals were recorded over 26 nights with maxima of five.
- 73.123 (2361) **Rosy Rustic** *Hydraecia micacea* (Esper) 02 July – 18 October C  
Regular at light in small to moderate numbers up to 2017 (in 2009 there were peaks of 11-18 in each month from July – September and similar numbers occurred in 2010, 2013 and 2014). Over 63 nights between 06 July and 28 September 2017 185 individuals were recorded with a maximum of 16 on 31 July.
- 73.1281 (2360x) **Ear Moth Agg.** – *Amphipoa oculea agg* Ear Moth species require gen det to separate.  
Past records have been attributed to Saltern Ear and Ear but we now record as Ear Moth agg. Recorded in 2016 from 26 July to 31 August. Seven adults were recorded in singles or twos between 14 July and 04 August 2017.
- 73.128 (2360) **Ear Moth** *Amphipoa oculea* (Linnaeus)  
A single to HQ light on 04 August 2017 (M gen det DS)
- 73.131 (2353) **Flounced Rustic** *Luperina testacea* (Denis & Schiffermüller) 04 June – 04 October C  
Common throughout the area, sometimes with large numbers at light up to 2017. Peak counts in 2009 included 73 on 20 August, with six other counts of 50+ during the month, and up to 140 were recorded in August 2010. In 2017 556 individuals were recorded over 74 dates between 04 June (three weeks earlier than the previous earliest record) and 04 October (six days later than the previous latest date) with maxima of 42 on 29 and 50

on 30 August.

- 73.134 (2375) **Large Wainscot** *Rhizedra lutosa* (Hübner) 26 August – 27 November C  
Regular in moderate numbers at light up to 2017 (eg up to 27 in October 2009, up to 21 in October 2010, up to 28 in October 2011, 18 in October 2013 and 21 in October 2014). Between 23 September and 16 November 2017, over 45 nights, 379 individuals were recorded with maxima of 36 on 18 and 25, 41 on 16 and 43 on 17 October.
- 73.136 (2369) **Bulrush Wainscot** *Nonagria typhae* (Thunberg) 14 July – 05 October F  
Recorded in 1976 and annually between 1982 and 2017. There were cumulative totals of 25 in 2009 and 18 in 2013. In 2017 a single was recorded on 14 (six days earlier than the previous earliest record) and two on 15 July and singles on 09 and 27 September.
- 73.137 (2377) **Fen Wainscot** *Arenostola phragmitidis* (Hübner) 29 June – 07 September F  
Regularly attracted to light up to 2017 (eg up to 22 in July 2010 and 29 in August 2013). In a two week period in 2017 from 05 to 19 July 32 individuals were recorded over eight nights with a maximum of 11 on 15 July.
- 73.139 (2370) **Twin-spotted Wainscot** *Lenisa geminipuncta* (Haworth) 25 July – 18 September F  
Attracted to light in most years between 1985 and 2017. In 2017 four singles and a two were recorded between 10 July and 04 August.
- 73.141 (2371) **Brown-veined Wainscot** *Archanara dissoluta* (Treitschke) 11 July – 08 September F  
Small numbers recorded at MV light in 17 years from 1969 – 2017. In 2017 singles were recorded on 16 and 31 July.
- 73.142 (2379) **Small Rufous** *Coenobia rufa* (Haworth) 11 July – 05 September O  
Recorded in 1969, 1975 (two), 1994, 1995, 2000, then annually in small numbers from 2010-2014, though absent since 2015.
- 73.144 (2350) **Small Wainscot** *Denticucullus pygmina* (Haworth) 08 July – 01 October O  
Small numbers recorded between 1975 and 2017. In 2017 22 individuals were recorded over 16 nights with a maximum of four on 04 August.
- 73.145 (2349) **Mere Wainscot** *Photodes fluxa* (Hübner) **Nb** R  
Two were recorded at light on 11 August 1969 (Embry & Youden, 1949) and singles were caught at HQ light on 01 July 2009 and 20 July 2010, with small numbers annually from 2013 to 2015. There were none in 2016. In 2017 there was a single record on 21 June (CM).
- 73.147 (2345) **Small Dotted Buff** *Photodes minima* (Haworth) 13 June – 30 July O  
Recorded in the last few days of July 1982, on 30 July 2002, two in the Oasis 23 June 2006 (MH) one-two on eight dates from 09-22 July 2010, singles in July 2013 and 13 June 2013.
- 73.149 (2347) **Concolorous** *Photodes extrema* (Hübner) **RDB3** R  
One at HQ MV light on 01 July 1994 (ACJ, EB) was the fifth record for Kent. Another was trapped at HQ light on 27 June 2011 (JGCB).
- 73.151 (2373) **Webb's Wainscot** *Globia sparganii* (Esper) **Nb** 21 July – 04 October O  
Recorded at light in 1975, 1995 (two), 2004 (four), 2007 and annually in small numbers between 2009 and 2017. In 2017 mainly singles were recorded on nine nights between 15 July (six days earlier than previous earliest date) and 03 September.
- 73.152 (2374) **Rush Wainscot** *Globia algae* (Esper) **RDB3** R  
Recorded in HQ MV trap 27 August 2005 (P&PH) (gen det DA).
- 73.154 (2330) **Dusky Brocade** *Apamea remissa* (Hübner) 22 May – 13 August F  
Small numbers regularly at light (eg up to seven in June 2009 and up to 10 in June 2010) almost annually between 1978 and 2017. In 2017 29 individuals were recorded over 17 nights between 22 May and 24 July with a maximum of three on 16 June.
- 73.155 (2327) **Clouded Brindle** *Apamea epomidion* (Haworth) 22 May – 11 July R  
Recorded at light on 01 July 1967, 01 July 1986, 19 June 2004, 11 July 2009, 25 and 28 June 2011, 23 June 2014, 22 May 2015 and 17 June 2017.
- 73.156 (2326) **Clouded-bordered Brindle** *Apamea crenata* (Hufnagel) 11 May – 29 July O  
Recorded at MV light on the Reserve Buffer Zone on 24 June 1985, 17 June 1987 and 01 June 1994, with small numbers at HQ light in 2009, 2010, 2011, 2013, 2014 and 2016. In 2017 singles were recorded on 16, 23 and 29 May.

- 73.157 (2333) **Large Nutmeg** *Apamea anceps* (Denis & Schiffermüller) R  
Singles recorded at light on 07 June 1994 (ACJ), 06 June 2004, 23 June 2006 (TD) and 31 May 2014 (JGCB).
- 73.158 (2334) **Rustic Shoulder-knot** *Apamea sordens* (Hufnagel) 23 April – 18 July F  
Scarce in the 1990s but now recorded annually at MV light up to 2017 (up to 10 in May 2009 and up to 40 in June 2010). In 2017 over 36 nights between 28 April and 15 June 167 individuals were recorded with a maximum of 19 on 16 May.
- 73.159 (2331) **Small Clouded Brindle** *Apamea unanimitis* (Hübner) 21 May – 20 July F  
First recorded on 06 June 1946 (Embry & Youlden, 1949). Almost annual in small numbers between 1982 and 2017 (and becoming more common since 2003). In 2017 12 individuals were recorded over eight nights between 22 May and 16 June with a maximum of three on 29 May.
- 73.161 (2325) **Crescent Striped** *Apamea oblonga* (Haworth) Nb 13 July – 23 August O  
Recorded on the Estate in 1981 (Emmett, 1977), 03 August 1982, 23 August 1984, 14 July 1995, 13 and 25 July 1997 and 07 August 2009, with one-three on seven dates from 18 July – 08 August 2010 and one on 30 July 2011. A species of saltmarsh, where it is common (FS).
- 73.162 (2321) **Dark Arches** *Apamea monoglypha* (Hufnagel) 13 May – 15 November Ab  
Abundant up to 2017 (1,950 recorded at HQ light on 31 nights in July 2016 with a maximum of 141 on 15, for example) with occasional individuals in September - November. In 2017 2,057 individuals were recorded over 73 nights between 26 May and 26 August with maxima of 126 on 15 July and 133 on 22, 156 on 24 and 184 on 23 June; and 10, mainly singles, were also recorded on eight nights between 08 October and 15 November.
- 73.163 (2322) **Light Arches** *Apamea lithoxyloea* (Denis & Schiffermüller) 26 May – 14 August C  
Regular at light in small to moderate numbers up to 2017. Peak counts include 77 in June 2009, 92 in July 2010 and 51 in July 2013. In 2017 80 individuals were recorded over 20 nights between 08 June and 10 July with a maximum of 17 on 23 June.
- 73.164 (2323) **Reddish Light Arches** *Apamea sublustris* (Esper) 27 May – 07 August C  
Regular at light up to 2017. Abundant in 2009 when peak counts included 41 on 22 June and 52 on 03 July. In 2017 over 27 nights between 27 May (three days earlier than previous earliest date) and 08 July 265 individuals were recorded with maxima of 25 on 16 and 18 June.
- 73.168 (2336) **Double Lobed** *Lateraligea ophiogramma* (Esper) 21 June – 22 August F  
Recorded annually at light between 1978 and 2017 with up to six-seven at HQ light. In 2017 singles were recorded on 21 June and 09 July with two recorded on 16 July.
- 73.1691 (2343x) **Common/Lesser Common Rustic agg** *Mesapamea secalis* agg C  
These species require gen det to separate.  
Past records have been attributed to Common Rustic and Lesser Common Rustic but we now record as Common Rustic agg. Recorded in 2016 from 16 June to 13 September with a maximum of 118 on 04 August. In 2017 they were recorded between 16 June and 21 September with a maximum of 94 on 19 July.
- 73.170 (2343a) **Lesser Common Rustic** *Mesapamea didyma* (Esper) 02 July – 30 August R  
Two individuals identified by genitalia on 14 July 1993 (two) (EB) and 30 August 1994 (EB).
- 73.171 (2342) **Rosy Minor** *Litologia literosa* (Haworth) 28 June – 05 September C  
Quite common and one-five regularly taken at light up to 2016. More numerous since 2009 when up to 39 were caught at HQ light in July, with up to 74 in July 2010 and 48 in August 2013. In 2017 90 individuals were recorded over 21 nights between 10 July and 04 August with a maximum of 13 on 10 July.
- 73.172 (2341) **Cloaked Minor** *Mesoligia furuncula* (Denis & Schiffermüller) 19 May – 10 September F  
Quite common and small numbers attracted to light up to 2016 (up to eight in August 2009, 20 in July 2010, 28 in August 2012 and 49 in August 2013). Between 09 July and 21 August 2017 27 individuals were recorded over 20 nights with a maximum of four on 15 July.
- 73.1731 (2337x) **Marbled Minor agg** *Oligia strigilis* agg  
Marbled Minor (*Oligia strigilis*), Tawny Marbled Minor (*O. latruncula*) and Rufous Minor (*O. versicolor*) form a complex of three species, which can only reliably be separated by dissection of the genitalia. Thus, records of each should be treated with caution.  
Recorded at HQ light in 2016 between 20 May and 23 July. In 2017 269 individuals were recorded over 46 nights from 11 May to 23 June with a maximum of 30 on 29 May.
- 73.173 (2337) Marbled Minor** *Oligia strigilis* (Linnaeus) Common  
Two on 16 and singles on 20 and 25 May 2017 at HQ light (all M gen det DS)
- 73.175 (2338) **Rufous Minor** *Oligia versicolor* (Borkhausen) 06 June – 08 July  
Probably overlooked and not identified until 8<sup>th</sup> July 1977 when two were confirmed by genital dissection (Brit.



Mus. MH).

- 73.176 (2340) **Middle-barred Minor** *Oligia fasciuncula* (Haworth) 16 May – 07 August F  
Recorded in small to moderate numbers (up to 18 individuals annually from 2009-2016). In 2017 81 individuals were recorded over 26 nights between 24 May and 21 June with a maximum of 17 on 02 June.
- 73.179 (2271) **Orange Sallow** *Tiliacea citrigo* (Linnaeus) R  
Singles trapped at HQ on 30 September 2009, 28 September 2010, 26 September 2011, 06 October 2013 and 27 September 2017 (IDH)
- 73.180 (2272) **Barred Sallow** *Tiliacea aurago* (Denis & Schiffermüller) 05 September – 27 October O  
Recorded at light in Slazengers in 1977, at HQ light in 1995 (three) and annually in small numbers between 2009 and 2016. In 2017 singles were recorded on nine dates between 08 September and 27 October (latest record by eight days).
- 73.181 (2273) **Pink-barred Sallow** *Xanthia togata* (Esper) 28 August – 29 October F  
Occasional at light in small numbers from 1994 – 2006. Annual between 2009 and 2017. In 2009 a cumulative total of 171 included up to 20 in September and nine in October. A total of 106 in 2011 included up to 16 in September. In 2016 68 individuals were recorded over 24 nights between 12 September and 29 October with a maximum of eight on 09 October. In 2017 there were records of 71 individuals over 26 nights between 30 August and 18 October with a maximum of nine on 26 September.
- 73.182 (2274) **Sallow** *Cirrhia icteritia* (Hufnagel) 09 September – 04 November C  
Recorded regularly at light between 2009 and 2017 (up to 11 in September and October since 2009, with up to 18 in September 2011). In 2016 64 individuals were recorded over 26 nights between 11 September and 04 November with a maximum of 10 on 07 October. In 2017 114 individuals were recorded over 30 nights between 16 September and 23 October with a maximum of 13 on 27 September. Often found feeding at Ivy blooms in the autumn.
- 73.183 (2275) **Dusky-lemon Sallow** *Cirrhia gilvago* (Denis & Schiffermüller) 01 September – 21 October F  
Up to three at HQ light in 1975, 1987, 1995, 1998 and annually between 2009 and 2017, including up to six at light in September 2011. In 2017 15 individuals were recorded over eight dates between 23 September and 17 October with a maximum of four on 03 October.
- 73.184 (2276) **Pale-lemon Sallow** *Cirrhia ocellaris* (Borkausen) Na R  
Singles at HQ light on 30 September, 04 October 2010, 07 October 2012 and one-two on three dates from 06-15 October 2013. Singles were recorded on 23 September (CM) and 27 September 2017 (IDH).
- 73.186 (2267) **Beaded Chestnut** *Agrochola lychnidis* (Denis & Schiffermüller) 11 September – 06 November C  
Frequent on Ivy blossom. Recorded regularly at light (up to five in September/October annually between 2009 and 2016, with up to 28 in October 2013). In 2016 69 individuals were recorded over 28 nights between 13 September and 02 November with a maximum of seven on 07 October. Over 27 dates between 25 September and 26 October 2017 79 individuals were recorded with a maximum of 11 on 14 October.
- 73.187 (2266) **Brown-spot Pinion** *Agrochola litura* (Linnaeus) 15 September – 13 October R  
Singles at HQ light in September 1989, 1990 and 1992, October 2010, September 2011, October 2012 and 2013, September 2014 and on 26 and 29 September 2016. In 2017 12 individuals were recorded over nine dates from 25 September to 13 October (three days later than previous latest record).
- 73.189 (2263) **Red-line Quaker** *Agrochola lota* (Clerck) 20 August – 21 December F  
Another moth often found at Ivy blossom but infrequent at light. Small numbers recorded annually at HQ light up to 2016, though more numerous in 2009 when up to 29 were recorded in October, in a cumulative total of 177. In 2016 42 individuals were recorded over 19 nights between 29 September and 15 November with a maximum of six on 27 October. 135 individuals were recorded over 23 nights between 22 September and 21 December (latest date by over a month) 2017 with a maximum of five on 02 November.
- 73.190 (2264) **Yellow-line Quaker** *Agrochola macilenta* (Hübner) 26 September – 03 December O  
Recorded at a lighted window on 03 December 1990, at light on 14, 19 and 20 October 1995. Small numbers at light annually between 2009 and 2016. In 2017 singles were recorded on 23 (Whitehouse) and 25 (HQ) October.
- 73.192 (2262) **Brick** *Agrochola circellaris* (Hufnagel) 09 September – 20 November F  
Recorded in 17 years from 1977 - 2017. Usually no more than a total of three, but particularly numerous in 2009 when up to 25 were recorded in September, with up to five in October in a cumulative total of 83 at HQ light. In 2017 recorded singly or in twos on 10 nights between 27 September and 15 November. Also recorded on Ivy blossom at Slazenger's on 23 October 1998.
- 73.193 (2270) **Lunar Underwing** *Omphaloscelis lunosa* (Haworth) 09 August – 05 November Ab

- Often abundant at light, with up to 217 in September 2009 and up to 321 in September 2013, for example. In 2016 1,009 individuals were recorded over 44 nights between 29 August and 30 October with a maximum of 64 on 26 September. In 2017 1,488 individuals were recorded over 49 nights between 16 September and 02 November with over 100 recorded on four nights in September including a maximum of 187 on 29 September.
- 73.194 (2258) **Chestnut** *Conistra vaccinii* (Linnaeus) 20 September – 05 May O  
Recorded at light in small numbers. In 2016 one was recorded on 02 November. In 2017 singles were recorded on 09, 18 and 20 March and 27 September, 16 November and 21 December. Sometimes found at Ivy blossom in the autumn and Sallow catkins in April.
- 73.195 (2259) **Dark Chestnut** *Conistra ligula* (Esper) 05 October – 16 April F  
Recorded in 1977, 1983, 1988 and 1995, then in small numbers (up to eight) annually from 2009 to 2016. In 2017 11 individuals were recorded over eight dates between 10 October and 16 November with a maximum of three on 17 October.
- 73.196 (2259a) **Black-spotted Chestnut** *Conistra rubiginosa* (Scopoli) R  
One was attracted to MV light at HQ on 22 December 2011 (JGCB, IPH, AML et al). This species was recorded for the first time in the UK in November 2011 when two singles were trapped in Dartford, Kent.
- 73.197 (2260) **Dotted Chestnut** *Conistra rubiginea* (Denis & Schiffermüller) R  
Singles were recorded at HQ light on 04 October 2011, 19 April and 16 October 2012, 08 May and 16 and 29 October 2013, 05 April 2014 and 01 and 04 April 2017.
- 73.198 (2261) **Red-headed Chestnut** *Conistra erythrocephala* (Denis & Schiffermüller) R  
An immigrant that breeds in N France, one was recorded at HQ light on 10 October 2010 (JGCB).
- 73.200 (2235) **Tawny Pinion** *Lithophane semibrunnea* (Haworth) 14 October – 24 May O  
Recorded at sugar on 25 October 1977 (Chalmers-Hunt) and in small numbers at HQ MV light on 23 April 1993, 14 October 1995, on four dates in 2010, in May 2012, in March-April 2014 and September 2015. A single was recorded on 05 April 2017.
- 73.201 (2236) **Pale Pinion** *Lithophane socia* (Hufnagel) 14 March – 16 June O  
Recorded on 19 September 1998 and annually in small numbers at HQ light from 2009-2014, but absent in 2015 and 2016. In 2017 singles were recorded at HQ light on 24 and 30 March (IDH/SZW) and in the Whitehouse on 16 June (latest date by four days) (FS).
- 73.202 (2237) **Grey Shoulder-knot** *Lithophane ornitopus* (Hufnagel) 15 November – 16 May R  
Singles in November 2009, April and May 2010, April 2011, March and April 2012 and March and April 2014.
- 73.206 (2240) **Blair's Shoulder-knot** *Lithophane leautieri* (Boisduval) 19 September – 16 December F  
Formerly rare along the south coast but now established and widespread wherever *Cupressus* hedging is grown. Almost annual since 1982 in small numbers. The cumulative total in 2009 was 56, including three records of five-eight at HQ light between 28 September – 10 October, and totals of 24, 22, 17 and 33 were recorded in 2010, 2011, 2012 and 2013. In 2016 singles were recorded on 29 September and 04 November. None were recorded in 2017.
- 73.209 (2241) **Red Sword-grass** *Xylena vetusta* (Hübner) R  
A rare immigrant in Kent, very local elsewhere in Britain, one was trapped at HQ light on 15 October 2014 (IDH).
- 73.210 (2256) **Satellite** *Eupsilia transversa* (Hufnagel) 01 October – 15 April F  
One-two recorded at HQ light in eleven years from 1977 – 2005. More numerous in 2009 when there were peak counts of three-four in October and November, with similar numbers in 2011 and 2012 and up to three since. In 2016 singles were recorded on 30 March, 30 October and 06 December. In 2017 a larva was recorded on 09 May in the Elms (SZW) and singles were recorded at HQ light on 18 February (IDH) and 22, 23 and 25 October.
- 73.212 (2311) **Double Kidney** *Ipimorpha retusa* (Linnaeus) July – September R  
A single was attracted to actinic light in the Big Gully on 19 July 2017 (SZW)
- 73.213 (2312) **Olive** *Ipimorpha subtusa* (Denis & Schiffermüller) 06 July – 16 August O  
Singles were recorded at HQ light on 08 July 1990, 10 and 28 July 1995 and 20 July and 03 August 2004. More numerous between 2009-2016, with small numbers (up to five) annually. A single was recorded on 17 July 2017.
- 73.215 (2316) **Lesser-spotted Pinion** *Cosmia affinis* (Linnaeus) R  
Singles were recorded at HQ light on 12 August 2011 (JGCB), in the Whitehouse on 07 August 2015 (FS) and at HQ light on 18 July 2017 (SZW).
- 73.216 (2318) **Dun-bar** *Cosmia trapezina* (Linnaeus) 06 June – 11 September F  
Recorded in 1969, and small numbers at light almost annually from 1981 to 2017. Numerous in 2009 when

up to 34 were caught at HQ light in July. In 2017 12 individuals were recorded over 10 nights between 06 July and 04 August.

- 73.217 (2319) **Lunar-spotted Pinion** *Cosmia pyralina* (Denis & Schiffermüller) 10 July – 02 September O  
Recorded at HQ light on 14 July 1982, 01 August 1983, 26 July 2005, 23 July and 18 August 2010 and 02 September 2011, with small numbers from 2013-2016. None were recorded in 2017.
- 73.219 (2269) **Centre-barred Sallow** *Atethmia centrago* (Haworth) 04 September – 27 October F  
One-two recorded in 1977, 1981, 1986, 1993, 2003 – 2006 and annually from 2009 – 2017 (up to four in September 2010 and a total of six individuals in 2016). In 2017 12 individuals were recorded over 10 nights in the second part of September.
- 73.220 (2225) **Minor Shoulder-knot** *Brachylomia viminalis* (Fabricius) R  
Singles trapped on 4 July 2009 (PDH, JGCB) and 12 and 19 July 2010 (PDH, JGCB).
- 73.221 (2268) **Suspected** *Parastichtis suspecta* (Hübner) R  
Recorded in Slazengers on 03 July 1976, at HQ light on 19 July 1997 (MG, IL) with two on 23 August 2009 (PDH, JGCB, AP).
- 73.222 (2314) **Dingy Shears** *Apterogenum ypsilon* (Denis & Schiffermüller) 07 June - 12 August O  
12 recorded in six years from 1982-1988 then in small numbers in 1995, 2001, 2004, 2010, 2011, 2013, 2014 and 2015. In 2017 singles were attracted to light in the Whitehouse on 16 June (FS) and at HQ on 23 June (SH/IDH)
- 73.223 (2246a) **Oak Rustic** *Dryobota labecula* (Esper) October to December R  
The first Observatory records were singles at HQ light on 11 and 18 October and 02 November 2017 (IDH & SZW)
- 73.224 (2247) **Merveille du Jour** *Griposia aprilina* (Linnaeus) 29 September – 28 October O  
Singles at light on 20 October 1982, 09 October 1986, 03 October 1995, 11 October 2003, 13 October 2009, 18 October 2010, October 2011 (three), 23 October 2013, October 2014 (two), October 2015 (three), 28 October 2016 (eight days earlier than previous earliest record) and 25 October 2017.
- 73.225 (2248) **Brindled Green** *Dryobotodes eremita* (Fabricius) 03 September – 09 October R  
Recorded on successive days at light from 03 to 05 September 1975, with singles on 25 September 1998, 01 and 06 October 2010, 28 and 30 September 2011, 04 and 09 October 2012 and 21 September and 04 October 2013.
- 73.230 (2230) **Feathered Brindle** *Aporophyla australis* (Boisduval) **Nb** 09 September – 02 November C  
Regularly attracted to light in late autumn (eg up to eight in October 2009, 10-12 in September and October 2010, 14-15 in October 2011 and 2012, exceptionally up to 67 in October 2013 and up to 24 in October 2014). In 2016 154 individuals were recorded over 28 nights between 18 September and 29 October with maxima of 16 on 28 September and 17 on 08 October. In 2017 178 individuals were recorded over 32 nights between 23 September and 19 October with maxima of 13 on 29 September and 13 October.
- 73.231 (2231) **Deep-brown Dart** *Aporophyla lutulent* (Denis & Schiffermüller) 19 September – 28 October C  
Small numbers recorded on many nights annually to 2000, then unrecorded until 2009 since when recorded annually at HQ light in small numbers (up to 10). In 2016 46 individuals were recorded over 24 nights between 25 September and 23 October with a maximum of eight on 07 October. In 2017 35 individuals were recorded over 19 nights between 20 September and 17 October with a maximum of four on 01 October.
- 73.233 (2232) **Black Rustic** *Aporophyla nigra* (Haworth) 05 August – 04 November C  
Recorded annually in small to moderate numbers (up to eight at HQ light in September 2009, up to 11-13 in October 2010 and 2011, up to 16 in October 2012 and up to 24-27 in September and October 2013). In 2016 55 individuals were recorded over 22 nights between 19 September and 04 November with a maximum of eight on 29 September. In 2017 100 individuals were recorded over 28 nights with maxima of 10 on 25 and 27 September.
- 73.235 (2255) **Feathered Ranunculus** *Polymixis lichenea* (Hübner) 26 July – 09 November F  
Small numbers regular at light in late autumn (up to five in September in 2009 and 2011 and seven in October 2013). In 2016 20 individuals were recorded over 12 nights between 25 September and 22 October with a maximum of six on 05 October. In 2017 15 individuals were recorded over 10 nights between 27 September and 18 October with a maximum of four on 09 October.
- 73.237 (2252) **Large Ranunculus** *Polymixis flavicincta* (Denis & Schiffermüller) R  
Singles taken in 1933, 18 September 1954 (both CH) and 27 September 2004.
- 73.241 (2179) **Pine Beauty** *Panolis flammea* (Denis & Schiffermüller) 08 March – 08 June O  
Almost annual in small numbers since 1990 (absent in 2015 and 2016). In 2017 singles were recorded at HQ

light on 31 March and 12 April (SH/IDH).

- 73.242 (2188) **Clouded Drab** *Orthosia incerta* (Hufnagel) 18 February – 15 June C  
Recorded annually at light up to 2017 (up to 21 in April 2010, 18 in March 2011 and 15 in March 2012, 45 in March 2014 and 11 on 12 April 2016 from a total of 114 individuals). In 2017 142 individuals were recorded over 46 nights between 09 March and 08 May with a maximum of 14 on 18 March. Occasionally seen at Sallow catkins in the spring.
- 73.243 (2183) **Blossom Underwing** *Orthosia miniosa* (Denis & Schiffmüller) March/April R  
Two at HQ light on 19 April 2011 (JGCB), one on 01/02 April 2014 (JGCB) and a single on 31 March 2017 (SH/IDH).
- 73.244 (2187) **Common Quaker** *Orthosia cerasi* (Fabricius) 03 February – 20 June C  
Small to moderately large numbers regularly at light (up to 15 in April 2009, 52 in March 2010, 42 in March 2011 and 54 in April 2014). In 2016 116 individuals were recorded over 36 nights between 01 March and 12 May with a maximum of 11 on 23 March. In 2017 297 individuals were recorded over 58 nights between 08 March and 24 May with a maximum of 31 on 18 March.
- 73.245 (2182) **Small Quaker** *Orthosia cruda* (Denis & Schiffmüller) 08 March – 13 May F  
Small numbers recorded annually up to 2017, though up to 12 at HQ light in April 2010 and, exceptionally, up to 78 in March 2012. In 2017 six singles were recorded between 08 March and 01 April.
- 73.246 (2185) **Lead-coloured Drab** *Orthosia populeti* (Fabricius) 15 March – 03 May R  
One at HQ light on 11 April 2015. In 2016 two were recorded on 13 April and a single on 03 May (IDH). In 2017 singles were recorded on 15 and 18 March (a month earlier than previous records but in line with information in the 2019 Atlas) (SZW/IPH).
- 73.247 (2186) **Powdered Quaker** *Orthosia gracilis* (Denis & Schiffmüller) 16 March – 29 May F  
Small to moderate numbers annually at light up to 2017 (eg up to six in April 2009, 24 in April 2010 and 15 in April 2011). In 2017 42 individuals were recorded over 23 nights between 21 March and 25 April with a maximum of four on 20 April.
- 73.248 (2184) **Northern Drab** *Orthosia opima* (Hübner) R  
Singles at HQ light on 28 April 2011, on three dates between 19 and 28 April 2014 and on 20 May 2015.
- 73.249 (2190) **Hebrew Character** *Orthosia gothica* (Linnaeus) 04 February – 13 June C  
Regular at light since 1967 and up to 2017 in moderate numbers (up to 11 in April 2009, 58 in April 2010 and 26 in March 2012). In 2016 377 individuals were recorded over 43 nights between 10 March and 12 May with a maximum of 27 on 30 March. In 2017 786 individuals were recorded over 75 nights between 08 March and 09 May with a maximum of 31 on 29 March and more than 20 individuals recorded on each of 11 nights.
- 73.250 (2189) **Twin-spotted Quaker** *Orthosia munda* (Denis & Schiffmüller) 14 March – 28 April F  
Small numbers recorded at light annually to 2016 (up to 13 in March 2012). In 2017 singles were recorded on five dates between 14 March and 05 April. The first record being 3 days earlier than the previous earliest date.
- 73.252 (2177) **Hedge Rustic** *Tholera cespitis* (Denis & Schiffmüller) 10 August – 10 October F  
First recorded in 1975 and in most years from 1981. Scarcer since 1998, although up to eight were recorded at HQ light in September 2010 and up to 12 were recorded in August 2013. In 2016 32 individuals were recorded over 18 nights between 10 August and 13 September with maxima of four on 25 August and 05 and 06 September. In 2017 singles were recorded on nine dates between 14 August and 09 September.
- 73.253 (2178) **Feathered Gothic** *Tholera decimalis* (Poda) 15 August – 25 September C  
Small to moderate numbers regularly attracted to light (eg up to 14 in August and 19 in September 2009, 18 in September 2010, 26 in September 2011 and 23-26 in August and September 2103). In 2016 183 individuals were recorded over 20 nights between 25 August and 20 September with maximum of 35 on 05 September. In 2017 24 individuals were recorded over 13 nights between 29 August and 09 September with a maximum of four on 04 September
- 73.254 (2176) **Antler Moth** *Cerapteryx graminis* (Linnaeus) 09 July – 11 September O  
Occasional at light 1975 - 1982 but uncommon thereafter. None were recorded in 2016 or 2017.
- 73.255 (2145) **Nutmeg** *Anarta trifolii* (Hufnagel) 16 April – 10 September F  
Occasionally found on garden palings and regular at light in fairly small numbers (up to 10 in July 2012) between 1981 and 2016. In 2017 145 individuals were recorded over 56 dates between 11 May and 06 September with a maximum of 11 on 04 August plus a late single on 02 October is a suspected immigrant (IDH).
- 73.261 (2150) **Grey Arches** *Polia nebulosa* (Hufnagel) R

Singles found resting on palings in June 1971 (DMB) and in Slazengers on 03 July 1976.

- 73.263 (2157) **Light Brocade** *Lacanobia w-latinum* (Hufnagel) 29 April – 12 July O  
First recorded in 1972 and occasionally until 2001 since when it has become almost annual in small numbers. In 2016 singles were recorded on 28 May and 03, 11 and 13 June. In 2017 17 individuals were recorded over 12 nights between 29 April and 03 June. The earliest recorded in 2017 was five days earlier than the previous earliest date.
- 73.264 (2158) **Pale-shouldered Brocade** *Lacanobia thalassina* (Hufnagel) 16 May – 03 August O  
Small numbers recorded in 1992 and almost annually from 1999 to 2006 but scarce since, with singles on 18 May 2010, on 17 May and three dates in July 2015 and 29 May and three dates in July 2016. None were recorded in 2017.
- 73.266 (2159) **Dog's Tooth** *Lacanobia suasa* (Denis & Schiffermüller) 23 April - 10 September F  
First recorded in 1969 and small numbers (eg up to four in May and three in June in 2009, five in August 2010 and seven in August 2015) annually up to 2016. 12 singles were recorded between 16 May and 09 August 2017
- 73.267 (2160) **Bright-line Brown-eye** *Lacanobia oleracea* (Linnaeus) 24 March – 21 November C  
Regular at light (eg up to 32 in July 2009 and 57 in September 2010) in two overlapping broods up to 2016. In 2017 503 individuals were recorded over 123 dates between 24 March (three weeks earlier than the previous earliest record) and 23 October with a maximum of 18 on 24 August.
- 73.268 (2160a) **Splendid Brocade** *Lacanobia splendens* (Hübner) 25 June – 27 July O  
First identified in the UK at Portland in 2003. Recorded for the first time at the Bay in 2010 in a record arrival of the species along the south coast, including one-two on eight dates from 02 – 27 July. Subsequently, singles on 25 June 2011, 01 July 2013, 26 June 2014, five in 2015 including three on 12 July and 11 June 2016. None were recorded in 2017.
- 73.270 (2155) **Dot Moth** *Melanchra persicariae* (Linnaeus) 24 June – 11 September F  
Small numbers taken at light almost annually between 1967 and 2016. In 2017 singles were recorded on 17, 20 and 26 July.
- 73.271 (2163) **Broom Moth** *Ceramica pisi* (Linnaeus) Late April – mid July O  
Formerly up to four almost annually at light on many nights since 1967, but much less frequent since and unrecorded from 2009-2017 apart from one on 02 July 2014.
- 73.273 (2147) **Shears** *Hada plebeja* (Linnaeus) 05 May – 19 July, 05 August – 09 September F  
First taken at light in July 1978 and annually in small numbers from 1981-2016 (up to seven in June 2010 but only a single in 2016 on 06 June). None were recorded in 2017. Larvae were found on White Campion on the dunes in June 1971.
- 73.274 (2154) **Cabbage Moth** *Mamestra brassicae* (Linnaeus) 20 April – 02 October C  
Small to moderate numbers regularly attracted to light up to 2016 (up to 24 in August 2010). In 2017 752 individuals were recorded over 87 dates between 20 April (six days earlier than the previous earliest date) and 02 October (five days later than previous latest date) with maxima of 45 on 19 July and 23 August. Larvae often found on garden brassicas and other plants.
- 73.275 (2152) **White Colon** *Sideridis turbida* (Esper). **Nb** 09 May – 13 September O  
A local and uncommon species found on coastal sandhills with several attracted to sugar patches in the Elms in 1967. Taken at light in 1977 and annually since in small numbers. Not recorded in 2016. In 2017 singles were recorded on 26, 28 and 29 May and 16 and 19 June.
- 73.276 (2166) **Campion** *Sideridis rivularis* (Fabricius) 24 May – 28 August O  
Taken at light in July 1975 and almost annually from 1982 – 2002. Scarcer in recent years with small and diminishing numbers at HQ light annually from 2009 to 2015. Not recorded in 2016. A single was recorded on 15 July 2017. Larvae found in the calyx of White Campion on the Estate in 1970.
- 73.277 (2153) **Bordered Gothic** *Sideridis reticulata* (Goeze) **Na** R  
A rare and declining species, Embry & Youden (1949) stated that it had been taken at Sandwich Bay. Not recorded in 2017.
- 73.279 (2164) **Broad-barred White** *Hecatera bicolorata* (Hufnagel) 16 May – 30 August O  
Found resting on seafront paling fences several times in 1970/71 and 1978 with small numbers at light almost annually since. A single recorded on 17 May 2016. In 2017 singles were recorded on 13 June, 16 July and 21 August.

- 73.281 (2173) **Lychnis Hecatera bicruris** (Hufnagel) 18 April – 29 September F  
Small numbers attracted to light almost annually between 1967 and 2016 in two more or less overlapping broods (eg up to six in 2009 and 2010). In 2016 mainly singles were recorded on 13 nights between 25 May and 24 August with maxima of two on 30 July and 10 August. In 2017 68 individuals were recorded over 36 dates between 18 April (17 days earlier than the previous earliest record) and 25 August with a maximum of seven on 19 July.
- 73.282 (2170) **Varied Coronet Hecatera compta** (Denis & Schiffermüller) 21 June – 06 September R  
Recorded at light in the Whitehouse on 30 June 1989 and at HQ light on 06 September 1989, 04 July 1995, 25 June 2009, 10 July 2010, 14 July 2013, 21 June and 02/03 July 2014 and 16 July 2016.
- 73.283 (2171) **Marbled Coronet Hecatera confusa** (Hufnagel) R  
Recorded at HQ light in July 1972 (DMB) and 08 June 1986 (NO).
- 73.284 (2172) **White Spot Hadena albimacula** (Borkhausen) **RDB2** R  
One at HQ light on 08 May 2014 (JGCB, IPH). A species that feeds on Nottingham Catchfly *Silene nutans*, the nearest colony of which is on the cliffs either side of the South Foreland.
- 73.286 (2167) **Tawny Shears Hecatera perplexa** (Denis & Schiffermüller) 20 May – 22 July, 11 – 29 August O  
First recorded in 1985 but only irregularly taken at light since, with none in 2011, or 2015 to 2017.
- 73.289 (2196) **Striped Wainscot Mythimna pudorina** (Denis & Schiffermüller) 10 June – 07 August O  
Recorded in small numbers intermittently from 1972-2010 and from 2013 to 2016 (a single on 17 July). In 2017 a single was recorded 4 days earlier than the previous earliest record on 10 June on the beach (DG) and subsequently on 14, 16 (CM), 21 and 22 June.
- 73.290 (2192) **Brown-line Bright-eye Mythimna conigera** (Denis & Schiffermüller) 19 June – 02 September O  
Common at light from 1967 – 1972. Gradually scarcer to 1991 and less frequent since with most recent records of up to three in 2007 and annually from 2009-2014, but absent in 2015. In 2016 a single was recorded on 15 July and four on 04 August. Four individuals were recorded over three dates in July 2017.
- 73.291 (2199) **Common Wainscot Mythimna pallens** (Linnaeus) 05 May – 04 October Ab  
A very common species regularly attracted to light up to 2016. Exceptional numbers occurred in 2009, including 676 at HQ light on 15 August. In 2017 640 individuals were recorded over 109 dates between 12 May and 30 September with maxima of 43 on 21 and 23 August.
- 73.292 (2200) **Mathew's Wainscot Mythimna favicolor** (Barrett) **Nb** 21 May – 15 September O  
A local species of coastal salt marshes first recorded in 1966 and in small numbers in 14 years from 1984 to 2016. In 2016 singles were recorded on 21 and 26 August. In 2017 singles were recorded on 21 May, 21 June (CM), 21 July, 04 August and 02 September.
- 73.293 (2198) **Smoky Wainscot Mythimna impura** (Hübner) 12 May – 12 November Ab  
Regular at light up to 2016 and sometimes abundant, such as in 2009 when there were exceptional numbers, including 132 on 14 July and 632 on 20 July. In 2017 872 individuals were recorded over 55 dates between 02 June and 08 September with a maximum of 76 on 15 July.
- 73.294 (2197) **Southern Wainscot Mythimna straminea** (Treitschke) 04 June – 29 September C  
Taken at sugar in 1949 and annually at light in small numbers (up to 11) between 1975 and 2016. In 2016 112 individuals were recorded over 39 nights between 07 July and 26 September with a maximum of 11 on 05 August. In 2017 109 individuals were recorded over 36 nights between 10 June and 29 September (latest date by 2 days) with a maximum of 15 on 19 July.
- 73.295 (2195) **Delicate Mythimna vitellina** (Hübner) 25 June – 02 November F  
A scarce migrant first taken in 1945 with a total of around 78 from 1991 – 2016. This includes six singles in 2010, one-two on 11 dates in 2012, a total of 14 in 2013, all but one of which occurred in October, one-two on eight dates between 23 September and 09 October 2016 and 49 individuals over 32 dates between 17 June (a week earlier than previous earliest date) and 02 November (latest date by two days) 2017 with a maximum of five on 02 October.
- 73.297 (2194) **White-point Mythimna albipuncta** (Denis & Schiffermüller) 30 April – 02 November C  
Previously a migrant species that is now breeding in Kent. At least 50 have been caught in most years since 2004 and in 2009 there was a cumulative total of 386 between 06 May – 27 October, most of which (297) were recorded in August, including 65 on 16 August. Subsequently, up to 100 in August 2010, 33 in August 2011, 80 in August 2012, 96 in August 2013, 36 in August 2014, 19 in August 2015. In 2016 a total of 490 individuals were recorded over 73 nights between 01 May and 09 October with maxima of 28 on 24 August and 07 September. A total of 581 individuals were recorded over 111 dates between 03 May and 02 November (latest

date by six days) 2017 with a maximum of 32 on 12 August.

- 73.298 (2193) **Clay Mythimna ferrago** (Fabricius) 28 May – 26 August F  
Small to moderate numbers attracted to light annually (up to 13 in July 2009, 23 in July 2010, 17 in July 2013, 25 in July 2014 and 26 in July 2015). In 2016 a total of 173 individuals were recorded over 42 nights between 21 June and 23 August with a maximum of 20 on 15 July. Over 41 dates between 28 May (nine days earlier than previous earliest) and 11 August 2017 179 individuals were recorded with a maximum of 12 on 15 July.
- 73.299 (2201) **Shore Wainscot Mythimna litoralis** (Curtis) **Nb** R  
A coastal species recorded in 1950 and on 27 June 1969, 15 July 2013, 12 July 2015 and 06 July 2016.
- 73.300 (2202) **L-album Wainscot Mythimna l-album** (Linnaeus) **Nb** 20 May – 31 October C  
Formerly a scarce immigrant but now resident and breeding in rough grassland by the sea. Recorded in small numbers from 1993 – 2008, but increased significantly since 2009 when moderate numbers annually at light, including cumulative totals of 164 in 2009, 137 in 2010, 133 in 2011, 186 in 2012, 67 in 2016 and 107 in 2017 with a maximum of 13 on 25 September, for example.
- 73.301 (2205) **Shoulder-striped Wainscot Leucania comma** (Linnaeus) 12 May – 27 July F  
Small numbers were regular at light until the 1990s, then very much scarcer until a resurgence of records in 2004 and 2005, then annually in small numbers between 2009 and 2016. In 2017 13 individuals were recorded over eight dates between 02 and 19 June with maxima of three on 02 and 03 June.
- 73.302 (2204) **Obscure Wainscot Leucania obsoleta** (Hübner) 06 May – 27 July F  
A very local species first recorded in 1976 and 1977 with small numbers taken at light annually between 1982 and 2016. A total of 33 in 2011, including a peak of four on 28 June. Some late records (to 14 August) are suspect with regard to date (FS) although Moth Atlas 2019 suggests peak period is July but records up to mid August are now regular. Records for 2017 at Sandwich Bay showed mainly singles on five dates between 03 and 21 June.
- 73.304 (2208) **Cosmopolitan Leucania loreyi** (Duponchel) R  
A rare migrant, recorded at HQ light on 12 August 2011 (JGCB).
- 73.305 (2209) **Flame Wainscot Senta flammea** (Curtis) **Na** R  
A fen species, and possible immigrant, only recorded on 31 May 1982 (IDH), 06 June 1982 (IDH) and 13 May 2009 (JGCB).
- 73.307 (2119) **Pearly Underwing Peridroma saucia** (Hübner) 25 April – 25 October F  
Up to six at light in most years up to 2016. In 2017 singles were recorded on 27 May, 23 August, 07 and 20 September and 11, 24 and 25 October (latest date by two days). Recorded feeding at Ivy blossom on the Estate on 04 October 1971.
- 73.308 (2099) **Portland Moth Actebia praecox** (Linnaeus) R  
Singles at HQ light on 30 August 2006 and 15 August 2012 (JGCB, IPH)
- 73.313 (2081) **White-line Dart Euxoa tritici** (Linnaeus) 06 June – 18 September C  
Attracted to light annually and often numerous (eg up to 146 in July 2010, 174 in July 2011 and 242 in August 2012). In 2017 383 individuals were recorded over 59 dates between 13 June and 27 August with a maximum of 30 on 19 July.
- 73.314 (2082) **Garden Dart Euxoa nigricans** (Linnaeus) 06 July - 17 September O  
Small numbers were regular; but now much reduced and there have been few confirmed records since 2001, the most recent of which were singles on 18 July 2011 and 03 and 09 August 2015.
- 73.316 (2084) **Light Feathered Rustic Agrotis cinerea** (Denis & Schiffermüller) R  
One at HQ light on 08 May 2011 (JGCB).
- 73.317 (2089) **Heart & Dart Agrotis exclamationis** (Linnaeus) 24 April – 24 September (16 October) Ab  
One of the most numerous species in the MV light (up to 149 in July 2009, 137 in June 2014, 138 in June 2015 and a peak count for 2016 of 106 on 19 June) with occasional individuals in September and as late as 16 October in 2013. In 2017 there were 1130 individuals recorded over 97 dates from 27 April to 08 September with a maximum of 73 on 23 June.
- 73.319 (2087) **Turnip Moth Agrotis segetum** (Denis & Schiffermüller) 12 April – 20 November C  
Common throughout the area and attracted to light in small to moderate numbers (eg up to 20 in August 2010). In 2016 ones to threes were recorded over 42 nights between 03 June and 19 July and 05 August and 14 November. In 2017 ones to threes were recorded over 54 dates between 02 May and 01 November with one record of 9 individuals on 04 August. 30 were found on ivy blossom at Slazenger's on 23 October 1998.

- 73.320 (2088) **Heart & Club** *Agrotis clavis* (Hufnagel) 28 May – 16 August C  
Frequent at light in most years, often in double figures (eg up to 77 in July 2009, 117 in July 2010, 126 in June 2011 and 96 in June 2015). In 2016 a total of 118 individuals were recorded over 31 nights between 14 June and 17 July with a maximum of 11 on 29 June. In 2017 there were 159 recorded over 29 nights between 03 June and 14 August with a maximum of 15 on 23 June.
- 73.322 (2085) **Archer's Dart** *Agrotis vestigialis* (Hufnagel) 12 June – 28 September C  
Frequent at light up to 2016 (eg peaks of 15-17 in July and August 2009, 21-22 in August 2010 and September 2011 and 44 in August 2012). In 2016 a total of 78 individuals were recorded over 36 nights between 10 July and 14 September with a maximum of eight on 11 August. In 2017 a total of 79 individuals were recorded over 37 nights between 13 June and 07 September with maxima of six on 14 and 24 August.
- 73.323 (2093) **Sand Dart** *Agrotis ripae* (Hübner) **Nb** 10 May – 11 August O  
A seashore species, first recorded at sugar in the Elms in June 1978 and almost annual in small numbers at light from 1981 – 2012 and in 2015. Not recorded in 2016 or 2017. Larvae were found in sand beneath Sea Rocket near the Point on 12 August and 02 September 1998.
- 73.325 (2092) **Shuttle-shaped Dart** *Agrotis puta* (Hübner) 30 March – 26 June, July - November C  
A very common species (with annual peaks of 53-67 between 2009 and 2014). In 2016 a total of 117 individuals were recorded over 59 nights between 06 May and 16 June and 18 July and 28 October with a maximum of nine on 05 August. In 2017 a total of 176 individuals were recorded over 73 nights between 17 April and 08 June and 08 July and 13 October with maxima of seven on 16 May and 17 July.
- 73.327 (2091) **Dark Sword-grass** *Agrotis ipsilon* (Hufnagel) 14 March – 09 December C  
A common migrant species. There have been cumulative totals of 132 in 2009, 89 in 2012, an exceptional 392 in 2013, of which 114 were recorded in August and 113 were recorded in October, and 81 in 2015. In 2016 one to four individuals were recorded over 29 nights between 30 March and 14 November. In 2017 a total of 136 individuals were recorded over 65 nights between 03 April and 15 November with a maximum of 11 on 01 August.
- 73.328 (2098) **Flame** *Axylia putris* (Linnaeus) 07 May – 15 September C  
A common species regularly attracted to light (eg up to 52 in June 2009, 49 in July 2013 and 61 in June 2014, for example) with smaller numbers in the second generation. In 2016 a total of 215 individuals were recorded over 50 nights between 03 June and 15 September with a maximum of 22 on 04 July. In 2017 a total of 210 individuals were recorded over 51 nights between 16 May and 29 August with maxima of 18 on 14 and 16 June.
- 73.329 (2102) **Flame Shoulder** *Ochropleura plecta* (Linnaeus) 06 April – 18 September C  
A common, double-brooded species, frequently numerous at light (eg peaks in 2009 of 56 in May and 60 in August, 82 in August 2012, 106 in August 2013 and 74 in August 2016). In 2017 a total of 452 individuals were recorded over 113 nights between 11 April and 17 September with a maximum of 32 on 16 May.
- 73.332 (2122) **Purple Clay** *Diarsia brunnea* (Denis & Schiffermüller) R  
Singles recorded at light on 27 May 1981, 27/28 June 1982, 06 June 2014 and 22 and 24 June 2017 (IDH, IPH).
- 73.333 (2120) **Ingrailed Clay** *Diarsia mendica* (Fabricius) 26 May – 11 August O  
One-two attracted to light in 1969, 1987, 1989, 2002, 2008, 2009 and 2010. In 2017 singles were recorded at light on 08 (SZW), 09 (SZW), 10 (PF/RW) and 16 (FS) June.
- 73.334 (2123) **Small Square-spot** *Diarsia rubi* (Vieweg) 04 May – early October C  
Fairly common at times on the flowers of Ragwort and sometimes fairly numerous at MV light up to 2017 (eg up to 37 in September 2009, 53 in August 2014, 42 in August 2015 and a peak count of 102 in August 2016). In 2017 a total of 314 individuals were recorded over 76 nights between 15 May and 25 September with a maximum of 29 on 03 June.
- 73.336 (2139) **Red Chestnut** *Cerastis rubricosa* (Denis & Schiffermüller) 29 February – 21 May F  
Up to three recorded annually historically, increasing in more recent years, with peaks of 12 in April 2010, six in April 2013 and 11 in March 2014, though no more than three in 2015. In 2016 a total of 24 individuals were recorded over 15 nights between 22 March and 10 May. Singles to three individuals were recorded over 19 nights between 14 March and 02 May 2017.
- 73.338 (2118) **True Lover's Knot** *Lycophotia porphyrea* (Denis & Schiffermüller) R  
Recorded at HQ light on 30 July and 07 August 2002 (KW).
- 73.339 (2105) **Dotted Rustic** *Rhyacia simulans* (Hufnagel) 28 June – 30 September O



Up to three almost annually from 1982, but the only recent records are of singles at HQ light on 03 August 2012 and in the Whitehouse on 16 June 2017 (FS).

- 73.342 (2107) **Large Yellow Underwing** *Noctua pronuba* (Linnaeus) 23 April – 19 November Ab  
Abundant throughout the area and often abundant at MV light up to 2017. Peak counts in 2009 included up to 139 in August and 258 in September and in the run-up to National Moth Nights on 18/19 September, of 544 moths that were marked (mostly Large Yellow Underwings), only 26 were re-trapped, suggesting a considerable turnover of insects. In 2017 a total of 3,028 individuals were recorded over 166 nights between 23 April (over two weeks earlier than previous earliest date) and 02 November with maxima of 169 on 19 July and 162 on 29 August.
- 73.343 (2110) **Broad-bordered Yellow Underwing** *Noctua fimbriata* (Schreber) 14 June – 05 October F  
Taken annually at light in small numbers up to 2017 (eg up to eight in August 2010), with exceptional numbers in 2013 when up to 70 were recorded in September. In 2017 a total of 94 individuals were recorded over 49 nights between 14 June (a week earlier than previous earliest date) and 01 October with a maximum of 12 on 19 July.
- 73.345 (2109) **Lesser Yellow Underwing** *Noctua comes* (Hübner) 02 June – 16 November C  
Usually more abundant than the previous species and common at light up to 2017 (eg up to 65 in July 2009 and 84 in August 2013). In 2017 a total of 407 individuals were recorded over 86 nights between 12 June and 16 November (six days later than previous latest date) with maxima of 29 on 19 July, 24 on 25 September and 23 on 29 September.
- 73.346 (2112) **Least Yellow Underwing** *Noctua interjecta* (Hübner) 26 June – 14 September C  
Annual at light in small to moderate numbers up to 2017 (though up to 22 in July 2009, 57 in August 2013 and 30 in July 2014). In 2017 a total of 90 individuals were recorded over 30 nights between 10 July and 05 September with a maximum of 13 on 15 July.
- 73.347 (2110a) **Langmaid's Yellow Underwing** *Noctua janthina* (Denis & Schiffermüller) 23 June – 05 October O  
One at HQ light on 05 July 2009, five singles between 25 July – 05 October 2010 and annually in small numbers from 2011 to 2017. Including up to five in July 2014 and a total of eight in July 2016. In 2017 a total of 27 individuals were recorded over 16 nights between 23 June (five days earlier than previous earliest date) and 16 August with maxima of four on 15 and 19 July.
- 73.348 (2111) **Lesser Broad-bordered Yellow Underwing** *Noctua janthina* (Borkhausen) 24 June – 16 October F  
Taken annually at light in small to moderate numbers (eg up to 32 in August 2009, 39 in August 2010, 41 in August 2012 and 59 in August 2013). In 2016 a total of 163 individuals were recorded over 36 nights between 15 July and 06 September with a maximum of 18 on 13 August. In 2017 a total of 276 individuals were recorded over 67 nights between 24 June and 16 October (over three weeks later than the previous latest record) with a maximum of 18 on 14 August.
- 73.349 (2113) **Stout Dart** *Spaelotis ravida* (Denis & Schiffermüller) R  
The only records of this marshland species which is declining throughout Europe are singles taken on the Cinque Ports Golf Course on 13 July 1946 (Embry/Youden) and at HQ light on 30 July 1985 (MP).
- 73.350 (2137) **Great Brocade** *Eurois occulta* (Linnaeus) Na R  
An uncommon migrant from N Europe, with singles on 21 and 26 August 1995 (ACJ), 09 September 1996 and 11 September 2015 (IDH photo SH).
- 73.351 (2114) **Double Dart** *Graphiphora augur* (Fabricius) R  
Recorded as "uncommon" on Worth Marshes in 1949 and subsequently recorded at SBBO on 14 July 1987 (AJM, MJP) and 09 July 1991 (PB et al).
- 73.352 (2138) **Green Arches** *Anaplectoides prasina* (Denis & Schiffermüller) R  
Singles on 01 June 1992 and 07 July 2010 and, in 2014, one on 12 July and two on 18 August.
- 73.357 (2134) **Square-spot Rustic** *Xestia xanthographa* (Denis & Schiffermüller) 20 July – 29 October Ab  
Plentiful throughout the area up to 2016 and readily attracted to light and sugar patches. In 2009, up to 300 were recorded in August, with up to 288 in September, and up to 297 were recorded in September 2013, though up to only 18 in 2015. In 2016 a total of 887 individuals were recorded over 76 nights between 24 July and 29 October with a maximum of 66 on 26 September. In 2017 a total of 633 individuals were recorded over 71 nights between 11 August and 16 October with a maximum of 92 on 25 September.
- 73.358 (2133) **Six-striped Rustic** *Xestia sexstrigata* (Haworth) 08 August – 29 September C  
First recorded on 09 August 1969 and seen feeding on Ragwort and Sea Aster flowers in August 1972. Historically up to 25 attracted to light annually. In 2016 a total of 125 individuals were recorded over 23 nights between 15 August and 10 September with a maximum of 24 on 27 August. In 2017 a total of 236 individuals were recorded over 40 nights between 11 August and 27 September with maxima of 19 on 25 and 29 August.

- 73.359 (2126) **Setaceous Hebrew Character** *Xestia c-nigrum* (Linnaeus) 17 April – 17 November Ab  
Abundant throughout the area. Peak counts include up to 515 in August 2009, 309 in September 2013 and 752 on 06 September 2016. In 2017 a total of 3,405 individuals were recorded over 160 nights between 02 May and 16 November with over 100 individuals recorded on five dates including a maximum of 162 on 29 August.
- 73.361 (2128) **Double Square-spot** *Xestia triangulum* (Hufnagel) 30 May – 09 August F  
Historically up to four recorded annually at light. In more recent years the totals have been a little higher - up to 10 in July 2010, 15 in June 2014, a total of 11 individuals in July 2016 and in 2017 44 individuals recorded over 14 nights between 15 June and 17 July with a maximum of six on 16 June.
- 73.365 (2117) **Autumnal Rustic** *Eugnorisma glareola* (Esper) 11 September – 19 October C  
Recorded at HQ light on 06 October 1998, with small numbers annually at light since 2009 (up to 14 in September 2013). In 2016 a total of 34 individuals were recorded over 19 nights between 19 September and 19 October with a maximum of five on 07 October. In 2017 a total of 68 individuals were recorded over 27 nights between 15 September and 18 October with a maximum of 11 on 24 September.
- 73.368 (2136) **Gothic** *Naenia typica* (Linnaeus) 15 May – 11 August R  
Found uncommonly in the dunes areas in 1949 (Embry and Youden). Up to four occurred in 1976 (MAA, JVDD), 1981-1987 (DMB et al), 1989 (WEF), 1992 (PB et al), 1994 (MW et al), 1995 (ACJ et al), 2001 (IDH) and since 2009 only recorded in June 2010.

## NOLIDAE

- 74.002 (2076) **Kent Black Arches** *Meganola albula* (Denis & Schiffermüller) Nb 13 June – 07 August C  
Recorded at light in 18 years from 1982 - 2017 (eg up to nine in July 2009 and 10 in July 2013). In 2016 a total of 22 individuals were recorded over 13 nights between 06 and 31 July with a maximum of five on 15 July. In 2017 a total of 19 individuals were recorded over nine nights between 13 June (two days earlier than previous earliest date) and 09 July with a maximum of five on 16 June. Singles were also recorded on 21 (SH) and 25 (SZW) September and 08 October (SZW) which may have been a late generation or immigrants.
- 74.003 (2077) **Short-cloaked Moth** *Nola cucullatella* (Linnaeus) 22 June – 10 August O  
One-two occasional at light to 2017, but 13 on 27 June 1983. In 2016 one or two were recorded on five nights between 14 and 22 July. Larvae have been found on the Hawthorns on the Sampher.
- 74.004 (2078) **Least Black Arches** *Nola confusalis* (Herrich-Schäffer) 07 April – 16 June O  
Several were found resting on palings on the Estate in May 1968 and since then taken at Slazengers garden (1982 and 1994) and at HQ light in 2004. Recently, small numbers at light annually from 2010 to 2015. In 2016 only a single recorded on 16 June. In 2017 singles were recorded on 13 and 22 April and two were recorded on 16 May.
- 74.005 (2079) **Scarce Black Arches** *Nola aerugula* (Hübner) 04 July – 28 July O  
Singles found on the wall of the Whitehouse on 28 July 1970, at HQ light on 22 July 2001 and 04 July 2009. There were many earlier records for the Cinque Ports Golf Course. An immigrant and transitory resident.
- 74.007 (2421) **Scarce Silver-lines** *Bena bicolorana* (Fuessly) R  
Singles at HQ light on 27 June 2011, 15 July 2014 and 03 September 2016 (IDH).
- 74.008 (2422) **Green Silver-lines** *Pseudoips prasinana* (Linnaeus) 23 May – 31 August R  
For many years the only record of this woodland species was one on St Georges Golf Course on 01 July 1979. However, in 2010 there were five singles between 07-12 July and four on 11 August, one was recorded at HQ light on 22 July 2013, followed by singles on 23 May and 31 August 2014, a total of seven in 2015 and a single on 13 June 2017.
- 74.009 (2423) **Oak Nycteoline** *Nycteola revayana* (Scopoli) 23 April – 27 September R  
One at HQ light on 22 July 2010, singles on 23 April and on three dates from 27 June – 15 August 2011, one on 22 September 2013, up to three in 2014, four singles in July 2015. Singles were recorded on 15 and 16 May, 21 and 22 June, 14 July and 27 September 2017.
- 74.011 (2418) **Cream-bordered Green Pea** *Earias clorana* (Linnaeus) Nb 07 May – 04 September C  
A local species of Osier beds that has increased in recent years, regularly recorded at light. Several recorded at light on the beach on 23 June 2005 Annual between 2009 and 2016, including peak counts of 22 in July 2009, 37 in July 2010, 23 in June 2011 and 25 in July 2013. In 2016 a total of 121 individuals were recorded over 44 nights between 07 June and 27 August with a maximum of 13 on 15 July. In 2017 a total of 101 individuals were recorded over 62 nights between 11 May and 25 August with a maximum of 15 on 16 June.

## Recorders

DA David Agassiz  
MAA Mick Allen  
DMB Dennis Batchelor  
JGCB John Beugg  
MBo M Boreham  
EB Eric Bradford  
DB D Brown  
PB P Brown  
TB Terry Butcher  
JMC-H Chalmers-Hunt  
MC M Chapman  
TD Tony Davis  
PF Paul Fallon  
IF Ian Fisher  
WEF Bill Fletcher  
LTF L T Ford  
RFra R Frampton  
RF R French  
MG M Game  
DG Dave Grundy  
CG C Gummer  
MH Mark Hammond  
DFH Dennis Harle  
TH Tony Harman  
NH Norman Heal  
P&PH Peter and Pauline Heathcote  
KH Ken Heron  
IPH Ian Hodgson  
JNH John Hollyer  
MH Martin Honey  
PDH Paul Howe  
HCH H C Huggins  
IDH Ian Hunter  
SH Sally Hunter  
ACJ Andy Johnson  
JAJ Jenny Jones  
JK John Knowler  
JL John Langmaid  
AML Andrew Lipczynski  
IL I Lycett  
AJM Andy MacKay  
CM Chris Manley  
BM (NH) British Museum expedition  
IPN  
SN Sue North  
PTO Patrick Old  
NO Nigel Odin  
AO Ashen Oleander  
TO/CM Tim Orr and Christine Morgan  
SP Stephen Palmer  
AP Amanda Parker  
MPa Mark Parsons  
MP Mike Pennington  
CP Colin Plant  
JP J Platts  
MJP Mike Pollard  
SPR  
GSR G S Robinson  
TR Tony Rowse  
TMR T Ruck  
JDS  
AS Aaron Sapsford  
DS David Shenton  
BS Bernard Skinner  
FS Francis Solly  
AT A Taylor  
ST S Terrier  
SWT Steve Tookey  
JVDD John van der Dol  
RW Richard Wall  
SZW Steffan Walton  
CW Claire Ward  
KW Kevin Webb  
JW J Wells  
BKW B K West  
MW M Williams

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