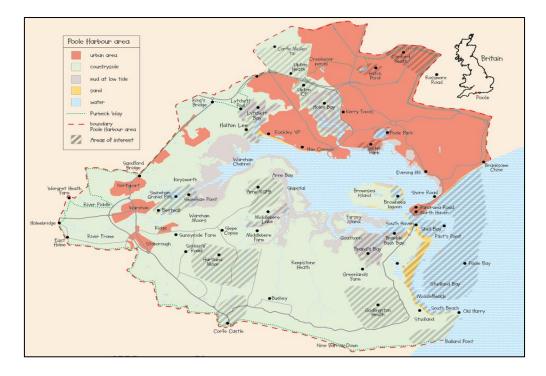


Moths of Poole Harbour is a project of Birds of Poole Harbour

Moths on Ballard 2018 – 2020

The 'Moths of Poole Harbour' project was set up in 2017 to gain knowledge of moth species occurring in Poole Harbour, Dorset, their distribution, abundance and to some extent, their habitat requirements. The study area uses the same boundaries as the Birds of Poole Harbour (BoPH) project.



Birds of Poole Harbour recording area

The National Trust site at Ballard comprises a substantial (2Ha+) area of scrub to the north of Ballard Down. It is the site of the bird ringing station for BoPH and contains hedges and net rides that lend themselves ideally to moth recording.

The site was visited from May 2018 until November 2020 although due to a number of factors coverage was far from continuous. A total of 20 visits were made in 2018 between 14th May and 23rd October. In 2019 due to other early season commitments visits began in May. Due to chain ferry disruption for much of late summer only 7 visits were made: 6 in May, June and early July and one in September. In 2020 due mainly to the coronavirus pandemic and site restrictions the site was visited 3 times in September and October and once in November specifically to look for leaf-mines.

The site comprises grassland and scrub surrounded by arable farmland with a network of interconnecting hedgerows. It is unusual to find such a large area of scrub in Dorset and it has been supplemented by tree planting over the years – presumably by the National Trust.

The moth fauna seems quite heavily influenced by the surrounding habitats. In particular a number of aquatic species were recorded despite absence of any water sources in the immediate vicinity. Species were occasionally found wandering from the heaths lower down as well as the chalk downland to the south. In addition, the site is considered good for migrating birds and it was anticipated that migrant moths would show well here. Maintaining floral diversity on Ballard is key to preserving the rich assemblage of moth species. Keeping rides open and appropriate aftercare of planted trees will help to maintain and enhance species abundance and diversity.

378 species, including aggregate species were recorded. The full species accounts form the bulk of this report.

14 of the species are designated as either Red Data Book or Nationally Scarce A or B. Certain species are designated for their rarity. The designations are Nationally Scarce A or Notable A (Na) (recorded in 16 - 30 10km squares since 1980), Nationally Scarce B or Notable B (Nb) (recorded from 31 - 100 10km squares since 1980) and Red Data Book (RDB) (recorded from fewer than 15km squares in Britain). Micro-moths are in italics in Latin and macro moths use the common English name. These are summarised in Table 1 below.

The national designations are a useful guide to evaluating individual sites. However a number of the species regarded as notable at a national level may be considered very common locally in Dorset. For instance Horse Chestnut and Kent Black Arches are found frequently.

In an attempt to assess more local significance, the Living Record database, active since 2000, has been assessed. The number of 1km squares in which each species has been recorded this century was determined, allowing a distribution evaluation over the last 20 years. Inevitably the Living Record database, like virtually all such data sets, is incomplete, but it is invaluable in any attempt to assess a local context for moth species. The results are summarised in Table 2 below.

Table 1. Notable species recorded at Ballard

SPECIES	STATUS	TIMES RECORDED	NUMBER RECORDED
Cnephasia conspersana*	Notable B	1	1
Crambus silvella	Red Data Book	1	1
Dolicharthria punctalis	Notable B	1	1
Evergestis limbata	Notable B	2	2
Festoon	Notable B	1	1
Glyphipterix schoenicolella*	Notable A	1	1
Horse Chestnut	Notable B	1	1
Jersey Tiger	Notable B	4	4
Kent Black Arches	Notable B	5	16
L-album Wainscot	Notable B	12	32
Oncocera semirubella	Notable B	1	1
Pempelia genistella	Notable B	1	1
Platyedra subcinerea	Notable B	1	1
Scrobipalpa ocellatella*	Notable B	1	1

*Species verified by Dr Phil Sterling.

59 species (16%) from Ballard have been recorded in 5 or fewer of the 1km squares of the Poole Harbour recording area on Living Record. These are summarised in Table 2 below. This is mainly explained by the proximity to rich chalk habitats. The site is also strategically located to attract potential migrant species.

Table 2. Species recorded in 5 or fewer, 1km squares in Living Record 2000-2019

SPECIES	No. OF 1KM SQUARES ON LIVING RECORD	TIMES RECORDED	NUMBER RECORDED
Acleris cristana	2	1	1
Acleris schalleriana	3	1	1
Aethes rubigana	1	1	1
Ancylis badiana*	1	1	1
Aproerema anthyllidella*	4	2	3
Argyresthia albistria	2	1	1
Argyresthia semifascia*	2	1	1
Argyresthia spinosella*	2	1	1
Beautiful Carpet	1	1	1
Blackneck	1	4	21
Calybites phasianipennella	5	2	2
Campion	4	1	1
Coleophora lineolea*	0	1	1

Convolvulus Hawk-moth	5	2	3
Dusky Sallow	4	1	1
Elachista argentella	5	5	18
Elachista atricomella	2	7	13
Endothenia marginana*	5	7	8
Epiblema costipunctana*	1	2	2
Esperia sulphurella	4	1	1
Eucosma obumbratana	3	1	1
Fern	2	2	2
Flounced Chestnut	4	2	2
Gallium Carpet	4	4	5
Glyphipterix schoenicolella*	5	1	1
Glyphipterix simpliciella	4	1	1
Grapholita funebrana*	1	1	1
Grapholita janthinana*	5	1	1
Homeosoma sinuella*	4	1	1
Lunar-spotted Pinion	3	1	1
Metzneria lappella	3	2	2
Micropterix aruncella*	1	1	1
Monopis weaverella	4	6	11
Nemophora degeerella	4	1	1
Nephopterix angustella	3	1	1
Notocelia rosaecolana*		2	2
Notocelia trimaculana	5	2	14
	1	1	14
Paraswamerdamia albicapitella* Parornix fagivora I	5	1	1
	0	1	1
Platyedra subcinerea		8	
Pretty Chalk Carpet Ptocheuusa paupella*	1 3	2	14 2
Reddish Light Arches	3	1	1
Rivulet			
	3	1	1
Scorched Carpet		1	1
Scrobipalpa ocellatella*	1	1	1
Scythropia crataegella	4	1	1
Shaded Pug	0	1	1
Small Clouded Brindle	4	1	1
Small Dotted Buff	5	1	1
Small Waved Umber	5	3	4
Syncopacma larseniella	5	1	1
Syndemis musculana	3	2	4
Tawny Shears	2	2	2
Teleiodes vulgella*	2	2	4
Tinea semifulvella	4	1	1
Twin-spot Carpet	1	1	1
Udea lutealis	4	1	1
Wood Carpet	1	1	1
Ypsolopha scabrella *Confirmed by Dr Phil Starling & Confir	3	3	3

*Confirmed by Dr Phil Sterling + Confirmed by Jack Oughton

43 species (11% of the total number) were recorded with Ballard as their sole location for the Moths of Poole Harbour project (MoPH). Of these, 29 species (69%) were recorded as just a single individual. These are summarised in Table 3 below.

SPECIES	TIMES	NUMBER	YEAR
	RECORDED	RECORDED	RECORDED
Acleris cristana	1	1	2018
Acleris laterana*	1	1	2020
Acleris sparsana	1	1	2018
Aethes rubigana	1	1	2018
Agonopterix arenella	1	1	2018
Ancylis badiana*	1	1	2018
Argyresthia albistria	1	1	2018
Argyresthia semifusca*	1	1	2018
Argyresthia spinosella*	1	1	2018
Beautiful Carpet	1	1	2018
Blackneck	4	21	2018 & 2019
Caloptilia semifascia*	2	2	2018
Cnephasia conspersana*	1	1	2018
Cochylis hybridella*	1	1	2019
Coleophora lineolea*	1	1	2020
Dolicharthria punctalis	1	1	2018
Epiblema costipunctana*	2	2	2018 & 2019
Esperia sulphurella	1	1	2018
Fern	2	2	2018 & 2019
Grapholita funebrana*	1	1	2018
Hedya nubiferana*	3	4	2018 & 2019
Lozotaenia forsterana	1	1	2019
Metzneria lappella	2	2	2018 & 2019
Micropterix aruncella*	1	1	2018
Nemophora degeerella	1	1	2018
Nephopterix angustella	1	1	2018
Notocelia rosaecolana*	2	2	2018
Notocelia trimaculana	2	14	2018 & 2019
Paraswammerdamia albicapitella*	1	1	2018
Parornix fagivora l	1	1	2020
Platyedra subcinerea	1	1	2019
Pretty Chalk Carpet	8	14	2018 & 2019
Ptocheuusa paupella*	2	2	2018
Scorched Carpet	1	1	2018
Scrobipalpa ocellatella*	1	1	2018
Shaded Pug	1	1	2018
Slender Pug	1	1	2019
Syndemis musculana	2	4	2018 & 2019
Tawny Shears	2	2	2018
Twin-spot Carpet	1	1	2018

Table 3. Species for which Ballard provided the sole location

White Satin	1	1	2018
Wood Carpet	1	1	2018
Zeiraphera isertana	2	2	2018

*Confirmed by Dr Phil Sterling. I Confirmed by Jack Oughton

Table 4. The commonest 25 species recorded at Ballard 2018-2020

SPECIES	NUMBER	TIMES	YEAR
	RECORDED	RECORDED	RECORDED
Large Yellow Underwing	3,948	25	2018, 2019, 2020
Common Wainscot	801	25	2018, 2019, 2020
Heart & Dart	770	16	2018, 2019
Dark Arches	542	10	2018, 2019
Setaceous Hebrew Character	351	22	2018, 2019, 2020
Square-spot Rustic	149	11	2018, 2019, 2020
Vine's Rustic	141	12	2018, 2029, 2020
Chrysoteuchia culmella	139	10	2018, 2019, 2020
Silver Y	116	15	2018, 2019, 2020
Common Rustic aggregate	84	9	2018, 2019
Celypha lacunana	75	15	2018. 2019
Green Carpet	73	12	2018, 2019, 2020
Rustic / Uncertain agg.	70	8	2018, 2019
Beaded Chestnut	63	6	2018, 2020
Common Swift	63	7	2018, 2019
Smoky Wainscot	63	7	2018, 2019, 2020
Crambus perlella	61	5	2018, 2019
Plutella xylostella (Diamond-back)	56	15	2018, 2019
Epihyas postvittana (Light Brown	55	14	2018, 2019, 2020
Apple Moth)			
Dingy Footman	54	3	2018
Aspilapteryx tringipenella	51	9	2018, 2019
Middle-barred Minor	49	5	2018
Flame Shoulder	48	15	2018, 2019, 2020
Common Carpet	45	18	2018, 2019, 2020
Black Rustic	43	6	2018

Species Accounts

The following pages list every species recorded on site from 2018 – 2020. Each species has its individual 'Bradley & Fletcher' (BF) moth number. Micro-moths are recorded by Latin name with common name in brackets (where given). Macro moths are recorded by common name with Latin name following. Distribution, local status and larval food plant is given where this knowledge exists. Numbers in brackets following each account represent frequency of times caught, followed by number of individuals caught in total.

Acleris cristana – An uncommon and thinly distributed resident in Dorset. A single record from 9th September 2018. The adult is very distinctive with raised scales and the larvae feed on Hawthorn and Blackthorn which are abundant at the site. (1,1)

1038 / 1039 **Acleris laterana** / **comariana** – Acleris laterana is a common and widespread resident whilst *comariana* is rare and very local in Dorset. The two species are considered to require examination of genitalia for determination so are more commonly aggregated. The aggregate species was recorded 6 times, totalling 9 individuals in 2018 and 2020. (6,9)

Acleris laterana – Common and widespread. One on 8th September 2020 was confirmed by Dr Phil Sterling. This was the only definitive identification of the 2 species for the MoPH project. (1,1)



Acleris schalleriana – A scare and thinly distributed resident, the larvae feeding on Wayfaring Tree, Guelder Rose and cultivated Viburnum. One on 19th October 2020 the sole record. (1,1)

Fig. 1 Acleris schalleriana

Acleris sparsana – An uncommon and thinly distributed resident, the larvae feed on Beech and Sycamore. One on 15th October 2018. (1,1)

Acleris variegana (Garden Rose Tortrix) – A fairly common and widespread resident. The larvae feed on various fruit-bearing plants and shrubs. Recorded on 3 occasions in 2018, totalling 6 individuals. (3,6)

Acrobasis advenella – A fairly common and widely distributed resident. Larvae feed on Blackthorn, Hawthorn and Rowan. Recorded once; 4 on 6th August 2018. (1,4)

Adaina microdactyla – A scarce and thinly distributed resident, the larvae feed on Hemp Agrimony. 4 on 28th May 2018 the sole record. (1,4)

Aethes rubigana – An uncommon and thinly distributed resident, the larvae feed on Burdock. One on 9th July 2018, is the sole record for the MoPH project. (1,1)

Agapeta hamana – A common and widespread resident, the larvae feed on Thistle. 29 recorded on 8 occasions in 2018 and 2019. (8,29)

Agonopterix arenella – A fairly common and widely distributed resident. Larvae feed on Thistles, Knapweeds and Burdock. One on 28th May 2018, was the sole record for the MoPH project. (1,1)

Agonopterix ocellana – An uncommon and thinly distributed resident, the larvae feed on Willows and Sallow. One on 8th September 2020. (1,1)

Agriphila geniculea – Fairly common but thinly distributed or restricted resident, the larvae feed on short fine grasses. Recorded twice, in September 2020, only. (2,2)

Agriphila inquinatella – Fairly common and widely distributed resident. Larvae feed on grasses. One on 23rd July 2018 the sole record. (1,1)

Agriphila straminella – Very common and widespread resident. The larvae feed on various short grasses, especially Sheep's-fescue. 27 recorded on 4 occasions in 2018 and 2019. (4,27)

Agriphila tristella – A very common and widespread resident. Larvae feed on various grasses. 13 recorded on 5 occasions in July and August 2018. (5,13)

Alder Moth *Acronicta alni* – An uncommon and thinly distributed or restricted resident. Larvae feed on broad-leaved trees especially Alder. Singles on 14th and 28th May 2018 had presumably wandered from lower ground. (2,2)



Fig.2 Alder Moth

Anania crocealis – Uncommon and thinly distributed or restricted resident, the larvae feed on Common Fleabane and Ploughman's Spikenard. Singles recorded 3 times in July 2018 and once in July 2019. (4,4)

Anania hortulata (Small Magpie) – Very common and widespread resident, the larvae feed on nettles. Singles on 23rd July 2018 and 8th July 2019 the only records. (2,2)

Anania lancealis – Fairly common and widely distributed resident, the larvae feed on Hemp Agrimony. 2 on 9th July 2018, 3 on 8th July 2019. (2,5)

Ancylis achatana – An uncommon and thinly distributed resident, larvae feed on Hawthorn and Blackthorn. 12 on 2nd July 2018, 2 on 8th July 2019. (2,14)

Ancylis badiana – An uncommon and thinly distributed resident, larvae feed on Pea, Vetch and Clover species. One on 28th May 2018 confirmed by Dr Phil Sterling. This is the only record in Living Record 2000-2019. Leaf-mine found on Clover on 11th November 2020. (2,2)

Angle Shades *Phlogophora meticulosa* – A very common and widespread resident, larvae feed on herbaceous and woody plants. 16 recorded on 11 occasions in 2018, 2019 and 2020. (11,16)

Annulet *Charissa obscurata* – A scarce and restricted resident, larvae feed on Sea Campion, Thrift and Common Rock-rose. 1 on 3rd September 2018. (1,1)

Aphomia sociella (Bee Moth) – Common and widespread resident, the larvae feed on honeycomb in hives. One on 25th June 2019 the only record. (1,1)

Apotomis capreana – An uncommon and thinly distributed resident, the larvae feed on Goat Willow. 2 on 2nd July 2018. (1,2)

Aproaerema anthyllidella – Scarce and thinly distributed resident, the larvae feed on Kidney Vetch and other herbaceous plants. 1 on 3rd September 2019, 2 on 8th September 2020. (2,3)

Archer's Dart *Agrotis vestigialis* – An uncommon and restricted resident, the larvae feed on herbaceous plants. One on 24th September 2019 the sole record. (1,1)

Archips podana (Large Fruit-tree Tortrix) – Common and widespread resident, larvae feed on a variety of deciduous trees. 27 recorded on 7 occasions in 2018 and 2019. (7,27)

Argyresthia albistria – A scarce and thinly distributed resident, larvae feed on Blackthorn. One on 27th August 2018 is the sole MoPH project record for the species. Known from only 2 x 1km squares on Living Record 2000-2019. (1,1)

Argyresthia semifusca – Scarce and thinly distributed resident, the larvae feed on Hawthorn and Rowan. One on 21^{st} August 2018, confirmed by Dr Phil Sterling is the only record for the MoPH project. Recorded in 2 x 1km squares on Living Record 2000-2019. (1,1)

Argyresthia spinosella – Scarce and thinly distributed resident, the larvae feed on Blackthorn. One on 4th June 2018, confirmed by Dr Phil Sterling. The sole record for the MoPH project. Recorded in 2 x 1km squares on Living Record 2000-2019. (1,1)

Aspilapteryx tringipennella – Fairly common and thinly distributed resident. Larval foodplant is Ribwort Plantain. 51 recorded on 9 occasions in 2018 and 2019. (9,51)

Autumnal Rustic *Eugnorisma glareosa* – Uncommon and thinly distributed resident, larvae feed on herbaceous plants and heathers. One on 24th September 2018 the sole record. (1,1)

Bactra lancealana – Fairly common and widespread resident. Larvae feed on various Rushes. 11 recorded on 4 occasions in 2018. (4,11)

Barred Red *Hylaea fasciaria* – Uncommon and fairly widespread resident, the larvae feed on Scots Pine and Norway Spruce. One on 25th June 2019 the only record. (1,1)



Barred Sallow *Xanthia aurago* – Uncommon and thinly distributed resident, the larvae feed on Field Maple and Beech. 11 recorded on 5 occasions in 2018 and 2019. (5,11)

Fig.3 Barred Sallow showing colour variation

Barred Straw *Eulithis pyraliata* – Very common and widespread resident, the larvae feed on Cleavers and Bedstraw. Recorded 5 times in July 2018 and late June and July 2019, totalling 11 individuals. (5,11)

Beaded Chestnut *Agrochola lychnidis* – Very common and widespread resident, the larvae feed on herbaceous plants. 63 recorded on 6 occasions in 2018 and 2020. (6,63)

Beautiful Carpet *Mesoleuca albicillata* – Very scarce and local resident, larvae feed on Bramble, Dewberry, Raspberry and Hazel. One on 9th July 2018 the sole record for the MoPH project. Apparently, the only record for Poole Harbour this century. (1,1)

Beautiful Hook-tip *Laspeyria flexula* – An uncommon and thinly distributed resident, the larvae feed on lichens. One on 25th June 2019 the sole record. (1,1)

Beautiful Yellow Underwing *Anarta myrtilli* – Scarce and restricted resident, the larvae feed on Heather and Bell Heather. One on 13th August 2018 is presumed to have wandered from lower ground. (1,1)

Black Arches *Lymantria monachal* – Common and widespread resident, the larvae feed on various trees. One on 23rd July 2018 is surprisingly, the only record. (1,1)

Black Rustic *Aporophyla nigra* – Common and widespread resident, the larvae feed on herbaceous and woody plants. 43 recorded on 6 occasions in 2018 and 2019. (6,43)



Blackneck *Lygephila pastinum* – Scarce and local resident, larvae feed on Tufted Vetch. A total of 21 recorded on 4 occasions in July 2018 and June and July 2019. Maximum 10 on 25th June 2019. No other records in Living Record 2000-2019 for the Poole Harbour recording area. (4,21)

Fig.4 Blackneck

Blastobasis adustella – Fairly common and widespread resident, larvae feed on a variety of foodstuffs and decaying matter. Recorded 6 times, totalling 16 individuals. Maximum 6 on 21st August 2018. (6,16)

Blastobasis lacticolella – Uncommon and thinly distributed resident. Larvae feed on a wide variety of vegetation, stored products and leaf litter. 2 on 8th July 2019 the only record. (1,2)

Blood-vein *Timandra comae* – Common and fairly widespread resident, larvae feed on Docks, Common Orache, Common Sorrel. 8 recorded on 7 occasions in 2018. (7,8)

Blue-bordered Carpet *Plemyria rubiginata* – A scarce and thinly distributed resident, the larvae feed on Alder and Blackthorn. One on 1st July 2019 the only record. (1,1)

Bordered Beauty *Epione repandaria* – Fairly common and thinly distributed resident the larvae feed on Sallow, Grey Willow and Black Poplar. One on 23rd July 2018 the only record. (1,1)

Brick *Agrochola circellaris* – Uncommon and thinly distributed or restricted resident, larvae feed on Wych Elm, Aspen, Poplars, Sallow, Ash. Singles on 8th and 15th October 2018. (2,2)

Bright-line Brown-eye *Lacanobia oleracea* – Abundant and widespread resident, the larvae feed on herbaceous and woody plants. 28 recorded on 13 occasions in 2018, 2019 and 2020. (13,28)

Brimstone Moth *Opisthograptis luteolata* – Widespread and abundant resident, larvae feed on Blackthorn, Hawthorns, Plum and Bullace. 36 recorded on 16 occasions in 2018, 2019 and 2020, maximum 5 on 21st August 2018. (16,36)

Brindled Pug *Eupithecia abbreviata* – Uncommon and widespread resident, the larvae feed on Pedunculate and Sessile Oaks and Hawthorns. One on 21st and 2 on 28th May 2018. (2,3)

Broad-bordered Yellow Underwing *Noctua fimbriata* – Common and widespread resident, larvae feed on herbaceous plants. 20 recorded on 9 occasions in 2018, 2019 and 2020. (9,20)

Broken-barred Carpet *Electrophaes corylata* – Fairly common and widespread resident, the larvae feed on broadleaved trees. 2 on 28th May 2018 the sole record. (1,1)

Brown Silver-line *Petrophora chlorosata* – Fairly common and widespread resident, the larvae feed on Bracken. Two on 4th June 2018 the only record. (1,2)

Brown-tail *Euproctis chrysorrhoea* – Uncommon and local resident, the larvae feed on Bramble, Hawthorn, Blackthorn, Dog-rose, Sallow. 9 recorded on 4 occasions in 2018 and 2019. (4,9)

Brussels Lace *Cleorodes lichenaria* – Fairly common and widespread resident, the larvae feed on lichens. 4 recorded on 3 occasions in 2018 and 2019. (3,4)

Buff Arches *Habrosyne pyritoides* – Very common and widespread resident, the larvae feed on Bramble and Dewberry. 20 recorded on 4 occasions in 2018 and 2019 with a maximum of 12 on 2nd July 2018. (4,20)

Buff Ermine *Spilosoma luteum* – Very common and widespread resident, larvae feed on herbaceous plants. 33 recorded on 7 occasions with a maximum of 13 on 11th June 2018. (7,33)

Buff Footman *Eilema depressa* – Fairly common and widespread resident, larvae feed on lichens. Recorded twice in July 2018, totalling 6 individuals. (2,6)

Burnished Brass *Diachrysia chrysitis* – Common and widespread, the larvae feed on common Nettle and other plants. Recorded singly 3 times in 2018 and 2020. (3,3)

Cabbage Moth *Mamestra brassicae* – Fairly common and widespread resident. Larvae feed on Brassicas, cabbages etc. One on 25th June 2019 the sole record. (1,1)

Caloptilia populetorum – Very rare resident, larvae feed on Birch. One on 23rd July 2018 the only record. (1,1)

Caloptilia semifascia – Rare and restricted resident, larvae feed on Field Maple, sometimes Sycamore. Singles on 9th July 2018 and 21st August 2018 verified by Dr Phil Sterling. This is the only site where the species was recorded by the MoPH project. (2,2)

Calybites phasianipennella – Scarce and restricted resident, larvae feed on Water Docks, Loosestrifes and Knotgrass. Singles on 8th and 15th September 2020. (2,2)



Fig.5 Calybites phasianipennella

Campion Hadena rivularis – Uncommon and thinly distributed or restricted resident, the larvae feed on Red, White or Sea Campion. One on 9^{th} July 2018 the only record. Recorded by the MoPH project at Goathorn but only in 4 x 1km squares on Living Record 2000-2019. (1,1)

Canary-shouldered Thorn *Ennomos alniaria* – Common and fairly widespread resident, the larvae feed on Downy and Silver Birch, Alder, Limes and Elms. Recorded twice on 6th and 27th August 2018. (2,2)

Carcina quercana – Fairly common and widespread resident, larvae feed on Oak and Beech. Singles on 9th July, and 13th and 21st August 2018. (3,3)

Catoptria pinella – Fairly common and widespread resident, larvae feed on Grasses in damp areas. One on 8th July 2019 the sole record. (1,1)

Celypha lacunana – A very common and widespread resident, larvae feed on herbaceous plants. 75 recorded on 15 occasions in 2018 and 2019 with a maximum of 16 on 2nd July 2018. (15,75)

Celypha striana – Common and widespread resident, larvae feed on Dandelion. Singles recorded on 4 occasions ion 2018 and 2019. (4,4)

Chestnut *Conistra vaccinii* – Common and widespread resident, larvae feed on Oaks, Elms, Blackthorn, Hawthorn, Birch and Docks. One on 8th October 2018 the only record. (1,1)



Chinese Character *Cilix glaucata* – Fairly common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Crab Apple. 21 recorded on 11 occasions in 2018 and 2020, maximum 7 on 27th August 2018. (11,21)

Fig.6 Chinese Character

Chocolate-tip *Clostera curtula* – Fairly common and widespread resident, the larvae feed Aspen, Poplars, Sallow and Willows. One on 21st May 2018 the only record. (1,1)



Fig.7 Chocolate-tip

Chrysoteuchia culmella (Garden Grass-veneer) – Abundant and widespread resident. The larvae feed on various grasses. 139 recorded on 10 occasions in 2018 and 2019 and 2020. Maximum of 35 on 25th June 2019. (10,139)

Cinnabar *Tyria jacobaeae* – Common and widespread resident, larvae feed on Common Ragwort. 2 on 1st July 2019 the only record. (1,2)

Clay *Mythimna farrago* – Common and widespread resident, the larvae feed on Grasses. 24 recorded on 5 occasions in 2018 and 2019 with a maximum of 10 on 8th July 2019. (5,24)

Clepsis consimilana – Fairly common and widely distributed resident, the larvae feed on Privets, Lilac, Honeysuckle, Ivy and Apple. One on 9th July 2018 the only record. Confirmed by Dr Phil Sterling. (1,1)

Clepsis spectrana (Cyclamen Tortrix) – Uncommon and thinly distributed resident, larvae feed on a wide variety of herbaceous plants. Singles on 4th June and 13th August 2018, confirmed by Dr Phil Sterling. (2,2)



Clifden Nonpareil *Catocala fraxini* – Scarce migrant / wanderer, probable resident. Larvae feed on Aspen and Poplars. One on 15th October 2018, a well-worn individual was considered a probable migrant. Elsewhere in the Harbour and apparently established breeding population was found near Wareham where 16 individuals were recorded in 2019 and 2020. (1,1)

Fig.8 Clifden Nonpareil

Cloaked Minor *Mesoligia furunculi* – Fairly common and widespread resident, the larvae feed on grasses. One on 9th July and 2 on 23rd July 2018. (2,3)

Clouded Border *Lomaspilis marginata* – Common and widespread resident, larvae feed on Aspen, Poplars, Sallow and Willows. 14 recorded on 7 occasions in 2018 and 2019. (7,14)

Clouded Brindle Apamea epomidion – A scarce and thinly distributed or restricted resident, larvae feed on grasses. One on 9th and 3 on 17th June 2019. (2,4)

Cnephasia conspersana (Nationally Scarce B) – Rare and thinly distributed coastal resident. Larvae feed on rosaceous plants. One on 9^{th} July 2018, confirmed by Dr Phil Sterling. This is apparently the only record for Poole Harbour this century. (1,1)

Cochylimorpha straminea – Uncommon and thinly distributed or restricted resident, larvae feed on Common Knapweed. Singles on 11th June, 6th August and 21st August 2018. (3,3)

Cochylis atricapitana – Fairly common and thinly distributed and restricted resident. The larval foodplant is Ragwort. 7 recorded on 6 occasions in 2018 and 2019. (6,7)

Cochylis hybridella – Uncommon and thinly distributed and restricted resident, larvae feed on Oxtongue and Hawkweed species. One on 8^{th} July 2019 confirmed by Dr Phil Sterling. This was the only site where the species was recorded by the MoPH project and it is known from only 3 x 1km squares on Living Record 2000-2019. (1,1)

964a **Cochylis molliculana** – Uncommon and thinly distributed and restricted resident, larvae feed on Bristly Oxtongue. Singles recorded on 3 occasions, 23rd July and 6th August 2018 and 8th July 2019, confirmed by Dr Phil Sterling. (3,3)

Coleophora lineolea – Scarce and thinly distributed resident, larvae feed on Hedge Woundwort, Betony and Black and White Horehounds. One on 8th September 2020, confirmed by Dr Phil Sterling. Apparently, the only Poole Harbour record this century. (1,1)

Coleophora species. A further 5 recorded on 3 occasions in 2019 were not identified to species level. (3,5)

Common Carpet *Epirrhoe alternata* – Very common and widespread resident, the larvae feed on Cleavers, Hedge and other Bedstraws. 45 recorded on 18 occasions in 2018 and 2019 with a maximum of 4 on 2nd July 2018. (18,45)

Common Emerald *Hemithea aestivaria* – Common and widespread resident, the larvae feed on Hawthorn, Blackthorn, Hazel, Oaks, Willows etc. One on 8th July 2019 the sole record. (1,1)

Common Footman *Eilema lurideola* – Abundant and widespread resident, the larvae feed on lichens. 10 recorded on 4 occasions in July 2018 and July 2019. Maximum 4 on 2nd July 2018. (4,10)

Common Lutestring *Ochropacha duplaris* – Fairly common and thinly distributed resident, the larvae feed on Birches, Alder, Hazel and Oaks. One on 1st July 2019 the only record. (1,1)

Common Marbled Carpet *Chloroclysta truncata* – Abundant and widespread resident, the larvae feed on woody plants. Singles on 6 occasions in 2018 and 2019. (6,6)

Common Pug *Eupithecia vulgata* – Common and widespread resident, the larvae feed on trees including Hawthorn and Sallow. 2 on 20th May and 4 on 9th June 2019. (2,6)

Common Quaker Orthosia cerasi – Abundant and fairly widespread resident, the larvae feed on broadleaved trees, Birches, Sallow, Oaks and Hazels. One on 14th May 2018 the only record. (1,1)

2343 / 2343a **Common Rustic / Lesser Common Rustic aggregate** *Mesapamea secalis / didyma* – Abundant and widespread resident the Common Rustic and Lesser Common Rustic are treated as aggregate species without dissection of the genitalia. Larval foodplant is grasses. 84 recorded on 9 occasions in 2018 and 2019 with a maximum of 34 on 23rd July 2018. (9,84)

Common Swift *Hepialus lupulinus* – Abundant and widespread resident, the larvae feed on grasses and herbaceous plants. 63 recorded on 7 occasions in 2018 and 2019 with a maximum of 15 on 4th June 2018. (6,63)

Common Wainscot *Mythimna pallens* – Abundant and widespread resident, the larvae feed on grasses. 801 recorded on 25 occasions in 2018 and 2019 and 2020. High counts of 72 and 73 on 1st and 8th July 2019 and 73 and 94 on 8th and 15th September 2020. (25,801)

Common White Wave *Cabera pusaria* – Common and widespread resident, larvae feed on Downy and Silver Birch, Alder and Sallow. Singles on 28th May 2018 and 17th June 2019 the only records. (2,2)

Convolvulus Hawk-moth *Agrius convolvuli* – Scarce and local migrant / wanderer, the larvae feed on Bindweeds and other convolvulaceae. One on 21st August 2018, 2 on 9th September 2018. Elsewhere recorded singly in 2 other sites by the MoPH project. (2,3)



Fig.9 Convolvulus Hawk-moth

Copper Underwing *Amphiphyra pyramidea* – An uncommon and thinly distributed resident. Larvae feed on Hawthorns, Blackthorn, Crab Apple, Hazel, Honeysuckle. The species is separable from Svennson's Copper Underwing if shading on the underside of the hindwing is visible. Most are recorded as aggregates therefore. One on 3rd September 2018 the sole record attributed to this species. (1,1)

Coptotriche marginea – Uncommon and thinly distributed resident, the larval foodplant is Bramble. 22 recorded on 8 occasions in 2018, 2019 and 2020. (8,22)

Coronet *Craniophora ligustri* – Fairly common and widespread resident, the larvae feed on Ash and Wild Privet. 2 on 9th and 3 on 23rd July 2028. (2,5)

Crambus perlella – Common and widespread resident, larvae feed on various grasses. 61 recorded on 5 occasions in 2018 and 2019, maximum 31 on 8th July 2019. (5,61)

Crambus silvella (Red Data Book 3) – Scarce and thinly distributed and restricted resident, larvae feed on various sedges. One on 23rd July 2018 is presumed to have wandered from lower ground. Recorded by the MoPH project at 4 other sites and known from 9 x 1km squares on Living Record 2000-2019. (1,1)

Crassa unitella – Uncommon and thinly distributed resident, larvae feed on fungus and dead wood. One on 9th July 2018 the only record. (1,1)



Crescent *Celaena leucostigma* – Uncommon and thinly distributed or restricted resident, larvae feed on Yellow Iris, Great Fen-sedge. 2 on 23rd July and one on 13th August 2018 are presumed to have wandered from lower ground. Recorded by the MoPH project at 4 other sites and in 7 x 1km squares on Living Record 2000-2019. (2,3)

Fig.10 Crescent (this individual photographed on Arne Moors)

1409a *Cydalima perspectalis* (Box-tree Moth) – Recent colonist. The larvae feed on Box. One on 15th September 2020, the sole record. (1,1)

Cydia splendana – Fairly common and widely distributed resident, larvae feed on Oak and Sweet Chestnut. 2 on 23rd July and 1 on 6th August 2018 the only records. (2,3)

Cydia ulicetana – Fairly common and widely distributed resident, larvae feed on Gorse and Broom. Singles on 11th June and 6th August 2018 the only records. (2,2)

Dark Arches Apamea monoglypha – Abundant and widespread resident, the larvae feed on grasses. Recorded 10 times in 2018 and 2019, totalling 542 individuals, with high counts of 187 on 1^{st} July and 177 on 8^{th} July 2019. (10,542)

Dark Spectacle *Abrostola triplasia* – Scarce and thinly distributed or restricted resident, the larvae feed on Common Nettle and Hop. Singles on 4 occasions June to September 2018. (4,4)

Dark Sword-grass Agrotis ipsilon – Common and fairly widespread migrant / wanderer, the larvae feed on herbaceous plants. 14 recorded on 8 occasions in 2018 and 2020, with a maximum of 5 on 21st August 2018. (8,14)

Dark-barred Twin-spot Carpet *Xanthorhoe ferrugata* – Scarce and thinly distributed resident, the larvae feed on herbaceous plants. 4 on 21st May and 1 on 23rd July 2018 the only records. (2,5)

Delicate *Mythimna vitellina* – Uncommon and thinly distributed migrant, the larvae feed on grasses. 26 recorded on 11 occasions in 2018, 2019 and 2020. Maximum 5 on 8th September 2020. (11,26)

Dingy Footman *Eilema griseola* – Very common and widespread resident, the larvae feed on lichens. 54 recorded on 3 occasions in July and August 2018. High count of 36 on 23rd July 2018. (3,54)

Dioryctria simplicella – Uncommon and thinly distributed or restricted resident, the larvae feed on Scots Pine. One on 8th October 2018 the sole record. (1,1)

Dog's tooth *Lacanobia suasa* – Uncommon and very local resident, the larvae feed on herbaceous plants. One on 27th August 2018 the only record. (1,1)

Dolicharthria punctalis (Nationally Scarce B) – Uncommon and thinly distributed and restricted coastal resident, the larvae feed on Bird's-foot Trefoil, Red Clover, and Buckshorn Plantain. One on 23rd July 2018 the sole record. Recorded in 2 x 1km squares on Living Record 2000-2019. (1,1)



Fig.11 Dolicharthria punctalis

Double-striped Pug *Gymnoscelis rufifasciata* – Common and widespread resident, the larvae feed on many plants. 11 recorded on 7 occasions in 2018 and 2019. (7,11)

Drinker *Euthrix potatoria* – Common and fairly widespread resident, larvae feed on coarse grasses and reeds. 9 recorded on 4 occasions in July and August 2018 with a high count of 5 on 23rd July 2018. (4,9)

Dun-bar *Cosmia trapezina* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. Recorded only 3 times, totalling 4 individuals, in 2018 and 2019. (3,4)

Dusky Brocade *Apamea remissa* – Very common and widespread resident, the larvae feed on grasses. 2 on 25th June 2019 the only record. (1,2)

Dusky Sallow *Eremobia ochroleuca* – Fairly common and widespread resident, the larvae feed on grasses. One on 23rd July 2018 the only record. (1,1)

Dusky Thorn *Ennomos fuscantaria* – Fairly common and widespread resident, the larvae feed on Ash. 4 recorded on 3 occasions in August and September 2018. (3,4)

2358 / 2360 **Ear Moth aggregate** *Amphipoea oculea agg.* – Uncommon and thinly distributed or restricted resident, the larvae feed on grasses. The Ear Moth species are only identifiable from genitalia dissection, so are treated as an aggregate species. One on 23rd July 2018. (1,1)

Early Thorn Selenia dentaria – Very common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Hazel and other broadleaved plants. One on 23rd July 2018 and 2 on 8th July 2019. (2,3)

Elachista argentella – Uncommon and thinly distributed resident, the larvae feed on various grasses. Recorded 4 times in May and June 2018 and once in May 2019. Maximum 8 on 28th May 2018. (5,18)

Elachista atricomella – Uncommon and thinly distributed resident, the larvae feed on Cock's-foot. 13 recorded on 7 occasions in 2018 and 2019, with some verified by Dr Phil Sterling. (7,13)

Elephant Hawk-moth *Deilephila elpenor* – Common and widespread resident, the larvae feed on Rosebay Willowherb, other willowherbs and bedstraws. 26 recorded on 8 occasions in 2018 and 2019, with a high count of 8 on 2nd July 2018. (8,26)

Elophila nymphaeata (Brown China-mark) – Fairly common and widely distributed resident, the larvae feed on various aquatic plants and pondweed. One on 11th June 2018 is assumed to have wandered from lower ground. (1,1)

Emmelina monodactyla (Common Plume) – Common and widespread resident, the larvae feed on Bindweed species. Single record, one on 21st August 2018. (1,1)



Endothenia marginana – Scarce and thinly distributed resident, the larvae feed on flower and seed-heads of Teasel, Ribwort Plantain, Betony, Yellow Rattle, amongst others. 8 recorded on 7 occasions in 2018 and 2020, with some verified by Dr Phil Sterling. Confusion species between this and *E. oblongana*, hence sending specimens to Phil Sterling. (7,8)

Fig.12 Endothenia marginana

Endotricha flammealis – Common and widespread resident, the larvae feed on various plants and deciduous trees including Sallow and Oak. Singles on 9th and 23rd July 2018 the only records. (2,2)

Endrosis sarcitrella (White-shouldered House Moth) – Uncommon and thinly distributed resident, the larvae feed on household detritus, dried goods, cereal, grain. Singles on 28th May 2018 and 8th September 2020. (2,2)

Epiblema costipuntana – Scarce and thinly distributed resident, the larvae feed on Ragwort. Singles on 9th July 2018 and 8th July 2019 confirmed by Dr Phil Sterling. Apparently, the only Poole Harbour record this century. (2,2)

Epinotia bilunana – Common and thinly distributed or restricted resident, the larvae feed on Birch. One on 23rd July 2018 is, perhaps surprisingly, the only record. (1,1)

Epinotia nisella – Uncommon and thinly distributed resident, the larvae feed on Sallow and Poplar. One on 6th August 2018 and 3 on 21st August 2018. (2,4)

Epiphyas postvittana (Light Brown Apple Moth) – Abundant and naturalised resident, larvae feed on many plants. 55 recorded on 14 occasions in 2018, 2019 and 2020. High count 10 on 21st August 2018. (14,55)

Esperia sulphurella – Uncommon and thinly distributed resident, the larvae feed on rotting wood and associated fungi. One on 21st May 2018 the sole record. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

Eucosma campoliliana – Uncommon and thinly distributed or restricted resident, the larvae feed on Common Ragwort. 10 recorded on 5 occasions in 2018 with 3 on 6th August 2018. (5,10)

Eucosma cana – Fairly common and widely distributed resident, the larvae feed on Thistles, common Knapweed, Black Knapweed. Singles on 2nd July 2018 and 8th July 2020 the only records. (2,2)

Eucosma obumbratana – Scarce and thinly distributed resident, larvae feed on Perennial Sowthistle. One on 9th July 20918 the only record. Recorded in 3 x 1km squares on Living Record 2000-2019. (1,1)

Eudonia angustea – Common and widespread resident the larvae feed on lichens and mosses. Singles on 3 occasions in 2018 and 2019, the only records. (3,3)

Eudonia lacustrata – Fairly common and widely distributed resident, larvae feed on mosses. 13 recorded on 3 occasions in 2018 and 2019, high count of 10 on 8th July 2019. (3,13)

Eudonia mercurella – Common and widespread resident, the larvae feed on mosses. Recorded twice, totalling 9 individuals, in 2018 and 2019. (2,9)

Eudonia pallida – Fairly common and widely distributed resident, the larvae feed on mosses. 23 recorded on 14 occasions in 2018, 2019 and 2020. Maximum 6 on 11th June 2018. (14,23)

Eupoecilia angustana – Uncommon and thinly distributed resident, the larvae feed on Plantains, wild herbs, Heather, Sitka Spruce. 14 recorded on 7 occasions in 2018 with a high count of 5 on 28th May 2018. (7,14)

1356a *Evergestis limbata* (Nationally Scarce B) – Rare and very local recent resident, the larvae feed on Hedge Mustard and Garlic Mustard. Singles on 9^{th} July 2018 and 8^{th} September 2020. (2,2)



Fig. 13 Evergestis limbata (this individual photographed at Carey Estate

Eyed Hawk-moth *Smerinthus ocellata* – Uncommon and thinly distributed or restricted resident, the larvae feed on Willow, Sallow, Apple, Crab Apple. Singles on 11th June 2018 and 17th June 2019. (2,2)

Feathered Gothic *Tholera decimalis* – Uncommon and thinly distributed or restricted resident, the larvae feed on grasses. Singles on 4 occasions in 2018 and 2020. (4,4)

Feathered Ranunculus *Polymixis lichenea* – Uncommon and restricted resident, the larvae feed on herbaceous plants. 6 recorded on 3 occasions in October 2018. (3,6)

Fern *Horisme tersata* – Uncommon and thinly distributed resident, the larvae feed on Traveller's Joy. Singles on 2nd July 2018 and 17th June 2019. The foodplant is abundant. This is the only site where MoPH recorded the species. Recorded in only 2 x 1km squares on Living Record 2000-2019. (2,2)

Festoon *Apoda limacodes* (Nationally Scarce B) – Scarce and restricted resident, the larvae feed on Oak and Beech. One on 25th June 2019 the sole record. (1,1)

Flame *Axylia putris* – Very common and fairly widespread resident, larvae feed on many low growing plants. 22 recorded on 4 occasions in 2018 and 2019. (4,22)

Flame Shoulder *Ochropleura plecta* – Abundant and widespread resident the larvae feed on herbaceous plants. 48 recorded on 15 occasions in 2018, 2019 and 2020. High count 16 on 23rd July 2018. (15,48)

Flounced Chestnut Agrochola helvola – Scarce and local resident, the larvae feed on broadleaved trees. Singles on 23rd October 2018 and 19th October 2020. (2,2)

Flounced Rustic *Luperina testacea* – Abundant and widespread resident, the larvae feed on grasses. 9 on 6 occasions in 2018 and 2020. (6,9)

Fox Moth *Macrothylacia rubi* – Uncommon and restricted resident, the larvae feed on Heathers, Bilberry, Creeping Willow, Brambles. 2 on 28th May 2018 the only record. May have wandered from lower ground. (1,1)

Frosted Orange *Gortyna flavago* – Common and fairly widespread resident, the larvae feed on herbaceous plants, Thistles, Burdocks, Foxglove. 4 on 3 occasions in September and October 2018. (3,4)



Galium Carpet *Epirrhoe galiata* – Uncommon and restricted resident, the larvae feed on Lady's, Heath and Hedge Bedstraws. Singles on 11^{th} June, 21^{st} August and 27^{th} August 2018. 2 on 8^{th} September 2020. Otherwise recorded by MoPH at Corfe Castle. Recorded in 4 x 1km squares on Living Record 2000-2019. (4,5)

Fig.14 Galium Carpet

Garden Carpet *Xanthorhoe fluctuata* – Very common and widespread resident, the larvae feed on herbaceous plants. Singles on 11th June 2018 and 1st July 2019, perhaps surprisingly the only records. (2,2)

Garden Tiger *Arctia caja* – Common and widespread resident, the larvae feed on herbaceous plants, Nettle, Docks, Burdocks etc. 13 recorded on 5 occasions in 2018 and 2018. High count of 6 on 23rd July 2018. (5,13)

Ghost Moth *Hepialus humili* – Common and widespread resident, the larvae feed on grasses and herbaceous plants. One on 9th July 2018 the only record. (1,1)

Glyphipterix schoenicolella (Nationally Scarce A) – Rare and restricted resident, the larvae feed on Black Bog-rush. One on 3rd September 2018, verified by Dr Phil Sterling. Recorded in 5 x 1km squares on Living Record 2000-2019. (1,1)

Glyphipterix simpliciella – Common and fairly widespread resident, larvae feed on Cocksfoot. One on 28th May 2018 the sole record. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

Glyphipterix thrasonella – Fairly common but restricted resident, the larvae feed on Rush. One on 28th May 2018 confirmed by Dr Phil Sterling. (1,1)

Grapholita funebrana (Plum Fruit Moth) – Uncommon and thinly distributed resident, the larvae feed on Plums, Cherry and Blackthorn. One on 27th August 2018, confirmed by Dr Phil Sterling, the sole record. Apparently, the only record for Poole Harbour this century. (1,1)

Grapholita janthinana – Scarce and thinly distributed resident, the larvae feed on Hawthorn. One on 15th September 2020 the only record. Confirmed by Dr Phil Sterling. Recorded in 5 x 1km squares on Living Record 2000-2019. (1,1)

Grass Emerald *Pseudoterpna pruinata* – A scarce and local resident, the larvae feed on Gorse, Broom, Petty Whin. One on 23rd July 2018 the sole record. (1,1)

Green Carpet *Colostygia pectinaria* – Very common and widespread resident, the larvae feed on Bedstraws. Recorded on 12 occasions totalling 73 individuals in 2018, 2019 and 2020. High count 24 on 20th May 2019. (12,73)

Green-brindled Crescent *Allophyes oxycanthae* – Fairly common and widespread resident, the larvae feed on Hawthorns, Blackthorn, Dog-rose, Crab Apple. One on 19th October 2020 the only record. (1,1)

Grey Arches *Polia nebulosa* – Scarce and thinly distributed or restricted resident, the larvae feed on woody plants, Hazel, Birches, Honeysuckle etc. 6 recorded on 4 occasions in 2018 and 2019. (4,6)

2284 / 2283 **Grey / Dark Dagger aggregate** Acronicta tridens / psi – Scarce and local resident the larvae feed on broadleaved trees and shrubs. The 2 species are considered separable only by dissection of the genitalia so are recorded as an aggregate species. One on 11th June 2018. (1,1)

Grey Pine Carpet *Thera obeliscata* – Fairly common and widespread resident, the larvae feed on coniferous trees, Pine, Spruce, Cypress. Singles on 21st May 2018 and 25th June 2019. (2,2)

Heart and Club Agrotis clavis – Fairly common and thinly distributed resident, the larvae feed on herbaceous plants. One on 25th June and 2 on 1st July 2019 the only records. (2,3)

Heart and Dart *Agrotis exclamationis* – Abundant and widespread resident, the larvae feed on herbaceous plants. Recorded on 16 occasions totalling 770 individuals in 2018 and 2019. High count 235 on 1st July 2019. (16,770)

Hebrew Character *Orthosia gothica* – Abundant and widespread resident, the larvae feed on herbaceous plants, bushes and trees. Singles on 3 occasions in May and June 20018. (3,3)

Hedge Rustic *Tholera cespitis* – A scarce and local resident, the larvae feed on grasses. 2 on 9th September 2018 and 3 on 15th September 2020 the only records. (2,5)

Hedya nubiferana (Marbled Orchard Tortrix) – Uncommon and thinly distributed resident, the larvae feed on various trees and shrubs including Hawthorn, Blackthorn and Wild Cherry. Recorded twice in 2018, 2 on 4th June and one on 2nd July and once on 8th July 2019. At least one of these confirmed by Dr Phil Sterling. (3,4)

Hedya pruniana (Plum Tortrix) – Fairly common and thinly distributed or restricted resident. The larval foodplants are wild fruit trees, also Hawthorn and Hazel. Recorded 3 times in 2018 and twice in 2019, maximum count 4 on 4th June 2018. (5,6)

Helcystogramma rufescens – Fairly common and widespread resident, the larvae feed on a selection of grasses, especially Wood Small-reed and False Brome. Singles on 9th June and 8th July 2019, confirmed by Dr Phil Sterling. (2,2)



Fig.15 Helcystogramma rufescens

Hofmannophila pseudospretella (Brown House Moth) – Fairly common and widespread resident, the larvae feed on household detritus. One on 23rd July 2018 the only record. (1,1)

Homeosoma sinuella – Uncommon and thinly distributed of restricted resident, the larvae feed on Ribwort Plantain and other plantains. One on 27th August 2018. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

Horse Chestnut *Pacycnemia hippocastanaria* (Nationally Scarce B) – Uncommon and restricted resident, the larvae feed on Heather and Cross-leaved Heath. One on 9th September 2019 assumed to have wandered from lower ground. (1,1)

Hypsopygia costalis (Gold Triangle) – Common and widespread resident the larvae feed on dry vegetable matter, hay and dead grasses. One on 9th July 2018 the only record. (1,1)

Ingrailed Clay *Diarsia mendica* – Very common and widespread resident, the larvae feed on herbaceous plants. 26 recorded on 7 occasions in 2018 and 2019, maximum 9 on 8th July 2019. (7,26)

Jersey Tiger *Euplagia quadripunctaria* (Nationally Scarce B) – Fairly common and mainly coastal resident / wanderer, the larvae feed on herbaceous plants including nettles. One on 23rd July 2018, 3 on 6th August, 2 on 13th August and 1 on 27th August 2018. (4,7)

July Highflyer *Hydriomena furcata* – Common and widespread resident, the larvae feed on Hazel, Sallow, Willows and others. Singles on 2nd and 9th July 2018 the only records. (2,2)

Kent Black Arches *Meganola albula* (Nationally Scarce B) – Uncommon and restricted resident, the larvae feed on Dewberry, Bramble, Raspberry and Strawberry. 16 recorded on 6 occasions in 2018 and 2019, with a high count of 7 on 8th July 2019. (6,16)

Knot Grass *Acronicta rumicis* – Very common and widespread resident, the larvae feed on herbaceous and woody plants. 8 recorded on 5 occasions in 2018 and 2019. (5,8)

Lackey *Malacosoma neustria* – Common and widespread resident, the larvae feed on broadleaved trees and shrubs including the rose family. 29 recorded on 3 occasions in 2018 and 2019 with high counts of 11 on 2nd July 2018 and 12 on 8th July 2019. (3,29)

L-album Wainscot *Mythimna I-album* (Nationally Scarce B) – Scarce and mainly coastal resident and local wanderer, the larvae feed on Marram and other grasses. 32 recorded on 12 occasions in 2018, 2019 and 2020. Highest count 7 on 17th September 2018. (12,32)

Large Yellow Underwing *Noctua pronuba* – An abundant and widespread resident. The larvae feed on herbaceous plants and grasses. Unsurprisingly the most commonly recorded species with nearly 4,000 trapped in total and with some exceptionally high counts: 2,251 were recorded as a minimum count from 4 traps on 25th June 2019 and 978 from 4 traps on 1st July 2019. (25, 3,948)

Lathronympha strigana – Uncommon and thinly distributed or restricted resident, the larvae feed on St. John's-wort. Singles in 2018 on 6th and 27th August, and in 2019 on 17th June and 8th July. (4,4)

2078 Least Black Arches *Nola confusalis* – Fairly common and thinly distributed resident, the larvae feed on Lime, Oak, various broad-leaved trees. One on 21st May and 2 on 28th May 2018, one on 20th May 2019. (3,4)

Least Yellow Underwing *Noctua interjecta* – Fairly common and thinly distributed resident, the larvae feed on herbaceous plants. Singles on 23rd July, 21st and 28th August 2018. (3,3)

2111 Lesser Broad-bordered Yellow Underwing *Noctua janthe* – Abundant and widespread resident, the larvae feed on herbaceous plants. 9 recorded on 6 occasions in 2018 and 2019. (6,9)

2109 Lesser Yellow Underwing *Noctua comes* – Abundant and widespread resident, the larvae feed on herbaceous plants. 16 recorded on 8 occasions in 2018, 2019 and 2020. (8,16)

Light Arches *Apamea lithoxylaea* – Common and fairly widespread resident, the larvae feed on grasses. Recorded 5 times totalling 24 individuals in 2018 and 2019. High count of 14 on 1st July 2019. (5,24)

Light Brocade *Lacanobia w-latinum* – Common, the larvae feed on herbaceous and woody plants. Singles on 21st May 2018 and 9th June 2019. (2,2)

Light Emerald *Campaea margaritata* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. 6 recorded on 5 occasions in 2018, one in 2020. (6,7)

Lime-speck Pug *Eupithecia centaureata* – Common and fairly widespread resident, the larvae feed on many plants. One on 23rd July 2018 the sole record. (1,1)

Lobesia abscisana – Uncommon and thinly distributed resident, the larvae feed on Creeping Thistle. 2 on 2nd July 2018 and one on 9th July 2019. Recorded in 7 x 1km squares on Living Record 2000-2019. (2,3)



Lobster Moth *Stauropus fagi* – Fairly common and widespread resident, the larvae feed on Birch, Alder, Oak and Beech. One on 11th June 2018 the only record. (1,1)

Fig. 16 Lobster Moth (this individual photographed at Goathorn)

Lozotaenia forsterana – Uncommon and thinly distributed resident, the larvae feed on various trees and shrubs, especially Ivy. One on 17th June 2019 the sole record. (1,1)

Lunar Underwing *Omphaloscelis lunosa* – Very common and fairly widespread resident, the larvae feed on grasses. 37 recorded on 6 occasions in 2018 and 2019, maximum 20 on 1st October 2018. (6,37)

Lunar-spotted Pinion *Cosmia pyralina* – Uncommon and restricted resident, the larvae feed on Blackthorn, Hawthorn, Apple, Elms. One on 23^{rd} July 2018 the only record. Otherwise only recorded by the MoPH project on Goathorn and in 3 x 1km squares on Living Record 2000-2019. (1,1)

Magpie Moth *Abraxas grossulariata* – Common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Privet, Red and Black Currant. 2 on 23rd July 2018 the only record. (1,1)

Marbled Minor agg. *Oligia strigilis* (aggregate species) – The Dorset status is considered unknown as the majority are undetermined, requiring dissection. 10 records of aggregate species, totalling 81 moths in 2018 and 2019, maximum 22 on 8th July 2019. (10,81)

Marbled White Spot *Protodeltote pygarga* – Uncommon and local resident, the larvae feed on grasses. 3 on 11th June and one on 2nd July 2018, two on 8th July 2029. (3,6)

May Highflyer *Hydriomena impluviata* – Fairly common and thinly distributed resident, the larvae feed on Alder. Singles on 21st and 28th May 2018 the only records. (2,2)

Merveille du Jour *Dichonia aprilina* – Fairly common and widespread resident, the larvae feed on Oaks. One on 15th October 2018. (1,1)



Fig.17 Merveille du Jour

Metzneria lappella – Scarce and thinly distributed resident, the larvae feed on Greater Burdock. Singles on 9th July 2018 and 8th July 2019. The only site where the MoPH project recorded the species. Recorded in 3 x 1km squares on Living Record 2000-2019. (2,2)

Micropteryx aruncella – Scarce and thinly distributed or restricted resident, the larvae feed on liverworts, detritus. One on 28th May 2018, confirmed by Dr Phil Sterling. Apparently, the only Poole Harbour record this century, though recorded on Brownsea in the 1980's. (1,1)

Middle-barred Minor Oligia fasciuncula – Very common and widespread resident, the larvae feed on grasses. 49 recorded on 5 occasions in 2018, maximum 15 on 2nd July 2018. (5,49)

Miller Acronicta leporina – Uncommon and thinly distributed resident, the larvae feed on Birches and Alder. One on 9th July 2018 the only record. (1,1)

Mirificama mulinella – Scarce and thinly distributed resident, the larvae feed on Gorse and Broom. One on 6th August 2018 the sole record. (1,1)

Monochroa cytisella – Scarce and thinly distributed resident, the larvae feed on Bracken. One on 23rd July 2018 the sole record. (1,1)

Monopis laevigella (Skin Moth) – Scarce and thinly distributed resident the larvae feed on dead or decaying animal matter, bird's nests, detritus. 3 on 28th May 2018 the only record. (1,3)

Monopis weaverella – Uncommon and thinly distributed resident, the larvae feed on dead and decaying animal matter, faeces. 11 recorded on 6 occasions in 2018 and 2019. (6,11)

Mottled Beauty *Alcis repandata* – Very common and widespread resident, the larvae feed on woody plants. One on 8th July 2019 the only record. (1,1)

Mottled Pug *Eupithecia exiguata* – Fairly common and fairly widespread resident, the larvae feed on Hawthorn, Blackthorn, Dogwood. 2 on 14th May 2018 the only record. (1,2)

Mottled Rustic *Caradrina morpheus* – Abundant and fairly widespread resident, the larvae feed on herbaceous plants. Singles recorded 5 times in 2018 and 2019. (5,5)

Mullein Wave *Scopula marginepunctata* – Local, the larvae feed on herbaceous plants. 2 on 23rd July 2018 the sole record. (1,2)

Muslin Moth *Diaphora mendica* – Fairly common and widespread resident, the larvae feed on herbaceous plants. One on 21st May 2018 the sole record. (1,1)

Myelois circumvoluta (Thistle Ermine) – Common and widespread resident, the larvae feed on Thistle species. Singles on 11th June 2018 and 25th June and 1st July 2019. (3,3)

Narrow-winged Pug *Eupithecia nanata* – Uncommon and restricted resident, larvae feed on Heather. 2 on 20th May 2019 were assumed to have wandered from lower ground. (1,2)

Nematopogon swammerdamella – Uncommon and thinly distributed resident, the larvae feed on leaf-litter. One on 11th June 2018 the sole record. (1,1)

Nemophora degeerella – Fairly common and widespread resident, the larvae feed on leaf-litter. One on 4^{th} June 2018 the only record. This is the only record for the MoPH project. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)



Nephopterix angustella – Uncommon and thinly distributed or restricted resident, the larvae feed on berries of Spindle. One on 3rd September 2018. The larval foodplant is present on the site. This is the only record for the MoPH project. Recorded in 3 x 1km squares on Living Record 2000-2019. (1,1)

Fig. 18 Nephopterix angustella

Nomophila noctuella (Rush Veneer) – Abundant and widespread migrant, the larvae feed on clover and grasses, though the species is not thought to breed in the UK. 10 recorded on 4 occasions in 2018 and 2019. Maximum 5 on 27th August 2018. (4,10)

Notocelia rosaecolana – Uncommon and thinly distributed resident, the larvae feed on Wild and cultivated Rose. Singles on 28th May and 4th June 2018, confirmed by Dr Phil Sterling. The only site where the MoPH project has recorded this species. Recorded in 5 x 1km squares on Living Record 2000-2019. (2,2)

Notocelia trimaculana – Uncommon and thinly distributed resident, the larvae feed on Hawthorn. 13 on 11th June 2018 and one on 17th June 2019, the sole records. This is the only site where the MoPH project has recorded the species. Recorded in 5 x 1km squares on Living Record 2000-2019. (2,14)

Notocelia uddmanniana (Bramble Shoot Moth) – Common and widespread resident, the larvae feed on wild and cultivated Rose. 18 recorded on 5 occasions in 2018 and 2019, with a maximum of 6 on 1st July 2019. (5,18)

Nutmeg *Discestra trifolii* – Fairly common and thinly distributed or restricted resident, the larvae feed on herbaceous plants and Goosefoots. 16 recorded on 7 occasions in 2018, 2019 and 2020. Maximum of 5 on 23rd July 2018. (7,16)

Nut-tree Tussock *Colocasia coryli* – Fairly common and widespread resident, the larvae feed on Hazel, Birches, Beech, Oaks, other trees. 2 on 23rd July and 1 on 6th August 2018, the only records. (2,3)

Oak Eggar *Lasiocampa quercus* – Fairly common and thinly distributed resident, the larvae feed on Heathers, Bilberry, Bramble and other woody plants. One on 23rd July 2018 the sole record. (1,1)



Fig.19 Oak Eggar

Oak Hook-tip *Watsonalla binaria* – Fairly common and widespread resident, the larvae feed on Oaks. Singles 3 times in 2018, 2 on 8th September 2020. (4,5)

Oncocera semirubella (Nationally Scarce B) – Uncommon and thinly distributed and restricted resident, the larvae feed on Bird's-foot Trefoil and Clover species. One on 13th August 2018 the only record. (1,1)

Orange Footman Eilema sororcula – Fairly common and widespread resident, the larvae feed on lichen. One on 25th June 2019 the only record. (1,1)

Orange Swift *Hepialus sylvina* – Common and widespread resident, the larvae feed on herbaceous plants. 22 recorded on 6 occasions in 2018 and 2020. Maximum 11 on 3rd September 2018. (6,22)

Ostrinia nubilalis (European Corn Borer) – Recent colonist and migrant, the larvae feed on Mugwort. 10 recorded on 4 occasions in 2018 and 2020. High count 5 on 21st August 2018. (4,10)

Pale Mottled Willow *Paradrina clavipalpis* – Common and fairly widespread resident, the larvae feed on grass seeds. One on 17th June 2019 the sole record. (1,1)

Pale Pinion *Lithophane hepatica* – Uncommon and local resident, the larvae feed on Oaks, Birches, Sallow, Hazel and other trees and shrubs. One on 21st May 2018 the only record. (1,1)

Pale Tussock *Calliteara pudibunda* – Fairly common and widespread resident, the larvae feed on broadleaved trees and shrubs. 2 on 11th June 2018, one on 17th June 2019. (2,3)

Pandemis cerasana (Barred Fruit-tree Tortrix) – Fairly common and widespread resident, the larvae feed on deciduous trees, especially fruit trees. 21 recorded on 8 occasions in 2018 and 2019 with a high count of 11 on 11th June 2018. (8,21)

Pandemis corylana (Chequered Fruit-tree Tortrix) – Fairly common and widespread resident, the larvae feed on a wide range of deciduous trees and shrubs. One on 15th September 2020 the sole record. (1,1)

Paraswammerdamia albicapitella – Uncommon and thinly distributed resident, the larvae feed on Blackthorn. One on 21st August 2018 confirmed by Dr Phil Sterling. This is apparently the only record for Poole Harbour this century. (1,1)

Parornix fagivora – Local, very rare resident. Feeds on Beech. Leaf-mine confirmed by Jack Oughton. Recorded in 5 x 1km squares on Living Record, all in the north of the Harbour (1, leaf-mine)



Peach Blossom *Thyatira batis* – Fairly common and widespread resident, the larvae feed on Bramble. One on 6^{th} August 2018 the sole record. (1,1)

Fig.20 Peach Blossom

Peacock Moth *Macaria notata* – Rare and very local resident, the larvae feed on Birch. One on 23rd July 2018 the sole record. (1,1)

Pearly Underwing *Peridroma saucia* – Uncommon but widely distributed migrant / wanderer, the larvae feed on low growing plants, Dandelions etc. 2 on 17th June 2019 the only record. (1,2)

Pebble Prominent *Notodonta ziczac* – Fairly common and widespread resident, the larvae feed on Sallow, Willow, Aspen and other Poplars. Singles on 23rd July 2018 and 9th June 2019. (2,2)

Pempelia genistella (Nationally Scarce B) – Uncommon and thinly distributed and restricted resident, the larvae feed on Gorse. One on 8th July 2019 the sole record. (1,1)

Pempelia palumbella – Fairly common but thinly distributed or restricted resident, the larvae feed on Heather species. One on 23rd July 2018, 2 on 25th June 2019. (2,3)

Phyllonorycter messaniella – Fairly common and local resident, the larvae feed on Oak, Beech and Sweet Chestnut. 2 on 9th July 2018 the only record. (1,2)

Pine Carpet *Thera firmata* – Fairly common and widespread resident, the larvae feed on Scots Pine and Corsican Pine. One on 6th August 2018 the only record. (1,1)

1978 **Pine Hawk-moth** *Hyloicus pinastri* – Uncommon and restricted resident, the larvae feed on Scots and Corsican Pine, Norway Spruce. One on 23rd July 2018, one on 17th June 2019 and 2 on 1st July 2019. (3,4)

808 *Platyedra subcinerea* (Nationally Scarce B) – Scarce and thinly distributed resident, the larvae feed on Common Mallow and Hollyhock. One on 20th May 2019 the sole record. This is apparently the only record for Poole Harbour this century. (1,1)

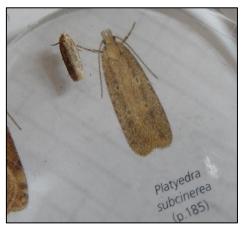


Fig.21 Platyedra subcinerea

1405 *Pleuroptya ruralis* (Mother of Pearl) – Very common and widespread resident, the larvae feed on Nettles. 34 recorded on 7 occasions in 2018 and 2019, high count 16 on 23rd July 2018. (7,34)

464 *Plutella xylostella* (Diamond-back) – Very common and widespread migrant / wanderer, the larvae feed on various vegetables and cruciferous plants. 56 recorded on 15 occasions in 2018 and 2019. Maximum 17 on 6th August 2018. (15,56)

1981 **Poplar Hawk-moth** *Laothoe populi* – Very common and widespread resident, the larvae feed on Poplars, Aspen, Willows and Sallow. 11 recorded on 7 occasions in 2018 and 2019. (7,11)



1784 **Pretty Chalk Carpet** *Melanthia procellata* – Scarce and thinly distributed resident, the larvae feed on Traveller's-joy. Recorded on 8 occasions in 2018 and 2019, totalling 14 individuals and with a maximum of 4 on 23rd July 2018. The only site where the MoPH project recorded the species, the foodplant being plentiful. This is the only 1km square where the species has been recorded in Poole Harbour this century. (8,14)

Fig.22 Pretty Chalk Carpet

1976 **Privet Hawk-moth** *Sphinx ligustri* – Fairly common and widespread resident, the larvae feed on Wild and Garden Privet, Ash, Lilac and Guelder-rose. 20 recorded on 8 occasions in 2018 and 2019, maximum count of 4. (8,20)

1011 *Pseudagyrotoza conwagana* – Fairly common and widespread resident, the larvae feed on Wild Privet, Garden Privet and Ash. Singles on 25th June and 1st July 2019. (2,2)

436 **Pseudoswammerdamia combinella** – Uncommon and thinly distributed resident, the larvae feed on Blackthorn. Singles on 28th May 2018 and 20th May 2019. Recorded in 4 x 1km squares on Living Record 2000-2019. (2,2)

748 **Ptocheuusa paupella** – Scarce and thinly distributed resident the larvae feed on various plants, including Common Fleabane and Golden Samphire. Singles on 11th June and 6th August 2018, confirmed by Dr Phil Sterling. This is the only site where the species was recorded by the MoPH project. Recorded in 3 x 1km squares on Living Record 2000-2019. (2,2)

Purple Bar *Cosmorhoe ocellata* – Common and widespread resident, the larvae feed on Bedstraws. 10 recorded on 5 occasions in 2018 and 2019. (5,10)

Pyrausta aurata – Fairly common and widely distributed resident, the larvae feed on various mint species. One on 9th July 2018 the sole record. (1,1)

Pyrausta despicata – Fairly common and widely distributed resident, the larvae feed on herbs like Wild Thyme and Marjoram. One on 21st August 2018 and 2 on 9th September 2018 the only records. (2,3)



Fig.23 Pyrausta despicata

Pyrausta purpuralis – Fairly common and widely distributed resident, the larvae feed on Wild Thyme and Corn Mint. One on 27th August 2018 the only record. (1,1)

Red Twin-spot Carpet *Xanthorhoe spadicearia* – Common and widespread resident, the larvae feed on herbaceous plants. 13 recorded on 7 occasions in 2018 and 2019. Maximum 3. (7,13)

Reddish Light Arches *Apamea sublustris* – Scarce and very local resident, the larvae feed on grasses. One on 25th June 2019. Also recorded by the MoPH project at Corfe Castle. Recorded in 3 x 1km squares on Living Record 2000-2019. (1,1)

Red-green Carpet *Chloroclysta siterata* – Fairly common and fairly widespread resident, the larvae feed on broadleaved trees. One on 15th October 2018 the only record. (1,1)

Red-line Quaker Agrochola lota – Common and fairly widespread resident, the larvae feed on willows. One on 23rd October 2018 the sole record. (1,1)

Riband Wave *Idaea aversata* – Abundant and widespread resident, the larvae feed on herbaceous plants. 21 recorded on 6 occasions in 2018 and 2019, high count of 13 on 8th July 2019. (6,21)

Rivulet *Perizoma affinitata* – Fairly common and thinly distributed resident, the larvae feed on Red Campion. One on 28th May 2018 the only record. Otherwise recorded by the MoPH project only at Corfe Castle. Recorded in only 3 x 1km squares on Living Record 2000-2019. (1,1)

Rosy Footman *Miltochrista miniata* – Common and widespread resident, the larvae feed on Dog lichen and other lichens. One on 8th July 2019 is, surprisingly, the only record. (1,1)

Rosy Minor *Mesoligia literosa* – Fairly common and fairly widespread resident, the larvae feed on grasses. One on 9th July 2018 the only record. (1,1)

Rosy Rustic *Hydraecia micacea* – Abundant and fairly widespread resident, the larvae feed on low growing plants, Broad-leaved Dock, Ribwort Plantain etc. 18 recorded on 6 occasions in 2018, 2019 and 2020. Maximum of 7. (6,18)

Ruby Tiger *Phragmatobia fuliginosa* – Common and widespread resident, the larvae feed on herbaceous plants. 10 recorded on 4 occasions in 2018 and 2019. Maximum 5 on 23rd July 2018. (4,10)

2381 / 2382 **Rustic / Uncertain aggregate** *Hoplodrina blanda / alsines* – Very common and widespread resident, the larvae feed on herbaceous plants. All species were recorded as aggregates due to the difficulty in separating the species on field characteristics alone. Recorded 8 times in 2018 and 2019, totalling 70 individuals with a maximum count of 27 on both 23rd July 2018 and 8th August 2019. (8,70)

Sallow *Xanthia icteritia* – Fairly common and widespread resident, the larvae feed on Poplars and herbaceous plants. One on 24th September 2018 the sole record. (1,1)

Sallow Kitten *Furcula intertie* – Uncommon and thinly distributed resident, the larvae feed on Willows. Singles on 6th and 27th August 2018 the sole records. (2,2)

Satellite *Eupsillia transversa* – Uncommon and fairly widespread resident, the larvae are omnivorous feeding on broadleaved trees and shrubs and moth larvae. One on 15th October 2018 the only record. (1,1)

Satin Wave *Idaea subsericeata* – Fairly common and thinly distributed resident, the larvae feed on Knotgrass, Dandelions and Chickweed. One on 17th June 2019 the only record. (1,1)



Scalloped Oak *Crocallis elinguaria* – Very common and widespread resident, the larvae feed on broadleaved woody plants, Hawthorn, Blackthorn etc. 15 recorded on 5 occasions in 2018 and 2019. Maximum 4 on 9th July 2018 and 1st July 2019. (5,15)

Fig.24 Scalloped Oak

Scarce Footman *Eilema complana* – Fairly common but restricted resident, the larvae feed on lichens. One on 23rd July 2018 is surprisingly the only record. (1,1)

Scarlet Tiger *Callimorpha dominula* – Uncommon and thinly distributed resident, the larvae feed on herbaceous plants including Comfrey, Hemp-agrimony, Common Nettle, Bramble, Honeysuckle and Meadowsweet. Singles on 9th July 2018 and 25th June and 1st July 2019. (3,3)

Scoparia ambigualis – Common and widespread resident, the larvae feed on various mosses. 3 on 2nd July 2018 the only record. (1,3)

Scoparia pyralella – Fairly common and widely distributed resident, the larvae feed on mosses and dead or decaying leaves. 14 recorded on 3 occasions in 2018 and 2019 with a maximum of 9 on 17th June 2019. Otherwise recorded by the MoPH project only at Corfe Castle. Recorded in 6 x 1km squares on Living Record 2000-2019. (3,14)

Scorched Carpet *Ligdia adustata* – Fairly common and widespread resident, the larvae feed on Spindle. One on 13th August 2018 is the sole record and the only time the MoPH project has recorded the species. (1,1)

Scorched Wing *Plagodis dolabraria* – Fairly common and widespread resident, the larvae feed on Oaks and Birches. One on 8th July 2019 the only record. (1,1)

Scrobipalpa ocellatella (Nationally Scarce B) – Very rare coastal resident, the larvae feed on Sea Beet. One on 27th August 2018, confirmed by Dr Phil Sterling, the sole record. This is apparently the only Poole Harbour record this century. (1,1)

Scythropia crataegella (Hawthorn Moth) – Scarce and restricted resident, the larvae feed on Hawthorn and Blackthorn. One on 11^{th} June 2018 is the only record. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

September Thorn *Ennomos erosaria* – Scarce and thinly distributed or restricted resident, the larvae feed on Oaks and Birches, Limes and Beech. One on 13th August 2018 is the only record. (1,1)

Setaceous Hebrew Character *Xestia c-nigrum* – Abundant and widespread resident, the larvae feed on herbaceous plants, Nettles, Willowherbs etc. Recorded 22 times, totalling 351 individuals in 2018, 2019 and 2020. High count of 62 on 9th September 2018. (22,351)

Shaded Pug *Eupithecia subumbrata* – Scarce and very local resident, the larvae feed on herbaceous plants. One on 28th May 2018 the sole record. Apparently, the only record for Poole Harbour this century. (1,1)

Shark *Cuculiia umbratica* – Fairly common and thinly distributed resident, the larvae feed on Sowthistles, Wild Lettuces, Hawkweeds. 9 recorded on 5 occasions in 2018 and 2019 with a maximum of 5 on 8th July 2019. (5,9)

Sharp-angled Peacock *Macaria alternata* – Common and widespread resident, the larvae feed on Sallow, willows, Sea Buckthorn, Alder. 7 recorded on 6 occasions in 2018 and 2019. (6,7)

Shears *Hada plebeja* – Fairly common and widespread resident, the larvae feed on herbaceous plants. Singles on 9th June and 8th July 2019. (2,2)

Short-cloaked Moth *Nola cucullatella* – Common and fairly widespread resident, the larvae feed on Hawthorns, Blackthorn, Apple, Pear, Plum. 7 recorded on 5 occasions in 2018 and 2019. (5,7)



Fig.25 Short-cloaked Moth

Shoulder-striped Wainscot *Mythimna comma* – Fairly common and widespread resident, the larvae feed on grasses. 2 on 17th June and 3 on 25th June 2019. (2,5)

Shuttle-shaped Dart *Agrotis puta* – Very common and widespread resident, the larvae feed on Docks, Dandelion and other herbaceous plants. Singles on 4 occasions August-October 2018. (4,4)

Silky Wainscot *Chilodes maritimus* – Scarce and local resident, the larvae are omnivorous feeding on invertebrates and dead Common Reed stems. Two on 21st August 2018 assumed to have wandered from lower ground, the only record. (1,2)

Silver Y *Autographa gamma* – Abundant and widespread migrant / wanderer, the larvae feed on many plants. 116 recorded on 15 occasions in 2018, 2019 and 2020. Maximum 74 on 9th July 2018. (15,116)

Silver-ground Carpet *Xanthorhoe montanata* – Abundant and widespread resident, the larvae feed on herbaceous plants. Singles on 28th May 2018, 2nd July 2018 and 9th June 2019. (3,3)

Single-dotted Wave *Idaea dimidiata* – Very common and fairly widespread resident, the larvae feed on Cow Parsley, Burnet Saxifrage, Hedge Bedstraw. 9 recorded on 5 occasions in 2018 and 2019 with maximum counts of 3. (5,9)

Slender Brindle *Apamea scolopacina* – Uncommon and thinly distributed resident, the larvae feed on woodland grasses. One on 23rd July 2018 the sole record and may have been a wanderer from lower ground. Recorded in 6 x 1km squares on Living Record 2000-2019. (1,1)

Slender Pug *Eupithecia tenuiata* – Scarce and local resident, the larvae feed on Goat Willow, Grey Willow, Eared Willow. One on 8th July 2019 is the sole record for the MoPH project. (1,1)

Small Blood-vein *Scopula imitaria* – Fairly common and thinly distributed or restricted resident, the larvae feed on Garden Privet and Honeysuckle. Singles on 6 occasions in 2018 and 2019. (6,6)

Small Clouded Brindle *Apamea unanimis* – Uncommon and thinly distributed or restricted resident, the larvae feed on grasses. One on 2nd July 2018 the only record. (1,1)

Small Dotted Buff *Photedes minima* – Common and fairly widespread resident, the larvae feed on Tufted Hair-grass. One on 2nd July 2018 the sole record. (1,1)



Small Elephant Hawk-moth *Deilephila porcellus* – Fairly common and widespread resident, the larvae feed on Bedstraws. 17 recorded on 7 occasions in 2018 and 2019, maximum 7 on 1st July 2019. (7,17)

Fig.26 Small Elephant Hawk-moth

Small Emerald *Hemistola chrysoprasaria* – Uncommon and thinly distributed resident, the larvae feed on Traveller's Joy. 3 on 8th July 2019 the only record. (1,3)

Small Fan-foot *Herminia grisealis* – Fairly common and fairly widespread resident, the larvae feed on Pedunculate Oak, Birches, Hazel, Hawthorn and Sallow. One on 25th June 2019 the only record. (1,1)

Small Fan-footed Wave *Idaea biselata* – Very common and widespread resident, the larvae feed on various low-growing plants. 8 recorded on 5 occasions in 2018 and 2019. (5,8)

Small Purple-barred *Phytometra viridaria* – Scarce and restricted resident, the larvae feed on Common and Heath Milkwort. One on 9th July 2018 the only record. Assumed to have wandered from lower ground. (1,1)

Small Seraphim *Pteraphrapteryx sexalata* – Fairly common and thinly distributed resident, the larvae feed on Sallow. 6 recorded on 4 occasions, May-July 2018. (4,6)

Small Square-spot *Diarsia rubi* – Abundant and widespread resident, the larvae feed on Dandelion, Foxglove and Docks. 8 recorded on 5 occasions in 2018 and 2019. (5,8)

Small Wainscot *Chortodes pygmina* – Uncommon and thinly distributed or restricted resident, the larvae feed on sedges and grasses. One on 27th August 2018 and 2 on 3rd September 2018. (2,3)

Small Waved Umber *Horisme vitalbata* – Common, the larvae feed on Traveller's Joy. One on 21st May, two on 23rd July and one on 6th August 2018. (3,4)

Smoky Wainscot *Mythimna impura* – Abundant and widespread resident, the larvae feed on grasses. 63 recorded on 7 occasions in 2018, 2019 and 2020. Maximum 18 on 9th July 2018. (7,63)

Snout *Hypena proboscidalis* – Abundant and widespread resident, the larvae feed on Common Nettle. 18 recorded on 12 occasions in 2018, 2019 and 2020. (12,18)

Southern Wainscot *Mythimna straminea* – Uncommon and restricted resident, the larvae feed on Common Reed and Reed Canary Grass. One on 17th June 2019 the only record. (1,1)

Spectacle *Abrostola tripartita* – Very common and widespread resident, the larvae feed on Common Nettle. 13 recorded on 9 occasions in 2018 and 2019. Maximum 3 on 23rd July 2018. (9,13)

Spilonota ocellana (Bud Moth) – Fairly common and widely distributed resident, the larvae feed on various rosaceous trees and shrubs, such as Apple, Pear and Hawthorn. One on 9th July 2018 confirmed by Dr Phil Sterling. (1,1)

Spruce Carpet *Thera britannica* – Fairly common and widespread resident, the larvae feed on Norway Spruce, Sitka Spruce, Western Hemlock. One on 8th October 2018 assumed to have wandered from lower ground. (1,1)

Square-spot Rustic *Xestia xanthographa* – Abundant and widespread resident, the larvae feed on grasses and small herbaceous plants. Recorded 11 times in 2018, 2019 and 2020, totalling 149 individuals. Maximum 40 on 15th September 2020. (11,149)

Straw Dot *Rivula sericealis* – Very common and fairly widespread resident, the larvae feed on grasses. 16 recorded on 9 occasions in 2018 and 2019, maximum 7 on 11th June 2018. (9,16)

Straw Underwing *Thalpophila matura* – Fairly common and thinly distributed or restricted resident, the larvae feed on grasses. One on 13th August and 2 on 21st August 2018 the only records. (2,3)

Swallow-tailed Moth *Ourapteryx sambucaria* – Common and widespread resident, the larvae feed on broadleaved woody plants, Hawthorn, Blackthorn etc. 12 recorded on 4 occasions in 2018 and 2019. Maximum 6 on 9th July 2018. (4,12)



Fig.27 Swallow-tailed Moth

Swammerdamia pyrella – Scarce and thinly distributed resident, the larvae feed on Hawthorn, Apple and Pear. One on 14th May 2018 the sole record. (1,1)

Synaphe punctalis – Fairly common but thinly distributed and restricted resident, the larvae feed on mosses in dry, sandy, shingle or chalky areas. One on 25th June 2019 and 10 on 8th July 2019. (2,11)

Syncopacma larseniella – Rare and very local resident, the larvae feed on Bird's-foot Trefoil. One on 9th July 2018 the sole record. Recorded in 5 x 1km squares on Living Record 2000-2019. (1,1)

Syndemis musculana – Uncommon and thinly distributed resident, the larvae feed on many trees, shrubs and grasses, especially Bramble, Birch and Oak. 2 on 28th May 2018 and 2 on 20th May 2019 the only records. The only site where the species was found by the MoPH project and recorded in 3 x 1km squares on Living Record 2000-2019. (2,4)

Tachystola acroxantha – Uncommon and thinly distributed resident, the larvae feed on leaf litter. One on 28th May 2018 the sole record. (1,1)

Tawny Shears Hadena perplexa – Fairly common and thinly distributed and restricted resident, the larvae feed on Campions, Nottingham Catchfly, Rock Sea-spurrey. Singles on 9th and 23rd July 2018 the only records for the MoPH project. Recorded in 2 x 1km squares on Living Record 2000-2019. (2,2)

Teleiodes vulgella – Scarce and thinly distributed resident the larvae feed on a variety of shrubs and trees especially Hawthorn and Blackthorn. One on 9th July 2018, 3 on 8th July 2019 confirmed by Dr Phil Sterling. Recorded in 2 x 1km squares on Living Record 2000-2019. (2,4)

Tinea semifulvella – Uncommon and thinly distributed or restricted resident, the larvae feed on animal matter and bird's nest detritus. One on 17^{th} June 2019 the sole record. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

Tinea trinotella – Uncommon and thinly distributed or restricted resident, the larvae feed on animal matter and bird's nest detritus. One on 9th July 2018 the only record. (1,1)

Treble Brown Spot *Idaea trigeminata* – Fairly common but restricted resident, the larvae feed on Ivy and Knotgrass. One on 11th June 2018, one on 17th June 2019 and 2 on 25th June 2019. (3,4)



Treble Lines *Charancya trigammica* – Common and fairly widespread resident, the larvae feed on herbaceous plants. 22 recorded on 6 occasions in 2018 and 2019, maximum 8 on 9th June 2019. (6,22)

Fig.28 Treble Lines

True Lover's Knot *Lycophotia porphyria* – Fairly common but restricted resident, the larvae feed on Heather and Bell Heather. 6 recorded on 3 occasions in 2018 and 2019 may have wandered from lower ground. (3,6)

Turnip Moth Agrotis segetum – Common and widespread resident, the larvae feed on herbaceous plant roots, Turnip, Carrot, Beet etc. 12 on 6 occasions in 2018 and 2020. Maximum 4 on 8th October 2018. (6,12)

Twin-spot Carpet *Perizoma didymata* – Scarce and thinly distributed resident, the larvae feed on many plants. One on 6th August 2018 the sole record. Apparently, the only Poole Harbour record this century. (1,1)

Udea ferrugalis (Rusty-dot Pearl) – Very common and widespread migrant, the larvae feed on herbaceous plants. 9 recorded on 7 occasions in 2018, 2019 and 2020. (7,9)

Udea fulvalis – Uncommon, thinly distributed migrant, probable scarce resident. The larvae feed on Black Horehound, Meadow Clary, Red and White Campions. Singles on 27th August 2018 and 8th July 2019. (2,2)

Udea lutealis – Very common and widespread resident, the larvae feed on herbaceous plants including Bramble. One on 8th July 2019 the only record. Recorded in 4 x 1km squares on Living Record 2000-2019. (1,1)

Udea olivalis – Common and widespread resident, the larvae feed on herbaceous plants. One on 11th June 2018 the only record. (1,1)

1390 *Udea prunalis* – Fairly common and widely distributed resident, the larvae feed on herbaceous plants. One on 11th June 2018 the sole record. (1,1)

1716 **Vestal** *Rhodometra sacraria* – Scarce and local migrant / wanderer, the larvae feed on Knotgrass. One on 15th October 2018. (1,1)

2384 **Vine's Rustic** *Hoplodrina ambigua* – Uncommon and local resident, the larvae feed on herbaceous plants. Recorded on 12 occasions in 2018, 2019 and 2020, totalling 141 individuals. Maximum 41 on 21st August 2018. (12,141)

1858 **V-Pug** *Chloroclystis v-ata* – Fairly common and widespread resident, the larvae feed on many plants. Singles on 21st May 2018, 23rd July 2018 and 8th July 2019. (3,3)

2060 White Ermine Spilosoma lubricipeda – Very common and widespread resident, the larvae feed on herbaceous plants, nettles and docks. 19 recorded on 6 occasions in 2018 and 2019. Maximum 7 on 11th June 2018. (6,19)

2031 White Satin Leucoma salicis – Uncommon and thinly distributed or restricted resident, the larvae feed on Aspen, Poplars, Sallow and Willows. One on 2nd July 2018 is, surprisingly, the only record for the MoPH project. Recorded in 6 x 1km squares on Living Record 2000-2019. (1,1)

2081 White-line Dart *Euxoa tritici* – Uncommon and local resident, the larvae feed on herbaceous plants. Singles on 23rd July 2018 and 15th September 2020. (2,2)

2194 White-point *Mythimna albipunta* – Fairly common and widely distributed resident and migrant, the larvae feed on grasses. 33 recorded on 11 occasions in 2018, 2019 and 2020. Maximum 9 on 15th October 2018. (11,33)

1937 **Willow Beauty** *Peribatodes rhomboidaria* – Abundant and widespread resident, the larvae feed on various trees. 33 recorded on 13 occasions in 2018, 2019 and 2020. Maximum 6 on 8th July 2029. (13,33).

1739 **Wood Carpet** *Epirrhoe rivata* – Rare and very local resident, the larvae feed on Lady's and Hedge Bedstraw. One on 23^{rd} July 2018 the sole record. This is apparently the only Poole Harbour record this century. (1,1)



Fig.29 Wood Carpet

1830 **Wormwood Pug** *Eupithecia absinthiata* – Fairly common and widespread resident, the larvae feed on Mugwort, Yarrow, Wormwood, Golden-rod and others. One on 6th August 2018 is the sole record. (1,1)

1742 **Yellow Shell** *Camptogramma bilineata* – Fairly common and widespread resident, the larvae feed on Cleavers and Bedstraw. Singles on 9th July and 3rd September 2018, the only records. (2,2)

2030 **Yellow-tail** *Euproctis similis* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. 2 on 23rd July 2018 the only record. (1,2)

424 *Yponomeuta evonymella* (Bird Cherry Ermine) – Uncommon and thinly distributed resident, the larvae feed on Bird Cherry. One on 23rd July 2018 the only record. (1,1)



455 **Ypsolopha scabrella** – Uncommon and thinly distributed resident, the larvae feed on Apple and Hawthorn. Singles recorded on 6th, 13th and 21st August 2018. Otherwise recorded by the MoPH project only on Canford Heath and recorded in 3 x 1km squares in Living Record 2000-2019. (3,3)

Fig.30 Ypsolopha scabrella

1165 **Zeiraphera isertana** – Uncommon and thinly distributed resident, the larvae feed on Oak. Singles on 2nd July 2018 and 27th August 2018.the only site where the species was recorded by the MoPH project. Recorded in 7 x 1km squares on Living Record 2000-2019. (2,2)

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Fig.31 Chris Thain emptying moth traps at Ballard Down