

The RSPB Arne complex is known to be extremely rich for moths with regular recording going back to the 1970's. However comparatively little trapping work has been undertaken on Arne moors and so the Moths of Poole Harbour (MoPH) project has undertaken weekly trapping throughout 2018 and 2019 and in June to August in 2020. One of the drivers for this work is the saltmarsh managed re-alignment project proposed for the site.

Importance of Arne Moors for Moths

The moth fauna on Arne Moors is very rich considering the relative lack of diversity of habitat types. A significant number of local, scarce and rare species, particularly those associated with wetland and marshy habitats have been recorded. In addition, a number of other significant species, clearly wandering from other habitats in close proximity, have been found.

An examination of records from the Dorset Environmental Records Centre (DERC), 'Recorder' database and from the more recently established Living Record database (effectively operational since 2000) provides a species list of 775 species of macro and micro-moth for the Arne complex as a whole. This is known to be somewhat incomplete as a number of species are known to have been added by Luke Phillips (RSPB) and Jack Oughton, and quite possibly others, over the past 2 years alone. Karl Clennell carried out a daily moth study with a Rothamsted trap at Arne in years 2010 – 2011 inclusive. His records are recorded on Living Record and are added to the species list appended in this report.

It does seem however that Arne Moors has had very little direct moth recording undertaken on it and the MoPH project found 51 species not otherwise recorded for Arne on existing datasets. These are listed in Table 5.

It is clear that a number of the species apparently new for Arne are in fact common or even abundant species and may well be extensively known from other areas of the reserve. For example; *Agriphila geniculea*, *Aroga velocella*, *Epiphyas postvittana*. However many others are distinctly wetland species and undoubtedly some will be at their only location within the complex.

Method

A total of 44 trapping visits have been made to Arne Moors, at 3 distinct locations within the site. One is the central access track from the Arne Road at SY049864 (Site 1) and the other 2 reached via the 'plastic road' behind Bank Gate cottages and via the gate at SY954868 (both referred to as Site 2). One area trapped was along the track adjacent to the pond and wetland area scheduled for habitat retention around SY952868 and the other was in the more open grassland areas around SY551 705.

In 2018, 15 visits were made to Site 1 and 7 to Site 2, between 15th May and 24th October. In 2019, 9 visits were made to Site 1 and 5 to Site 2 between 30th April and 5th September. During 2020 there

was a hiatus for the recording project due to the national Coronavirus pandemic but a total of 8 visits were made, 2 to Site 1 and 6 to Site 2, between 9th June and 11th August.

The choice of location on each visit was generally determined in part by the desired absence of livestock. From September 2019 cattle were present across both sites so trapping ceased a little earlier than in the previous season.

Normally 4 moth traps were deployed on each visit, 3 x 'Robinson' Mercury Vapour (MV) traps and one x 'heath' actinic ultra-violet (UV) trap. The MV traps were powered by a petrol generator and the normal duration of a single tank of fuel was in excess of 6 hours. The actinic trap was battery powered and ran all night.

Findings of the Moths of Poole Harbour study 2018 - 2020

In total 8,088 moths of 337 species (including aggregates) have been recorded from Arne Moors. 220 of these are macro moth species (including aggregates) and 117 are micro-moths or aggregate micro-moth species. Dr Phil Sterling kindly assisted with identification of some of the trickier micros, though by no means all of those considered to be 'grade 4' or 'grade G' (requiring examination of genitalia) were sent for determination. For this reason, one or two groups (e.g. *Coleophora spp.*) can be considered likely to be under-recorded.

30 species are designated Nationally Scarce B (Nb, recorded from 31-100 10km squares since 1980), Nationally Scarce A (Na, recorded in 16- 30 10km squares since 1980) or Red Data Book (RDB), recorded in 15 or fewer 10km squares. These are listed in the table below.

In addition, 18 other species are included on Section 41 (S41) of the 2006 Natural Environment and Rural Communities Act. These species, designated to be "of principal importance for the purpose of conserving biodiversity" are those that are most threatened, in greatest decline, or where the UK holds a significant proportion of the world's total population. These are included in the table below for completeness. Each table lists the number of times the moth was recorded on site 'Times recorded' and the total number of moths seen on that occasion 'Number recorded'.

TABLE 1. DESIGNATED SPECIES RECORDED FROM ARNE MOORS 2018 – 2019

SPECIES	ARNE MOORS SITE	STATUS	TIMES RECORDED	NUMBER RECORDED
Autumnal Rustic	1	S41	1	1
<i>Bactra lacteana</i> *	2	Nb	1	1

<i>Bactra robustana</i> *	1	Nb	2	5
Beaded Chestnut	1	S41	1	1
Blood-vein	1	S41	4	10
Buff Ermine	1 & 2	S41	11	16
<i>Crambus hamella</i>	1 & 2	Nb	2	6
<i>Crambus silvella</i>	1	RDB	4	4
<i>Crambus uliginosellus</i>	2	Nb	1	1
Cream-bordered Green Pea	2	Nb	3	3
Crescent	1 & 2	S41	8	15
<i>Cydia cosmopherana</i> *	1	Nb	1	1
<i>Dioryctria sylvestrella</i>	2	Nb	1	1
<i>Donacaula mucronella</i>	1	Nb	1	1
Dusky Brocade	1 & 2	S41	6	32
<i>Eudonia delunella</i>	1 & 2	Nb	4	6
Feathered Gothic	1 & 2	S41	3	24
Festoon	2	Nb	1	1
Four-spotted Footman	1 & 2	Na	7	22
Garden Tiger	1 & 2	S41	11	57
<i>Glyphipterix schoenicolella</i> *	1	Na	1	1
Grass Eggar	1	Na	1	1
Hedge Rustic	1 & 2	S41	3	5
Horse Chestnut	1 & 2	Nb	5	12
Jersey Tiger	1 & 2	Nb	2	2
Kent Black Arches	1 & 2	Nb	5	8
Knot Grass	1 & 2	S41	5	7
L-album Wainscot	1	Nb	1	1
Large Emerald	1 & 2	S41	3	4
Large Wainscot	1	S41	3	4
Marsh Oblique-barred	1	Nb	1	2
<i>Monochroa palustrellus</i> *	2	Nb	1	1
Mottled Rustic	2	S41	5	8
Mouse Moth	1	S41	1	2
Oblique Carpet	1 & 2	S41	14	53
<i>Oncocera semirubella</i>	1	Nb	1	1
<i>Pediasia contaminella</i>	1 & 2	Nb	7	31
<i>Pempelia genistella</i>	1 & 2	Nb	4	6
Purple-bordered Gold	1	Nb	2	2
Ringed Carpet	1	Na	1	1
Rosy Rustic	1	S41	1	1
Rosy Wave	1 & 2	Nb	6	11
September Thorn	1	S41	1	1
Small Chocolate-tip	1	Nb	1	2
Southern Chestnut	1	RDB	1	1
<i>Sparganothis pilleriana</i> *	1	Na	1	1
Webb's Wainscot	1 & 2	Nb	2	4
White Ermine	1 & 2	S41	4	11

Species marked * have been verified by Dr Phil Sterling.

TABLE 2. THE COMMONEST 25 SPECIES RECORDED ON ARNE MOORS 2018-2020

SPECIES	NUMBER RECORDED	TIMES RECORDED
Smoky Wainscot	1,004	22
Large Yellow Underwing	873	30
<i>Chrysoteuchia culmella</i>	678	19
<i>Agriphila straminella</i>	605	22
<i>Agriphila tristella</i>	368	14
<i>Agriphila selasella</i>	302	11
<i>Aroga velocella</i>	209	4
<i>Bactra lancealana</i>	197	19
True Lover's Knot	162	19
Dark Arches	139	20
Rustic / Uncertain aggregate	122	15
<i>Synaphe punctalis</i>	122	12
Broad-bordered Yellow Underwing	117	10
Common Wainscot	83	20
Round-winged Muslin	81	14
Elephant Hawk-moth	75	15
Six-striped Rustic	74	8
Flame Shoulder	72	27
Scarce Footman	72	10
<i>Aristotelia ericinella</i>	71	7
Common Rustic aggregate	71	19
Drinker	67	17
Garden Tiger	57	11
Small Rufous	54	13
Oblique Carpet	53	14

MoPH recorded 8,088 moths in total. The commonest 25 species, as listed above amounts to 5,728 moths and accounts for 71% of the total moths recorded. The 5 most numerous species account for 43.5% of all the moths.

TABLE 3. SPECIES AT ARNE MOORS THAT ARE RECORDED IN 5 OR FEWER 1KM SQUARES IN LIVING RECORD 2000-2019

SPECIES	NUMBER OF 1km SQUARES	TIMES RECORDED	NUMBER RECORDED
<i>Acrobasis consociella</i>	2	1	1
<i>Agapeta zoegana</i>	5	2	2
<i>Anania perlucidalis</i>	3	1	1
<i>Bactra furfurana</i> *	3	2	2
<i>Bactra lacteana</i> *	1	1	1
<i>Bactra robustana</i> *	4	3	6
Blotched Emerald	5	2	2
Brown-veined Wainscot	4	1	2
<i>Coleophora alticolella</i> *	3	1	1
<i>Coleophora glaucicolella</i> *	3	2	2
<i>Coleophora taeniipennella</i> *	2	1	1
<i>Cydia cosmopherana</i> *	0	1	1
<i>Cydia fagiglandana</i> *	5	1	1
<i>Donacaula mucronella</i>	2	1	1
<i>Endothenia marginana</i> *	5	1	1
<i>Epiblema scutulana</i> *	2	1	1
<i>Glyphipterix schoenicolella</i> *	5	1	1
<i>Glyphipterix simplicella</i>	4	1	1
Grass Eggar	4	1	1
<i>Hedya ochroleucana</i> *	4	1	1
Marsh Oblique-barred	5	1	2
<i>Monochroa lucidella</i> *	1	1	1
<i>Monochroa palustrellus</i> *	0	1	1
<i>Monopis weaverella</i>	4	3	3
<i>Orthotelia sparganella</i>	2	2	2
<i>Phycitodes binaevella</i>	3	1	1
Ringed Carpet	5	1	1
September Thorn	5	1	1
Small Chocolate-tip	3	1	2
Small Clouded Brindle	4	2	3
Small Dotted Buff	5	3	7
Svensson's Copper Underwing	3	2	3

*Verified by Dr Phil Sterling.

TABLE 4. SPECIES FOR WHICH ARNE MOORS PROVIDED THE SOLE LOCATION 2018-2020

SPECIES	TIMES RECORDED	NUMBER RECORDED	YEARS RECORDED
<i>Acleris hastiana</i> *	1	1	2018
<i>Acrobasis consociella</i>	1	1	2020
<i>Bactra furfurana</i> *	2	2	2018
<i>Bactra lacteana</i> *	1	1	2018
<i>Coleophora alticolella</i> *	1	1	2018
<i>Coleophora glaucicolella</i> *	2	2	2018
<i>Coleophora taeniipennella</i> *	1	1	2018
<i>Cydia cosmopherana</i> *	1	1	2020
Marbled Green	1	1	2020
<i>Monochroa lucidella</i> *	1	1	2018
<i>Monochroa palustrellus</i> *	1	1	2018
<i>Orthotelia sparganella</i>	2	2	2018 & 2020
<i>Parornix betulae</i> *	1	1	2020
Suspected	1	1	2020
Svensson's Copper Underwing	2	3	2019

*Verified by Dr Phil Sterling.

Selected species accounts for rarer and local moths

In an attempt to provide at least a basic local context for these records, the species accounts for rarer and local moths that follow give a summary of where else a particular species has been recorded by the MoPH project which has been operating since July 2017.

In addition the number of 1km squares in which each species has been recorded in the Living Record database (effectively active from 2000) up until 2019 is included as an indicator of occurrence within the Harbour. Records were trawled for the BoPH recording area and include all MoPH sightings up until the end of 2019.

It should be stressed though that recording effort across the harbour is far from exhaustive or comprehensive.

Acleris hastiana – Single record on 26th June 2018, confirmed by Dr Phil Sterling. An uncommon and thinly distributed resident. This is the only record for the MoPH project. Recorded in 5 x 1km squares on Living Record 2000-2019.

Agapeta zoegana – Singles on 9th and 24th of July 2019. An uncommon and thinly distributed resident in Dorset. This is one of 3 sites where the species has been recorded by MoPH. Recorded in 5 x 1km squares on Living Record 2000-2019.

Anania perlucidalis – One on 12th June 2018. A rare and very local resident in Dorset, though likely to be expanding its range. The larval foodplant is Thistles. Also recorded by MoPH at Holton Lee. Recorded in 3 x 1km squares on Living Record 2000-2019.



Antler Moth *Cerapteryx graminis* – Recorded on 11 occasions and with a total of 34 moths seen. This species is a scarce and restricted resident in Dorset and apparently declining, so this may represent an important population. The larvae feed on Sheep's Fescues. Elsewhere MoPH has only recorded one single individual, on Slepe Heath in 2017. Recorded in 7 x 1km squares on Living Record 2000-2019.

Fig. 1 Antler Moth

Bactra furfurana – Recorded twice, on 26th June 2018 and 12th August 2020, both records confirmed by Dr Phil Sterling. A scarce and local resident species in Dorset. Larvae feed on Rushes. These are the only records for the MoPH project. Recorded in 3 x 1km squares on Living Record 2000-2019.

Bactra lacteana – Nationally Scarce B. One on 31st July 2018, confirmed by Dr Phil Sterling. A very rare, though probably overlooked, resident. Larvae feed on sedges, especially Carnation sedge. This is the only MoPH record for the species. There are no other records in Living Record for this century.

Bactra robustana – Nationally Scarce B. 4 trapped on 15th May 2018, 1 on 11th confirmed by Dr Phil Sterling, and one on 11th August 2020. A rare and restricted coastal resident, the larvae feed on Sea Club-rush. Also recorded by MoPH from Holton Lee. Recorded in 4 x 1km squares on Living Record 2000-2019.



Fig. 2 Bactra robustana

Blotched Emerald *Comibaena bajularia* – Singles on 12th and 19th June 2018. A Scarce and very local resident in Dorset mainly of Oak woods, where it can be locally common. Also trapped by MoPH at Holton Lee and Hamworthy. Recorded in 5 x 1km squares on Living Record 2000-2019.

Bordered Sallow *Pyrrhia umbra* – Single on 3rd and 2 on 24th July 2018. A Scarce and local resident, mainly coastal in Dorset. Wide range of foodplants include Restharrow, and leaves of Oaks and Willows. Also recorded by MoPH on Slepe Heath. Recorded in 5 x 1km squares on Living Record 2000-2019.

Brown-veined Wainscot *Archanara dissoluta* – 2 on 24th July 2019. Also recorded by MoPH at Holton Lee and Sandford Gardens. Recorded in 4 x 1km squares on Living Record 2000-2019.

Calamatropha paludella – Recorded on 9 occasions over all 3 years, with a total of 27 and a maximum of 9 on 31st July 2020. The larvae feed on Reedmace (*Typha latifolia*). An uncommon and thinly distributed and restricted resident. The species is probably fairly reliant on the ditch network on Arne Moors. Also recorded by MoPH at Holton Lee, Carey Estate and Hamworthy. Recorded in 13 x 1km squares on Living Record 2000-2019.



Chilo phragmitella – Recorded on 5 occasions, a total of 6 individuals. A local, uncommon and thinly restricted resident in Dorset, the larvae feed on Reedmace. Recorded by MoPH at Carey Estate, Corfe River Meadow, Holton Lee and Slepe Heath. Recorded in 9 x 1km squares on Living Record 2000-2019.

Fig. 3 *Chilo phragmitella*

Coleophora alticolella – Recorded on 22nd May 2018, record conformed by Dr Phil Sterling. A scarce and thinly distributed resident, larval foodplant is Soft Rush and Heath Rush. As the various *Coleophora* species frequently require detailed examination of the genitalia for specific identification, the status of the species on Arne Moors is difficult to assess. However the foodplant is locally abundant. This is the only location where the species has been recorded by MoPH. Recorded in 3 x 1km squares on Living Record 2000-2019.

Coleophora glaucicolella – Singles on 26th June and 31st July 2018, identification confirmed by Dr Phil Sterling. A scarce and thinly distributed resident in Dorset the foodplants being a number of species of Rush. This is the only site where the species has been recorded by MoPH. Recorded in 3 x 1km squares on Living Record 2000-2019.

Coleophora taeniipennella – One on 31st July 2018, verified by Dr Phil Sterling. A rare and very local resident, the foodplants are a Jointed and Sharp-flowered Rush. This is the only site where the species has been recorded by MoPH. Recorded in 2 x 1km squares on Living Record 2000-2019.

[Note: *Coleophora* species are difficult to identify and it is unlikely that records will be accepted without examination of genitalia. *Coleophora* species are encountered on Arne Moors quite frequently but relatively few are retained and sent for verification. It is likely that several additional species occur, given the large expanse of apparently suitable habitat. MoPH has not tended to investigate specific *Coleophora* species on other sites, hence the lack of any site comparison information.]

Crambus hamella Nationally Scarce B. – 2 on 28th August 2018 and 4 on 27th August 2019. A scarce and thinly distributed and restricted resident. With the majority of records from Poole Basin and east of the county. Food-plant is possibly Wavy Hair-grass. Also recorded by MoPH at Holton Lee and Slepe Heath. Recorded in 7 x 1km squares on Living Record 2000-2019.



Fig. 4 *Crambus hamella*



Fig. 5 *Crambus silvella*

Crambus silvella Red Data Book 3 – Recorded 4 times: singles on 17th July and 14th August 2018 and 24th and 31st July 2019. A scarce and thinly distributed and restricted resident where it is confined to mire habitat. The larvae feed on various Sedges. Recorded by MoPH at Ballard Down, Holton Lee, Carey and Sandford. Recorded in 9 x 1km squares on Living Record 2000-2019.

Crambus uliginosellus Nationally scarce B. – One on 16th June 2020. A scarce and thinly distributed resident the larvae feed on various grasses. Also recorded by MoPH at Carey Estate. Recorded in 6 x 1km squares on Living Record 2000-2019.

Cream-bordered Green Pea *Earias clorana* – Nationally Scarce B. Recorded on 12th June 2018, 9th July 2019 and 23rd June 2020. A scarce and restricted resident in Dorset, feeding on Sallow and Willows. Also recorded by MoPH at Goathorn, Holton Lee and Carey Estate, Hamworthy and Corfe River Meadow. Recorded in 21 x 1km squares on Living Record 2000-2019.

Crescent *Helotropha leucostigma* (formerly *Celaena leucostigma*) – Section 41 species. 15 recorded on 8 occasions across all 3 years. An uncommon and thinly distributed or restricted resident. The larvae feed on Yellow Iris, Greater Fen-sedge, Pond-sedge and others. Also recorded by MoPH at Ballard Down, Corfe River Meadow, Carey estate and Holton Lee. Recorded in 7 x 1km squares on Living Record 2000-2019.



Fig. 6 Crescent

Cydia cosmopherana – Nationally Scarce B. One on 11th August 2020, verified by Dr Phil Sterling. A rare and very local resident in Dorset, the larvae feed on Pines. There are no records for the Harbour in Living Record 2000-2019, and none in the DERC database either. This quite possibly represents a new species for Poole Harbour.

Dark Tussock *Dicallomera fascelina* – Singles on 31st July 2018 and 21st July 2020. A scarce and restricted resident the larvae feeding on Heathland plants including Heather, Broom, Hawthorn, Bramble and Creeping Willow. Also recorded by MoPH at Goathorn and Wareham Forest. Recorded in 14 x 1km squares on Living Record 2000-2019.

Dioryctria sylvestrella – Nationally Scarce B. One on 9th July 2019. An uncommon and thinly distributed or restricted resident. First recorded in Dorset in 2000 the species appears to be spreading from a Poole basin stronghold. The larval foodplant is Pines. Also recorded by MoPH at Wareham Forest and Carey Estate, Wareham. Recorded in 9 x 1km squares on Living Record 2000-2019.

Donacaula mucronella – Nationally Scarce B. One on 27th August 2019. A rare and very local resident around marsh and fen habitat where the larvae feed on Reed and Sedges. Has also been recorded by MoPH on Goathorn. There are no other records on Living Record for Poole Harbour from 2000 – 2019.

Endothenia marginana – One on 12th August 2020, verified by Dr Phil Sterling. A scarce and thinly distributed resident, the larvae feeding on a variety of plants including Teasel and Ribwort Plantain. Also recorded by MoPH at Ballard down and Hamworthy. Recorded in 5 x 1km squares in Living Record 1999-2000.

Epiblema scutulana – One on 5th June 2018. An uncommon and thinly distributed resident. Larval foodplant is Thistles. Also recorded by MoPH at Holton Lee. Recorded in 2 x 1km squares on Living Record 2000-2019.

Eucosma hohenwartiana – One on 3rd July 2018 and one on 31st July 2018. An uncommon and thinly distributed or restricted resident, the larval foodplants are Knapweed and Saw-wort. Also recorded by MoPH at Carey estate. Recorded in 4 x 1km squares on Living Record 2000-2019.

Eudonia delunella Nationally Scarce B. – 6 recorded on 4 occasions across all 3 years. An uncommon and thinly distributed or restricted resident the larvae feed on lichens and mosses. Recorded by MoPH at Carey estate, Holton Lee and Longfleet School in Poole. Recorded in 13 x 1km squares on Living Record 2000-2019.

Fen Wainscot *Arenostola phragmitidis* – One on 9th July 2019. An uncommon and restricted resident. The larvae feed on Common Reed. Also recorded by MoPH at Goathorn and Holton Lee. Recorded in 12 x 1km squares on Living Record 2000-2019.

Gold Swift *Phymatopus hecta* (formerly *Hepialus hecta*) – One on 26th June 2018. An Uncommon and thinly distributed and restricted resident. Larvae known to feed on Bracken and presumed other plants. Also recorded by MoPH at Holton Lee. Recorded in 3 x 1km squares on Living Record 2000-2019.

Glyphipterix schoenicolella – Nationally Scarce A. One on 12th August 2020, verified by Dr Phil Sterling. A rare and restricted resident, the larvae feed on Black Bog-rush. Also recorded by MoPH at Ballard Down. Recorded in 5 x 1km squares in Living Record 2000-2019. This species has certainly been recorded previously from the Arne complex.



Grass Eggar *Lasiocampa trifolii* Nationally Scarce A – One on 11th August 2020. A rare and restricted resident, the larvae feed on a variety of grasses and plants. Considered a local and declining species being found in fewer than 10 counties. Also recorded by MoPH on Slepe Heath. Recorded in 4 x 1km squares on Living Record 2000-2019.

Fig. 8 Grass Eggar

Hedge Rustic *Tholera cespitis* Section 41 species – 5 recorded on 3 occasions in 2018 and 2019. A sparsely distributed resident the larvae feed on grasses. Apparently declining in the county. Recorded by MoPH at Ballard, Carey estate and Corfe Castle. Recorded in 11 x 1km squares on Living Record 2000-2019.

Hedya ochroleucana – One on 3rd July 2018 confirmed by Dr Phil Sterling. A scarce and thinly distributed resident. Larval foodplants are Rose and Apple. Also recorded by MoPH at Carey Estate, Wareham. Recorded in 4 x 1km squares on Living Record 2000-2019.

Leopard Moth *Zeuzera pyrina* – One on 9th July 2019. An uncommon though fairly widespread resident. Also recorded by MoPH at Holton Lee and Carey estate. Recorded in 10 x 1km squares on Living Record 2000-2019.

Lesser Cream Wave *Scopula immutata* – 3 recorded on 2 occasions, 2018 and 2019. A rare and very local resident the larvae feed on Meadowsweet and Common Valerian. Recorded by MoPH at Holton Lee, Slepe Heath, Carey estate and Corfe River Meadow. Recorded in 7 x 1km squares on Living Record 2000-2019.

Limnaecia phragmitella – Three on 31st July 2019. A scarce and thinly distributed or restricted resident, the larvae feed on Bulrush and Lesser Bulrush. Also recorded by MoPH at Holton Lee. Recorded in 9 x 1km squares on Living Record 2000-2019.

Marsh Oblique-barred *Hypenodes humidalis* Nationally Scarce B. – Two on 24th July 2019. A scarce and restricted resident mainly around the Poole basin and east of the county. This species may be easily overlooked. The foodplants are unknown but the fen and marsh habitat appears ideal. The species has been well known at Arne since the 1970's. Also recorded by MoPH at Slepe Heath. Recorded in 5 x 1km squares on Living Record 2000-2019.

Monochroa lucidella – One on 31st July 2018, identity confirmed by Dr Phil Sterling. A rare and restricted resident in Dorset, the larvae feeding on Common Spike-rush. Most records seem to be from the river valleys west of Wareham. This is the only MoPH record and the only one in Living Record for Poole Harbour this century.

Monochroa palustrellus Nationally Scarce B. – One on 31st July 2018, identity confirmed by Dr Phil Sterling. A very rare resident with Dock and Curled Dock as foodplants. This species has seldom been recorded in Dorset and this may represent the first breeding colony (P. Sterling pers com). This is quite a striking Gelechiid, and, as such, can be identified in the field. This is the only MoPH record and the only one on Living Record this century.

Oblique Carpet *Orthonama vittata* – Scarce and local resident, the larvae feed on Marsh and Heath Bedstraw. 53 recorded on 14 occasions in 2018, 2019 and 2020. One of the 25 most commonly recorded species in terms of numbers. Elsewhere in the Harbour relatively scarce and recorded by the MoPH project only at Holton Lee. Recorded in 7 x 1km squares on Living Record 2000-2019. *Section 41 species ("of principal importance for the purpose of conserving biodiversity" covered under section 41 [England] of the NERC Act 20016).*

Obscure Wainscot *Leucania obsoleta* / *Mythimna obsoleta* – One on 3rd June 2019. A scarce and local resident in Dorset, the larvae feeding on Common Reed. Also recorded by MoPH at Holton Lee. Recorded in 6 x 1km squares on Living Record 2000-2019.

Ochreous Pug *Eupithecia indigata* – One on 28th May 2019 from site 2, nearest to the Scots Pines. A scarce and restricted resident. Also recorded by MoPH at Goathorn and Holton Lee. Recorded in 7 x 1km squares on Living Record 2000-2019.

Oncocera semirubella Nationally Scarce B – One on 11th August 2020. An uncommon and thinly distributed and restricted resident, the larvae feed on Birds-foot Trefoil and Clover species.

Recorded by MoPH at 7 other localities in the Harbour. Recorded in 18 x 1km squares on Living Record 2000-2019.

Orthotelia sparganella – One on 3rd July 2018. One on 11th August 2020. A rare and very local resident in Dorset, the larvae feeding on Branched Bur-reed and Reed Sweet-grass. This is the only site where MoPH has recorded the species. Recorded in 2 x 1km squares on Living Record 2000-2019.

Pediasia contaminella Nationally Scarce B. – Recorded on 7 occasions, totalling 31 moths over all 3 years. An uncommon and thinly distributed and restricted resident, the larvae feed on various grasses including Sheep's-fescue. Also recorded by MoPH at Holton Lee, Canford Heath, Round Island, Grange Heath, Hamworthy and Carey Estate. Recorded in 10 x 1km squares on Living Record 2000-2019.

Pempelia genistella Nationally Scarce B. – 2 on 3rd July 2018, 2 on 9th July 2019, singles on 30th June and 11th August 2020. An uncommon and thinly distributed and restricted resident. The larval foodplant is Gorse. The species has been recorded by MoPH on 10 other sites in the Harbour. Recorded in 24 x 1km squares on Living Record 2000-2019.

Purple-bordered Gold *Ideaea muricata* Nationally Scarce B. – One on 3rd July 2018 and one on 31st July 2019. A very rare and very local resident restricted in Dorset to Poole Harbour and the east of the county. The species inhabits mire edges where Marsh Cinquefoil grows. Also recorded by MoPH at Goathorn and Holton Lee. Recorded in 11 x 1km squares on Living Record 2000-2019.

Puss Moth *Cerura vinula* – Recorded once, with 4 trapped on 30th April 2019. An uncommon and thinly distributed resident in Dorset. Foodplant is Poplars and Willows. Also recorded by MoPH at Carey Estate and Hamworthy. Recorded in 9 x 1km squares on Living Record 2000-2019.



Fig. 9 Puss Moth

Ringed Carpet *Cleora cinctaria cincture* Nationally Scarce A. – One on 30th April 2019. A scarce and restricted resident with nearly all Dorset records from the Poole Basin heaths and east of the county. The larval foodplants are Birch and Bog Myrtle. Also recorded by MoPH on Goathorn, Grange Heath and Creech Heath. Recorded in 5 x 1km squares on Living Record 2000-2019.

Rosy Wave *Scopula emutaria* Nationally Scarce B. – Recorded on 26th June and 3rd July 2018 and on 9th and 16th July 2019. One on 16th June 2020 and 3 on 23rd June 2020. A total of 11 individuals trapped. A scarce and very local resident. The larval foodplant is unknown and although the species is found on coastal edges it is well known from acid bogs inland and there are several colonies known in Poole Harbour. Also found by MoPH on Holton Lee and Goathorn and well known from Brownsea Island. Recorded in 13 x 1km squares on Living Record 2000-2019.

Schoenobius gigantella – Recorded on 31st July and 27th August 2019. A very rare resident in Dorset, inhabiting reedbeds. Also found once by MoPH at Holton Lee. These records are now queried.

Small Chocolate-tip *Clostera pigra* Nationally Scarce B. – 2 trapped on 24th July 2019. A rare and very local resident the larvae feeding on Eared and Creeping Willows, also low growth of Aspen. Also recorded by MoPH at Slepe Heath. Recorded in 3 x 1km squares on Living Record 2000-2019.

Southern Chestnut *Agrochola haematidea* Red Data Book – In Dorset a very scarce and restricted recent colonist. One on 2nd October 2018. Found by MoPH to have spread extensively around the south side of the Harbour, this individual was away from its usual heathland habitat. It has also now been found by MoPH on 6 additional sites: Canford Heath, Hartland Moor, Holton Lee, Slepe Heath with another apparently wandering individual at Carey Estate. The species can be reasonably expected to occur on any heathland site in the Poole basin now and is assumed to be across the Arne heathland complex. Larval foodplant is Bell Heather, though also found on Cross-leaved Heath. Recorded in 12 x 1km squares on Living Record 2000-2019.

Sparganothis pilleriana Nationally Scarce A – One on 3rd July 2018, confirmed by Dr Phil Sterling. A scarce and thinly distributed and restricted resident. Foodplants are various herbaceous plants in salt-marsh and damp heathland. Also recorded by MoPH at Hamworthy, though apparently well-known on Studland since the 1930's. Recorded in 6 x 1km squares on Living Record 2000-2019.

Suspected *Parastichtis suspecta* – Scarce and restricted resident, the larvae feed on Birches and Sallow. One on 23rd June 2020 the sole record for the MoPH project. Recorded in 6 x 1km squares on Living Record 2000-2019.

Svensson's Copper Underwing *Amphipyra berbera* – 2 on 24th July 2019 and one on 31st July 2019. An uncommon and thinly distributed or restricted resident. 2 additional Copper Underwing aggregates have been trapped but gave good views of the diagnostic undersides are required for determination. The only site where the species has been found by MoPH. Recorded in 3 x 1km squares on Living Record 2000-2019.



Fig. 10 Webb's Wainscot

Webb's Wainscot *Globia sparganii* / *Archanara sparganii* Nationally Scarce B – 3 trapped on 20th August 2019 by the pond area at SY953868. A single from site 1 on 11th August 2020. A scarce and restricted resident, the larvae feed on Reedmaces, Branched Bur-reed and Yellow Iris. Also found by MoPH at Holton Lee and well-known from Brownsea Island. Recorded in 9 x 1km squares on Living Record 2000-2019.

Yponomeuta rorella* (Willow Ermine) – Singles recorded in 2018 and 2019 (confirmed by Dr P. Sterling). An uncommon and thinly distributed resident and migrant/wanderer, the larvae feed on Willow spp. Also recorded by MoPH in Sandford gardens. Recorded in 5 x 1km squares on Living Record 2000-2019.

**TABLE 5. SPECIES RECORDED ON ARNE MOORS 2018-2020
NOT FOUND IN EXISTING ARNE DATA-BASES**

SPECIES	ARNE MOORS SITE	STATUS	TIMES RECORDED	TOTAL NUMBER
<i>Acleris hastiana</i> *	1		1	1
<i>Acleris variegana</i>	1 & 2		2	2
<i>Acrobasis consociella</i>	1		1	1
<i>Aethes cnicana</i>	1 & 2		7	18
<i>Agriphila geniculea</i>	1		2	4
<i>Agrochola haematida</i> (Southern Chestnut)	1	RDB	1	1
<i>Anania crocealis</i>	1		1	1
<i>Anania perlucidalis</i>	2		1	1
<i>Apamaea unanimitis</i> (Small Clouded Brindle)	1 & 2		2	3
<i>Aroga velocella</i>	1 & 2		4	209
<i>Aspilapteryx tringipennella</i>	1		1	1
<i>Bactra furfurana</i> *	1		1	1
<i>Bactra lacteana</i> *	2	Nb	1	1
<i>Bactra robustana</i> *	1	Nb	2	5
<i>Blastobasis lacticolella</i>	1		1	1
<i>Bryotropha terrella</i>	1		1	1
<i>Helotropha leucostigma</i> Crescent	1 & 2		8	15
<i>Coleophora alticolella</i> *	1		1	1
<i>Coleophora glaucicolella</i> *	1 & 2		2	2
<i>Coptotriche marginea</i>	1 & 2		2	2
<i>Cydia amplana</i>	1		1	1
<i>Cydia cosmopherana</i> *	1	Nb	1	1
<i>Cydia fagiglandana</i> *	2		1	1
<i>Dioryctria sylvestrella</i>	2	Nb	1	1
<i>Endothenia marginana</i> *	1		1	1
<i>Epiblema scutulana</i> *	2		1	1
<i>Epiphyas postvittana</i> (Light Brown Apple Moth)	1 & 2		10	24
<i>Eucosma hohenwartiana</i> *	1 & 2		2	2
<i>Eudonia lacustrata</i>	1 & 2		2	2
<i>Euplagia quadripunctaria</i> (Jersey Tiger)	1 & 2	Nb	2	2
<i>Glyphipteryx simpliciella</i>	2		1	1
<i>Hedya ochroleucana</i> *	1		1	1
<i>Hepialus lupulinus</i> (Common Swift)	1 & 2		4	12
<i>Hofmanophila pseudospretella</i> (Brown House Moth)	2		1	3

<i>Lasiocampa trifolii</i> (Grass Eggar)	1	Na	1	1
<i>Limnaecia phragmitella</i>	1		1	3
<i>Mirificarma mulinella</i>	1		3	9
<i>Monochroa lucidella</i> *	2		1	1
<i>Monochroa palustrellus</i> *	2	Nb	1	1
<i>Myelois circumvoluta</i>	1 & 2		4	4
<i>Oncocera semirubella</i>	1	Nb	1	1
<i>Orthotelia sparganella</i>	1		2	2
<i>Ostrinia nubilalis</i>	1 & 2		2	3
<i>Eugnorisma glareosa</i> (Autumnal Rustic)	1		1	1
<i>Phycitodes binaevella</i>	2		1	1
<i>Pseudagyratoza conwagana</i>	2		1	1
<i>Pyrausta despicata</i>	1 & 2		4	26
<i>Sparganothis pilleriana</i> *	1	Na	1	1
<i>Spilonota ocellana</i> *	1		1	1
<i>Tachystola acroxantha</i>	2		1	20
<i>Teleiopsis diffinis</i>	1		1	3
<i>Udea prunalis</i>	1		1	1
<i>Xanthia aurago</i> (Barred Sallow)	1		1	1

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Appendix 1. Full MoPH Species List – Arne Moors 2018 – 2020 inclusive

The following list is a summary of results from 44 nights trapping at Sites 1 & 2 placed in alphabetical order. Micro-moths appear in italics.

SPECIES	TIMES RECORDED	NUMBER RECORDED
<i>Acentria ephemerella</i>	1	1
<i>Acleris hastiana</i> *	1	1
<i>Acleris variegana</i>	2	2
<i>Acrobasis consociella</i>	1	1
<i>Aethes cnicana</i>	7	18
<i>Agapeta hamana</i>	3	3
<i>Agapeta zoegana</i>	2	2
<i>Agriphila geniculea</i>	2	4
<i>Agriphila inquinatella</i>	3	6
<i>Agriphila latistria</i>	1	2
<i>Agriphila selasella</i>	11	302
<i>Agriphila straminella</i>	22	605
<i>Agriphila tristella</i>	14	368
<i>Anania crocealis</i>	1	1
<i>Anania perlucidalis</i>	1	1
Angle Shades	8	15
Antler	11	34
Archer's Dart	2	2
<i>Argyresthia goedartella</i>	2	12
<i>Aristotelia ericinella</i>	2	71
<i>Aroga velocella</i>	4	209
<i>Aspilapteryx tringipennella</i>	1	1
Autumnal Rustic	1	1
<i>Bactra furfurana</i> *	2	2
<i>Bactra lacteana</i> *	1	1
<i>Bactra lancealana</i>	19	197
<i>Bactra robustana</i> *	3	6
Barred Sallow	1	1
Beaded Chestnut	1	1
<i>Beautiful China-mark</i>	5	5
Beautiful Hook-tip	2	2
Beautiful Yellow Underwing	4	13
Bird's Wing	3	7
Black Arches	8	17
Black Rustic	2	5
<i>Blastobasis adustella</i>	4	6
<i>Blastobasis lacticolella</i>	1	1
Blood-vein	4	10
Blotched Emerald	2	2
Bordered Sallow	2	3

<i>Brachmia blandella</i>	1	1
Brick	1	1
Bright-line Brown-eye	15	47
Brimstone	2	4
Broad-bordered Yellow Underwing	10	117
Broom	10	31
<i>Brown China-mark</i>	10	26
Brown Rustic	1	1
Brown Silver-line	2	5
Brown-tail	7	22
Brown-veined Wainscot	1	2
Brussels Lace	4	4
<i>Bryotropha terrella</i>	1	1
Buff Arches	3	6
Buff Ermine	11	16
Buff Footman	4	7
Buff-tip	13	23
Burnished Brass	2	2
Cabbage	2	2
<i>Calamatropha palludella</i>	9	27
<i>Caloptilia alchimiella / robustella</i>		
Canary-shouldered Thorn	12	14
<i>Carcina quercana</i>	1	1
<i>Catoptria falsella</i>	1	1
<i>Catoptria pinella</i>	1	1
<i>Celypha lacunana</i>	8	18
Chestnut	1	1
Chevron	3	4
<i>Chilo phragmitella</i>	7	8
Chinese Character	1	1
<i>Chrysoteuchia culmella</i>	19	678
Cinnabar	2	3
Clay	5	5
<i>Clepsia spectrana</i>	2	2
Clouded Border	8	21
Clouded Brindle	1	1
Clouded Buff	5	11
Clouded-bordered Brindle	2	2
<i>Cochylis atricapitana</i>	1	1
<i>Coleophora alticolella*</i>	1	1
<i>Coleophora glaucicolella*</i>	2	2
<i>Coleophora spp.</i>	10	31
<i>Coleophora taeniipennella*</i>	1	1
Common Carpet	10	12
Common Emerald	1	1
Common Footman	7	18
Common Quaker	1	2
Common Rustic agg.	19	71
Common Swift	4	12
Common Wainscot	20	83

Common Wave	2	2
Common White Wave	4	4
Copper Underwing	1	1
Copper Underwing agg.	1	2
<i>Coptotriche marginea</i>	2	2
Coxcomb Prominent	1	1
<i>Crambus hamella</i>	2	6
<i>Crambus pascuella</i>	7	30
<i>Crambus perlella</i>	4	10
<i>Crambus silvella</i>	4	4
<i>Crambus uliginosellus</i>	1	1
<i>Crassa unitella</i>	1	2
Cream-bordered Green Pea	3	3
Crescent	8	15
<i>Cydia amplana</i>	1	1
<i>Cydia cosmopherana</i> *	1	1
<i>Cydia fagiglandana</i> *	1	1
<i>Cydia splendana</i>	6	6
Dark Arches	20	139
Dark Sword-grass	4	4
Dark Tussock	2	2
<i>Diamond-back</i>	5	9
Dingy Footman	10	33
<i>Dioryctria abietella</i>	1	1
<i>Dioryctria sylvestrella</i>	1	1
<i>Ditula angustoriana</i>	2	2
Dog's Tooth	14	22
<i>Donacaula forficella</i>	11	22
<i>Donacaula mucronella</i>	1	1
Double-lobed	2	2
Double-striped Pug	9	23
Drinker	17	67
Dun-bar	6	6
Dusky Brocade	6	32
Dwarf Cream Wave	1	1
Ear Spp.	2	6
Elephant Hawk	15	75
Emperor	1	2
<i>Endothenia marginana</i> *	1	1
<i>Endotricha flammealis</i>	5	19
<i>Endrosis sarcitrella</i>	1	1
Engrailed	2	5
<i>Epiblema scutulana</i> *	1	1
<i>Epiphyas postvittana</i>	10	24
<i>Eucosma cana</i>	6	9
<i>Eucosma hohenwartiana</i> *	2	2
<i>Eudonia delunella</i>	4	6
<i>Eudonia lacustrata</i>	2	2
<i>Eudonia mercurella</i>	10	20
<i>Eudonia pallida</i>	13	50

Eyed Hawk	8	11
Fan-foot	1	1
Feathered Gothic	3	24
Fen Wainscot	1	1
Festoon	1	1
Flame	2	2
Flame Shoulder	27	72
Flounced Rustic	4	33
Four-dotted Footman	4	29
Four-spotted Footman	7	22
Fox Moth	4	11
Frosted Orange	5	8
Garden Tiger	11	57
<i>Gelechiidae spp.</i>	3	8
<i>Glyphipterix schoenicolella*</i>	1	1
<i>Glyphipteryx simpliciella</i>	1	1
<i>Glyphipteryx thrasonella</i>	3	4
Gold Spot	16	49
Gold Swift	1	1
Grass Eggar	1	1
Grass Emerald	1	1
Great Prominent	1	4
Green Carpet	5	9
Green Silver-lines	1	1
Grey Pine Carpet	2	2
Heart and Dart	15	29
Heath Rustic	1	1
Hebrew Character	1	2
Hedge Rustic	3	5
<i>Hedya ochroleucana*</i>	1	1
Herald	2	2
<i>Hofmanophila pseudospretella</i>	1	3
Horse Chestnut	5	12
<i>Hypsopygia costalis</i>	2	2
<i>Hypsopygia glaucinalis</i>	1	1
Ingrailed Clay	1	1
Iron Prominent	7	11
Jersey Tiger	2	2
July Highflyer	1	1
Kent Black Arches	5	8
Knot Grass	5	7
L-album Wainscot	1	1
Large Emerald	2	3
Large Wainscot	3	4
Large Yellow Underwing	30	873
Least Yellow Underwing	4	4
Leopard	1	1
Lesser broad-bordered Yellow Underwing	5	16
Lesser Cream Wave	2	3
Lesser Swallow Prominent	17	43

Lesser Yellow Underwing	7	27
Light Arches	1	6
Light Brocade	5	18
Light Emerald	1	1
Lime-speck Pug	1	1
<i>Limnaecia phragmitella</i>	1	3
<i>Lobesia abscisana</i> *	2	2
Lobster	4	5
<i>Lozotaenioides formosana</i>	1	1
Lunar Underwing	3	14
Lychnis	1	1
Maiden's Blush	1	1
Marbled Green	1	1
Marbled White-spot	6	31
Marsh Oblique-barred	1	2
Middle-barred Minor	4	16
Miller	5	5
Minor agg.	7	12
<i>Mirificarma mulinella</i>	3	9
<i>Monochroa cytisella</i>	1	1
<i>Monochroa lucidella</i> *	1	1
<i>Monochroa palustrellus</i> *	1	1
<i>Monopis weaverella</i>	3	3
<i>Mother of Pearl</i>	2	2
Mottled Pug	1	1
Mottled Rustic	5	8
Mouse Moth	1	2
Muslin	5	9
<i>Myelois circumvoluta</i>	4	4
Narrow-winged Pug	3	26
<i>Neofaculta ericetella</i> *	2	2
<i>Nomophila noctuella</i>	1	1
<i>Notocelia uddmanniana</i>	2	2
Nutmeg	2	3
Nut-tree Tussock	2	2
Oak Hook-tip	7	10
Oblique Carpet	14	53
Obscure Wainscot	1	1
Ochreous Pug	1	1
<i>Oncocera semirubella (Nb)</i>	1	1
Orange Footman	1	2
<i>Orthotelia sparganella</i>	2	2
<i>Ostrinia nubilalis</i>	2	3
Pale November agg.	1	1
Pale Prominent	6	6
Pale Tussock	4	5
Pale-shouldered Brocade	2	5
<i>Parornix betulae</i> *	1	1
Peach Blossom	1	1
Peacock	2	2

Pebble Hook-tip	7	8
Pebble Prominent	13	19
<i>Pediasia contaminella</i>	7	31
<i>Pempelia genistella</i>	4	6
<i>Pempelia palumbella</i>	7	16
Peppered	8	12
<i>Phycitodes binaevella</i>	1	1
<i>Phyllonorycter messaniella</i>	1	1
Pine Carpet	3	4
Pine Hawk	9	12
Pinion-streaked Snout	1	1
Plain Wave	2	6
Poplar Grey	1	1
Poplar Hawk	12	16
Privet Hawk	5	7
<i>Pseudagyrotoza conwagana</i>	1	1
Purple Bar	1	1
Purple-bordered Gold	2	2
Puss Moth	1	4
<i>Pyrausta despicata</i>	4	26
<i>Pyrausta purpuralis</i>	3	3
Red Chestnut	1	1
Red Twin-spot Carpet	1	1
Red-line Quaker	2	4
Riband Wave	7	15
Ringed Carpet	1	1
<i>Ringed China-mark</i>	6	20
Rosy Footman	4	6
Rosy Rustic	1	1
Rosy Wave	6	11
Round-winged Muslin	14	81
Ruby Tiger	13	43
Rustic / Uncertain	15	122
Sallow Kitten	7	13
Satin Wave	1	1
Scallop Shell	1	2
Scalloped Hook-tip	4	5
Scalloped Oak	1	1
Scarce Footman	10	72
Scarlet Tiger	1	5
<i>Schoenobius gigantella</i>	2	2
<i>Scoparia ambigualis</i>	1	1
Scorched Wing	3	5
September Thorn	1	1
Setaceous Hebrew Character	11	32
Sharp-angled Peacock	3	4
Shears	2	2
Shoulder-striped Wainscot	7	12
Shuttle-shaped Dart	2	2
Silver Y	7	11

Single-dotted Wave	7	13
Six-striped Rustic	8	74
Small Blood-vein	1	1
<i>Small China-mark</i>	6	14
Small Chocolate-tip	1	2
Small Clouded Brindle	2	3
Small Dotted Buff	3	7
Small Elephant Hawk	3	3
Small Fan-footed Wave	2	3
Small Quaker	1	1
Small Rufous	13	54
Small Seraphim	1	1
Small Square-spot	9	18
Small Wainscot	12	35
Smoky Wainscot	22	1004
Southern Chestnut	1	1
Southern Wainscot	8	18
<i>Sparganothis pilleriana*</i>	1	1
Spectacle	5	5
<i>Spilonota ocellana*</i>	1	1
Spruce Carpet	1	1
Square-spot Rustic	4	18
Straw Dot	15	46
Striped Wainscot	6	10
Suspected	1	1
Svensson's Copper Underwing	2	3
Swallow Prominent	3	4
<i>Synaphe punctalis</i>	12	122
<i>Tachystola acroxantha</i>	1	20
Tawny-barred Angle	2	7
<i>Teleiopsis diffinis</i>	1	3
<i>Tortrix viridana</i>	1	3
Treble Lines	4	6
True Lover's Knot	19	162
Twin-spotted Wainscot	2	2
<i>Udea ferrugalis</i>	2	2
<i>Udea prunalis*</i>	1	1
Vine's Rustic	7	12
Webb's Wainscot	2	4
White Ermine	4	11
White-line Dart	2	5
White-point	3	5
Willow Beauty	7	8
Yellow Belle	1	1
Yellow-line Quaker	1	1
Yellow-tail	8	20
<i>Yponomeuta evonymella</i>	2	5
<i>Yponomeuta mallinellus/padella</i>	1	5
<i>Yponomeuta rorrella*</i>	2	2
Yponomeuta spp.	1	1

Appendix 2. List of species caught in Rothamsted trap by Karl Clennell (2010-11 inclusive) that were not caught by the MoPH Project at Arne Moors.

Annulet
Autumnal Moth
Balsam Carpet
Barred Red
Birch Mocha
Blair's Shoulder-knot
Bordered Grey
Bordered White
Brindled Beauty
Clouded Silver
Common Marbled Carpet
Common Pug
Cream Wave
Cream-spot Tiger
Cypress Carpet
Dark-barred Twin-spot Carpet
December Moth*
Dotted Border*
Dotted Border Wave
Dotted Chestnut
Early Grey
Early Tooth-stripped*
Feathered Ranunculus
Feathered Thorn
Foxglove Pug
Grass Rivulet
Grass Wave
Grey Birch*
Grey Shoulder-knot
July Belle
Lunar Marbled Brown
March Moth *
Mottled Umber
Mullein Wave
Neglected Rustic
November moth (non-aggregate) *
Oak Beauty
Oak Eggar
Orange Swift
Pale Brindled Beauty*

Pine Beauty
Pink-barred Sallow
Sallow
Sandy Carpet
Scalloped Hazel
Scarce Umber*
Shoulder Stripe*
Small Grass Emerald
Snout
Toadflax Pug*
twin-spotted Quaker
Vapourer
Vestal
Winter Moth*
Yellow-horned

All species recorded by Karl Clennell have been entered on to the Living Record database. Species followed by an '*' have not been recorded by the MoPH Project at all. Toadflax Pug and Balsam Carpet are now queried on Living Record and may not be accepted.