



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

Moths on Carey Estate 2019 – 2020



Goat Moth, Privet, Elephant, Lime and Poplar Hawk-moths

The 'Moths of Poole Harbour' (MoPH) 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 shares the same boundaries as the Birds of Poole Harbour (BoPH) project.



Birds of Poole Harbour recording area

The privately-owned Carey Estate west of Wareham along the Piddle valley is a wonderfully diverse area of some 150 acres. Habitats include riparian meadows, acid grassland, woodlands with old and specimen exotic trees, ditches and ponds.

Past land use is much in evidence, the woodlands having a high component of Rhododendron and Cherry laurel and the many mature exotic conifers hinting at a 19th century model farm. There is a substantial walled garden under the process of significant restoration and a large main garden. Both of these are high in nectar sources.

The site abuts the Trigon estate with a well-known and extremely rich moth fauna.

Carey was visited from late April 2019 until November 2020. Unfortunately, due to the global Coronavirus pandemic in 2020 it was not possible to access the site for moth survey until the beginning of June. There is no doubt that a substantially increased moth fauna awaits discovery not least from the early few months of the year.

The variety of habitats is reflected in a very rich moth fauna. 31 trapping visits were made in 2019 and a further 28 in 2020. The 2019 season ran from 21st April until 31st October and the 2020 season from 5th June until 6th November. Additionally, on one date in March and one in May 2020 Joe Parker was able to access the site and picked up a number of species additions and interesting records from the garden. The trapping effort is summarised in Table 1 below.

Table 1. Summary of trapping effort by habitat area 2019 – 2020

VISITS	GARDEN	POND AREA	RIVER MEADOWS	WALLED GARDEN	BRACKEN FIELD
2019 visits	17	6	1	5	2
2020 visits	2	2	16	0	8
Total visits	19	8	17	5	10

A total of 13,466 moths were identified to species level comprising 467 species, or aggregate species. 9 of the micro-moth species were recorded only as leaf-mines. The accounts for each species form the main body of this report.

Of these 467 species, 21 are designated as Red Data Book or Notable (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 listed in Table 2 below.

Table 2. Notable species recorded at Carey Estate 2019 and 2020

SPECIES	STATUS	TIMES RECORDED	NUMBER RECORDED	YEAR RECORDED
<i>Anania verbascalis</i>	Nb	2	2	2019 & 2020
Cloaked Carpet	Nb	1	1	2020
<i>Crambus silvella</i>	RDB 3	1	1	2020
<i>Crambus uliginosellus</i>	Nb	1	1	2019
Cream-bordered Green Pea	Nb	2	5	2019 & 2020
<i>Dioryctria sylvestrella</i>	Nb	3	4	2019 & 2020
<i>Elegia similella</i>	Nb	1	1	2019
<i>Eudonia delunella</i>	Nb	5	9	2019 & 2020
<i>Evergestis limbata</i>	Nb	2	2	2019
Festoon	Nb	4	8	2019 & 2020
Four-spotted Footman	Na	20	63	2019 & 2020
Goat Moth	Nb	1	2	2020
Horse Chestnut	Nb	3	4	2019 & 2020
Jersey Tiger	Nb	2	3	2019 & 2020
Kent Black Arches	Nb	4	4	2019 & 2020
L-album Wainscot	Nb	3	4	2019 & 2020
<i>Oncocera semirubella</i>	Nb	1	1	2019
Orange-tailed Clearwing	Nb	1	1	2020

<i>Pediasia contaminella</i>	Nb	10	74	2019 & 2020
Scare Merveille du Jour	RDB 3	1	1	2019
Southern Chestnut	RDB 2	1	1	2019

Several of the species important in a national context are locally quite common in Purbeck (such as Horse Chestnut and Four-spotted Footman). In order to look more closely at the locally scarcer species, analysis has been made of the records in the Living Record database. This has been running since the year 2000 and gives a better indication of local context for species. Around 175 square kilometres comprise the Birds of Poole Harbour recording area. 51 of the Carey species are found in 5 or fewer of those squares between 2000 and 2019 are summarised in Table 3 below.

Table 3. Species at Carey Estate recorded in 5 or fewer 1km squares in Living Record 2000-2019

SPECIES	NUMBER OF 1KM SQUARES IN LIVING RECORD	TIMES RECORDED	NUMBER RECORDED
<i>Acleris rhombana</i>	1	1	1
<i>Acrobasis marmorea</i>	5	2	2
<i>Acrobasis repandana</i>	1	1	1
<i>Agapeta zoegana</i>	5	1	1
<i>Agonopterix heracliata</i>	1	1	1
<i>Agonopterix nervosa</i>	3	1	1
<i>Alabonia geoffrella</i>	1	1	1
<i>Anacampsis blattariella</i> *	0	1	1
<i>Anania verbascalis</i>	4	2	2
<i>Argyresthia pruniella</i>	3	1	1
Beautiful Snout	5	1	1
<i>Blastodacna hellerella</i>	3	2	2
Brindled White-spot	4	2	2
<i>Caloptilia betulicola</i>	4	2	2
<i>Calybites phasianipennella</i>	5	6	7
<i>Caryocolum fraternella</i> *	0	1	1
Cloaked Carpet	0	1	1
<i>Coleophora mayrella</i> *	0	1	1
Cream-spot Tiger	3	1	1
<i>Cydia fagiglandana</i> *	5	4	5
Dewick's Plusia	1	1	1
Dusky Sallow	4	1	1
<i>Elachista atricomella</i> *	2	1	1
<i>Elachista canapennella</i>	1	1	1
<i>Elegia similella</i> *	2	1	1

<i>Ephestia unicolora</i> *	5	3	3
<i>Evergestis pallidata</i>	2	3	3
Goat Moth	3	1	2
<i>Hedya ochroleucana</i>	4	1	2
<i>Lobesia relinquana</i>	2	1	1
<i>Mompha propinquella</i>	5	1	1
<i>Monopis weaverella</i>	4	1	1
<i>Nematopogon metaxella</i>	1	1	1
Oak Processionary	0	1	1
Orange-tailed Clearwing	0	1	1
Pale Oak Beauty	1	1	1
Pale-shouldered Brocade	5	2	2
<i>Phtheochroa inopiana</i>	3	1	1
<i>Phycitodes binaevella</i>	3	1	1
<i>Phycitodes maritima</i> *	2	1	1
<i>Phyllonorycter joannisi</i>	5	1	1
<i>Prays ruficeps</i>	2	1	1
Satin Beauty	5	5	9
Scarce Merveille du Jour	2	1	1
Small Dotted Buff	5	3	6
Small Waved Umber	5	1	1
<i>Stenoptilia zophadactylus</i> *	5	1	1
<i>Syncopacma larseniella</i>	5	1	1
Tawny Speckled Pug	1	1	1
<i>Tinea semifulvella</i>	4	1	1
White-spotted Pug	2	1	1

*Species confirmed by Dr Phil Sterling.

151 of the 467 species (32%) were recorded only once. This compares to the overall project average of 26%. Of the 151 species seen on only one occasion, 123 records (81%) consisted of a single individual. Carey was the sole recorded locality for 54 species (7% of the project total) and these are listed in Table 4 below.

Table 4. Species for which Carey Estate provided the sole location for the MoPH Project

SPECIES	TIMES RECORDED	NUMBER RECORDED	YEAR RECORDED
<i>Acleris rhombana</i>	1	1	2020
<i>Agonopterix heracliiana</i>	1	1	2019
<i>Agonopterix nervosa</i>	1	1	2020
<i>Anacampsis blattariella</i> *	1	1	2020
<i>Apehelia paleana</i>	1	1	2019
<i>Apotomis betuletana</i> *	1	1	2020
<i>Argyresthia pruniella</i>	1	1	2019
<i>Batia lunaris</i>	1	1	2019
<i>Blastodacna hellerella</i> *	2	2	2019 & 2020

Brindled White-spot	2	2	2019 & 2020
<i>Caloptilia betulicola</i>	2	2	2020
<i>Caryocolum fraternella</i> *	1	1	2020
Clay Triple-lines	6	7	2019 & 2020
Cloaked Carpet	1	1	2020
<i>Cnephasia incertana</i> *	1	1	2020
<i>Cnephasia stephensiana</i> *	2	4	2019 & 2020
<i>Cochylis dubitana</i> *	2	2	2020
<i>Coleophora mayrella</i> *	1	1	2020
Cream-spot Tiger	1	1	2019
Cream Wave	3	3	2020
Currant Pug	1	1	2019
Dewick's Plusia	1	1	2019
Dot Moth	3	3	2019 & 2020
<i>Elachista canapennella</i>	1	1	2020
<i>Elegia similella</i> *	1	1	2019
<i>Evergestis pallidata</i>	3	3	2019 & 2020
Flame Carpet	5	6	2019
Frosted Green	1	1	2019
<i>Lobesia relinquana</i>	1	1	2019
<i>Nematopogon metaxella</i>	1	1	2020
Oak-tree Pug	1	1	2020
Orange-tailed Clearwing	1	1	2020
Pale Oak Beauty	1	1	2020
<i>Pammene aurita</i>	1	1	2020
<i>Phtheochroa inopiana</i>	1	1	2020
<i>Phyllonorycter geniculella</i>	1	Leaf-mine	2020
<i>Phyllonorycter joannisi</i>	1	Leaf-mine	2020
<i>Prays ruficeps</i>	1	1	2020
<i>Psyche casta</i>	1	1	2020
<i>Pterophorous pentadactyla</i>	1	1	2019
Purple Clay	1	1	2019
Rustic Shoulder-knot	1	1	2019
Sandy Carpet	1	1	2019
Satin Beauty	5	9	2019 & 2020
Scarce Merveille du Jour	1	1	2019
Scarce Silver-lines	1	1	2019
<i>Stenoptilia zophodactylus</i> *	1	1	2019
<i>Stigmella tityrella</i>	1	Leaf-mine	2020
Tawny-speckled Pug	1	1	2019
<i>Tischeria ekebladella</i>	1	2	2019
Twin-spotted Quaker	1	3	2020
White-spotted Pug	2	2	2019

Five main areas were targeted. In 2019, the garden and pond area were principally used. Prior to mid-summer when other conservation projects necessarily take priority, a couple of visits were made to the river meadows. The top meadow, west of the pond area, known as 'Bracken Field' was

visited a few times and in late autumn a number of trapping sessions were held in the walled garden.

In 2020 it was possible to have easy access to the river meadows for most of the summer from June to the end of August. After that Bracken Field was a regular targeted habitat.

Really interesting species were picked up across all areas of the site and it is hoped that the data presented in this report and accompanying spreadsheet will act as a catalyst for continued survey and as a useful baseline for comparisons in the future. To this end the project has included all available information on physical numbers caught as well as the species and number of trapping sessions. In future this may be of use in assessing changes in biomass. There are also big plans for re-wilding and other initiatives across the site and it is to be hoped that, going forward, this data will facilitate evaluation of that effort.

On nearly all visits the basic methodology was the same. 3 mercury vapour (MV) 'Robinson' traps were operated from a single petrol generator. The running time for this was a little over 6 hours on a single tank of fuel and in high summer this effectively covered the whole period of darkness. In addition, a single actinic UV Heath trap was run from a rechargeable battery. This would run all night at any time of the year. The equipment was generally moved around the site in a van but a wheelbarrow could be used to move kit to less accessible areas, such as the walled garden.

In autumn 2019 and 2020 we were regularly joined in the field by Chris Fox and Joe Parker who were able to supply additional traps and a second generator.

For each night's trapping the records from all (usually 4) traps were amalgamated and it is that data which is presented in this report. Breakdowns of the species numbers and composition from individual traps exists and has been entered into the Living Record database in that format.

The total number of moths recorded at Carey was 13,466. The commonest 25 species, shown below, which was 8,675 moths amounts to 64.5%. The commonest 10 species, which was 6,579 moths amounts to 49%. The commonest 5 species which was 5,302 moths amounts to 39%.

Table 5. Commonest 25 species recorded at Carey

SPECIES	NUMBER RECORDED	TIMES RECORDED
<i>Synaphe punctalis</i>	1,427	22
<i>Chrysoteuchia culmella</i>	1,229	23
<i>Aroga velocella</i>	1,192	15
Large Yellow Underwing	933	45
<i>Agriphila straminella</i>	521	23
Heart and Dart	289	24
Common Rustic agg.	268	23
Square-spot Rustic	268	16
Buff Footman	238	23
Dark Arches	214	25
<i>Agriphila tristella</i>	213	14

<i>Beautiful China-mark</i>	210	17
Rustic / Uncertain	178	23
Smoky Wainscot	178	17
<i>Blastobasis adustella</i>	147	17
Black Arches	146	17
<i>Eudonia mercurella</i>	139	25
Treble Lines	129	14
Dingy Footman	126	16
Setaceous Hebrew Character	115	26
Grey Pine Carpet	109	25
Vine's Rustic	106	22
Flame Shoulder	102	31
Riband Wave	100	19
Orange Footman	98	13

Habitat Management

Carey Estate will undoubtedly reveal a significantly greater number of species over time. There are various parts of the site that have not been trapped and relatively little has been done in the wet woodland alongside the river. There are likely to be many more species of micro-moths but many of these can only be identified to species level by dissection, by experts, which may not be considered desirable.

The MoPH project has concentrated on recording in a few representative habitats and the results have been very productive. However, in future it may be possible using external electrical power supplies to trap a number of locations in a single night without the need for multiple generators. It is envisaged that future wildlife engagement events will become a feature of Carey Estate and the moth fauna would seem to present itself as an ideal component of such activities.

The intention of this report is to summarise the information gathered to date. It should be practical to trap the same areas in future to re-find existing species. Although many moth species are ubiquitous and widespread there are several which may be quite tightly habitat-specific.

Longer term it does seem that Mercury Vapour bulbs will be fully phased out and that the modern more powerful UV alternatives will increasingly be used in future surveys.

Management of Carey Estate grounds, especially if a core focus is effectively re-wilding, need not pose a threat to the very rich moth fauna as long as existing habitats are retained in some measure. The key to the richness of the site is clearly the habitat variety. The potential for large-scale Rhododendron and Laurel removal provides enticing prospects for the future though it should be noted that post-rhododendron regeneration is usually slow, taking 5-10 years or more.

Retention of existing tree species is key to invertebrate conservation and care should be taken when future tree management is considered. Many moth species have a specific larval foodplant, so retaining existing plant species is essential to maintaining the current moth fauna. Leaning and fallen trees such as the Lime and Pear tree in the river meadows should be retained in situ whenever

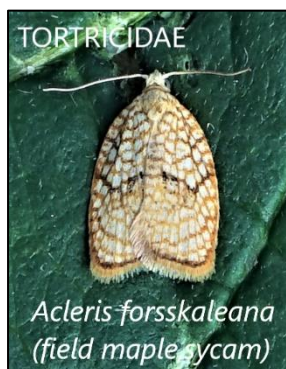
feasible. Dead wood is also a key component to woodland and should be retained. Mossy, damp habitats as well as cold outbuildings can also be excellent moth habitat and several hibernating moths and butterflies were found during the project. Timing of meadow mowing can directly affect moth species by removing nectar sources, so leaving a meadow to grow until September-time will ensure that most plant species have flowered and set seed. Alternatively, low-density grazing is an effective conservation tool. Many species of micro-moth are leaf miners and can over-winter as a larva inside the leaf, therefore leaving leaf litter in situ and not being too 'tidy' will allow them to pupate and emerge in the Spring.

SPECIES ACCOUNTS

1331 *Acentria ephemerella* (Water Veneer) – A fairly common and widely distributed resident in Dorset. Larvae feed on Pondweed. One on 14th July 2018 from around the pond area. (1,1)

1426 *Achroia grisella* (Lesser Wax Moth) – Scarce and thinly distributed resident in Dorset. Larvae of this species feed on the wax of honeycomb in bee hives and nests. 3 seen on 2 occasions in 2019 and 2020. (2,3)

1044 / 1045 *Acleris ferrugana* / *notana* **aggregate** – The 2 species are effectively indistinguishable without genitalia examination. Larvae feed on Birch (*notana*) and Oaks and Sallow (*ferrugana*). In Dorset both species are considered scarce and local residents. Recorded as aggregates on 25th June 2019 and 2 on 30th October 2020. (2,3)



1036 *Acleris forsskaleana* – An uncommon and thinly distributed resident in Dorset. The larvae feed on Field Maple and Sycamore. One trapped on 2nd August 2019 from the garden. (1,1)

Fig. 1 *Acleris forsskaleana* ©Chris Fox

1038 / 1039 *Acleris laterana* / *comariana* – *A. 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. 7 recorded on 5 occasions in both years. (5,7)

1042 *Acleris rhombana* (Rhomboid Tortrix) – An uncommon and thinly distributed resident. Foodplants include Hawthorn, Blackthorn, Dog Rose, Hazel and Oak. Single record on 23rd July 2020. (1,1). Recorded in 1 other x 1km square on Living Record 2000-2019.

1048 *Acleris variegana* (Garden Rose Tortrix) – A fairly common and widespread resident. The larvae feed on various fruit-bearing plants and shrubs. One on 18th August 2019 from the pond area. (1,1)

1440 *Acrobasis marmorea* – An uncommon and thinly distributed resident. The larvae feed on Blackthorn, Hawthorn and Sorbus spp. Singles on 8th and 15th June 2020. (2,2)

1436 *Acrobasis repandana* – A scarce and thinly distributed resident. The larvae feed on Oak. As part of an apparent large influx of the species into Dorset it was recorded on 29th June 2020 from the river meadows. (1,1)



Fig. 2 *Acrobasis repandana*

1517 *Adaina microdactyla* (Hemp Agrimony Plume) – A scarce and thinly distributed resident, the larvae feed on Hemp Agrimony. Singles on 4th Sept 2019, 25th July and 7th August 2020. (3,3)

945 *Aethes cnicana* – An uncommon and thinly distributed resident, the larvae feed on Thistles. Caught around the river meadows with 6 on 15th June 2020 and singles – one on 22nd June and 2 on 25th June 2020. (3,9)

937 *Agapeta hamana* – A common and widespread resident, the larvae feed on Thistle. 15 recorded on 5 occasions in over both years and from a variety of the habitats. (5,15)



938 *Agapeta zoegana* – An uncommon and thinly distributed resident, the larvae feed on Knapweed. A much scarcer species than *A. hamana*, it was recorded from the river meadows on 6th August 2020. Also found at Arne Moors and Corfe River Meadow in 2020. (1,1)

Fig. 3 *Agapeta zoegana*

688 *Agonopterix heracliana* – A fairly common and widespread resident the larvae feed on Umbellifers. One on 20th July 2019 the only record for the project. (1,1)

706 *Agonopterix nervosa* – An uncommon and thinly distributed resident, the larvae feed on Broom, Gorse and Greenweed. One on 25th June 2020 from the river meadows. (1,1)

701 *Agonopterix ocellana* – An uncommon and thinly distributed resident, the larvae feed on Willows and Sallow. One on 26th July 2020 from the pond area. (1,1)

1309 *Agriphila geniculea* – Fairly common but thinly distributed or restricted resident, the larvae feed on short fine grasses. Recorded on 10 occasions totalling 46 moths. Maximum 28 from the pond area on 18th August 2019. (10,46)

1306 *Agriphila inquinatella* – Fairly common and widely distributed resident. Larvae feed on grasses. Singles recorded twice in 2019, 9 recorded on 2 occasions in 2020. (4,11)

1303 ***Agriphila selasella*** – An uncommon and thinly distributed or restricted resident. Larvae feed on Common Saltmarsh-grass and Sheep’s Fescue. 24 recorded on 8 occasions in 2019 and 2020. Maximum 7 on 26h July 2029. (8,24)

1304 ***Agriphila straminella***. Very common and widespread resident. The larvae feed on various short grasses, especially Sheep’s-fescue. Recorded on 23 occasions totalling 213 individuals. Maximum 159 on 10th August 2020. (23,213)



652 ***Alabonia geoffrella*** – An uncommon and thinly distributed resident. The larval foodplant is rotting wood. A wonderful find, one was photographed in the field by Brittany Maxted on 4th June 2020. Very scarce in the Harbour the species had been trapped by the project the previous day in Hamworthy (2 individuals). Recorded from only one other 1km square in Poole Harbour on Living Record 2000-2019. (1,1)

Fig. 4 *Alabonia geoffrella* ©Brittany Maxted

2281 **Alder Moth *Acronicta alni*** – An uncommon and thinly distributed or restricted resident. Larvae feed on broad-leaved trees especially Alder. 3 trapped by Joe Parker in the garden on 21st May 2020 the only records. Otherwise only recorded by MoPH on Ballard. (1,3)



Fig. 5 Alder Moth ©Chris Fox

1288 ***Alucita hexadactyla*** (Twenty-plume or Many-plumed Moth) – Common and fairly widespread resident, the larvae feed on Honeysuckle. 18 recorded on 6 occasions including up to 4 roosting in outbuildings. (6,18)

1497 ***Amblyptilia acanthadactyla*** (Beautiful Plume) – An uncommon and thinly distributed or restricted resident. Larvae feed on a large range of plants. One on 11th August 2019 from Bracken Field the only record. (1,1)

854 ***Anacampsis blattariella*** – A scarce and thinly distributed resident, the larvae feed on Birch. A single on Carey Estate on 10th August 2020 from Bracken Field, a female, was confirmed by Dr Phil Sterling. This is apparently the first record for the Harbour this century as the species is not recorded on Living Record 2000-2019. However, this species has been recorded from Brownsea Island and Studland (1930’s). (1,1)

1385 ***Anania crocealis*** – Uncommon and thinly distributed or restricted resident, the larvae feed on Common Fleabane and Ploughman’s Spikenard. 5 recorded on 4 occasions from both years. (4,5)

1376 *Anania hortulata* (Small Magpie) – Very common and widespread resident, the larvae feed on Nettles. Singles on 9 occasions in both years. (9,9)

1377 *Anania lancealis* – Fairly common and widely distributed resident, the larvae feed on Hemp Agrimony. 8 recorded on 4 occasions in July 2019 and June 2020. (4,8)

1382 *Anania verbascalis* (Nationally Scarce B) – A scarce and thinly distributed resident, the larvae feed on Wood Sage. Singles recorded on 5th July 2019 and 15th June 2020. (2,2)

1115 *Ancylis achatana* – An uncommon and thinly distributed resident, larvae feed on Hawthorn and Blackthorn. One from the garden on 27th June 2019 the only record. (1,1)

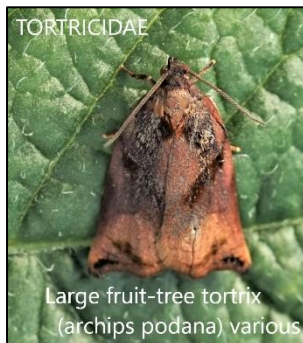
2306 **Angle Shades** *Phlogophora meticulosa* – A very common and widespread resident, larvae feed on herbaceous and woody plants. Recorded on 10 occasions in both years from May to October, totalling 18 individuals. (10,18)

989 *Aphelia paleana* (Timothy Tortrix) – An uncommon and thinly distributed resident, larvae feed on various herbaceous plants and grasses. Single record, from Bracken Field on 1st August 2019, was the only record for the MoPH project. (1,1)

1428 *Aphomia sociella* (Bee Moth) – Common and widespread resident, the larvae feed on honeycomb in hives. A total of 8 recorded on 6 occasions in both 2019 and 2020. Recorded from the garden, pond area, river meadows and Bracken Field. (6,8)

1093 *Apotomis betuletana* – An uncommon and thinly distributed resident. Larvae feed on Birch. One on 10th August 2020 from Bracken Field was confirmed by Dr Phil Sterling. (1,1)

1094 *Apotomis capreana* – An uncommon and thinly distributed resident, the larvae feed on Goat Willow. 2 on 7th July 2019 from around the pond, the only record. (1,2)



977 *Archips podana* (Large Fruit-tree Tortrix) – Common and widespread resident, larvae feed on a variety of deciduous trees. One from the garden on 5th July 2019 the sole record. (1,1)

Fig. 6 *Archips podana* @Chris Fox

410 *Argyresthia brockeella* – Uncommon and thinly distributed and restricted resident. Larvae feed on Birch and Alder. Singles on 7th July 2019 and 29th June 2020 the only records. (2,2)

411 *Argyresthia goedartella* – Uncommon and thinly distributed resident, larvae feed on Birch and Alder. 10 recorded on 5 occasions in both years, maximum 6 on 10th August 2020. (5,10)

420 **Argyresthia pruniella** – Scarce and thinly distributed resident, larvae feed on Cherry species. One on 11th August 2019 is the sole MoPH project record. Known from 3 x 1km squares on Living Record 2000-2019. (1,1)

796 **Aroga velocella** – Scarce and restricted resident, the larvae feed on Sheep's Sorrel. Recorded 15 times in both years but with an astonishing 1,090 individuals from 4 traps in Bracken Field on 10th August 2020. (15, 1,192)

2117 **Autumnal Rustic** *Eugnorisma glareosa* – Uncommon and thinly distributed resident, larvae feed on herbaceous plants and heathers. 9 recorded on 5 occasions in September 2019 and September 2020. (5,9)



Fig. 7 Autumnal Rustic

1111 **Bactra lancealana** – Fairly common and widespread resident. Larvae feed on various rushes. A single on 29th May 2019 from the garden is, surprisingly the only record. The species is commonly found around other wetland habitats in the harbour. (1,1)

1962 **Barred Red** *Hylaea fasciaria* – Uncommon and fairly widespread resident, the larvae feed on Scots Pine and Norway Spruce. Singles recorded 3 times in June 2019 and twice in May and July 2020. (5,5)

2272 **Barred Sallow** *Xanthia aurago* – Uncommon and thinly distributed resident, the larvae feed on Field Maple and Beech. Recorded on 8 occasions, totalling 39 individuals in October 2019 and September to October 2020. (8,39)

1758 **Barred Straw** *Eulithis pyraliata* – Very common and widespread resident, the larvae feed on Cleavers and Bedstraw. Recorded 3 times in July 2019 and once on 29th June 2020. (4,5)

641 **Batia lambdella** – Uncommon and thinly distributed resident. Larvae feed on Gorse. One on 10th August 2020 from Bracken Field the sole record. (1,1)

640 **Batia lunaris** – Uncommon and thinly distributed resident, larvae feed on fungus and decaying wood. One from the pond area on 14th July 2019 the sole record. (1,1)

2267 **Beaded Chestnut** *Agrochola lychnidis* – Very common and widespread resident, the larvae feed on herbaceous plants. Recorded 5 times in October 2019 and October 2020, maximum of 8 on 30th October 2020. (5,19)

2473 **Beautiful Hook-tip** *Laspeyria flexula* – An uncommon and thinly distributed resident, the larvae feed on lichens. Recorded 5 times in 2019 and twice in 2020 totalling 11 individuals. (7,11)

2476 **Beautiful Snout** *Hypena crassalis* – A rare and very local resident, the larvae feed on Bilberry. One on 27th June 2019 from the garden, the sole record. (1,1)

2142 **Beautiful Yellow Underwing** *Anarta myrtilli* – Scarce and restricted resident, the larvae feed on Heather and Bell Heather. One on 10th August 2020 from Bracken Field is the only record of this normally heathland species. (1,1)

1677 **Birch Mocha** *Cyclophora albipunctata* – Scarce and restricted resident, the larvae feed on Downy and Silver Birch. Single from Bracken Field on 10th August 2020 the sole record. (1,1)



2301 **Bird's Wing** *Dypterygia scabriuscula* – Scarce and restricted resident, larvae feeding on Docks, Sorrels and Knotgrass. Recorded 9 times, totalling 18 individuals, in both years. Maximum 5 on 15th June 2020. (9,18)

Fig. 8 Bird's Wing

2033 **Black Arches** *Lymantria monacha* – Common and widespread resident, the larvae feed on various trees. 146 recorded on 17 occasions in 2019 and 2020. Maximum 32 on 10th August 2020. (17,146)

2232 **Black Rustic** *Aporophyla nigra* – Common and widespread resident, the larvae feed on herbaceous and woody plants. 38 recorded on 7 occasions in October 2019 and late September and October 2020. Maximum 17 from the walled garden on 20th October 2019. (7,38)

2240 **Blair's Shoulder-knot** *Lithophane leautieri* – A fairly common and thinly distributed resident. The larvae feed on Monterey Cypress, Lawson Cypress, Leyland Cypress and Juniper. One on 31st October 2019 from the pond area. (1,1)

873 **Blastobasis adustella** – Fairly common and widespread resident, larvae feed on a variety of foodstuffs and decaying matter. Recorded 17 times in both years totalling 147 individuals. Maximum 41 from the pond area on 18th August 2019. (17, 147)

874 **Blastobasis lacticolella** – Uncommon and thinly distributed resident. Larvae feed on a wide variety of vegetation, stored products and leaf litter. 10 recorded on 7 occasions in both years. (7,10)

905 **Blastodacna hellerella** – Scarce and thinly distributed resident. Larvae feed on Hawthorn. Singles recorded on 7th July 2019 and 15th June 2020, the sole record for the MoPH project. Recorded in 3 x 1km squares on Living Record 2000-2019. (2,2)

1682 **Blood-vein** *Timandra comae* – Common and fairly widespread resident, larvae feed on Docks, Common Orache, Common Sorrel. 10 recorded on 7 occasions in 2019 and 2020, maximum 3 on 25th June 2020. (7,10)



Fig. 9 Blood-vein

1766 **Blue-bordered Carpet** *Plemyria rubiginata* – A scarce and thinly distributed resident, the larvae feed on Alder and Blackthorn. Singles recorded on 5th July 2019 and 29th June 2020. Otherwise only recorded at Ballard by the MoPH project. (2,2)

1907 **Bordered Beauty** *Epione repandaria* – Fairly common and thinly distributed resident the larvae feed on Sallow, Grey Willow and Black Poplar. Singles on 14th July and 2nd August 2019 from the pond area and garden respectively. (2,2)

866 **Brachmia blandella** – Uncommon and thinly distributed resident, larvae feeding on Gorse. 9 recorded on 5 occasions in 2019 and 2020. (5,9)

2262 **Brick** *Agrochola circellaris* – Uncommon and thinly distributed or restricted resident, larvae feed on Wych Elm, Aspen, Poplars, Sallow and Ash. 3 on 31st October 2019 the sole record. (1,3)

2160 **Bright-line Brown-eye** *Lacanobia oleracea* – Abundant and widespread resident, the larvae feed on herbaceous and woody plants. Recorded on 13 occasions in both years, totalling 20 individuals and with a maximum of 3 on 5th June and 6th July 2020. (13,20)

1906 **Brimstone Moth** *Opisthograptis luteolata* – Widespread and abundant resident, larvae feed on Blackthorn, Hawthorns, Plum and Bullace. 64 recorded on 21 occasions in both years. Maximum 19 on 10th August 2020 from Bracken Field. (21,64)

1927 **Brindled Beauty** *Lycia hirtaria* – Uncommon and thinly distributed resident, the larvae feed on broadleaved trees. 3 on 21st April 2019 and 1 on 3rd May 2019 all from the garden, the only records. (2,4)



2248 **Brindled Green** *Dryobotodes eremita* – Uncommon and thinly distributed resident, the larvae feed on Pedunculate and Sessile Oak. Singles recorded twice in September 2019 from the walled garden and twice in September 2020 from Bracken Field. (4,4)

Fig. 10 Brindled Green

1852 **Brindled Pug** *Eupithecia abbreviata* – Uncommon and widespread resident, the larvae feed on Pedunculate and Sessile Oaks and Hawthorns. 4 from the garden on 21st April 2019, one from there on 21st March 2020 (Joe Parker) the only records. (2,5)

1950 **Brindled White-spot** *Parectropis similaria* – Uncommon and restricted resident, the larvae feed on Oak and Birch. Singles on 7th July 2019 from the pond area and 21st May 2020 (by Joe Parker) from the garden. The only site where the species has been recorded by the MoPH project. (2,2)

2110 **Broad-bordered Yellow Underwing** *Noctua fimbriata* – Common and widespread resident, larvae feed on herbaceous plants. Recorded on 19 occasions in 2019 and 2020 totalling 54 individuals and with a maximum of 10 on 1st August 2019 from Bracken Field. (19,54)

2163 **Broom Moth** *Ceramica pisi* – Fairly common but restricted resident, the larvae feed on various herbaceous plants. One on 5th June 2020 from the river meadow area the sole record. (1,1)

1902 **Brown Silver-line** *Petrophora chlorosata* – Fairly common and widespread resident, the larvae feed on Bracken. Recorded 12 times totalling 26 individuals in 2019 and 2020. (9,12)

2029 **Brown-tail** *Euproctis chryorrhoea* – Uncommon and local resident, the larvae feed on Bramble, Hawthorn, Blackthorn, Dog-rose and Sallow. 41 recorded on 19 occasions in 2019 and 2020 with a maximum of 4 on 21st June 2019 and 8th June 2020. (19,41)

787 **Bryotropha terrella** – Uncommon and thinly distributed resident, the larvae feed on various grassy stems. One on 29th May 2019 from the garden, 2 on 30th July 2020 from the river meadows and one on 10th August 2020 from Bracken Field. (3,4)

1653 **Buff Arches** *Habrosyne pyritoides* – Very common and widespread resident, the larvae feed on Bramble and Dewberry. 27 recorded on 11 occasions in 2019 and 2020. Maximum 8 from the river meadows on 16th July 2020. (11,27)

2061 **Buff Ermine** *Spilosoma luteum* – Very common and widespread resident, larvae feed on herbaceous plants. 27 recorded on 14 occasions 2019 and 2020. Maximum 4 on 20th July 2020 from the river meadows. (14,27)

2049 **Buff Footman** *Eilema depressa* – Fairly common and widespread resident, larvae feed on lichens. Recorded on 23 occasions, totalling 238 moths. Maximum 66 from Bracken Field on 1st August 2019. (23,238)

1994 **Buff-tip** *Phalera bucephala* – Very common and widespread resident, the larvae feed on broadleaved trees, Birches, Sallow, Oaks, Hazel. 49 recorded on 18 occasions in 2019 and 2020. Maximum 6 on 25th June 2020 from the river meadows. (18,49)

2434 **Burnished Brass** *Diachrysia chrysitis* – Common and widespread, the larvae feed on common Nettle and other plants. Recorded singly on 8 occasions with 2 on 22nd June 2020 from the river meadows. (8,9)

2154 **Cabbage Moth** *Mamestra brassicae* – Fairly common and widespread resident. Larvae feed on Brassicas, cabbages etc. Singles recorded on 1st and 11th August 2019 and 26th August 2020. (3,3)

1292 **Calamatropha paludella** – Uncommon and thinly distributed and restricted resident, larval foodplant is Reedmace. Recorded 9 times totalling 40 individuals in 2019 and 2020. Maximum 13 from Bracken Field on 23rd July 2019. (9,40)

286 / 287 **Caloptilia alchimiella / robustella** – The 2 species are aggregated due to difficulties in separating them on field characteristics alone. The larvae of both species feed on Oak. One on 10th August 2020 from Bracken Field. (1,1)



283 *Caloptilia betulicola* – Uncommon and local resident, the larvae feed on Birch. Singles on 25th June from the river meadows and 30th October 2020 from Bracken Field. This is the only site where the species has been recorded by the MoPH project. (2,2)

Fig. 11 *Caloptilia betulicola* ©Chris Fox

281 *Caloptilia populetorum* – Very rare resident, larvae feed on Birch. One on 1st August 2019 from Bracken Field the sole record. (1,1)

287 *Caloptilia robustella* – Uncommon and local resident. Larvae feed on Oak. (2,2)

288. *Caloptilia stigmatella* – Common and thinly distributed resident, the larvae feed on Willow and Poplar. Singles recorded once from Bracken Field in 2019 and twice from there and once from the river meadows in 2020. (3,3)

296 *Calybites phasianipennella* – Scarce and restricted resident, larvae feed on Water Docks, Loosestrifes and Knotgrass. Recorded once from the garden in 2019 and 5 times in 2020, from the river meadows once and Bracken Field 4 times. (6,7)

366a *Cameraria ohridella* (Horse-chestnut Leaf Miner) – Fairly common and thinly distributed recent resident, the larvae feed on Horse Chestnut. Singles on 18th August 2019 and 10th August 2020. (2,2)

1913 **Canary-shouldered Thorn** *Ennomos alniaria* – Common and fairly widespread resident, the larvae feed on Downy and Silver Birch, Alder, Limes and Elms. 30 recorded on 12 occasions in 2019 and 2020 with a maximum of 6 on 21st September 2020. (12,30)

658 *Carcina quercana* – Fairly common and widespread resident, larvae feed on Oak and Beech. Singles on 1st and 2nd August 2019 and 2 on 25th July 2020. (3,4)

830 *Caryocolum fraternella* – A rare and very local resident of the *Gelechiidae* family, the larvae feed on Stitchwort and Common Mouse-ear. One on 23rd July 2020 from Bracken Field, a male, confirmed by Dr Phil Sterling, is the only Poole Harbour record for the species. (1,1)

1354 *Cataclysta lemnata* (Small China-mark) – Uncommon and thinly distributed or restricted resident, the larvae feed on Duckweed. 28 recorded on 15 occasions in both years. Maximum 6 from the garden on 20th July 2019. (15,28)

1316 *Catoptria falsella* – Fairly common and widely distributed resident, the larvae feed on mosses. 12 recorded on 7 occasions in 2019 and 2020. (7,12)

1313 *Catoptria pinella* – Fairly common and widespread resident, larvae feed on Grasses in damp areas. 6 records from both years totalling 7 individuals. (6,7)



Fig. 12 *Catoptria pinella* ©Chris Fox

1076 **Celypha lacunana** – A very common and widespread resident, larvae feed on herbaceous plants. Recorded 22 times in both years, totalling 65 individuals and with a maximum of 9 from the river meadows on 8th June 2020. (22,65)

1063 **Celypha striana** – Common and widespread resident, larvae feed on Dandelion. 3 from the river meadows on 29th June 2020 the only record. (1,3)

2269 **Centre-barred Sallow** *Atethmia centrigo* – Fairly common but thinly distributed resident, the larvae feed on Ash. One on 4th September 2019 and 9 on 21st September 2020 from Bracken Field. (2,10)

2258 **Chestnut** *Conistra vaccinii* – Common and widespread resident, larvae feed on Oaks, Elms, Blackthorn, Hawthorn, Birch and Docks. One on 8th October and 2 on 30th October 2020 from Bracken Field. (2,3)

1290 **Chilo phragmitella** – Uncommon and thinly distributed or restricted resident, the larvae feed on Common Reed and Reed Sweet-grass. One from the river meadow on 7th August 2020 the sole record. (1,1)

1651 **Chinese Character** *Cilix glaucata* – Fairly common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Crab Apple. One on 16th July 2020 from the river meadows the only record. (1,1)

1293 **Chrysoteuchia culmella** (Garden Grass-veneer) – Abundant and widespread resident, the larvae feed on various grasses. Recorded on 23 occasions, often abundantly, with a total of 1,229 counted and a maximum of 745 on 25th June from the river meadows. (23, 1,229)

2069 **Cinnabar** *Tyria jacobaeae* – Common and widespread resident, larvae feed on Common Ragwort. 60 recorded on 12 occasions with a maximum of 12 on 8th June 2020. (12,60)

2193 **Clay** *Mythimna farrago* – Common and widespread resident, the larvae feed on Grasses. 12 recorded on 7 occasions in both years with a maximum of 4 on 25th June 2020. (7,12)

1681 **Clay Triple-lines** *Cyclophora linearia* – A scarce and local resident, the larvae feed on Beech. Recorded 5 times in 2019 from the garden and pond area and once in 2020 from the river meadows. Maximum 2 on 2nd August 2019. (6,7)

994 **Clepsis consimilana** – Fairly common and widely distributed resident, the larvae feed on Privets, Lilac, Honeysuckle, Ivy and Apple. One from the garden on 21st June 2029 the only record. (1,1)

993 **Clepsis spectrana** (Cyclamen Tortrix) – Uncommon and thinly distributed resident, larvae feed on a wide variety of herbaceous plants. Singles from the river meadows on 15th and 22nd June 2020. (2,2)



2451 **Clifden Nonpareil** *Catocala fraxini* – Scarce migrant / wanderer, probable resident. Larvae feed on Aspen and Poplars. Trapped on 9 occasions totalling 16 individuals. Singles in 2019 on 18th September and 20th October from the walled garden and 31st October from the pond area. In 2020 one from the river meadows on 18th August then a remarkable series of records from Bracken Field with a further 12 being caught on 5 occasions. Maximum 4 on 14th October 2020. It seems likely that a breeding population is now established here, and the moth was trapped on 5 consecutive visits to Bracken Field in late autumn 2020. (9,16)

Fig. 13 Clifden Nonpareil ©Chris Fox

1793 **Cloaked Carpet** *Euphyia biangulata* (Nationally Scarce B) – Uncommon and thinly distributed resident the larvae feed on Chickweed species. Carey Estate, one trapped by Joe Parker in the garden on 21st May 2020 is apparently the only record for Poole Harbour this century. (1,1)

2341 **Cloaked Minor** *Mesoligia furuncula* – Fairly common and widespread resident, the larvae feed on grasses. One on 2nd August 2019 from the garden and 2 on 7th August 2020 from the river meadows. (2,3)

1887 **Clouded Border** *Lomaspilis marginata* – Common and widespread resident, larvae feed on Aspen, Poplars, Sallow and Willows. 48 recorded on 18 occasions in both years, maximum 8 on 7th July 2029. (18,48)

2327 **Clouded Brindle** *Apamea epomidion* – A scarce and thinly distributed or restricted resident, larvae feed on grasses. One from the river meadows on 15th June 2020 the sole record. (1,1)

2188 **Clouded Drab** *Orthosia incerta* – Very common and widespread resident, on the wing early in the season. Larvae fed on broadleaved trees, Oak, Birches, Sallow etc. One on 21st April 2019 from the garden. 3 on 21st March 2020 from the garden. (1,4)

1958 **Clouded Silver** *Lomographa temerata* – Common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Plum, Cherry, Crab Apple. 7 recorded on 6 occasions in both years. (6,7)

2326 **Clouded-bordered Brindle** *Apamea crenata* – Fairly common and thinly distributed and restricted resident, larvae feed on grasses. Singles from the garden on 3rd May, 29th May and 2nd June 2019. (3,3)

1024 **Cnephasia incertana** (Light Grey Tortrix) – Fairly common and widespread resident, larvae feed on Greater Plantain, Ribwort Plantain, Common and Sheep's sorrels. One from the river meadows on 15th June 2020, confirmed by Dr Phil Sterling. The only Poole Harbour record this century. (1,1)

1020 ***Cnephasia stephensiana*** (Grey Tortrix) – Fairly common and widespread resident, larvae feed on a wide range of herbaceous plants. 3 on 7th July 2019 from the pond area, one on 15th June 2020 from the river meadows, confirmed by Dr Phil Sterling. Recorded in 3 x 1km squares on Living Record 2000-2019. (2,4)

966 ***Cochylis atricapitana*** – Fairly common and thinly distributed and restricted resident. The larval foodplant is Ragwort. 12 recorded on 9 occasions from across the site, in both years. (9,12)



Fig. 14 *Cochylis atricapitana* ©Chris Fox

964 ***Cochylis dubitana*** – Rare and local resident, larvae feed on Ragwort, Hawkweed and Goldenrod amongst other similar plants. Singles on 15th June 2020 from the river meadows and 10th August 2020 from Bracken Field. The latter, a male, was confirmed by Dr Phil Sterling. Recorded in 1 other 1km square on Living Record 2000-2019. (2,2)

964a ***Cochylis molliculana*** – Uncommon and thinly distributed and restricted resident, larvae feed on Bristly Oxtongue. One from Bracken Field on 11th August 2019 and 2 from there on 10th August 2020. At least one of these, a male, was confirmed by Dr Phil Sterling. (2,3)

518 ***Coleophora mayrella*** – Uncommon and thinly distributed resident, larvae feed on White Clover. One on 15th June 2020 from the river meadows, a male, confirmed by Dr Phil Sterling. There is one previous Harbour record, from Brownsea Island in 2011. (1,1)

1738 **Common Carpet** *Epirrhoe alternata* – Very common and widespread resident, the larvae feed on Cleavers, Hedge and other Bedstraws. Only a single record, one on 10th August 2020 from Bracken Field. (1,1)

1669 **Common Emerald** *Hemithea aestivaria* – Common and widespread resident, the larvae feed on Hawthorn, Blackthorn, Hazel, Oaks, Willows etc. 12 recorded on 7 occasions in both years. (7,12)

2050 **Common Footman** *Eilema lurideola* – Abundant and widespread resident, the larvae feed on lichens. 79 recorded on 16 occasions in both years with a maximum of 13 from the pond area on 25th July 2020. (16, 79)

1764 **Common Marbled Carpet** *Chloroclysta truncata* – Abundant and widespread resident, the larvae feed on woody plants. 12 recorded on 11 occasions in 2019 and 2020. (11,12)

1834 **Common Pug** *Eupithecia vulgata* – Common and widespread resident, the larvae feed on trees including Hawthorn and Sallow. Singles recorded on 4 occasions from the garden and pond area in 2019 with 2 from the river meadows on 8th June 2020. (5,6)

2187 **Common Quaker** *Orthosia cerasi* – Abundant and fairly widespread resident, the larvae feed on broadleaved trees, Birches, Sallow, Oaks and Hazels. 41 recorded on 4 occasions in April and early May 2019, and March 2020, with 26 from the garden on 21st April. (4,41)

2343 / 2343a **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. Recorded as an aggregate on 23 occasions totalling 268 individuals. Maximum 41 from Bracken Field on 1st August 2019. (23, 268)

17 **Common Swift** *Hepialus lupulinus* – Abundant and widespread resident, the larvae feed on grasses and herbaceous plants. 37 recorded on 6 occasions in both years with a maximum of 18 from the river meadows on 5th June 2020. (6,37)

2199 **Common Wainscot** *Mythimna pallens* – Abundant and widespread resident, the larvae feed on grasses. 37 trapped on 16 occasions in both years with a maximum of 8 on 18th August 2020 from the river meadows. (16,37)

1956 **Common Wave** *Cabera exanthemata* – Common and widespread resident, the larvae feed on Goat Willow, Grey Willow, Sallow and Poplars. 8 recorded on 6 occasions in both years. (6,8)

1955 **Common White Wave** *Cabera pusaria* – Common and widespread resident, larvae feed on Downy and Silver Birch, Alder and Sallow. 8 recorded on 6 occasions in both years. (6,8)



2297 **Copper Underwing** *Amphipyra pyramidea* – An uncommon and thinly distributed resident. Larvae feed on Hawthorns, Blackthorn, Crab Apple, Hazel, Honeysuckle. The species is separable from Svensson's Copper Underwing if shading on the underside of the hindwing is visible. Most are recorded as aggregates therefore. Singles from the garden on 15th August and 13th September 2019. (2,2)

Fig. 15 Copper Underwing

Copper Underwings aggregate (see comment above) – 11 recorded as aggregate species on 7 occasions in 2020. (7,11)

125 **Coptotriche marginea** – Uncommon and thinly distributed resident, the larval foodplant is Bramble. Singles from the garden on 27th June and 15th August 2019. (2,2)

2291 **Coronet** *Craniophora ligustri* – Fairly common and widespread resident, the larvae feed on Ash and Wild Privet. 11 recorded on 8 occasions across both years. (8,11)

2008 **Coxcomb Prominent** *Ptilodon capucina* – Common and widespread resident, the larvae feed on broadleaved trees. Single record, one on 20th July 2020 from the river meadows. (1,1)

1294 **Crambus pascuella** – Fairly common and widespread resident, the larvae feed on various grasses. Single record only, one on 25th June 2020 from the river meadows. (1,1)

1302 **Crambus perlella** – Common and widespread resident, larvae feed on various grasses. Singles from the garden on 5th July 2019 and the river meadows on 8th June, 15th June and 25th June 2020. (4,4)

1296 ***Crambus silvella*** (Red Data Book 3) – Scarce and thinly distributed and restricted resident, larvae feed on various sedges. One from Bracken Field on 10th August 2020. The species has also been found by MoPH at Arne Moors, Ballard, Holton Lee and Sandford Gardens. (1,1)

1297 ***Crambus uliginosellus*** (Nationally Scarce B) – Scarce and thinly distributed and restricted resident, larvae feed on various grasses. One from the garden on 27th June 2019 is one of only 2 found by the MoPH project (the other at Arne Moors). (1,1)



Fig. 16 *Crambus uliginosellus* in tube next to illustration

642 ***Crassa unitella*** – Uncommon and thinly distributed resident, larvae feed on fungus and dead wood. Recorded 5 times in 2019 and once in 2020, total of 8 individuals. (6,8)

1693 **Cream Wave** *Scopula floslactata* – Scarce and local resident, the larvae feed on Bedstraws, Woodruff and Bush Vetch. First recorded by Joe Parker on 21st May 2020 then twice from the river meadows on 15th and 25th June 2020. Carey is the only site where MoPH have recorded the species. (3,3)

2418 **Cream-bordered Green Pea** *Earias clorana* (Nationally Scarce B) – Scarce and restricted resident, larvae feed on Sallow and Willows. One from the garden on 27th June 2019, 4 from the river meadows on 25th June 2020. (2,5)

2058 **Cream-spot Tiger** *Arctia villica* – Fairly common and thinly distributed and restricted resident. Larvae feed on herbaceous plants. One from the garden on 29th May 2019 the sole record. This is the lone record for MoPH. Recorded in 3 x 1km squares on Living Record 2000-2019. (1,1)

2368 **Crescent** *Celaena leucostigma* – Uncommon and thinly distributed or restricted resident, larvae feed on Yellow Iris, Great Fen-sedge. One from the river meadows on 16th July 2020. The species has been found a number of times by the MoPH project at Corfe River Meadow, Holton Lee, Arne Moors and even on Ballard. (1,1)

1832 **Currant Pug** *Eupithecia assimolata* – Uncommon and thinly distributed or restricted resident, larvae feed on Wild Hop, Black Currant, Red Currant. One from the pond area on 7th July 2019 is the sole record for the MoPH project. (1,1)

1409a ***Cydalima perspectalis*** (Box-tree Moth) – Recent colonist. The larvae feed on Box. 3 from Bracken Field on 21st September 2020 the only record. Not so far recorded from the garden where Box is reasonably plentiful. High numbers in Hamworthy had decimated local garden Box hedges in 2020. (1,3)

1262 ***Cydia amplana*** – Uncommon and thinly distributed migrant. The larvae feed on nuts of Oak, Beech, Hazel and Walnut, not confirmed breeding in Britain. One from the river meadows on 18th August 2020. The species was also found, singly, on Arne Moors in 2020. (1,1)

1259 *Cydia fagiglandana* – Uncommon and thinly distributed resident, larvae feed on Beech. Recorded on 4 occasions in both years, 3 from the pond area in 2019 and 1 from the river meadow in 2020 totalling 5 moths, one, a male, confirmed by Dr Phil Sterling. (4,5)

1261 *Cydia pomonella* (Codling Moth) – Fairly common and widely distributed resident, the larvae feed on various fruit trees. Singles from the pond area on 7th July 2019 and the river meadows on 29th June 2020. (2,2)

1260 *Cydia splendana* – Fairly common and widely distributed resident, larvae feed on Oak and Sweet Chestnut. 33 recorded on 14 occasions in both years. Maximum 7 from the river meadows on 25th June 2020. (14,33)

1255 *Cydia ulicetana* – Fairly common and widely distributed resident, larvae feed on Gorse and Broom. Single from the garden on 27th June 2019. (1,1)

1777a **Cypress Carpet** *Thera cupressata* – Recent colonist to Dorset, larvae feed on Monterey and Leyland Cypresses. Singles from the river meadow on 29th June 2020 and Bracken Field on 30th October 2020. The species has otherwise only been recorded at Hamworthy by the MoPH project. (2,2)



1855 **Cypress Pug** *Eupithecia phoeniceata* – Scarce and thinly distributed and restricted resident, larvae feed on Monterey Cypress and other cultivated species. One from Bracken Field on 21st September 2019. The species has otherwise only been recorded at Hamworthy by the MoPH project. (1,1)

Fig. 17 Cypress Pug

2321 **Dark Arches** *Apamea monoglypha* – Abundant and widespread resident, the larvae feed on grasses. 214 recorded on 25 occasions over both years. Maximum count 60 on 25th June 2020. (25,216)

2259 **Dark Chestnut** *Conistra ligula* – Uncommon and thinly distributed or restricted resident, the larvae feed on Blackthorn, Hawthorn, Sallow, Oaks, Docks. 2 from the pond area on 31st October 2019 the only record. (1,2)

2449 **Dark Spectacle** *Abrostola triplasia* – Scarce and thinly distributed or restricted resident, the larvae feed on Common Nettle and Hop. One from Bracken Field on 21st September 2020 the only record. (1,1)

2091 **Dark Sword-grass** *Agrotis ipsilon* – Common and fairly widespread migrant / wanderer, the larvae feed on herbaceous plants. One 1st August 2019 from Bracken Field the only record. (1,1)

2231 **Deep-brown Dart** *Aprophyla luteola* – Scarce and very local resident, the larvae feed on grasses and bushes, moorland populations feed on heather. Recorded from Bracken Field twice in 2020, 5 on 21st September and 1 on 8th October. Otherwise recorded by the MoPH once at Hamworthy and recorded in only 2 x 1km squared in Living Record 2000-2019. (2,6)

2195 **Delicate** *Mythimna vitellina* – Uncommon and thinly distributed migrant, the larvae feed on grasses. Singles on 21st June and 18th August 2019, 2 in the walled garden on 4th October 2019. (3,4)

2436 **Dewick's Plusia** *Macdunnoughia confusa* – Rare, mainly coastal migrant, the larvae feed on Common Nettle and other plants. One from the walled garden on 4th October 2019 the sole record. The sole record for the MoPH project and only recorded in 2 x 1km squares on Living Record 2000-2019. (1,1)



Fig. 18 Dewick's Plusia

2044 **Dingy Footman** *Eilema griseola* – Very common and widespread resident, the larvae feed on lichens. 126 recorded on 16 occasions in both years, maximum 29 from Bracken Field on 10th August 2020. (16, 126)

1874 **Dingy Shell** *Euchoeca nebulata* – Uncommon and thinly distributed resident, the larvae feed on Alder. One on 5th July 2019 from the garden, 2 on 10th August 2020 from Bracken Field. (2,3)

1455 **Dioryctria simplicella** – Uncommon and thinly distributed or restricted resident, the larvae feed on Scots Pine. Singles on 6 occasions in both years, from the garden, Bracken Field and river meadows. (6,6)

1454b **Dioryctria sylvestrella** (Nationally Scarce B) – Uncommon and thinly distributed or restricted resident, the larvae feed on Pine. Recorded from the garden on 5th July 2019, pond area, 2 on 26th July 2019 and Bracken Field, one on 23rd July 2010. Elsewhere only recorded by MoPH project once, at Arne Moors. (3,4)

1329 **Donacaula forficella** – Uncommon and thinly distributed and restricted resident, the larvae feed on Common Reed. 6 recorded on 5 occasions with 1 record from the garden in 2019 and 5 recorded from the river meadows in 2020. (5,6)

2155 **Dot Moth** *Melanchra persicariae* – Common and fairly widespread resident, the larvae feed on herbaceous and woody plants. Singles on 5th and 20th July 2019 from the garden and 29th June 2020 from the river meadows. The only site where MoPH has recorded the species. (3,3)

2336 **Double Lobed** *Apamea ophiogramma* – Uncommon and thinly distributed or restricted resident, the larvae feed on grasses. 3 from the garden on 5th July and singles from the pond area on 7th and 14th July 2019. (3,5)

2128 **Double Square-spot** *Xestia triangulum* – Very common and fairly widespread resident, the larvae feed on herbaceous plants. 28 recorded on 10 occasions in both years with maximum of 14 from the garden on 5th July 2019. (10,28)

1862 **Double-striped Pug** *Gymnoscelis rufifasciata* – Common and widespread resident, the larvae feed on many plants. 64 recorded on 22 occasions in both years. Maximum 9 from the river meadows on 8th June 2020. (22,64)

1640 **Drinker** *Euthrix potatoria* – Common and fairly widespread resident, larvae feed on coarse grasses and reeds. Recorded 7 times, totalling 22 individuals, Maximum 9 from the river meadows on 30th July 2020. (7,22)

2318 **Dun-bar** *Cosmia trapezina* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. 15 recorded on 7 occasions in both years, with a maximum of 4 from the pond area on 26th July 2019. (7,15)

2352 **Dusky Sallow** *Eremobia ochroleuca* – Fairly common and widespread resident, the larvae feed on grasses. One from the pond area on 25th July 2020 the sole record. Otherwise only caught by MoPH project on Ballard and recorded in only 4 x 1km squares in Living Record 2000-2019. (1,1)

1914 **Dusky Thorn** *Ennomos fuscantaria* – Fairly common and widespread resident, the larvae feed on Ash. 26 recorded on 11 occasions in both years. Maximum 6 from the river meadows on 7th August 2020. (11,26)

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 from the river meadows on 7th August 2020 and 2 from Bracken Field on 10th August 2020 the only records. (2,3)

2243 **Early Grey** *Xylocampa areola* – Common and widespread resident, the larvae feed on Honeysuckle. 5 on 21st March 2020 trapped by Joe Parker the only record. (1,5)

1917 **Early Thorn** *Selenia dentaria* – Very common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Hazel and other broadleaved plants. One from the pond area on 7th July 2019, singles from the river meadows on 20th July 2020 and Bracken Field on 10th August 2020. (3,3)

597 **Elachista atricomella** – Uncommon and thinly distributed resident, the larvae feed on Cock's-foot. One from the river meadow on 15th June 2020 the only record. Elsewhere recorded by MoPH project only from Corfe Castle. (1,1)

607 **Elachista canapennella** – Uncommon and thinly distributed resident, the larvae feed on various grasses. One from Bracken Field on 28th September 2020 the sole record. Recorded in 1 other 1km square on Living Record 2000-2019. (1,1)



1449 **Elegia similella** (Nationally Scarce B) – Rare and local resident the larvae feed on Oak. One from the garden on 2nd August 2019. Recorded in one other 1km square on Living Record 2001-2019. (1,1)

Fig. 19 *Elegia similella* in tube next to illustration

1991 **Elephant Hawk-moth** *Deilephila elpenor* – Common and widespread resident, the larvae feed on Rosebay Willowherb, other willowherbs and bedstraws. 47 recorded on 14 occasions in both years with a maximum of 8 from the river meadows on 25th June 2020. (14,47)



Fig. 20 Elephant Hawk

1345 **Elophila nymphaeata** (Brown China-mark) – Fairly common and widely distributed resident, the larvae feed on various aquatic plants and pondweed. 26 recorded on 8 occasions in 2019 and 2020 with a maximum of 7 from the pond area on 7th July 2019. (8,26)

1424 **Endotricha flammealis** – Common and widespread resident, the larvae feed on various plants and deciduous trees including Sallow and Oak. 20 recorded on 8 occasions in both years, maximum 5 from the pond area on 14th July 2019. (8,20)

1947 **Engrailed** *Ectropis bistortata* – Fairly common and widespread resident, the larvae feed on woody plants. 11 recorded on 9 occasions in both years. (9,11)

106 **Epagoge grotiana** – Uncommon and thinly distributed resident, the larvae feed on Oak, Hawthorn and Bramble. One from the garden on 27th June 2019 the only record. (1,1)

1474 **Epehstia unicolorella ssp. woodiella** – Fairly common and widely distributed resident, the larvae feed on dried leaves and plant matter. Singles from the garden on 27th June 2019 and the pond area on 7th and 14th July 2019. One, a male, confirmed by Dr Phil sterling. (3,3)

1133 **Epinotia bilunana** – Common and thinly distributed or restricted resident, the larvae feed on Birch. Singles from the river meadows on 5th and 8th June 2020 the only records. (2,2)

1134 **Epinotia ramella** – Uncommon and thinly distributed resident, the larvae feed on Birch and Sallow. One from Bracken Field on 21st September 2020. (1,1)

998 **Epiphyas postvittana** (Light Brown Apple Moth) – Abundant and naturalised resident, larvae feed on many plants. 8 recorded on 7 occasions in both years. (7,8)



1197 **Eucosma campoliliana** – Uncommon and thinly distributed or restricted resident, the larvae feed on Common Ragwort. Recorded 4 times from the river meadows in 2020, with 2 on 25th June 2020. (4,5)

Fig. 21 Eucosma campoliliana

1201 *Eucosma cana* – Fairly common and widely distributed resident, the larvae feed on Thistles, common Knapweed, Black Knapweed. Recorded 3 times from the river meadows in 2020, singles on 22nd June and 16th July and 4 on 25th June. (3,6)

1200 *Eucosma hohenwartiana* – Uncommon and thinly distributed or restricted resident, the larvae feed on Knapweed species and Saw-wort. One from the river meadows on 15th June 2020, a female, was confirmed by Dr Phil Sterling. (1,1)

1342 *Eudonia angustea* – Common and widespread resident the larvae feed on lichens and mosses. Singles from the garden on 27th June 2019 and pond area on 31st October 2019 the only records. (2,2)

1343 *Eudonia delunella* (Nationally Scarce B) – Uncommon and thinly distributed or restricted resident, the larvae feed on lichens and mosses. One from the pond area on 7th July 2019 and recorded 4 times from the river meadows in June 2020 with maximums of 3 on 15th and 25th June 2020. (5,9)

1338 *Eudonia lacustrata* – Fairly common and widely distributed resident, larvae feed on mosses. 16 recorded on 8 occasions in both years with a maximum of 5 from the pond area on 7th July 2019. (8,16)

1334 *Eudonia mercurella* – Common and widespread resident, the larvae feed on mosses. Recorded on 25 occasions in both years, totalling 139 individuals. Maximum 23 from Bracken Field on 1st August 2019. (25,139)

1336 *Eudonia pallida* – Fairly common and widely distributed resident, the larvae feed on mosses. Surprisingly only a single record, from the walled garden on 20th September 2019. (1,1)

1470 *Euzophera pinguis* – Fairly common and widely distributed resident, the larvae feed on Ash, which is common on site, but has been severely affected by Ash Dieback disease. Recorded once in 2019, one at the pond area on 26th July then 6 times in 2020 totalling 12 individuals, with a maximum of 4 from the river meadows on 16th July 2020. (7,13)

1356a *Evergestis limbata* (Nationally Scarce B) – Rare and very local recent resident, the larvae feed on Hedge Mustard and Garlic Mustard. Singles from the garden on 5th July and 2nd August 2019 the only records. (2,2)



Fig. 22 *Evergestis limbata*

1358 *Evergestis pallidata* – Scarce and thinly distributed or restricted resident, the larvae feed on various brassicas. Singles from the pond area on 26th July 2019, river meadows on 30th July and Bracken Field on 10th August 2020. (3,3)

1980 **Eyed Hawk-moth** *Smerinthus ocellata* – Uncommon and thinly distributed or restricted resident, the larvae feed on Willow, Sallow, Apple, Crab Apple. Recorded twice from the garden in 2019 and 3 times from the river meadows in 2020. Total of 7 individuals. (5,7)

2489 **Fan-foot** *Zanclognatha tarsipennalis* – Common and fairly widespread resident, the larvae feed on fallen leaves from Oaks, Beech etc. 12 recorded on 6 occasions in both years. Maximum 5 from the pond area on 7th July 2019. (6,12)

2178 **Feathered Gothic** *Tholera decimalis* – Uncommon and thinly distributed or restricted resident, the larvae feed on grasses. 13 recorded on 3 occasions, with 11 from Bracken Field on 7th September 2020. (3,13)

173 **Festoon** *Apoda limacodes* (Nationally Scarce B) – Scarce and restricted resident, the larvae feed on Oak and Beech. One from the garden on 5th July 2019 and 3 records totalling 7 individuals from the river meadows in late June and July 2020. Maximum 4 on 25th June 2020. (4,8)

2098 **Flame** *Axylia putris* – Very common and fairly widespread resident, larvae feed on many low growing plants. 22 recorded on 10 occasions in both years. Maximum 5, from the garden on 5th July 2019 and the river meadow on 25th June 2020. (10,22)



1722 **Flame Carpet** *Xanthorhoe designata* – Common and fairly widespread resident. 6 caught on 5 occasions in May to August 2019. 4 records from the garden with 2 on 2nd June and one from Bracken Field on 1st August. (5,6)

Fig. 23 Flame Carpet

2102 **Flame Shoulder** *Ochropleura plecta* – Abundant and widespread resident the larvae feed on herbaceous plants. Recorded on 31 occasions over both years totalling 102 individuals and with a maximum of 12 from Bracken Field on 10th August 2020. (31,102)

2353 **Flounced Rustic** *Luperina testacea* – Abundant and widespread resident, the larvae feed on grasses. 54 recorded on 12 occasions in both years. Maximum 18 from Bracken Field on 10th August 2020. (12,54)

2040 **Four-dotted Footman** *Cybosia mesomella* – Fairly common but restricted resident, the larvae feed on algae and lichens on woody plants. Singles recorded on 5 occasions from the garden in 2019 and 4 times from the river meadows in 2020. (5,5)

2051 **Four-spotted Footman** *Lithosia quadra* (Nationally Scarce A) – Migrant, recent colonist, the larvae feed on Dog Lichen and other lichens. 63 recorded on 20 occasions in both years with a maximum of 12 from Bracken Field on 1st August 2019. (20,63)

1660 **Frosted Green** *Polyphoca ridens* – Fairly common and widespread resident, the larvae feed on Pedunculate, Sessile and Turkey Oaks. One from the garden on 21st April 2019, the sole record for the MoPH project. Recorded in 8 x 1km squares on Living Record 2000-2019. (1,1)

2364 **Frosted Orange** *Gortyna flavago* – Common and fairly widespread resident, the larvae feed on herbaceous plants, Thistles, Burdocks, Foxglove. 7 recorded on 6 occasions in both years. (6,7)

1728 **Garden Carpet** *Xanthorhoe fluctuata* – Very common and widespread resident, the larvae feed on herbaceous plants. Surprisingly only a single record, one from the garden on 31st May 2019. (1,1)

2057 **Garden Tiger** *Arctia caja* – Common and widespread resident, the larvae feed on herbaceous plants, Nettle, Docks, Burdocks etc. Singles recorded on 7 occasions in both years. (7,7)

14 **Ghost Moth** *Hepialus humili* – Common and widespread resident, the larvae feed on grasses and herbaceous plants. Singles recorded from the river meadows on 25th June, 29th June and 16th July 2020. (3,3)



Fig. 24 Ghost Moth



162 **Goat Moth** *Cossus Cossus* (Nationally Scarce B) – A rare and very local resident, the larvae feed mainly on Poplar and Willow species, and various deciduous trees. 2 adults trapped on 25th June 2020 from the river meadow area. This is the only site where MoPH project have trapped the species, though it is known not to come readily to light traps. Recorded in 3 x 1km squares on Living Record 2000-2019. (1,2)

Fig. 25 Goat Moth (Two)

2439 **Gold Spot** *Plusia festucae* – Uncommon and local resident, the larvae feed on Sedges, Yellow Iris, Bur-reed, Water Plantain. Recorded on 12 occasions in both years, totalling 16 individuals. Maximum 4 from Bracken Field on 10th August 2020. (12,16)

1665 **Grass Emerald** *Pseudoterpna pruinata* – A scarce and local resident, the larvae feed on Gorse, Broom, Petty Whin. One from the garden on 2nd August 2019, the only record. (1,1)



2005 **Great Prominent** *Peridea anceps* – Uncommon and restricted resident, the larvae feed on Pedunculate and Sessile Oaks. 37 recorded on 7 occasions in April and May 2019. Maximum 17 from the garden on 21st April 2019. (7,37)

Fig. 26 Great Prominent

1776 **Green Carpet** *Colostygia pectinataria* – Very common and widespread resident, the larvae feed on Bedstraws. 5 recorded on 3 occasions, from the garden, in both years. (3,5)

1860 **Green Pug** *Pasiphila rectangularata* – Common and widespread resident, the larvae feed on Crab Apple, Pear, Apple, Hawthorn, Blackthorn and Cherry. Singles recorded from the garden on 27th June and 5th July 2019 and the pond area on 7th July 2019. (3,3)

2422 **Green Silver-lines** *Pseudoips prasinana* – Fairly common but thinly distributed resident, the larvae feed on broadleaved trees. Singles from the garden on 27th June 2019 and pond area on 7th July 2019 the only records. (2,2)

2245 **Green-brindled Crescent** *Allophyes oxycanthae* – Fairly common and widespread resident, the larvae feed on Hawthorns, Blackthorn, Dog-rose, Crab Apple. Singles from Bracken Field on 21st September and one roosting by day on the house porch on 19th October 2020. (2,2)

2150 **Grey Arches** *Polia nebulosa* – Scarce and thinly distributed or restricted resident, the larvae feed on woody plants, Hazel, Birches, Honeysuckle etc. 38 recorded on 10 occasions in both years with a maximum of 10 from the garden on 5th July 2019. (10,38)

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. 5 recorded on 3 occasions in 2020, from the river meadow, 3 on 25th June and one on 26th August and the pond area one on 25th July. (3,5)

1768 **Grey Pine Carpet** *Thera obeliscata* – Fairly common and widespread resident, the larvae feed on coniferous trees, Pine, Spruce, Cypress. 109 recorded on 25 occasions in both years. Maximum 24 from Bracken Field on 28th September 2020. (25,109)

1837 **Grey Pug** *Eupithecia subfuscata* – Uncommon and fairly widespread resident, the larvae feed on herbaceous plants. One from the river meadow on 8th June 2020 the only record. (1,1)

2237 **Grey Shoulder-knot** *Lithophane ornitopus* – Uncommon and thinly distributed resident, the larvae feed on Oak. One from the garden on 21st March 2020 (Joe Parker), is the sole record. Elsewhere recorded by the MoPH project only at Goathorn. (1,1)

2088 **Heart and Club** *Agrotis clavis* – Fairly common and thinly distributed resident, the larvae feed on herbaceous plants. 2 in the garden on 15th June 2019 and one there on 5th July 2019, and one from the river meadows on 29th June 2020. (3,4)

2089 **Heart and Dart** *Agrotis exclamatoris* – Abundant and widespread resident, the larvae feed on herbaceous plants. Recorded 24 times in both years totalling 289 moths. High counts were 54 from the garden on 27th June 2019 and 39 from the river meadows on 25th June 2020. (24,289)

2135 **Heath Rustic** *Xestia agathina* – Scarce and thinly distributed or restricted resident, the larvae feed on Heather. One from Bracken Field on 10th August 2020. The only record. (1,1)

2190 **Hebrew Character** *Orthosia gothica* – Abundant and widespread resident, the larvae feed on herbaceous plants, bushes and trees. 29 recorded on 4 occasions in April and May 2019 and March and May 2020 (Joe Parker). Maximum 21 from the garden on 21st April 2019. (5,39)

2177 **Hedge Rustic** *Tholera cespitis* – A scarce and local resident, the larvae feed on grasses. One from Bracken Field on 7th September 2020. (1,1)

1084 **Hedya ochroleucana** – Scarce and thinly distributed resident, the larvae feed on Rose and Apple. 2 from the garden on 23rd August 2019, the only record. (1,2)

868 **Helcystogramma rufescens** – Fairly common and widespread resident, the larvae feed on a selection of grasses, especially Wood Small-reed and False Brome. One from the pond area on 26th July 2019, one from the river meadows on 22nd June 2020 and 2 at the pond area on 25th July 2020. (3,4)

2469 **Herald** *Scoliopteryx libatrix* – Uncommon and thinly distributed resident, the larvae feed on Willows, Aspen and Poplars. Recorded from the garden twice in 2019 and, 4 from Bracken Field on 14th October 2020. Recorded on 2 occasions roosting in outbuildings. (5,9)

647 **Hofmannophila pseudospretella** (Brown House Moth) – Fairly common and widespread resident, the larvae feed on household detritus. Singles from the pond area on 26th July 2019 and river meadows on 29th June and 30th July 2020. (3,3)

1905 **Horse Chestnut** *Pachycnemia hippocastanaria* (Nationally Scarce B) – Uncommon and restricted resident, the larvae feed on Heather and Cross-leaved Heath. One from the garden on 31st May 2019, one from the river meadows on 26th August 2020 and 2 from Bracken Field on 21st September 2020. (3,4)

1984 **Hummingbird Hawk-moth** *Macroglossum stellatarum* – Fairly common and widespread migrant, the larvae feed on Lady's Bedstraw, other Bedstraws and Wild Madder. Recorded twice in 2019, 2 on 18th August in the pond area, 2 on 23rd August 2019 outside the walled garden, one on 20th July 2020 in the pond area, all day-flying. (3,5)

1413 **Hypsopygia costalis** (Gold Triangle) - Common and widespread resident the larvae feed on dry vegetable matter, hay and dead grasses. Singles from the pond area on 14th and 26th July 2019, 2 from Bracken Field on 10th August 2020. (3,4)

1415 **Hypsopygia glaucinalis** – Fairly common and widely distributed resident, the larvae feed on hay, straw, bird's nests. Singles from the garden on 2nd August 2019 and top meadow on 10th August 2020. (2,2)

2120 **Ingrailed Clay** *Diarsia mendica* – Very common and widespread resident, the larvae feed on herbaceous plants. 8 recorded on 5 occasions in 2019, one on 21st March 2020 (Joe Parker). (6,9)

2000 **Iron Prominent** *Notodonta dromedarius* – Fairly common and widespread resident, the larvae feed on Birch and Alder. Recorded on 16 occasions over both years, totalling 27 individuals. Maximum 8 on 10th August 2020. (16,27)

2067 **Jersey Tiger** *Euplagia quadripunctaria* (Nationally Scarce B) – Fairly common and mainly coastal resident / wanderer, the larvae feed on herbaceous plants including nettles. One from the pond area on 18th August 2019 and 2 from Bracken Field on 10th August 2020. (2,3)

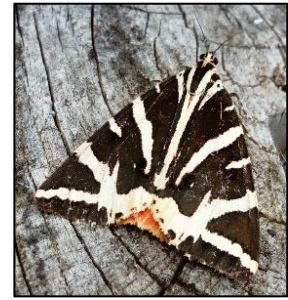


Fig. 27 Jersey Tiger

1777 **July Highflyer** *Hydriomena furcata* – Common and widespread resident, the larvae feed on Hazel, Sallow, Willows and others. One from the river meadows on 25th June 2020 the sole record. (1,1)

2076 **Kent Black Arches** *Meganola albula* (Nationally Scarce B) – Uncommon and restricted resident, the larvae feed on Dewberry, Bramble, Raspberry and Strawberry. Singles from the pond area on 14th July 2019, river meadows on 22nd June and 16th July 2020 and Bracken Field on 23rd July 2020. (4,4)

2289 **Knot Grass** *Acronicta rumicis* – Very common and widespread resident, the larvae feed on herbaceous and woody plants. 11 recorded on 8 occasions in both years. (8,11)

2202 **L-album Wainscot** *Mythimna l-album* (Nationally Scarce B) – Scarce and mainly coastal resident and local wanderer, the larvae feed on Marram and other grasses. 2 from the walled garden on 20th October 2019, singles from the river meadows on 15th June 2020, and Bracken Field 21st September 2020. (3,4)

1666 **Large Emerald** *Geometra papilionaria* – Uncommon and fairly widespread resident, the larvae feed on Birches, Hazel and Alder. Singles on 3 occasions in 2019 from the pond area on 7th July, Bracken Field 1st August and garden on 2nd August. In 2020 2 from the river meadows on 20th July and one from the pond area on 25th July. (5,6)

2375 **Large Wainscot** *Rhizedra lutosa* – Common and thinly distributed or restricted resident, the larvae feed on Common Reed. One from Bracken Field on 21st September 2020 the only record. (1,1)

2107 **Large Yellow Underwing** *Noctua pronuba* – An abundant and widespread resident. The larvae feed on herbaceous plants and grasses. Recorded on 45 occasions in both years totalling 933 individuals. Maximum 263 from the garden on 5th July 2019. (45,933)

2112 **Least Yellow Underwing** *Noctua interjecta* – Fairly common and thinly distributed resident, the larvae feed on herbaceous plants. 8 recorded on 3 occasions in 2019, one from Bracken Field in 2020. (4,9)



161 **Leopard Moth** *Zeuzera pyrina* – Uncommon and fairly widespread resident, the larvae feed on many woody plants and deciduous trees. In 2020 recorded 3 times from the river meadows, maximum 6 on 25th June 2020 and twice from Bracken Field. (5,10)

Fig. 28 Leopard Moth

2111 **Lesser Broad-bordered Yellow Underwing** *Noctua janthe* – Abundant and widespread resident, the larvae feed on herbaceous plants. 93 recorded on 18 occasions in both years, maximum 34 from the pond area on 18th August 2019. (18,93)

1692 **Lesser Cream Wave** *Scopula immutata* – Rare and very local resident, the larvae feed on Meadowsweet, Common Valerian. 1 on 16th July 2020. (1,1)

2006 **Lesser Swallow Prominent** *Pheosia gnoma* – Fairly common but restricted resident, the larvae feed on Birch. 60 recorded on 24 occasions in both years, maximum 8 on 10th August 2020 from Bracken Field. (24,60)

2109 **Lesser Yellow Underwing** *Noctua comes* – Abundant and widespread resident, the larvae feed on herbaceous plants. 28 recorded on 14 occasions in both years, maximum 4 from the garden on 20th July and 13th September 2019. (14,28)

2322 **Light Arches** *Apamea lithoxylaea* – Common and fairly widespread resident, the larvae feed on grasses. 11 recorded on 6 occasions in both years. Maximum 4 from the garden on 21st June 2019. (6,11)

2157 **Light Brocade** *Lacanobia w-latinum* – Common, the larvae feed on herbaceous and woody plants. Recorded 11 times in both years totalling 38 individuals. Maximum 14 from the garden, on 21st May 2020 (Joe Parker). (11,38)

1961 **Light Emerald** *Campaea margaritata* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. 33 recorded on 16 occasions in both years. Maximum 5 from Bracken Field on 21st September 2020. (16,33)

1979 **Lime Hawk-moth** *Mimas tiliae* – Uncommon and fairly widespread resident, the larvae feed on Limes, Elms, Birches and Alder. One trapped from the river meadow, next to the fallen Lime on 25th June 2020. (1,1)

1825 **Lime-speck Pug** *Eupithecia centaureata* – Common and fairly widespread resident, the larvae feed on many plants. Recorded from Bracken Field: 3 on 1st August 2019 and 2 on 10th August 2020. (2,5)

1106 **Lobesia reliquana** – Scarce and thinly distributed or restricted resident, the larvae feed on Oak, Birch and Blackthorn. One from the garden on 29th May 2019, the sole record. This is the only site where the MoPH project has found the species, and it is known from 2 x 1km squares on Living Record 2000-2019. (1,1)

1999 **Lobster Moth** *Stauropus fagi* – Fairly common and widespread resident, the larvae feed on Birch, Alder, Oak and Beech. Recorded 6 times, totalling 7 individuals, once from the garden in 2019 and 4 times from the river meadows and once from Bracken Field in 2020. (6,7)



Fig. 29 Lobster Moth

1001 **Lozotaeniodes formosana** – Uncommon and thinly distributed or restricted resident, the larvae feed on Scots Pine. 2 in the garden on 27th June and one there on 5th July 2019, one from the river meadows on 15th June 2020. (3,4)

2015 **Lunar Marbled Brown** *Drymonia ruficornis* – Fairly common and thinly distributed resident, the larvae feed on Oaks. Recorded once with 9 from the garden on 21st April 2019. (1,9)

2270 **Lunar Underwing** *Omphaloscelis lunosa* – Very common and fairly widespread resident, the larvae feed on grasses. 74 recorded on 10 occasions in both years. Maximum 25 from the walled garden on 4th October 2019 and 21 from Bracken Field on 21st September 2020. (10,74)

2173 **Lychnis** *Hadena bicruris* – Fairly common and widespread resident, the larvae feed on Red, White and Sea Campion. Singles from the garden on 21st and 7th June 2019 the only records. (2,2)

263 **Lyonetia clerkella** (Apple Leaf Miner) – Fairly common but restricted resident, the larvae feed on fruit trees, especially Apples, also Hawthorn. Singles from the river meadows on 5th June 2020 and pond area on 25th July 2020. (2,2)

1884 **Magpie Moth** *Abraxas grossulariata* – Common and widespread resident, the larvae feed on Blackthorn, Hawthorn, Privet, Red and Black Currant. Singles from the river meadow on 25th June and Bracken Field on 10th August 2020. (2,2)

1680 **Maiden's Blush** *Cyclophora punctaria* – Rare and very local resident, the larvae feed on Oaks. 30 recorded on 14 occasions in both years with a maximum of 7 from the garden on 23rd August 2019. (14,30)

2410 **Marbled White Spot** *Protodeltote pygarga* – Uncommon and local resident, the larvae feed on grasses. 22 recorded on 13 occasions in both years. Maximum 6 from the pond area on 14th July 2019. (13,22)

1778 **May Highflyer** *Hydriomena impluviata* – Fairly common and thinly distributed resident, the larvae feed on Alder. One on 21st May 2020 recorded by Joe Parker the sole record. (1,1)

2247 **Merveille du Jour** *Dichonia aprilina* – Fairly common and widespread resident, the larvae feed on Oaks. 11 recorded on 5 occasions in both years, maximum 5 from the walled garden on 20th October 2019. (5,11)

2340 **Middle-barred Minor** *Oligia fasciuncula* – Very common and widespread resident, the larvae feed on grasses. Singles on 21st May 2020 (Joe Parker) and from the river meadows on 8th June 2020. (2,2)

2280 **Miller** *Acrionicta leporina* – Uncommon and thinly distributed resident, the larvae feed on Birches and Alder. 8 recorded on 5 occasions in both year, maximum 4 from the river meadows on 25th June 2020. (5,8)

Minor aggregate – Due to the difficulties in specific identification with 3 of the 6 species requiring genital dissection, the species are frequently aggregated. 75 of these aggregates were recorded on 18 occasions in the 2 years with a maximum of 20 from the river meadows on 25th June 2020. (18,75)



888 **Mompha propinquella** – Scarce and thinly distributed resident, the larvae feed on Willowherb species. One from the pond area on 18th August 2019 the only record. (1,1)

Fig. 30 *Mompha propinquella* ©Chris Fox

728 **Monochroa cytisella** – Scarce and thinly distributed resident, the larvae feed on Bracken. 6 from the river meadows on 29th June 2020, one from Bracken Field on 23rd July and 2 from the pond area on 25th July 2020. (3,9)

228 **Monopis weaverella** – Uncommon and thinly distributed resident, the larvae feed on dead and decaying animal matter, faeces. One from the pond area on 26th July 2019 the sole record. (1,1)

1941 **Mottled Beauty** *Alcis repandata* – Very common and widespread resident, the larvae feed on woody plants. 9 recorded on 7 occasions in both years. (7,9)

1819 **Mottled Pug** *Eupithecia exiguata* – Fairly common and fairly widespread resident, the larvae feed on Hawthorn, Blackthorn, Dogwood. One from the garden on 31st May 2019 the only record. (1,1)

2387 **Mottled Rustic** *Caradrina morpheus* – Abundant and fairly widespread resident, the larvae feed on herbaceous plants. Recorded 4 times, totalling 9 moths. Maximum 4 from the river meadows on 15th June 2020. (4,9)

2221 **Mullein** *Shargacucullia verbasci* – Scarce and thinly distributed or restricted resident, the larvae feed on Mulleins, Figworts and Buddleias. Singles from the garden on 3rd and 13th May 2019 the only records. (2,2)

1689 **Mullein Wave** *Scopula marginepunctata* – Local, the larvae feed on herbaceous plants. Recorded 5 times from the garden and pond area in 2019 and once from the pond area in 2020. (6,8)

2063 **Muslin Moth** *Diaphora mendica* – Fairly common and widespread resident, the larvae feed on herbaceous plants. 24 recorded on 4 occasions in 2019, maximum of 12 from the river meadows on 12th May 2019. One recorded by Joe Parker on 21st May 2020. (5,24)

1458 **Myelois circumvoluta** (Thistle Ermine) – Common and widespread resident, the larvae feed on Thistle species. 7 recorded on 6 occasions in both years, from garden, river meadow and Bracken Field. (6,7)



Fig. 31 Thistle Ermine

1846 **Narrow-winged Pug** *Eupithecia nanata* – Uncommon and restricted resident, larvae feed on Heather. One from the pond area on 25th July 2020, 2 from Bracken Field on 10th August 2020. (2,3)

2132 **Neglected Rustic** *Xestia castanea* – Scarce and restricted resident, the larvae feed on Heathers. Single record, one from Bracken Field on 2nd September 2020. (1,1)

143 **Nematopogon metaxella** – Uncommon and thinly distributed resident, the larvae feed on leaf-litter. One from the river meadows on 5th June 2020 is the only MoPH record. Known from one other square on Living Record 2000-2019. (1,1)

140 **Nematopogon swammerdamella** – Uncommon and thinly distributed resident, the larvae feed on leaf-litter. Recorded 4 times from the garden in 2019, totalling 5 individuals and one recorded from the river meadows on 5th June 2020. (5,6)

797 **Neofaculta ericetella** – Uncommon and thinly distributed and restricted resident, the larvae feed on Heathers. 2 from the garden on 29th May 2019 is the only record. (1,2)

1398 **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. One from Bracken Field on 11th August 2019 is, perhaps surprisingly, the only record. (1,1)

1174 **Notocelia cynosbatella** – Fairly common and widely distributed resident, the larvae feed on Wild and cultivated Rose. One recorded by Joe Parker on 21st May 2020 the only record. (1,1)

1175 **Notocelia uddmanniana** (Bramble Shoot Moth) – Common and widespread resident, the larvae feed on wild and cultivated Rose. 14 recorded on 8 occasions in both years. Maximum 5 from the river meadows on 8th June 2020. (8,14)

1795 **November Moth agg.** *Epirrita dilutata* aggregate. – Three species, November Moth, Pale November Moth and Autumnal Moth are treated as aggregates in the absence of genitalia dissection. The status of the various species in Dorset is unknown for this reason. One from the walled garden on 20th October 2019 and 5 from Bracken Field on 30th October 2020. (2,6)

2145 **Nutmeg** *Discestra trifolii* – Fairly common and thinly distributed or restricted resident, the larvae feed on herbaceous plants and Goosefoots. Singles from the river meadows on 5th June 2020 and Bracken Field on 21st September 2020. (2,2)

2425 **Nut-tree Tussock** *Colocasia coryli* – Fairly common and widespread resident, the larvae feed on Hazel, Birches, Beech, Oaks, other trees. 26 recorded on 10 occasions in both years. Maximum 6 from Bracken Field on 10th August 2020. (10,26)

1350 **Nymphula nitidulata** (Beautiful China-mark) – Uncommon and thinly distributed or restricted resident, larvae feed on Bur-reed, Yellow water-lily and other aquatic plants. Recorded 17 times in both years with a total of 210 moths and a maximum of 86 on 7th August 2020 from the river meadows. (17, 210)

1930 **Oak Beauty** *Biston strataria* – Uncommon and thinly distributed resident, the larvae feed on broadleaved trees. 7 recorded by Joe Parker on 21st March 2020 the only record. (1,7)



1637 **Oak Eggar** *Lasiocampa quercus* – Fairly common and thinly distributed resident, the larvae feed on Heathers, Bilberry, Bramble and other woody plants. Singles recorded from Bracken Field on 1st August 2019 and 10th August 2020 and from the river meadows on 30th July 2020. (3,3)

Fig. 32 Oak Eggar

1646 **Oak Hook-tip** *Watsonalla binaria* – Fairly common and widespread resident, the larvae feed on Oaks. Singles recorded twice from garden and pond area in 2019 and 3 records, of 4 individuals from pond area and Bracken Field, in 2020. (5,6)

2022 **Oak Processionary** *Thaumetopoea processionea* – Uncommon migrant and considered a pest species in the larval stage. Recorded once in 2020, from the river meadows on 26th August 2020, during a notable influx from the continent consisting of male moths (P. Sterling pers. com). Not yet known to breed in Dorset. Recorded the same month by MoPH at Hamworthy. (1,1)

1853 **Oak-tree Pug** *Eupithecia dodoneata* – Uncommon and thinly distributed resident, the larvae feed on Hawthorn and Oak. One from the garden on 21st May 2020 (Joe Parker), the sole record. Not recorded by the MoPH project elsewhere. (1,1)

1441 **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 11th August 2019 from Bracken Field the only record. (1,1)

2043 **Orange Footman** *Eilema sororcula* – Fairly common and widespread resident, the larvae feed on lichen. Recorded 9 times from the garden in 2019 with a maximum of 38 on 29th May. 4 records from the garden and river meadow in 2020. (13,98)

15 **Orange Swift** *Hepialus sylvina* – Common and widespread resident, the larvae feed on herbaceous plants. Singles from the river meadows on 7th August 2020 and Bracken Field 10th August 2020. (2,2)

378 **Orange-tailed Clearwing** *Synanthedon andrenaeformis* (Nationally Scarce B) – A very scarce and restricted resident, the larvae feed on Wayfaring Tree and Guelder Rose. One attracted to pheromone by the pond on 17th July 2020. Not recorded anywhere else by the MoPH project and apparently the first record for Poole Harbour this century. (1,1)



Fig. 33 Orange-tailed Clearwing

1375 **Ostrinia nubilalis** (European Corn Borer) – Recent colonist and migrant, the larvae feed on Mugwort. Singles from the pond area on 7th July 2019 and 14th September 2020 and Bracken Field on 7th September 2020. (3,3)

1944 **Pale Oak Beauty** *Hypomecis punctinalis* – Scarce and restricted resident, the larvae feed on Oak, Birch and other trees. One from woodland by the old water wheel on 16th July 2020, the sole record. Recorded in 1 other x 1km square on Living Record 2000-2019. (1,1)

2011 **Pale Prominent** *Pterostoma palpina* – Common and widespread resident, the larvae feed on Aspen, Poplars and Willows. 18 recorded on 15 occasions in both years, maximum 3 from the river meadows on 20th July 2020. (15,18)

2028 **Pale Tussock** *Calliteara pudibunda* – Fairly common and widespread resident, the larvae feed on broadleaved trees and shrubs. 37 recorded on 10 occasions in both years with a maximum of 24 from the garden on 21st May 2020 by Joe Parker. (10,37)

2158 **Pale-shouldered Brocade** *Lacanobia thalassina* – Fairly common and widespread resident, the larvae feed on woody plants. Recorded twice: singles from the garden on 21st June 2019 and the river meadows on 8th June 2020. (2,2)

1233 **Pammene aurita** – Scarce and local resident, the larvae feed on Sycamore. One from the pond area on 14th September 2020. This is the only record for the MoPH project. The species has been found in 3x 1km squares on Living Record 200-2019. (1,1)

970 **Pandemis cerasana** (Barred Fruit-tree Tortrix) – Fairly common and widespread resident, the larvae feed on deciduous trees, especially fruit trees. Singles from the garden on 27th June and 5th and 20th July all in 2019. (3,3)

969 **Pandemis corylana** (Chequered Fruit-tree Tortrix) – Fairly common and widespread resident, the larvae feed on a wide range of deciduous trees and shrubs. 5 recorded on 4 occasions in 2019, 3 from Bracken Field on 10th August 2020. (5,8)

1348 ***Paraponyx stratiotata*** (Ringed China-mark) – Uncommon and thinly distributed or restricted resident, the larvae feed on pondweeds and other aquatic plants. 17 recorded on 6 occasions with a maximum of 8 on 7th August 2020 from the river meadows. (6,17)



1652 **Peach Blossom** *Thyatira batis* – Fairly common and widespread resident, the larvae feed on Bramble. One from the river meadows on 25th June 2020 the only record. (1,1)

Fig. 34 Peach Blossom ©Chris Fox

1889 **Peacock Moth** *Macaria notata* – Rare and very local resident, the larvae feed on Birch. One in the garden on 31st May 2019 the only record. (1,1)

1648 **Pebble Hook-tip** *Drepana falcataria* – Common and fairly widespread resident, the larvae feed on Birches. 22 recorded on 10 occasions with a maximum of 9 from Bracken Field on 10th August 2020. (10,22)

2003 **Pebble Prominent** *Notodonta ziczac* – Fairly common and widespread resident, the larvae feed on Sallow, Willow, Aspen and other Poplars. 16 on 10 occasions in both years, maximum 3 from the river meadows on 30th July 2020. (10,16)

1323 ***Pediasia contaminella*** (Nationally Scarce B) – Uncommon and thinly distributed and restricted resident, the larvae feed on various grasses such as Sheep's Fescue. 74 recorded on 10 occasions in both years with a maximum of 30 on 1st August 2019 from Bracken Field. (10,74)

1442 ***Pempelia palumbella*** – Fairly common but thinly distributed or restricted resident, the larvae feed on Heather species. 6 recorded on 4 occasions from garden, pond area and Bracken Field in 2019. (4,6)

1931 **Peppered Moth** *Biston betularia* – Very common and widespread resident, the larvae feed on many small plants, trees and shrubs. 63 recorded on 20 occasions in both years. Maximum 10 from the river meadows on 25th June 2020. (20,63)

921 ***Phtheochroa inopiana*** – Uncommon and thinly distributed resident, the larvae feed on Common Fleabane. One from the river meadows on 25th June 2020 the sole record. Apparently, the only record for Poole Harbour this century. (1,1)

1452 ***Phycita roborella*** – Common and widespread resident, the larvae feed on Oak. Recorded singly twice in 2019 and 4 times in 2020. (6,6)

1483 ***Phycitodes binaevella*** – Uncommon and thinly distributed resident, the larvae feed on Spear Thistle. One from the river meadow On 25th June 2020. Also recorded by the MoPH project from Arne Moors. (1,1)

1485 ***Phycitodes maritima*** – Uncommon and thinly distributed or restricted resident, the larvae feed on Yarrow and Ragwort. One on 25th June 2020, from the river meadows, a male, confirmed by Dr Phil Sterling. The species was also recorded by MoPH in Hamworthy. Recorded in 2 other 1km squares in Living Record 2000-2019. (1,1)

342 ***Phyllonorycter coryli*** (Nut Leaf Blister Moth) – Very common and widespread resident, the larvae feed on Hazel. Recorded as leaf-mine on Hazel, 6th November 2020. (1, leaf-mine)

364 ***Phyllonorycter geniculella*** – Very scarce and restricted resident, the larvae feed on Sycamore. Recorded as leaf-mine on Sycamore, 6th November 2020. (1, leaf-mine)

363 ***Phyllonorycter joannisii*** – Very rare resident, the larvae feed on Norway Maple. Found as leaf-mine on the foodplant on 6th November 2020. (1, leaf-mine)

321 ***Phyllonorycter messaniella*** – Fairly common and local resident, the larvae feed on Oak, Beech and Sweet Chestnut. Recorded as leaf-mine on Beech on 6th November 2020. (1, leaf-mine)

359 ***Phyllonorycter nicelli*** – Uncommon and thinly distributed resident, the larvae feed on Hazel. Recorded as leaf-mine on foodplant on 6th November 2020. (1, leaf-mine)



356 ***Phyllonorycter tristrigella*** – Scarce and thinly distributed resident, the larvae feed on Elm. Recorded as leaf-mine on the foodplant 6th November 2020. (1, leaf-mine)

Fig. 35 Leaf-mine on Elm leaf

2179 **Pine Beauty** *Panolis flammea* – Uncommon and thinly distributed or restricted resident, the larvae feed on Scots, Corsican and Lodgepole Pines, Larch. Recorded once, 5 from the garden on 21st April 2019. (1,5)

1767 **Pine Carpet** *Thera firmata* – Fairly common and widespread resident, the larvae feed on Scots Pine and Corsican Pine. 29 recorded on 6 occasions, maximum 20 from the pond area on 31st October 2019. (6,29)

1978 **Pine Hawk-Moth** *Hyloicus pinastri* – Uncommon and restricted resident, the larvae feed on Scots and Corsican Pine, Norway Spruce. Recorded 19 times totalling 42 individuals from both years. Maximum 7 from Bracken Field on 25th July 2020. (19,42)

2484 **Pinion-streaked Snout** *Schrankia costaestrigalis* – Scarce and local resident, the larval foodplant is unknown. Recorded 4 times in 2019 and once in 2020. (5,6)

1079 ***Piniphila bifasciana*** – Uncommon and thinly distributed and restricted resident, the larvae feed on Scots Pine. One from the garden on 15th June 2019 and 2 from the pond area on 7th July 2019 the only records. (2,3)

2273 **Pink-barred Sallow** *Xanthia togata* – Fairly common and fairly widespread resident, the larvae feed on Sallow, Poplars and herbaceous plants. 7 from Bracken Field on 21st September 2020 and 2 from there on 30th October 2020. (2,9)

1715 **Plain Wave** *Idaea straminata* – Scarce and thinly distributed or restricted resident, the larval foodplant is unknown. One from Bracken Field on 23rd July 2020 is the only record. (1,1)

1405 **Pleuroptya ruralis** (Mother of Pearl) – Very common and widespread resident, the larvae feed on Nettles. 70 recorded on 11 occasions in both years. Maximum 16 from the garden on 2nd August 2019. (11,70)

464 **Plutella xylostella** (Diamond-back) – Very common and widespread migrant / wanderer, the larvae feed on various vegetables and cruciferous plants. 20 recorded on 11 occasions in both years. Maximum 4 from the river meadows on 25th June 2020. (11, 20)

1981 **Poplar Hawk-moth** *Laothoe populi* – Very common and widespread resident, the larvae feed on Poplars, Aspen, Willows and Sallow. 45 recorded on 27 occasions in both years with a maximum of 3 on 6 occasions. (27,45)



Fig. 36 Poplar Hawk

1998 **Poplar Kitten** *Furcula bifida* – Scarce and thinly distributed resident, the larvae feed on Poplars, Aspen, Willows. Singles from the garden on 8th June 2019, pond area on 14th July 2019 and river meadows on 30th July 2020. (3,3)

2186 **Powdered Quaker** *Orthosia gracilis* – Common and thinly distributed or restricted resident, the larvae feed on herbaceous and woody plants. One from the garden on 3rd May 2019. (1,1)

448a **Prays ruficeps** (Dark Ash Bud Moth) – Formerly considered a dark form of *Prays fraxinella* this is now considered to be a species in its own right, but distribution is poorly known. One on 28th September 2020, from Bracken Field, is the sole record. This is the only site where MoPH project has recorded the species, and it is otherwise known from only 2x 1km squares in Living Record 2000-2019. (1,1)

1976 **Privet Hawk-moth** *Sphinx ligustri* – Fairly common and widespread resident, the larvae feed on Wild and Garden Privet, Ash, Lilac and Guelder-rose. 35 recorded on 14 occasions in both years with a maximum of 7 from the garden on 21st June 2019. (14,35)

1011 **Pseudagyrotoza conwagana** – Fairly common and widespread resident, the larvae feed on Wild Privet, Garden Privet and Ash. Singles from the garden on 27th June 2019 and river meadows on 8th June 2010. (2,2)



186 ***Psyche casta*** – Scarce and thinly distributed resident, the larvae feed on leaf-litter and detritus. One on 5th June 2020 from the river meadows is, perhaps surprisingly, the sole record for the MoPH project. Although AG found one on her car, parked in Bournemouth on 8/6/19 (not within Project area) (1,1)

Fig. 37 *Psyche casta*

1513 ***Pterophorous pentadactyla*** (White Plume Moth) – Uncommon and thinly distributed or restricted resident, the larvae feed on Bindweed. One at the porch light on 7th July 2019, is the sole record for Carey and the MoPH project. (1,1)

1752 **Purple Bar** *Cosmorhoe ocellata* – Common and widespread resident, the larvae feed on Bedstraws. One from the river meadows on 25th June 2020 is the sole record. (1,1)

2122 **Purple Clay** *Diarsia brunnea* – Fairly common and fairly widespread resident, the larvae feed on herbaceous plants. One from the garden on 21st June 2019 is the only MoPH record recorded in 6 x 1km squares on Living Record 2000-2019. (1,1)

1919 **Purple Thorn** *Selenia tetralunaria* – Fairly common and thinly distributed resident, the larvae feed on broadleaved trees, Hazel, Birches etc. Singles from the garden on 21st April and 2nd August 2019 (second brood) and the pond area on 25th July 2020. (3,3)

1995 **Puss Moth** *Cerura vinula* – Uncommon and thinly distributed resident, the larvae feed on Poplars and Willows. One in the garden on 8th June 2019 and 2 trapped from there on 21st May 2020, by Joe Parker. (2,3)

1365 ***Pyrausta despicata*** – Fairly common and widely distributed resident, the larvae feed on herbs like Wild Thyme and Marjoram. Recorded, singly, once in 2019 from the pond area and 3 times from the river meadows and Bracken Field in 2020. (4,4)

1362 ***Pyrausta purpuralis*** – Fairly common and widely distributed resident, the larvae feed on Wild Thyme and Corn Mint. Singles recorded twice from the garden in 2019 and twice from the river meadows in 2020. (4,4)

2139 **Red Chestnut** *Cerastis rubricosa* – Common and fairly widespread resident, the larvae feed on herbaceous and woody plants. One from the garden on 21st April 2019 the only record. An abundant early season species on the local heaths. (1,1)

1724 **Red Twin-spot Carpet** *Xanthorhoe spadicearia* – Common and widespread resident, the larvae feed on herbaceous plants. 23 recorded on 11 occasions in both years. Maximum 4 from the pond area on 25th July 2020. (11, 23)

2452 **Red Underwing** *Catocala nupta* – Uncommon and fairly widespread resident, the larvae feed on Black Poplar, White Poplar, Aspen, Willows. One from Bracken Field on 21st September 2020, another Red Underwing species was disturbed by day along the river by Paul Morton earlier the same month. (1,1)

1760 **Red-green Carpet** *Chloroclysta siterata* – Fairly common and fairly widespread resident, the larvae feed on broadleaved trees. 1 spring emergence individual in the garden on 21st April 2019 and 4 autumn records of 5 individuals in both years. (5,6)

2263 **Red-line Quaker** *Agrochola lota* – Common and fairly widespread resident, the larvae feed on Willows. Singles from the walled garden on 20th and 22nd October 2019 and Bracken Field on 30th October 2020. (3,3)

2039 **Red-necked Footman** *Atolmis rubicollis* – Uncommon and thinly distributed resident, the larvae feed on lichens. Singles from the garden on 5th July 2019 and river meadows on 29th June. Elsewhere recorded by the MoPH project only at Holton Lee and recorded in 6x 1km squares on Living Record 2000-2019. (2,2)

1211 **Rhyacionia pinicolana** – Uncommon and thinly distributed resident, the larvae feed on Scots Pine. Singles from the pond area on 26th July 2019 and Bracken Field on 10th August 2020. (2,2)

1212 **Rhyacionia pinivorana** (Spotted Shoot Moth) – Uncommon and thinly distributed resident, the larvae feed on Scots Pine. One from, the garden on 27th June 2019 the sole record. (1,1)

1713 **Riband Wave** *Idaea aversata* – Abundant and widespread resident, the larvae feed on herbaceous plants. Recorded 19 times in both years, totalling 100 individuals. Maximum 17 from the pond area on 7th July 2019. (19,100)

2037 **Rosy Footman** *Miltochrista miniata* – Common and widespread resident, the larvae feed on Dog lichen and other lichens. 70 recorded on 14 occasions in both years with a maximum of 16 from Bracken Field on 10th August 2020. (14,70)



Fig. 38 Rosy Footman

2342 **Rosy Minor** *Mesoligia literosa* – Fairly common and fairly widespread resident, the larvae feed on grasses. Singles on 15th and 25th June 2020 from the river meadows. (2,2)

2361 **Rosy Rustic** *Hydraecia micacea* – Abundant and fairly widespread resident, the larvae feed on low growing plants, Broad-leaved Dock, Ribwort Plantain etc. 37 trapped on 12 dates in both years. Maximum 8 on 18th and 26th August 2020 from the river meadows both times. (12,37)

2035 **Round-winged Muslin** *Thumatha senex* – Scarce and restricted resident, the larvae feed on lichens and mosses. Recorded 4 times in 2020, totalling 5 individuals, 4 times from the river meadows and once from Bracken Field. (4,5)

2064 **Ruby Tiger** *Phragmatobia fuliginosa* – Common and widespread resident, the larvae feed on herbaceous plants. 20 recorded on 8 occasions in both years, with a maximum of 7 from the river meadows on 16th July 2020. (8,20)

2382 / 2381 **Rustic / Uncertain aggregate** *Hoplodrina blanda / alsines* – Very common and widespread resident, the larvae feed on herbaceous plants. Trapped 23 times, totalling 178 individuals. Maximum 22 from the garden on 20th July 2019. (23,178)

2334 **Rustic Shoulder-knot** *Apamea sordens* – Fairly common and thinly distributed and restricted resident, the larvae feed on grasses. One from the garden on 29th May 2019 the sole record for the MoPH project. Recorded in 5 x 1km squares on Living Record 2000-2019. (1,1)

2274 **Sallow** *Xanthia icteritia* – Fairly common and widespread resident, the larvae feed on Poplars and herbaceous plants. 5 recorded on 4 occasions in both years. (4,5)

1997 **Sallow Kitten** *Furcula furcula* – Uncommon and thinly distributed resident, the larvae feed on Willows. One in Bracken Field on 1st August 2019, 3 from the river meadows on 7th August 2020 and 2 from Bracken Field on 10th August 2020. (3,6)

1808 **Sandy Carpet** *Perizoma flavofasciata* – Uncommon and fairly widespread resident, the larvae feed on Red Champion. One from the garden on 21st April 2019 is the sole MoPH project record. Recorded in 6 x 1km squares on Living Record 2000-2019. (1,1)

2256 **Satellite** *Eupsillia transversa* – Uncommon and fairly widespread resident, the larvae are omnivorous feeding on broadleaved trees and shrubs and moth larvae. Single record, from the walled garden on 20th October 2019. (1,1)

1940 **Satin Beauty** *Deileptenia ribeata* – Uncommon and thinly distributed resident, the larvae feed on Scots Pine, Norway Spruce, Larch, Douglas Fir. Recorded from the pond area in 2019, one on 7th July, 2 on 14th July and 3 on 26th July. Recorded from the river meadows in 2020, 2 on 29th June and 1 on 20th July. This is the only location where MoPH has recorded the species. Known from 5 x 1km squares on Living Record 2000-2019. (5,9)



1789 **Scallop Shell** *Rheumaptera undulata* – Uncommon and thinly distributed resident, the larvae feed on Sallow, Aspen, Bilberry. Singles from the pond area on 14th July 2019, river meadows on 20th July 2020 and Bracken Field on 23rd July and 10th August 2020. (4,4)

Fig. 39 Scallop Shell

1920 **Scalloped Hazel** *Odontopera bidentata* – Common and fairly widespread resident, the larvae feed on woody plants. Singles from the garden on 29th and 31st May 2019 and 21st May 2020. (3,3)

1645 **Scalloped Hook-tip** *Falcaria lacertinaria* – Fairly common but restricted resident, the larvae feed on Oak. 10 recorded on 5 occasions in both years. (5,10)

1921 **Scalloped Oak** *Crocallis elinguaris* – Very common and widespread resident, the larvae feed on broadleaved woody plants, Hawthorn, Blackthorn etc. 16 recorded on 9 occasions in both years, with a maximum of 5 from the pond area on 25th July 2020. (6,16)

2400 **Scarce Bordered Straw** *Helicoverpa armigera* – Scarce and local migrant / wanderer, the larvae feed on Scarlet Geranium and Yellow Rattle amongst others. One on 30th August 2019 from the pond area and one from the walled garden on 4th October 2019. (2,2)

2047 **Scarce Footman** *Eilema complana* – Fairly common but restricted resident, the larvae feed on lichens. 32 recorded on 11 occasions in both years. Maximum 12 from Bracken Field on 1st August 2019. (11,32)

2277 **Scarce Merveille du Jour** *Moma alpium* (Red Data Book 3) – Rare and restricted resident, the larvae feed on Oak species. One by the pond area on 7th July 2019 the only record. This may have been the sole Dorset record in that year and is the only record for the MoPH project. Recorded in 2 other 1km squares in Living Record 2000-2019. (1,1)



Fig. 40 Scarce Merveille du Jour

2421 **Scarce Silver-lines** *Bena bicolorana* – Scarce and thinly distributed resident, the larvae feed on Pedunculate Oak. One from the garden on 27th June 2019 is the only record for the MoPH project, though recorded in 10x 1km squares on Living Record 2000-2019. (1,1)

2068 **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. Recorded 3 times from the river meadows in 2020, one on 19th June, 2 on 22nd June and 2 on 25th June. (3,5)

1904 **Scorched Wing** *Plagodis dolabraria* – Fairly common and widespread resident, the larvae feed on Oaks and Birches. 9 recorded on 6 occasions, from the garden in 2019 and garden and river meadows in 2020. (6,9)

2126 **Setaceous Hebrew Character** *Xestia c-nigrum* – Abundant and widespread resident, the larvae feed on herbaceous plants, Nettles, Willowherbs etc. 115 recorded on 26 occasions in both years with a maximum count of 21 from the river meadows on 26th August 2020. (26,115)

1890 **Sharp-angled Peacock** *Macaria alternata* – Common and widespread resident, the larvae feed on Sallow, Willows, Sea Buckthorn, Alder. 19 recorded on 10 occasions in both years. Maximum count 4 from Bracken Field on 1st August 2019. (10,19)

2205 **Shoulder-striped Wainscot** *Mythimna comma* – Fairly common and widespread resident, the larvae feed on grasses. 57 trapped on 10 occasions with a maximum of 15 from the river meadows on 22nd June 2020. (10,57)

2092 **Shuttle-shaped Dart** *Agrotis puta* – Very common and widespread resident, the larvae feed on Docks, Dandelion and other herbaceous plants. Recorded 15 times, and in both years totalling 22 individuals, maximum 5 from Bracken Field on 10th August 2020. (15,22)

2441 **Silver Y** *Autographa gamma* – Abundant and widespread migrant / wanderer, the larvae feed on many plants. Recorded 10 times totalling 21 individuals. Maximum 6 from the garden on 2nd August 2019. (10,21)

1727 **Silver-ground Carpet** *Xanthorhoe montanata* – Abundant and widespread resident, the larvae feed on herbaceous plants. One from the garden on 15th June 2019 and 4 from there on 21st May 2020, trapped by Joe Parker are, perhaps surprisingly, the only records. (2,5)

1708 **Single-dotted Wave** *Idaea dimidiata* – Very common and fairly widespread resident, the larvae feed on Cow Parsley, Burnet Saxifrage, Hedge Bedstraw. 33 recorded on 17 occasions in both years. Maximum 6 from the river meadows on 25th June 2020. (17,33)

2133 **Six-striped Rustic** *Xestia sexstrigata* – Very common and fairly widespread resident, the larvae feed on Hedge Bedstraw, Ribwort Plantain, Bramble, Bluebell. 59 recorded on 8 occasions in both years with a maximum count of 27 from the river meadows on 26th August 2020. (8,59)

2335 **Slender Brindle** *Apamea scolopacina* – Uncommon and thinly distributed resident, the larvae feed on woodland grasses. 3 from the garden on 20th July 2019, 1 from the pond area on 26th July 2019 and 2 from Bracken Field on 23rd July 2020. (3,6)

2305 **Small Angle Shades** *Euplexia lucipara* – Fairly common and widespread resident, the larvae feed on herbaceous and woody plants. Singles from the garden on 2nd June 2019 and the river meadows on 15th, 22nd and 25th June 2020. (4,4)

1690 **Small Blood-vein** *Scopula imitaria* – Fairly common and thinly distributed or restricted resident, the larvae feed on Garden Privet and Honeysuckle. One from the pond area on 7th July 2019 the sole record. (1,1)



2345 **Small Dotted Buff** *Photedes minima* – Common and fairly widespread resident, the larvae feed on Tufted Hair-grass. 2 from the river meadows on 8th June 2020, 3 from there on 25th June 2020 and 1 from Bracken Field on 23rd July 2020. (3,6)

Fig. 41 Small Dotted Buff

1992 **Small Elephant Hawk-moth** *Deilephila porcellus* – Fairly common and widespread resident, the larvae feed on Bedstraws. One from the garden on 5th July 2019 the only record. (1,1)

2492 **Small Fan-foot** *Herminia grisealis* – Fairly common and fairly widespread resident, the larvae feed on Pedunculate Oak, Birches, Hazel, Hawthorn and Sallow. One from the river meadows on 25th June and one from Bracken Field on 23rd July 2020. (2,2)

1702 **Small Fan-footed Wave** *Idaea biselata* – Very common and widespread resident, the larvae feed on various low-growing plants. 32 recorded on 15 occasions in both years, maximum 8 from the pond area on 26th July 2019. (15,32)

1759 **Small Phoenix** *Ecliptopera silaceata* – Common and widespread resident, the larvae feed on Willowherbs. 19 recorded on 12 occasions in both years. Maximum 5 from the pond area on 26th July 2019. (12,19)

2182 **Small Quaker** *Orthosia cruda* – Common and widespread resident, the larvae feed on Oaks, Downy Birch, Sallow, Hazel. One in the garden on 21st April 2019 the only record. (1,1)

2379 **Small Rufous** *Coenobia rufa* – Uncommon and local resident, the larvae feed on Jointed Rush, Sharp-flowered Rush and Soft Rush. Recorded 4 times totalling 33 individuals from the river meadows and Bracken Field, and all in 2020. Maximum count 19 from the river meadows on 7th August 2020. (4,33)

1882 **Small Seraphim** *Pteraphrapteryx sexalata* – Fairly common and thinly distributed resident, the larvae feed on Sallow. 3 from the river meadows on 25th June 2020 the only record. (1,3)

2123 **Small Square-spot** *Diarsia rubi* – Abundant and widespread resident, the larvae feed on Dandelion, Foxglove and Docks. Recorded 17 times, totalling 36 individuals. Maximum 8 on 8th June 2020 from the river meadows. (17,36)

2350 **Small Wainscot** *Chortodes pygmina* – Uncommon and thinly distributed or restricted resident, the larvae feed on sedges and grasses. Singles from the river meadows on 30th July and 31st August 2020 the only records. (2,2)

1781 **Small Waved Umber** *Horisme vitalbata* – Common, the larvae feed on Traveller's Joy. A single record, one from the garden on 21st April 2019. (1,1)

1876 **Small Yellow Wave** *Hydrelia flammeolaria* – Fairly common and widespread resident, the larvae feed on Field Maple, Sycamore and Alder. 2 from the garden on 5th July 2019 and singles from the river meadows on 25th June and 16th July 2020. (3,4)

2198 **Smoky Wainscot** *Mythimna impura* – Abundant and widespread resident, the larvae feed on grasses. 178 recorded on 17 occasions in both years with a maximum of 48 from the river meadows on 25th June 2020. (17,178)

2477 **Snout** *Hypena proboscidalis* – Abundant and widespread resident, the larvae feed on Common Nettle. 31 recorded on 19 occasions in both years, maximum 4 from the pond area on 18th August 2019. (19,31)

2264a **Southern Chestnut** *Agrochola haematidea* (Red Data Book 2) – Very scarce and restricted recent colonist. Found to have extensively colonised heaths across the south side of the Harbour and located in all sites surveyed during late autumn. Known to wander widely. One from the pond area on 20th October 2019 was well away from the normal heathland habitat. (1,1)

2450 **Spectacle** *Abrostola tripartita* – Very common and widespread resident, the larvae feed on Common Nettle. 24 recorded on 16 occasions in both years, maximum 5 from Bracken Field on 10th August 2020. (16,24)

1205 ***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. Recorded twice from Bracken Field on 10th August and 7th September 2020. The latter, a female, was confirmed by Dr Phil Sterling. (2,2)

1769 **Spruce Carpet** *Thera britannica* – Fairly common and widespread resident, the larvae feed on Norway Spruce, Sitka Spruce, Western Hemlock. 10 recorded on 6 occasions in both years, maximum 4 from Bracken Field on 14th October 2020. (6,10)

2134 **Square-spot Rustic** *Xestia xanthographa* – Abundant and widespread resident, the larvae feed on grasses and small herbaceous plants. 268 recorded on 16 occasions in both years. Maximum 45 from the walled garden on 18th September 2019. (16,268)

1507 ***Stenoptilia zophadactylus*** (Dowdy Plume) – Scarce and thinly distributed or restricted resident, the larvae feed on Centaury, Yellow-wort and Gentian species. One on 18th August 2019 from the pond area, confirmed by Dr Phil Sterling, the sole record. Not recorded at any other site by the MoPH project. Recorded from 5x 1km squares on Living Record 2000-2019. (1,1)

50 ***Stigmella aurella*** – Very common and widespread resident, the larvae feed on Bramble. Identified from leaf-mines on Bramble on 6th November 2020. (1, leaf-mine)

111 ***Stigmella microtheriella*** – Scarce and thinly distributed resident, identified from leaf-mine on Hazel, 6th November 2020. (1, leaf-mine)

77 ***Stigmella tityrella*** – Scarce and thinly distributed resident, the larvae feed on Beech. Recorded as leaf-mine on Beech, November 2020. (1, leaf-mine)



Fig. 42 Leaf-mine on Beech

2474 **Straw Dot** *Rivula sericealis* – Very common and fairly widespread resident, the larvae feed on grasses. Recorded 21 times, totalling 80 individuals, in both years. Maximum 14 from the river meadows on 7th August 2020. (21,80)

2303 **Straw Underwing** *Thalpophila matura* – Fairly common and thinly distributed or restricted resident, the larvae feed on grasses. One from the garden on 23rd August 2019 the only record. (1,1)

1747 **Streamer** *Anticlea derivata* – Uncommon and fairly widespread resident, the larvae feed on Dog-rose and other wild roses. Recorded once, 2 from the garden on 21st April 2019. Otherwise only recorded by the MoPH project at Creech Heath. (1,2)

2196 **Striped Wainscot** *Mythimna pudorina* – Scarce and restricted resident, the larvae feed on broadleaved grasses. Recorded twice on the river meadows, singles on 22nd and 25th June 2020. (2,2)

2007 **Swallow Prominent** *Pheosia tremula* – Common and fairly widespread resident, the larvae feed on Aspen, Poplars, Sallow and Willows. 18 recorded on 13 occasions in both years. Maximum 3 on 2nd August 2019 from the garden. (13,18)

1922 **Swallow-tailed Moth** *Ourapteryx sambucaria* – Common and widespread resident, the larvae feed on broadleaved woody plants, Hawthorn, Blackthorn etc. Singles recorded from the river meadows on 22nd June 2020 and Bracken Field on 21st September 2020, the latter a rare second brood individual. (2,2)

1414 **Synaphe punctalis** – Fairly common but thinly distributed and restricted resident, the larvae feed on mosses in dry, sandy, shingle or chalky areas. A total of 1,427 counted from 21 trapping events over both years. High counts of 186 from Bracken Field on 1st August 2019 and 361 from there on 23rd July 2020. (21, 1,427)

844 **Syncopacma larseniella** – Rare and very local resident, the larvae feed on Bird's-foot Trefoil. One on 7th July 2019, from the pond area. (1,1)

656 **Tachystola acroxantha** – Uncommon and thinly distributed resident, the larvae feed on leaf litter. Singles recorded on 7 occasions in both years. (7,7)

1893 **Tawny-barred Angle** *Macaria liturata* – Uncommon and fairly widespread resident, the larvae feed on Scots and Corsican Pines, Norway and Sitka Spruce. 49 recorded on 21 occasions. Maximum 12 from Bracken Field on 10th August 2020. (21,49)

1838 **Tawny Speckled Pug** *Eupithecia icterata* – Uncommon and fairly widespread resident, the larvae feed on Yarrow and Sneezewort. One from the pond area on 26th July 2019 is the only one recorded by the MoPH project. Recorded in only 1 other x 1km square on Living Record 2000-2019. (1,1)

774 **Teleiodes luculella** – Common and thinly distributed resident, the larvae feed on Oak. One from the river meadows on 29th June 2020 the only record. (1,1)

776 **Teleiopsis diffinis** – Scarce and thinly distributed resident, the larvae feed on Sheep's sorrel. Recorded on 7 occasions, totalling 11 individuals, all from Bracken Field but from both years. Maximum 3 on 7th September 2020. (7,11)

246 **Tinea semifulvella** – Uncommon and thinly distributed or restricted resident, the larvae feed on animal matter and bird's nest detritus. One from the pond area on 14th July 2019. Recorded elsewhere by the MoPH project only at Ballard and from 4 x 1km squares on Living Record 2000-2019. (1,1)

247 **Tinea trinotella** – Uncommon and thinly distributed or restricted resident, the larvae feed on animal matter and bird's nest detritus. Singles from the garden on 2nd August 2019 and the river meadows on 7th August 2020. (2,2)

123 **Tischeria ekebladella** – Scarce and thinly distributed resident, the larvae feed on Oak and Sweet Chestnut. 2 from the pond area on 7th July 2019 the only record. Not recorded elsewhere by the MoPH project but known from 15 x 1km squares on Living Record 2000-2019. (1,2)

1711 **Treble Brown Spot** *Idaea trigeminata* – Fairly common but restricted resident, the larvae feed on Ivy and Knotgrass. 18 recorded on 8 occasions, in both years, with maximum counts of 4, from the garden on 27th June 2019 and pond area on 7th July 2019. (8,18)

2380 **Treble Lines** *Charanyca trigammica* – Common and fairly widespread resident, the larvae feed on herbaceous plants. 129 recorded on 14 occasions in both years. Maximum count 44 from the garden on 31st May 2019. (14,129)

1867 **Treble-bar** *Aplocera plagiata* – Scarce and local resident, the larvae feed on species of St John's-wort. One from the river meadows on 25th June 2020 the sole record. (1,1)

2118 **True Lover's Knot** *Lycophotia porphyrea* – Fairly common but restricted resident, the larvae feed on Heather and Bell Heather. 39 recorded on 10 occasions mostly from the river meadows and Bracken Field. (10,39)

2087 **Turnip Moth** *Agrotis segetum* – Common and widespread resident, the larvae feed on herbaceous plant roots, Turnip, Carrot, Beet etc. Singles from the garden on 5th July 2019, walled garden on 20th October 2019 and Bracken Field on 8th October 2020. (3,3)

2189 **Twin-spotted Quaker** *Orthosia munda* – Uncommon and fairly widespread resident, the larvae feed on broadleaved trees, Oak, Birches, Sallow etc. 3 trapped in the garden on 21st March 2020 by Joe Parker. Perhaps surprisingly, not recorded elsewhere by the MoPH project. (1,3)

1395 **Udea ferrugalis** (Rusty-dot Pearl) – Very common and widespread migrant, the larvae feed on herbaceous plants. 7 recorded on 6 occasions in both years. (6,7)



1392 **Udea olivalis** – Common and widespread resident, the larvae feed on herbaceous plants. Singles from the garden on 23rd August and 4th September 2019 and from the river meadows on 8th June 2020. (3,3)

Fig. 43 *Udea olivalis* ©Chris Fox

1390 **Udea prunalis** – Fairly common and widely distributed resident, the larvae feed on herbaceous plants. Singles from the garden on 15th August 2019 and the river meadows on 30th July 2020. (2,2)

2381 **Uncertain** *Hoplodrina alsines* – Very common and widespread resident, the larvae feed on herbaceous plants. Recorded as an aggregate with Rustic (*H. blanda*), except for one at Carey Estate on 25th June 2020, confirmed as this species by Tony Davis. There are records ascribed to this species from 16 x 1km squares on Living Record 2000-2019.

1716 **Vestal** *Rhodometra sacraria* – Scarce and local migrant / wanderer, the larvae feed on Knotgrass. One from Bracken Field on 21st September 2020 the only record. (1,1)

2384 **Vine's Rustic** *Hoplodrina ambigua* – Uncommon and local resident, the larvae feed on herbaceous plants. Recorded 22 times, totalling 106 individuals. Maximum count 24 from the pond area on 18th August 2019. (22,106)

1858 **V-Pug** *Chloroclystis v-ata* – Fairly common and widespread resident, the larvae feed on many plants. 11 recorded on 7 occasions in both years. (7,11)

2060 **White Ermine** *Spilosoma lubricipeda* – Very common and widespread resident, the larvae feed on herbaceous plants, nettles and docks. 21 recorded on 10 occasions, maximum 4 from the garden on 8th June 2019. (10,21)

2081 **White-line Dart** *Euxoa tritici* – Uncommon and local resident, the larvae feed on herbaceous plants. One from Bracken Field on 10th August 2020 the only record. (1,1)

2194 **White-point** *Mythimna albipuncta* – Fairly common and widely distributed resident and migrant, the larvae feed on grasses. 20 recorded on 11 occasions in both years with a maximum of 6 from Bracken Field on 10th August 2020. (11,20)

1835 **White-spotted Pug** *Eupithecia tripunctaria* – Uncommon and thinly distributed or restricted resident, the larvae feed on Elder and Wild Angelica. Singles from the pond area on 26th July 2019 and Bracken Field on 23rd July 2020. These are the only records for the MoPH project. Recorded in 2 x 1km squares on Living Record 2000-2019. (2,2)

1937 **Willow Beauty** *Peribatodes rhomboidaria* – Abundant and widespread resident, the larvae feed on various trees. 50 recorded on 23 occasions in both years. Maximum 6 from the garden on 21st June 2019. (23,50)

1883 **Yellow-barred Brindle** *Acasis viretata* – Uncommon and thinly distributed resident, the larvae feed on Holly, Ivy, Privet, Dogwood and Hawthorn. One from the pond area on 15th August 2019 the only record. (1,1)

2264 **Yellow-line Quaker** *Agrochola macilenta* – Common and fairly widespread resident, the larvae feed on Oaks, Poplars, Beech, Sallow, Hawthorn and other plants. Recorded 4 times totalling 6 individuals. (4,6)

2030 **Yellow-tail** *Euproctis similis* – Very common and widespread resident, the larvae feed on broadleaved trees and shrubs. Trapped 14 times, totalling 38 individuals, from both years. Maximum 7 from Bracken Field on 1st August 2019. (14,38)

424 **Yponomeuta evonymella** (Bird Cherry Ermine) – Uncommon and thinly distributed resident, the larvae feed on Bird Cherry. One from the pond area on 26th July 2019 the only record. (1,1)

426 / 425 *Yponomeuta malinellus / padella* (Apple / Orchard Ermine) – Scarce and thinly distributed resident, the larvae feed on Apple (*malinellus*) and Blackthorn, Hawthorn and Cherry (*padella*). The 2 species are aggregated due to the extreme difficulty in separating their identities. One from Bracken Field on 10th August 2020 the sole record. (1,1)

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Fig. 44 Abby studies a moth by the pond