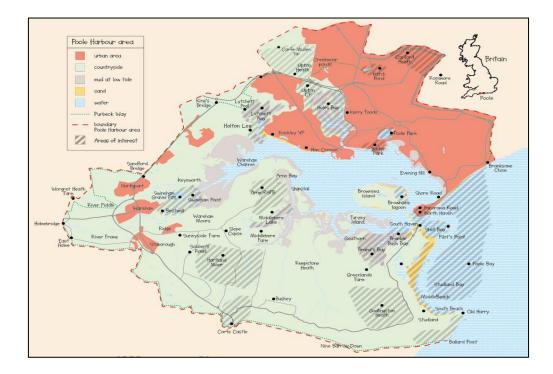


Moths of Poole Harbour is a project of Birds of Poole Harbour

MOTHS ON GOATHORN 2017-2019

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



Birds of Poole Harbour recording area

The MoPH project has been engaged for two summers looking at species around the Harbour and a number of other heathland or peripheral heathland sites have been included for recording. In the early spring, these included Hartland Moor, Slepe Heath, Godlingstone Heath, Stoborough Heath, Creech Heath and Grange Heath. During the summer months trapping was also undertaken on Slepe, Hartland, Canford Heath, Holton Heath and at Holton Lee. Outside of the early spring period however Goathorn has been the most consistently visited site.

Moth trapping was undertaken on a total of 27 nights. On nearly all occasions the effort consisted of 4 traps; 3 x Mercury Vapour (MV) 'Robinson' traps and a single Ultra-Violet (UV) Actinic 'Heath' trap. The area trapped within the site was consistently the same, covering from the access gate on the road at SZ011853 to the slope below the ridge. It is likely that additional species would be recorded if trapping was undertaken across the ridge and towards the harbour edge. 7 visits were made between the end of August and 12th October in 2017, 17 visits in 2018 between 10th May and 18th October and a further 3 visits in May 2019.

Due to other commitments for the Project, no early spring trapping (late March and April) was carried out and there is no doubt that a small, but possibly significant, number of other species would be recorded if this was undertaken.

A total of 249 species, including aggregates, have been recorded. 78 of these are classified as micromoths and 171 macro moths. In a number of instances, micro-moth species identification has been verified by Dr Phil Sterling at Butterfly Conservation.



Fig.1 Habitat at Goathorn

Goathorn sits within the Rempstone Estate which has a high level of security meaning that although there was ample suitable habitat, we were restricted on where we could access.

The site shows a rich assemblage of mainly heathland species, though there is clear evidence that moths are typically drawn from a number of nearby habitats including woodland, gardens and the Harbour edge. Significantly, as with most sites, retaining as much variety of micro-habitat as possible

will be key to invertebrate conservation management. One significant macro species, Rosy Marbled, likes bracken in warm gullies and whilst there has been work to control bracken across the site, if this is undertaken on a rotational basis, or as long as areas are missed out, the requirements of this moth should remain catered for.

A number of notable species have been found; most can be regarded as true 'heathland species'. These are summarised in the table below. In some instances, such as that for Horse Chestnut *Pachycnemia hippocastanaria*, the designation reflects a scarce national distribution when the moth may be locally widespread and abundant.

For the purposes of analysis, it has been decided to concentrate on those species recorded which have occurred on only 3 or fewer other sites sampled by MoPH, in an attempt to give a context to relative abundance and distribution in the Harbour.

A full species list and summary of all recording effort appears at the end of this report.

Notable species recorded on Goathorn

A total of 18 species are considered notable and are summarised in Table 1 below. The designations are Nationally Scarce A (Na, recorded in 16-30 10km squares since 1980), Nationally Scarce B (Nb, recorded from 31-100 10km squares since 1980) and Red Data Book (RDB, recorded in 15 or fewer 10km squares).

In addition, 14 further species are included in Section 41 of the 2006 Natural Environment and Rural Communities Act. These species, designated to be "of principal importance for the purpose of conserving biodiversity" are those that are most threatened, in greatest decline, or where the UK holds a significant proportion of the world's total population. These are also included in the table below labelled 'S41' for completeness.

Species	Status	Times Recorded	Number Recorded
Autumnal Rustic	S41	1	1
Buff Ermine	S41	2	5
Capperia britanniodactylus* (Wood Sage Plume)	Nb	1	1
Cream-bordered Green Pea	Nb	2	3
Cydia conicolana*	Nb	1	1
Donacaula mucronella	Nb	1	1
Dotted Border Wave	Nb	3	14
Dusky Brocade	S41	1	2
Feathered Brindle	Nb	1	1
Feathered Gothic	S41	3	6
Festoon	Nb	1	1
Flounced Chestnut	S41	2	3

Table 1. Notable species on Goathorn 2017-2019

Four-spotted Footman	Na	4	5
Horse Chestnut	Nb	11	32
Kent Black Arches	Nb	2	12
Knot Grass	S41	1	1
Large Wainscot	S41	2	8
Mocha	Nb	1	1
Mouse Moth	S41	1	1
Neglected Rustic	S41	4	6
Pempelia genistella	Nb	3	12
Purple-bordered Gold	Nb	1	2
Pyrausta cingulata (Silver-barred Sable)	Nb	1	1
Ringed Carpet	Na	1	1
Rosy Marbled	Nb	2	8
Rosy Wave	Nb	2	2
Rustic agg. (Recorded as Rustic / Uncertain agg).	S41	3	6
Sallow	S41	1	1
September Thorn	S41	3	6
Southern Chestnut	RDB	4	19
White Ermine	S41	2	3
White-line Dart	S41	2	2

* Verified by Dr Phil Sterling.

Table 2. Species on Goathorn recorded in 5 or fewer 1km grid squares in Living Record (LR) 2000-2019

Species	Number of 1km Squares on LR	Times Recorded	Number Recorded	Year Recorded
Beautiful Snout	5	1	1	2018
Campion	4	1	1	2019
Capperia britanniodactylus*	4	1	1	2018
Cochylimorpha straminea	5	1	1	2018
Cochylis nana	4	1	2	2018
Cydia conicolana*	2	1	1	2018
Cydia fagiglandana*	5	1	1	2018
Donacaula mucronella	2	1	1	2018
Feathered Brindle	1	1	1	2017
Flounced Chestnut	4	2	3	2018
Little Emerald	2	1	1	2018
Lunar-spotted Pinion	3	1	1	2018
Matilella fusca	4	1	1	2018
Mocha	4	1	1	2018
Pyrausta cingulata	1	1	1	2018
Ringed Carpet	5	1	1	2019

Rosy Marbled	5	2	8	2018
Scoparia basistrigalis	5	2	2	2017
September Thorn	5	3	6	2017 & 2018
White-speck	3	1	1	2017

*Verified by Dr Phil Sterling.

Table 3. Species for which Goathorn was the only site (2017-2019)

Species	Times Recorded	Number Recorded	Year Recorded
Acrocercops brongniardella	1	1	2018
Capperia britanniodactylus*	1	1	2018
Cydia conicolana*	1	1	2018
Feathered Brindle	1	1	2017
Little Emerald	1	1	2018
Pyrausta cingulata	1	1	2018

Species recorded by the Moths of Poole Harbour (MoPH) project on 3 or fewer sites 2017-2019:

The following pages refer to species that were recorded on 3 or fewer sites trapped by the MoPH project in an attempt to give context for the local importance of the site. Each species has its individual 'Bradley & Fletcher' (BF) moth number. Micro-moths are recorded by Latin name with common name in brackets (where given). Macro moths are recorded by common name with Latin name following. Distribution, local status and larval food plant is given where this knowledge exists. Numbers in brackets following each account represent frequency of times caught, followed by number of individuals caught in total. The information regarding occurrence in Dorset is taken from the Dorset Moths website.

313 *Acrocerops brongniardella* – A single record 28th June 2018. The species is a rare and local resident in Dorset with the larvae feeding on Oak and Holm Oak. The usual habitat is considered open woodland, parkland and gardens. This is the only MoPH record. Recorded in 11 x 1km squares in Living Record 2000-2019. (1,1)

945 *Aethes cnicana* – 3 trapped on 7th June 2018. An uncommon and thinly distributed resident. Larvae feed on Thistles. Also recorded by MoPH on Arne Moors and Hartland Moor. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,3)

705 Agonopterix umbellana – One on 1^{st} May 2019. A scarce and restricted resident though with a strong Poole Harbour and eastern bias in Dorset. Feeds on Gorse and Greenweed. Also recorded by MoPH at Canford and Grange Heaths. Recorded in 6 x 1km squares in Living Record 2000-2019. (1,1)



Anomalous *Stilbia anomola* – One on 12th September 2018. A scarce and restricted resident. Grasses, especially Wavy Hair-grass. On Dorset Heaths it is assumed Bristle Bent (*Agrostis curtisii*) is important due to the comparative scarcity of Wavy Hair-grass. Also recorded by MoPH at Slepe Heath. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,1)

Fig.2 Anomalous

410 *Argyresthia brockeella* – One on 28th June 2018. In Dorset this is an uncommon and thinly distributed and restricted resident. Foodplants are Birch and Alder. The species is recorded regularly on Brownsea Island and also recorded by MoPH at Holton Lee and Talbot Heath. Recorded in 16 x 1km squares in Living Record 2000-2019. (1,1)

974 *Argyrotaenia ljungiana* – One on 26th July 2018, the record was verified by Dr Phil Sterling. An uncommon and thinly distributed and restricted resident mainly from the Poole basin and east of the county. Foodplants are Bog myrtle and Heather. Also recorded by MoPH at Slepe Heath and Wareham Forest. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,1)

641 *Batia lambdella* – One on 7th June 2018. An uncommon and thinly distributed resident in Dorset, Poole Harbour being very much the county stronghold for the species. Feeds under the dead bark of Gorse. Also recorded by MoPH at Slepe Heath. Recorded in 12 x 1km squares in Living Record 2000-2019. (1,1)

2476 Beautiful Snout *Hypena crassalis* – One on 28th June 2018. A rare and very local resident in Dorset. Larvae feed on Bilberry and possibly Heather. Also recorded by MoPH at Carey Estate and Holton Lee. Recorded in 5 x 1km squares in Living Record 2000-2019. (1,1)

1954 Bordered White *Bupalus piniaria* – 4 trapped on 7th June 2018. An uncommon and restricted resident with most records from the Poole basin and East Dorset. The species is fairly frequent on Brownsea Island. Larval foodplants are Scots and Corsican Pine. Also recorded by MoPH at Talbot Heath. Recorded in 17 x 1km squares in Living Record 2000-2019. (1,4)

2166 Campion *Sideridis rivularis* – One on 22^{nd} May 2019. Uncommon and thinly distributed or restricted resident. Larvae feed on Red, White and Sea Campion. Also recorded by MoPH at Ballard Down. Recorded in 4 x 1km squares in Living Record 2000-2019. (1,1)

1494 *Capperia britanniodactylus* (Wood Sage Plume) Nationally Scarce B – One trapped on 28th June 2018 was confirmed by Dr Phil Sterling. A scarce and thinly distributed and restricted resident. Larval foodplant is Wood Sage. This is the sole MoPH record. Recorded in 4 x 1km Squares in Living Record 2000-2019. (1,1)

2327 Clouded Brindle *Apamea epomidion* – One on 5th July 2018. A scarce and thinly distributed or restricted resident in Dorset. Feed on Grasses in woodland. Also recorded by MoPH at Ballard Down and Holton Lee. Recorded in 6 x 1km squares in Living Record 2000-2019. (1,1)



Fig.3 Clouded Brindle



936 *Cochylimorpha straminea* – One on 7th June 2018. Uncommon and thinly distributed or restricted resident, though with apparent past records on Goathorn, shown on the Dorset Moths distribution map. Feeds on Knapweed. Also recorded by MoPH at Ballard Down and Holton Lee. Recorded in 5 x 1km squares in Living Record 2000-2019. (1,1)

Fig.4 Cochylimorpha straminea

968 *Cochylis nana* – 2 trapped on 7th June 2018. A scarce and thinly distributed and restricted resident mainly from Poole basin and the east of the county. Larvae feed on Downy and Silver Birch. Also recorded by MoPH at Holton Lee. Recorded in 4 x 1km squares in Living Record 2000-2019. (1,2)

1433 *Cryptoblabes bistriga* – One on 7th June 2018. Uncommon and thinly distributed or restricted resident. Larvae feed on Oak, Birch and Alder. Also recorded by MoPH at Holton Lee and Hamworthy. Recorded in 11 x 1km squares in Living Record 2000-2019. (1,1)

1269 *Cydia conicolana* Nationally Scarce B – One trapped on 7^{th} June 2018. The record confirmed by Dr Phil Sterling. A Rare and very local resident in Dorset. Larvae feed on Scots and Corsican Pine. Recorded in 2 x 1km squares in Living Record 2000-2019. (1,1)

1259 *Cydia fagiglandana* – One trapped on 7th of June 2018. The record confirmed by Dr Phil Sterling. An uncommon and thinly distributed resident. Larval foodplant is Beech. Also recorded by MoPH at Carey Estate. Recorded in 5 x 1km squares in Living Record 2000-2019. (1,1)

2027 Dark Tussock *Dicallomera fascelina* – One on 5th July 2018. A scarce and restricted resident, mainly in the Poole basin and east Dorset. Larvae feed on heathland plants including Heather, Broom, Hawthorn, Bramble and Creeping Willow. Also recorded by MoPH at Are Moors and Wareham Forest. Recorded in 14 x 1km squares in Living Record 2000-2019. (1,1)

1454 *Dioryctria abietella* – One on 5th September 2018. Uncommon and thinly distributed or restricted resident, though well-known on Brownsea Island. Foodplant is Scots Pine. Also recorded by MoPH on Arne Moors and Slepe Heath. Recorded in 11 x 1km squares in Living Record 2000-2019. (1,1)

1330 *Donacaula mucronella* – Nationally Scarce B. One on 5th July 2018. A rare and very local resident in Dorset, but most commonly recorded in the Poole basin. Larvae feed on reeds and sedges. Also recorded by MoPH on Arne Moors. Recorded in 2 x 1km squares in Living Record 2000-2019. (1,1)

648 *Endrosis sarcitrella* (White-shouldered House-moth) – One on 22nd May 2019. An uncommon and thinly distributed resident in Dorset. Also recorded by MoPH on Arne Moors and Ballard Down. Recorded in 15 x 1km squares in Living Record 2000-2019. (1,1)

1133 *Epinotia bilunana* – One trapped on 28th June 2018. A common and thinly distributed or restricted resident. Larval foodplant is Birch. Recorded by MoPH at Ballard Down and Ham Common. Recorded in 14 x 1km squares in Living Record 2000-2019. (1,1)

1134 *Epinotia ramella* – Singles trapped on 31st August and 7th September 2017. An uncommon and thinly distributed resident in Dorset. Larvae feed on Birch and Sallow. Recorded by MoPH at Holton Lee and on Round Island. Recorded in 12 x 1km squares in Living Record 2000-2019. (2,2)

1340 *Eudonia truncicolella* – One on 2nd August 2018, one on 23rd August 2018 and 3 on 5th September 2018. Uncommon and thinly distributed or restricted resident, though well-known from Brownsea Island. Also recorded by MoPH at Holton Lee and Round Island. Recorded in 9 x 1km squares in Living Record 2000-2019. (3,5)

2230 Feathered Brindle *Aporophyla australis pascuea* Nationally Scarce B – A single record on 28th September 2017. This is an uncommon and mainly coastal resident in Dorset. Foodplants include Sea Campion and coastal grasses. Recorded in 1 other 1km square on Living Record 2000-2019. (1,1)



Fig.5 Feathered Brindle (in tube)

2377 Fen Wainscot *Arenostola phragmitidis* – One on 5th July 2018. An uncommon and restricted resident. Larvae feed on Common Reed. Also recorded by MoPH at Arne Moors and Holton Lee. Recorded in 12 x 1km squares in Living Record 2000-2019. (1,1)

2237 Grey Shoulder-knot Lithophane ornitopus lactipennis – One on 18^{th} October 2018. An uncommon and thinly distributed resident in Dorset. Larval foodplants are Oaks, possibly Blackthorn. This is the sole MoPH record. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,1)

2135 Heath Rustic *Xestia agathina agnathia* – Recorded on 6 occasions with a total of 15 individuals trapped. A scarce and thinly distributed or restricted resident. Larvae feed on Heather. Also recorded by MoPH at Arne Moors, Corfe Castle and Holton Lee. Recorded in 21 x 1km squares in Living Record 2000-2019. (6,15)

1674 Little Emerald *Jodis lactearia* – One on 28th June 2018. Scarce and local resident in Dorset, though apparently known from Arne Woods. Foodplants include Downy Birch, Silver Birch, Hazel, Hawthorn,

Blackthorn. This is the sole MoPH record. Recorded in only 2 x 1km squares on Living Record 2000-2019. (1,1)

2319 Lunar-spotted Pinion *Cosmia pyralina* – One on 5th July 2018. An uncommon and restricted resident. Larvae feed on Blackthorn, Hawthorn, Apple, Elms. Also recorded by MoPH on Ballard Down. Recorded in 3 x 1km squares in Living Record 2000-2019. (1,1)

2014 Marbled Brown *Drymonia dodonaea* – Recorded twice, 6 individuals on 7th June 2018 and 1 on 14th June 2018. A fairly common and thinly distributed resident. Usually found in Oak woodland. Also recorded by MoPH at Holton Lee. Recorded in 13 x 1km squares in Living Record 2000-2019. (2.7)

1451 *Matilella fusca* (*Formerly Pyla fusca*) – One trapped on 26th July 2018. Scarce and thinly distributed and restricted resident. Foodplants are Heather and Bilberry. Also recorded by MoPH at Talbot Heath. Recorded in 4 x 1km squares in Living Record 2000-2019. (1,1)

1676 Mocha *Cyclophora annularia* Nationally Scarce B – One on 5^{th} September 2018. An uncommon and restricted resident. Larvae feed on Field Maple. Also recorded by MoPH at Holton Lee. Recorded in 4 x 1km squares in Living Record 2000-2019. (1,1)

2423 Oak Nycteoline *Nycteola revayana* – Singles recorded on 5th July 2018 and 18th October 2018. An uncommon and thinly distributed resident. Foodplant is Oaks. Also recorded by MoPH on Slepe Heath. Recorded in 10 x 1km squares in Living Record 2000-2019. (2,2)

1844 Ochreous Pug *Eupithecia indigata* – One trapped on 7th June 2018. Scarce and restricted resident in Dorset. Larvae feed on Scots and Lodgepole Pine and Larch. Also recorded by MoPH at Arne Moors and Holton Lee. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,1)

1079 *Piniphila bifasciana* – Singles trapped on 28th June and 26th July 2018. An uncommon and thinly distributed and restricted resident mainly recorded in Poole basin and the east of the county. Larval foodplant is Scots Pine. Also recorded by MoPH at Carey Estate and Sandford (gardens). Recorded in 11 x 1km squares in Living Record 2000-2019. (2,2)

1698 Purple-bordered Gold *Idaea muricata* Nationally Scarce B - 2 trapped on 5th July 2018. Very rare and very local resident in Dorset. Larval food-plant is Marsh Cinquefoil. Also recorded by MoPH on Arne Moors and at Holton Lee. Marsh Cinquefoil in Dorset is restricted to the Poole basin and one site in the west of the county. Recorded in 11 x 1km squares in Living Record 2000-2019. (1,2)



1367 *Pyrausta cingulata* Nationally Scarce B – One on 26th July 2018. Scarce and thinly distributed or restricted resident. Foodplant is Wild Thyme. This is the sole MoPH record, and the only one recorded on Living Record for the Poole Harbour area this century. (1,1)

Fig.6 Pyrausta cingulata in tube. Possibly the only Poole Harbour record this century.

2396 Rosy Marbled *Elaphria venustula* Nationally Scarce B – Recorded twice with 6 individuals on 7th June 2018 and 2 on 28th June 2018. A rare and very local resident / wanderer in Dorset. Foodplant is thought to be Tormentil. Also recorded by MoPH at Corfe Castle and Hartland Moor. This species appears to be breeding here and has a preference for warm gullies where Bracken grows. It may be that retention of Bracken, at least in part, on the site will be very beneficial. Recorded in 5 x 1km squares in Living Record 2000-2019. (2,8)



Fig.7 Rosy Marbled

1691 Rosy Wave *Scopula emutaria* Nationally Scarce B – Singles on 28th June 2018 and 5th July 2018. Scarce and very local resident, though the Poole basin and east Dorset is the county stronghold. Larval foodplant is unknown in the wild. The species occurs on the Wareham heaths as well as saltmarshes and mires in the Poole Basin. Also recorded by MoPH at Arne Moors and Holton Lee. Recorded in 13 x 1km squares in Living Record 2000-2019. (2,2)

2400 Scarce Bordered Straw *Helicoverpa armigera* – One on 18th October 2018. A scarce and local migrant/wanderer. Also recorded by MoPH at Carey Estate and Hamworthy (garden). Recorded in 8 x 1km squares in Living Record 2000-2019. (1,1)

Scrobipalpa costella – One on 7th June 2018. A fairly common and widespread resident. Larval foodplant is Woody Nightshade. Also recorded by MoPH at Corfe Castle. Recorded in 8 x 1km squares in Living Record 2000-2019. (1,1)

1915 September Thorn *Ennomos erosaria* – Recorded on 3 occasions with two each on 31st August 2017, 14th September 2017 and 26th July 2018. A scarce and thinly distributed or restricted resident, with most Dorset records from the Poole Basin and the east of the county. Foodplants are Oaks, birches, limes and beech. Also recorded by MoPH at Arne Moors and Ballard Down. Recorded in 5 x 1km squares in Living Record 2000-2019. (3,6)

1769 Spruce Carpet *Thera britannica* – Recorded twice with 5 on 4th October 2018 and 11 on 18th October 2018. A fairly common and widespread resident in Dorset. Foodplant is Norway and Sitka Spruce, Hemlock. Also recorded by MoPH at Ballard Down Carey Estate. Recorded in 13 x 1km squares in Living Record 2000-2019. (2,16)

438 *Swammerdamia pyrella* – A single record on 26th July 2018. Scarce and thinly distributed resident in Dorset feeding on Hawthorn, Apple and Pear. This species had presumably wandered from nearby habitat. Recorded by MoPH also at Ballard Down and Holton Lee. Recorded in 7 x 1km squares in Living Record 2000-2019. (1,1)

1867 Treble-bar Aplocera plagiata paginate – One trapped on 7th June 2018. A scarce and local resident in Dorset. Larvae feed on St John's Worts. Also recorded by MoPH at Carey Estate and Hamworthy. Recorded in 16 x 1km squares in Living Record 2000-2019. (1,1)

1716 Vestal *Rhodmetra sacraria* – 2 trapped on 18th October 2018. A scarce and local migrant/wanderer. Larval foodplant is Knotgrass but the species is considered a non-breeding migrant

in the UK. Also recorded by MoPH a Ballard Down and Hartland Moor. Recorded in 13 x 1km squares in Living Record 2000-2019. (1,2)

2203 White-speck *Mythimna unipuncta* – One recorded on 31st August 2017. A fairly common migrant, probable occasional resident. Larvae feed on Grasses. Also recorded by MoPH on Talbot Heath and Hamworthy. Recorded in 3 x 1km squares in Living Record 2000-2019. (1,1)

Other important species:

2418 Cream-bordered Green Pea *Earias clorana* Nationally Scarce B – 2 on 7th June 2018, 1 on 5th July 2018. Scarce and restricted resident in Dorset, though frequent in Poole Basin wetlands where Willow and Sallow occur. Also recorded by MoPH on Arne Moors, Holton Lee and Carey Estate and well-known on Brownsea Island. Recorded in 21 x 1km squares in Living Record 2000-2019. (2,3)

1701 Dotted Border Wave *Idaea sylvestraria* Nationally Scarce B – Scarce in Dorset. Well established on open Dorset Heaths and recorded 3 times on Goathorn: 2 on 7th June 2018, 11 on 5th July 2018 and one on 26th July 2018. Recorded by MoPH on Holton Heath, Slepe Heath, Canford Heath and Wareham Forest. The larval foodplant is apparently unknown in the wild. Recorded in 11 x 1km squares in Living Record 2000-2019. (3,14)



2265 Flounced Chestnut *Agrichola helvola* – A scarce and local resident in Dorset, the larvae feed on broadleaved trees. One on 27th September 2018 and 2 on 4th October 2018. Elsewhere recorded by the MoPH project only at Ballard and Slepe Heath. Recorded in 4 x 1km squares in Living Record 2000-2019. (2,3)

Fig. 8 Flounced Chestnut

1939 Ringed Carpet Cleora cinctaria cincture Nationally Scarce A – A scarce and restricted resident in Dorset. One on 1^{st} May 2019. This is an early season species. Also recorded by MoPH at Arne Moors, Creech Heath and Grange Heath. Larval foodplants are Birches, Bilberry, Bog Myrtle, Bell Heather and Cross-leaved Heath. Seems to be particularly associated with Bog Myrtle on Dorset Heaths. Recorded in 5 x 1km squares in Living Record 2000-2019. (1,1)



Fig.9 Ringed Carpet



2264a Southern Chestnut Agrochola haematidea RDB2 – In Dorset a very scarce and restricted recent colonist. Recorded on 4 occasions on Goathorn. Following the discovery of the first in September 2017, the species was trapped repeatedly at Goathorn indicating that a strong population now exists on the south side of the Harbour. It can be a common species in October (e.g. 12 trapped on 4th October 2018, when it was the second commonest species recorded). It has also now been found by

MoPH on 6 additional sites: Canford Heath, Hartland Moor, Holton Lee, Slepe Heath with apparently wandering single individuals at Arne Moors and Carey Estate. The species can be reasonably expected to occur on any heathland site in the Poole basin now. Larval foodplant is Bell Heather, though also found on Cross-leaved Heath. Recorded in 12 x 1km squares in Living Record 2000-2019. (4,19)

Fig.10 The first Southern Chestnut, photographed in a tube, September 2017

Table 4. Goathorn full species list showing times and number recorded

Species	Times	Number
Species	Recorded	Recorded
Acleris laterana / camariana	1	1
Acleris notana / ferrugana	1	4
Acrocerops brongniardella	1	1
Aethes cnicana	1	3
Agapeta hamana	3	3
Agonopterix umbellana	1	1
Agriphila inquinitella	3	3
Agriphila latistria	4	5
Agriphila straminella	5	14
Agriphila tristella	3	6
Angle Shades	9	18
Anomalous	1	1
Apotomis turbidana	1	3
Argyresthia brockeella	1	1
Argyresthia goedartella	1	1
Argyrotaenia ljungiana*	1	1
Aristotelia ericinella	5	44
Autumnal Rustic	1	1
Bactra lancealana	2	3
Batia lambdella	1	1
Beautiful Snout	1	1
Beautiful Yellow Underwing	5	41
Birch Mocha	1	2

1	1
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	27
	1
	10
	4
	10
	6
	4
	2
	1
	18
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Moths of Poole Harbour is a Project of Birds of Poole Harbour run by Chris Thain and Abby Gibbs

Dark Arches Dark Sword-grass Dark Tussock	3	12
	3	6
	1	1
Diamond-back	4	48
Dingy Footman	2	3
Dioryctria abietella	1	1
Ditula angustiorana	1	1
Donacaula mucronella	1	1
Dotted Border Wave	3	14
Double Square-spot	1	1
Double-striped Pug	12	22
Drinker	1	2
Dun-bar	1	1
Dusky Brocade	1	2
Dwarf Cream Wave	3	5
Elephant Hawk	3	4
Endotricha flammealis Endrosis sarcitrella	3	35
	1	1
Epinotia bilunana	1	1
Epinotia ramella	2	2
Epiphyas postvittana	3	4
Eucosma cana	1	1
Eudonia angustea	1	1
Eudonia lacustrata	2	2
Eudonia mercurella	5	6
Eudonia pallida	3	5
Eudonia truncicolella	3	5
Eupoecilia angustana	1	1
Featherd Brindle	1	1
Feathered Gothic	3	6
Fen Wainscot	1	1
Festoon	1	1
Flame Shoulder	8	9
Flounced Chestnut	2	3
Flounced Rustic	2	2
Four-dotted Footman	4	24
Four-spotted Footman	4	5
Fox Moth	2	2
Foxglove Pug	1	1
Frosted Orange	1	1
Gold Spot	4	7
Grass Emerald	2	8
Great Prominent	2	6
Grey Arches	1	2
Grey Pine Carpet	11	51
Grey Shoulder-knot	1	1
Heart and Dart	7	18
Heath Rustic	6	15
Hebrew Character	1	2
Hofmannophila pseudospretella	1	2

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Horse Chestnut	11	32
Hypsopygia costalis	1	1
Ingrailed Clay	1	1
Iron Prominent	1	1
Kent Black Arches	2	12
Knot Grass	1	1
Large Wainscot	2	8
Large Yellow Underwing	16	210
Least Yellow Underwing	10	210
Lesser Broad-bordered Yellow Underwing	4	5
Lesser Swallow Prominent	7	15
Lesser Yellow Underwing	4	12
Light Brocade	4	11
Light Emerald	2	8
Lime-speck Pug	1	1
Little Emerald	1	1
Lobster Moth	1	2
Lozotonioides formosana	1	1
Lunar Marbled Brown	1	1
Lunar Underwing	3	9
Lunar-spotted Pinion	1	1
Marbled Brown	2	7
Marbled White Spot	3	13
Matilella fusca	1	1
Merveille du Jour	1	3
Middle-barred Minor	2	2
Mirificama mulinella*	2	6
Mocha	1	1
Monochroa cytisella	3	44
Mottled Pug	1	1
Mouse Moth	1	1
Muslin	4	10
Narrow-winged Pug	4	4
Neglected Rustic	4	6
Neofaculta ericetella*	3	28
Nomophila noctuella	3	3
Notocelia uddmanniana	2	2
Nutmeg	1	1
Nut-tree Tussock	2	3
Oak Hook-tip	4	8
Oak Nycteoline	2	2
Ochreous Pug	1	1
Orange Footman	1	7
Pale Prominent	3	5
Pale Tussock	3	6
Pandemis corylana	2	2
Pebble Prominent	4	4
Pempelia genistella	3	12
Pempelia palumbella	8	25
Peppered Moth	2	23
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Pine Beauty	1	4
Pine Carpet	11	17
Pine Hawk	3	4
Pinion-streaked Snout	5	6
Piniphila bifasciana	2	2
Pink-barred Sallow	2	2
Plain Wave	4	13
Plueroptera ruralis	1	1
Poplar Hawk	2	2
Privet Hawk	6	14
Pseudagyratoza conwagana	1	1
Purple-bordered Gold	1	2
Pyrausta cingulata	1	1
Pyrausta purpuralis	2	2
Red Chestnut	1	1
Red Twin-spot Carpet	1	1
Red-line Quaker	1	2
Rhyacionia pinicolana	1	2
Rhyacionia pinicolana	2	7
Riband Wave	3	4
Ringed Carpet	1	1
Rosy Footman	3	6
Rosy Marbled	2	8
Rosy Wave	2	2
Ruby Tiger	3	4
Rustic / Uncertain agg.	3	6
Sallow	1	1
Sallow Kitten	1	1
Satellite	2	2
Satin Wave	1	2
Scalloped Hook-tip	1	1
Scarce Bordered Straw	1	1
Scarce Footman	4	50
Scoparia ambigualis	2	3
Scoparia basistrigalis	2	2
Scorched Wing	1	1
Scrobipalpa costella	1	1
September Thorn	3	6
Setaceous Hebrew Character	8	38
Sharp-angled Peacock	1	1
Silver Y	2	3
Single-dotted Wave	3	3
Six-striped rustic	1	1
Small Blood-vein	1	1
Small China-mark	1	1
Small Fan-footed Wave	3	3
Small Rufous	1	2
Small Seraphim	1	2
Small Wainscot	4	7
Smoky Wainscot	1	1

Southern Chestnut	4	19
Spectacle	1	1
Spruce Carpet	2	16
Square-spot Rustic	4	8
Straw Dot	1	4
Straw Underwing	1	1
Striped Wainscot	1	3
Swammerdamia pyrella	1	1
Synaphe punctalis	2	5
Tachystola acroxantha	1	1
Tawny-barred Angle	3	6
Treble Brown Spot	1	1
Treble-bar	1	1
True Lover's Knot	9	190
Udea ferrugalis	1	1
Vestal	1	2
Vine's Rustic	6	12
White Ermine	2	3
White-point	2	3
White-line Dart	2	2
White-speck	1	1
Willow Beauty	2	2
Wormwood Pug	1	1
Yellow-line Quaker	2	3
Yellow-tail	1	1
Yponomeuta evonymella	1	2

Acknowledgements

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Fig.11 Moth trapping at Goathorn