

Bittern Countryside

Community Interest Company



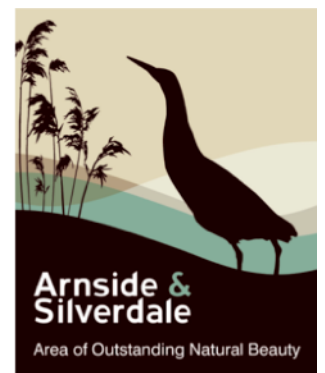
An Atlas and Guide to the Day-flying Moths of the Arnside & Silverdale AONB



Supporting the Arnside & Silverdale Area of Outstanding Natural Beauty

Bittern Countryside Community Interest Company
Registered Office: The Old Station Building, Arnside, LA5 0HG
Registered number 6363720

© Bittern Countryside Community Interest Company, April 2022



Produced with assistance from the Arnside & Silverdale AONB Sustainable Development Fund

Website: <http://www.bitterncountrysidecic.org.uk>

Day-flying Moths of the Arnside & Silverdale AONB

by Brian Hancock

It is well known that our AONB is home to a wide variety of butterflies a few of which are nationally rare and endangered. It may not be appreciated that there are some moths that regularly fly by day and identification of these can add enjoyment to any walk in our area. Like butterflies, they only fly on sunny days. The males are usually searching to find a mate whilst the females are more often seen feeding on nectar-rich flowers or quietly egg-laying out of sight. Some night-flying moths may be spotted at rest during the day or easily disturbed when walking in the countryside. This account is confined to those that preferentially fly by day.

The Arnside & Silverdale AONB has been very well recorded for night-flying moths using a variety of moth traps but I suspect that day-flying moths are under-recorded. A couple of red and one yellow species are easy to see but most of the others are very small and usually overlooked. Many are very localised to their special habitat.

The flower-rich grassland of the limestone areas, Gait Barrows, Arnside Knott and Warton Crag are special places for most of the local species.

A good guide to Moths would be "A Concise Guide to the Moths of Great Britain and Ireland" by Paul Waring and Martin Townsend; illustrated by Richard Lewington.

Good web sites are www.ukmoths.org.uk, www.lancashiremoths.co.uk

I would be happy to have records of any of these moths. Arnside Knott is particularly short of recordings of day flyers. Ideally a photo together with the date, a grid reference, and site description should be sent to me at hancockb410@gmail.com.

Habitat photos on the back page are by Ann Kitchen. All other photos are by Brian Hancock unless otherwise stated.

Edited by Ann Kitchen.

All profits from this publication will go towards recording and conserving the wildlife of the AONB.

"AONB Status" Definitions

Common - occurs frequently throughout the area in suitable habitats

Fairly common - occurs in small numbers throughout the area in suitable habitats

Locally common - occurs frequently in a few locations.

Extremely local - occurs in small numbers in one or two locations.

Scarce - only a very few records in scattered locations.

Uncertain - Not known for sure if this occurs.

Migrant - can not overwinter in any form.

Common name	Scientific name	Page
Cistus Forester	<i>Adscita geryon</i>	4
Hummingbird Hawk Moth	<i>Macroglossum stellatarum</i>	5
Mother Shipton	<i>Callistege mi</i>	6
Silver Y	<i>Autographa gamma</i>	7
Six Spot Burnet	<i>Zygaena filipendulae</i>	8
Small Yellow Underwing	<i>Panemeria tenebrata</i>	9
Small Purple-barred	<i>Phytometra viridaria</i>	10
Antler Moth	<i>Cerapteryx graminis</i>	10
Burnet Companion	<i>Euclidia glyphica</i>	11
Chimney Sweeper	<i>Odezia atrata</i>	12
Cinnabar	<i>Tyria jacobaeae</i>	13
Least Minor	<i>Photedes captiuncula</i>	14
Marsh Pug	<i>Eupithecia pygmaeata</i>	14
Orange Underwing	<i>Archiearis parthenias</i>	15
Speckled Yellow	<i>Pseudopanthera macularia</i>	16
Vapourer	<i>Orgyia antique</i>	17
Girdled Pyrausta	<i>Pyrausta cingulata</i>	18
Purple Pyrausta	<i>Pyrausta purpuralis</i>	18
White Spotted Sable Moth	<i>Anania funebris</i>	19

Alphabetical Index

Scientific Name	Common Name	Page
<i>Adscita geryon</i>	Cistus Forester	4
<i>Anania funebris</i>	White Spotted Sable Moth	19
<i>Archiearis parthenias</i>	Orange Underwing	15
<i>Autographa gamma</i>	Silver Y	7
<i>Callistege mi</i>	Mother Shipton	6
<i>Cerapteryx graminis</i>	Antler Moth	10
<i>Euclidia glyphica</i>	Burnet Companion	11
<i>Eupithecia pygmaeata</i>	Marsh Pug	14
<i>Macroglossum stellatarum</i>	Hummingbird Hawk Moth	5
<i>Odezia atrata</i>	Chimney Sweeper	12
<i>Orgyia antique</i>	Vapourer	17
<i>Panemeria tenebrata</i>	Small Yellow Underwing	9
<i>Photedes captiuncula</i>	Least Minor	14
<i>Phytometra viridaria</i>	Small Purple-barred	10
<i>Pseudopanthera macularia</i>	Speckled Yellow	16
<i>Pyrausta cingulata</i>	Girdled Pyrausta	18
<i>Pyrausta purpuralis</i>	Purple Pyrausta	18
<i>Tyria jacobaeae</i>	Cinnabar	13
<i>Zygaena filipendulae</i>	Six Spot Burnet	8

The Cistus Forester - *Adscita geryon*

Forewing length: c. 11 mm. Flight time: May to July. AONB Status: extremely local.
Larva: dark brown; hairy with a light stripe; feeds on Common Rockrose.

Both sexes visit flowers such as hawkbits and Bird's-foot Trefoil. The female spends much of the time perching on vegetation. It is a declining species in Britain and is only found at one site on Warton Crag in our area. With management work aimed to increase the grassland area it is hoped it may spread to other areas on the Crag.

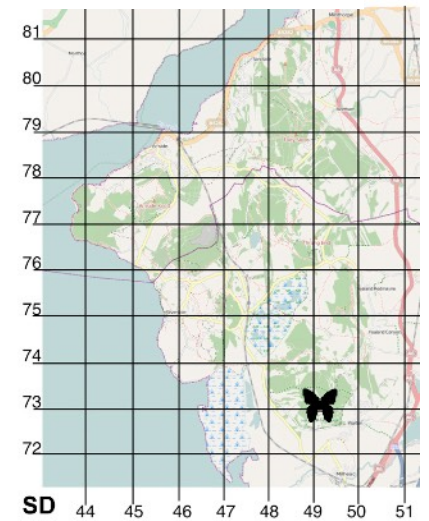


Photo Ann Kitchen

Common Rockrose

Hummingbird Hawk Moth - *Macroglossum stellatarum*

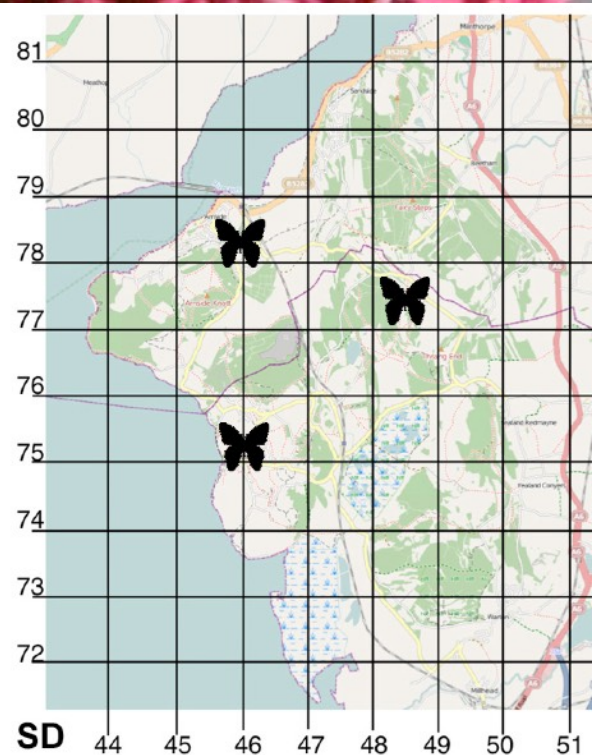
Forewing length: c. 22 mm. Flight time: any time after April. AONB Status: migrant.
Larva: green with stripes and a horn; feeds mainly on bedstraws.

This uncommon migrant should be familiar to anyone holidaying in southern Europe. It is regular in southern England but very few reach us here. Occasionally there is a real influx, as in 2006. It has a fast, darting flight as it moves from flower to flower. Red Valerian is a particular favourite and most records are from gardens.



Photo Ann Kitchen

Red Valerian



Mother Shipton - *Callistege mi*

Forewing length: c. 15 mm. Flight time: May to June. AONB Status: extremely local.
Larva: buff with darker and lighter stripes; feeds on the clover family and some grasses.

It can be found in small numbers on our limestone grasslands visiting flowers of Ox-eye Daisy, Red Clover and others. It can easily be confused with a Dingy Skipper butterfly. A close look will reveal the fanciful outline of a witch (Old Mother Shipton) on the forewing.



Larva

Photos Rob Petley-Jones

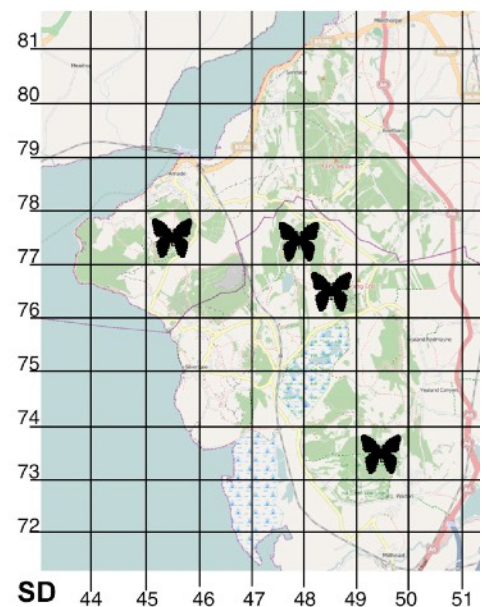


Adult



Photo Ann Kitchen

Red Clover



Silver Y - *Autographa gamma*

Forewing length: c. 13 - 20 mm. Flight time: June to October. AONB Status: common. Larva: green with white stripe and a few hairs; the larval foodplants include Common Nettle, clovers and bedstraws.

This is a very common migrant. Look for it in sunny weather. Some years it may be seen in great numbers in daytime, or especially in gardens during the evening, feeding on nectar rich flowers.

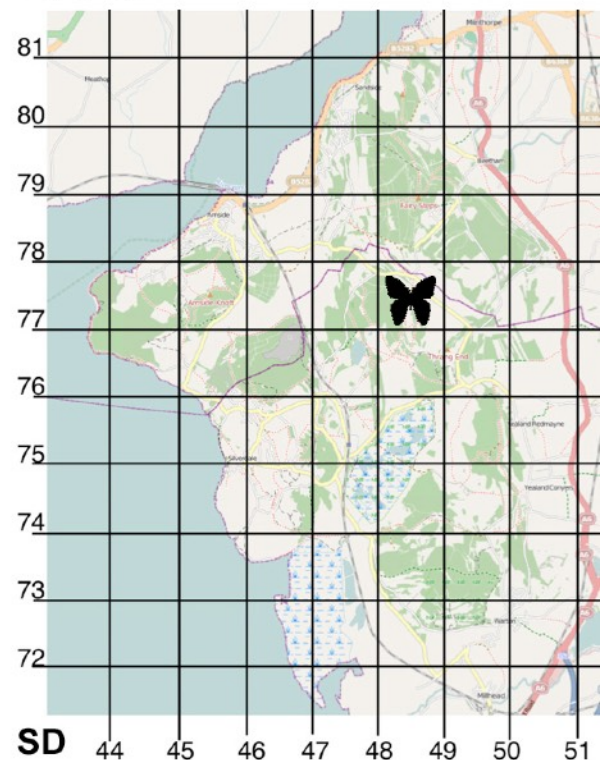


Photo Ann Kitchen

Common Nettle

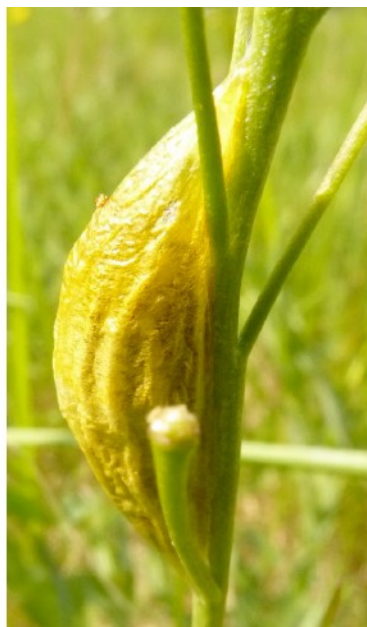
Six Spot Burnet - *Zygaena filipendulae*

Forewing length: c. 17 mm. Flight time: June to August. AONB Status: locally common.
Larva: yellow with black spots; feeds on Common and Greater Birdsfoot Trefoil.

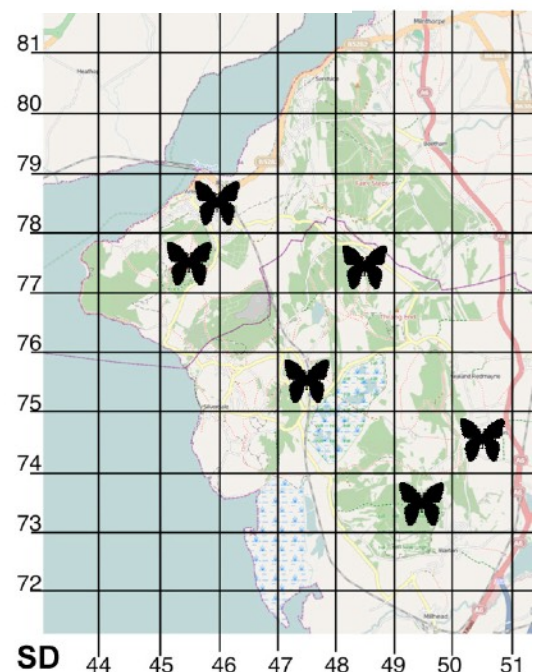
Males patrol the area looking for a mate. They are often found on thistles and knapweeds. It is a slow flying moth that is easy to observe. Surprisingly it doesn't occur everywhere in our area. Warton Crag, Arnside Knott and Gait Barrows are regular locations. Where the moth occurs the characteristic larvae and cocoons can be seen on grass stems. A similar species, the Narrowed-bordered Five Spot Burnet, *Zygaena lonicerae* has occasionally been recorded here, so count the spots carefully. It is easy to make a mistake and count the two close to the thorax as one.



Burnet Moth larva



Burnet Moth pupa

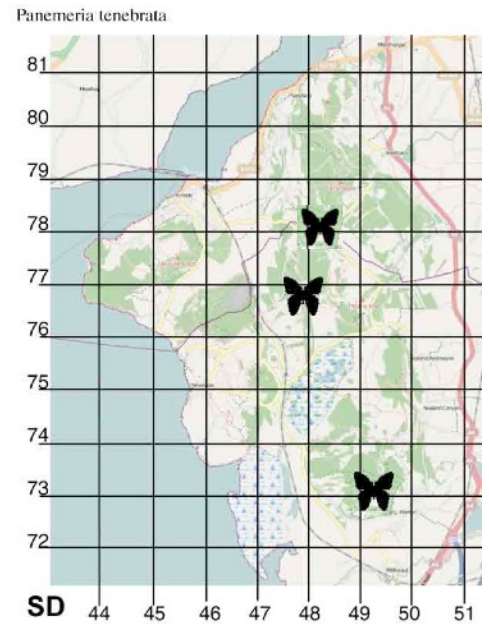


Small Yellow Underwing - *Panemeria tenebrata*

Forewing length: c. 9 mm. Flight time: May to June. AONB Status: extremely local.
Larva: light green; feeds on seeds of Common and Field Mouse-ear.

The Small Yellow Underwing is a very elusive species. It is fast flying, small and easily overlooked on flowery meadows in May. Save for one record from Warton Crag, the only known sites are the meadow at the bottom of Gait Barrows and Leighton Beck meadows at SD 483780. It occurs here in very small numbers.

It shares the same food plant as the Marsh Pug and in some sites elsewhere the two are found together. It is almost certainly to be found in other areas in the AONB. It overwinters underground as a pupa.



Small Purple-barred - *Phytometra viridaria*

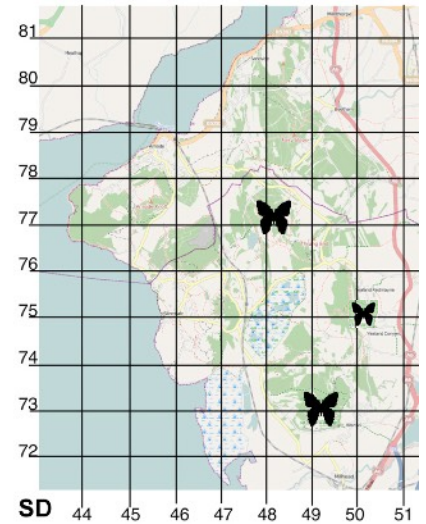
Forewing length: c. 10 mm. Flight time: May to July. AONB Status: uncertain.

Larva: dark green; feeds on milkworts

It flies mainly in sunshine but can be found after dark. It has been found at Warton Crag and at Gait Barrows but a recent record from Yealand Redmayne suggests it may still occur in our area. It is more often seen across the Kent Estuary on Whitbarrow.



Photo John Knowler

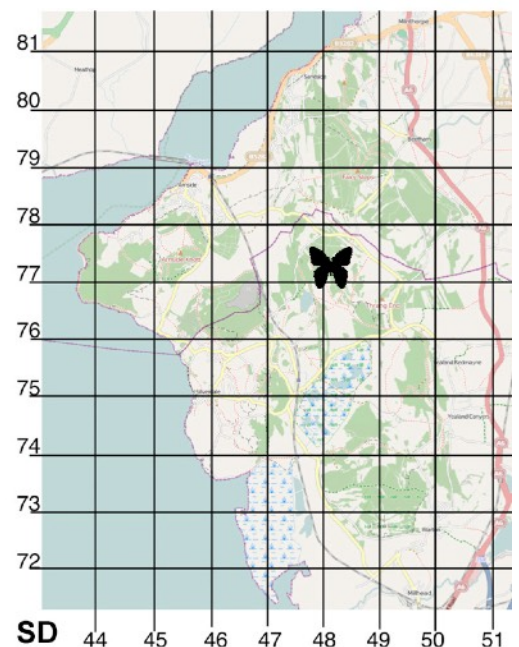


Antler Moth - *Cerapteryx graminis*

Forewing length: c. 12 -17 mm. Flight time: July to Sept. AONB Status: common.

Larva: glossy greyish brown; feeds on grasses.

This is a common northern upland species that often flies by day but in our area it is more likely encountered resting on flower heads such as Ragwort.



Burnet Companion - *Euclidia glyphica*

Forewing length: c. 14 mm. Flight time: May to June and August to September.

AONB Status: extremely local.

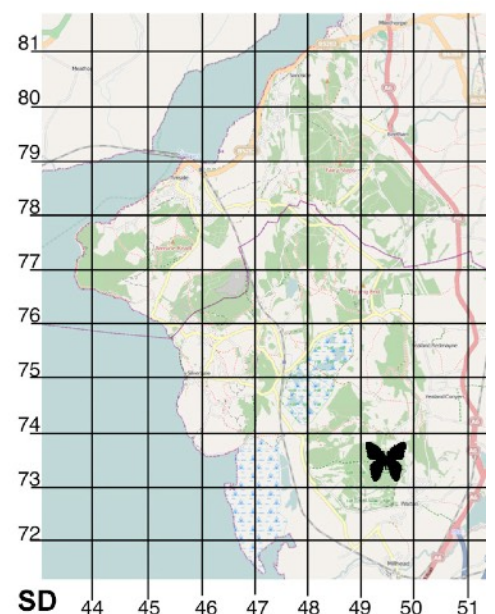
Larva: pale brown; feeds on clovers, trefoils and other vetches etc.

The Burnet Companion is a southern species occasionally encountered on Warton Crag. There was a strong colony just outside our area at Lundsfield quarry, Carnforth until recent development. It occurs in good numbers at Heysham Nature Reserve.



Photo Ann Kitchen

Birdsfoot Trefoil

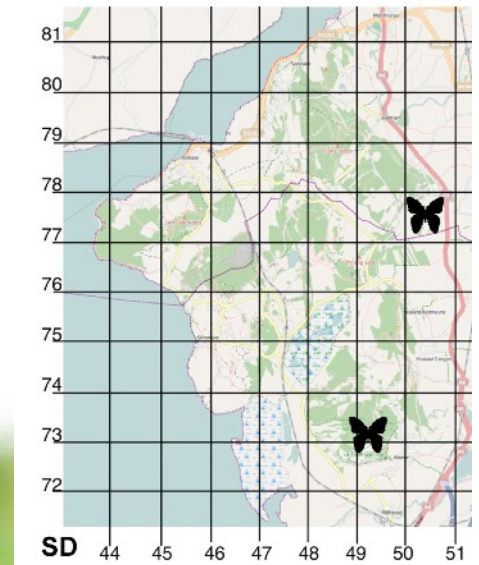


Chimney Sweeper - *Odezia atrata*

Forewing length c. 14 mm. Flight time: May to June. AONB Status: locally common.
Larva: dark green; feeds on flowers and seeds of Pignut.

This pretty and distinctive moth is out in late May and June. It is possibly confined to Warton Crag and Hale Moss although its larval food plant, Pignut, is widely distributed.

Male and females look the same but the colour can fade to dark brown in both as the moth ages



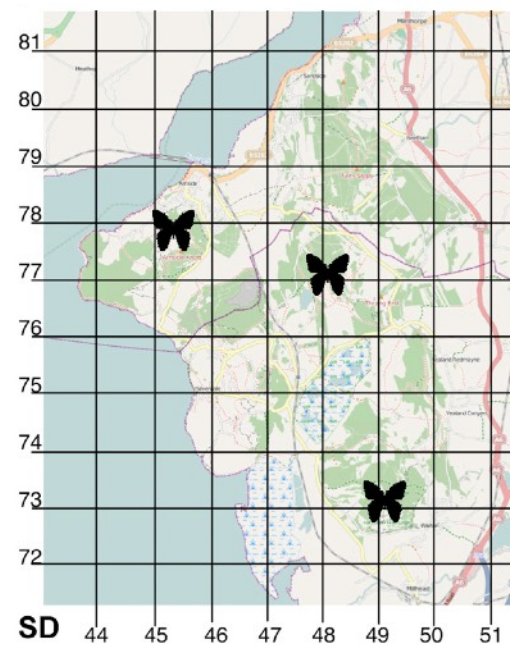
Cinnabar - *Tyria jacobaeae*

Forewing Length c. 20 mm. Flight time May to Aug. AONB Status: common.
Larva: orange and black, feeds on Ragwort.

The Cinnabar is perhaps better known by its orange and black caterpillars that are a familiar sight devouring Ragwort flowers in August. It can be abundant.



Cinnabar larva on Ragwort



Least Minor - *Photodes captiuncula*

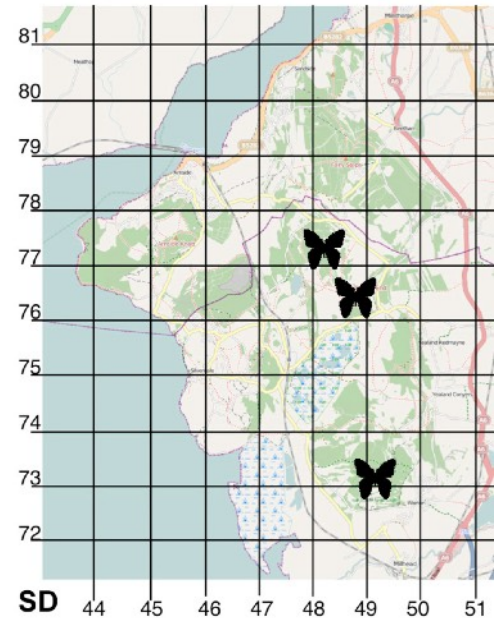
Forewing length: c. 17 mm. Flight time: June to July. AONB Status: scarce.

Larva: light green with brown stripes; feeds on Glaucus Sedge and other sedges.

This is a nationally rare moth that is found at Gait Barrows, Yealand Hall Allotment and Warton Crag in very small numbers. It flies in late June and July and is very easy to overlook flying fast on sunny days. It is more likely to be seen at rest on limestone pavements on duller days by those with sharp eyes.



Photo Rob Petley-Jones

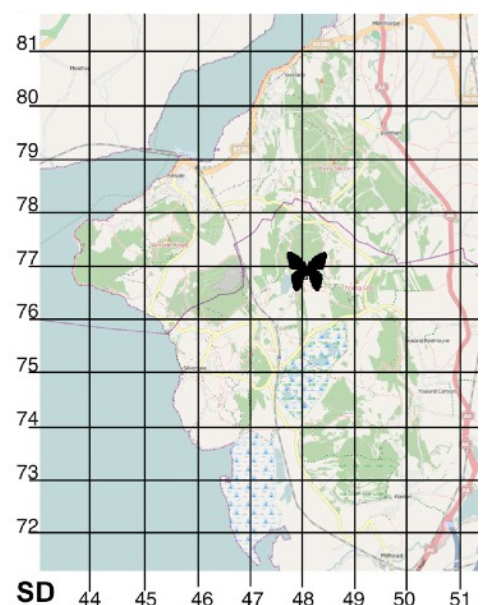


Marsh Pug - *Eupithecia pygmaeata*

Forewing length: c. 9 mm. Flight time: May to June. AONB Status: extremely local.

Larva: light green with brown stripes; feeds on flowers and seeds of Field Mouse-ear.

It has been found in damp areas (Gait Barrows meadow) with one recent record from Arnside Knott. It also occurs on brown field sites and rough ground where *Cerastium* species are common (Heysham Nature Reserve is a good place to see it).



Orange Underwing - *Archiearis parthenias*

Forewing length: c. 18 mm. Flight time: March to April. AONB Status: fairly common but overlooked.

Larva: green with white stripes; feeds on birches.

This pretty moth flies in spring on sunny days high around birch trees and is easily overlooked. It could be mistaken for a butterfly especially a Small Tortoiseshell; both fly on sunny days in spring but the habitat is quite different and the moth is smaller. One has to be patient and look high up around good stands of birch trees to see this moth. Its jerky flight around the tree tops is quite distinctive. Sometimes it is disturbed when resting on the ground.

Sightings of the moth settled long enough for a photo are rare. Gait Barrows and Trowbarrow are good places to look, but there are probably several new sites to be discovered in the AONB.

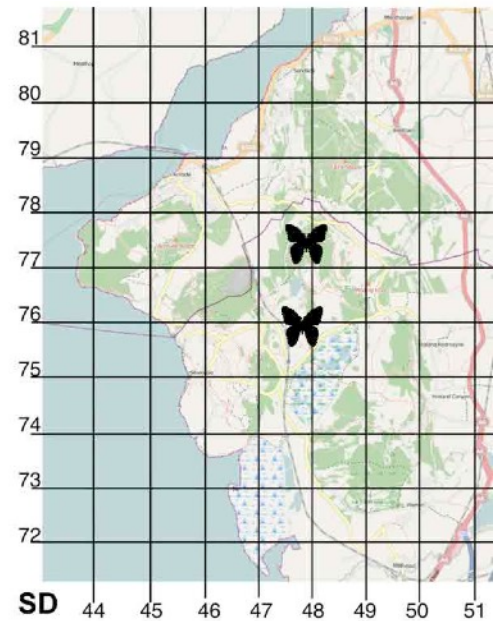


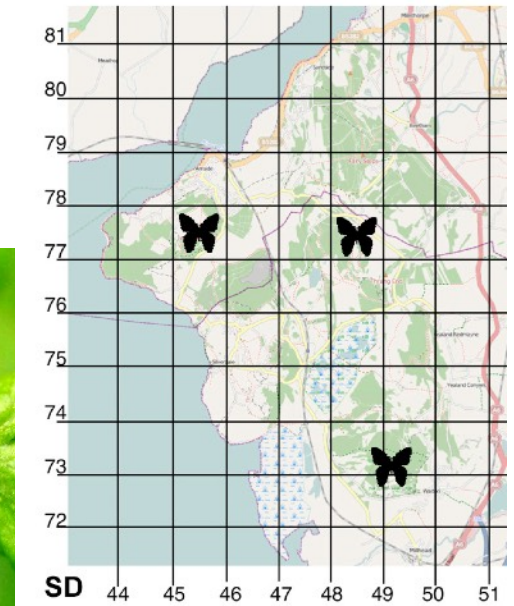
Photo Martin Elsworth

Speckled Yellow - *Pseudopanthera macularia*

Forewing length: c. 14 mm. Flight time: May to June. AONB Status: locally common.
Larva: light green with brown stripes; feeds on Wood Sage.

This is a familiar species on sunny days in May and June, flying quite actively like a small butterfly. Gait Barrows and Warton Crag are good sites.

Most are a bright yellow or orange with brown blotches but occasionally paler individuals occur.

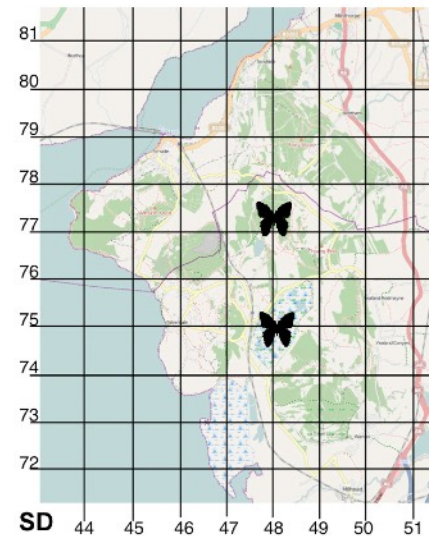


Vapourer - *Orgyia antiqua*

Forewing length: c. 12 - 17 mm. Flight time: June to October. AONB Status: scarce.
Larva: bluish grey with red spots and tufts of bristles; feeds on trees and shrubs.

Quite a common moth throughout the UK, though not often recorded here. The males which are orange and brown may be seen by day with an irregular fluttering flight often quite high up amongst trees and bushes searching for females. The few records from our area are in late August and September.

The female is flightless and looks like a small grey hairy wingless bug. She lays her eggs on her pupal sac. They overwinter and hatch out in the spring. You can sometimes spot the silken web round the sac in the trees.



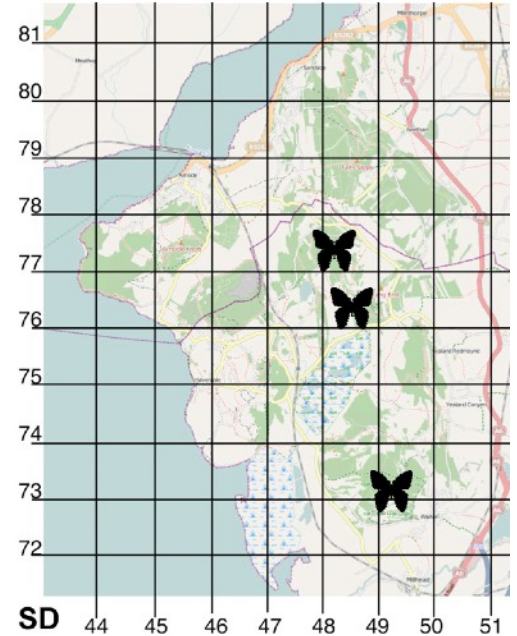
Girdled Pyrausta - *Pyrausta cingulata*

Forewing length: c. 7-8 mm. Flight time: May to June and July to August.

AONB Status: locally common.

Larva: dark brown feed on Wild Thyme; they protect themselves in a fine web.

A tiny moth, quite common flying around Gait Barrows flitting from rock to rock. It likes dry grassland.



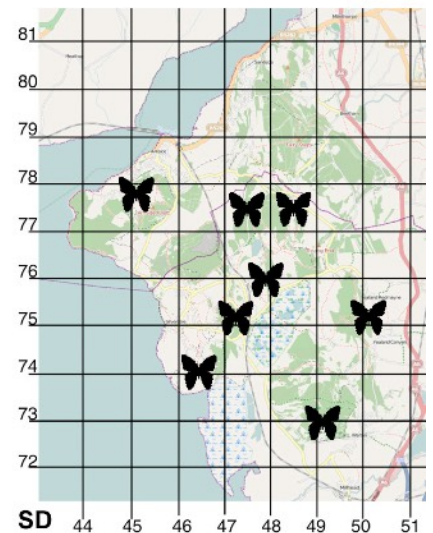
Purple Pyrausta - *Pyrausta purpuralis*

Forewing Length c. 7-11 mm. Flight time May to June and July to August.

AONB Status: common.

Larva: dark brown feed on Wild Thyme and Mint, they protect themselves in a fine web.

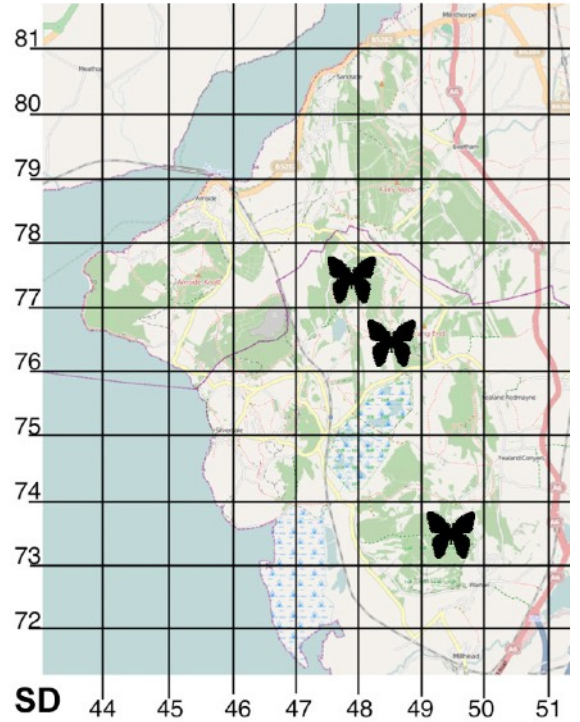
Common in Gait Barrows and other limestone areas. There are 2 closely related moths which have been recorded a few times in our area. *Pyrausta aurita* has a darker forewing and just one or two golden spots and *Pyrausta ostrinalis* which requires careful examination of the underwing after capture.



White Spotted Sable Moth - *Anania funebris*

Forewing length: c. 10-11 mm. Flight time: May to July. AONB Status: extremely local.
Larva: pale greenish yellow; feeds on Goldenrod.

This is a very special species in the AONB as it is now nationally rare. It is found where its larval food plant grows. Gait Barrows is a top site. It is so small that it is easily overlooked but looks like a little black and white fly as it flits close to the ground. It's very difficult to photograph as when settled it usually hides in the herbage, only to fly off again when approached.



Goldenrod



Coldwell Parrock



Gait Barrows



View over Arnside Moss



View from Arnside Knott