NO:1 JANUARY 2024

MOTH NEWS

FOR DERBYSHIRE 2024

Derbyshire Moths Facebook Group **(DMFG)**

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VC57

News Flash - A **Great Prominent** was trapped in Belper by Dave Evans on 15/5/2023, representing a new species for the VC, taking the list of Macros to 571. The record came to light during verification processes.

Great Prominent - Dave Evans

News Flash - A new species, for Derbyshire, the **Bilberry Pug**, was discovered whilst verifying records recently. Two specimens were netted over Bilberry moorland on 1st July 2023, at Long Clough, near Glossop. Derbyshire Macro List is now 572.

Bilberry Pug 1 - Christian Heintzen

Bilberry Pug 2 - Christian Heintzen

January Moth Records

The new year started with a record of **Early Moth** from Heanor on 5 January, when Sid Morris did his annual winter tunnel survey of Headstone & Cressbrook tunnels along the Monsal Trail, and discovered 4 **Herald Moth** and 1 **Tissue Moth.** Martin Roome counted 69 hibernating **Herald Moths** and 3 **Peacock** butterflies in the main tunnel in Ticknall Lime yards on 9 January. Brian Hobby recorded a **Chestnut** from his first garden moth trap of the year at Kirk Hallam on 11th, with an over-night temperature of -4.3°C.

The Tissue - Sid Morris

The Herald - Sid Morris

Whilst conducting environmental work at Markham Vale during the afternoon of 12th January, a Varied Tortrix (*Acleris hastiana*) was discovered. This record represents the third modern day record of this Tortrix. Despite being widespread across the British Isles, it seems to be quite scarce in Derbyshire.

Varied Tortrix (*Acleris hastiana*) Sid Morris

One or two ***Agonopterix heracliana*** (**Common Flat-body**) were being reported and two Common Plumes on 21st January (Emily Louise Milnes).

January Moth Records cont'd

A mild spell during the last few days of January allowed Derbyshire Moth records a small window of opportunity. **Pale Brindled Beauty** was recorded from Staveley on 26th, by Sid Morris, 2 from Darley Moor on 28th by Nadine Snowshill and one from Melbourne by Tony Davison. Clive Ashton recorded an **Early Moth** from Cromford also overnight on 28th. Several **Spring Usher** were trapped at Wildboar Clough, Longendale on 28th/29th. Also 28th from Breaston, Steve Thorpe had a single **Light Brown Apple Moth** and Paul Buxton had another **Early Moth** from his Sandiacre garden moth trap.

Pale Brindled Beauty - Tony Davison

Pale Brindled Beauty - Sid Morris

Clive Ashton recorded another **Pale Brindled Beauty** and a **Light Brown Apple Moth** from his 20w actinic at Cromford on 29th.

Pale Brindled Beauty - Clive Ashton

An Introduction to Leaf-miners by Dave Evans - Part 1

I'm not sure if any of you have ever wondered what those silvery-like trails are you can see on bramble leaves or those squiggly lines you might have encountered on deciduous tree leaves?, well, it is more than likely you have stumbled upon a leaf-mine of a micro moth.

There are some 462 moths that either mine the leaves, stems, needles or roots of trees or plants. Miners tend to be restricted to a certain range of host plants and so the identification of a miner is helped by the correct identification of the host plant, bush or tree.

It is a complex field which requires diligent searching but knowing what host plants to look at facilitates these searches. Bear in mind that many species of leaf-miners cannot be identified at adult stages and can only be identified by the galleries they leave behind in the foliage.

The aim of this topic is to highlight some of the more common species and hopefully this will encourage some of you to take up the search for these often overlooked and hidden gems of the moth world.

Starting off with a few of the more commonly encountered species in the county, and progressing to some that are less common. I will also explain some of the terminology as I go along.

Biology and Life Cycle

The caterpillars of leaf-mining moths feed between the upper and lower epidermis of leaves. In doing so, they create mines that show up as white or brownish discoloured lines. The pattern of the mine is fairly constant for a particular species of leaf miner. Other species create irregular blotch mines or a combination of linear and blotch mines.

Leaf-mining moths lay their eggs on the foliage of suitable host plants. After hatching, the larvae tunnel through the internal leaf tissues. When they have completed their feeding, the larvae of some species pupate within the foliage but in others the larvae exit the mines and pupate elsewhere on the plant or in the soil.

An Introduction to Leaf-miners by Dave Evans - Part 1 - cont'd

Species 1. *Stigmella lapponica* - (Drab Birch Pigmy) - 4.002 (BF116)

The mine (slender pale corridor) can be long and it can also be contorted (as in the photo). The Frass, (dark line inside the mine that is waste excrement from the larvae) is green to start with and then turns dark after about a 1/4 of the way into the mine. The egg is usually laid on the underside of the leaf and the larvae exits the mine at adult stage at the widest end of the corridor. The adult is on the wing in May and the larvae (Mine) can be found in June and July with the vacated mines still seen on the leaves of Silver Birch (*Betula*), even after the yellowed leaf has fallen to the ground.

Species 2. *Stigmella confusella* - (Pale Birch Pigmy) - 4.003 (BF117)

This larvae creates a long and angular-looking gallery, with a dark, narrow central line of linear Frass. The egg is laid under the leaf and close to a vein. The adult is on the wing during May and the leaf-mine can be found on Birch from June until August.

Stigmella lapponica - Dave Evans

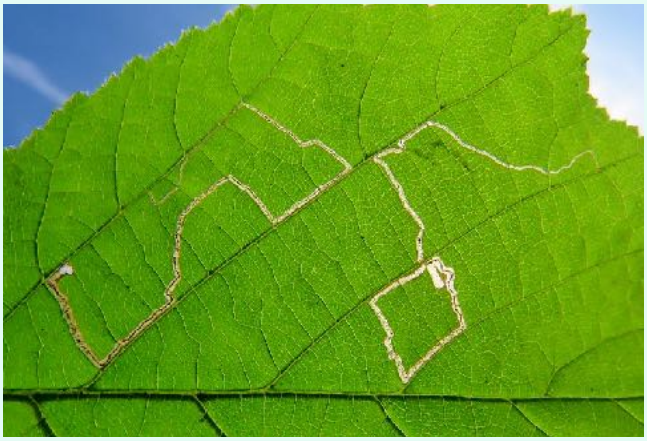
Stigmella confusela - Dave Evans

Species 3. *Stigmella microtheriella* - (Nut-tree Pigmy) - 4.010 (BF111)

A narrow and long slender corridor that usually follows the veins of the leaf. Numerous mines can be located on each leaf. In the early part of the mine the Frass is linear (unbroken) to start with, becoming dispersed later. Favours Hazel (*Corylus*)

Species 4. *Stigmella nylandriella* - (Common Rowan Pigmy) - 4.025 (BF103)

The mine is a long, contorted and gradually widening corridor that often closely follows the leaf margin for a long distance, often doubling back with variable Frass. Most often found along the serrated edge of the leaf of *Sorbus* sp. Mine shown on *Sorbus* (Rowan).



Stigmella microtheriella - Dave Evans

Stigmella nylandriella - Dave Evans

News up-date on Deep Brown Dart

Formerly split into **Deep-brown Dart** *Aporophyla lutulenta* and **Northern Deep-brown Dart** *A. lueneburgensis*. The species code and scientific name changed in 2024. DNA bar-coding suggests that we have only one species in Britain, *A. lueneburgensis* which is now renamed **Deep-brown Dart**. *A. lutulenta* is now a synonym and the name **Northern Deep-brown Dart** no longer used.
Can we ask that all future records are now recorded as **Deep Brown Dart** *A.lueneburgensis*. With the loss of Northern Deep Brown Dart, the VC57 Macro Moth List is now **571 species.**

Why are moths attracted to lights? Here's the science behind it - https://www.theguardian.com/science/2024/jan/30/why-are-moths-attracted-to-lights-science-answer

Well folks, here's the first of our bulletins for 2024. Thanks to Dave Evans for the Leaf Miner article, a few moths to report and looking forward to the spring. I wonder what February might bring, maybe a ***Euchromius ocellea***, now wouldn't that be wonderful?

Tony Davison