Species to look for in April

(I) *Coleophora serratella* (Lep: Coleophoridae):

This is a very common leaf miner on trees such as Alder, Birch, Elm, Hazel and Hornbeam and a good species to look for in spring.

As soon as the leaves appear it will start feeding and you can detect it by the white patches it leaves as it enters the leaf, through a hole underneath, to feed.

You can see the larva entering the leaf below:

When it forms its case it cuts a section out from the edge of the leaf and this can be serrated – hence its name.

The cases are quite variable as it depends where it cuts its leaf from and what tree it chooses as a host.

The photo above shows the final case (right leaf), with the cut out section (and small winter case) (second leaf left).

Photos © Rob Edmunds

(ii) *Bucculatrix nigricomella* (Lep: Bucculatricidae)

Look for the mines of this species, early in the season, as soon as the rosettes of

Oxeye Daisy (*Leucanthemum vulgare*) develop.

The yellow larva is very distinctive:

The larvae form long galleries in the leaf:

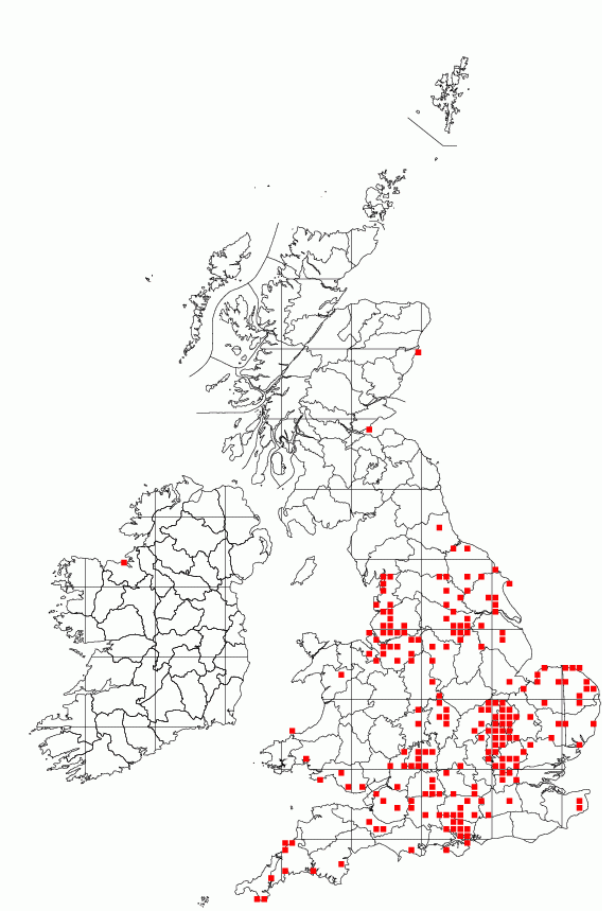
In common with several of the *Bucculatricidae* they form tiny moulting cocoonets when changing instars and the larvae may be found inside these structures:

Larvae may change leaves to feed and finally feed externally on the leaf.

Care must be taken as there are some Agromyzidae which can make similar mines.

Photos © Mike Shumer

The distribution of *Bucculatrix nigricomella* from the Leaf-miner Moths Recording Scheme shows a more southern distribution.



It may swap leaves several times, rolling them on each occasion.

The larva grazes inside the rolls and its presence may be detected as the tips of the leaves may turn white as a result of this feeding.

The larva is spectacular:

Photos © Andy Beaumont

(iii) *Helcystogramma rufescens* (Lep:Gelechiidae)

One to search for on grassland in roadside verges, canal banks, ungrazed or lightly grazed fields etc.

It feeds on grasses such as *Arrhenatherum elatius* (false oat-grass), *Brachypodium sylvaticum* (false brome), *Dactylis glomerata* (cock's-foot grass) etc.

It is distinctive as it rolls the grass leaf and leaves the ends open:

A widespread and locally common species, with a more southerly distribution.

Perhaps you can add records to its distribution?

More details:

Gelechiid Recording Scheme:

https://www.gelechiid.co.uk/

(iv) *Aspilapterix tringipennella* (Lep: Gracilariidae):

This is a widespread miner in the UK.

Look for leaves of Ribwort Plantain (*Plantago lanceolata*) which are twisted together as this may indicate the presence of this species.

It initially makes a silvery mine in the lower epidermis but then feeds on the upper surface, making a large brown blotch, which causes the leaf to fold over and twist (as shown):

Photo © Rob Edmunds

(v) The Birch feeding *Eriocranias* (Lep:Eriocraniidae):

As soon as the Birch leaves appear you should start looking for blotch mines with Spaghetti- like frass for these will be made by an *Eriocrania* species, as below:

Photo © Rob Edmunds

The mines are formed in a matter of a few days and then the larvae vacate the mine, so it is a question of being there at the right time.

It is vital to see the larvae as you cannot identify the species from a vacated mine. You also need to note where the mine starts – edge of leaf or in the centre as this helps identify the species.

Most are pretty straightforward to identify and this guide will help you:

http://leafmines.co.uk/pdfs/Newsletter%2035.pdf

Which species is shown above? Answer in May newsletter!

(v) Oak *Coleophora* species at an early stage:

You can differentiate between *Coleophora lutipennella* and *Coleophora flavipennella* from their tiny winter cases.

You need to look closely at Oak buds this month. To the naked eye it looks as if there is a small protuberance on the bud:

I find that they start to feed on the buds and small pinholes, where they fed, helps indicate their presence.

To identify the species you need to look carefully with a hand lens.

Coleophora flavipennella has a distinct hump where the initial leaf cut out was incorporated into the case as these two show. The hump often appears as a paler spot to the naked eye::

Coleophora lutipennella forms an initial case like this but doesn't incorporate a lump of material:

Most cases can be assigned to species using this feature.

Photos © Rob Edmunds

(vi) *Phytomyza ilicis* (Dip: Agromyzidae):

This is the only leafminer found on Holly in the UK (although *Phytomyza jucunda* is present in Europe too on this host https://bladmineerders.nl/parasites/animalia/arthropoda/insecta/diptera/brachycera/agromyzidae/phytomyzinae/phytomyza/phytomyza-jucunda/)

Phytomyza ilicis is found widely in the UK and is one of the most often recorded Agromyzids during April (Agromyzidae Recording Scheme).

It forms blotches on the Holly leaves:

Photo © Rob Edmunds

If you do spot it then please photograph and iRecord.

This applies to any Agromyzide you may encounter.

(vii) *Aulagromyza* species (Dip:Agromyzidae) on Honeysuckle (Lonicera):

These mines on Honeysuckle are common but you need to find a mine with a larva in so that you can identify to species.

Aulagromyza hendeliana and *cornigera* both form identical mines and you cannot identify them from a vacated mines.

The mines form quickly on developing leaves and are vacated within a couple of days.

An occupied mine could look like this, with the yellow larva:

If you put the leaf in a container with a piece of damp tissue round the petiole the larvae soon vacate the mine to pupariate and it is now that you can differentiate between species.

The puparium of *Aulagromyza cornigera* has a spike on its rear spiraculm:

The rear spiraculum *of Aulagromyza hendeliana* has no such spike:

A feature of *A.cornigera*, which can be seen with a hand lens, is the fact that it has rows of red warts along its body, (which are absent in *A.hendeliana*) :

It seems that *A.cornigera* mines are usually the first to appear (but this still needs further investigation)?

Photos © Rob Edmunds

(viii*) Hexomyza simplicoides* (Dip: Agromyzidae):

This is an uncommon gall causer and seems to be found on isolated Willow species (*Salix spp.*) in boggy areas.

It forms galls, on young branches, which taper at both ends and can be found in clusters, as shown:

Photo © Barry Warrington

It is best searched now, for before the trees are in leaf'.

Please note that *Rabdophaga spp* (Dip: Cecidomyiidae) can form similar looking galls so the larva/puparium needs to be examined.

Further details:

Agromyzidae Recording Scheme:

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