



## Wandering the Woods with Matt

Leafminers

Observed early  
June

at Fieldstone Farm  
Nature Preserve,

Walker Nature  
Preserve,

and everywhere!

As you are walking through the woods, have you ever noticed little tracks along leaves? I hadn't paid much attention to them until recently, when I heard of a project to document leafminers, which refers to a diverse group of insects that "mine" layers of leaf tissue. According to the Leafminers of North America Project (<https://www.inaturalist.org/projects/leafminers-of-north-america>), this includes 40 families of moths, 10 families of flies, 6 families of beetles, and 2 families of sawflies. All told there are more than 2000 species of leafminers, and undoubtedly more remain undescribed.

Cabbage leafminer (*Liriomyza brassicae*) on garlic mustard (*Alliaria petiolata*), taken in early June at Fieldstone Farm Nature Preserve.

The developing larva eats plant tissue between the epidermal layers, not on either the upper or lower leaf surfaces. As it moves through the leaf, the miner leaves a distinctive track that, along with the host plant, can lead to an identification of the leaf miner without having to rear a specimen. The leaf miner is generally well-protected inside of the leaf (though there are parasitoid wasps that specialize on certain leafminers) and often pupates inside the leaf as well, before emerging as an adult fly, ready to mate and lay more eggs on suitable leaves.

*Calycomiza promissa* on *Symphyotrichum* sp. at Walker Nature Preserve in early June. (in this photo, the brownish blotch is the puparium)

Now that I know to look for them, I find leafminers everywhere, often on plants that I would ignore because they are not in flower or fruit. So now when I see a leaf mine, I have some extra incentive to try to identify the plant host (which can be tricky without flowers – a little bit like IDing trees in the winter), because that can be enough to ID the leafminer.

If you want to start looking, particularly fruitful plants are garlic mustard (*Alliaria petiolata*), goldenrods (*Solidago* sp.), asters (*Erigeron*, *Symphyotrichum*, *Packera*), and jewelweeds (*Impatiens* sp.). But really, just start looking – you'll find them!

