

More dots on the map: further records of leafmining moths in East Yorkshire

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The apparent scarcity of many leafmining moths in East Yorkshire (see Sutton & Beaumont, 1989) is at least partly due to a lack of recorder effort, and a number of previously presumed scarce or rare moths are actually relatively widespread (Chesmore, 2008; Nunn, 2015). One of the aims of a previous article (Nunn, *op. cit.*) was, hopefully, to encourage searches for leafminers in an attempt to redress the imbalance of records in Yorkshire. This article summarises our 'leafminering' highlights from 2015.

A number of sites in VC61 were searched for leafmining moths (Table 1). Sampling effort varied considerably between sites. AN's 'leafminering' opportunities were mostly restricted to casual observations while on family outings; BW's focussed on sites that could be reached using public transport. The most time was spent in the Hessle area and a productive site in Hull. In October, the authors joined Charlie Fletcher and Ian Marshall for a day in an under-recorded 10km square, concentrating on the Settrington area. North Cliffe Wood was visited only in late spring and early summer, and other sites were visited briefly in the autumn.

Table 1. Most notable records by the authors of leafmining moths in East Yorkshire (VC61) in 2015.

Site	NGR	Most notable records ²
Cottingham	TA0231	Oak Satin Lift <i>Heliozela sericiella</i> , Black-headed Pigmy <i>Stigmella atricapitella</i> , Common Oak Pygmy <i>Stigmella roborella</i> ³ Barred Sycamore Pigmy <i>Stigmella speciosa</i>
Flamborough	TA2169	Yarrow Case-bearer <i>Coleophora argentula</i> Fern Smut <i>Psychoides filicivora</i> ⁴
Hessle area	TA0227	Elm Bent-wing <i>Bucculatrix albedinella</i> Flame Neb <i>Chrysoesthia drurella</i> Six-spot Neb <i>Chrysoesthia sexguttella</i> Mottled Purple <i>Eriocrania sparrmannella</i> Fern Smut Black-headed Pigmy ⁴ Narrow-barred Pigmy <i>Stigmella centifoliella</i> ⁴ White-barred Alder Pigmy <i>Stigmella glutinosae</i> ⁴ Chestnut Pigmy <i>Stigmella samiatella</i> ⁴
Hull, Beverley Road	TA0831	Lime Bent-wing <i>Bucculatrix thoracella</i> Bordered Carl <i>Coptotriche marginea</i>

Hull, West	TA0629	Birch Lift <i>Heliozela hammoniella</i> ⁴ Common Birch Pigmy <i>Stigmella betulicola</i> Double-barred Pigmy <i>Stigmella continuella</i>
North Cave Wetlands	SE8833	Burdock Neb <i>Metzneria lappella</i>
North Cliffe Wood	SE8637	Grey Alder Case-bearer <i>Coleophora binderella</i> Forest Case-bearer <i>Coleophora ibipennella</i> ⁴ Pale Feathered Bright <i>Incurvaria pectinea</i>
Risby	TA0135	Coarse Hazel Pigmy <i>Stigmella floslactella</i> Oak Carl <i>Tischeria ekebladella</i>
Rowley	SE9932	Garden Lance-wing <i>Epermenia chaerophyllella</i>
Settrington area ¹	SE8673	Dusty Apple Pigmy <i>Bohemannia pulverosella</i> Daisy Bent-wing <i>Bucculatrix nigricomella</i> Dewberry Pigmy <i>Ectoedemia rubivora</i> ⁴ Small Elm Midget <i>Phyllonorycter schreberella</i> Base-spotted Pigmy <i>Stigmella basiguttella</i> Scarce Thorn Pigmy <i>Stigmella paradoxa</i> Little Beech Piercer <i>Strophedra weirana</i>
Sigglesthorpe	TA1546	Grey-alders Midget <i>Phyllonorycter strigulatella</i>
Skidby	TA0133	Ribwort Slender <i>Aspilapteryx tringipennella</i> Garden Lance-wing Small Alder Midget <i>Phyllonorycter stettinensis</i> White-barred Alder Pigmy
Thwaite Gardens	TA0532	Hypericum Pigmy <i>Ectoedemia septembrella</i> Spotted Black Pigmy <i>Ectoedemia subbimaculella</i> Dark Hornbeam Midget <i>Phyllonorycter esperella</i>
University of Hull	TA0731	Larch Case-bearer <i>Coleophora laricella</i> Pale Thistle Case-bearer <i>Coleophora peribenanderi</i> Alder Lift <i>Heliozela resplendella</i> Pointed Groundling <i>Scrobipalpa acuminatella</i>
Walkington	SE9936	Large Birch Pigmy <i>Ectoedemia occultella</i> Fern Smut

¹ With Charlie Fletcher and Ian Marshall

² Sampling effort varied considerably between sites

³ Adult reared, identification confirmed by gen. det. (Charlie Fletcher)

⁴ New vice county record

As previously (Nunn, *op. cit.*), the relative lack of 'leafminering' in VC61 resulted in a number of new VC records, namely Forest Case-bearer (on Pedunculate Oak *Quercus robur*), Dewberry Pigmy (on *Rubus* sp. - see Plate 4, centre pages), Birch Lift (on Silver Birch *Betula pendula*), Fern Smut (on Hart's-tongue Fern *Phyllitis scolopendrium*), Black-headed Pigmy (on Pedunculate Oak), Narrow-barred Pigmy (on Dog-rose *Rosa canina*), White-barred Alder Pigmy (on Common Alder *Alnus glutinosa*) and Chestnut Pigmy (on Sweet Chestnut *Castanea sativa*). Other particularly notable moths included Oak Satin Lift, Common Oak Pygmy, Elm Bent-wing, Flame Neb (see Plate 4, centre pages), Six-spot Neb, Mottled Purple, Common Birch Pigmy, Grey Alder Case-bearer and Scarce Thorn Pigmy. Many of them, including Birch Lift, Fern Smut, Black-headed Pigmy, White-barred Alder Pigmy and Chestnut Pigmy, have probably been overlooked in the past, but Forest Case-bearer and Dewberry Pigmy, and

possibly Narrow-barred Pigmy, may be genuinely scarce or rare in Yorkshire. For example, the Forest Case-bearer larva found at North Cliffe Wood appears to be only the ninth record for Yorkshire, as the records cited in Sutton & Beaumont (1989) are considered unreliable (Box, 2016). Similarly, despite widespread searching, Dewberry Pigmy appears to be extremely rare outside the Ripon area, with just a single record from elsewhere (Box, *op. cit.*). The status and distribution of Narrow-barred Pigmy are unclear. Its mine is exceptionally difficult, if not impossible, to distinguish from that of the “common but thinly distributed or restricted resident” Rose Leaf Miner *Stigmella anomalella*, and it is therefore necessary to breed the adult to confirm the identity. Thus, although there is a small number of larval records from VC63, they remain unconfirmed as adults were not reared (Box, *op. cit.*).

Although Black-headed Pigmy, White-barred Alder Pigmy and Chestnut Pigmy are probably widespread in Yorkshire, there were no confirmed records in VC61 until 2015, due partly to uncertainties over whether they can be reliably identified to species from the mines or larvae; there appear to be some contradictions in the various resources (e.g. Ellis, 2016; Edmunds, 2016; Pitkin *et al.*, 2016) over what characteristics, if any, are diagnostic. The mines of most oak-feeding *Stigmella* spp. are widely considered impossible to identify to species but John Langmaid, one of the UK’s leading authorities on leafmining moths, confirmed that the dark prothoracic shield is a diagnostic feature of the Black-headed Pigmy larva. The mine of Chestnut Pigmy is also very difficult or impossible to identify on oaks, but this problem was avoided when a mine was found on Sweet Chestnut (no other *Stigmella* spp. are known to mine Sweet Chestnut in the UK). Distinguishing the mines of the two alder-feeding *Stigmella* spp. can also be difficult but the White-barred Alder Pigmy larva has a dark prothoracic spot which is absent in the Silver-barred Alder Pigmy *Stigmella alnetella*. Thus, although suspected individuals of Black-headed Pigmy, Chestnut Pigmy and White-barred Alder Pigmy have been recorded previously, these were the first confirmed records in VC61. By contrast, Fern Smut is possibly limited by the distribution of its food plant (most often Hart’s-tongue but also other ferns) in VC61, but was recorded in several locations in 2015 (Table 1).

This article demonstrates that, even with only relatively small amounts of effort or limited transport, it is possible to find a diverse range of leafmining moths, including in urban or suburban areas. Very few of the moths reported here were recorded in nature reserves. The Hessle area was particularly productive, due partly to the relatively large amount of effort there, but even casual observations sometimes revealed scarce or under-recorded moths, or at least put more ‘dots on the map’ to improve our knowledge of the geographical distributions of common ones. Most gardens, parks or hedgerows should support a variety of leafmining moths and we would encourage other naturalists to record them.

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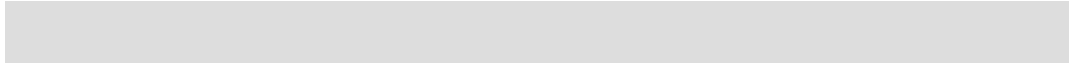


Plate 4. Leafmining moths in VC61 (see pp101-104).

Top left: Pale Thistle Case-bearer *Coleophora peribenanderi* on Creeping Thistle *Cirsium arvense*.

Top right: Mines of Dewberry Pigmy *Ectoedemia rubivora* on *Rubus* sp.

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Lower left: Mines of Flame Neb *Chrysoesthia drurella* on Common Orache *Atriplex patula*.

Lower right: Adult Flame Neb ex larva.

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