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

Andy D. Nunn¹ and Barry Warrington²

¹Hull International Fisheries Institute, School of Biological, Biomedical & Environmental Sciences, University of Hull, Hull, HU6 7RX, UK. Email: a.d.nunn@hull.ac.uk
²36 Marlborough Avenue, Hessle, HU13 0PN, UK. Email: treasurer@ynu.org.uk

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.

<table>
<thead>
<tr>
<th>Site</th>
<th>NGR</th>
<th>Most notable records³</th>
</tr>
</thead>
</table>
| Cottingham          | TA0231 | Oak Satin Lift *Heliozela sericiella*,  
Black-headed Pigmy *Stigmella atricapitella*,  
Common Oak Pygmy *Stigmella roborella*³  
Barred Sycamore Pigmy *Stigmella speciosa* |
| Flamborough         | TA2169 | Yarrow Case-bearer *Coleophora argentula*  
Fern Smut *Psychoides filicivora*³ |
| Hessle area         | TA0227 | Elm Bent-wing *Bucculatrix albedinella*  
Flame Neb *Chrysoesthia drurella*  
Six-spot Neb *Chrysoesthia sexguttella*  
Mottled Purple *Eriocrania sparrmannella*  
Fern Smut  
Black-headed Pigmy  
Narrow-barred Pigmy *Stigmella centfoliella*³  
White-barred Alder Pigmy *Stigmella glutinosae*³  
Chestnut Pigmy *Stigmella samiatella*³  
| Hull, Beverley Road | TA0831 | Lime Bent-wing *Bucculatrix thoracella*  
Bordered Carl *Coptotricha marginea* |
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

---

**The Naturalist 141 (2016) 102**
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.

**Acknowledgements**

We would like to thank Harry Beaumont, Charlie Fletcher, John Langmaid and Dave Shenton for verifying the identity of difficult and/or under-recorded moths.

**References**


Plate 4. Leafmining moths in VC61 (see pp101-104).
Top left: Pale Thistle Case-bearer *Coleophora peri-benanderi* on Creeping Thistle *Cirsium arvense*.
Top right: Mines of Dewberry Pigmy *Ectoedemia rubivora* on *Rubus* sp.

A.D.Nunn

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

B. Warrington