

**LEICESTERSHIRE & RUTLAND
ENTOMOLOGICAL SOCIETY**

**The status of Diptera
in VC55**

**Limoniidae:
Limnophilinae & Limoniinae**

John Kramer & Ray Morris

john.kramer@btinternet.com; ray@cactusbob.net



Epiphragma ocellare (Graham Calow, NatureSpot)

LESOPS 51 (July 2022)

ISSN 0957 - 1019

Introduction

This LESOPS completes the status review of the Limoniidae to 2020 with LESOPS 46 having covered the sub-family Chioneinae (Kramer & Morris, 2022).

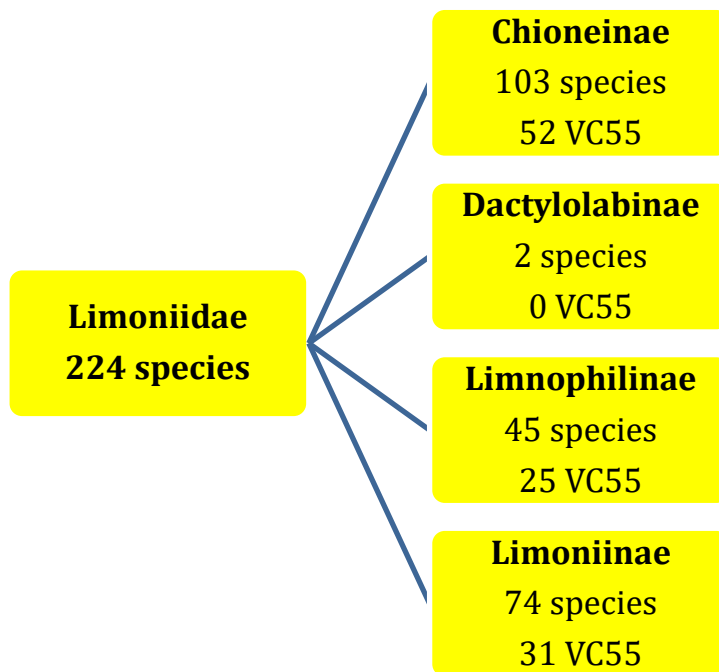


Figure 1. The Limoniidae sub-families

Records have been gleaned from a number of sources: Leicestershire & Rutland Environmental Records Centre, NatureSpot, NBN Atlas and entomological journals. Maps have been generated using MapMate® and species records organised alphabetically by genus. It will not escape the reader's attention that there has been little general interest in these smaller craneflies such that the majority of records originate from John Kramer particularly in the late 1990s. Stubbs' keys (Stubbs, 2021) should allow more accurate identification of the species in this family. Tables 1 and 2 indicates the records for each genus covered by the Limnophilidae and Limoniinae in VC55.

Care must be taken when establishing identity of these insects. The lack in any report of the evidence for the identification of the more difficult or rarer species, especially National or County 'firsts' means that the record may have to be considered as "unproven". Examination of male genital structure is sometimes the only reliable way to ensure correct identification. The identification of females is often more difficult at this time.

Table 1: Genera of the sub-family Limnophilinae

Genus	British Species	VC55 Species*	Genus	British Species	VC55 Species*
<i>Australolimnophila</i>	1	1	<i>Limnophila</i>	2	1
<i>Dichranophragma</i>	3	3	<i>Neolimnomyia</i>	2	0
<i>Eloeophila</i>	6	3	<i>Paradelphomyia</i>	6	4
<i>Epiphragma</i>	1	1	<i>Phylidorea</i>	7	2
<i>Euphylidorea</i>	5	3	<i>Pilaria</i>	6	3
<i>Hexatoma</i>	2	0	<i>Pseudolimnophila</i>	2	2
<i>Idioptera</i>	2	0			

*VC55 records include those "unproven" – see individual species notes

Table 2: Genera of the sub-family Limoniinae

Genus	British Species	VC55 Species*	Genus	British Species	VC55 Species*
<i>Achrylolimonia</i>	2	1	<i>Limonia</i>	9	7
<i>Antocha</i>	1	1	<i>Lipsothrix</i>	5	2
<i>Atypophthalmus</i>	1	1	<i>Metalimnobia</i>	3	2
<i>Dicranomyia</i>	37	10	<i>Neolimonia</i>	1	1
<i>Dicranoptycha</i>	1	1	<i>Orimarga</i>	3	0
<i>Discobola</i>	1	0	<i>Rhipidia</i>	3	2
<i>Geranomyia</i>	2	0	<i>Thaumastoptera</i>	1	1
<i>Helius</i>	4	3			

*VC55 records include those "unproven" – see individual species notes

Categories and criteria used for status evaluation

The origins of estimating the rarity of a species have been previously described (Kramer & Morris, 2021). For the present publication the National Rarity Indices (Table 3) has been used as based on the number of hectads (10x10km squares) that showed the presence of a species (data from the National Biodiversity Network).

Table 3: National Rarity Indices

National Rarity Indices (NRI, JK. 2012)

- 1 = >100 hectads [most common]
- 2 = 30-100 hectads
- 3 = 16-30 hectads
- 4 = 6-15 hectads
- 5 = 2-5 hectads
- 6 = 1 hectad [least common]

Acknowledgements

JK would like to thank the Natural History Museum, London, for use of their imaging laboratory, and also staff Erica McAlister and Duncan Sivell for their support. We have also used some of the excellent photos taken by the late Mike Ackland which he sent to JK and we are pleased to be able to use and acknowledge work of such a high standard.

References

- Kramer, J. & Morris, R. (2022), The status of Diptera in VC55: Tipilidae. *Leicestershire Entomological Society Occasional Publications Series*, **43**.
- Kramer, J. & Morris, R. (2022), The status of Diptera in VC55: Limoniidae: Chioneinae. *Leicestershire Entomological Society Occasional Publications Series*, **46**.
- Stubbs, A.E. (2021). *British Craneflies*. British Entomological & Natural History Society. (The References section provides an enormous resource for those interested in these flies).

Annotated Limoniidae

Notes on the national distribution of species are based on the NBN Atlas data as of April 2022. The thumbnail diagrams in the Stubbs' keys are necessarily simplified and there are some images in this current publication that will help with understanding of the diagnostic characters.

The male genital and other illustrations are all photographed by John Kramer, at home or at the NHM, unless otherwise stated, and includes examples of some illustrations of species which are absent from Stubbs.

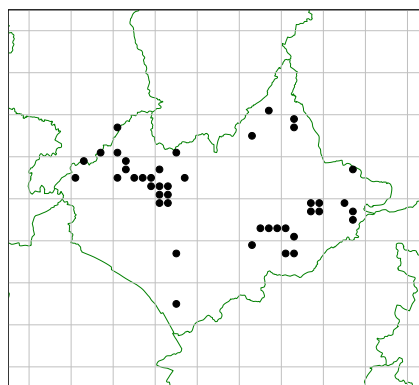
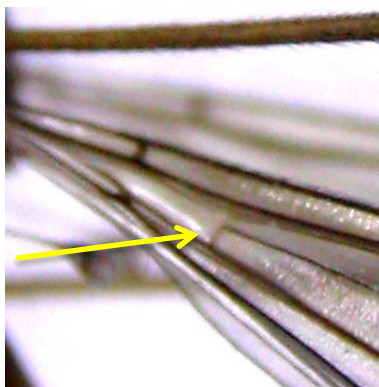
Subfamily Limnophilinae

This sub-family of short-palped crane-flies differs in that the radial vein R_s divides three times before reaching the wing margin and also tibial spurs are present.

Austrolimnophila ochracea Meigen (81 records)

NRI 1

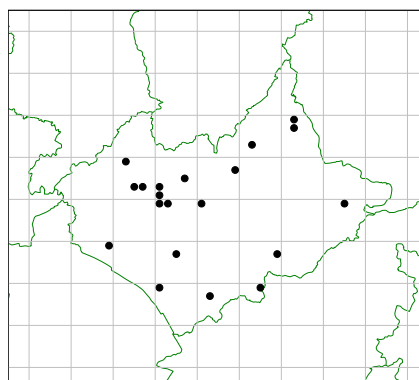
Larvae are feeders in rotting wood. At first glance this seems a drab brown fly but the male has an obvious blackish abdominal ring just before the genitalia. Both sexes have a right-angled bend in the base of medial stem vein which is clearly visible with a hand lens and is diagnostic (arrow in photograph). Widespread and common throughout Britain and noted throughout VC55 often abundant. May - August.



Dicranophragma adjunctum Walker (28 records)

NRI 1

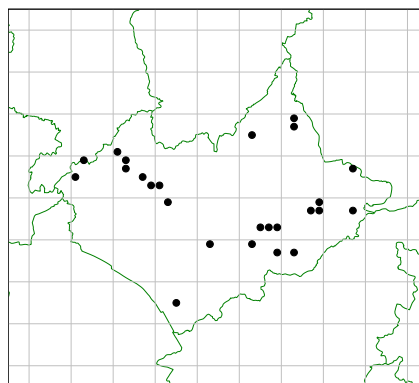
A locally common marshland species being widespread in England & Wales but scattered elsewhere. The only member of this genus which has markings on the wings. The claspers of species in this genus are similar and the outer claspers are all bifurcated at the tip. Throughout VC55. May-October.



Dicranophragma nemorale Meigen (45 records)

NRI 1

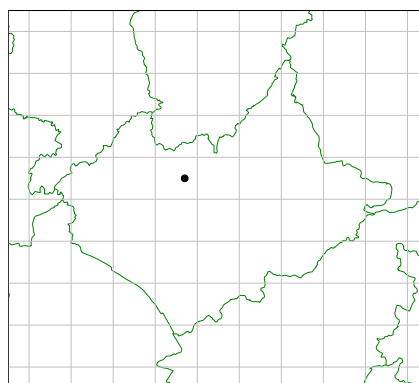
A widespread species in Britain particularly in woodlands. Widespread in VC55. May-October.



Dicranophragma separatum Walker (1 records)

NRI

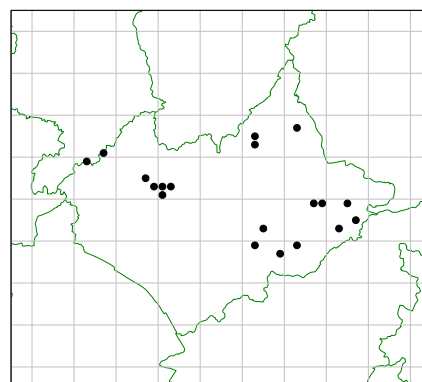
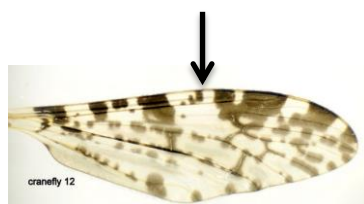
The antennae of this fly are entirely black whereas others of the genus have some yellow. Primarily occurring in northern and western areas. The single record from VC55 was found by Andy Godfrey in the Mountsorrel-Buddon habitat complex in 2011. (Photo: Michael Ackland).



Eloeophila maculata Meigen (29 records)

NRI 1

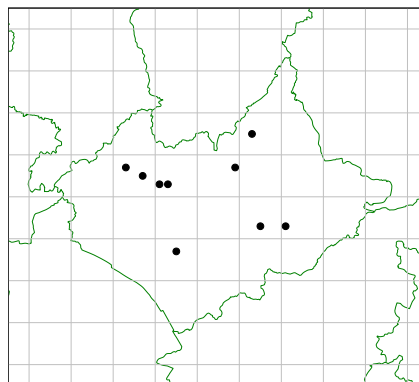
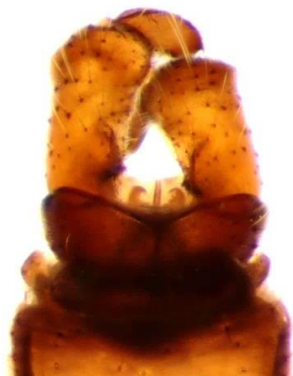
This fly seems to be the largest of this genus with the wing having a row of closely-spaced dark dots along many of the veins. Tend to be found in open situations throughout Britain although some VC55 records seem to come from wooded areas. May-September. (Photos: Michael Ackland).



Eloeophila submarmorata Verrall (14 records)

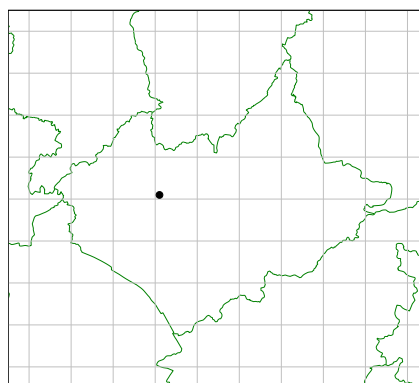
NRI 1

May be confused with the previous species but is usually smaller, weaker and lacking a row of spots in the middle of the front edge of the wing. Throughout Britain associated with marshy locations but not as commonly recorded as *E. maculata*. Scattered in VC55. April-August.



Eloeophila veralli Bergroth (2 records) **NRI 4**

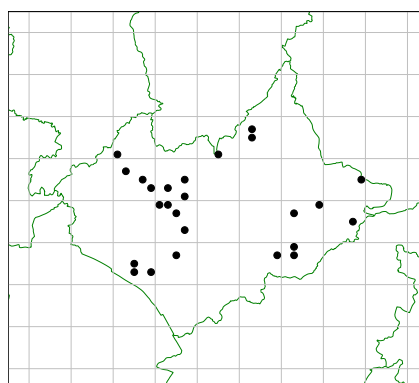
Scattered throughout England & Wales, less encountered elsewhere. Aquatic larvae by streams. Only found in VC55 near Newtown Linford when seen on two occasions at a stream margin in May 1999 by JK. May-June.



Epiphragma ocellare L. (48 records)

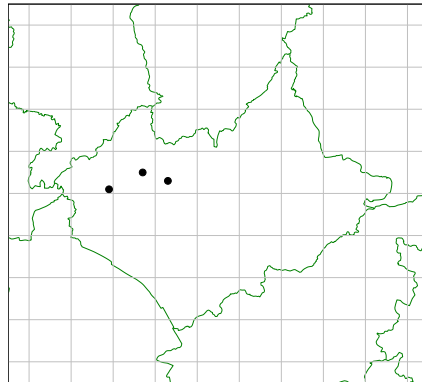
NRI 1

An easily recognised species (see cover) where its distinctively mottled wings has rings. Commonly encountered in VC55 and widespread in Britain. May-June.



***Euphylidorea aperta* Verrall (5 records) NRI 2**

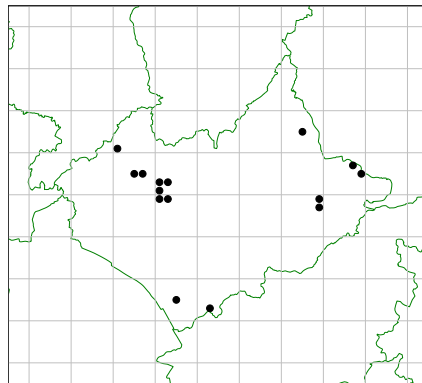
A medium-sized species lacking a discal cell. Found throughout Britain although seemingly scarcer towards the eastern and Cotswold areas. First recorded locally at Heather in May 1974 by Adrian Port (identification by AE Stubbs) then by JK on two dates at Swithland Wood in 1998 and again at Burrow Wood (Charley) in 2000. June-July.



***Euphylidorea dispar* Meigen (23 records)**

NRI 2

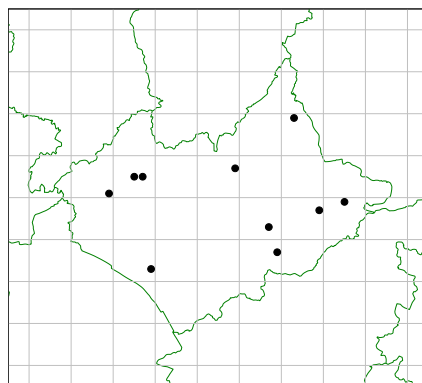
This fly has an orange-yellow thorax with a darkish stripe to the front. Found throughout England & Wales in woodland areas but less so in Scotland. VC55 records are scattered but possibly with the Charnwood area being favoured. Taken at the Rutland Water Egleton malaise trap in 2015. May-June.



***Euphylidorea lineola* Meigen (11 records)**

NRI 2

Needs careful separation from the previous species but the wings seem to have a more yellowish tinge. Found throughout England & Wales less so in Scotland. Scattered in VC55. May-September.



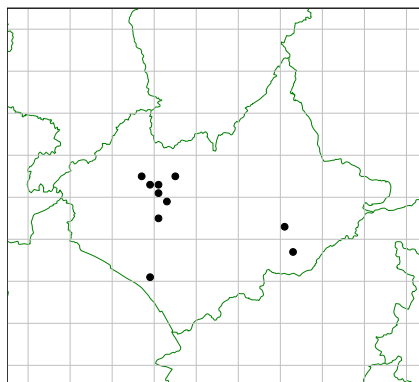


Sapcote 2014 (G Calow (NatureSpot))

Limnophila schranki Oosterbroek (14 records)

NRI 2

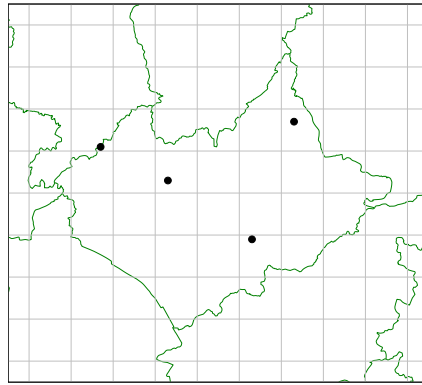
The peppered wings can be very variable with the thorax having two broad median stripes. Most records seem to come from England & Wales. In VC55 records are mainly from the Charnwood area. March-May.



Sharnford 2014 (G Calow, NatureSpot)

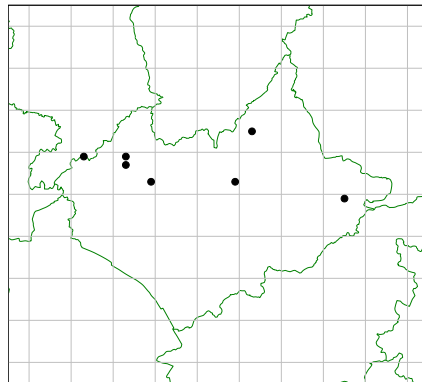
***Neolimnomyia batava* Edwards (4 records)
NRI 2**

Occurs throughout Britain but few records from VC55. First noted at Croxton Park by AE Stubbs during a visit by the Society in May 1994 and then in 1998 at Noseley Copse and Swithland Wood) by JK. Found during a Dipterists Forum meeting at Cloud Wood NR (July 2015). Usually March to May but three of the four VC55 records were in July.



***Neolimnomyia filata* Walker (12 records) NRI 1**

A slender black-bodied species with narrow wings. Identification is aided by a shining black disc around the anterior part of the thoracic dorsum. Widespread throughout Britain but few VC55 records.



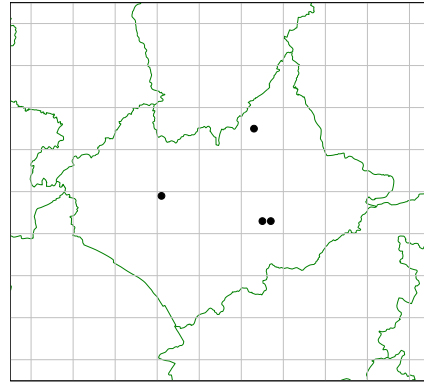
The genus *Paradelphomyia* is one of the most difficult to identify to species. All members of the genus have similar coloration, dark pleural stripe and a claw-like ending to one of the styles. The best diagnostic feature is the tiny genital apodeme of the males examples of which are shown below.



Paradelphomyia dalei Edwards (4 records)

NRI 2

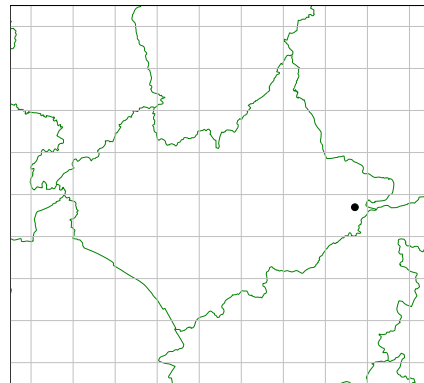
A species of damp woodland occurring throughout England and parts of Wales. Thorax has a central pale yellow-brown line with lateral dark lines. It is the only member of the genus to have this feature. The genital apodeme is very similar to that of *P. ecalcarata* with lateral arms. The VC55 records were made Stubbs in 1989. July-August.



Paradelphomyia fuscula Loew (1 records)

NRI 3

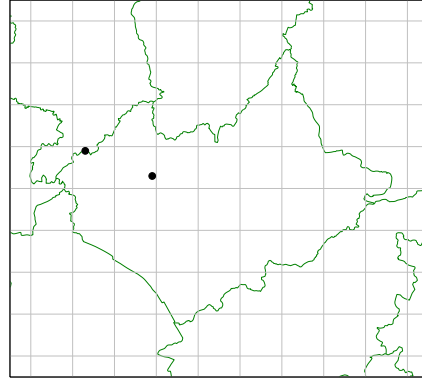
A pale species with the thorax lacking stripes. Scattered records throughout Britain but less so in the Midlands and to the east. The aedeagal apodeme resembles a tuning-fork. The only local record came from Shacklewell Spinney (Empingham) by JK in 1998. August-October.



Paradelphomyia nielseni Kuntze (4 records)

NRI 1

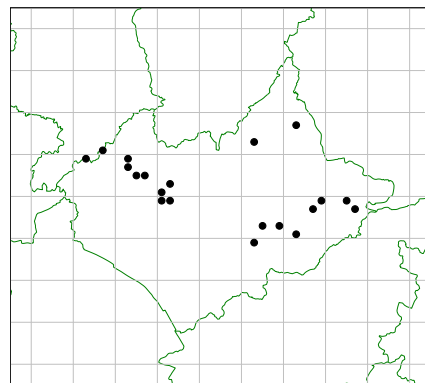
Distribution in Britain similar to the previous species but less common. A small yellowish species with hairs limited to the wing tips. The genital apodeme is small and located at the base of the folded sperm duct/ The four local records come from two VC55 sites - Ulverscroft NR and Scam Hazel Wood (Ashby de la Zouch) all noted by JK in September 1998. August- October.



Paradelphomyia senilis Haliday (46 records)

NRI 4

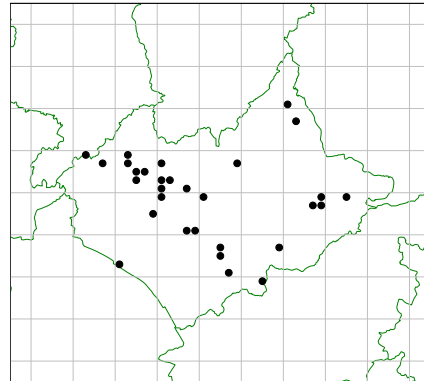
The apodeme is similar to *P. fuscula* but with shorter processes. Widespread being associated with damp woodland. The wing has a slightly enlarged anal lobe. Frequently encountered in VC55. May-October.



Phylidorea ferruginea Meigen (58 records)

NRI 1

A rusty-orange species of marshland with orange-yellow legs as is the top of the thorax. Common throughout Britain and well scattered in VC55. April-October. (Photo: Michael Ackland).

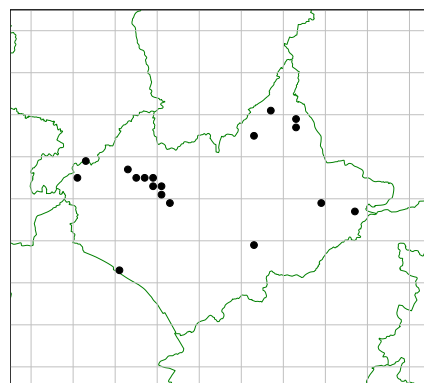


Grace Dieu 2008 (Dave Nicholls, NatureSpot)

Phylidorea fulvonervosa Edwards (35 records)

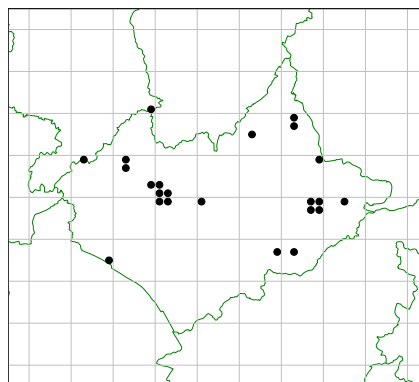
NRI 1

A widely distributed bright-yellow species of marshy locations having a black narrow stripe at the front of the thorax. Occurs across VC55. May-August.



***Pilaria discicollis* Meigen (35 records) NRI 1**

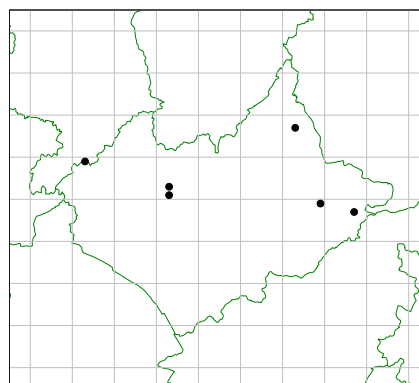
A largish marshland fly that appears entirely blackish-brown from above but with orange sides to the thorax. Wings brown-tinged. A widespread species in England & Wales, few in Scotland. VC55 records are scattered. June-August although noted in October locally (JK).



***Pilaria fuscipennis* Meigen (8 records) NRI 1**

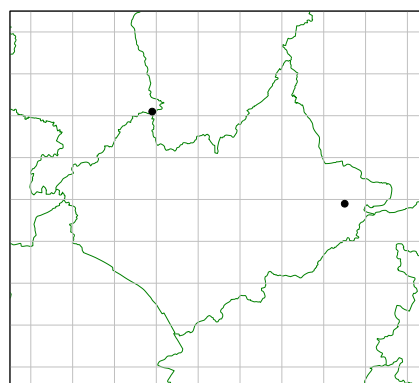
NRI 1

A shining orange thorax and yellow scutellum; as in all *Pilaria*, long hairs on the antennae. England & Wales, less so in Scotland. Relatively few scattered records in VC55. June-July.



***Pilaria scutellata* Staeger (2 records) NRI 1**

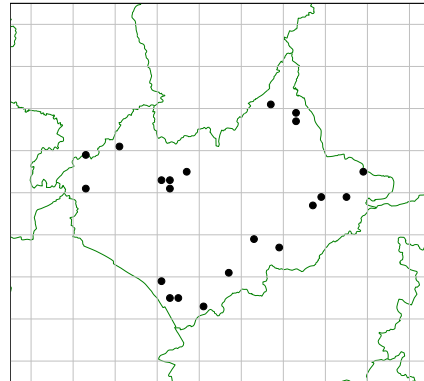
The body of this fly is drab darkish brown although the thorax has a noticeable black stripe and a dot by the base of the halteres. Occurs throughout Britain. Both VC55 records came from marshy areas (Lockington, Empingham). June-July.



Pseudolimnophila lucorum Meigen (29 records)

NRI 1

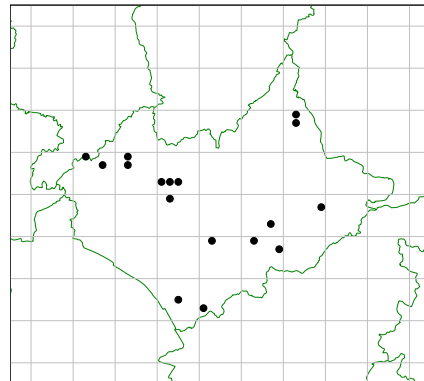
Associated with marshy areas, this fly's body is a dark grey with three brown stripes on the thorax top. Occurs throughout Britain and regularly found in VC55. May-July.



Pseudolimnophila sepium Verrall (25 records)

NRI 1

The position of the r-crossvein is diagnostic (see Stubbs' key) and, unlike the previous species, the thorax is medium brown with three vague darker stripes. A marshland fly with a similar distribution to *P. lucorum* in Britain and VC55. June-August.



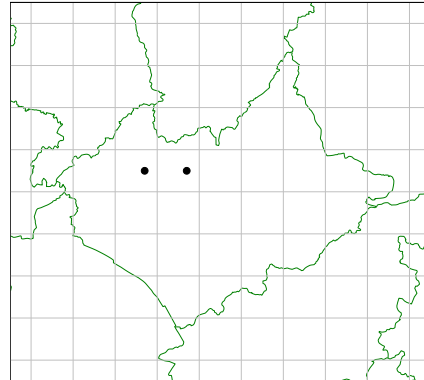
Subfamily Limoniinae

With its simpler venation this is perhaps the easiest subfamily to identify. Just two veins from the Rs fork reach the wing margin.

Achrolimonia decemmaculata Loew (2 records)

NRI 1

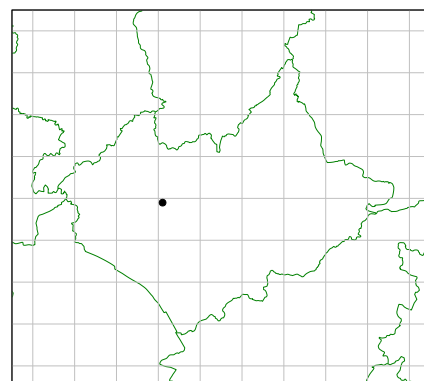
The sole member of this woodland genus in Britain is found throughout England & Wales but scattered in Scotland. The five round spots on each wing aid identification. Noted in VC55 by Alan Stubbs on two occasions (2006, 2011) from Charnwood Forest sites. May-September. (Photo: Michael Ackland).



Antocha vitripennis Meigen (1 records)

NRI 1

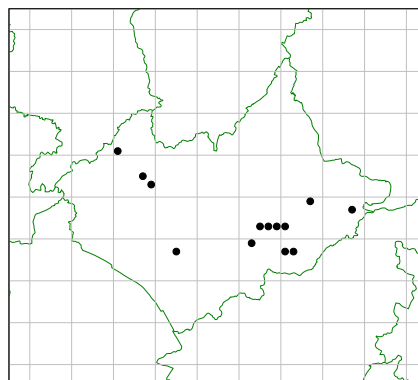
The larvae of this fly inhabit silk tubes at the bottom of clear streams and rivers.. The adult is a drab brown but with milky white wings and the right-angled amal angle enabling certain identification. Whilst occurring throughout Britain, it has only been found once in VC55 when seen by Alan Stubbs at Bradgate Park in 2006.



***Atypophthalmus inustus* Meigen (17 records)**

NRI 1

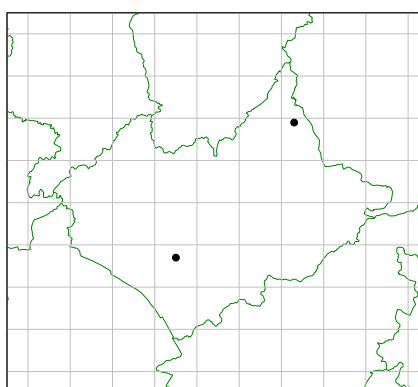
The only native species of this woodland genus is found mainly in England & Wales occurring scattered in VC55. The small delicate adult has an orange thorax with a dark stripe on the side. The plain wing has a light brown stigma. July but local records cover June-September.



***Dicranomyia autumnalis* Staeger (3 records)**

NRI 1

Whilst being widely found in Britain this fly has been seen on three occasions at two sites in VC55 – Croxton Kerial (1998) and Narborough Bog NR (1999) all by JK. The colour is variable but males can be readily identified by a pair of dagger-like appendages projecting down from the genitalia, one from each coxite May-October. (Photo: Andrew Cunningham).

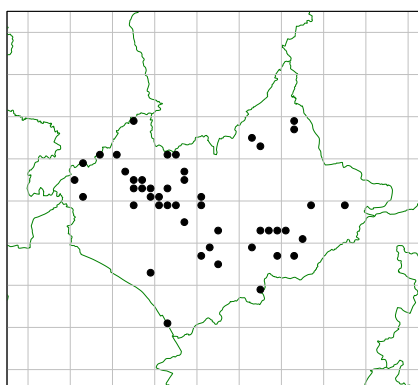


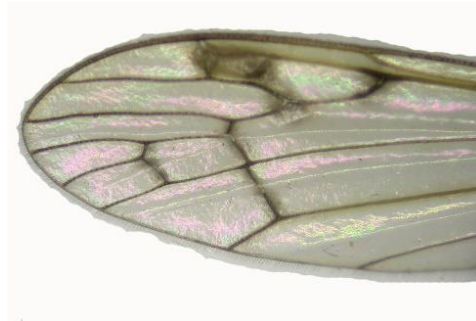
***Dicranomyia chorea* Meigen (120 records)**

NRI 1

The distinctive spot over the end of vein Rs and a coloured stigma aid identification. Note the relatively short pair of spines on each rostrum which separate faintly marked specimens (and *D. radegasti*) from specimens in the *mitis* group.

Widely found in Britain and in VC55 often swarming/dancing in a sun spot. First recorded in VC55 from Bradgate Park in 1935 by PAH Muschamp. April-October.

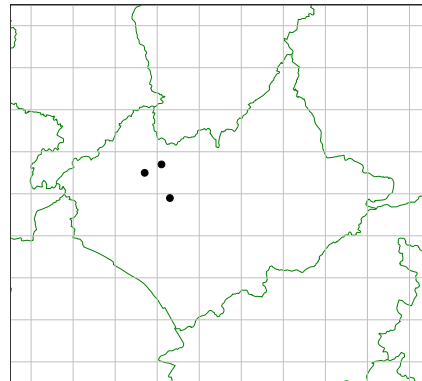




Dicranomyia didyma Meigen (5 records)

NRI 2

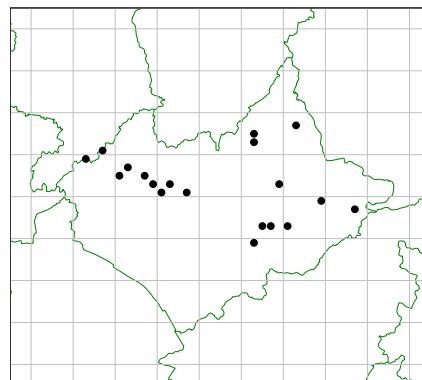
A drab-looking fly with three largish spots on the rather narrow wings. Seems to be found near running water, especially waterfalls, where the eggs are laid in damp moss. Widespread in Britain but only found at three Charnwood sites in VC55. June-September.



Dicranomyia fusca Meigen (30 records)

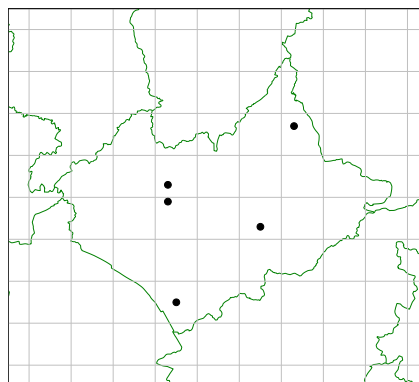
NRI 1

The apical quarter of the wing is hairy, unique in the Limoniinae. Found in wet woodlands throughout Britain and over VC55. May-July although noted locally outside this range.



Dicranomyia lucida de Meijere (7 records)
NRI 2

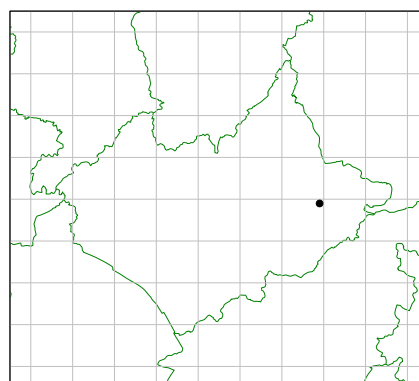
The strong wing markings and the orange and black body pattern makes this fly noticeable. Distributed across England & Wales it has been seen at five VC55 locations. June-July.



Dicranomyia lutea Meigen (1 records)

NRI

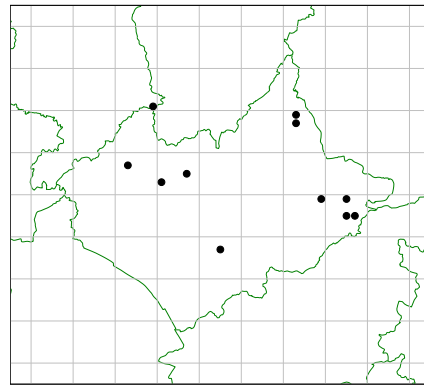
(See *D. mitis* below). When fresh, the wings show a yellow coloration. Scattered across Britain but only found once in VC55 at Burley Wood (1989, Alan Stubbs). May-June.



Dicranomyia mitis Meigen (18 records)

NRI 1

This species has a long history since Meigen named it in 1830 and both Verrall and Edwards recognised that it may be an aggregate. Verrall (1886) noted specimens of *D. chorea* lacking wing markings and recommended study of the male genitalia. Edwards (1938) named two varieties (*affinis* and *lutea*). The species in the *mitis* group have been re-defined by Stary & Stubbs (2015) who established five separate species (*affinis* Schummel 1829, *imbecilla* Lackschewitz 1941, *lutea* Meigen 1804, *mitis* Meigen 1838, and *quadra* Meigen 1838). As a result of this recent re-definition of these species, there is uncertainty with regard to the local and national distribution, flight times and status. More work needs to be done on the identification of these species and all the current information about '*D. mitis*' must be regarded as tentative.

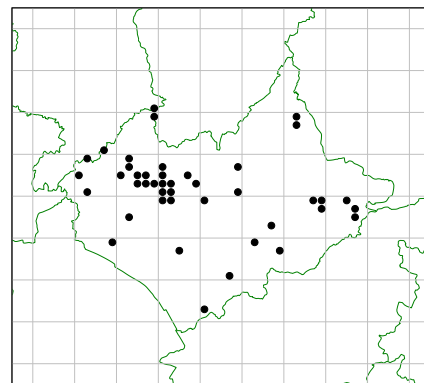


[Edwards, F.W. (1938). British short-palped craneflies. Taxonomy of adults. *Transactions of the Society for British Entomology*, **5**, 1-168.
Stary, J. & Stubbs. A.E. (2015). Five species under *Dicranomyia* (*Dicranomyia*) *mitis* (Meigen, 1830) (Diptera, Limoniidae). *Zootaxa*, **3964**, 321-334.
Verrall, G.H. (1886). List of British Tipulidae etc ("Daddy-Longlegs") with notes. *Entomologists' Monthly Magazine*, **24**, 156-160.]

Dicranomyia modesta Meigen (90 records)

NRI 1

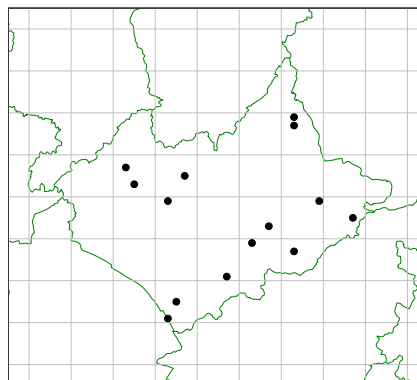
The plain wings and pale-brown body probably points towards this species. The short 'pile' of dark bristles on the internal faces of the lobed styles is diagnostic. Common everywhere including VC55. May-October.



Dicranomyia morio Fabricius (18 records)

NRI 1

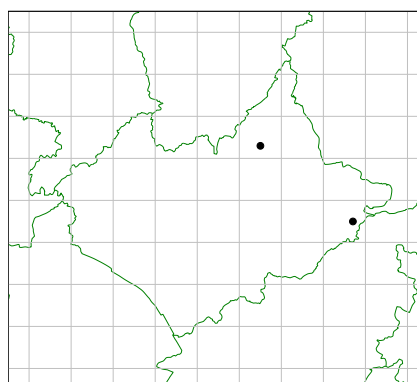
A marshland species with a shiny black abdomen and conspicuous narrow yellow rings. Throughout England & Wales less so in Scotland. Scattered throughout VC55. Apparently with spring and autumn generations which is reflected in local records. April-May, August-October.



Dicranomyia sericata Meigen (2 records)

NRI 2

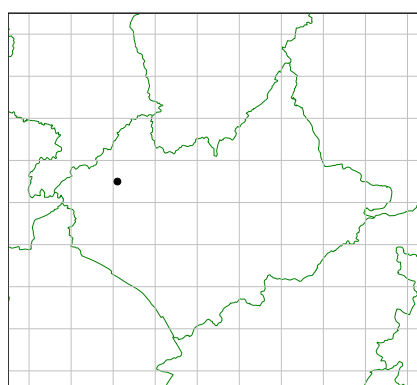
A calcareous grassland species with plain wings and the thorax having three very dark brown shiny stripes on top. The pair of conspicuous downward-pointing processes at the end of the male abdomen are diagnostic. Scattered in England & Wales with only two local records both from preferred habitats – Ketton and Holwell Brown's Hill Quarries, April-June.



Dicranoptycha fuscescens Schummel (1 records)

NRI

A nationally rare fly mostly found in SE England although the NBN has a Nottinghamshire record. The sole local record came from Finney Wood (Swannington near Coalville) although this needs to be confirmed as the date (April) seems at odds with the normal appearance time of June.

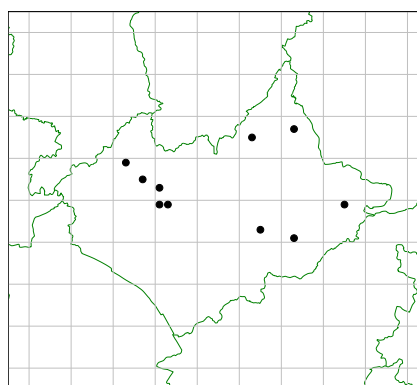


Members of the genus *Helius* are known as the 'Pond snouts' because of the conspicuous long rostrum or proboscis. This presumably evolved for drinking. Note the palps at the end of this 'snout'



***Helius flavus* Walker (11 records) NRI 1**

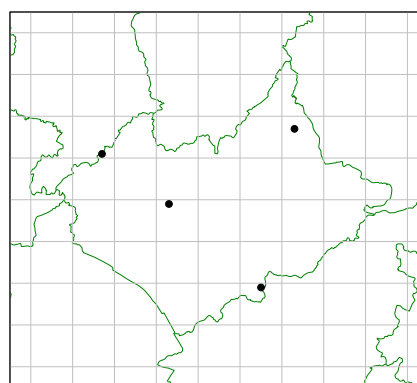
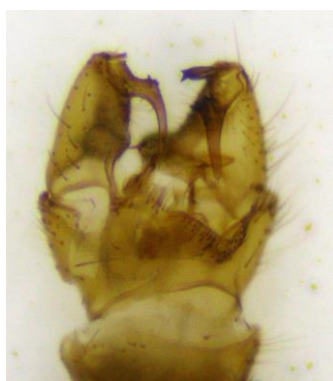
The yellow wings and lack of a stigma makes this fly easy to identify from other members of the genus. This fly is common in wet woodland throughout England & Wales but more scattered in Scotland. Scattered in VC55. June-July.



***Helius longirostris* Meigen (4 records)**

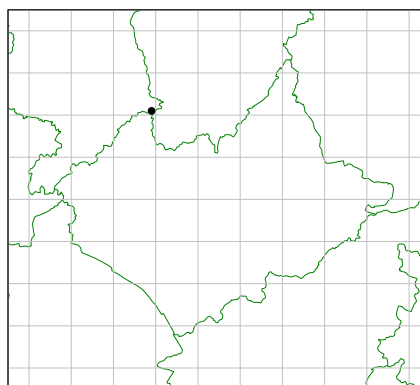
NRI 1

The proboscis is extensively tinged yellow-brown and there are three dark brown stripes on the top of the brown thorax. Found throughout Britain near waterbodies but few records from VC55. June-July.



Helius pallirostris Edwards (2 records) **NRI 2**

Similar to the previous species but with a noticeable round, almost black, stigma. Scattered through much of Britain but found only on two occasions in VC55 when seen by JK at Lockington Marshes in 2001 and 2003.

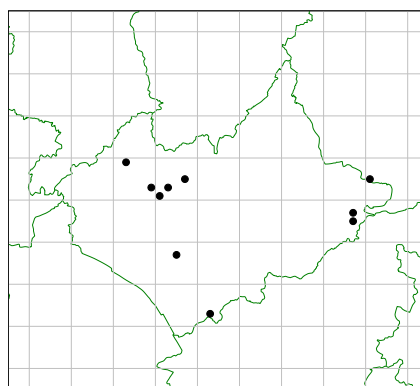


Members of the the genus *Limonia* all have a similar single horn-like clasper (see *L. nubeculosa* below) but features of the genitalia are not currently used for identification of this group.

Limonia flavipes Fabricius (17 records)

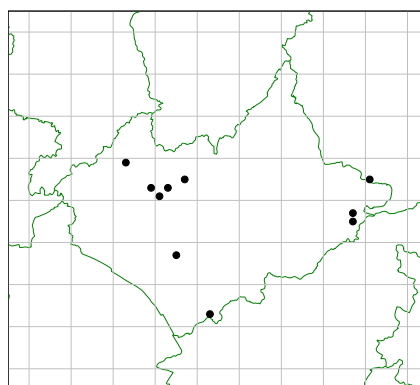
NRI 1

A dark-brown fly that has broad wings with markings that include three large round spots behind the front margin. The "thumbprint" on the scutellum is diagnostic. A woodland species found all over Britain but with relatively few records locally. First seen at Narborough Bog in 1935 by PAH Muchamp. May-July.



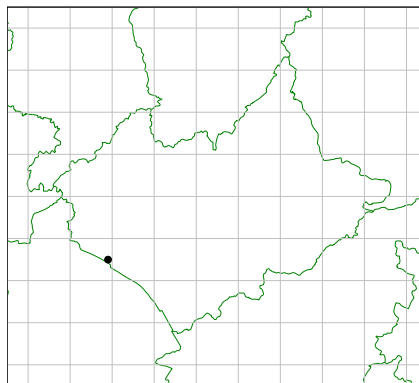
Limonia macrostigma Schummel (38 records) **NRI 1**

Wings lack any markings and, despite its name, the stigma is not large. Found throughout Britain in wet woodlands but only in scattered locations locally. May-October.



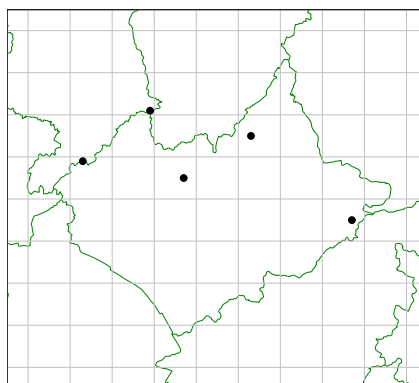
***Limonia maculipennis* Fabricius (1 record)**
NRI

The wings are strongly marked. The top of the thorax is glossy black with the sides heavily dusted grey. Seems to be predominantly found in the Cambridgeshire and London areas (NBN). The only VC55 sighting came from Higham (SW Leics) in 1951 when found by CN Colyer co-author of the "Flies of the British Isles". April-May.



***Limonia nigropunctata* Fabricius (9 records)**
NRI 2

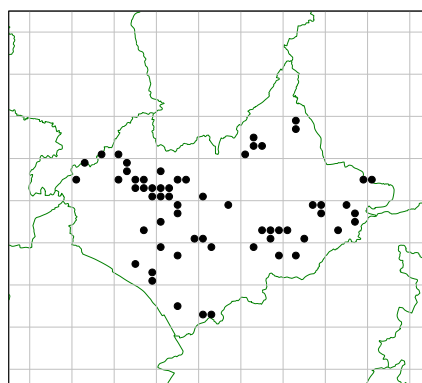
The bright orange thorax with a median black line and a mostly black abdomen helps with identification of this species. (Note that the form with a short black tip to the front femora was previously recorded as *L. masoni*). Found mostly in England up to the Manchester area. Noted from five scattered localities in VC55. May-June.

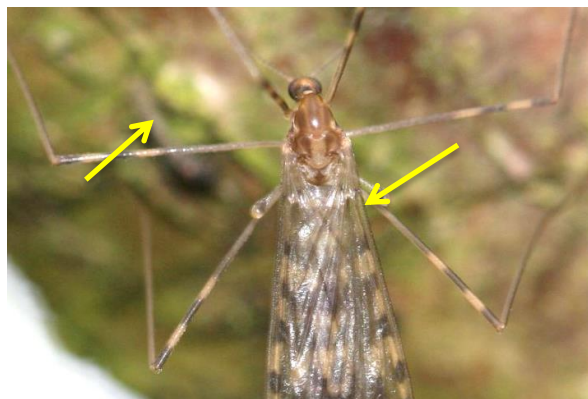


***Limonia nubeculosa* Meigen (184 records)**

NRI 1

One of the commonest of the Limoniinae in Britain and in VC55 with larvae feeding on rotting wood. The three dark bands on the femora are diagnostic. A specimen from Narborough Bog was first identified by PAH Muschamp in 1935. March-December.



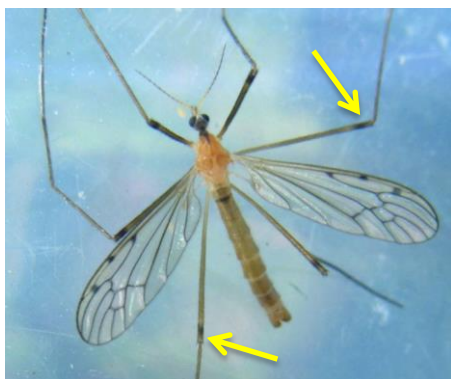


Burbage Common 2010 (Dave Nicholls, NatureSpot)

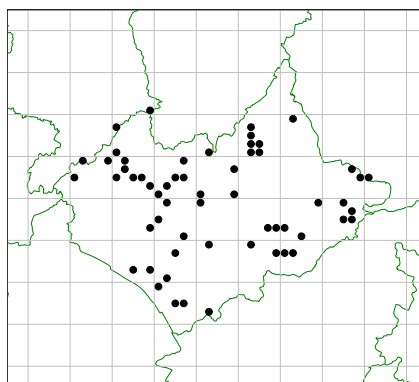
Limonia phragmitidis Schrank (112 records)

NRI 1

Found throughout Britain and commonly encountered in VC55 usually in shaded grassy places. The obvious pre-apical dark ring on the femora aids identification.

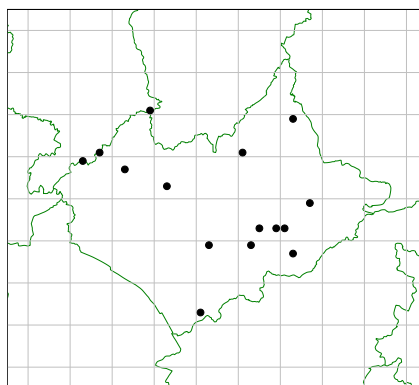


Sapcote 2012 (Graham Calow, NatureSpot)



Limonia trivittata Schummel (25 records) **NRI 1**

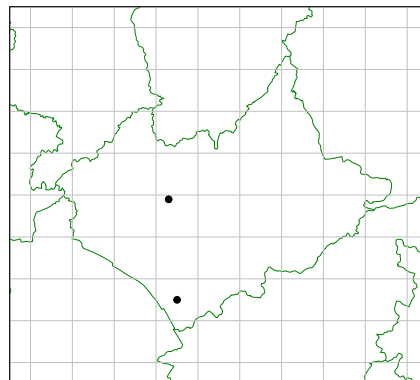
A local species of damp woodland found across Britain being scattered in VC55. Needs careful identification with all local records coming from experienced dipterists. June-July.



Lipsothrix nervosa Edwards (2 records)

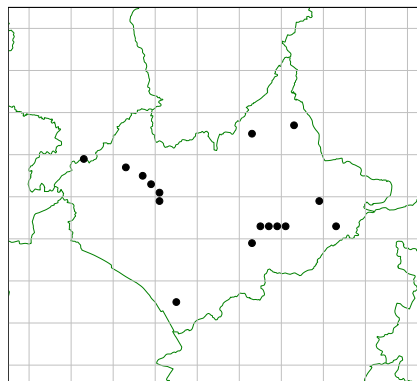
NRI 2

Found throughout England & Wales. Larvae feed on rotting wood in tree branches in streams. Rare in VC55 with only two records. Identification is relatively complex so great care must be taken. Note the distinct long antennae with elongated joints. June-July.



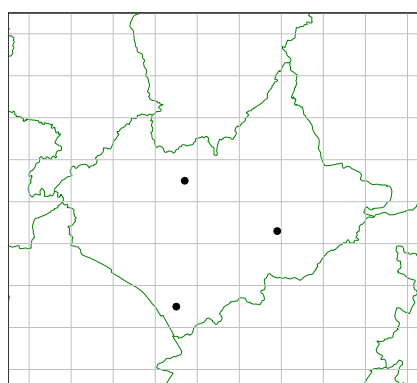
Lipsothrix remota Walker (26 records) **NRI 1**

Easily recognised as the body and femora are entirely yellow. Larvae with a similar habit as the previous species. Widespread in both Britain and VC55. May-July.



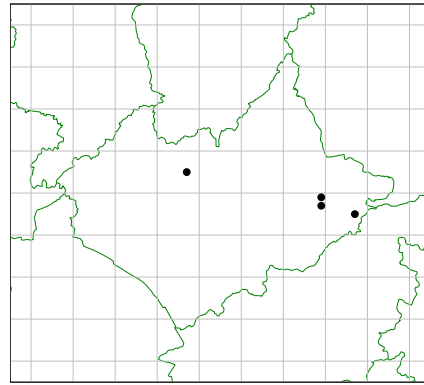
Metalimnobia bifasciata Schrank (4 records) **NRI 3**

Moderately large orange-yellow body coloration which also applies to the wings. Scattered throughout much of Britain but scarce in VC55. Inhabits woodlands where the larvae feed on fungi. July-October.



Metalimnobia quadrinotata Fabricius (8 records) **NRI 1**

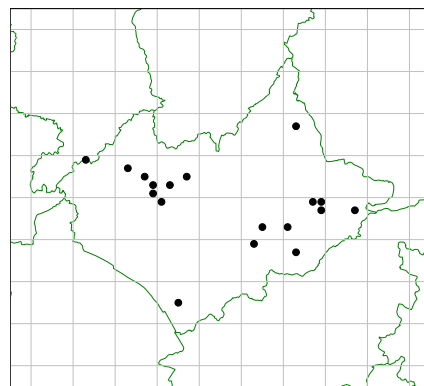
A largish fly with long, heavily-marked, wings and the top of the thorax having four very dark stripes. A spring species being widely distributed in Britain. Uncommon in VC55. April-May.



Neolimonia dumetorum Meigen (38 records)

NRI 1

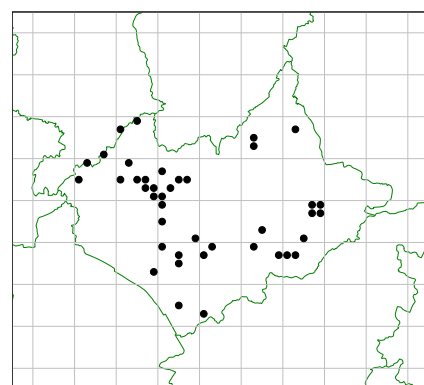
Thorax is bright orange-brown with three dark stripes on top. The abdominal tergites have yellow and black bands. Found all over Britain and regularly in VC55. June-September. (Photo: Michael Ackland).



Rhipidia maculata Meigen (100 records)

NRI 1

Wing normally peppered with brownish spots, unique in the Limoniinae. A common species of woodland in Britain with the larvae feeding on wood. Frequent in VC55. May-October.

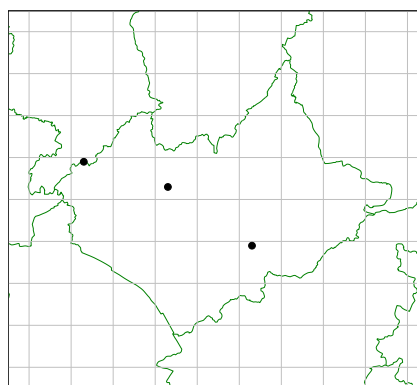




Whetstone 2013 (Mark Skevington, NatureSpot) – male: note the two comb antennal structure

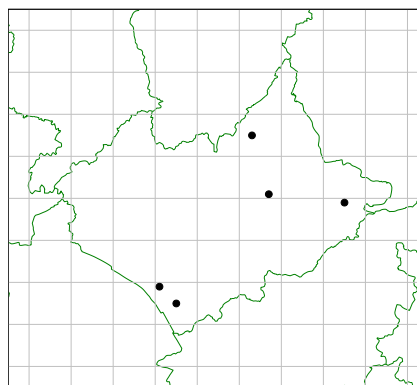
***Rhipidia uniseriata* Schiner (3 records) NRI 3**

A species found scattered across England in woodland. Unlike the previous species the male antennae have a single comb as the name suggests. Rare in VC55 with the three records all coming from 1998 by JK. May-October.



***Thaumastoptera calceata* Mik (7 records) NRI 2**

A small, very fragile species with a pale yellow body. It was necessary to darken the photo to make the genitalia visible against a white background. Both femur and tibia have black tips. (A species of very similar appearance is *Cheilotrichia imbuta* so always check the pale indistinct venation very carefully and note the single forked style.) Found in marshy situations throughout England & Wales. June-July. [Photo: Michael Ackland.]



Leicestershire & Rutland Entomological Society Occasional Publications Series (LESOPS) covering
(a) detailed studies of insects and other invertebrates carried out by Society members and
(b) matters of historical entomological interest to VC55 Leicestershire & Rutland

Copyright of LESOPS publications remains with the author(s)

Editor: Ray Morris (ray@cactusbob.net)