

**LEICESTERSHIRE  
ENTOMOLOGICAL SOCIETY**

**The status of Diptera  
in VC55**

**Pediciidae**

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*Pedicia rivosa* Grace Dieu 23/05/2009 (Ray Morris)

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## Introduction



The Pediciidae is one of the crane fly group and is distinguished by having eyes with a covering of short hairs visible in good light under x20 magnification (photo). A small family of just four genera of 20 British species, of which nine have been recorded in Leicestershire & Rutland (VC55). Most of the VC55 species have low numbers of records with one being known from a single record and another from two records – a definitely under-recorded family!

Some species are large and *Pedicia rivosa* has a distinct wing pattern. Some of the smaller species have unusual wing venation. Two of the genera, *Dicranota* and *Pedicia*, have larvae which are active predators in aquatic habitats, larvae of *Tricyphona* live in moist soil whilst those of the *Ula* genus feed within woodland fungi. The county collections have few specimens of

Pediciidae originating from VC55; the majority of collection specimens were collected by PAH Muschamp when he visited Switzerland in the 1930s and 1940s many of which are not of genera found in Britain.

Many of the records of the Pediciidae in the VC55 database were accumulated by John Kramer in the last thirty years. Maps have been produced using MapMate® and data has been recovered primarily from LRERC and the NBN Atlas. There are few local photographs of VC55 species.

The British status of a species has been determined by the number of hectads (10x10km squares) that it has been recorded across the country (Table 1) based on the data presented by the NBN Atlas accessed 30 September 2021. It should be noted that the rating does not reflect the actual national distribution with bias where particular areas of the country have large numbers of records. However, none of the species recorded in VC55 are unusual with all scoring as NRI 1.

**Table 1: National Rarity Index**

NRI 1	>100 hectads
NRI 2	30-100 hectads
NRI 3	16-30 hectads
NRI 4	6-15 hectads
NRI 5	2-5 hectads
NRI 6	1 hectad

## Acknowledgements

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## References

- Kramer, J. (2011). Leicestershire Crane fly update. *Leicestershire Entomological Society Newsletter*, **45**, 6.  
 Kramer, J. (2011). The crane flies of Leicestershire & Rutland (VC55). *Leicestershire Entomological Society Occasional Publications Series*, **26**.  
 Stubbs, A.E. (2021). *British Crane flies*. British Entomological & Natural History Society.

## Annotated Pediciidae

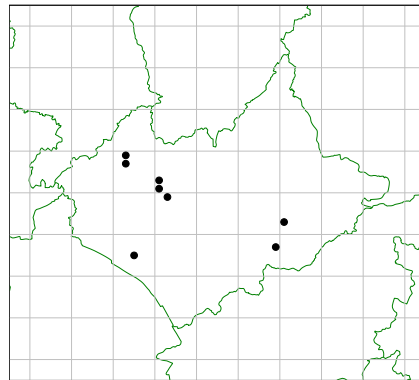
### *Dicranota bimaculata* (14 records)

**NRI 1**

Widely distributed in England and Wales while being scattered elsewhere. Associated with moist areas by streams. The wing sometimes shows a dark spot over vein r-m although this may be faint and overlooked. The few VC55 records come from across the area. The habitat preference seems to be the case in VC55.



Male hypopygium showing distinct finger-like style



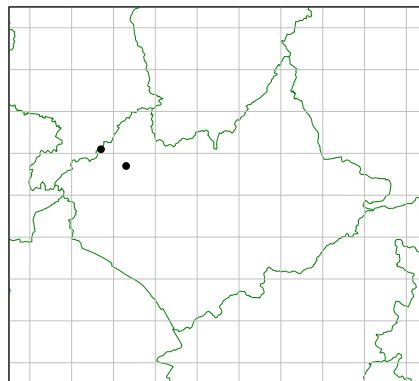
### *Dicranota claripennis* (5 records)

**NRI 1**

A drab looking fly with a greyish head and the top of the thorax having four shining stripes. Nationally the fly seems to be most frequent in the west and north of Britain with the East Midlands, south-east England and East Anglia having very few records. Grace Dieu Wood provided all of the records with the exception of one. The latter was recorded during a National Trust survey as being at "Calke: Staunton Harold village area" with a grid reference which indicates Dimmingsdale NR (NBN Atlas). The border between the reserve and the Calke estate is literally across the road!



Male hypopygium



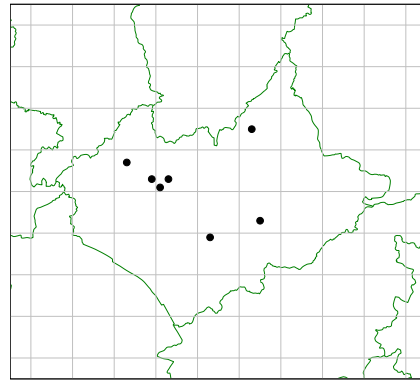
***Dicranota pavid*** (13 records)

**NRI 1**

The national distribution of this species seems to show poor representation in the East Midlands and East Anglia whilst being widespread elsewhere in Britain. VC55 seems well endowed in comparison with neighbouring counties (Derbyshire 4 records, Lincolnshire 0, Northamptonshire 2 and Warwickshire 1 – NBN Atlas September 2021). First appears in spring with a further emergence in the autumn.



Male hypopygium



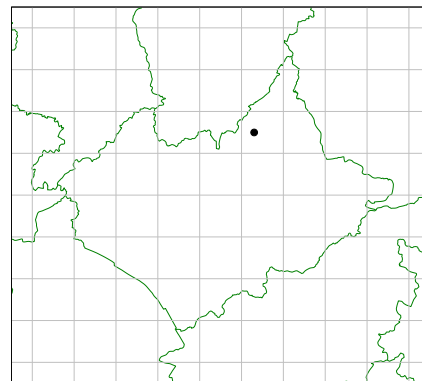
***Dicranota subtilis*** (1 record)

**NRI 1**

The middle and hind coxae are yellowish and the body is mainly dark grey. A species of fast-flowing streams mainly in the uplands in Britain. The species was recorded at the Holwell Reserve in north-east Leicestershire by Alan Stubbs in 1989.



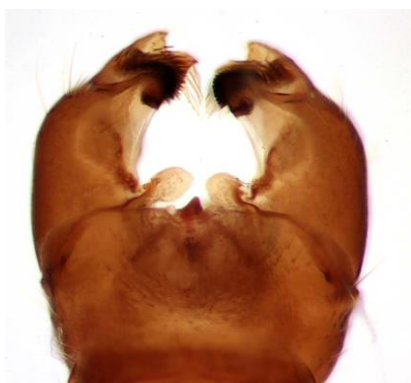
Male hypopygium



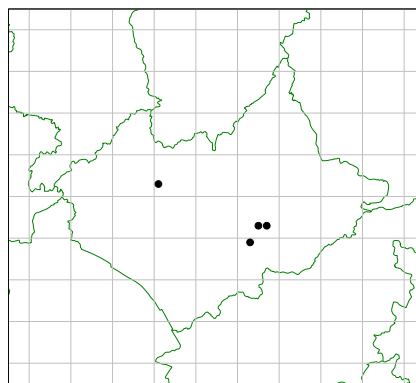
***Pedicia litoralis*** (5 records)

**NRI 1**

A largish fly with a bright orange-yellow body with a darkish brown front margin to the yellowish wing. A species primarily of the west and north of Britain with an almost total lack in the east of the country. The five VC55 records were made by Alan Stubbs and John Kramer and can be considered reliable. Only Derbyshire of the adjacent counties has records of the fly.



Male hypopygium



***Pedicia rivosa*** (18 records)

**NRI 1**

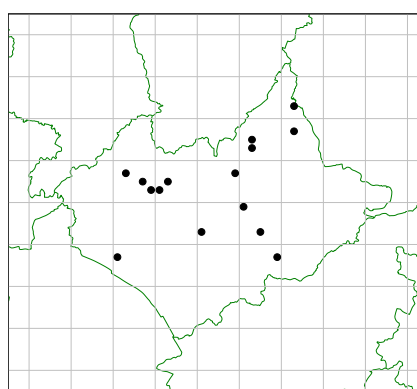
The large size and distinctive wing pattern makes identification of this fly to be definitive although some may confuse it with *Tipula maxima*. It is a widespread species in Britain although less so in the Midlands. The adult seems to avoid detection depending on lush tall wet vegetation. The example shown on the cover was taken in the "fen" area at Grace Dieu Wood. The larvae are described as being "fearsome" with their large mandibles, seeking a variety of prey. The adult is a July flier in VC55 although occasionally can be seen outside this period. Interestingly Crabbe (1795) mentions the species (as similar to *Tipula rivosa*) in his study of the natural history of the Vale of Belvoir.

*"Tipula – a very common and numerous tribe of insects, found in every part of the vale; one large and handsome species of which is not described by any author; it is of the size of the Tipula rivosa but the wings are immaculate, and of a pale brown colour; it is very scarce, but haunts a few places about Stathern in July and August."*

However, it is not clear whether the *T. rivosa* he refers to came from Stathern and hence has been recorded as Vale of Belvoir in the database. [Crabbe seems perhaps to be referring to *T. fulvipennis* here, not *P. rivosa*]



Found dead in moth trap at Charwood Lodge NNR  
2016 (Kate Nightingale, NatureSpot)



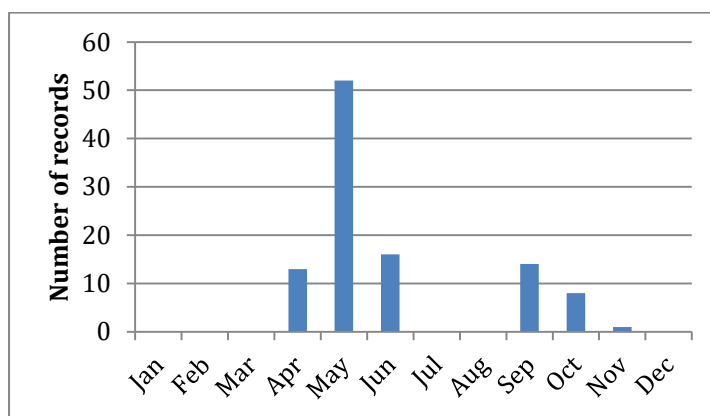
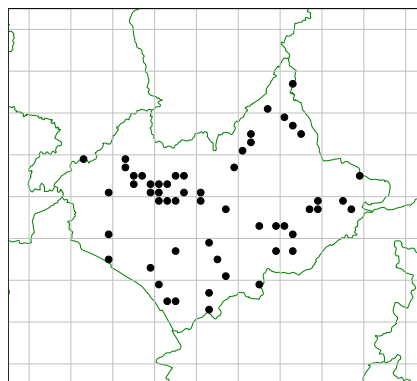
***Tricyphona immaculata*** (104 records)

**NRI 1**

An often frequent and widespread species throughout Britain which initially may be recognised by the yellow bases to the femora. However, close examination needs to be undertaken including examination of the top of the thorax and genitalia. The most numerous and widely spread of the Pediciidae in VC55, occurring in moist soil. The strong spring appearance in VC55 with a lesser autumn generation agrees with that described by Stubbs (2021).



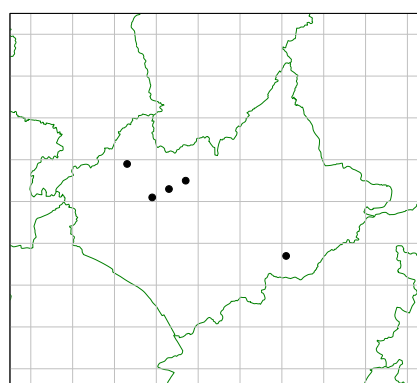
Sapcote 2012 (Graham Calow, NatureSpot)



***Ula mollissima*** (7 records)

**NRI 1**

The larvae of *Ula* species, unlike the other members of the Pediciidae, feed on bracket and a few other terrestrial fungal species. Genital examination is the only reliable means of identifying the species. Widespread in England & Wales, scattered elsewhere. All VC55 records have been confirmed by experienced entomologists. Apart from the first record at Hornighold in 1972 (by Alan Stubbs), all other records come from the Charnwood area although there have been no credible identifications since 2012.





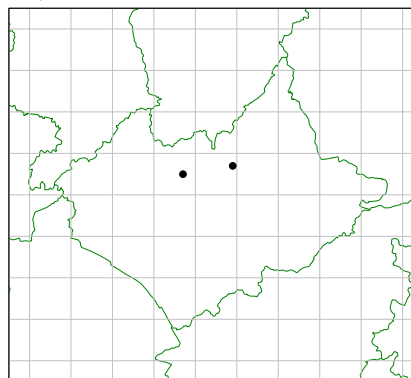
***Ula sylvatica*** (2 records)

NRI 1

This species of *Ula* can be easily identified by genital examination. The larvae feed mainly on terrestrial fungi in woodlands and is widely found throughout Britain although less so in the south and east Midlands area. The two records for VC55 came from experienced entomologists.



Female genital apodeme

***Ula mixta***

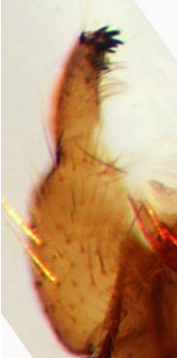
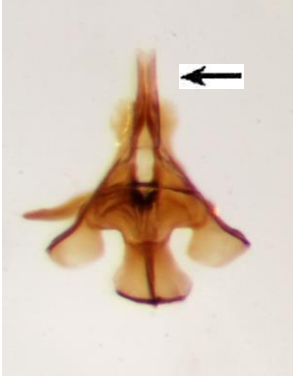
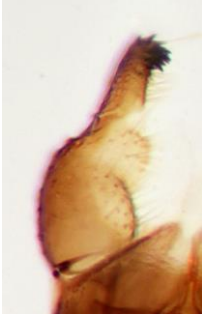


Another species, *Ula mixta* (added to the British list in 2003) is very similar to *U. mollissima* differing in the internal genital apodeme. (See below). Unsurprisingly, this new species has not yet been searched for or recorded in VC55. A voucher specimen would be needed to support records for this species.

**The identification of the genus *Ula***

The genus *Ula* is one of the most distinctive to recognise. They are small, about 5-8mm long, brown and with 'hairy' eyes and wings. However, identifying the different species needs a bit of care and the key in '*British Craneflies*' should be consulted.

If it is a male, first check the claspers. Those of *U. sylvatica* are distinctive with their strong black terminal spines. *U. mixta* and *U. mollissima* are similar and require dissection of their genital apodemes to separate them conclusively.

The females of *mixta* and *mollissima* are also very similar with the ovipositor valves of the former being more finely tapered; a difficult judgement. If a female *mixta* is suspected it is a good idea to search for males for confirmation. The genital apodeme of *mixta* is characterised by the pale flange (arrowed) and the broad 'fan-tail'.

Species	Male clasper	Male genital apodeme
<i>Ula mixta</i>		
<i>Ula mollissima</i>		
<i>Ula sylvatica</i>		

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

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