



# Cranefly News

## Dipterists Forum Cranefly Recording Scheme

For Superfamily Tipuloidea & Families Ptychopteridae & Trichoceridae

Newsletter No 35

Spring 2020

Editor: John Kramer



Achyrol

### News! New Cranefly for the British List (See Dipterists Digest 2019 Vol 27 No.2)



Fig.1. *A. neonebulosa*  
Male genitalia (JK)

On 25 Sept 2019 Michael James from Norfolk posted on the DF website photographs of a specimen which he correctly identified as *Achyrolimonia neonebulosa*. The adult fly emerged from the compost of a plant pot containing a plant of *Sarracenia*. This is a genus of North American insectivorous trumpet pitcher plants which are indigenous to the Eastern side of the USA. It was purchased from a garden centre at Fritton, Norfolk on 29 August 2019. The assumption is that the larva must have been present in the compost surrounding the plant, imported from the Netherlands, although of course there are a number of other logical possibilities which could be investigated. The larvae live in humus-rich soils. The species has a circum-polar (Holarctic) distribution, ranging from the Nearctic North America, across Palaearctic Europe and Asia to China and Japan. The wing pattern is very similar to *A. decemmaculata* and it is well worth examining the genitalia of all specimens of this species in case there has been misidentification. In Holland the species was first detected in a commercial greenhouse, but was later collected in the wild. This is the first cranefly new to Britain recognised from a photo on the DF website. *A. decemmaculata* has genitalia which place it close to *Dicranomyia*, but when we look at the genitalia of

*A. neonebulosa*, it seems to be so different to *A. decemmaculata* as to place it in a separate genus. It would be interesting to see if DNA barcoding reveals some other affinity

### Field Work & Records

**Pete Boardman**, Natural England Mail Hub, Natural England, Worcester County Hall, Spetchley Road, Worcester, WR5 2NP. [Pete.Boardman@naturalengland.org.uk](mailto:Pete.Boardman@naturalengland.org.uk)

### Craneflies as part of a landscape scale invertebrate recording project including several new to Staffordshire (VC39)

Over the past eighteen months I have been involved through my work in Natural England in the development and implementation of a landscape scale invertebrate monitoring project. This is probably not the place to go into the methodology in detail, but in brief, crane flies were used as a proxy for other wetland flies at a number of sites in the pilot study area; the Cannock Chase to Sutton Park Priority Focus Area (CC to SP). Crane flies were used because their ecology is relatively well known and they are coded into Pantheon invertebrate analysis software (Webb, *et al.* 2019), which is central to our interpretation of results under this new methodology.

A number of interesting crane flies were encountered over the survey period of 2018/19, some of which were significant as new country records or uncommon species in a Staffordshire (VC39), or a Warwickshire (VC38) context, so are listed here for interest. [Note species listed as new for VC39 were determined from the Staffordshire Ecological Record online atlas - <http://www.staffs-ecology.org.uk>, and Warwickshire detail was gathered from the NBN Atlas - <https://nbnatlas.org/>]

#### Staffordshire (VC39)

Barr Beacon LNR – heathland: *Limonia dilutior* (Nationally Scarce and third record for Staffordshire VC39).

Gentleshaw SSSI – area of valley mire (a very rare habitat within the West Midlands): *Dicranomyia distendens* (Nationally Scarce and new to Staffordshire VC39), and the *Sphagnum* associates: *Euphyllidorea meigenii*, *Molophilus occultus*, and *Phyllidorea squaleus*.

Jockey Fields SSSI – area of swamp: *Triogma trisulcata* (Nationally Scarce and 2<sup>nd</sup> Staffordshire VC39 record)

Leighs Wood LNR – area of reed fen, swamp, and fringed pool: *Erioptera meijerei* (Nationally Scarce and new to Staffordshire VC39), *Lipsothrix nervosa* (Section 41 species and new to Staffordshire VC39). Sutton Park NNR – extensive wet heath and small area of valley fen: *Dicranomyia lucida* (Nationally Scarce and 4<sup>th</sup> Warwickshire VC38 record), *Idioptera pulchella*, Nationally Scarce, only Warwickshire site, and second record there – the other being in 1938. The *Sphagnum* associate *Euphyllidorea meigenii* was recorded and *E. aperta*, which is uncommon in the West Midlands and was found at only its second Warwickshire VC38 location.

Cannock Chase SSSI – northern part of Unit 18 (area of alder carr with a shaded shallow stream running through it): *Atypophthalmus inustus* (new to Staffordshire VC39), *Eloeophila trimaculata*, *Gonomyia abscondita*, (new to Staffordshire VC39), *Tanyptera atrata* - all Nationally Scarce, and *Ormosia depilata* (new to Staffordshire VC39). Chasewater Heaths SSSI – wet heath and bog within Unit 6: *Sphagnum* associate *Euphyllidorea meigenii* Clayhanger SSSI - area of reed fen and fringed pool: *Pilaria scutellata*, and *Triogma trisulcata* (both Nationally Scarce and both new to Staffordshire VC39).

These records suggest that there are still many undiscovered species of interest within the West Midlands and builds on work done in this region over many years by the stalwart Mike Bloxham in the Sandwell Valley. Some of the sites visited as part of this project were in urban areas and might not be in the first set of sites selected by dipterists on which to swing their nets, so it was particularly rewarding to find some interesting flies as part of this project. Many thanks to Jaclyn Lake and Vicky Gilson at Natural England, and the various landowners who gave permission to record on their land.

#### References

Pantheon <https://www.brc.ac.uk/pantheon> - Webb, J., Heaven, D., Lott, D., Dean, H.J., van Breda, J., Curson, J., Harvey, M.C., Gurney, M., Roy, D.B., van Breda, A., Drake, M., Alexander, K.N.A. and Foster, G. (2018). Pantheon - database version 3.7.6

#### Craneflies recorded at Plas-y-brenin, Capel Curig, North Wales in 2019

On 3 June 2019 I accompanied the British Arachnological Society field excursion to a bog close to the Plas-y-brenin outdoor activity centre at Capel Curig in North Wales (VC49 Caernarvonshire). 18 species of craneflies were recorded on the visit including: *Gonomyia dentata*, *Euphyllidorea phaetostigma* (Nationally Scarce), *Phyllidorea longicornis* (Nationally Scarce), *P. squalens*, *Molophilus ater* (collected by Richard Gallon), and *M. occultus*. Thanks to Richard Gallon of Cofnod for arranging access to the site, and the British Arachnological Society for so willingly accepting a dipterist in their midst.

#### *Dicranomyia aquosa* new to West Gloucestershire (VC34)

During 2019 I visited **Slade Brook SSSI** in West Gloucestershire (VC34) on two occasions as part of a survey of invertebrates there associated with the W134 SAT assemblage, the nearest Pantheon (Webb et al 2019) assemblage to tufa habitats. Slade Brook SSSI contains some of the most tufa-rich wetlands in England, though very little in the way of bryophytes such as *Palustriella commutata* that usually accompany tufa, and the tufa-specialist crane fly *Ellipteroides alboscuteatus* was absent at the times of sampling. A few interesting species were recorded however including *Dicranomyia aquosa*, which appears to be a new record for this Vice County. Other species of note recorded were: *Paradelphomyia dalei*, *P. ecalcarata*, (See below) *Dicranomyia lucida* (Nationally Scarce), *Lipsothrix nervosa* (Section 41 species), and *Molophilus corniger* (Nationally Scarce). Thanks to Ali Swanson and Nick Button of Natural England, and the landowners for access to the site.

**Pete Boardman,**

#### *Paradelphomyia* from Slade Brook West Gloucestershire (VC34) - John Kramer

Males of two species of *Paradelphomyia* were collected by Pete Boardman at this site on 1 Aug. 2019 and details of the hypopygia are shown and discussed below.

Jaroslav Starý's observations on the genital apodemes of *Paradelphomyia dalei* (Edwards 1939) and *Paradelphomyia ecalcarata* (Edwards 1938) in the latest Dipterists Digest (Dipterists Digest 2019 Vol. 26 No.1) leave us with a problem and stimulates more work in the context of the British species. From Ralph Coe's key in the RES Handbook (Vol IX, Pt. 1, 1950) to the release of Alan Stubb's Key to the British Limnophilinae in 1997, and onwards, we have always used the presence/absence of prescutal stripes, to identify *P. dalei* and *P. ecalcarata*. These characters were described by Edwards and are good field characters. For conclusive identification, the apodemes are checked for the presence of lateral arms, using a microscope. Because of discoloration in ethanol, in place of the striped/unstriped prescutum Jaroslav Starý offers structural features as more reliably diagnostic of each species, as shown on the table below.

**Table to compare diagnostic characters used by Jaroslav Starý to identify *P. dalei* and *P. ecalcarata***

Characteristic	<i>P. dalei</i>	<i>P. ecalcarata</i>
[Prescutal stripes	Paler. Prescutal stripes present	Darker. Prescutal stripes absent]
Aedeagus length	As long as parameres	Shorter than parameres
Outer style	Shorter and broader	longer and more slender
Long tooth	Less conspicuous and curved	More conspicuous and curved
Lateral arm of apodeme	Thin at base	Thick at base

Because the prescutal stripes are listed as diagnostic by Edwards we must assume that this is the case with the two specimens of *P. dalei* used by Starý. According to Jaroslav's hypothesis the cluster of characters listed above for *P. dalei* always occur together and are correlated with the prescutal stripes. Some doubt is shed on this when Figs. 8, 17 and 18 in my review of *Paradelphomyia* (DD. 2015 Vol.22 No.1) and also in **Cranefly News 29, Spring 2015** are compared. They



**Fig. 2. *Triogma trisulcata***  
Male hypopygium  
Ventral view

do not fit neatly with Jaroslav's hypothesis since there is no significant difference in the thickness of the lateral arms proximally of some of the British *P. ecalcarata*. We need to observe a sufficiently large sample of specimens to decide on the range of intra-specific variation for the characteristics listed by Stary. To this end I offer 3 more examples below. The two species of *Paradelphomyia* were found by Pete Boardman at Slade Brook West Gloucestershire (VC34) on 1 August 2019, and details of the hypopygia are shown below. (a. genital apodeme, b. inner style )



Fig 3a *P. dalei* (PB30)



Fig 4a *P. ecalcarata* (PB28)



Fig 5a *P. ecalcarata* (PB29)



Fig 6b *P. dalei* (PB30)



Fig 7b *P. ecalcarata* (PB28)



Fig 8b *P. ecalcarata* (PB29)

We can see that two of the proposed differentiating characters, the lateral apodeme arm, and the features of the outer style, shown above are shared by both species shown here. Contact with continental Europe was lost about 8,000 years ago when the rising post-glacial sea-level led to the formation of the English Channel and the North Sea. Before then the British and European *P. ecalcarata* shared a common gene pool. *P. dalei* seems to be endemic to Britain, and, if so, it probably evolved here from the isolated British population of *P. ecalcarata*. It would therefore not be surprising if there were variation towards *P. dalei* in the present-day *P. ecalcarata* population; incipient *P. dalei*, perhaps. If *P. dalei* and *P. ecalcarata* are indeed members of different species then each will occupy a different ecological niche and be reproductively isolated. It is very possible that, due to its 8,000-year isolation, the intra-specific variability of the British population of *P. ecalcarata* differs from that on continental Europe, and it is notable that all of the 22 specimens of *P. ecalcarata* studied by Jaroslav are from central Europe.

**John Kramer**

### ***Dicranomyia sericata* in Northamptonshire**

**John Showers**

#### **Introduction**

*Dicranomyia (Glochina) sericata* has an inflated inner style which is typical of the genus *Dicranomyia* (Limoniidae). It is readily identified by a pair of long processes which extend ventrally from each side of tergite 9 on each side of the long external aedeagus (penis).

#### **Distribution**

This species appears to have a very limited range in Northamptonshire, being associated with the inferior oolite group of Jurassic limestone in the Rockingham Forest area. It was first recorded by Jon Cole at Collyweston Quarry on 30/5/1997. This site, an SSSI and Nature Reserve, is a former quarry for "Collyweston slate", a finely bedded limestone that cleaves easily into thin slabs traditionally used for roofing locally. The site is a rich limestone grassland, with scattered hawthorn and blackthorn scrub and is dry.

The next records were in 2011 when Alan Stubbs recorded it at Ring Haw on 30<sup>th</sup> April in limestone grassland and I recorded it on the same day at Old Sulehay Forest, an adjacent site. Both these sites lie on the same belt of limestone as Collyweston and both are dry. The Old Sulehay Forest site is ancient woodland but with an open central ride with limestone flora. The Ring Haw site has old grassed-over limestone workings surrounded by woodland.

In 2013, during the Dipterists Forum Spring Field meeting on 19<sup>th</sup> May, both Alan Stubbs and I recorded several at Twywell Whitestones nature reserve, another former limestone quarry. This site consists of steep grassy banks with substantial areas of hawthorn and some blackthorn scrub. A number of the hollows contain ponds, many of which dry out in hot summers.

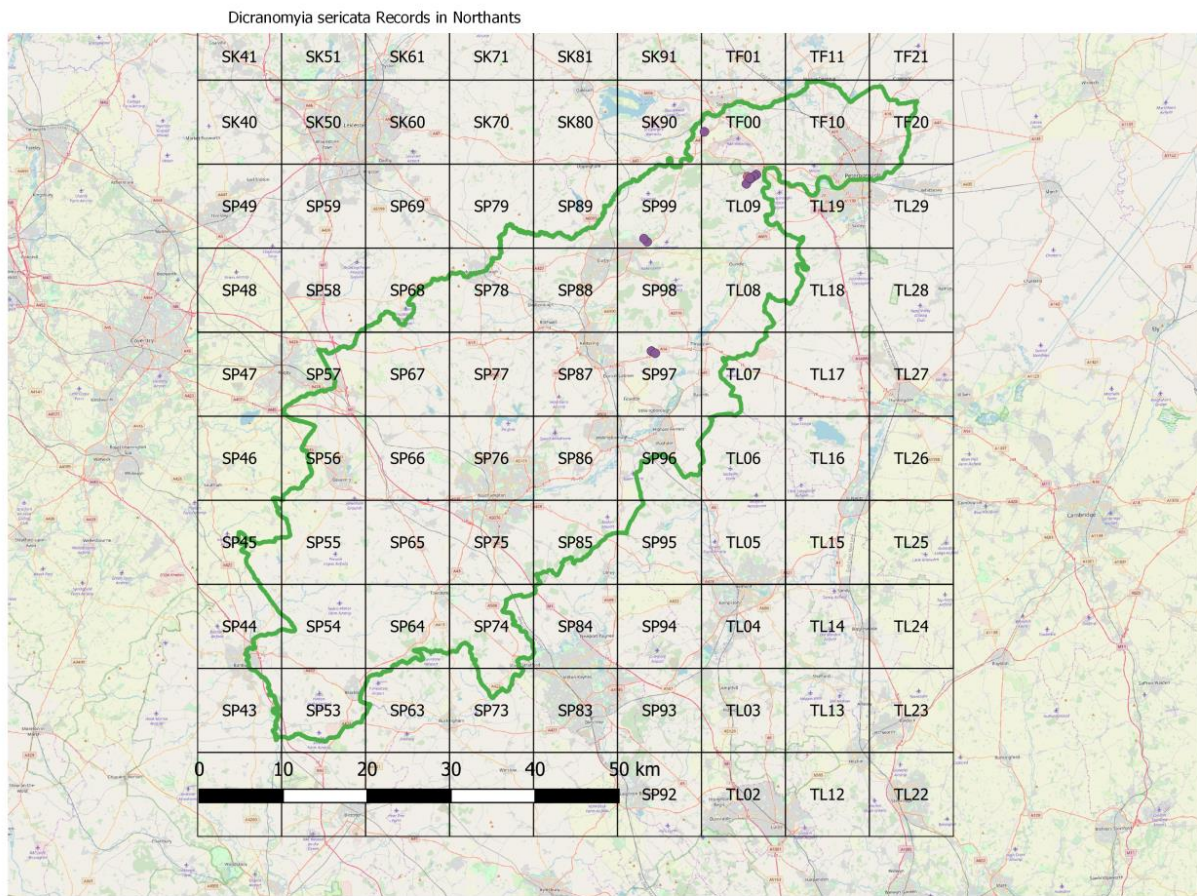


Fig 9. *D. sericata*, terminal segments



The species was not recorded again until 2019 when I found it at two sites whilst participating in bioblitz follow-ups for the Northants Biodiversity Records Centre. The first site was a disused quarry and sand/gravel pit adjacent to Old Sulehay. The floor of the quarry had limestone outcrops and overgrown spoil banks covered in grassland and birch scrub. The second site was another former limestone and ironstone quarry at Prior's Hall, near Corby. Here the site consisted of a broad gullet with exposed limestone rock faces and bedrock at the sides and a series of ponds in the centre. Along the banks scattered birch scrub is establishing on spoil heaps.

The map below shows the locations of the records within the county.



The following table summarises the habitats where the cranefly was found.

Site	Grid Ref.	Underlying Geology	Surface Topography	Presence of Water	Main Scrub Species
Collyweston	TF003038	Inferior Oolite Series (Jurassic)	Shallow hills and holes	No	Hawthorn and blackthorn
Old Sulehay	TL065987	Ditto	Flat	No	Bramble and open ground along oak/ash forest ride
Twywell Whitestones	SP940777	Ditto	Steep hills and holes	Some ponds but may dry out in hot summers	Extensive hawthorn scrub and some blackthorn
Yarwell Quarry	SP0598	Ditto	Steep spoil heaps and flat areas	Permanent ponds	Extensive birch scrub with areas of hawthorn in old parts.
Prior's Hall, Corby	SP931911	Ditto	Broad, deep gullet with exposed limestone	Ponds in bottom of gullet	Extensive birch. Poor soils.

The common features are the presence of the inferior oolite close to the surface and the presence of scrub or trees. The presence of water does not appear to be a factor and, indeed, on those sites with water present, the drainage is sharp. There are other parts of the county with this geology, although, further south, the exposed areas are much less extensive. However, they may provide further records in future.

### Crane-fly Records from the Devon Fly Group – Compiled from notes by Andrew Cunningham, Rob Wolton and Martin Drake.

**Andrew Cunningham** writes: On a field trip to Slapton Ley NNR *Tipula marginella* was recorded in short cattle grazed *Phragmites* reed/*Iris* habitat, and species-rich tall fen, by the northern part of the freshwater lake known as Higher Ley. (See below)



Fig 10. The margin of Higher Ley (SX829448), habitat of *Tipula marginella* and *Thaumastoptera calceata*. Photo. Andrew Cunningham.

Good numbers of *Thaumastoptera calceata* were taken along a boardwalk cutting through a large reed bed and from wet willow carr, also at Slapton Ley. The study of this Field Studies Council Reserve goes back a long way – at least to 1966 and the habitats are well mapped out and defined. *T. calceata* was also recorded at Tidcombe Fen near Tiverton, Mid Devon in late May. *T. calceata* were also recorded at Tidcombe Fen (SS977126) in wet alder & willow carr flanked by rushy meadow.

**Rob Wolton** writes ‘On 23 Apr I found about 20 *Triogma trisulcata* in a small patch of a few square metres of moss in a wet depression at the base of Meldon Aplite Quarry on the north-western edge of Dartmoor. (See Cranefly News #33, 2018 for location details). I knew the species was there, so no surprise, but I was able to take some photos. Fig shows the over-all shape of the cranefly which belongs to the family Cylindrotomidae, or ‘damselle craneflies’. Fig. shows details of the head and thorax of this warty bog-fly.



Fig 11. *Triogma trisulcata*

[Judy Webb located a population of *Triogma* at Cothill Fen (Cranefly News #31, 2016). The botanists have put this site down as M13 (*Schoenus nigricans*-*Juncus subnodulosus* mire) on the National Vegetation Classification. It would be interesting to compile a cranefly species list for each of the NVC categories. Ed.]

Some good news was the re-finding of the rare coastal limoniid cranefly *Geranomyia bezzii* (the sea snout) at Dawlish Warren on 19 August 2019.

(See Dipterists Digest 2011 **18** ) Half a dozen individuals were found in exactly the same position as 2 years ago, on the upper foreshore just to the NE of the bird hide at SX98837965, sheltering deep within low sea purslane bushes, plus one in a similar bush on the raise high tide roost SX98737968. It was a huge relief! Because the major dune restructuring/flood defence work in 2018 had ignored the presence of the fly, there was concern that spreading surplus sand from the works over the mudflats where the fly breeds might have led to its demise,

**Martin Drake** again recorded *Arctoconopa melampodia* on The Spittals on 22 May 2019, just into Dorset and writes that it is one of the most easily located craneflies on the parts that look like a builder's yard consisting of bare sand and bouldery clay, slipped from the cliffs in the most recent storms. Rather less interesting is *Dicranomyia lucida* at woods near me in East Devon (Holyford Woods LNR, Hook Wood down the lane), with a lot of squidge by the stream at the bottom of each wood.’

**Andrew Cunningham, Rob Wolton and Martin Drake.**

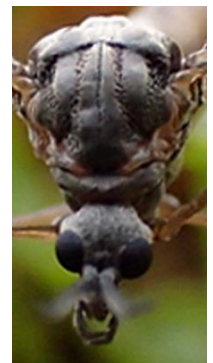


Fig 12. *Triogma trisulcata*



## A New British *Gonomyia* ?

Geoff Hancock was working through some specimens when he came across an unusual *Gonomyia* from Loch Ailort, captured on 4 July 1992. Unfortunately the aedeagus is broken (See photos, Figs 12 & 13 taken by Geoff.) but the part that remains is distinctly different from the currently known British species. If you have any specimens of *Gonomyia* to identify it would be a good idea to look out for this one, especially from the Loch Ailort area of the west coast of Scotland, VC 97, West Inverness-shire (NM7379).



Fig 13. *Gonomyia* style



Fig 14. *Gonomyia* aedeagus

There was also a rumour of another *Gonomyia* (subgenus *Leiponeura*) being found in Cumbria but there is no publication yet, that I know of.

## *Dicranomyia pauli* Geiger 1983. J.Kramer

Along with *Tipula mutila*, *Tipula siebkei*, *Tipula sarajevensis* and others, *Dicranomyia pauli* is a species seldom seen. In fact it clings onto the British checklist by its finger-tips. It was first netted by Alan Stubbs on Gaitbarrow, North Lancashire, on the evening of 19 July 1977, and was identified by Willy Geiger a Swiss dipterist. Gary Hedges at The World Museum, Liverpool ([Gary.Hedges@liverpoolmuseums.org.uk](mailto:Gary.Hedges@liverpoolmuseums.org.uk)) is hunting this snark of a species which seems to fly in the evenings and so may turn up in a light trap. (Let's hope that it's not a Boojum!!!) Please let Gary (or Pete or myself) know if you catch any dark brown *Dicranomyia* with a pale stigma. The illustration of the distinctive hypopygium shown here (Fig.14) is from Podenas et al 2006.

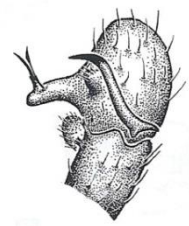


Fig. 14

Ref: Podenas, S., Geiger, W., Haenni, J-P., & Gonseth, Y. 2006. Fauna Helvetica 14, Limoniidae & Pediciidae de Suisse. Schweizerisches Entomologische Gesellschaft, Neuchâtel.

## Field Work in France – J. Kramer

Pierre Tillier ([p.tillier.entomo@free.fr](mailto:p.tillier.entomo@free.fr)) and Clovis Quindroit ([clovis.quindroit@etud.univ-angers.fr](mailto:clovis.quindroit@etud.univ-angers.fr)) have put out a request for crane fly records from France and they would be grateful for any records of any fieldwork you have done there. Pierre is especially interested in Tipulidae, and Clovis will take records of the other crane fly families, especially Limoniidae.

My work in the Ravin de Valbois in eastern France is recorded in the recent issues of Dipterists Digest and there was much of interest. A black *Molophilus* was collected identified as *M. tirolensis* Hancock by Jaroslav Starý. Like that species, first described by Geoff Hancock the upper style (outer dististyle) is bent inwards near the distal end – rather like a hockey stick. The lower style (inner dististyle) forms a downward-pointing hook, broader in the middle. The coxite has a knife-like ventral blade which has tufts of short bristles on the ventral edge, giving a serrated appearance, and there is a pointed extension, a 'peak', distally. It differs, from the typical *M. tirolensis* however, in that the bend of the upper style (us) is smooth, lacking the distinctive 'heel'. Just in case anyone else finds this form I am calling it var *valboisensis*. In addition to the population in the Ravin de Valbois, looking back at my previous records I found that I have previously collected this form in the Gorge de Bruyant, S.W. France. on 28th May 2007 (See Crane fly News 17, Autumn 2008).



*M. tirolensis.us*  
to show 'heel'

Ref: Hancock, E.G., 2005. Notes on *Molophilus* (Diptera, Limoniidae) including the description of a new European species. Entomologists Monthly Magazine Vol. 141. 59-63

## The Rotation of the hypopygium in *Molophilus* and other Chioneinae



*M. flavus* male to show the coxite and styles (JK)

Ever since I read about this curious phenomenon in a paper by F.W. Edwards, (Edwards 1938) I have looked for the evidence for the process. The coxite of *Molophilus* forms a protective hood extending over the more delicate styles which are inserted below this hood. Without this rotation the styles would be exposed to damage. In 1936 Edwards wrote: *Many years ago* (Ann. Trop. Med., 14:24 1920) *I called attention to the fact that in the (Tipulid) genera Molophilus and Rhypholophus, as in all mosquitoes, the hypopygium of the fully developed male occupies an inverted position, the anal parts being ventral and the genital parts being dorsal; the rotation takes place shortly after emergence from the pupa and once it has taken place the organs remain in their new position and are not freely rotatable as in Sciara and many other Mycetophilidae. A recent re-study of the genera of the Eriopterini shows that the phenomenon of inversion is of somewhat wider occurrence in the tribe than I thought at first. Thus it occurs in all species (so far as I have seen) of Molophilus, Dasymolophilus, Tasiocera, Ormosia*

(including *Rhypholophus*), *Ilysia*, *Empeda*, *Cheilotrichia* and *Styringomyia* (Not Brit). ... the normal, non-inverted hypopygium is found in all species of *Erioptera* sensu stricto, *Gonempeda*, *Symplecta* and *Trimicra*. ... (Edwards 1936)

It is not clear whether this 'recent study' cited above is one carried out by Edwards himself, or someone else and I have still not traced this. As far as I can discover so far, the first person to describe rotation was Major S. R. Christophers of the Central Research Institute, Kasauli in 1915, and in another paper in 1922 he observed that, in mosquitoes, between 24-48 hours after emergence of the imago, segment 8 is rotated through 180°. This later paper describes his excellent work where he uses histology to observe the relative positions of the gut and the genital tract in sections of the inverted mosquito abdomen. Edwards also worked with mosquitoes and perhaps also observed directly a similar rotation of the hypopygium in genera of Chioneinae, including *Molophilus*. To avoid confusion Edwards (1920) used the terms 'upper' and 'lower' in place of ventral and dorsal respectively for these genera.

The following observations are from Hennig 1973: *Cheilotrichia* - Inverted, 180° after 7th segment, *Erioconopa* - Incompletely twisted through 45-90°, *Hoplolabis* - Inverted, 180° after 7th segment, *Molophilus* - Inverted, 180° after 7th segment, *Ormosia* - Incompletely twisted through 45-90°, *Rhypholophus* - Incompletely twisted through 45-90°.

Perhaps the proto-*Molophilus* was like *Ormosia* and the hooded protective coxite evolved later, after rotation, allowing the protected styles to evolve into the wide variety of structures that we see today?

## References

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**Hennig, W., 1973,** Diptera (Zweiflügler) in Handbuch der Zoologie Berlin, 4 (2) 1-337. De Gruyter, Berlin and New York. (Thanks for information about that reference, Pjotr.)

## Recording Scheme update – social media and iRecord news - Pete Boardman

Alongside our Twitter page @CRStipula we now have a Facebook page which has been set up by Ryan Mitchell and is moderated by Ryan and Ian Andrews. Even though the Facebook group has only been running for a short period of time it already has 150 members. Also Ryan is now helping with the backlog and future verification of records on iRecord. Currently we get around 3000 records on iRecord each year, 1000 or so of these come with photographs. Many thanks to Ryan and Ian for taking on these roles with the Scheme. Spreadsheets can be sent to: [pete.ento22@gmail.com](mailto:pete.ento22@gmail.com)



### Cranefly Recording Scheme

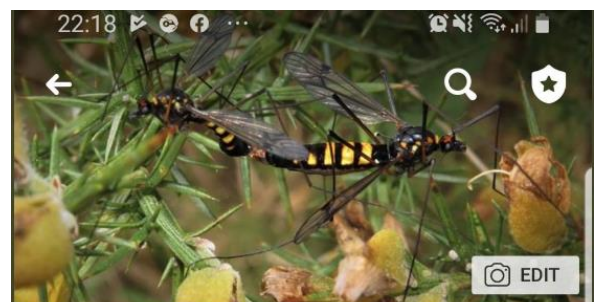
@CRStipula

Cranefly Recording Scheme (UK). Promoting study & recording of craneflies in the UK Also Tipulidae from around the world. My personal views at [@pebo22](https://twitter.com/pebo22)

📍 United Kingdom

📅 Joined January 2018

860 Following 940 Followers



### UK Cranefly Recording Scheme

PRIVATE GROUP · 2 MEMBERS



+ Invite

Watch party

Photos

Events

Files

## Meetings

### Meeting of Diptera Recorders - NHM 20 Sept 2019

This was an opportunity to discuss the aims of Recording Schemes, our needs and to question the methods we currently use. A number of speakers contributed their perspectives. To summarise: Digital photography, photomicroscopy, writing, website management, fieldwork and recording, writing and editing are a few of the different jobs that are needed to sustain a successful Recording Scheme. It is better to build a team of people to share these activities, and also for the sake of continuity, so that younger members could take over when necessary. Recruiting new recorders is important, and ways to

do this were also discussed. Websites and social media are demonstrably important, especially when combined with digital photography. Pete Boardman and his team are pushing forward with these aspects for the CRS. Accurate identification is obviously important, as is the frequency of recording presences and absences at any given site. The need for workshops, and a system of mentoring is needed to stimulate and support interest and the whole ethos of the Dipterists Forum is directed to this. If anyone needs help with identification, they only have to ask. Effective communication through 'Crane-fly News' also continues for the moment, and I believe that it still offers useful support. If anyone would like to help me with the production of Crane-fly News, please let me know. For all field records and digital contributions, Pete Boardman is your contact. (See above.)

### **BOLD Meeting - Peterborough 3 Dec. 2019 [BOLD = Barcode Of Life Database]**

This meeting set out to address the gaps in the database of invertebrate DNA barcodes. The specialists from the Insect Recording Schemes can play an important role in providing fresh correctly identified specimens for DNA analysis, and also in checking the names of specimens already bar-coded and identified. Different species have different DNA but, as with other features, there are both intra- and inter-specific variations. Which differences to choose to define different species is work which is on-going and work that the Recording Schemes can assist. Environmental DNA – eDNA - is that which can be found by taking a sample of (say) soil or water from a habitat and doing an analysis for the DNA content, and a species list derived from this. Thanks to the use of computers, this analysis process can be an automated, although currently it is not a very accurate process and also, as someone at the meeting said, 'where's the fun in that?' A fear is that the use of eDNA would eventually circumvent the work of experienced and qualified field-workers. It could also be a useful tool for biologists, for example, to determine the food webs in a biotope, including larval food. A dystopian future can be imagined where there is no human intervention and they who control the digital data control the 'truth' !! We must hope that Marvin is programmed to act in the interests of the survival and happiness of all human beings on the planet and not just a powerful few. This meeting should lead to activity and rapid progress in increasing the accuracy of this potentially useful tool.

### **Recent papers on Crane-flies in the Dipterists Digest.**

Since the last issue of Crane-fly News in Bulletin 86, in Autumn 2018 there have been 4 issues of Dipterists Digest:

### **Dipterists Digest 2018 Vol. 25 No.1 :**

**John Kramer. A review of the status of *Ula mixta* Starý (Diptera, Pediciidae) in Britain.**

The motivation for this paper was the lack of voucher specimens supporting records. Photographs are shown to show the hypopygia and genital apodemes of British specimens of *U. mollissima* and *U. mixta*. The specimen of *U. mixta* is shown with a shallower notch on the sternite than *U. mollissima*, if the former is defined by its larger apodeme, with membranous flange.

**Alan Watson Featherstone. *Ctenophora flaveolata* (Fabricius) (Diptera, Tipulidae), unexpected occurrence in Scotland.**

This note records the first observation of *C. flaveolata* in Scotland on 26 May, 2018. Since there is a lack of beech or oak in the vicinity this may have been carried passively by a car, although the mild dry weather prevalent at that time may have allowed flight for some distance. May 2018 was the warmest May since 1910, when records began.

### **Dipterists Digest 2018 Vol. 25 No.2 :**

**John Kramer and Michel Billard. Two wet-rock (hygropetic) species of Limoniidae from the Savoie, France.**

Photographs of larvae and adults of two non-British species, one an *Elliptera*, the other a *Dactylolabis* are shown.

### **Dipterists Digest 2019 Vol. 26 No.1 :**

Four papers on crane-flies were in this Spring issue.

**E. Geoffrey Hancock. Some records of crane-flies from Kola peninsular, Russia.**

Geoff Hancock has identified 11 crane-fly species from a collection made by Fred Woodward on the Kola peninsula. Eight of these are found in the UK.

**Jaroslav Starý. Some notes on the genus *Paradelphomyia* Alexander (Diptera, Limoniidae)**

This paper clears away some historical classification and abolishes the subgeneric classification of this genus. Addressing British dipterists, Jaroslav Starý also compares the aedeagal length, the structure of the aedeagal complex and outer gonostylus of *P. dalei* and *P. ecalcarata* as a means of separating these two closely related species, especially when, as with specimens in ethanol, the colour has faded. Whereas Jaroslav's taxonomy offers simplification, the comparative anatomy in his paper stimulates further work with British specimens of *P. ecalcarata*. When Figs. 8, 17 and 18 in my review of *Paradelphomyia* (DD. 2015 Vol.22 No.1) are compared, they do not fit neatly with Jaroslav's hypothesis. We now need to observe a sufficiently large sample of genital apodemes to decide on the range of intra-specific variation in *P. ecalcarata*. (See *Paradelphomyia* from Slade Brook West Gloucestershire (VC34) above)

**John Kramer and Dominique Langlois. Crane-flies (Diptera, Tipuloidea) of the Ravin de Valbois, France.**

The Editor (JK) has done some work at a National Nature Reserve in France with Dominique Langlois, the Conservation Officer on the site. It is a varied location with many biotopes suitable for crane-flies and as a consequence, in this paper,



about 80 species have been identified including 5 new for France. **Corrigendum:** Closer examination of the *Discobola caesarea* recorded on 24 Sept 2016 from the Malaise trap in Sector 7 revealed it to be *Discobola annulata*.

**Pete Boardman, Siobhan Hillman and Adrian Gardiner. A population of the crane fly *Limonia maculipennis* (Meigen) (Diptera, Limoniidae) on a North Norfolk sea wall.**

Pete Boardman and colleagues have located a thriving colony of this very attractive species on the sea wall in North Norfolk in mid-April, 2019. It will stimulate searches of similar habitat for more colonies.

## **Dipterists Digest 2019 Vol. 26 No.2:**

**Michael James and John Kramer. *Achyrolimonia neonebulosa* (Alexander) (Diptera, Limoniidae) – a new crane fly for the British list.** Recorded on the Dipterists Forum website. (See article above.)

**John Kramer and Dominique Langlois. More crane flies (Diptera, Tipuloidea) from the Ravin de Valbois National Nature Reserve, France.** A continuation of the work recorded in DD Vol 26 No1. A further 5 species were added making a total of 10 new to the French fauna, out of about 90 crane fly species for the Reserve.

## **Correction to Cranefly News No 34 (Autumn 2018) Phil Brighton**

Pjotr Oosterbroek has pointed out that the picture I claimed to be *Tipula luna* in the Outer Hebrides was not that species, as the quadrate outer clasper of the subgenus *Tipula* can be discerned by the keen-eyed. In fact the small printed photo also shows up the dark leading edges of the wings which were not so evident in the original photo. *Tipula oleracea* is the most likely species for early July, and already well known from the Outer Hebrides.

The observation of *Tipula maxima* in the hotel toilet remains indisputable. Moreover, my hypothesis of a migration of large tipulids to the Western Isles last year is supported by two records of *Tipula luna* from the NBN Atlas for June 2018, both by Stephen Bungard and identified by Murdo Macdonald. These were from the west coast of Skye (NM394814) on the 2nd and from a small islet just off Muck (NG187397) on the 26th. They were the first records since 1990 of the species from the Inner Hebrides.

**Phil Brighton**

## **Identification**

**Key to European species of *Crypteria* and *Neolimnophila* (Diptera, Limoniidae, Chioneinae) Jaroslav Starý<sup>1</sup> & Pjotr Oosterbroek<sup>2</sup>**

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## **Introduction**

Recently the North American species *Neolimnophila alaskana* (Alexander, 1924) was added to the fauna of Europe (Starý 2019). This was reason to write a key to the now four European species of *Neolimnophila*, the more so because all four are rather widespread, *N. bergrothi* (Kuntze, 1919) and *N. carteri* (Tonnoir, 1921) in Europe, and *N. alaskana* and *N. placida* (Meigen, 1830) throughout the Holarctic. So far, *N. carteri* and *N. placida* are known from the British Isles. The period of flight of all four species is from about May to August or September.

Among the European Limoniidae of the subfamily Chioneinae, the genera *Neolimnophila* and *Crypteria* are characterized by having a long and conical third antennal segment (fig. 1-3, 7). These two genera, furthermore, share a closed discal cell, vein M1+2 forked (fig. 4-6, 9) and male genitalia with elongate gonocoxites, each bearing two slender gonostyles (fig. 8, 10-13). Because of the unique antennal segment, the only European species of *Crypteria*, *C. limnophiloides* Bergroth, 1913, is included in the key. This species also has a large distribution in Europe, including European Russia and is also known from Georgia.

## **Key**

1.a. Wing extra broad in the middle; vein Sc ending at about fork of veins R<sub>3</sub> and R<sub>4</sub>; vein R<sub>2</sub> absent; vein R<sub>3</sub> strongly arched and much longer than vein R<sub>3+4</sub>; anal vein (A<sub>2</sub>) ending beyond broadest part of wing (fig. 4). Hypopygium without hypopygial spines (fig. 8).

*Crypteria limnophiloides*

b. Wing of normal shape; vein Sc ending at about fork of veins R<sub>2+3+4</sub> and R<sub>5</sub>; vein R<sub>2</sub> present; vein R<sub>3</sub> not strongly arched and about as long as vein R<sub>2+3+4</sub>; anal vein ending before broadest part of wing (fig. 5). Hypopygium with hypopygial spines (fig. 18-21).

*Neolimnophila* 2.

2.a. Thorax without prescutal stripes. Vein R<sub>2</sub> mostly its own length or more beyond fork of R<sub>3+4</sub> (fig. 5-6).

3.

b. Thorax with distinct brown prescutal stripes (fig. 1, 7). Vein R<sub>2</sub> mostly just beyond, at or before fork of R<sub>3+4</sub> (fig. 9).

4.

3.a. Dark brown species. Vein  $A_2$  ending at from one-third to half-way length of  $R_s$  (fig. 5). Outer gonostylus hooked; inner gonostylus simple (fig. 10); most frequently only dorsal hypopygial spine present, rarely a tiny ventral spine present (fig. 18).

*Neolimnophila carteri*

b. Grey to dark grey species. Vein  $A_2$  ending more or less opposite origin of  $R_s$  (fig. 6). Outer gonostylus only slightly curved at tip; inner gonostylus long and slender, apical part bent backwards and covered with stiff setae (fig. 11); ventral hypopygial spine present, about one-third of length of dorsal spine (fig. 19).

*Neolimnophila bergrothi*

4.a. Wing relatively narrow, width-length ratio 1-3.8 (fig. 1); vein  $R_{2+3+4}$  simply arched, not sinous (as in *N. carteri* fig. 5). Outer gonostylus moderately long and stouter (fig. 12); distal outer corner of parameres conspicuously extended (fig. 16); ventral hypopygial spine at most one-third of length of dorsal spine (fig. 20).

*Neolimnophila placida*

b. Wing relatively broad, width-length ratio 1-3; vein  $R_{2+3+4}$  sinous (fig. 9). Outer gonostylus long and slender (fig. 13); distal outer corner of parameres not conspicuously extended (fig. 17); ventral hypopygial spine two-third of length of dorsal spine (fig. 21).

*Neolimnophila alaskana*

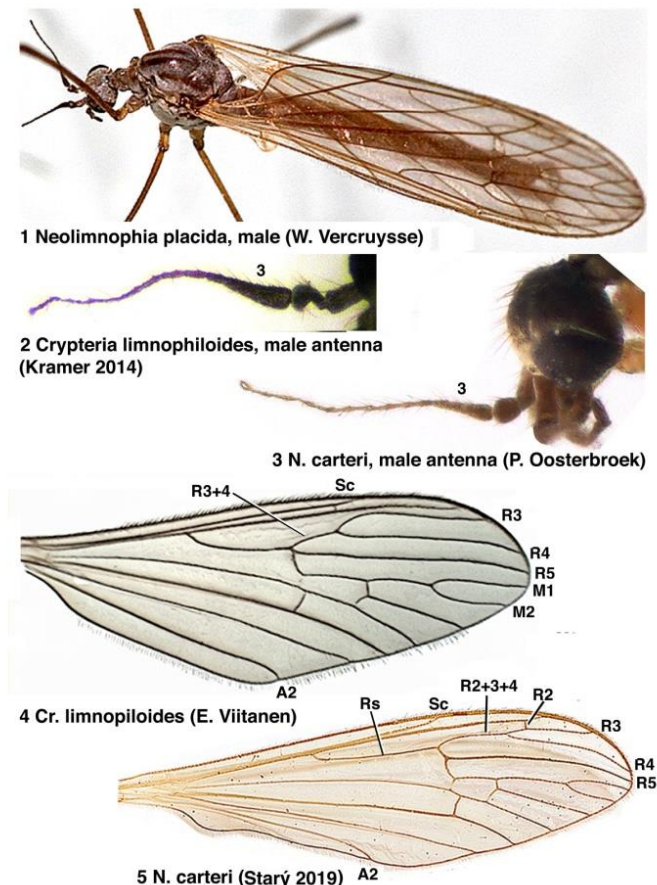
### Acknowledgements

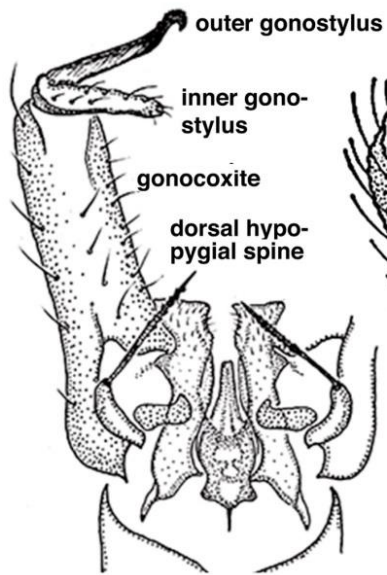
The work of J. Starý was financially supported by the Ministry of Culture of the Czech Republic by institutional financing of long-term conceptual development of the research institution (the Silesian Museum, MK000100595).

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### Figures

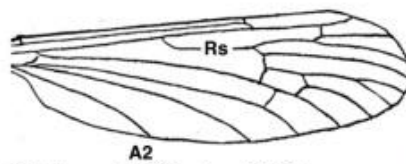




10 *N. carteri*



11 *N. bergrothi*



6 *N. bergrothi* (Kuntze, 1919)

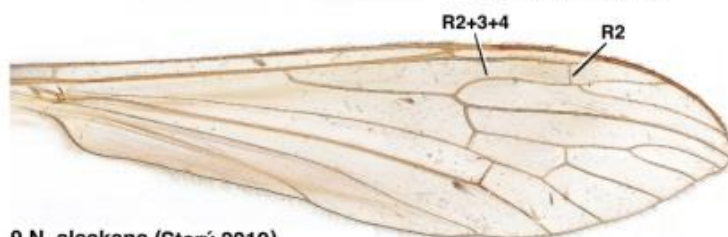
12  
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7 *N. placida*, female  
(P. Oosterbroek)

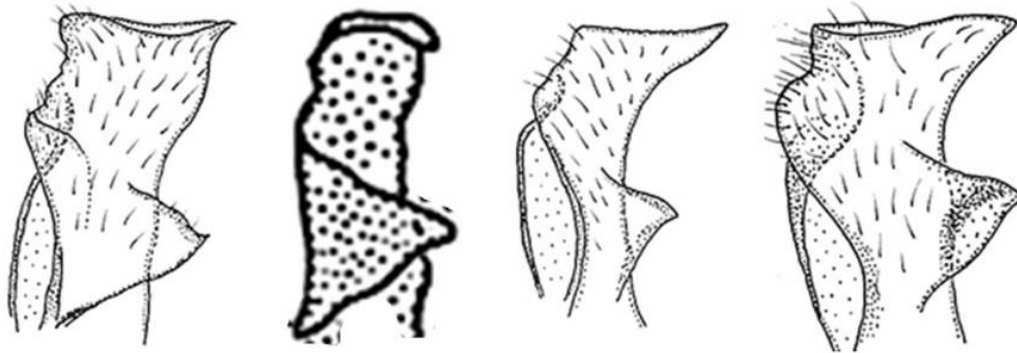


8 *Crypteria limnophiloides*,  
hypopygium, dorsal (Noll 1985)

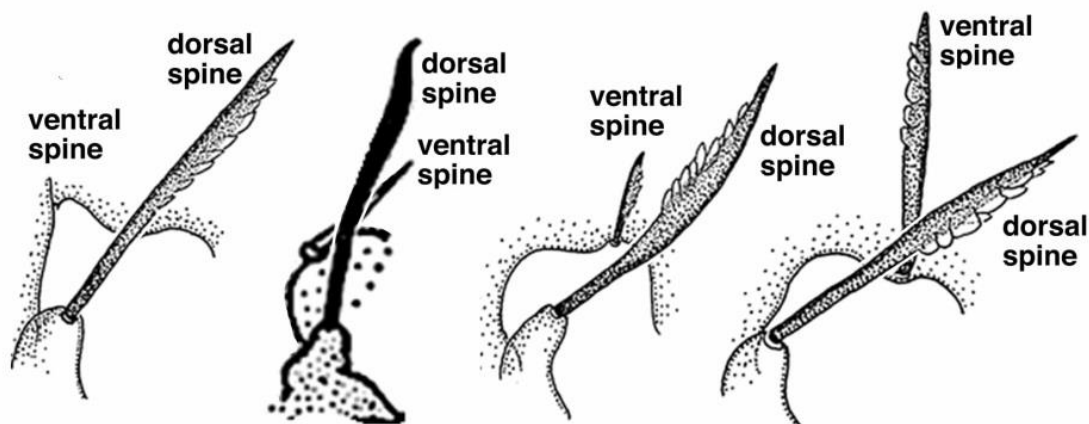


9 *N. alsakana* (Starý 2019)





**14 N. carteri      15 N. bergrothi      16 N. placida      17 N. alaskana**  
**Parameres, dorsal (14 16 17 Starý 2019, 15 Savchenko 1982)**



**18 N. carteri      19 N. bergrothi      20 N. placida      21 N. alaskana**  
**Hypopygial spines, dorsal (18 20 21 Starý 2019, 19 Savchenko 1982)**

### **Early issues**

The early issues of the Cranefly Recording Scheme Newsletters, nos. 1-7, from 1973, have been scanned and appear in pdf on the Dipterists Forum website. The newsletters of all recording schemes were issued together in each Bulletin from 1976.

News about craneflies can be obtained either as 'News from the Schemes' or as a separate newsletter. There are also 'Reports on Field Meetings' which contain some interesting information. Indices will be published to help navigate these documents.

**Thanks to all contributors for an interesting and useful issue.**

**The next copy deadline is 20 July 2020**

**Good hunting ! Editor**

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