## LEICESTERSHIRE & RUTLAND ENTOMOLOGICAL SOCIETY

# The status of Diptera in VC55

### Dolichopodidae



Poecilobothrus notatus 3, Burbage Common 2011 (Dave Nicholls, NatureSpot)

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#### Introduction

The Dolichopodidae ("Dolis", Long-legged flies) are an interesting and often beautiful family of small, day-flying, mostly predatory, insects with 308 British species of 46 genera some of which have been around for millennia (Figure 1; Bickel & Kraemer, 2016)). The identification of some genera can be challenging particularly as no recent keys are available addressing the whole family. However, many species of some genera e.g. *Dolichopus*, can be easily recognised and identified. As these flies nearly always require careful microscopic investigation to ensure identity, it is likely that many of the species (and some genera) are under-recorded in Leicestershire & Rutland (VC55) and even countrywide.



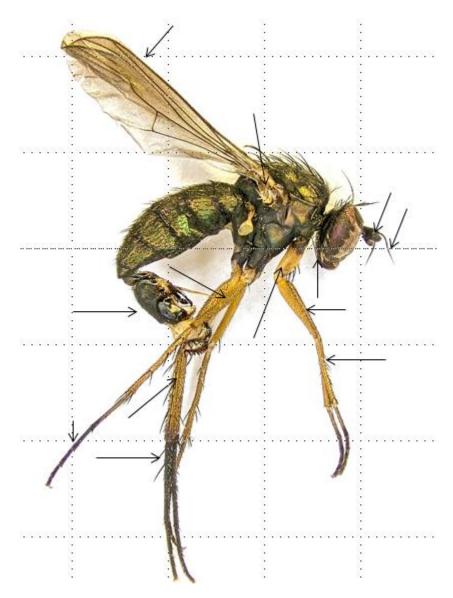
Figure 1: A dolichopodid in Mexican amber (Bickel & Kraemer, 2016)

Light-trapping is not a useful tool for their monitoring (although they do occasionally turn up) so that day-time field work is necessary. The use of non-attractant methods, such as Malaise traps, sweeping and suction sampling, can be fruitful in their collection. This LESOPS aims to stimulate recording of this family most of which frequent moist places such as woods, hedgerows, damp meadows etc (Drake, 2014). However, some have even adapted to living in increased saline environments (Drake, 2013) whilst other can be found in drier habitats (Drake, 2017a).

#### How to know it's a "Doli"

In the main it is easy to recognise a member of the Dolichopodidae, despite being small flies, in the field as most of them have a metallic-looking appearance and often assume a mosquito-like stance when at rest because of the long legs. In many species the male have an extraordinary genital capsule (hypogyium) while further sex differences are often found with the antennae, legs and mouthparts. A truly fascinating group of insects! A useful introduction to the family is Brooks (2005). Figure 2 illustrates a typical *Dolichopus* which shows some of the characters present in other members of the family used in arriving at a correct identification.

The British species of the family are usually keyed out using d'Assiz Fonseca (1978) which, although lacking additional species recorded since its appearance, is still a useful way with which to begin identification. The obvious sexual differences between male and female has often resulted in genera being identified to species level using separate keys for the sexes; a few genera do not need this. Perusal of the entomological literature (even worldwide) can lead to the recovery of updated keys for some genera which include the British species but also allows identification of species that may be found in the future e.g. Grichanov & Kazerani (2014; Sybistroma), MacGowan (1997; Systenus) and Drake (2017b; Lamprochromus).



<u>Figure 2: Example of some identification points for a male dolichopodid</u> (photo: Graham Finch)

#### Historical Dolichopodidae in Leicestershire & Rutland

Perhaps, not surprisingly, the lack of any local concentrated effort/interest in this fly family has resulted in very little appearing in publications and relatively few records until into the present century. However, some early lists have been published nationally although none with VC55 interest (Walker 1851; Verrall, 1872, 1875, 1904; Collin 1913).

The family did not appear in the Vale of Belvoir study by George Crabbe (Crabbe, 1795) with WA Vice being the first to mention the family in Leicestershire when providing records of 25 species for inclusion in the Victoria County History for Leicester (VCH-L, 1907); none appeared in the Rutland volume. The personalia files for PAH Muschamp, held at the Barrow County Resources Collection (CRC), lists some dipteran records that he gathered but no Dolichopodidae were included. However, he also started a catalogue of Leicestershire flies in 1935 which did contain a listing of Dolichopodidae but it is unclear whether many of these were his personal observations or referred to Vice's original VCH-L listing and specimens in the CRC. As was often the case with Muschamp, he was very poor at giving clear data with just a possible date or location but, more often than not, specimens were recognised as being from Leicestershire simply by having a red disc attached to the pin but with no attribution! There are examples of 16 VC55 species in the County specimen collection.

The entomological press contributes nothing to the early state of the family in the two counties and it was not until 2013 when nine species were mentioned by Woodward & Ikin (2013) as part of their investigations into the flora and fauna of the Grace Dieu Woods complex with more details in Woodward & Ikin (2022). Short reports on the VC55 Dolichopodidae were produced by the present author (Morris 2017a; Morris & Russell, 2017) based on malaise trapping at Rutland Water NR. A general article mentioned a few of these flies found by the late Annie Smith (Morris, 2017b).

#### Current status of Dolichopodidae flies in Britain

National Recorder, Martin Drak,) prepared a review of these flies as a Natural England Commissioned Report (Drake, 2018). It included the basis for assigning national status based primarily on national records from 1990 to 2012 although, for some species, later data to 2017 was also used. Drake is preparing an up-to-date identification guide/key (and atlas hopefully) but it is likely that it will be a few years still before being available for general usage. For the purposes of the present LESOPS, national status has been taken as the criteria in Figure 3 (from Drake, 2018).

#### REGIONALLY EXTINCT (RE)

A taxon is Extinct when there is no reasonable doubt that the last individual has died. In this review the last date for a record is set at fifty years before publication.

#### CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see Table 4).

#### ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (see Table 4).

#### VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (see Table 4).

#### NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

#### LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

#### DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate.

#### NOT EVALUATED (NE)

A taxon is Not Evaluated when it is has not yet been evaluated against the criteria.

#### Figure 3: IUCN categories (Drake, 2018)

#### Data sources for this Review

Much reliance has been placed on retrieving data from the ORCA database maintained by the Leicestershire & Rutland Environmental Records Centre (LRERC). The county collections (CRC) at Barrow upon Soar have been checked for VC55 specimens along with the paper files held by the site. Several planning surveys have contributed records (thanks to LRERC for making copies available) and the 2014-2016 malaise trapping at four sites at Rutland Water NR (carried out by the late Adrian Russell and the author) also added to local knowledge. Commoner, i.e. the more readily identifiable, species have come from NatureSpot contributors which, at least for some species, gives a better idea of VC55 distributions. Finally Martin Drake provided the VC55 data from the "Empid & Doli Recording Scheme"

(Dipterists Forum, DF) which, in particular, supplied more details of the 2015 visit of the DF to the northwest of Leicestershire than was available through the NBN Atlas which was also checked for local records not found elsewhere..

#### Annotated list of VC55 Dolichopodidae

National status assessments are based on occurrence as depicted in the NBN Atlas and the Drake 2018 status report. The current local status of the family is summarised in Table 1. However the data from the NBN Atlas has to be used with caution due to the lack of more recent data having been deposited.

<u>Table 1: British</u>	Dolichopodidae	genera	(Chanaler, 2021)	)
			•	

Genus	No British	No VC55	Genus	No British	No VC55
	species	species		species	species
Achalcus	7	3	Micromorphus	1	1
Acropsilus	1	0	Microphor	4	1
Anepsiomyia	1	1	Micropygus	1	0
Aphrosylus	4	0	Meuscideicus	1	0
Argyra	11	7	Nematoproctus	2	0
Asyndetus	1	0	Neurigonia	6	1
Australachalcus	1	0	Ortochile	1	1
Campsicnemus	13	5	Poecilobothrus	5	1
Chrysotimus	2	1	Rhaphium	26	15
Chrysotus	18	10	Scellus	1	1
Cyrturella	1	0	Schoenophilus	1	0
Diaphorius	3	1	Sciapus	10	3
Dolichophorus	1	0	Sybistroma	3	2
Dolichopus	55	36	Sympycnus	5	1
Erithomyia	1	1	Syntormon	16	7
Gymnopterus	9	5	Systenus	6	0
Hercostomus	13	6	Tachytrechus	4	1
Hydrophorus	9	2	Telmaturgus	1	0
Lamprochromus	3	1	Teuchophorus	5	4
Lianculus	1	1	Thinophilus	2	0
Machaerium	1	0	Thrypticus	9	1
Medetera	37	9	Xanthochlorus	4	2
Melnostolus	1	0			

#### Achalcus genus – 7 British species; 3 VC55 species.

At first sight, members of this genus are somewhat atypical of many Dolichopodidae in that the body appearance is not metallic but tending to be yellowish to brown-blackish instead. Also the distinctive wing venation, where the three long veins diverge from each other, contrasts with most of the family (Figure 4). A revision of the genus in the Palaearctic was published by Pollet (1996) and includes keys to the British species of this genus. The flies tend to be found in damp situations and have been bred from tree debris.



Figure 4: Wing of Achalcus cinereus (Waarnemingen.be)

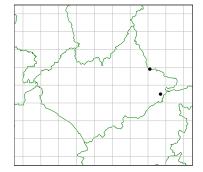
#### Achalcus bimaculatus Pollet (2 records)

IUCN status - Least Concern.

A species usually associated with damp grasslands. Not covered by the d'Assis Fonseca (1978) key but is by Pollet (1996).

Few records scattered across southern half of England & Wales

Taken at two VC55 NRs (Ketton Quarry and Cribb's Meadow) by Derek Lott in 2006 with identifications by Martin Drake



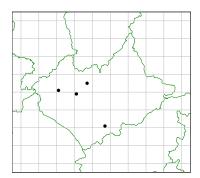
#### Achalcus cinereus Haliday in Walker (6 records)

IUCN status – Least Concern

Associated with damp grasslands and covered by the d'Assis Fonseca (1978) key. Thorax black with the front femur having an erect ventral bristle near the base.

Widespread in England & Wales.

A specimen collected in 1935 at Bradgate Park by Muschamp is in the County collections. It was 2006 before further records were made when Derek Lott noted the fly at Kelham Bridge NR and Saddington Reservoir with the latter site giving a further record in 2010 (Keith Alexander), The most recent record came in 2013 during survey work at the Mountsorrel Quarry complex (Andy Godfrey).



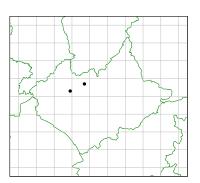
#### Achalcus flavicollis Meigen (2 records)

IUCN status – Least Concern

Associated with damp grasslands and covered by the d'Assis Fonseca (1978) key. Thorax reddish-yellow and the front femur with an erect ventral bristle near the base.

Widespread in England & Wales.

The only records for this species in VC55 came from Derek Lott when the fly was taken in a pitfall trap near the River Soar at Barrow upon Soar (1994) and by suction sampling at Ulverscroft NR (2006) with identifications by Martin Drake,



#### Anepsomyia genus - 1 British species; 1 VC species

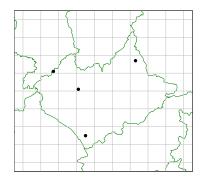
Small shining black flies with leg coloration varying from brownish-yellow to black with the male abdomen partly a translucent yellow. Often found near water on low vegetation.

#### Anepsiomyia flaviventris Loew (4 records)

IUCN status – Least Concern

Occurs throughout Britain but there seems to be a lack of records from central England according to the NBN Atlas.

The four scattered VC55 records were made by experienced dipterists being first noted locally at Croxton Park (1994, Alan Stubbs). Derek Lott subsequently found it at Lea Meadows NR in 2006 whilst Martin Drake noted it at Dimminsdale NR during the 2015 visit by the DF. The only other record came from Misterton Marshes SSSI, south Leicestershire in 2018 (David Gibbs).



#### Argyra genus – 11 British species; 7 British species

Larger flies than many other Dolichopodidae being easily recognised (with the exception of one species) by the presence of a vertical row of three or more bristles on the outer face of the hind coxa (the exception has only two bristles). The abdomen of many males shows a slivery gloss which makes them conspicuous (figure 5, 6) whilst the male genital capsule (hypopygium) is symmetrical. Martin Drake produced an unpublished key to males in 2012 available to Dipterists Forum members.



Figure 5: Argyra diaphana, Long Clawson 2018
(Barbara Cooper, NatureSpot)



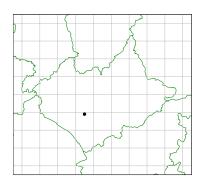
<u>Figure 6: Argyra perplexa, Ratby 2011</u> (David Nicholls, NatureSpot)

#### Argyra argentina Meigen (1 record)

IUCN status – Least Concern

National distribution tends to be westerly, north-east and East Anglia with a paucity of records in the Midlands area.

The single VC55 record, recorded in VCH-L (1907), came from Narborough Bog presumably attributable to WA Vice.

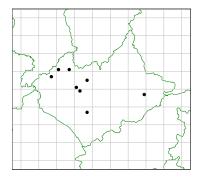


#### Argyra argyria Meigen (9 records)

IUCN status – Least Concern

Widespread in England & Wales, less so in Scotland.

Listed in VCH-L (1907) from the Blaby area and in 1935 by PAH Muschamp at Bradgate (?Park). Since noted in the Charnwood area and also at Rutland Water NR.

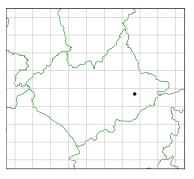


#### Argyra atriceps Loew (1 record)

IUCN status – Least Concern

Relatively few scattered records from England & Wales.

The single VC55 record, a male, came to a malaise trap at Heron Bay, Rutland Water NR in August 2015 (RM).

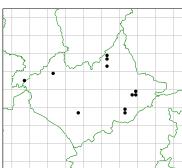


#### Argyra diaphana Fabricius (14 records)

IUCN status – Least Concern

Fairly widespread in England & Wales, less so in Scotland.

The VCH-L (1907) records its presence at Blaby but does not mention one from Grange Wood (Netherseal near Ashby de la Zouch) in 1889 on the VC55 border (possibly considered to be in Derbyshire although originally in Leicestershire). Quite numerous at malaise traps operated at Rutland Water 2014-2015 with mostly males being seen. (Figure 5.)

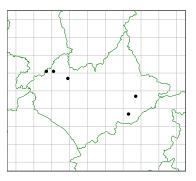


#### Argyra ilonae Gosseries (5 records)

IUCN status – Least Concern

Scattered in England with the north Midlands seeming to be favoured.

Found at Longcliffe (near Loughborough) by Muschamp (undated but probably 1930s), Great Merrible Wood (1985) and then in 2015 at three other sites.

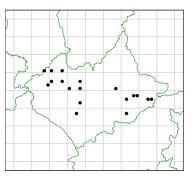


#### Argyra leucocephala Meigen (24 records)

IUCN status – Least Concern

Probably the commonest of the genus being found throughout England & Wales and into southern Scotland.

Widespread in VC55 with first sightings from the VCH-L (1907) noting it at Somerby and Narborough. Seen in 1937 at Muschamp's Leicester garden and since 1989 has been found occasionally at widespread locations.

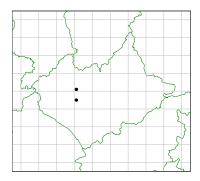


#### Argyra perplexa Becker (2 records)

IUCN status – Least Concern

Scattered throughout Britain.

Rare (?under-recorded) in VC55 having been found at Lea Meadow NR in 2006 and then at Ratby in 2011. (Figure 6.)



#### Campsicnemus genus – 13 British species; 4 VC55 species

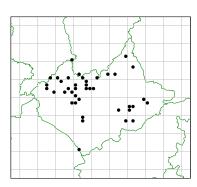
This is a genus of very small flies with some having been recorded throughout the year. The males of some species have extensive modifications to the legs but this is not evident in those recorded to date in VC55. However, those that do occur locally do have lesser modifications that are used for identification. The females of the so-called *curvipes* group (C. *armatus*, C. *curvipes*, C. *loripes* and C. *scambus*) have always been difficult to separate although Drake (2019) has produced a draft, detailed key to separate the four species.

#### Campsicnemus curvipes Fallén (76 records)

IUCN status – Least Concern

Well scattered throughout Britain

Throughout VC55 being first recorded locally in 1949 from Stathern Wood (CM White) and regularly in the period 1989-2015. The lack of more recent records is likely to be evidence of lack of recording effort.

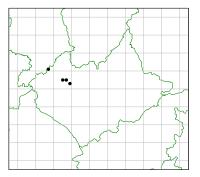


#### Campsicnemus loripes Haliday (4 records)

IUCN status – Least Concern

Has a similar national distribution to the previous species.

The local records all come from the north-west of Leicestershire - Charnwood Lodge NNR in 2005 (Derek Lott), Dimminsdale NR during a 2015 (visit by members of the Dipterists Forum). It was noted it at both Charnwood Lodge NNR and Ulverscroft 18 October 2007 (M Pugh).

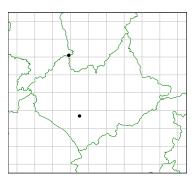


#### Campsicnemus picticornis Zetterstedt (2 records)

IUCN status – Least Concern

Primarily found in the south and east side of England.

Found twice in VC55 – Narborough Bog (1935, Muschamp) and in 1991 at Lockington Marshes SSSI by Alan Stubbs

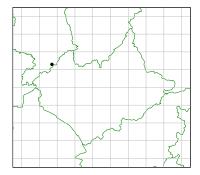


#### Campsicnemus pusillus Meigen (1 record)

IUCN status – Least Concern

Most NBN records come from Wales and Norfolk with an occasional record from elsewhere in England.

The sole VC55 record came from Peter Chandler who found the fly at Spring Wood SSSI near Dimminisdale NR in 2007. This site is now part of the Derbyshire administrative county but historically has been regarded as being in VC55. It is managed by the Derbyshire Wildlife Trust.

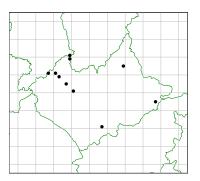


#### Campsicnemus scambus Fallén (22 records)

IUCN status – Least Concern

Found throughout Britain.

Random records come from VC55 with the survey work at Lockington Marshes SSSI (1991, 2009) and at a complex of habitats near Edith Weston (Rutland 1999) contributing the majority of records.



#### Chrysotimus genus – 2 British species; 1 VC55 species)

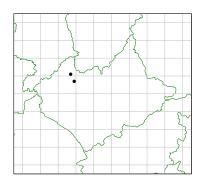
Small but stocky flies where the sexes differ markedly. The males are metallic green but the females have a yellow abdomen. The two British species can be readily separated in that *C. molliculus* has black antennae whilst *C. flaviventris* antennae are mainly yellow.

#### Chrysotimus flaviventris von Roser (2 records)

IUCN status – Least Concern

Few scattered records nationally.

The two VC55 records came from Longcliffe near Loughborough in 1935 (Muschamp, as *C. concinnus*) and seen at Piper Wood near Shepshed by members of the Dipterists Forum during a visit to the area in July 2015.



#### Chrysotus genus – 18 British species; 10 VC55 species

A difficult genus that requires careful examination to ascertain identity. Nearly all VC55 recorded species came from experienced entomologists. The outer bristle on the hind coxa is positioned very near to the base in both sexes. Males have eyes that touch or nearly touch. Two new British species have been addrd since d'Assiz Fonseca (1978) although not yet seen locally (Drake, 2020b).

#### Chrysotus blepharosceles Kowarz (9 records)

IUCN status – Least Concern

National records are scattered throughout England & Wales.

Recorded by Muschamp from Longcliffe near Loughborough (1934-5) and at Braunstone (Leicester, 1935). Not recorded until found at five other sites all towards the north west of VC55 between 2011 and 2020.



IUCN status – Least Concern

Scattered throughout England & Wales being less commonly recorded in Scotland.

First seen during the Mountsorrel Quarry complex survey in 2012 (Andy Godfrey). Since recorded at Dimminsdale NR (2015) and a survey of the Misterton-Lutterworth area (2018) as part of a planning application environmental assessment (David Gibbs).

#### Chrysotus femoratus Zetterstedt (2 records)

IUCN status – Least Concern

Scattered records throughout Britain.

The two records for VC55 came from the Mountsorrel Quarry complex survey in 2012 as well as during a survey of the Misterton-Lutterworth area (2018) as part of a planning application environmental assessment.

#### Chrysotus gramineus Fallén (51 records)

IUCN status – Least Concern

Numerous national records mainly from England & Wales.

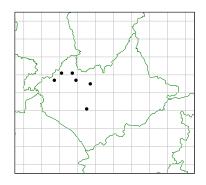
Scattered throughout VC55 being initially found at Narborough (VCH-L, 1907) and not again until 1999 and subsequently through the 2000s.

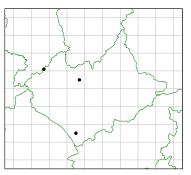
#### Chrysotus laesus Wiedemann (1 record)

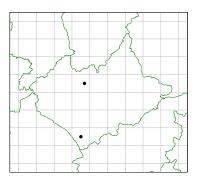
IUCN status – Least Concern

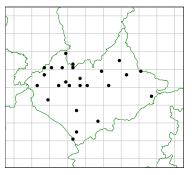
Few British records scattered throughout England & Wales.

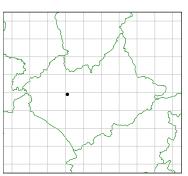
The sole VC55 record came from Bradgate (?Park) found by Muschamp with an undated specimen in the County Collections.









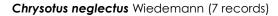


#### Chrysotus longipalpus Aldrich (2 records)

IUCN status – Not evaluated

A hot-house vagrant that presently has no records on the NBN Atlas.

Recorded on two occasions in VC55 with both coming from the Ashby de la Zouch area – 2018 from a disused aquatic nursery (Andy Godfrey) and 2020 from a mitigation site near Lounge (Andy Jukes).



IUCN status – Least Concern

Nearly all British records come from England & Wales.

Whilst noted in the VCH-L (1907) as being seen at Bradgate it was not until 2011 that the fly was reported again (Mountsorrel Quarry complex survey), Shawell Quarry (south Leicestershire) in 2016 and at several locations during the 2018 Misterton-Lutterworth area survey.

#### Chrysotus obscuripes Zetterstedt (1 record)

IUCN status – Least Concern

Most of the few national records seem to come from western Wales with occasional sightings in England.

The sole VC55 record came in April 1933 from Longcliffe near Loughborough collected by Muschamp with a specimen in the County Collections.

#### Chrysotus suavis Loew (1 record)

IUCN status – Least Concern

Scattered throughout Britain but with a low level of records.

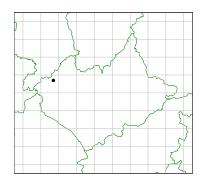
Cloud Wood NR gave the sole VC55 record to date when found by members of the Dipterists Forum during their visit in 2015,

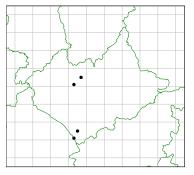
#### Chrysotus verralli Parent (1 record)

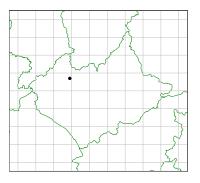
IUCN status – Data Deficient

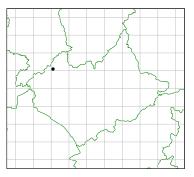
Seen primarily across the middle of England into East Anglia with further scattered records coming from southern England.

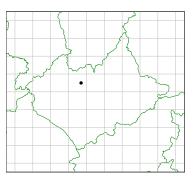
Recorded once in VC55 when found by Andy Godfrey at Buddon Wood in 2013.











#### Diaphorus genus – 3 British species; 1 VC55 species

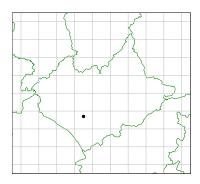
Small to medium sized flies with the males having eyes touching or nearly touching. Antennae in both sexes are unusually positioned low on the head. An updated key can be found on the Mike Hackston web site.

#### Diaphorus oculatus Fallén (1 record)

IUCN status – Least Concern

Scattered throughout England & Wales.

The single record in VC55 came from Narborough (VCH-L, 1907) presumably found by WA Vice.



#### Dolichopus genus – 55 British species; 36 VC55 species

One of the dolichopodid genera that has a (mostly) workable key with the distinct venation easily allowing recognition of the genus (Figure 7). However, the addition of new species since d'Assis Fonseca (1978) requires referral to updated keys published since.

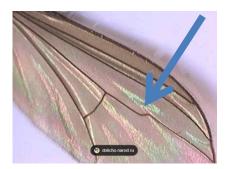


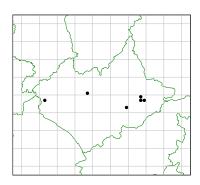
Figure 7: Typical Dolichopus wing venation

#### Dolichopus agilis Meigen (13 records)

IUCN status – Vulnerable

Nationally records are few and scattered mostly in England.

In VC55 the fly has been identified by RM at malaise traps at Rutland Water NR (2014-2016) and at the Rothamsted light trap located at Loddington (East Leicestershire) in 2018 (and again in 2021). Single records were made in the churchyard at Norton-Juxta-Twycross (west Leicestershire) in 2016 (RM) and at north Leicester (Andy Jukes, 2018).

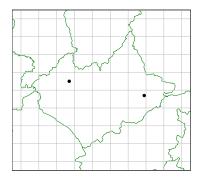


#### **Dolichopus andalusiacus** Strobl (3 records)

IUCN status – Least Concern

A few scattered records in southern England.

Found in malaise traps at two locations at Rutland Water NR (2014, 2015) and as bycatch during pitfall trapping at Charnwood Lodge NNR for spiders (2017).

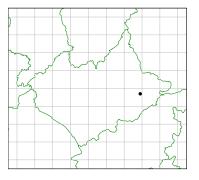


#### Dolichopus arbustorum Stannius (1 record)

IUCN status – Least Concern

Nationally recorded from the Kent and Nottinghamshire areas with a few elsewhere in England.

The only VC55 record was of a female from a malaise trap at Egleton Meadows, Rutland Water NR in 2015.

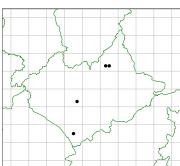


#### Dolichopus atratus Meigen (4 records)

IUCN status – Least Concern

Predominantly a western species in Britain with few Midlands records and a scattering elsewhere.

Muschamp recorded the fly at the canal in Leicester in 1943 with a specimen in the County Collections. Holwell NR provided two records from two parts of the reserve complex on the same day in 2013 (Brian Wetton). A further record came from the Misterton Marshes SSSI complex near Lutterworth during a planning survey in 2018 (David Gibbs).

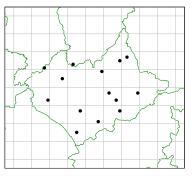


#### Dolichopus brevipennis Meigen (22 records)

IUCN status – Least Concern

Throughout much of England & Wales although not in the southern Midlands. Scattered in Scotland.

VC55 records are scattered across the area with the VCH-L (1907) noting sightings in the Tilton and Blaby areas.

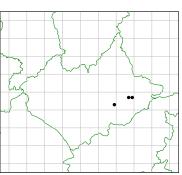


#### Dolichopus caligatus Wahlberg (6 records)

IUCN status – Least Concern

Few nationally scattered records.

Only recorded in VC55 from malaise traps at Rutland Water NR 2014-2016 and then at the Loddington Rothamsted light trap in 2018 (also 2021).

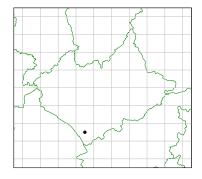


#### Dolichopus campestris Meigen (1 record)

IUCN status – Least Concern

Scattered in England & Wales but not noted in Scotland.

The sole VC55 record came from a spinney near Lutterwoth, south Leicestershire, during a planning survey in 2016.

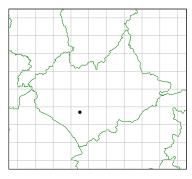


#### Dolichopus cilifemoratus Macquart (1 record)

IUCN status – Least Concern

Few scattered records in England & Wales.

The only record for VC55 came from Narborough Bog NR in 1940 with an unattributed specimen in the County Collections possibly associated with PAH Muschamp.

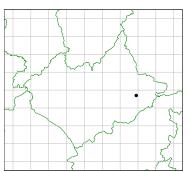


#### Dolichopus claviger Stannius (3 records)

IUCN status – Least Concern

Scattered throughout England & Wales and in the Scottish Highlands.

Recorded at the malaise trap at Egleton Meadows, Rutland Water NR, in 2016 when four females were found.

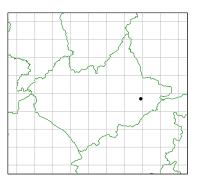


#### Dolichopus clavipes Haliday (2 records)

IUCN status – Least Concern

A coastal species in England & Wales and in northern Scotland.

Single females were taken in 2015 and 2016 at malaise traps at Egleton Meadows, Rutland Water NR.

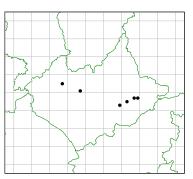


#### Dolichopus discifer Stannius (31 records)

IUCN status – Least Concern

Found throughout Britain but scarce in the southern Midlands.

In VC55, while records came from Charnwood Lodge NNR (2015, Dipterists Forum visit) and a north Leicester site (2018), all other records came from the malaise traps at Rutland Water NR (2014-2016) and the Loddington Rothamsted light trap in 2018 (also 2021). All records were of females.



#### **Dolichopus festivus** Haliday (44 records)

IUCN status – Least Concern

Found throughout England & Wales, scare in Scotland.

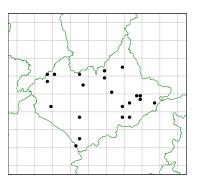
Records are widely scattered in VC55 being one of the more common of the genus locally. First noted in 1904 from Narborough Bog NR (unattributed, possibly Vice) with the specimen in the County Collections.

#### **Dolichopus griseipennis** Stannius (18 records)

IUCN status – Least Concern

Occurs throughout England & Wales being more scattered in Scotland. Identification is aided by a "spur" at the first vein bend (Figure 8).

Scattered throughout much of VC55. Noted in VCH-L (1907) from Longcliffe and Blaby areas. Specimens collected by Muschamp from Narborough Bog (1935) and Longcliffe (1936) are in the County Collections,



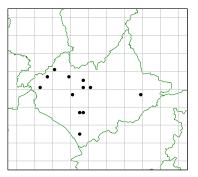




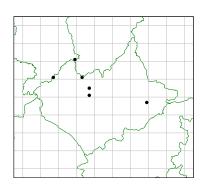
Figure 8: Dolichopus griseipennsi (micropics.org.uk)

#### Dolichopus latilimbatus Macquart (10 records)

IUCN status – Least Concern

Records almost entirely come from England & Wales.

In VC55 most records have been found in damp places towards the north of the two counties. Two males were taken at the Gorse Close (Rutland Water NR) malaise trap in 2014.

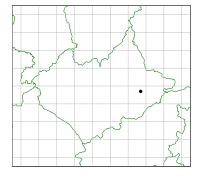


#### Dolichopus latipennis Fallén (1 record)

IUCN status - Critically Endangered

Nearly all the few records in the NBN Atlas come from coastal East Anglia with odd ones elsewhere inland.

The single VC55 record of a female came from a malaise trap operating at Herons' Bay at Rutland Water NR in 2015.

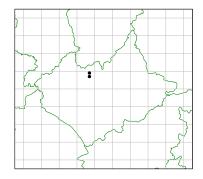


#### Dolichopus lepidus Staeger (2 records)

IUCN status – Least Concern

Found throughout Britain.

Specimens (six males and a single female) from the River Soar at Barrow upon Soar and the adjacent Pillings Lock were collected by Derek Lott (and presumably identified by Martin Drake) on 17/07/2016. These were deposited in the County Collections.

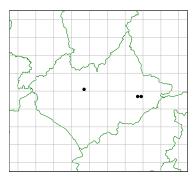


#### **Dolichopus linearis** Meigen (8 records)

IUCN status – Least Concern

The low number of records on the NBN Atlas are scattered throughout the country.

With the exception of a single 2018 record from north Leicester in 2018, all VC55 records came from malaise traps operating at two sites at Rutland Water NR 2015-2016 with both sexes being found.

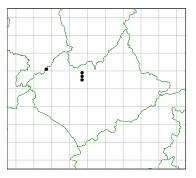


#### Dolichopus longicornis Stannius (4 records)

IUCN status – Least Concern

Scattered throughout England & Wales, less so in Scotland,

Apart from 1994 and 2006 records from Derek Lott (identified by Martin Drake) from the River Soar at Barrow upon Soar and Pillings Lock areas, the only other record came during a visit by Dipterists Forum members to Dimminsdale NR in 2015.

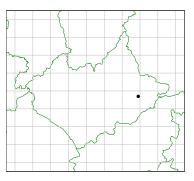


#### **Dolichopus migrans** Zetterstedt (1 record)

IUCN status – Vulnerable

Predominantly recorded in western East Anglia but also occasionally elsewhere.

The fly was an unexpected visitor to the malaise trap run at Egleton Meadows, Rutland Water NR in 2015 when a single female was caught easily keyed using d'Assis Fonseca (1978).

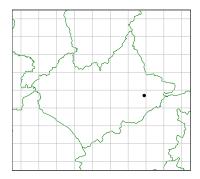


#### Dolichopus nitidus Fallén (1 record)

IUCN status – Least Concern

The few national records are scattered but western mid-Wales seems to be favoured.

Another visitor to the Rutland Water NR Egleton Meadows malaise trap in 2015 (a single female).

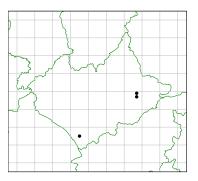


#### Dolichopus notatus Staeger (3 records)

IUCN status – Least Concern

Seems to be a mostly coastal species especially in Wales but also occurring in parts of East Anglia.

Noted on two occasions (males) at Rutland Water NR traps (North Arm marsh 2014, Herons' Bay 2015) but also swept at Misterton Marsh SSSI in 2018 (David Gibbs).

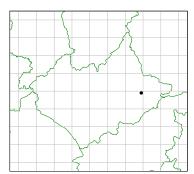


#### Dolichopus nubilus Meigen (1 record)

IUCN status – Least Concern

Frequent throughout Britain but apparently preferring coastal locations.

In VC55 the only record came from Burley Wood (Rutland) when found by John Mousley and Alan Stubbs in August 1989.



#### Dolichopus pennatus Meigen (14 records)

IUCN status – Least Concern

Throughout England & Wales in the Scottish Highlands. One of the species in the genus with modification evident on the male tarsi (figure 9).

Noted throughout VC55 collected by a range of methods but not being taken in the Rutland Water NR malaise traps of 2014-2016.

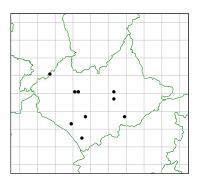




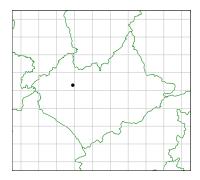
Figure 9: Dolichopus pennatus, Sapcote 2015 (Graham Calow, NatureSpot)

#### Dolichopus picipes Meigen (1record)

IUCN status – Least Concern

Recorded throughout England & Wales and in northern Scotland.

Only recorded once in VC55 when found by Derek Lott at the River Lin in Ulverscroft NR in 2006.



#### **Dolichopus plumipes** Scopoli (62 records)

IUCN status – Least Concern

One of the easier species, because of the modifications to male middle tarsi (figure 10) being found throughout Britain and also in VC55.

The VCH-L (1907) notes the fly at Tilton, Blaby, Narborough and Bradgate Park. Not then recorded until 1984 when found at the River Soar in the Barrow upon Soar area by Derek Lott. The sole County Collections specimen from VC55 came from Saddington Reservoir NR (Derek Lott 2006).

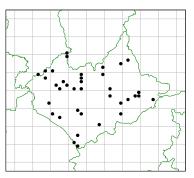




Figure 10: Dolichopus plumipes male mid tibia (Grand Union Canal, Barrow 2017, Annie Smith NatureSpot)

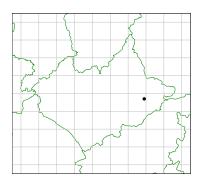
#### Dolichopus plumitarsis Fallén (1 record)

IUCN status – Endangered

The NBN Atlas currently has only three records of this fly in England being lacking elsewhere.

A single female was taken at the Gorse Close malaise trap at Rutland Water NR in 2014.

Due to the apparent national rarity of this species, the local record, a female, needs to treated with caution as no specimen was kept.



#### Dolichopus popularis Wiedemann (57 records)

IUCN status – Least Concern

Another of the more easily recognised of the genus because of modifications to the middle tarsus (figure 11).

Widespread throughout VC55 being noted in the VCH-L (1907) as occurring at Braunstone (Leicester), Bradgate and Longcliffe. However more recent records did not occur until 1989. Surprisingly the County Collections have only two specimens with one from Lea Meadows (Derek Lott, 2006) and the other collected by Mushchamp during one of his regular trips to Larengo in Swizerland!

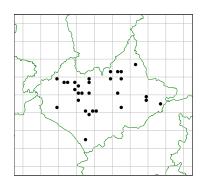




Figure 11: Dolichopus popularis, Ulverscroft 2010 (Steve Woodward, NatureSpot)

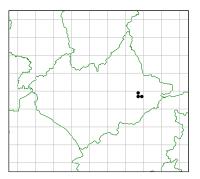
#### Dolichopus rupestris Haliday (13 records)

IUCN status – Least Concern

Tends to be found in northern Scotland and some coastal areas of England & Wales.

All VC55 records come from malaise traps operated at Herons' Bay and Egleton Meadows at Rutland Water NR in 2015-2016 with only females being collected.

In light of the national distribution of this species perhaps these records should be treated with caution.

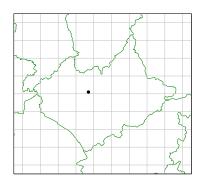


#### Dolichopus signatus Meigen (1 record)

IUCN status – Least Concern

Throughout much of the country but especially coastal areas of Wales and the Scottish Highlands.

Andy Jukes found the first and only VC55 record during 2018 survey work at a north Leicester site. The County Collections has a specimen attributed to Muschamp dated 28 May 1943 but no indication as to location.

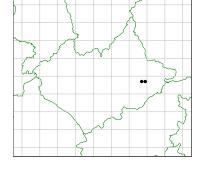


#### **Dolichopus signifier** Haliday (6 records)

IUCN status – Least Concern

Predominantly a coastal species of Wales in particular with scattered other inland sites.

All VC55 records are of females from malaise trapping at Rutland Water NR in 2015 (Herons' Bay, Egleton Meadows).

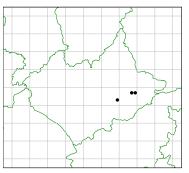


#### Dolichopus simplex Meigen (13 records)

IUCN status – Least Concern

Found throughout much of Britain but apparently in the southern Midlands and south England.

Frequently taken at the Rutland Water NR malaise traps (2015-2016) and at the Loddington Rothamsted light trap in 2018 (and 2021) with both sexes being recorded.



#### Dolichopus trivialis Haliday (55 records)

IUCN status – Least Concern

Frequent throughout England & Wales less so in Scotland.

Widely recorded in VC55 being noted in the VCH-L (1907) at Tilton, Bradgate, Blaby & Longliffe. There were no further records until 2006 when taken at Ragdale sewage works during a reed bed survey (lan Merrill). Regular at the Rutland Water NR and Loddington traps. No specimens in the County Collections!

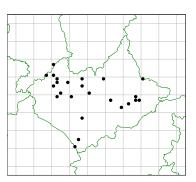




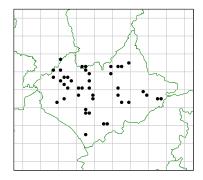
Figure 12: Dolichopus trivialis, Nailstone, 2017 (Graham Calow, NatureSpot)

#### **Dolichopus ungulatus** L. (77 records)

IUCN status – Least Concern

Seemingly common throughout England & Wales less so in Scotland.

Occurs throughout VC55 being reported in the VCH-L at Tilton, Saddington, Blaby and Narborough. Four specimens, collected by Muschamp at Narborough (?Bog) in 1930, are in the County Collections with further examples deposited by Derek Lott from the River Soar at Loughborough. Saddington Reservoir and Loughborough Big Meadow NR all taken in 2006.

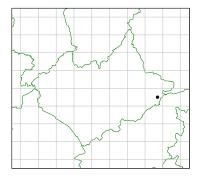


#### Dolichopus urbanus Meigen (3 records)

IUCN status – Least Concern

Scattered throughout Britain.

Recorded during survey work by Peter Kirby in 1999 at Wytchley Warren (Edith Weston, Rutland) and Ketton Quarry NR in Rutland.

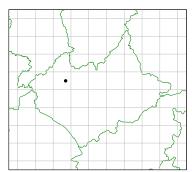


#### Dolichopus vitripennis Meigen (1 record)

IUCN status – Least Concern

Found throughout much of Britain but apparently lacking in most of the Midlands and East Anglia.

The only sighting of this fly was made by Brian Wetton during a visit to Charnwood Lodge NNR in 2014.



#### Dolichopus wahlbergi Zetterstedt (39 records)

IUCN status – Least Concern

Throughout much of England & Wales but less so in Scotland. Noticeable modification to the middle tarsi (Figure 13).

Scattered records in VC55 but no examples in the County Collections. First noted in VC55 in 1999 during survey work by Peter Kirby in the Edith Weston (Rutland) area. Taken at malaise and Rothamsted light traps as well as sweeping.

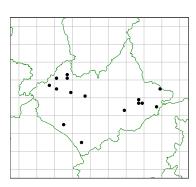




Figure 13: Dolichopus wahlbergi, Burbage Common & Wood 2012 (Graham Calow, NartureSpot)

#### Erithomyia genus – 1 British species; 1 VC55 species

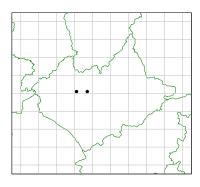
Originally regarded as a *Hercostomus* but considered as not being typical of that genus. However, there is still discussion about whether the species justifies being assigned to a new genus.

#### Ethiromyia chalybea Wiedemann (2 records)

IUCN status – Least Concern

Scattered throughout England & Wales. Previously known as Hercostomus chalybea.

Only recorded twice in VC55 – Lea Meadows NR 2006 when swept by Derek Lott and from a north Leicester site in 2018 by Andy Jukes.



#### Gynmnopternus genus – 9 British species; 5 VC55 species

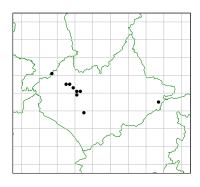
Originally many of the species of this genus were included in the *Hercostomus* genus. See notes under *Herostomus* genus below re identification.

#### Gymnopternus aerosus Fallén (14 records)

IUCN status – Least Concern

Occurs throughout Britain but less so in the southern Midlands.

Previously recorded in the VCH-L (1907), as *Hercostomus*, at Bradgate Park & Narborough. Then found as part of the Edith Weston (Rutland) survey work by Peter Kirby in 1999 and then almost exclusively from the Charnwood area with specimens added to the County Collections Ulverscroft and Lea Meadows NR.

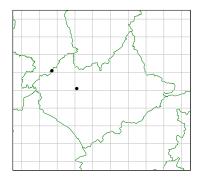


#### Gymnopternus celer Meigen (3 records

IUCN status – Least Concern

Scattered throughout Britain.

Known only from Lea Meadows NR (2006) and Dimminsdale NR (2015) in the north west of Leicestershire.

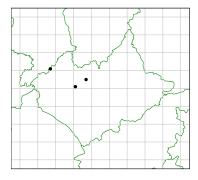


#### Gymnopternus cupreus Fallén (4 records)

IUCN status – Least Concern

Widespread in most of Britain.

Limited in VC55 to Lea Meadows NR (2006), Mountsorrel Quarry complex (2011) and Dimminsdale NR (2015). Probably under-recorded.

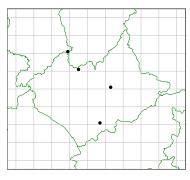


#### Gymnopternus metallicus Stannius (4 records)

IUCN status – Least Concern

Widespread in England Wales, less so in Scotland.

Four widely scattered locations in VC55 between 1991 and 2006.

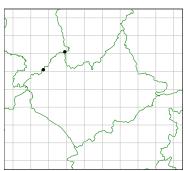


#### Gymnopternus silvestris Pollet (2 records)

IUCN status – Least Concern

Scattered in England Wales.

First noted by Alan Stubbs during survey work at Lockington Marshes SSSI in 1991 and then subsequently by members of the Dipterists Forum during a visit to Dimminsdale NR in 2015.



#### Hercostomus genus – 13 British species; 5 VC55 species

Originally included species now regarded as members of the *Gymnopternus* genus although some available keys to *Hercostomus* still contain the original list of members. Accordingly when keying out it is wise to check against several keys to ascertain the correct identification. Historical records held in the VC55 database have been updated to reflect the change of taxonomy. The flies are medium-large to small with dorsal bristles on hind metatarsus absent. The genus has been split into five groups (Table 2) although this is not helpful when using the d'Assis Fonseca keys.

#### Table 2: separation of the Hercostomus (Naglis & Negrebov, 2017)

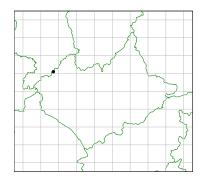
Species-group I	Femora yellow; lower postocular setae yellow or white; antennae partly yellow
Species-group II	Femora yellow; lower postocular setae yellow or white; antennae black
Species-group III	Femora yellow; lower postocular setae black
Species-group IV	Femora black; lower postocular setae yellow or white
Species-group V	Femora black; lower postocular setae black

#### Hercostomus chetifer Walker (1 record)

IUCN status – Least Concern

Mainly western particularly Wales, scattered elsewhere.

The single VC55 record was a result of the Dipterists Forum 2015 visit to Dimminsdale NR when swept by Martin Drake.

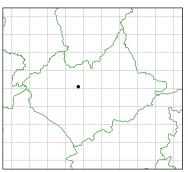


#### Hercostomus germanus Wiedemann (1 record)

IUCN status – Least Concern

Scattered in England & Wales as well as south west Scotland.

Andy Jukes made the only sighting of this fly during a survey at a north Leicester site in 2018.

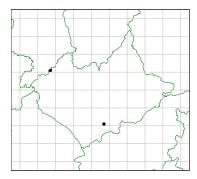


#### Hercostomus nanus Macquart (2 records)

IUCN status – Least Concern

Throughout England & Wales.

Very limited in VC55 being seen by Derek Lott at Saddington Reservoir (2006) and at Dimminsdale NR in 2015 during the Dipterists Forum visit to the site.

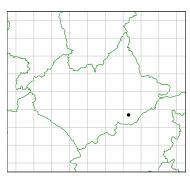


#### Hercostomus nigrilamellatus Macquart (1 record)

IUCN status – Least Concern

Mostly in the southern half of England.

During malaise trapping at Great Merrible Wood NR (Jon Daws) a single fly was caught and identified by Geoff Hancock.

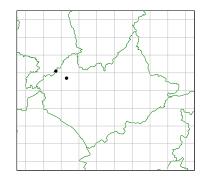


#### Hercostomus nigripennis Fallén (3 records)

IUCN status – Least Concern

Scattered through much of Britain.

A male was found by Steve Woodward in 2012 during survey work at the Grace Dieu Wood complex with a further examples coming from Dimminsdale NR in 2015 (Dipterists Forum visit).

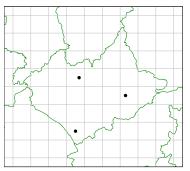


#### **Hercostomus parvilamellatus** Macquart (3 records)

IUCN status – Least Concern

Mostly in England and occasionally in Wales.

The first local record came in 2005 when Roger Morris found the fly at Prior's Coppice NR. This was followed by another in 2011 by Andy Godfrey during surveying at the Mountsorrel Quarry complex then by another example by David Gibbs from the Misterton area in 2018.



#### Hydrophorus genus – 9 British species; 2 VC55 species

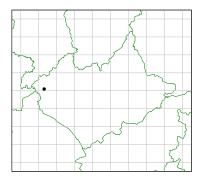
Small to medium sized flies being pale grey to almost black. Both sexes have front femora strongly spined. The sexes are keyed separately by d'Assis Fonseca (1978). Usually found near water and liquid mud. Both of the VC55 species have clear wings and a scutellum that has four bristles.

#### Hydrophorus balticus Meigen (1 record)

IUCN status – Least Concern

Scattered records in South Wales and across the middle of England.

The sole VC55 record came during surveying an active brickworks at Measham in 2006 (Andy Godfrey)

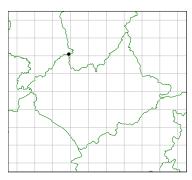


#### Hydrophorus litoreus Fallén (1 record)

IUCN status – Least Concern

Found scattered in Wales and northern England.

Recorded by Alan Stubbs during surveying of the Lockington Marshes SSSI in 1991.



#### Lamprochromus genus – 3 British species; 1 VC55 species

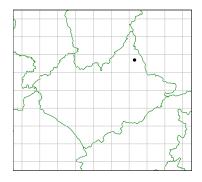
These flies are very small (1.5-2mm long) and have two pairs of matt black, copper-edged spots on the side and front corner of the mesonotum. The male have second and third tergites which are yellow enabling identification from other small dolichopodids. Details of the characters used for identifying both sexes of the British species can be found in Drake (2017b).

#### Lamprochromus bifasciatus Macquart (1 record)

IUCN status – Least Concern

Scattered in England & Wales usually in the vicinity of seepages or swampy water margins.

Noted at Croxton Kerrial (1991) as *L, elegans* when a male was caught by John Mousley and passed to Andy Godfrey for identification (Godfrey, 1994).



#### Lianculus genus – 1 British species; 1 VC55 species

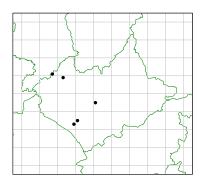
Large flies with long slender legs which have relatively few (or no) bristles. The wings are noticeably long which may be marked.

#### Liancalus virens Scopoli (5 records)

IUCN status – Least Concern

Commonly found in Wales but more scattered elsewhere in Britain. Abdomen has banded appearance.

Recorded on five separate occasions as singletons between 2011 and 2019 in VC55.





<u>Figure 14: Lianculus virens, Grace Dieu viaduct, 2011</u> (Steve Woodward, NatureSpot; identified by Roy Crossley)

#### Medetera genus – 37 British species; 8 VC55 species

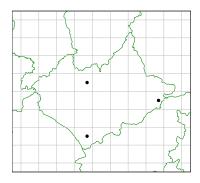
Not an easy genus to identify although a detailed key to males of the European species has been published (Negrebov & Naglis, 2016). No VC55 specimens occur in the County Collections. Identification problems have probably resulted in the paucity of local records.

#### Medetera abstrusa Thuneberg (4 records)

IUCN status – Least Concern

Scattered records mostly in England & Wales.

The four VC55 records were made by experienced entomologists from widely spaced sites between 1999 and 2018.

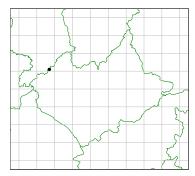


#### Medetera dendrobaena Kowarz (2 records)

IUCN status – Least Concern

Scattered throughout England with a few in Wales.

The VC55 record was as a result of the 2015 visit by Dipterists Forum members (Drake & Wolton) to Dimminsdale NR.

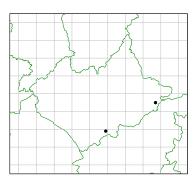


#### Medetera diadema L. (3 records)

IUCN status – Least Concern

Few English records towards the Midlands as well as east and south of the country.

First noted at Foxton Locks in 1984 (CE Dyte) before Peter Kirby discovered the species at both Ketton Quarry NR at an old orchard near Ketton Gorse, Edith Weston during 1999 survey work,

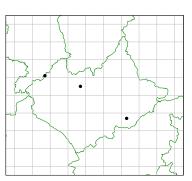


#### Medetera impigra Collin (3 records)

IUCN status – Least Concern

Mainly in England & Wales, scattered elsewhere.

Initially recorded at a 1985 malaise trap at Great Merrible Wood NR then during the Mountsorrel Quarry complex survey in 2011 and at Dimminsdale NR during the 2015 visit by Dipterists Forum members,

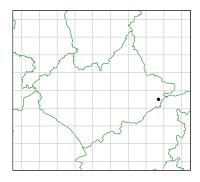


#### Medetera jacula Fallén (2 records)

IUCN status – Least Concern

Found mostly throughout England & Wales.

Found in VC55 at the same times and sites as for M. diadema.

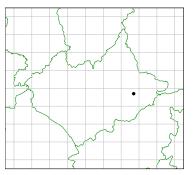


#### Medetera micacea Loew (1 record)

IUCN status – Least Concern

Throughout England & Wales often being coastal.

Recorded once in VC55 when a female was taken at the Herons' Bay malaise trap at Rutland Water NR in 2015

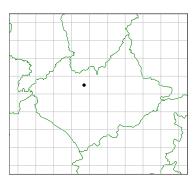


#### Medetera muralis Meigen (1 record)

IUCN status – Least Concern

Mainly in Wales and to northern England.

Found during Andy Godfrey's surveying at the Mountsorrel Quarry complex in 2011.

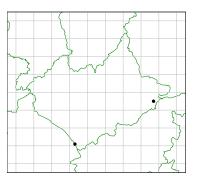


#### Medetera saxatilis Collin (5 record)

IUCN status – Least Concern

One of the numerous of the genus being found throughout England & Wales, rare elsewhere.

The only local records came from 1999 surveying at the old orchard near Ketton Gorse, Edith Weston and Ketton Quarry NR with others from Shawell Quarry in the south of Leicestershire (2016, 2018).

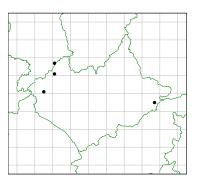


#### Medetera truncorum Meigen (6 record)

IUCN status – Least Concern

Common throughout England Wales, rare elsewhere.

Taken at Ketton Gorse (1999) and Ketton Quarry (1999, 2006), fields near Measham (2008) and Donington Park (2014).



#### Micromorphus genus – 1 British species; 1 VC55 species

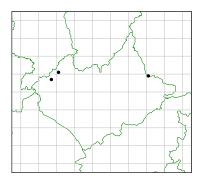
Worldwide there are few species in this genus of small flies. The only British species is a very small dark fly with variable leg colouring (brownish-yellow to almost black). Unlike many other species of Dolichopodidae the genus does not have a metallic green appearance.

#### Micromorphus albipes Zetterstedt (3 records)

IUCN status – Data Deficient

Seems to be mainly recorded in England & Wales.

A suction sample retrieved this species at Cribbs' Meadow NR in 2006 (Derek Lott). Sweeping found the species at Cloud Wood NR in 2015 and it was found again at an old aquatic nursery near Ashby de la Zouch in 2018.



#### Microphor genus – 4 British species; 1 VC55 species

The current taxonomic position of this genus is unclear. Unlike other members of the Dolichopodidae, the wing venation is different (Figure 15 shows the difference between *Microphor* with three veins from cell dm and an example of a typical Dolichopodidae (*Medetera*), with two veins).

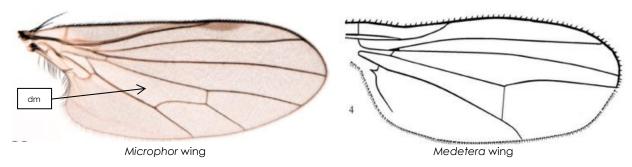


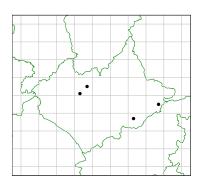
Figure 15: wing venation of Microphor

#### Microphor holosericeus Meigen (4 records)

IUCN status – Least Concern

Throughout England & Wales.

Found by Muschamp at Bradgate in 1935 (added to County Collections), Ketton Quarry NR (2006), at Buddon Wood (2013) and at a malaise trap at Great Merrible Wood NR (1985),



#### Neurigona genus – 6 British species; 1 VC55 species

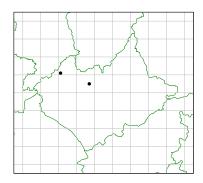
A distinctive dolichopodid with the adults being mostly or entirely yellow, quite large and with really long legs. D'Assiz Fonseca (1978) only keyed out four species but currently the list is of six species which can be readily identified (Drake & Hunnisett, 2014).

#### Neurigona pallida Fallén (2 records)

IUCN status – Least Concern

Scattered throughout England & Wales.

The two VC55 records came from the Mountsorrel Quarry complex survey in 2011 (Andy Godfrey) and from Cloud Wood NR during the 2015 visit by Dipterists Forum members.



#### Ortochile genus – 1 British genus; 1 VC55 genus

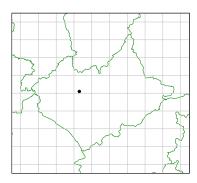
In d'Assis Fonseca 1978 this genus can be found in the *Hercostomus*. Since that time it has been allocated its own generic status but the sole British species can still be identified from the original key.

#### Ortochile nigrocoerulea Latreille (1 record)

IUCN status - Critically Endangered

The NBN Atlas has only two records (as of April 2022) and hence justifies the IUCN status.

The single VC55 record came from Bradgate Park probably from WA Vice (VCH-L, 1907). The lack of a specimen means this record must be treated with scepticism although it is possible the identification was carried out by GH Verrall, a noted 19th century dipterist, with whom Vice was in regular communication.



#### Poecilobothrus genus – 5 British species; 1 VC55 species

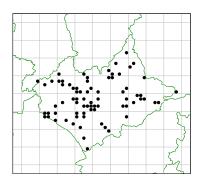
These flies are large to medium sized with rather long-haired arista and strongly "clawed" genital lamellae of the males. Four of the British species are keyed out in d'Assis Fonseca (1978) under *Poecilobothrus* with a fifth (now part of the present genus) noted under *Hercostomus* (now *P. chrysozygos*).

#### Poecilobothrus nobilitatus L. (133 records)

IUCN status – Least Concern

Widespread throughout England & Wales. The male (see LESOPS cover), with its white wing tips is distinctive but this is lacking in the female.

Widely reported in VC55 mostly of males. Surprisingly not listed in the VCH-L (1907). The first local record came from Muschamp in 1943 when seen at the canal in Leicester near his home on Upperton Road with many specimens from this location being in the County Collections.



#### Rhaphium genus – 26 British species; 15 VC55 species

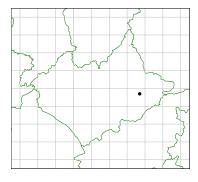
A genus with varying sized species distinguishable by the pointed 3<sup>rd</sup> antennal segment with an apical/sub-apical arista and longish silky pubescence on the outer face of the hind coxa. Martin Drake produced detailed keys to the males of this genus as part of a training programme as well as recording the presence of a further species (Drake, 2007).

#### Rhaphium albomaculatum Becker (1 record)

IUCN status – Least Concern

Scattered records north of a line from the Severn to the Humber. Apparently absent in the rest of England.

In VC55 the 2015 record at a Heron's Bay malaise trap at Rutland perhaps should be treated with caution.



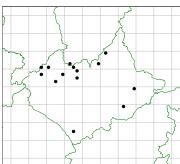
#### Rhaphium appendiculatum Zetterstedt

(18 records)

IUCN status – Least Concern

Throughout much of England & Wales (apart from the south Midlands) and into Scotland.

Noted at Longliffe in the VCH-L (1907) but not again until 1989 and onwards. Predominantly recorded from the north of Leicestershire.

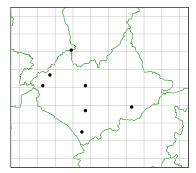


#### Rhaphium caliginosum Meigen (12 records)

IUCN status – Least Concern

Throughout England & Wales although not in the south Midlands.

Noted in the Blaby area (VCH-L, 1907) as well as other well-scattered VC55 sites since 1991 usually as a result of survey work by experienced dipterists.

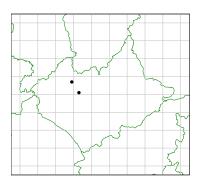


#### Rhaphium commune Meigen (2 records)

IUCN status – Least Concern

Nationally few records particularly in the Welsh border areas.

Two historic VC55 records originate from the VCH-L (1907) being reported from Longcliffe and Bradgate Park.

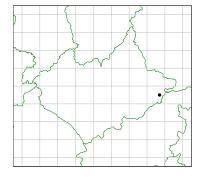


#### Rhaphium consobrinum Zetterstedt (1 record)

IUCN status – Least Concern

Seemingly a coastal species although scattered inland. Infrequent in Scotland.

The only VC55 record came from Ketton Quarry NR when found by the late Jonathan Cole in June 2006.



#### Rhaphium crassipes Meigen (11 records)

IUCN status – Least Concern

Scattered in England & Wales and in the Scottish Highlands.

The few scattered VC55 records come from a range of habitats with two in 2017 - Charnwood Lodge NNR (the late Annie Smith, figure 15) and from Prior's Coppice NR (Alan Cann, figure 16).

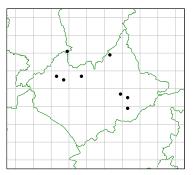




Figure 15: Annie Smith (NatureSpot)



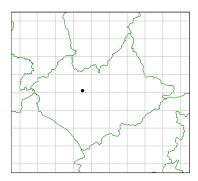
Figure 16: Alan Cann (NatureSpot)

#### Rhaphium elegantulum Meigen (1 record)

IUCN status – Least Concern

Few records mostly scattered through England & Wales.

The VCH-L (1907) reported this species at an old brickpit near Cropston.

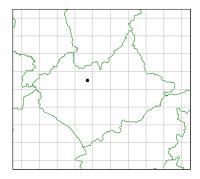


#### Rhaphium fasciatum Meigen (1 record)

IUCN status – Least Concern

Scattered in England & Wales and in the Scottish Highlands.

Andy Godfrey recorded the sole VC55 sighting of this fly in his 2011 survey of the Mountsorrel Quarry complex.

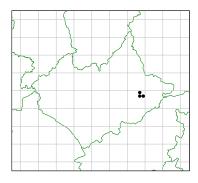


#### Rhaphium fascipes Meigen (7 records)

IUCN status – Vulnerable

Very few records in England & Wales.

The VC55 records from malaise traps at Rutland Water NR 2014-2015 may need to be treated with caution pending gathering specimens for confirmatory identification.

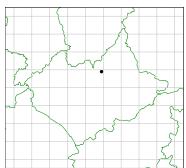


#### Rhaphium longicorne Fallén (1 record)

IUCN status – Least Concern

Mainly found on the west side of Britain with an apparent total absence from the Midlands eastwards.

The only VC55 record came from Ian Merrill's research on reed beds at Ragdale Sewage Works with identification by dipterist Richard Wilson.

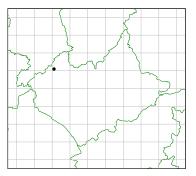


#### Rhaphium micans Meigen (1 record)

IUCN status – Least Concern

Few records mainly on the Welsh borders.

Brian Wetton reported the sole VC55 record on a visit to Cloud Wood NR in 2016.

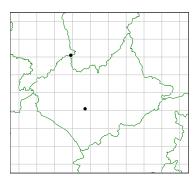


#### Rhaphium monotrichum Loew (2 records)

IUCN status – Least Concern

Scattered in England & Wales and also found in the Scottish Highlands.

Only recorded in the Aylestone (Leicester) area (VCH-L, 1907) and by Alan Stubbs at Lockington Marshes SSSI in 1991.

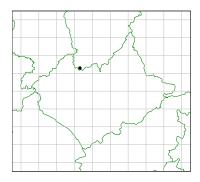


#### Rhaphium nasutum Fallén (1 record)

IUCN status – Least Concern

Few scattered records mainly from Wales.

The sole VC55 record came from Loughborough Big Meadow NR in 1993 during survey work by a group of experienced dipterists.

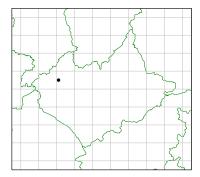


#### Rhaphium riparium Meigen (2 records)

IUCN status – Least Concern

Scattered throughout Britain but not numerous.

The two VC55 records came from the Swannington area during survey work by Andy Jukes in 2019.

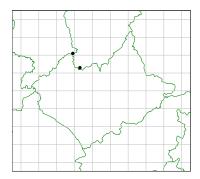


#### Rhaphium rivale Loew (3 records)

IUCN status – Least Concern

The few national records are scattered across Britain.

Found at the north of the county in wet conditions (Lockington Marshes SSSI, Loughborough Big Meadow NR and at Loughborough near the R. Soar).



#### Scellus genus – 1 British species; 1 VC55 species

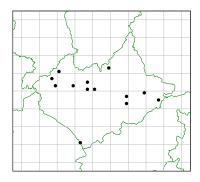
Keyed out readily in d'Assis Fonseca (1978) with the front tibia of the female being strongly spined.

#### Scellus notatus Fabricius – 24 records

IUCN status – Least Concern

Widespread in most of England & Wales occasional in Scotland.

Vice noted this fly at Owston Woods in 1897 with a specimen in the County Collections. Regularly seen throughout VC55 since 1989.



#### Sciapus genus – 10 British species 3 VC55 species

The wing venation of this genus is unique in the Dolichopodidae having a forked discal vein (Figure 17).

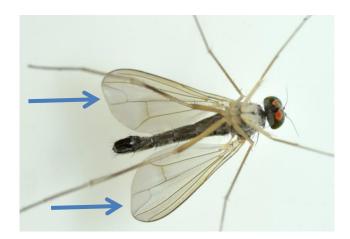


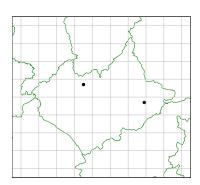
Figure 17: Sciapus platypterus, Long Clawson 2014 (Barbara Cooper, NatureSpot)

#### Sciapus contristans Wiedemann (3 records)

IUCN status – Least Concern

Scattered throughout England & Wales.

Recorded by Muschamp in 1923 at Quorn and taken on two occasions at malaise traps at Egleton Meadows, Rutland Water NR in 2015.

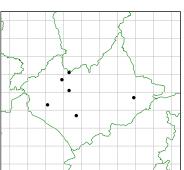


#### Sciapus longulus Fallén (6 records)

IUCN status – Least Concern

Well scattered across England & Wales.

Four of the VC55 records originate in VCH-L (1907) with one from Loughborough Big Meadow in 2006 and also at the Egleton Meadows malaise site at Rutland Water NR in 2015.

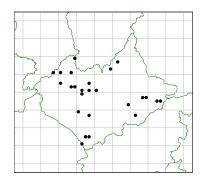


#### Sciapus platypterus Fabricius (41 records)

IUCN status – Least Concern

Probably the most common of the genus being found throughout Britain.

Also the most frequent species of the genus in VC55 being found at Bradgate Park and Blaby (VCH-I, 1907) and then regularly since 2006.



#### Sybistroma genus – 3 British species 2 VC55 species

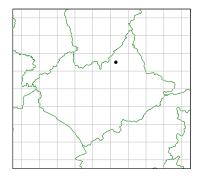
Formerly the genus *Hypophyllus*. The males of this genus have modified antennae. Legs are mainly yellow or reddish-yellow and the lower post-ocular setae are white. Females are difficult to distinguish from those of *Hercostomus*. A key to the males of the Palaearctic species includes the three British species (Grichanov & Kazerani, 2014).

#### Sybistroma crinipes Staeger (2 records)

IUCN status – Least Concern

Most records come from England especially the Welsh borders.

Only found at Holwell Mouth NR in 1989 and 1999 recorded as *Hypophyllus crinipes*.

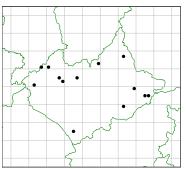


#### Sybistroma obscurellum Fallén (15 records)

IUCN status – Least Concern

Found across England & Wale and into Scotland.

First seen in VC55 in Burley Wood in 1989 with all records coming from experienced dipterists.



#### Sympycnus genus – 5 British species 1 VC55 species

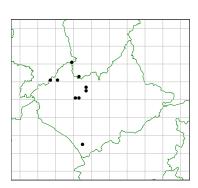
Small flies with a slender build. The d'Assiz Fonseca (1978) key gives four of the British species with a fifth added by Pollet et al (2015) (although currently with very few British records to date).

#### Sympycnus pulicarius Fallén (18 records)

IUCN status – Least Concern

Widespread through much of Britain with the exception of much of the Midlands.

Even so, regularly recorded in VC55. Seen at Bradgate (VCH-L, 1907) but not until 1991 at Lockington Marshes SSSI. Nearly always associated with wet habitats.



#### Syntormon genus – 16 British species 6 VC55 species

The species of this genus are small, dark green or yellow-marked flies associated with wetlands. The genus is unique in having a modification to the base of the antenna which requires careful examination under quite high magnification (Figure 18). Drake (2021) provides illustrations allowing separation of the males of the genus by genital examination. An addition to the British list came from Drake (2020a; S. pseudospicatus!).

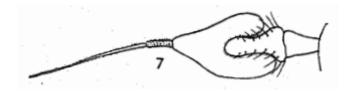


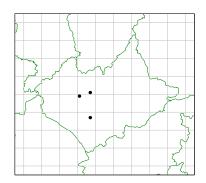
Figure 18: Structure of Syntormon antenna (d'Assiz Fonseca, 1978)

#### Syntormon aulicum Meigen (3 records)

IUCN status – Least Concern

Scattered in England & Wales especially in coastal areas.

Recorded in the VCH-L (1907) at Blaby and Bradgate the only other record coming in 2018 during survey work by Andy Jukes in north Leicester.

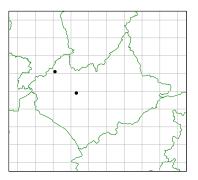


#### Syntormon bicolorellum Zetterstedt (2 records)

IUCN status – Least Concern

Scattered in England & Wales, few records elsewhere.

Found by Peter Chandler at Sheet Hedges Wood (2007) and then in 2015 at Cloud Wood NR by SM Crellin during the DF visit to the site.

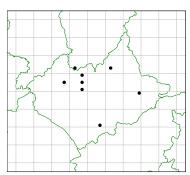


#### Syntormon denticulatum Zetterstedt (11 records)

IUCN status – Least Concern

Distributed throughout England & Wales.

First noted in VC55 at Burley Wood in 1989 (John Mousley & Alan Stubbs) then from various sites in 2006 by Derek Lott. The most recent record (2019) came from a north Leicester survey site.

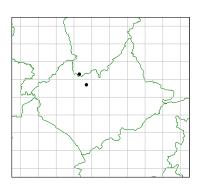


#### **Syntormon macula** Parent (2 records)

IUCN status – Least Concern

Mainly along the Welsh border with England.

Found twice in 2006 associated with the River Soar (Barrow upon Soar and Loughborough) by Derek Lott whilst sweeping vegetation.

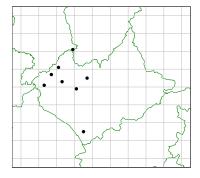


#### **Syntormon pallipes** Fabricius (14 records)

IUCN status – Least Concern

Widespread throughout Britain.

Many of the VC55 records come from north west Leicestershire. A specimen from Muschamp, apparently taken at Bradgate Park but lacking date information, is in the County Collections.

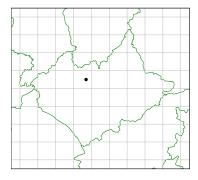


#### Syntormon pumilum Meigen (1 record)

IUCN status – Least Concern

Throughout most of England & Wales but less so in Scotland.

The fly has only been found at Barrow upon Soar (by the River Soar) when taken by Derek Lott in 1994 with identification by Martin Drake.

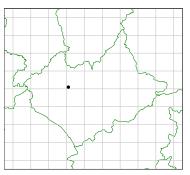


#### Syntormon tarsatum Fallén (1 record)

IUCN status – Least Concern

Scattered throughout Britain, especially Wales, but scarce in the Midlands.

Derek Lott recovered the fly at Lea Meadows NR in 2006 with identification by Martin Drake.



#### Tachytrechus genus – 4 British species 1 VC55 species

Fairly large flies with a metallic greenish-bronze colour with cubital and discal veins converginh towards the wing tip (Figure 19).



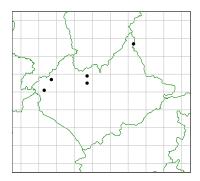
Figure 19: Converging veins in Tachytrechus

#### Tachytrechus notatus Stannius (6 records)

IUCN status – Least Concern

Mostly towards the west of England & Wales but scattered elsewhere including Scotland.

First seen in VC55 by Alan Stubbs at Muston Meadows NNR in 1986 and only occasionally since from a variety of sites.



#### Teuchophorus genus – 5 British species 4 VC55 species

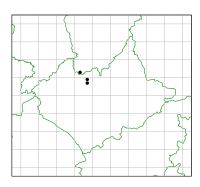
All British species can be keyed out using d'Assis Fonseca (1978) where the sexes are treated separately. A more recent key for males covers all those in the Palaearctic including the British (Pollet & Kechev, 2007). The flies are very small and delicate (which probably explains the paucity of local records) with the males showing a range of leg characters all illustrated by d'Assiz Fonseca. Species identification of females is more difficult.

#### Teuchophorus calcaratus Macquart (3 records)

IUCN status – Least Concern

Scattered throughout Britain particularly in the west.

Only known in VC55 from areas near the River Soar (Barrow upon Soar and Loughborough) when collected by sweeping (Derek Lott, 2006).

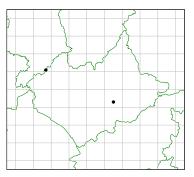


#### **Teuchophorus monacanthus** Loew (2 records)

IUCN status – Least Concern

Scattered in England & Wales, few records from Scotland.

The two local records came from Skeffington Wood NR (Alan Stubbs, 1989) and Dimminsdale NR during the 2015 Dipterists Forum visit.

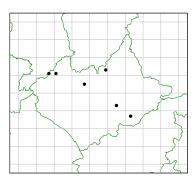


#### **Teuchophorus nigricosta** von Roser (7 records)

IUCN status – Least Concern

Scattered throughout England & Wales.

First found at a malaise trap at Skeffington Wood NR (1985) and since from a few varied sites across the area.

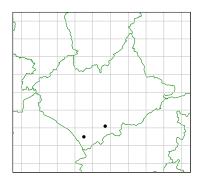


#### **Teuchophorus spinigerellus** Zetterstedt (4 records)

IUCN status - Least Concern

Throughout England & Wales.

With the exception of a record from Saddington Reservoir in 2006, all records came from survey work carried out by David Gibbs at the Mistertom Marshes SSSI survey 2018.



#### Thrypticus genus – 9 British species 1 VC55 species

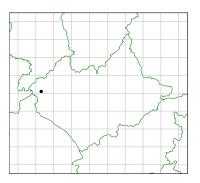
Unusually for the Dolichopodidae, the larvae of some species in this genus are known as leaf-miners. Fhe flies can be very small and are usually bright metallic green. Seven of the species can be identified using d'Assiz Fonseca whilst a further two have been added into the key by Martin Drake.

#### Thrypticus bellus Loew (1 record)

IUCN status – Least Concern

The larva is a leaf-miner of *Juncus* (Chandler, 1978). The few national records are scattered throughout Britain.

Andy Godfrey found the adult at a former aquatic nursery at Ashby de la Zouch in 2018.



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