LEICESTERSHIRE ENTOMOLOGICAL SOCIETY

The status of Diptera in VC55

Families with 11 to 20 species

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LESOPS 45 (January 2022)

ISSN 0957 - 1019

Introduction

Following on from previous Diptera Status LESOPS, the present issue considers those families with 11-20 species (Table 1) where records from VC55 to the end of 2020 have been collected.

Table 1: Families with 11-15 species (based on Dipterists Forum listing July 2021)*

| Anthomyzidae (19) | Chyromyidae (11) | Oestridae (11 | Rhagionidae (15) |
|---------------------|--------------------|--------------------|--------------------|
| Bibionidae (18) | Dixidae (15) | Opomyzidae (16) | Therevidae (14) |
| Bolitophilidae (16) | Hippoboscidae (14) | Pallopteridae (13) | Trichoceridae (12) |
| Canacidae (11) | Milichiidae (19) | Piophilidae (14) | Ulidiidae (20) |
| Carnidae (13) | ` , | | . , |

*Families with VC55 records

The problems of identification have been previously described (Morris, 2019) with levels of difficulty (1 to 5) defined by the Dipterists Forum (DF).

Distribution of each species known from VC55 is shown using MapMate® with the legend for each showing the number of records up to 2020. Nomenclature is based on the checklist produced by the Dipterists Forum July 2021. Reference to usable identification keys for each family is given, where available, and an indication of the DF level of difficulty is applied.

Acknowledgements

Records have been sourced from NatureSpot, the NBN Atlas, the County Collections at Barrow upon Soar and, of course, the Leicestershire & Rutland Environmental Records Centre (LRERC) who made available records from survey reports carried out as part of planning applications and historical recording. In addition, entomological publications, both local and national, have been scrutinised I am grateful to NatureSpot (courtesy David Nicholls) for allowing use of their photographs as well as to individuals who have passed images to me for comment and, with a bit of luck, confirmation of identity.

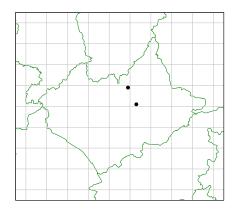
Anthomyzidae

A family of very small yellowor black flies (up to 4.5mm), occasionally with spots, with 19 species in Britain. Usually ssociated with grassy areas where the larvae an be foundin closely-fitting leaf-sheaths of plants such as rushes and reeds. Difficulty is classed by the Diperiss Forum at level 3 and identification keys are scattered in the literature. There does not seem to be a modern accessible key for British species at this time.

Anagnota bicolor Meigen (2 records)

Scatterd throughout England & Wales.

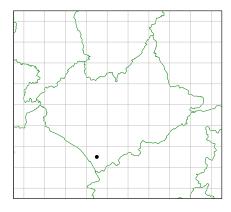
Ther two VC55 records came from surveys of reed beds at two sewage treatment works by Ian Merrill (2006) using window traps with identifications by Richard Wright,



Anthomyza collini Andersson (2 records)

Throughout England & Wales and into Scotland.

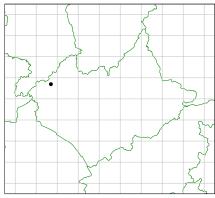
The two VC55 records cme from a 2018 survey of the Misterton marshes area by David Gibbs as part of environmental assessment for planning purposes.



Anthomyza elbergi Andersson (1 record)

Scattered records mostly in England and Wales.

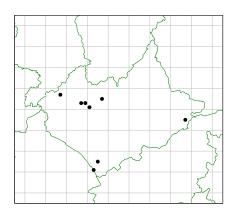
The sole VC55 record came Andy Godfrey at a disused aquatic plant nursery at Ashby de la Zouch in 2018.



Anthomyza gracilis Fallén (20 records)

One of the commoner of the family being recorded throughout Britain.

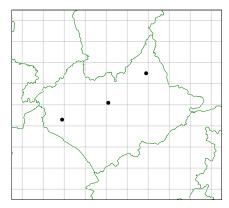
The most commonly recorded anthomyzid in VC55 first recorded in 2006. May well be overlooked due to under recording/lack of interest.



Paranthomyza nitida Meigen (3 records)

Throughout England & Wales and into Scotland.

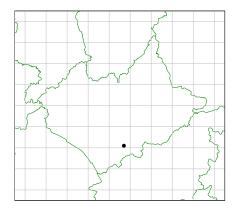
VC55 records came a window trap at Waltham on the Wolds sewage treatement works (2006) and from two development sites in 2011 at Market Boswrth and Syston.



Typhamyza bifasciata Wood (1 record)

Scattered throughout England & Wales, particuklarly in the Norfolk Broads.

The nly VC55 record came from Saddington reservoir in 2006 when caught by Derek Lott and identified by Martin Drake.



Bibionidae

These spring flies, colloquially known as St Mark's flies, are one of the most obvious insects at this time year often being present in swarms. However, some may be expected to be encountered at other times of the year. Remarkably for the British Diptera, the number of species (18) of the two genera has remained stable for many decades. Identification is usually straight forward (Freeman & Lane, 1985) as the flies tend to be hairy and black, especially the males which have a "dancing" flight. The separation of the sexes is readily accomplished: the males have large eyes (meeting at the top - holoptic) occupying most of the head whereas the female eyes are smaller and do not meet (dichopic). Thorax colour is usually black but in some species the females thorax is reddish. A key diagnostic character is the presence of apical spines on the front tibia which allows the commoner species to be readily identified. DF difficulty 1-3.

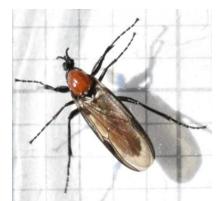


Bibio marci, Melton CP, 2015 (Paul Ruddoch, NatureSpot)

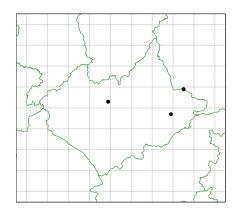
Bibio anglicus Verrall (3 records)

Possibly under-recorded in Britain this small version of St Mark's fly (B. marci) occurs at the same time of year. The abdominal hairs in both sexes are black as is the male body – the female body is red. Wings almost clear of any colour.

The only VC55 records come from Cossington NR (2008), Rutland Water NR (2017) and Stocken (Melton district) in 2020 all being females.

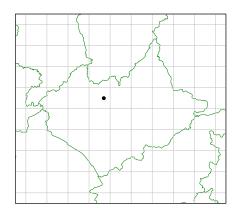


Rutland Water, 2017 (Steve Mathers, NatureSpot)



Bibio clavipes Meigen (1 record)

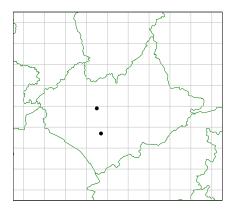
Scattered throughout Britain and only recorded in VC55 on a single occasion during survey work in the Mountsorrel Quarry, Buddon Wood & Rowhele Wood complex in 2012 by Andy Godfrey.



Bibio ferruginatus L. (2 records)

Hairs on thorax and abdomen are white in both sexes. The male body is black but the leg hairs are white. Female body is reddish with an indistinct darkish mid-dorsal stripe. Nationally there are few records.

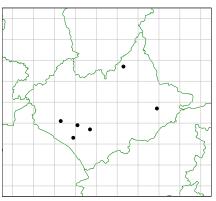
The two VC55 records came from the Blaby area and Anstey Lane (a well known Victorian natural history hot-spot) recorded by WA Vice (VCH-L).



Bibio hortulanus L. (7 records)

A small *Bibionidae* with the sex differences in coloration seen in other species. It seems that the male can be noticeably smaller than the female. National record nubbers seem low with distribution predominantly to the east of England.

Noted by Vice in the 19th century (VCH-L) in the Blaby area but not recorded in VC55 until 2013 to date.





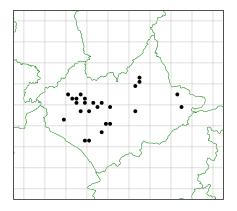
Long Clawson 2013 (Barbara Cooper, NatureSpot) note size difference (male left, female right)

Bibio johannis L. (32 records)

The head and legs are very hairy and the male has a distinct wing stigma. Found throughout England & Wales and also northern Scotland.

After B. marci this is the most frequently recorded Bibio in VC55 having first been noted by Vice (VCH-L) from the Blaby area but not regularly until after 2011.





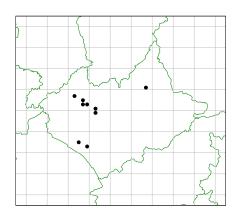
Leicester, Knigton 2018 (Alan Cann, NatureSpot) male

Bibio lanigerus Meigen (12 records)

Scattered widely through Britain but needing careful keying to ensure correct identity. Scattered records in VC55 since 2007 with nearly all coming from the west side of the area.



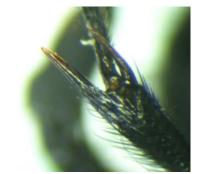
Sheepy Wood, Burbage 2019 (Graham Calow, NatureSpot) male



Bibio leucopterus Meigen (5 records)

The almost equal length spurs on the front tibia greatly helps identification. Males have milky wings while the females appear more smoky. Scattered throughout Britain.

Vice recorded this fly in the Blaby and Cropston areas (VCH-L) but only seen on three further occasions in the present review period. Probably under-recorded.

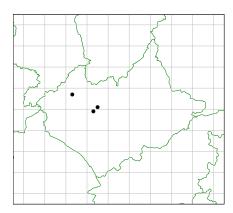


Ratby 2020 (Dave Nicholls, NatureSpot) note equal spines

Bibio longipes Loew (4 records)

Found throughout Britain but distribution is patchy. In Freeman & Lane it is named as B. lepidus. Male all black while female has reddish legs with a pronounced wing stigma.

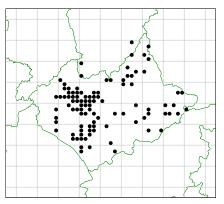
All VC55 records originate from surveying at Grace Dieu Woods complex (2009, 2011) and Bradgate Park (2013) by Helen Ikin & Steve Woodward.



Bibio marci L. (170 records)

The most familiar of the Bibionidae being seen in the Spring often as swarms over vegetation. The largest of the family occurring throughout Britain. Male wings almost clear.

Common in VC55 being recorded first from around Swithland and Blaby by Vice (VCH-L).



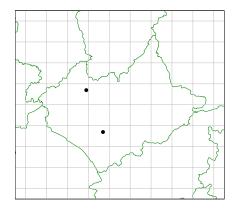


Narborough Bog NR, 2017 (Dave Nicholls, NatureSpot) male to right

Bibio nigriventris Haliday (2 records)

A species scattered throughout Britain but few from the Midlands.

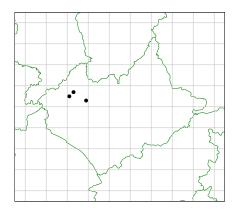
The only records for this species in VC55 come from Vice who found it at Longcliffe near Loughborough and in the Blaby area (VCH-L) It is worth noting that in neighbouring Nottinghamshire it was historically well recorded, yet there seems to have been no records since around 1920 although one was seen at Sherwood Forest in 2017.



Bibio pomonae Fabricius (2 records)

Occurs throughout much of Britain but less so in the Midlands and southern England. Red femora whilst rest of legs are black.

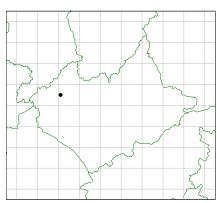
Both VC55 records came from Helen Ikin & Steve Woodward when surveying at the Grace Dieu Wood complex (2011) and Bradgate Park (2013).



Bibio reticulatus Loew (2 records)

A species needing careful examination to correctly identify. Few scattered records in England & Wales.

The only records for the fly came from Andy Jukes whilst carrying out survey work on 30 April 2019 at Finney Wood and a nearbt plantation at Swannington near Coalville.



Bibio varipes Meigen (7 records)

Scattered throughout much of Britain. Males are all black whilst females are black-bodied with reddish brown legs.

First recorded in VC55 by the late Phil Withers when he found the fly at Charnwood Lodge NNR (1977) and at Enderby (1978). Since found at the Grace Dieu Wood comple, the Mountsorrel Quarry & woods complex and at Peckleton Common.

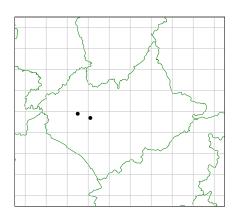


Peckleton Common 2020 (Dave Nicholls, NatureSpot) female

Bibio venosus Meigen (2 records)

Another species requiring careful identification. Relatively low number of records from England & Wales, seemingly absent elsewhere.

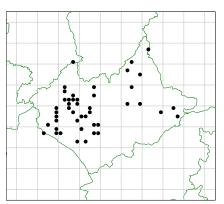
Recorded twice in VC55 from Grace Dieu Woods complex (2010, John Kramer) and again in 2020 at Martinshaw Wood (Dave Nicholls).



Dilophilus febrilis L. (85 records)

A commonly recorded fly throughout Britain. The front tibia has a single spine separate from the others.

A relatively commonly encountered species in VC55 being noted by Vice (VCH-L) in the Wigston and Blaby areas in the late 19th century, at Ulverscroft by Phil Withers (1977), Muston Meadows (1986, Alan Srtubbs) and then regularly elsewhere from 2008.



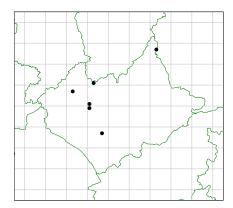


Sapcote 2009 (Graham Calow, NatureSpot) mating pair

Dilophilus femoratus Meigen (6 records)

Scattered throughout Britain. Smaller than *D, febrilis* with milky white wings in both sexes.

Recorded from Bradgate Park and the Blaby district by Vice (VCH-L) but not again until 1986 when found by Alan Stubbs at Muston Meadows, Since seen at Loughborough Big Meadow NR (1993), Grace Dieu Wood complex (2011) and Lea Meadows NR (2017)



Freeman, P. & Lane, R.P. (1985). Bibionid and Scatopsid Flies: Diptera: Bibionidae and Scataopsidae. RES Handbooks for the Identification of British Insects, 9(1). VCH-L (1907). Victoria County History: Leicester

Bolitophilidae

These small gnat-like flies are represented in Britain by the sinlge genus *Bolitophila* with 16 species nationally and one in VC55. They are slender with long legs and have a characteristic wing venation (figure). DF difficulty 3.

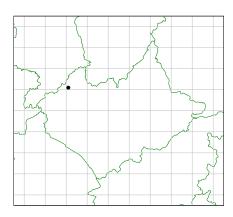


The current key to the identification of the species in this family (Hutson et al, 1980) covers all but one species, nigrolineata, which was added to the British list in 1987. Nationally the family is under-recorded with only two species having reasonable numbers of records.

Bolitophila saundersii Curtis (1 record)

Nationally records come mainly from Wales and SW England with scattered records from elsewhere.

The single record for this species, and the only record of this family, in VC55 came from Donington Park in 2014 by Andy Jukes, a voucher specimen being obtained.



Hutson, A.M. et al. (1980). Mycetophilidae. RES Handbooks for Identificatio of British Insects, **9**(3) modified by Hackston, M. (2020) Mikes Insect Keys - Key for the identification of British Bolitophilidae (google.com)

Carnidae

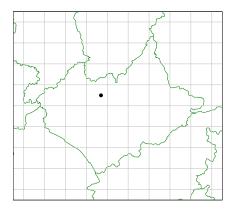
These small flies tend to be ignored/over-looked by dipterists! Only two genera are found in Britain with 13 species recorded – all but one belong to the *Meoneura* genus, the other to *Carnus*. They are often associated with bird nests and have been reared from bird faeces. The Dipterists Forum have assigned a difficulty classification of 3 meaning that the family is best

examinaed by experienced entomologists. Various keys are available in a range of languages but an Israeli key (Stuke & Freidberg, 2017), which includes the British species, is available on the internet. DF difficulty 3.

Meoneura flavifacies Collin (1 record)

Scattered records from throughout England & Wales.

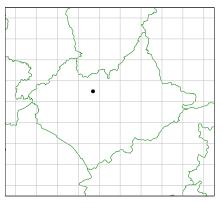
The sole VC55 record came from the 2011 survey of the Buddon Wood complex conducted by Andy Godfrey.



Meoneura neottiophila Collin (1 record)

Scattered records from throughout England & Wales.

The sole VC55 record came from the 2011 survey of the Buddon Wood complex conducted by Andy Godfrey.



Stuke, J-H. & Friedberg, A. (2017). The genera Meoneura Nitzsch and Carnus Rondani (Diptera: Carnidae) in Israel, with the description of ten new species, new records and identification keys. Israel Journal of Entomology, 47, 173-214.

Dixidae

These Meniscus Midges (as the name suggests often associated with watery situations where the larvae can thrive) have been little studied in VC55 with the main source of records being a project carried out by Jim Fowler and Will Peach of Leicester Polytechnic (now De Montfort University) in 1982-3 as part of a national survey organised by the Biological Record Centre (Fowler, 1984). The VC55 records have not appeared in our local database until a search of the NBN at the time of this LESOPS preparation showed the data from the BRC survey. The Dipterists Forum has a recording scheme which published the first Atlas of British Dixidae (Goldie-Smith, 1990) which showed the distribution of 14 species (of two genera) many of which were recorded at water traps. Since that time Dixella gracea has been added although not yet found in VC55 (Disney, 1992). It seems that the most recent identification key was produced by Disney (1999). Many of the species can be expected to be found in suitable habitats at any time of the year. The VC55 records all refer to adults. DF difficulty 1-3.

Disney, R.H.L. (1992). A meniscus midge (Dipt., Dixidae) new to Britain. *Entomologist's Monthkly Magazine*, **128**, 165-169.

Disney, R.H.L. (1999). British Dixidae (Meniscus Midges) and Thaumaleidae (Trickle Midges); keys with ecological notes. Freshwater Biological Association.

Fowler, J.A. (1984). Meniscus midges (Dipt., Dixidae) new to Leicestershire and Rutland. *Entomologist's Monthly Magazine*, **120**, 113-114.

Goldie-Smith, E.K. (1990). Distribution maps for Dixidae in Great Briatain and Ireland. *Dipterists Digest* (1st Series), **3**, 8-26.

Dixa dilutata Stobl (2 records)

Usually associated with water trickles and small streams of varying composition and vegetation often in woodlands. Now more widely recorded (NBN 2021) than in the original 1990 atlas although few sightings from the Midlands and east England March-October.

The two VC55 records came in October from Swithland Wood (1983, Peach) and Grace Dieu Wood (2010, Kramer).

Dixa nebulosa Meigen (6 records)

Occupies similar habitats as *D. dilutata* occurring March-December. Well-recorded in Wales since the 1990 Atlas and scattered elsewhere in England and Scotland, although few from the Midlands.

The VC55 records are all as a result of the Fowler & Peach survey work 1982-3 all coming from a small area in the Charnwood district.

Dixa nubilipennis Curtis (5 records)

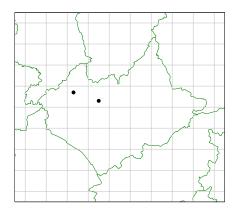
Occupies similar habitats as *D. dilutata* occurring March-November. Well-recorded in Wales since the 1990 Atlas and scattered elsewhere in England and Scotland, although few from the Midlands.

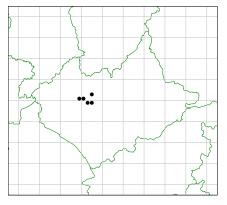
In VC55 records came from the same locations as for *D. nebulosa* but also from Sutton Cheney in SW Leicestershire possibly associated with a local stream. All records originate from the Fowler & Peach survey.

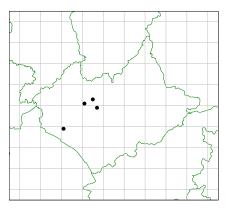
Dixa submaculata Edwards (3 records)

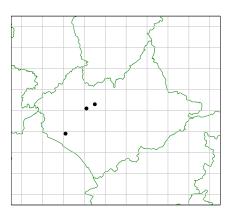
Occurring January-October the fly is a predominantly English species. Again, favoured habitats mirror those of other Dixidae.

Similar distribution in VC55 as D. nubilipennis as a result of the Fowler & Peach survey.









Dixella aestivalis Meigen (13 records)

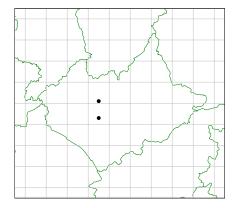
Occurring at most times if the year in habitats as previously noted. The 1990 Atlas showed relatively few scattered records but the NBN (as of 2021) shows a wide distribution throughout Britain.

VC55 records predomantly come from the 1982-3 survey but the species has since been found at Braunstone (Leicester) in 2012 and at Ashby de la Zouch in 2018.

Dixella amphibia De Geer (2 records)

A species apparently favouring Wales and East England with scattered records elsewhere occurribng March-November. Similar habitat requirements as previous species.

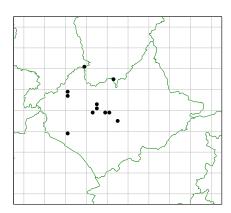
The 1982-3 survey produced a single recor from a pond at Cropston with a more recent sighting coming from Braunstone (Leicester) in 2012.



Dixella autumnalis Meigen (12 records)

Occurring though most of the year, the species has been found in a wide range of habitate including dune slacks. Numerous records from England & Wales, scattered in Scotland.

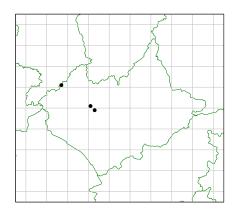
Most VC55 records came from a range of locations during the 1983 survey with the most recent record coming from Lockington Marshes in 2010.



Dixella filicornis Edwards (3 records)

Seems to occur at any time of the year but with scattered records from England & Wales although seemingly not numerous. Habitats are similar to other Dixidae.

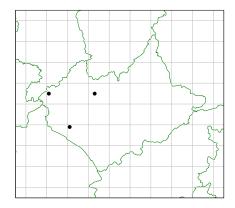
The Fowler & Peach survey gave three locations for the species in VC55 with records from 1983 and 1984.



Dixella martini Peus (3 records)

The fly can be found March-December in similar habitats as other species. Widely occurring in Wales, scattered in England and few in Scotland.

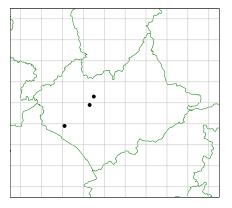
The three widely scattered VC55 records all came from 1983 as part of the Fowler & Peach survey.



Dixella serotina Meigen (4 records)

Predominantly recorded from the Welsh coast and East Anglia with few scattered records elsewhere. On the wing April-December.

VC55 records were from March/October as pary of the 1982-3 survey by Fowler & Peach.



Hippoboscidae

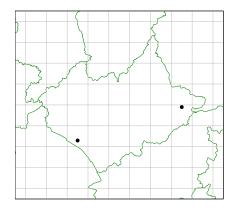
The Louse-flies or Keds, are obligate parasites of mammals and birds. In this family, the winged species can fly at least reasonably well, though others with vestigial or no wings are flightless. Only two species have been recorded in VC55 as of 2020 althoiugh a third species *Stenepteryx hirundinis*, has been noted in 2021. A key to aid identification is available (Hutson, 1984). DF difficulty 2.

Crataerina pallida Olivier in Latreille (7 records)

This fly is a parasite of Swifts and can often be found in their nests. Few records scattered throuhout Britain. The species has been cited as an excellent example of host-parasite relationship (Walker & Rotherham, 2010). Noted several times 2017-2019 at Empingham (Rutland) and in 2020 at Burbage.



Empingham, 2018 (Andrew Dejardin, NatureSpot)



Melophagus ovinus L.

The only mention of this species of Hippoboscidae is when George Crabbe referred to it as *Hippobosca ovinus* in his 18th century Vale of Belvoir publication (Crabbe, 1795).

He makes the following description: An insect which is an exception to this class, (having no wings, but otherwise agreeing with the winged Hippobosca), is very common upon the back of sheep. Adhering most tenaciously to the wool by its numerous small and acute claws.

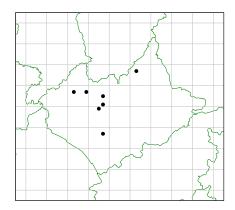
These days this pest of sheep is easily controlled by appropriate disinfecting dips.

Ornithomya avicularia L. (9 records)

A parasite of a range of bird species from widespread locations in Britain but records are not numerous. Mentioned in VCH-L) being noted by Vice as being present at Anstey, Longcliffe (near Loughborough) and the Blaby district. Since found at several Charnwood sites and most recently at Long Clawson in 2020.



Swannymote Wood 2011 (Steve Woodward, NatureSpot)



Crabbe, G. (1975). The Natural History of the Vale of Belvoir. In; Nicholls, J., The History and Antiquities of the County of Leicester, 1, 191-203.

Hutson, A.M. (1984). Diptera: Hippoboscidae and Nycteribiidae. Handbooks for the Identification of British Insects, **10** (7).

Walker, M.D. & Rotherham, I.D. (2010). The Common Swift Louse Fly, Crataerina palida,: an ideal species for studying host-parasite interactions. J of Insect Science, 10, 193-205.

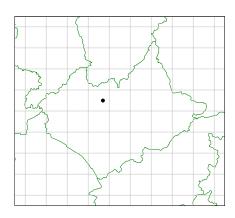
Milichiidae

Small, sometimes lustrous black, flies that may occasionallty show a silvery dusting. Larval habit varies from feeding on organic matter or animal waste to imbibing plant sap. Adults feed on nectar but may also predate on other insects. DF difficulty 3. Key to genera of Milichiidae | Milichiidae online (myspecies.info)

Phyllomyza donisthorpei Schmitz (1 record)

Whilst national records are sparse it is likely that this may be a result of gross underrecording. Much work has been done on this family in the Netherlands with an online key to genera available.

The sole VC55 record came from Andy Godfrey's 2011 survey work in the Mountsorre Quarry and associated woods.



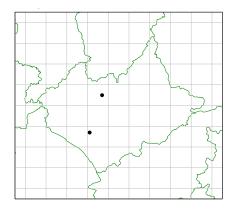
Oestridae

The Oestridae, also known as Warble or Bot flies, are intestinal parasites of mammals which these days are readily controlled by veterinary use of worming agents so that the presence of the fly is now less common that in previous centuries. The Dlpterists Forum has published two Newsletters of its Oestridae working group in 2010 nd 2013. The latter included data on larval presence by examining horse dung in 2011 from which adults were reared. No readily available key to current Oestridae species seems to be available. However, if the host of the fly larvae can be determined this may aid in determining fly identity. DF difficulty 2.

Gasterophilus intestinalis De Geer (2 records)

The intestinal parasitic larvae primarily attack horses with present day records coming from West England and Wales.

The sole VC55 records came from Mounsorrel by WA Vice prior to 1907 (VCH-L, 1907) and from Croft in 1930 by PAH Muschamp. The current apparent absence of the fly in VC55 is probably due to extensive worming of animals as part of veterinary husbandry.



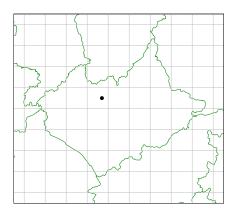
Pallopteridae

One of the families included in the "Picture-wing flies) with 13 British species. They can readily be identified from wing patterns with two exceptions where the lack of patterning requires examination of male genitalia, the females of which are not able to be identified with certainty at this time. DF difficulty 1. A useful identification key was produced as part of a DF training programme available, at thie time to members only.

Palloptera andersonii Rotheray & MacGowan (2 records)

A very rare British species with the NBN Atlas having only four records two of which originate in VC55. Best identified by examination of the male aedagus which is strongly bifurcated as the wings lack any clear pattern.

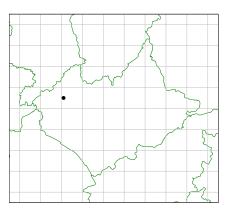
The VC55 records come fom the 2011/2012 surveys of Mountsorrel Quarry, Buddon Wood & Rowhele Wood by Andy Godfrey.



alloptera modesta Meigen (3 records)

Scattered throughout Britain with a recognisable wing pattern where spots abut each other to form dumb-bell shapes.

Recorded on three occasions in VC55 all from the Swannigton Finney Wood and nearby plantatiion surveys by Andy Jukes in 2019.



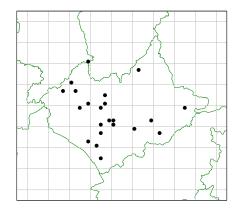
Palloptera (=Toxonevra) muliebris Harris (37 records)

The most easily recognised of the family in that it has a thick ontinuous band on the wing. Widely found in England & Wales.

First noted in VC55 in 1975 and then regularly since.



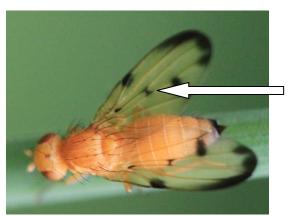
Bagworth, 2020 (Sue Timms, NatureSpot)



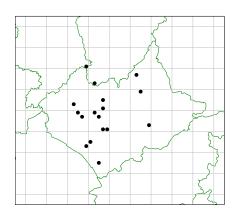
Palloptera quinquemaculata Macquart (24 records)

Found throughout much of Brtain if scattered. The wing pattern is diagnostic.

Frequently encountered in VC55 since 1991.



Melton CP, 2015 (Paul Ruddoch, NatureSpot)

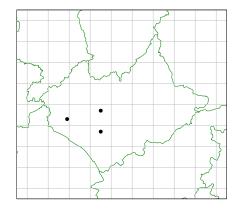


Palloptera saltuum L. (4 records)

The wing pattern is simple lacking any dots as found in many other species. Scattered thoughout Britain.

First recorded at Market Bosworth and Narborough Bog NR in 2011 and subsequently from County Hall, Glenfied on $2015\ \&\ 2017$.





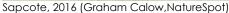
Narborough Bog NR, 2011 (David Gould, NatureSpot)

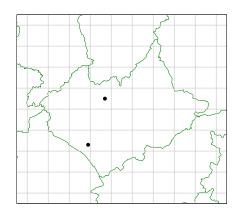
Palloptera scutellata Macquart (7 records)

Scattered throughout England & Wales. Markings scattered over wings.

Five of the VC55 records came from a Sapcote garden (Graham Calow) each year 2011 to 2014 and agin in 2016. The other records came from the Mountsorrel Quarry & Woods complex in 2011 and 2013 during survey work by Andy Godfrey.







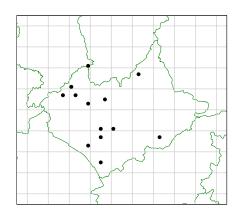
Palloptera umbellatarum Fabricius (15 records)

Scattered through Britain with conspicuously marked wings.

PAH Muschamp deposited a specimen into the County Collections that he found at Braunstone (Leicester) in 1935. Three other records were noted up to 2010 since when the majority of VC55 sightings have been made.



Whetstone, 2013 (Ashley Watson, NatureSpot)



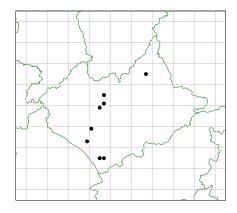
Palloptera ustulata Fallén (10 records)

Scattered throughout England & Wales less commonly encountered in Scotland. The absence of wing marking requires examination of the male genitalia wth the females being difficult to confirm.

As some of the VC55 records are based on photographs, it is likely that they may not have had genitalia examination and have been considered to be *P. ustulata* agg on NatureSpot but may well be this species as *P. andersonni* is less frequent in Britain. Other records came from recognised experts and are assumed to be correct.



Cropston, 2017 (Kate Nightingale, NatureSpot)



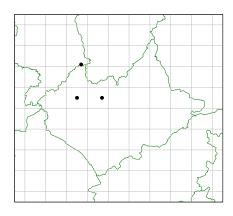
Piophilidae

These flies, often called Cheese-flies because *Piophila casei* larvae often infest such dairy products, utilise a wide range of carrion being attracted. In particular, they seem to be particularly fond of gamekeeper gibbets where pest species have been hung. The UK has 13 species of which seven have been noted in VC55 although records are few. The DF considers identification difficulty at level 2-3 but there is a usable key (Stubbs & Chandler, 2001) that covers all British species. Most of he VC55 records have come from survey work carried out by Andy Godfrey. An indication of larval habits has been published by Martin-Vega *et al* (2014).

Allopiophila flavipes Zetterstedt (3 records)

The habits of this species have not been uncovered and at this time the NBN carries only three national records under the previous name of *Parapiophila flavipes*.

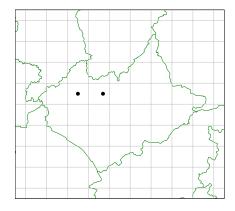
The single VC55 record on the NBN came from Andy Godfrey who recorded the fly on Bardon Hill in 2008. Two further records came from Whitwick Quarry (2010) and the Buddon Wood complex (2012).



Allopiophila vulgaris Fallén (2 records)

Most NBN records are listed under the previous generic name *Parapiophila* showing a wide distribution across Britain.

In VC55 the two records came from Whitwick Quarry (2010) and the Buddon Wood complex (2012).



Neottiophilum praeustum Meigen (2 records)

Scattered records throughout Wales and England, few elsewhere.

The two VC55 records came from NatureSpot recorders being found at Ratby in 2008 and at Broughton Astley in 2011.

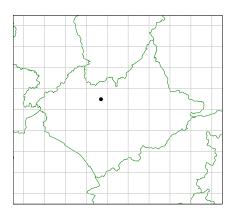


Ratby 2008 (Dave Nicholls, NatureSpot)

Piophila casei L. (1 record)

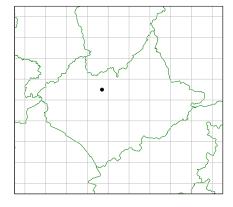
Nationally records seem to be mainly centred in the Nottinghamshire area with records from the earlier part of the 20th century but not since. The fly larvae can give rise to serious infestations of cured meats and especially cheese.

The single VC55 record came from the Buddon Wood complex by Andy Godfrey in 2012.



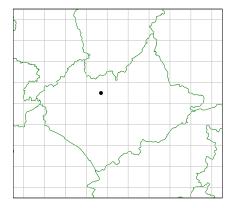
Prochyliza varipes Meigen (1 record)

Scattered records throughout Britain but only recorded in VC55 as part of the Buddon Wood complex survey of 2012.



Protopiophila latipes Meigen (1 record)

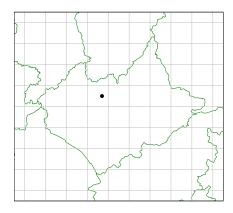
Very few national records with two coming from the Buddon Wood complex surveys of 2011 and 2012.



Stearibia nigriceps Meigen (1 record)

Scattered records from Britain. The fly has been associated with decaying human corpses proving to be a usefaul forensic tool.

The single VC55 record came from the Buddon Wood complex survey of 2011.



Martin-Vega, D. et al (2014). The immature stages of the necrophagous fly Liophila varipes and considerations on the genus Liophiophila (Diptera: Piophilidaw). Deutsche Entomologische Zeitschrift, **61**, 37-42.

Stubbs, A.E & Chandler, P.J. (2001). A provisional key to British Piophilidae (Diptera) and *Parapiophila flavipes* (Zetterstedt, 1874) new to Britain. *Daipterists Digest* (2nd series), **8**, 71-78.

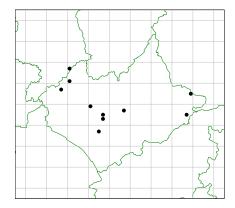
Rhagionidae

The Snipe-flies (sometimes called Down-looking flies because of their typical stance when at rest) have mouth parts adapted to piercing and many species thrive on a blood diet. The larvae are also predatory and, whilst most are terrestrial, a few prefer aquatic habitats. Adults and larvae of the 15 British species in Britain can be readily identified (Stubbs & Drake, 2014). DF 1.

Chrysopilus assiliformis Preyssler (14 records)

Also known as the Little Snipefly, this species has been widely recorded in England & Wales but rarely elsewhere.

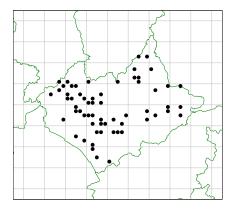
A specimen taken in 1930 at Narborough Bog by PAH Muschamp is in the County Collections. Since has been found on occasions elsewhere in VC55 although not numerous.



Chrysopilus cristatus Fabricius (174 records)

A widely occurring species in Britain with many records. Known as the Black Snipefly for the obvious coloration of the male which may not be so in the female.

Widespread and regularly recorded in VC55 in a range of habitats. The VCH-L notes its presence at Blaby, Bradgate Park and Owston Wood. Three specimens are in the County Collections.





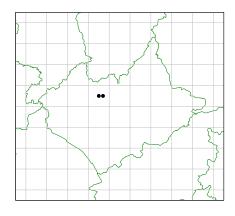


Spearwort Fields, Aylestone (Left – Male, Right female – both June 2016 (David Gould, NatureSpot)

Ptiolina obscura Fallén (7 records)

A widespread British species where the habitat preferences are unresolved at this time

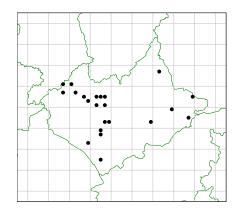
In VC55 only recorded throughout the Buddon Wood complex 2011-13 during survey work by Andy Godfrey



Rhagio lineola Fabricius (51 records)

A widespread and commonly encounterd member of the family apparentlyly favouring tree foliage when at rest.

VC55 records are widespread with early records (VCH-L) coming from Narborough Bog and Bradgate Park. Seen at Quorn in 1925 by John Saunt of Coventry and then regularly since the mid-1970s.





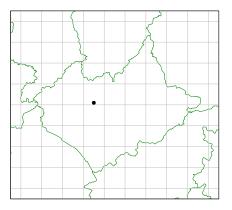


Cropston, 2015 (Kate Nightingale, NatureSpot)

Rhagio notatus Meigen (1 record)

Mainly a northern species with scattered records to the south. Possesses an obvious brown wing stigma which aids identification.

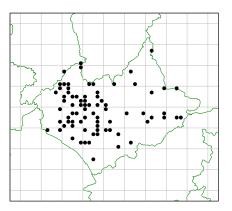
The sole VC55 record came from WA Vice who noted it at Cropston (VCH-L). The national distribution pattern explains why the species is unlikely to be found locally these days.



Rhagio scolopaceus L. (148 records)

Possibly the commonest of the Rhagionidae in Britain being widely recorded. The mottled wings aid identification.

Widespread in VC55 having been recorded in the VCH-L at Bradgate Park, Owston Woods and Blaby. Noted by Edwin Lowe at Thurmaston in 1908 and at Church Langton in 1954 by TW Tailby. Since the 1970s regularly recorded especially since 2002.





Thornton Reservoir, 2012 (Dave Nicholls, NatureSpot)

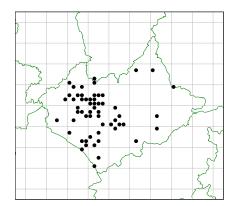


Lea Meadows NR 2016 (Alan Cann, NatureSpot)

Rhagio tringarius L. (101 records)

Common and widespread in Britain, this fly can have a varying appearance. Tends to be found in marshy habitats but not exclusively.

Most VC55 records come the west of the area with the VCH-L noting it at Bradgate Park and Cropston. Seen at Quorn (1925, Saunt) and Church Langton (1954, Tailby) and then throughout the last 20 years.





County Hall, 2017 (Mike Higgott, NatureSpot)

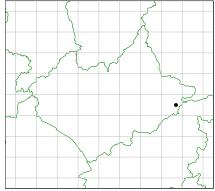


Rough Hill, Cropston, 2016 (Kate Nightingale, NatureSpot)

Symporomyia immaculata Meigen (1 record)

The only small drab snipefly being grey with poor dark thoracic stripes. Has yellow halters. Tends to be found in eastern and southern England and in South Wales.

The sole VC55 record came a 1999 survey at Edith Weston, Rutland, by Peter Kirby, a national expert.



Stubbs, A.E. & Drake, C.M. (2014). British Soldierflies and their allies. British Entomological and Natural History Society.

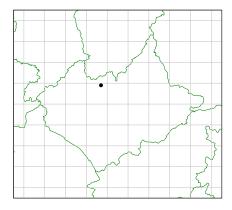
Therevidae

These flies are also known as Stiletto-flies on account that the conical shape for the abdomen resembles the instrument. The mouthparts are not designed for penetration as in the Rhagionidae but are more suited for sucking up fluids such as nectar, water and even exudates from carrion. Larval habits are poorl;y understood. Identification (Stubbs & Drake, 2014) is fairly straightforward with attention to head features. the halters and the femora. Only four of the 14 British species have been reported in VC55 with one not seen since the 19th century. DF difficulty 1-3.

Acrosathe annulata Fabricius (1 record)

Males appear silvery whereas females are dull in comparison. Predominantly a coastal species with occasional inland sightings.

The only VC55 record came the Pillings Lock area of the R Soar when taken by Derek Lott in a pitfall trap (with identification by Martin Drake) in June 1994.

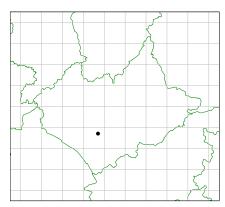


Thereva fulva Meigen (1 record)

Nationally records have come from SE England and coastal South Wales.

The single VC55 record came from the Blaby district when recorded by WA Vice in June 1871.

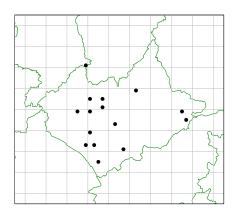
Its national distribution indicates that this fly is unlikely to be found locally these days.



Thereva nobilitata Fabricius (19 records)

This is the commonest of the family nationally being widely occurring throughout. Males tend to have a dark, drab brown thorax whilst the females has an almost golden colour (image).

First recorded in 1921 by John Saunt from Coventry who took the insect at Bradgate Park. Further VC55 records did not appear until 1999 and the fly has now been seen in most years since.



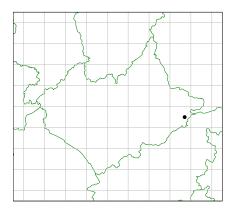


Pair in cop Cropston, 2017 (Kate Nightingale, NatureSpot)

Thereva plebeja L. (1 record)

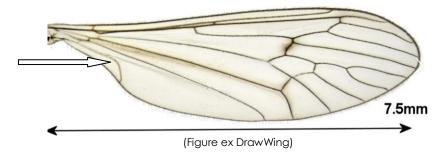
A robust species banded with grey and black. Nationally, nearly all records come from south of the Wash-Mersey.

The single VC55 record came during a 1999 survey by Peter Kirby at Wytchley Warren, Edith Westom, Rutland.



Trichoceridae

The Winter Gnats are readily attracted to light and can often be seen swarming. They are akin to the craneflies but can be easily sparated by the presence of two anal wing veins which in the Trichocera genus is sharply bent (figure) whereas it is less so in the Cladoneura.



Identification keys have been developed over the years and are now described in Stubbs (2021). Males are usually identified by examination of the aedeagus whilst the shape of the cerci allows identification of females. The members of the *Trichocera* genus are usually dominant in the winter months whilst the single *Cladoneura* species is a summer flier.

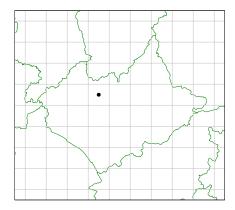
Of the 12 British species seven have been recorded in VC55 to 2020 (although a further species has been found in 2021). Experience with the Rothamsted light traps running nightly at Rutland Water and Loddington has shown that these flies are readily attracted in numbers. As some

moth recorders operate light traps throughout the winter, it is hoped that specimens will be submitted for identification.

Cladoneura hirtipenne Siebke (1 record)

This fly is found in the warmer months. Nationally there are few scattered records.

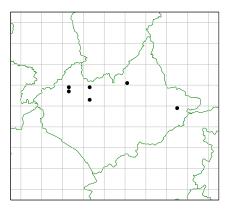
The sole VC55 record came from the Buddon Wood SSSI during 2011 survey work when seen in May by Andy Godfrey.



Trichocera annulata Meigen (7 records)

A widespread fly thoughout Britain, particularly in Wales.

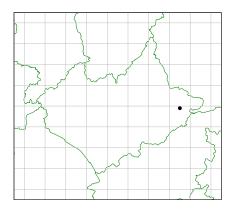
The low number of records is probably due to under-recording.



Trichocera hiemalis De Geer (1 record)

Common over England & Wales, less so in Scotland. And SW England.

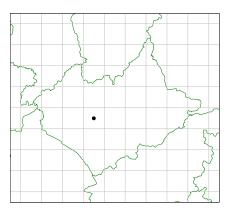
The single VC55 record came from an Empingham garden in December 2020 by Andrew Dejardin.



Trichocera maculipennis Meigen (1 record)

Few national scattered records. Apparently, most unusally for British flies, the species seems to favour caves.

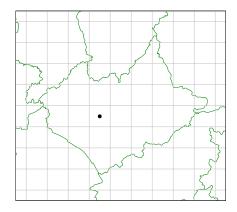
In VC55 the sole record came from the Leicester area by PAH Muschamp in April 1939 with the specimen deposited in the County Collections.



Trichocera major Edwards (1 record)

A fairly widespread species in Britain although with few records from the Midlands and eastern England. The female of this species has very large cerci ensuring correct identification.

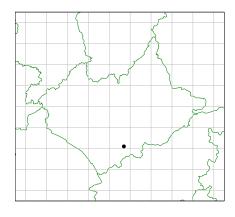
In VC55 the sole record came from the Leicester area by PAH Muschamp in August 1926 and identified by G Hanebeck with the specimen deposited in the County Collections. Despite the numbers of the family attracted to the VC55 Rothamsted traps, the species has not yet been found.



Trichocera parva Meigen (1 record)

Scattered records in England & Wales, few elsewhere.

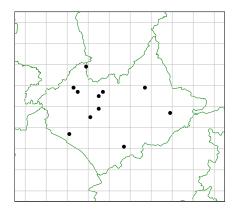
The single VC55 record came Saddington Resevoir in November 2009 when caught by Keith Alexander and identified by Peter Chandler.



Trichocera regelationis L. (16 records).

The presence of a wing spot ensures correct identification. Widely distributed in England & Wales and northern Scotland.

Widely noted in VC55 being first recorded in 1981 from Barrow upon Soar.



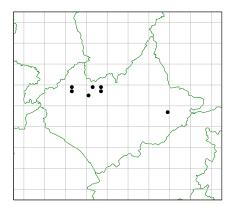


Pair in cop, Anstey, 2014 (Mike Higgott, NatureSpot)

Trichocera saltator Harris (13 records)

Widely distributed in England & Wales, less so in Scotland. The larvae have been found feeding on cow dung (Laurence, 1956).

All records come from the Charnwood area with the exception of one from the Rutland Water Rothamsed ligh trap in 2018. [Since taken at the Loddington Rothamsed trap in 2021].



Laurence, B.R. (1956). On the life history of *Trichocera saltator* Harris (Diptera, Trichoceridae). *Proceedings* of the Zoological Society of London, **126**, 235-244.

Stubbs, A. (2021). *British Craneflies*. British Entomologica & Natural History Society.

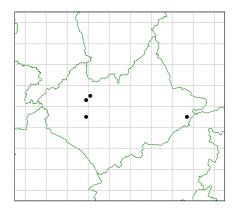
Ulidiidae

An excellent set of draft keys to the Picture-wing flies (including Ulidiidae) was produced as part of a Dipterists Forum training session in 2020 available to DF members. However, as many of the species have distinctive wing patterns it is possible to identify specimens by referral to internet images e.g. Flickr.

Herina frondescentiae L. (9 records)

Widespread throughout Britain the wing pattern makes this fly unmistakeable.

With two exceptions, all VC55 records originate from the Ulverscroft NR. The others came fom Ketton Quarry NR (2016) and Botcheston Bog SSSI (2017).





Ulverscroft NR, 2010 (Dave Nicholls, NatureSpot)



Ulverscroft NR, 2015 (Kate Nightingale, NatureSpot)

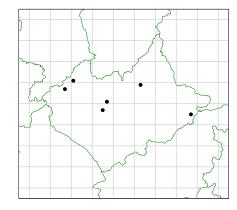
Herina lugubris Meigen (8 records)

Scattered throughout England & Wales, the wing markings make identification of this species easy.

First noted in VC55 in 2006 at Ketton Quarry NR (Derek Lott) during suction sampling and then intermittently at scattered locations.



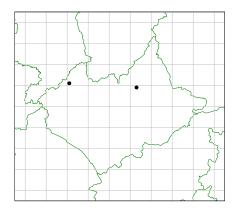
Ketton Qiarry NR, 2017 (Kate Nightingale, NatureSpot)



Herina nigrina Meigen (2 records)

Widespread in England & Wales being recognisable by a pattern of three dots on the wing.

The two VC55 records came from expert entomologusts during survey work at Holwell Works (2009) and Cloud Wood NR (Dipterists Forum visit).



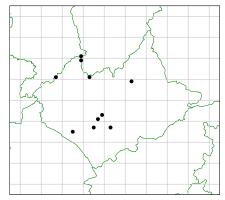
Melieria crassipennis Fabricius (17 records)

Widespread in England, less so elsewhere. A well-marked species.

Specimens from Narborough Bog NR (1928) and Newton Harcourt (1930) collected by PAH Muschamp are in the County Collections. Until 2011, records came from Loughborough Big Meadow NR (1982, Derek Lott) and during a Lockington Marshes survey (1991, Alan Stubbs). Since seen at scattered localities.



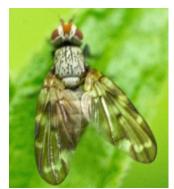
Spearwort Fields, Aylestone, 2017 (David Gould, NatureSpot)



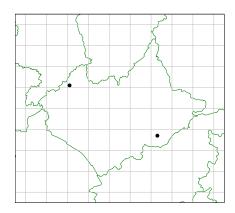
Otites guttatus Meigen (3 records)

Records come mainly from England. A very well-marked fly.

Found at Great Merrible Wood NR (1994, Neil Frankum) and again at Cloud Wood NR (2017, Alan Cann; 2019, B Lygo).



Cloud Wood, 2017 (Alan Cann, NatureSpot)

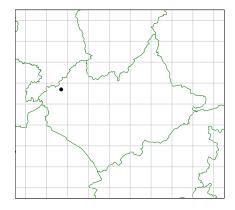


Physiphora alceae Preyssler (1 record)

Scattered records in England & Wales. One of the two clear-winged of the family.

The single VC55 record came from Andy Godfrey during survey work in 2018 at a former aquatic plant nursery at Ashby de la Zouch.

[SInce seen at Sapcote by Grahan Calow and identified by Tony Irwin of Norwich Museum, 2021].



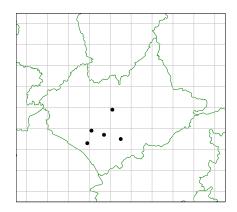
Seioptera vibrans L. (5 records)

Scattered records mainly from England & Wales. Distinguishable by the two dark areas on the wings and a shiny bulbous body.

The County Collections has a specimen taken by PAH Muschamp in 1940 from the Wistow area. In this collection there are specimens from Thurnby and Blaby but lacking any other details. Seen at Sapcote (2009) and at Thurlaston (2017).



Sapcote, 2009 (Graham Calow, NatureSpot)



Leicestershire Entomological Society Occasional Publications Series (LESOPS) covering (a) detailed studies of insects and other invertebrates carried out by Society members and

(b) matters of historical entomological interest to VC55 Leicestershire & Rutland

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