Larger Brachycera Recording Scheme



Newsletter 18

Summer 2000

Dipterists Forum

Contents

New L.B. Recording Scheme Organiser

Simon Hayhow

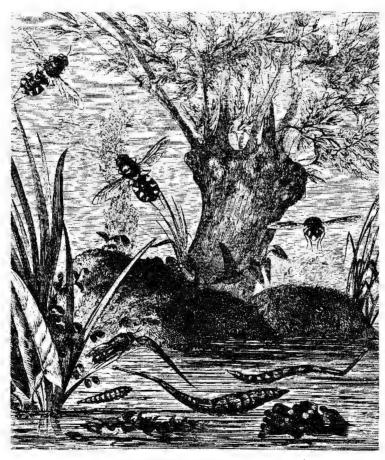
A provisional checklist of larger Brachycera for Vice-county 17, Surrey Roger Morris

The Horseflies of Yorkshire: A.D. 2000 update

Andrew Grayson

Request for contributions and records

Simon Hayhow



THE METAMORPHOSES OF Stratiomys chamaleo.

New L.B. Recording Scheme Organiser

Your new scheme organiser and newsletter editor is Simon Hayhow. For those of you who do not know me I am Curator (Natural Sciences) for Lancashire County Museum Service. I started in the 'South Yorkshire school of entomology', working with Bill Ely at Rotherham Museum and receiving early encouragement from other Sorby Natural History Society members like Derek Whiteley and Austin Brackenbury. I have been recording larger Brachycera for around twenty years but, for several years, Diptera recording did take second place to summer contract work for the R.S.P.B., English Nature and other organisations. I have been a regular attender at Dipterists' Day and the Preston Montford spring meetings. I have also attended several Dipterists' Field Weeks. I am Lancashire Diptera Recorder for the Lancashire and Cheshire Entomology Society and keen to encourage new dipterists in the North West. I may not yet be in the 'premier league' of Stubbs, Drake et al but hope to emulate their work and level of knowledge with the Larger Brachycera.

Having taken over from Martin as L.B. Scheme Organiser, I would like to thank him for his hard work over the past ten years, with some notable achievements in promoting the study of the Larger Brachycera, including the publication of a Provisional Atlas in 1991. After the initial surprise at being offered the chance to take over the reins, I am now feeling suitably honoured and enthused at the chance to carry on the work of developing the Recording Scheme and working towards a new atlas for this fascinating group of flies.

My own feeling is that interest in the group will certainly increase after the publication of the eagerly awaited book, 'British Soldierflies and their Allies' (in press), and maybe some division of labour or partnership on the lines of the Hoverfly Recording Scheme may be more efficient. I am committed to chasing up and inputting all the available records but if there is any one particularly keen to take on the production role for the L.B.R.S. Newsletter, please get in touch.

Simon Hayhow

A provisional checklist of larger Brachycera For Vice-county 17, Surrey

Roger K.A. Morris C/o 241 Commonside East, Mitcham, Surrey

Background:

The impending publication of Alan Stubbs' and Martin Drake's guide to the larger Brachycera (in press) will be a further important milestone in promoting Diptera recording and will hopefully act as the same stimulus for recording as *British Hoverflies* (Stubbs & Falk 1983) did for the hoverfly recording scheme. That latter volume spurred on my interest in hoverflies and was the immediate stimulus for *Hoverflies of Surrey* (Morris, 1998). So, perhaps it will come as little surprise that I now hope to produce a companion volume covering the larger Brachycera of Surrey (which will also include a chapter on the Conopidae, another attractive family which is often recorded by most dipterists).

So far, I have accumulated some 1,800 records of larger Brachycera including material collected on my previous recording hoverflies, data submitted to the national scheme and records submitted to me which have yet to be forwarded to the national scheme. I have also trawled the literature and, although this is not finished, some 110 papers and notes pertaining to Surrey have been identified. Most papers refer to captures of just a few species, but there are foundations for a checklist building on that in Drake (1991). As long ago as 1940, the Asilidae fauna of Surrey attracted attention with the production of a checklist by Parmenter and Oldroyd which listed 17 species. Since then, the fauna of the London area (including parts of VC17) was covered by an annotated checklist by Colin Plant (1990); it listed 95 species of larger Brachycera. The checklist produced here comprises 100 species, of which six are believed to be eronious records or identifications which require checking. The breakdown of records is given below in table 1.

Family	Total accepted species recorded in Surrey		Total of British Species	% of British species recorded	Additional doubtful records
	1818 - 1979	1980 - 1999	7	from Surrey	(to be confirmed)
Xylophagidae	-	1	3	33	_
Athericidae	1	2	3	100	-
Rhagionidae	-	10	15	67	-
Tabanidae	-	14	30	47	1
Xylomyidae	1	1	3	67	
Stratiomyidae	2	28	48	63	3
Acroceridae	1	2	3	100	-
Bombyliidae	2	2	9	44	1
Therevidae	1	4	14	36	1
Scenopinidae	1	1	2	100	-
Asilidae	2	18	29	69	-
Totals	11	83	159	53	6

Table 1: Representation of larger Brachycera in Surrey

Surrey is particularly rich in species associated with heathland, chalk downland and woodland, but other elements of the fauna, such as the Stratiomyidae assemblage associated with base-rich flushes, are poorly

represented. The current data also give the impression that the Tabanidae are poorly represented and may be declining with reductions in permanent wet pasture and associated livestock. However, it is a county which has a great deal to offer and I hope that this checklist will stimulate greater recording effort.

At the moment, coverage is widespread but mainly confined to just a few sites such as Great Bookham Common, Thursley Common and Mitcham Common. There are indications that good sites should yield perhaps as many as 40 species and there is enormous scope to improve our knowledge of what might be expected. Early distribution maps give an impression of possible habitat associated assemblages and therefore data which are accompanied by more detailed notes on related habitats are particularly welcome.

Unlike the hoverflies, I do not think that it will be possible to produce as comprehensive coverage maps on a tetrad basis so I hope recorders will take the most assiduous efforts to record even the commonest species when they are encountered. It is also clear from the few published accounts that there is enormous scope for improving our knowledge of flower visits by Stratiomyidae and Tabanidae, and prey assemblages taken by the Asilidae.

Provisional checklist:

The nomenclature follows Chandler (1998). Species marked with an asterisk have only been recorded prior to 1980, and those in parentheses are only represented by records which need further investigation or are very doubtful. A more detailed account of the known Surrey fauna has been prepared and submitted for publication in *The London Naturalist*; this will expand on the current information on individual species' frequency and distribution.

```
XYLOPHAGIDAE
                                                                  tringarius (Linnaeus, 1758)
                                                         Symphoromyia
Xylophagus
                                                                 immaculata (Meigen, 1804)
        ater Meigen, 1804
                                                         TABANIDAE
ATHERICIDAE
                                                         Chrysops
                                                                 caecutiens (Linnaeus, 1758)
        ibis (Fabricius, 1798)
                                                                  relictus Meigen, 1820
                                                                 viduatus Fabricius, 1794
Atrichops
                                                         Haematopota
        crassipes (Meigen, 1820)*
lbisia
                                                                 crassicornis Wahlberg, 1848
        marginata (Fabricius, 1781)
                                                                 pluvialis (Linnaeus, 1758)
                                                         Atvlotus
RHAGIONIDAE
                                                                 fulvus (Meigen, 1804)
                                                         Hybomitra
Chrysopilus
                                                                 bimaculata (Macquart, 1826)
        asiliformis (Preyssler, 1791)
                                                                 distinguenda (Verrall, 1909)
        cristatus (Fabricius, 1775)
                                                         Tabanus
Ptiolina
                                                                 autumnalis Linnaeus, 1761
        obscura (Fallén, 1814)
                                                                  {bovinus Linnaeus, 1761}
Rhagio
                                                                 bromius Linnaeus, 1758
        annulatus (De Geer, 1776)
                                                                 glaucopis Meigen, 1820
        lineola Fabricius, 1794
                                                                 maculiconis Zetterstedt, 1842
                                                                 miki Brauer in Brauer & von Bergenstamm,
        notatus (Meigen, 1820)
                                                                 1880
        scolopaceus (Linnaeus, 1758)
                                                                 sudeticus Zeller, 1842
        strigosus (Meigen, 1804)
```

XYLOMYIDAE

Salva

orbiculus (Fabricius, 1787) marginata (Meigen, 1820) Xylomya **Ogcodes** maculata (Meigen, 1804)* gibbosus (Linnaeus, 1758) * pallipes Latreille in Olivier, 1812 **STRATIOMYIDAE BOMBYLIIDAE** Beris chalybata (Forster, 1771) Bombylius clavipes (Linnaeus, 1767) discolor Mikan, 1796* fuscipes Meigen, 1820 major Linnaeus, 1758 geniculata Haliday in Curtis, 1830 {minor Linnaeus, 1758} morrisii Dale, 1841 vallata (Forster, 1771) fenestratus (Fallén, 1814) Villa Chorisops nagatomii Roskošný, 1979 venusta (Meigen, 1820)* tibialis (Meigen, 1820) {Clitellaria **THEREVIDAE** ephippium (Fabricius 1775)} Nemotehis Cliorismia pantherinus (Linnaeus, 1758) rustica (Panzer, [1804]) Oxycera Pandivirilia nigricornis Olivier, 1812 melaleuca (Loew, 1847)* rara (Scopoli 1763) Thereva {terminata Meigen, 1822} bipunctata Meigen, 1820 trilineata (Linnaeus, 1767) {fulva (Meigen, 1804)} Vanovia nobilitata (Fabricius, 1775) tenuicornis (Macquart, 1834) plebeja (Linnaeus, 1758) Neopachygaster meromelas (Dufour, 1841) **SCENOPINIDAE** Pachygaster atra (Panzer, [1798]) Scenopinus leachii Stephens in Curtis, 1824 fenestralis (Linnaeus, 1758) Zabrachia niger (De Geer, 1776)* tenella (Jaennicke, 1866) Chloromia **ASILIDAE** formosa (Scopoli, 1763) Microchrysa Asilus {cyaneiventris (Zetterstedt, 1842)} crabroniformis Linnaeus, 1758 flavicornis (Meigen, 1822) Dysmachus polita (Linnaeus, 1758) trigonus (Meigen, 1804) Sargus Eutolmus bipunctatus (Scopoli, 1763) rufibarbis (Meigen, 1820) cuprarius (Linnaeus, 1758) Machimus flavipes Meigen, 1822 atricapillus (Fallén, 1814) iridatus (Scopoli, 1763) cingulatus (Fabricius, 1781) Odontomyia rusticus (Meigen, 1820) argentata (Fabricius, 1794)* Neoitamus ornata (Meigen, 1822)* cyanurus (Loew, 1849) tigrina (Fabricius, 1775) Leptarthrus Oplodontha brevirostris (Meigen, 1804) viridula (Fabricius, 1775) vitripennis (Meigen, 1820) Stratiomys Choerades potamida Meigen, 1822 gilvus (Linnaeus, 1758)* singularior (Harris [1776]) marginatus (Linnaeus, 1758)

ACROCERIDAE

Paracrocera

Leptogaster
cylindrica (De Geer, 1776)
guttiventris Zetterstedt, 1842
Dioctria
atricapilla Meigen, 1804

baumhaueri Meigen, 1820

cothurnata Meigen, 1820*
linearis (Fabricius, 1787)
oelandica (Linnaeus, 1758)
rufipes (De Geer, 1776)
Lasiopogon
cinctus (Fabricius, 1781)

Acknowledgements:

I would like to thank Martin Drake for forwarding the data held on the national recording scheme database and printouts of data compiled for the provisional atlas (Drake 1991). I would also like to thank all recorders who have contributed either directly or indirectly to this brief review.

References:

Chandler, P.J., 1998

Checklist of insects of the British Isles (New Series) part 1: Diptera. *Handbk. Ident. Br. Insects* **12**: (1). Royal Entomological Society of London.

Drake, C.M., 1991

Provisional Atlas of the Larger Brachycera (Diptera) of Britain and Ireland. Institute of Terrestrial Ecology, Huntingdon.

Morris, R.K.A., 1998

Hoverflies of Surrey. Surrey Wildlife Trust, Pirbright.

Parmenter, L., & Oldroyd, H., 1940
Asilidae ("Robert-flies") in Surrey. London Naturalist 19: 20 – 22.

Plant, C.W., 1990

A working list of the larger Brachycera (Diptera) of the London area. *London Naturalist* **69**: 67 – 75.

Stubbs, A.E. & Falk, S.J., 1983

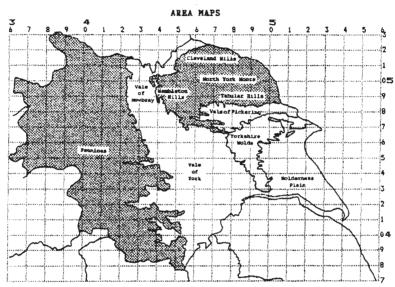
British Hoverflies. British Entomological and Natural History Society, London.

Stubbs, A.E., & Drake, C.M., (in press)

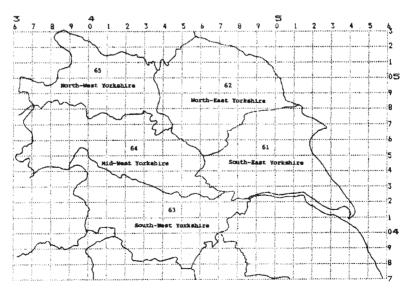
British Soldierflies and their Allies. British Entomological and Natural History Society, London.

The Horseflies of Yorkshire: A.D. 2000 update

Five years have past since publication of Grayson (1995), which was a monograph of Yorkshire Tabanidae. Between 1995 and 1999, I have continued to record Tabanidae in the five vice-countries that constitute the traditional county of Yorkshire, and have located the 'Fordham cards' for Tabanidae: during the same period, I have been sent records or specimens for identification by Len Auckland, John Coldwell, Roy Crossley, Bill Dolling, Ray Eades, Paul Forster, Andy Godfrey, Simon Hayhow, Robin Hunt, Jim Jobe, Gordon Simpson, Malcolm Smart, and Derek Whiteley. Chris Yeates has also kindly allowed me to check specimens held at the Tolson Museum, Huddersfield. All this activity has lead to the confirmation of an additional species to the Yorkshire list, the addition of three new, and deletion of one old vice-county record, the addition of 22 new, and deletion of one old 10km. square records, and the addition of 63 new, and deletion of two old 1km. square records.

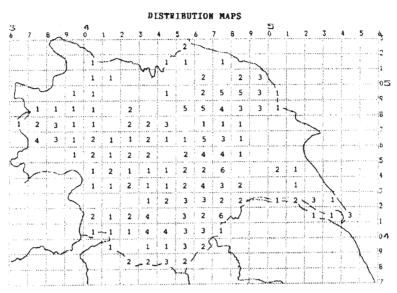


Principal areas of Yorkshire with 'highland' areas shaded

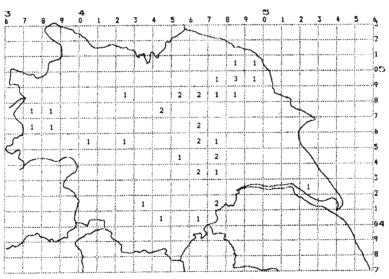


Watsonian vice-counties of Yorkshire

The Yorkshire Naturalists' Union Diptera records consist of two sets of record cards; those of Dr. W.J. Fordham, and Mr. C.A. Cheetham. Both sets of cards were probably initiated around 1920, but successive Y.N.U. Diptera recorders have only added data to the 'Cheetham cards', which contain, in the main, very concise data; whereas the 'Fordham cards' contain far more complete data. Unfortunately, and frustratingly, when research was carried out prior to the publication of Grayson (1995), the 'Fordham cards' for Tabanidae were unable to be traced, but these have since come into my possession, and they reveal some extra information.

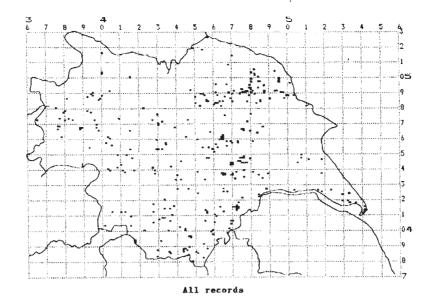


Number of species recorded per 10 km. square



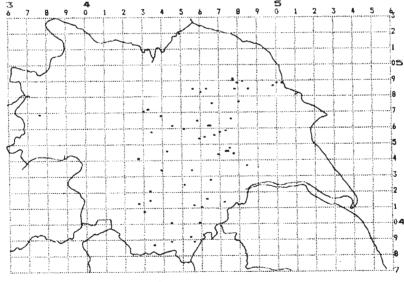
Number of Hybomitra and Tabanus species recorded per 10 km. square

This short article is not the place to discuss at length erroneous records nor records which are not acceptable such as the three remaining records of *Chrysops viduatus* (Fabricius) males from apparently unsuitable sites. The number of tabanid species now confirmed to occur in Yorkshire is twelve; these are as follows:



Chrysops caecutiens (Linnaeus)

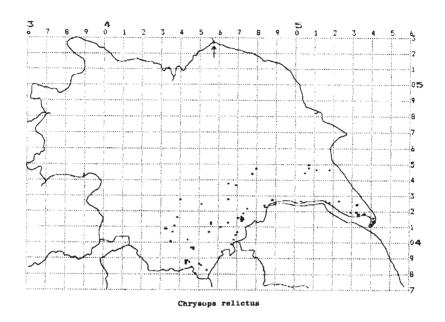
There have only been 8 new records since Grayson (1995), but 6 of these are new 1 km. squares, and these add 3 new 10 km. squares. There are therefore now around 50 Yorkshire sites, and it has been recorded from all 5 vice-counties. This is a 'lowland' species in Yorkshire, and is typically encountered in ones and twos in sunny sheltered areas. Whilst one can not be entirely sure as to precise larval habitat requirements, adult females are to be found at a variety of habitats, e.g. clearings and rides within wet woodland, along river banks, and on peat bogs and wet heathlands.



Chrysops caecutions

Chrysops relictus Meigen

As with the previous species, there have only been 8 new records since Grayson (1995), but 6 new 1 km. squares have been filled in, and 2 new 10 km. squares. The 'Sunk Island' record has been found to duplicate the 'Fisherman's Channel' record; therefore, 1 km. square 54/27-19- has been deleted. This is mainly an alluvial river valley, flood plain, and coastal species in Yorkshire, which is therefore mainly found in the central southern and south-eastern parts of the county. *C.relictus* is now known from around 50 Yorkshire sites, and can be locally numerous. Typical sites are along ditches and river banks, but it is also found on lowland raised mire at Thorne Moors.

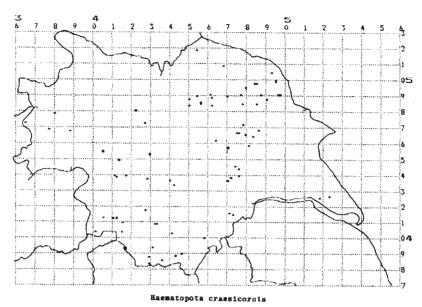


Haematopota bigoti Gobert

No new information since Grayson (1995) which divulges data from the two areas of the coastal site of Spurn whence *H. bigoti* has been recorded: there are no post 1953 Yorkshire records.

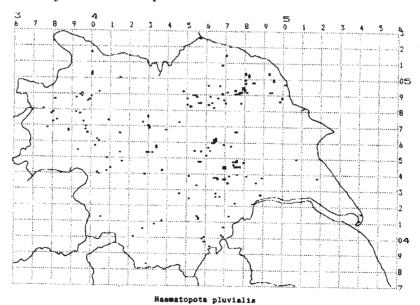
Haematopota crassicornis Wahlberg

There have been 26 new records since Grayson (1995), leading to 15 new 1 km. records, and 7 new 10 km. square records, and 1 new vice-county record (v.c. 65), meaning that *H. crassicornis* has now been recorded from all the Yorkshire vice-counties. Now recorded from over seventy Yorkshire sites, this species typically occurs along river banks, ditches, or in open areas within wet woodland, but also elsewhere such as wet heathland and lowland mire.



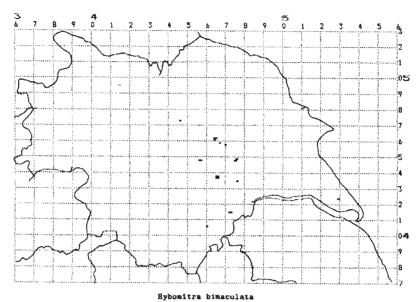
Haematopota pluvialis (Linnaeus)

There have been 77 new records since Grayson (1995), giving 23 new 1km. squares and 4 new 10 km. squares. This species is overall the most common Yorkshire tabanid, and has been recorded from around 150 Yorkshire sites. It occurs at a wide variety of sites, but is greatly outnumbered by *C. relictus* in parts of southern Yorkshire.



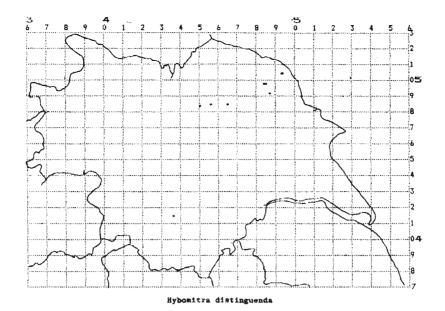
Hybomitra bimaculata (Macquart)

There have been no new sites located since Grayson (1995), but there have been 11 new records, and 1 new 1 km. record. This is a 'lowland' species in Yorkshire, which occurs at wet heathland and raised mire sites. There are only 3 sites at which *H.bimaculata* still definitely persists, viz. Pilmoor, Skipwith Common, and Strensall Common. It has been recorded from 11 10 km. squares during the 20th century, but may well be extinct in several of these.



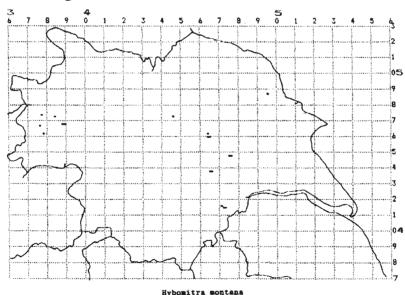
Hybomitra distinguenda (Verrall)

Only 2 new records since Grayson (1995), giving 1 new 1 km. and 1 new 10 km. square records. The 'Skipwith Common' record is now known to have been of a male, taken on 2.8.1918, and determined by Mr. P.H. Grimshaw, who would have used the key in Verrall (1909) for identification. Given the late date of this record, and having knowledge of Verrell's keys, I would consider it very likely that the 'Skipwith Common' specimen was a male H. montana, and I have deleted the record from the distribution maps. H. distinguenda is known from two areas of Yorkshire; it has been taken from 6 widely separated 'sites' in the North York Moors area, and has also been taken at Haw Park, near Wakefield. Some of the Yorkshire sites for H. distinguenda contain several types of wet habitat, but it seems to prefer partly sheltered areas of marsh vegetation, arising from decaying matter.



Hybomitra montana (Meigen)

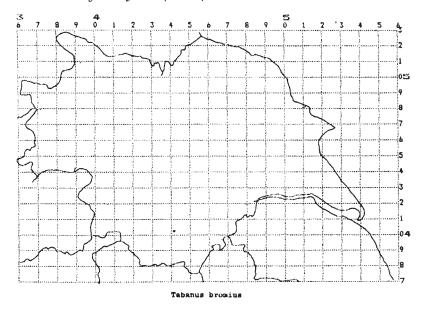
There have been 7 new records since Grayson (1995), filling just 1 new 1 km. square and 1 new 10 km. square; but, significantly, this new 1 km. square is on May Moss: the first record of *H. montana* from the North York Moors area. This species has otherwise been found at 5 sites in the Yorkshire Pennines, and 5 sites in the Vale of York: these sites are various types of bog, including 'lowland' raised mire and wet heathland, and 'highland' 'mosses'. Recent records from the Vale of York are available for Skipwith Common, Strensall Common, and Thorne Moors; whereas the only recent records from the Pennine sties are from Malham Tarn. The most recent record from any of the other sites is from 1995, but this is due, in the main, to lack of recording.



Tabanus bromius Linnaeus

This has now been confirmed as a Yorkshire species on the basis of a male caught by Mr. J.D. Coldwell at Gypsy Marsh in vice-county 63 on 21.7.1997.

Gypsy Marsh contains fragments of several types of habitat, including marsh, and relict heathland. The two questionably authentic Yorkshire records mentioned by Grayson (1995) remain dubious.

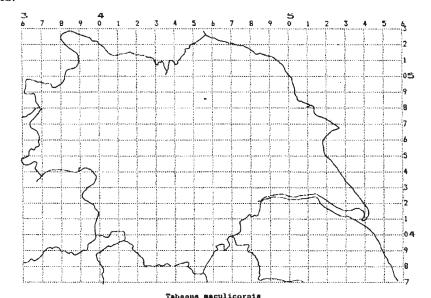


Tabanus cordiger Meigen

There has been no new information to add, so Yorkshire data still relates to the single female specimens from Barden, 30.6.1918, and Nidd, 21.6.1925; both are in vice-county 64.

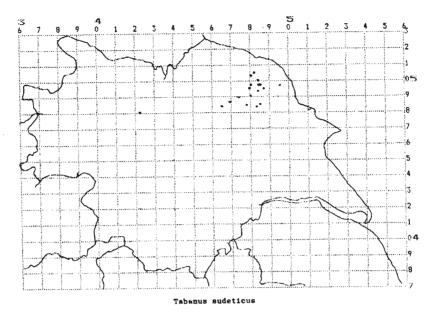
Tabanus maculicornis Zetterstedt

There have been 5 new records from the only known Yorkshire site, Ashberry Pasture in vice-county 62, where this species is frequently recorded. Ashberry Pasture is principally wet woodland overlying clay, and contains limestone flushes, boggy areas of decaying vegetation, and many other mini habitats.



Tabanus sudeticus Zeller .

There has been a marked advance in our knowledge of this species in Yorkshire, with 14 new records, leading to 9 new 1 km. squares, and 3 new 10 km. squares since Grayson (1995). It has now been recorded from 17 1 km. squares in the North York Moors area, with nearly all records being recent. Exact breeding sites are difficult to recognise, but Fen Bog, May Moss, and Tranmire Bogs are undoubtably three such sites: all are principally bog. *T. sudeticus* was undoubtably found at Masham in vice-county 65 during the 1880s, but there are no other records from the western half of Yorkshire.



References

Grayson, A. 1995. The Horseflies of Yorkshire: A comprehensive county account. ISBN 0 9521201 0 0 (If anyone wants to obtain a copy of this book, just send a cheque for £3 to Mr. A. Grayson, 56, Piercy End, Kirkbymoorside, York, YO62 6DF).

Verrall, G.H. 1909. British Flies. Volume V. Stratiomyidae and succeeding families of the Diptera Brachycera of Great Britain. London. Gurney and Jackson.

Request for contributions and records.

Please send me your:

- a) interesting records
- b) records of all common species
- c) news on input to local Biodiversity Action Plans
- d) notes on behaviour and ecology
- e) articles for newsletter

Thanks to Roger and Andrew for their contributions to this newsletter. I look forward to hearing from more of you soon.

Simon Hayhow

Scheme organiser and newsletter editor:

Simon Hayhow 15 Brookfield Road Thornton Cleveleys Lancashire FY5 4DR or

Fleetwood Museum Queens Terrace Fleetwood Lancashire FY7 6BT

tel: 01253-876621 (work)

fax: 01253-878088

e-mail: simon.hayhow@btinternet.com

Recording cards are available from:

Biological Records Centre Centre for Ecology & Hydrology (C.E.H.) Monks Wood Abbots Ripton Huntingdon Cambs. PE28 2LS

tel: 01487-772532 fax: 01487-773590 e-mail: kart@ceh.ac.uk