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Tachydromia - a gateway drug to the Hybotidae

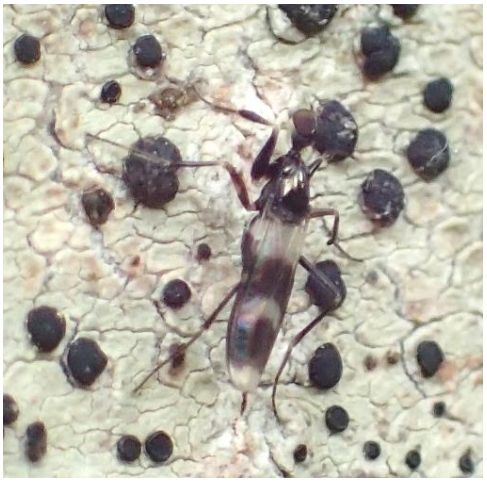
Stephen Hewitt

The genus *Tachydromia* has the attraction of being fairly easy to recognise, not too difficult to find in the right places, containing enough species (15 in Britain) to make things interesting but not so many as to make the key cumbersome to use. Their autecology is interesting, and they occupy a sufficiently diverse range of narrowly defined habitat niches to make them useful indicator species in some cases. These attributes make the genus an interesting group to study and a good introduction to the wider Hybotidae family.

Tachydromia umbrarum on a tree trunk

Tachydromia larvae probably develop in damp soil, leaf litter or wood-mould, where they are assumed to be predaceous. The adults are opportunistic predators, actively running over bare substrates in search of small invertebrate prey, such as springtails and small flies including Sciarids and Cecidomyiids. They are most often found in sheltered, sunny or lightly shaded situations, often close to wetland of some sort. Several species are associated with exposed riverine sediments (ERS) of different grades from fine sands to coarse shingle, others occur on bare sand or gravel away from rivers or are typically found running on tree trunks at woodland margins or over the leaves of herbaceous plants in various situations, including urban gardens. *Tachydromia* are under-represented in sweep net samples because of their tendency to run on firm surfaces and their reluctance to fly. As a result, it is more effective, and satisfying, to search for them directly on their preferred substrates. One then has the challenge and frustration of trying to directly poot these fast-running insects without causing them to fly off and often getting a pooter-full of sand in the process. Specialist *Tachydromia* of bare ground and ERS can be found sheltering under stones and debris or beneath the leaves of plants such as dock growing on the substrate. That said, on sunny days, bare and thinly vegetated ground may become too hot for *Tachydromia* and then they will take shelter in the shady canopy of over-hanging trees and other foliage, where they can sometimes be swept in numbers.

At around 1.5 to 3 mm long and black, they are not extravagantly obvious flies, but *Tachydromia* are readily distinguished, both in appearance with their rather boat-like shape and banded wings and in their general behaviour of actively running about on bare surfaces. The only really similar species are those belonging to the sister genus of *Tachypeza*, which are usually restricted to tree trunks (although *Tachypeza nubila* can also be found running over boulders on peaty moorland on occasion) and, although their wings are slightly darkened, they lack the distinctly dark-banded wings of those species of *Tachydromia* that are similarly found on tree trunks. With experience, *Tachypeza* can be pretty readily distinguished from *Tachydromia* but initially it will probably be necessary to check the key characters of a lower branch to vein Cu and conspicuous whitish setae on the occiput below the neck which are present in *Tachypeza* but not *Tachydromia.* Also, the upper margins of the eyes extend well beyond the ocellar tubercle in *Tachypeza* whilst in *Tachydromia* they are about level with it.



Tachydromia aemula on a log

Their habit of running over bare surfaces allows the opportunity to observe *Tachydromia* in situ, using close focus binoculars or digital cameras. Sue Taylor for one has used such methods in a fascinating study of a population *T smithi*, gaining new insights on their hunting and courtship behaviour.

In 1961 Collin recognised just 8 species of *Tachydromia* (under the name *Sicodus*) in Britain. There are now 15 species listed as British. Chvála published a review of the Palaearctic *Tachydromia* in 1970 in which he recognised 45 species. There are now some 81 Palaearctic species described. Chvála assigned species to different 'groups' based on their morphological characters. Although recent molecular studies have shed new light on the composition of some of these lineages, Chvála's groups, each named after a representative, remain a useful way of sub-dividing the genus. There is no strong correlation between the different groups and their habitat preferences. A key was included in the handout produced for the 2019 workshop at Preston Montford.

Tachydromia morio on river shingle

The following species accounts are based on the Recording Scheme data and my own personal experience. All photographs were taken by me unless otherwise stated.

Arrogans Group species

There are three British species in this group – *T arrogans*, *aemula* and *lundstroemi*. They typically run about on tree trunks, rocks and foliage in well vegetated situations, and have shiny black bodies with a silver-dusted episternum, slender male genitalia and two, unconnected, dark bands across each wing.

***Tachydromia aemula* (Loew, 1864)**

This is the most widespread *Tachydromia* species in Britain. It can be found in a range of habitats from tidal riverbanks to high mountain ledges. I have frequently found it running over the leaves of *Petasites* growing along river margins, as well as on the sand beneath. I also see them running on the soil and on the foliage of herbaceous plants in my garden in Penrith. An individual on the tidal sand at the vegetated edge of a river flowing into the Solway estuary had a small springtail as prey. *T aemula* is very similar to *T arrogans*; however, *aemula* can be distinguished by its polished black occiput (which is silver-dusted down the eye margin in *arrogans*) and the pale base to the hind femora (hind femur all black in *arrogans*). The two species are much the same size, although individuals of *aemula* can be smaller (1.6 – 2.5mm) than *arrogans* (2 – 2.5mm). In his monograph of the Empididae in 1961, Collin regarded this species as a form of *T arrogans* and for that reason perhaps there has been confusion as to the British distribution of the two species, with many specimens of *T aemula* arranged over the name *arrogans* in museum collections. Flight period: May-October.

Tachydromia aemula

***Tachydromia arrogans* (Linnaeus, 1761)**

Similar to *T aemula* and frequently confused with it, these two species can be distinguished by the characters mentioned in the account for *aemula* above. I personally have not found *T arrogans* in Britain, for which I have confirmed records only from south of a line between the Humber and Dee estuaries. I have however encountered the species in Europe where in most cases it was in riparian situations. I have seen them running on boulders in a wooded gorge in the Austrian Alps and on the walls of a limestone ravine in southern Spain. I have also swept it from vegetation along the banks of streams. Flight period: May-October.

Tachydromia arrogans

***Tachydromia lundstroemi* (Frey, 1913)**

Very similar to *T arrogans* but larger at 3mm long and with legs all black apart from the knees (the anterior four femora are pale in *arrogans* and *aemula*) and with the double row of short black spines extending the full length of the fore and mid femora beneath. A short appendix to vein R_{2+3} is said to be unique to this species within the Palaearctic fauna but I have specimens of *arrogans* in which at least one wing has this feature more or less developed. *T lundstroemi* is a north European species which has been reported from Sweden, Finland and Russia, so the single British record from Wiltshire is somewhat anomalous. A single specimen was swept from grass by the River Ebble at Coombe Bissett by Sir Christopher

Andrewes on 18 August 1964 and identified as this species by J.E. Collin. Andrewes left his collection to the NHM but the *lundstroemi* specimen is not among the material held there. There are however, several specimens of *T arrogans* collected by Andrewes on subsequent visits to Coombe Bissett, so he clearly returned several times to try and re-find the species but without success. Rob Douglas informs me that there is a single specimen of *T lundstroemi* from Coombe Bissett in the Verrall-Collin collection at OUMNH, so it appears that Collin retained the specimen although the date on the label is 'June 1965'. Flight period: June/August?

Annulimana Group species

The three British species in this group, *T umbrarum, smithi* and *woodi,* have a similar two-banded wing pattern to the *arrogans* group but the episternum is polished black and the middle of vein R_{2+3} is strongly arched towards the costa. These species are generally found running on tree trunks and fence posts, often in the vicinity of water. They seem to prefer smooth, pale-barked trunks, perhaps because these bare surfaces provide the best substrate for hunting and courtship display, although there could be also some recorder bias in that they are more easily spotted on such surfaces.

***Tachydromia smithi* Chvála, 1966**

This species resembles *T umbrarum* in having strong spinose setae on the hind part of the thorax and the scutellum. But whilst *umbrarum* has 4 to 8 scutellar bristles, *smithi* only has two. *T smithi* was first reported new to Britain by David Gibbs in 2006 after he found a single male on the trunk of an aspen tree at Centre Parks in Sherwood Forest, Nottinghamshire on 2 July 2005. There is now an earlier record on the recording scheme database, of a female found at a disused quarry at Chafford Hundred in South Essex in 2000, identified by D.A. Smith. I am embarrassed to find that I had myself collected a specimen of *T smithi* in 2004, from the River Monnow at Llangua, Herefordshire and which then went unrecognised for 15 years among unsorted material. There have been several subsequent records of the species from scattered locations in Kent, Buckinghamshire, Norfolk, Shropshire and, in 2023, from the Formby coast in South Lancashire. I have not come across any unrecognised specimens of this species in the older British collections of museums around the country, so it seems likely that *T smithi* is a recent addition to the British fauna, either by natural colonisation or, perhaps more likely, through introduction with imported trees, and that it is currently expanding its range here. Most British records are from trees on the margins of water bodies in flooded gravel pits and quarries, although I have also found this species on the trunks of river-side trees in Spain (and it has been found by the Monnow of course!). Sue Taylor has carried out a detailed study of this species at College Lake, Pitstone, Buckinghamshire where she has recorded adults from May through to December and has been able to video fascinating courtship and mating behaviour. Flight period: May-December.

A mating pair of *Tachydromia smithi* © Sue Taylor

***Tachydromia umbrarum* Haliday, 1833**

At 2-2.5mm long this species is the same size and appearance as *T smithi* but can be distinguished by the number of scutellar setae mentioned above. *T umbrarum* also has the last two pairs of dorocentrals equally large and strong whilst in *T smithi* the penultimate pair are only half as long as the posterior pair. *T umbrarum* occurs widely throughout Britain and is usually found running on tree trunks and fence posts but is not so strongly associated with water margins as is *T smithi*. I have found it on the trunks of trees planted along a suburban road as well as in wood pasture, wet woodland and on riparian tree trunks and fence posts. Flight period: May-September.

Tachydromia umbrarum

***Tachydromia woodi* (Collin, 1926)**

This species lacks the strong spinose setae of *T smithi* and *umbrarum* and also the large, shovel-like ventral projection to the tip of the mid-tibia that those two species share. At 1.9-2.25mm long it is also rather smaller. *T woodi* is not frequently recorded. It is mostly reported from riparian situations and shows an association with exposed riverine sediments. I have previously found individuals on fence posts on a wooded riverbank and the rails of a wooden footbridge over a woodland stream. However, I have recently captured this species in some numbers in soil emergence traps set on flood-deposited sand on riverbanks in Cumbria and Perthshire. This is a distinct but allied habitat to the in-channel sand and shingle bars required by some other *Tachydromia* species. Flight period: May-August.

Tachydromia woodi

Ornatipes Group species

This group is defined by the combined characters of a silver-dusted episternum, yellow palpi, black legs, two dark bands across the wings, fore femora without a double row of short black setae and male genitalia small and relatively simple. *T halidayi* is the only British representative of this group.

***Tachydromia halidayi* (Collin, 1926)**

At about 1.5 mm long, this is the smallest British species. It has a black body and legs with just the basitarsi and the palps yellow. The whole of the occiput, the episternum and the anterior face of the front coxae are silver-grey dusted. *T halidayi* is restricted to the north and west of Britain where the topography and climate provide suitable conditions. It is an obligate species of ERS, showing a distinct preference for unvegetated deposits of coarse shingle. It is therefore found on flashier and stonier stretches of river than most other *Tachydromi*a species. It has a later season than other ERS specialist *Tachydromia*, with numbers peaking in July. Flight period: May-September.

Tachydromia halidavi

Interrupta Group species

Chvála distinguished this group on the combined characters of the silver-grey dusted episternum, the cross-bands of the wing being joined in cell R_5 and in the fore femora being 'whitish pubescent beneath and armed only with whitish anteroventral hairs'. The wing of *T calcarata*, the only British representative of the group, is anomalous in having the cross-bands also connected in cell R_1 with only a hint of a pale area in cell R_3. In 2018, Grootaert and Shamshev proposed placing the *interrupta* group within the *arrogans* lineage.

***Tachydromia calcarata* (Strobl, 1910)**

The wing pattern of this fly is similar to that of species in the *connexa* group but male *T calcarata* lack the modified mid-femora and large genitalia of that group. A specialist of ERS, *T calcarata* was found new to Britain in 2004 on the rivers Irthing and King Water in northeast Cumbria. It was then found by Ian McLean on the River Tees near Bowlees, County Durham in 2010. I found it again in 2019 on Bollihope Burn in Weardale, Durham. *T calcarata* occurs on partially vegetated, low-lying, damp river-edge sand and shingle. Outside the north Pennines, this species is only reported from the Austrian Alps and the Dolomites. Flight period: June-July.

Tachydromia calcarata

Connexa Group species

The group is characterised by species with rather broad, blunt-tipped wings, the dark cross-bands on the wing are broadly connected in cells R_1 and R_3 at least, a relatively short arista and silver-grey dusted episternum. The males have modified mid-femora and large, globular genitalia.

***Tachydromia acklandi* Chvála, 1973**

This small species has only faintly marked wings but is easily recognised by the short, pale palps with several long pale setae. Also, the fore femur possesses a row of long fine ventral setae. Males are further differentiated by the modified mid-femur and the very large globular genitalia. *T acklandi* is an obligate ERS species, occurring on sandy shingle deposits in spring and early summer. It was first described from specimens collected by Mike Ackland by the Dorback Burn in Strath Spey in 1967 and has since been found on spate rivers with a significant sand fraction elsewhere in Scotland, northern England and south Wales. There is also a curious intertidal record from St Audrie's Bay, South Somerset in 2005. Flight period: May-August.

Tachydromia acklandi

***Tachydromia connexa* (Meigen, 1822)**

Specimens labelled as this species in museum collections often turn out to be *T morio*, which has the same wing pattern and similarly modified legs. However, *T connexa* has paler legs and the base of the hind femur is yellow rather than black. *T connexa* is a scarce southern species with thinly scattered records extending from East Kent as far north as Derbyshire and South West Yorkshire. It is a spring species of sandy substrates and although it has occasionally been found on sandy riverbanks it is more often recorded from sparsely vegetated quarries and sandpits. Flight period: May-July.

***Tachydromia costalis* (von Roser, 1840)**

Unlike *T connexa* and *morio*, *T costalis* has no pale area within cell R_3 of the wing. It is further distinguished from *T morio* by the yellow base to the hind femora, a character which it shares with *T connexa*. *T costalis* is another specialist species of ERS where it is found on partially vegetated sandy deposits, both on in-channel bars and on flood-deposited sand on riverbanks. It occurs on sandy rivers, with strongholds in south Wales, Cheshire and Cumbria. There are also scattered records from

Somerset, Sussex, Surrey, northeast England and southwest Scotland. Interestingly, there are no records further north in Scotland from the ERS-rich catchments of the Tay and Spey. Flight period: May-July.

Tachydromia costalis

***Tachydromia edenensis* Hewitt & Chvála, 2002**

This species was described from specimens collected on the River Eden in Cumbria where it was first found on deposits of dry, unvegetated sand deposited on the tops of shingle bars in 2000. The clearly annulated tarsi are distinctive as are the male genitalia. This obligate ERS species has subsequently been found by Andy Godfrey on the rivers Lune in Lancashire and Swale in Yorkshire. Martin Drake has found it in south Wales and I have found it on the Till in Northumberland and in Scotland on the Nith in Dumfriesshire and the Tay in Perthshire. Flight period: June-July.

Tachydromia edenensis

***Tachydromia halterata* (Collin, 1926)**

This species shares the modified mid-femora with several other *connexa* group species but is distinct from them all in having the outer two thirds of the wing darked right up to the tip and also in having dark halteres. This is an enigmatic species which has not been found in Britain for almost 90 years. All but one of the dozen or so records of the fly are from the fenland area of Cambridgeshire, Suffolk and Norfolk, the other report being of one found by Donisthorpe "with *Lasius fuliginosus"* at Darenth in Kent in 1909. Collin states that its short, dark legs and broad wings give it a *Drapetis*-like appearance. The only indication of substrate preference is provided by Collin's report of a female he caught on the trunk of a tree in his Newmarket garden. The last record of the species was on the Devil's Ditch near Burwell in 1937, when Collin found both sexes. Flight period: May-June.

***Tachydromia morio* (Zetterstedt, 1838)**

This is the most widespread of the ERS specialist species and is found widely in northern and western Britain from Ross & Cromarty south to Devon. *T morio* is less demanding in the grade of sediments it will tolerate and can be found on sandy gravels to coarser shingles. It is therefore able to extend into more upland river stretches than most other species. *T morio* is most similar to *T costalis* and *T connexa* but can be distinguished from *costalis* in having a pale patch in the otherwise darkened cell R_3 and in having the hind femora entirely black. *T connexa* also has a pale area in cell R_3 but like *costalis* it has the base of the hind femora yellow. Flight period: May-August.

Tachydromia morio

***Tachydromia terricola* Zetterstedt, 1819**

T terricola is the only British member of Chvála's *terricola* group, characterised by the possession of largely clear wings which are only faintly clouded along the veins and at the apex of cell R_3, largely pale legs and in the males lacking the large, globular genitalia of the *connexa* group. This species was first found in Britain in 1973, when A.A. Allen collected a single female in a sandpit near Lydd, Dungeness. Returning to the site in 1978 he found the species to be restricted to a "shallow depression in the sand not far from the edge of the lake filling the bottom of the pit" and he collected a few males and females by "grubbing at the roots of the thin herbage and in the open among fragments of plant debris etc". There are further records for Dungeness from June 1989 and also for Rye Harbour in August 1986, but none more recently that I am aware of. Chvála reports this species to be uncommon but well distributed across northern and central Europe, in sandy coastal biotopes. I have found it in central Norway on a sandy riverbank well away from the coast. Flight period: June-August.

Hints for finding small Hybotids – *Crossopalpus, Platypalpus, Stilpon, Tachypeza and Tachydromia*

Nigel Jones

Most Hybotidae are very small flies and can quite easily be overlooked in nets that have been swept through vegetation to collect flies. When looking for Hybotids, I find a useful approach, when first getting one's head into the net to see what lies within, is to first clear the net of distractions. This is best done by pootering up or letting escape larger flies, particularly any very active ones. Next, take plenty of time to watch for small flies climbing up the net and collect these in a pooter or direct into tubes. Once these have been collected, have a good long stare at the bottom of the net and in the crease where the edges of the net are sown together - Hybotids and other very small flies often lurk there.

Members of the same Hybotid genera wandering about within the confines of the net usually look very similar to each other, so collect a good number of them. Almost invariably a sample containing numerous, ostensibly identical specimens, will in fact contain a number of species. By way of example, I swept the foliage of some willow trees on the slopes of the

Stiperstones, Shropshire in early June and pootered up numerous *Platypalpus* which I could easily have assumed would all be members of one or two species at best. On getting the sample home and identifying the specimens, there were six species present: *Platypalpus ciliaris*, *P. cothurnatus*, *P. longicornis*, *P. longiseta*, *P. nigritarsis* and *P. verralli*.

Sweeping through and across vegetation is an excellent way to find Hybotids, particularly across tree foliage. For those with a vacuum sampler (a converted battery-powered leaf blower works a treat), prodding the sampler into the base of vegetation will garner plenty of *Crossopalpus* and sometimes the tiniest of the tiny Hybotids *Stilpon graminum* – a really smart little fly that's well worth seeking out. I've only ever found *Stilpon* (several times now) through vacuum sampling* at the bases of rushes in damp areas at the edges of standing water. Some of these flies are so small that they may not be recognised in the field as Hybotids, so it's a good idea to collect even the tiniest indistinct looking flies wandering about inside nets and in white trays that vacuum samples have been tipped into. Winter vacuum sampling is a great way to get hold of *Crossopalpus* and *Stilpon*. Cold conditions really slow them down so that they do not fly off when vacuum samples are emptied into trays.

In 2022 I went out collecting *Tachydromia* with Steve Hewitt. It was a searingly hot day and I was having hardly any joy finding *Tachydromia*, but Steve had plenty! Steve was sweeping the shady side of trees where small Hybotids move to when it gets too hot for them. I adopted this approach and immediately got better numbers. Steve also lifted leaves in contact with the ground, where *Tachydromia* also shelter from heat. The habit of *Tachydromia* of walk[illegible] posts and rails is well known and I [illegible] specimens by carefully direct pooterin[illegible] surfaces. *Tachypeza* are also in the habit of wandering about on timber surfaces but tend to eschew fences in favour of tree trunks. Beech is the best place to search as these flies are easier to spot on the relatively smooth surface of this tree. *Tachypeza* are very adept at getting away from approaching pooters or tubes, but they seldom fly, preferring to run a little distance off. It's usually possible to capture specimens with persistent and stealthy use of a pooter or a glass tube placed directly over the fly. When using a tube, approach very slowly, avoid sideways movement and try to bring the tube directly, but still slowly down on the specimen. Once the tube is over the fly, it will usually run up the tube, allowing one to get a cap over the open end – to this end, keep the closed end of the tube pointing upwards until the cap is in place.

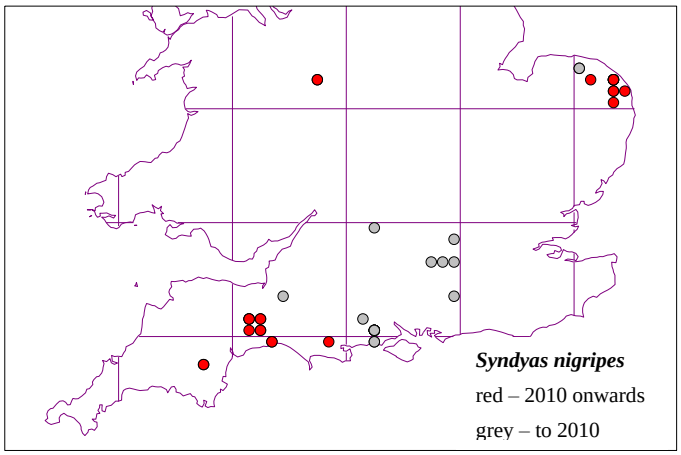
*I don't have my own vacuum sampler, but follow vacuum samplers about and ask them to sample from suitable looking places. See the Lesser Dung Fly Recording Scheme newsletter for more details.

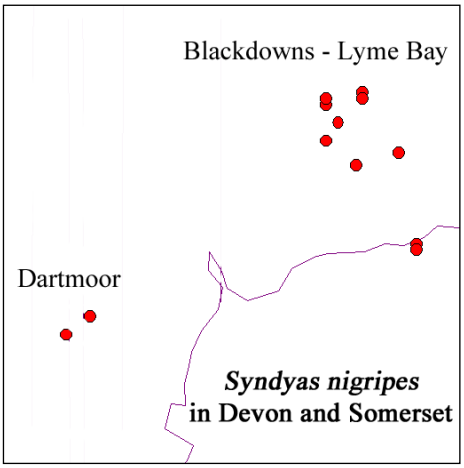
Update on *Syndyas nigripes* (Hybotidae) in the West Country

Martin Drake

A dozen years ago, I wrote about the first records of this Near Threatened fly in Devon (Drake, 2011). More records from Norfolk, mainly from the Dipterists Forum summer meeting in 2022, and from the southwest of England from my own collecting, show it to be doing well (Fig. 1). I am particularly interested in the records on my home patch in East Devon and adjacent west Somerset, plotted here at 2km resolution. (Fig. 2). This area is on Mesozoic geology with a wide range of soil types from acidic to basic. The result is an intimate mix of habitats that range from open acid mire with runnels to tufa-depositing seepages. Nearly all the records of *S. nigripes* from this area are from acid mire, the least attractive of which is *Molinia* or *Juncus* bog and the best is runnels with bog-bean and bog asphodel. No surprises there. But I also caught it recently at two seepages on the coastal soft-rock cliffs of Lyme Bay where aquatic stratiomyids are frequent, including six species of *Oxycera* and *Vanoyia tenuicornis*. This suggests a complete muddle of requirements. The Norfolk fens also have pockets of *Sphagnum*-dominated mire in close proximity to the more widespread base-rich or neutral fen (George 1992). Perhaps *Syndyas* is capable of sniffing out the small acidic patches, both in Norfolk fens and on Devon's soft-rock cliffs. Clearly we need to add a pH meter to our field equipment. Chvála (1983, p102) describes the genus as appearing to be restricted to cold *Sphagnum* bogs; there is no *Sphagnum* on the Devon cliffs and, whether or not the seepages are acidic, these steep south-facing slopes overlooking the English Channel are very definitely not cold.

The maps were produced using DMAP using records derived from the E&D recording scheme database, iRecord and the NBN Gateway.





Interesting dolichopodids recorded at the Dipterists Forum field meeting in Norfolk, 2022

Martin Drake

We had a bumper crop of dolichopodids at this field meeting, held 2-9 July 2022, despite the rather trying dry conditions. As in recent years, many participants passed their specimens to me during the week, while other recorders identified their own catch. Jane Hewitt collated everyone's records, which amounted to 1900 for dolichopodids from 22 hectads. These included an unexpectedly high total of 141 species which is a sizable increase on the past few years when 96-121 species have been recorded (see my earlier reports in this newsletter). This is probably mainly due to many more specimens given to me, but also to Norfolk holding some prime dolichopodid habitat.

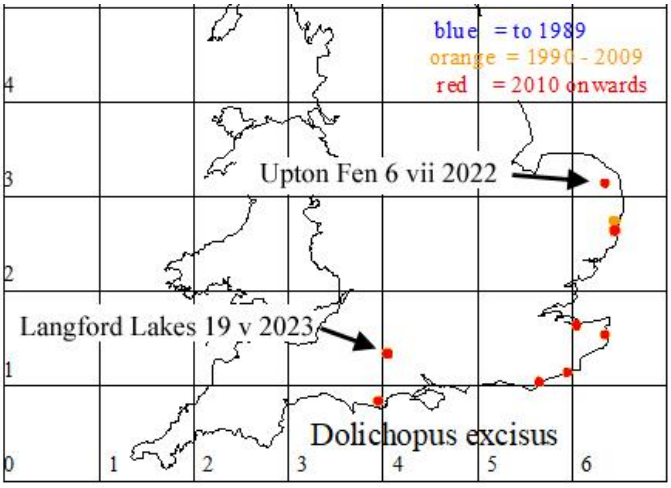
Way ahead at the top of the table were *Chrysotus gramineus* and *Gymnopternus aerosus*, both very common species, but among those most frequently found but which are not particularly common-or-garden species nationally were *Teuchophorus spinigerellus*, *Dolichopus longitarsis* and *Ethiromyia chalybea* which are closely associated with fens, and, because of so many coastal visits, *Dolichopus strigipes* on the saltmarshes.

At the other end of the scale, 23 species had a conservation status. Most of these were represented by single specimens. The more frequent were *Thrypticus pollinosus* and *Telmaturgus tumidulus*, both tiny flies, and *Telmaturgus* having a very limited distribution in Britain but well known from the Norfolk fens. I was hoping we'd find more than a single specimen of the endangered *Dolichopus laticola* and two of *Thrypticus smaragdinus* as these fens are almost their only locality and both were moderately widespread here a few years ago. Seven species represented new records for Norfolk according to the E&D database but I may be overlooking iRecord and NBN records. *Dolichopus excisus* (at Upton Fen) was a good find although it has not been on the British list for long so it is still turning up at new places. This record moves its distribution well inland when previous records suggested a near-coastal distribution, but to cap this, Mike Ashworth made an exceptional record on the DF spring meeting in Wiltshire in 2023 – see map. *Argyra auricollis* (Hilly Holey) and *Sciapus zonatulus* (East Wretham Heath) were over 100km from the nearest previous records. *Systenus bipartitus* (Catfield Fen) was also a considerable way from the nearest records in Cambridgeshire. *Dolichopus nitidus* (Sutton Broad) is known from nearby at a Suffolk fen but this was the first from Norfolk. *Dolichopus virgultorum* (Thompson Common) continues its northward march, this being the most northerly on the east side of the country, and a big leap from the nearest records in the Thames basin. I did not expect to find that *Argyra ilonae* (Lower Wood, Ashwellthorpe) was not previously known from Norfolk as it is widespread and hardly uncommon over much of England.

Several of the species are geographic oddities in that their distribution is northern and western and they reach their greatest frequency in Scotland, but their outlying occurrence in the Norfolk fens is already known. This group includes *Argyra auricollis*, *A. elongata*, *Campsicnemus pusillus*, *Dolichopus caligatus*, *D. lepidus*, *D. phaeopus* (although frequent on moors in south-west England) and *Syntormon tarsatum*. These flies presumably sniff out the patches of acid bog within the large expanses of neutral to base-rich fen.

Just mentioned in passing are some scarce or rare moderately conspicuous species that are already known in Norfolk but nice to see: *Dolichopus notatus*, *Orthoceratium sabulosum* and *Syntormon mikii*.

And *Syntormon metathesis* was recorded new to Britain after finding several males (Drake 2023). No sooner than the paper was published than Tony Irwin and Martin Greenland found more specimens. Martin's were particularly interesting as both sexes were recorded near Filby Broad in the southeast, somewhat away from the other records, and more importantly on 21 March 2023, thus making this another early-flying *Syntormon* along with *denticulatus*, *macula* and *pallipes*.



The single British record of *Campsicnemus umbripennis* (Dolichopodidae)

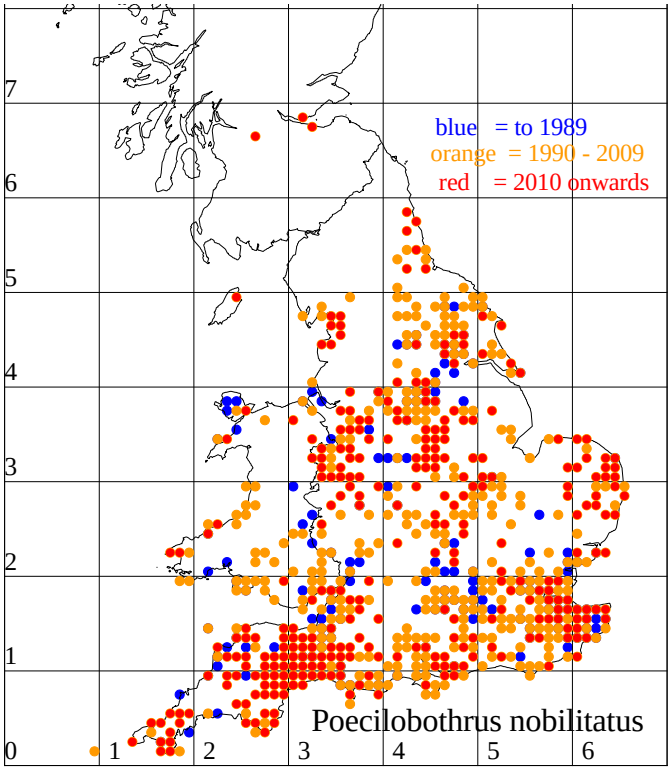
Martin Drake

Ivan Perry (1999) introduced this dolichopodid to the British list from one male found in grassland at the top of the soft-rock cliffs called The Spittals, next to Lyme Regis in Dorset. I have visited this many times in the last 20 years as it is only half an hour's drive away. My list of dolichopodids is enviable but I still have not found Ivan's *umbripennis*. More interesting than my lack of success is why this species is here at all. It is one of the few dolichopodids with accepted subspecies rank, if you think that this is a valid taxon. Strobl (1899) described *C. umbripennis* var. *hispanicus* from several males collected in northwest Spain. Parent found several more characters than Strobl used to separate the two subspecies, and the figures by Peter Chandler in Ivan's paper show most of these, so there is no doubt that the identification is correct. The distribution of subspecies *hispanicus* is just Spain and France whereas the nominal subspecies (*C. umbripennis umbripennis*) is widespread in Europe from Spain to Turkey to Poland (Pollet 2011), and clearly not uncommon, for instance, Strobl refers to his numerous central European specimens when comparing the two forms. The Dorset specimen is therefore curious for being the rare form. Does this one occurrence coincide with an influx of migrants blow north from the Pyrenees area? I will continue looking for it but I may be unlucky if it was merely swept off course.

Poecilobothrus nobilitatus is doing well

Martin Drake

Not so long ago, *Poecilobothrus nobilitatus* was a 'southern' species in Britain but a recent flow of records from central Scotland and northern England make its move northwards more obvious. It is also absurdly abundant on every scrap of water here in Devon this year. Where they congregate, they chase away all the other dolichopodids so spoiling the chance of finding more interesting species. Despite being so common, I think I'm right in saying that we do not know where its larvae live; Smith (1989) said that they were unknown. But they are almost certainly in damp soil, and use water only as a feeding and lekking area. For instance, one can find aggregations in the most inhospitable places as long as there is a puddle. I include this map based on the E&D recording scheme data to complement that on iRecord which shows more northern records, but both iRecord and NBN shower fewer of the southern records.



Dolichopodid test keys now on DF website

Martin Drake

I have uploaded my keys to dolichopodids on the Dipterists Forum website under the Resources / DF membership area / Keys. You need to be a DF member to access this page. Do please try them out and let me know what doesn't work or is unclear, or downright wrong. I will add a running update of corrections; I have some already! I have not included *Thrypticus* or *Medetera* yet as these include several 'new to Britain' species which I intend to publish formally shortly.

These keys will be published by the Royal Entomological Society in its series *Handbooks for the Identification of British Insects*. For the last two years I have missed my own deadline, so don't hold your breath.

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