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Interesting dolichopodids recorded at the Dipterists Forum field meeting in Cornwall, 2021

Martin Drake

This meeting's haul of dolichopodids was good – 108 species among just over 1000 specimens, and including about a dozen species of conservation interest. I say 'about' a dozen because the formal rarity status can be misleading for tiddlers, such as *Rhaphium fasciatum* and *Syntormon monile*, that are almost certainly under-recorded. See the maps on the next page to accompany the accounts.

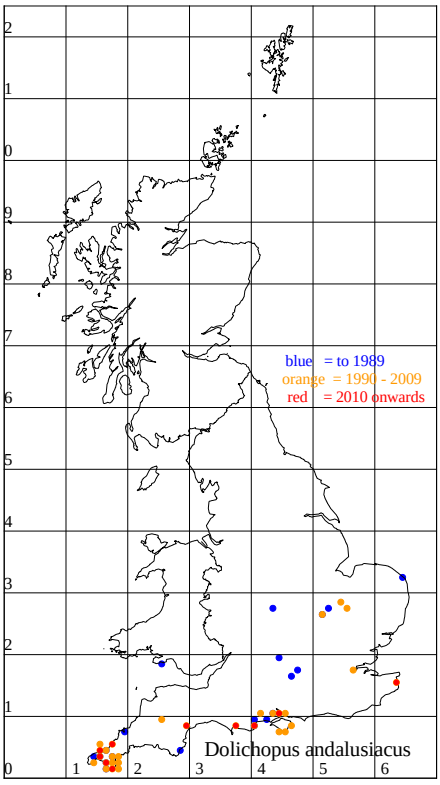
Most nationally scarce dolichopodids were sparsely distributed and found in low numbers. A distinctive exception was *Dolichopus andalusiacus* which was found at six sites and was sometimes quite numerous, particularly at Penhale dunes. Ponds seem to feature frequently in the site descriptions of these records. The national distribution is now absurdly tilted to the far west of Cornwall. Perhaps the clue to this distribution is in its name – Strobl described it from a specimen from Algerciras in Andalusia on the southern tip of Spain, and its European distribution is decidedly south-western. Another species with a strong cluster of records in this part of Cornwall was *Campsicnemus pumilio* (Croft Pascoe Pool, Rospannel Farm, Windmill Farm), although its habitat affinity is not easy to fathom as I think that records submitted to the recording scheme probably include plenty of errors based on females. But the swampy nature of these three Cornish sites does fit with a known preference for water margins. The first record west of Somerset for *Rhaphium antennatum* was from dunes at Kennack. Not only does the record upset the distribution pattern but introduces an unusual habitat for this species that appears more at home on coastal marshes and floodplain wetlands. The map for *Syntormon macula* is filling up nicely. I wonder whether this species is undergoing an increase in frequency, like *Dolichopus virgultorum* (Drake 2017), but of course it is difficult to disentangle increased recording from a population expansion. Not only is the density of dots on the map increasing but there is an increase in records of males which are found far less frequently than females and fly in midsummer when recording is at its peak, unlike the early-flying females, so their increased occurrence does not seem to be an artefact (Drake 2021a). The record from the Cornwall meeting was a single male from Croft Pascoe Pool. *Schoenophilus versutus* is small and probably overlooked but almost certainly correctly identified when found. Its habitat affinities are somewhat vague; it shows a propensity for coastal sites but is not closely tied to them and is found at a variety of wetlands. A small colony was found at Windmill Farm on the Lizard by sweeping a swamp dominated by spike-rush (*Eleocharis palustris*), bulrush (*Schoenoplectus*) and short flooded grass. *Syntormon mikii* (Rare) was found at Gwithian Green where two collectors each found single females. As the distribution map in Drake (2021b) shows, Cornwall is one of the most favoured counties for this coastal species, where it had previously been found at several of the sites that we visited in 2022.

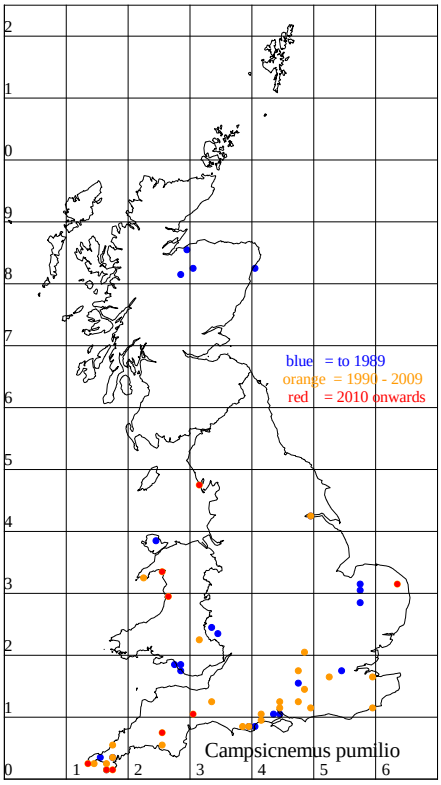
Uncertainty surrounds several *Sciapus* as d'Assis Fonseca's key has become unreliable following Meuffels and Grootaert's (1990) revision of the trickiest species-group in the genus. In this group, we found *S. zonatulus*, including a male which makes the record reliable, at Penhale dunes on the bare wind-blown sand of the foredune (two recorders, several specimens). Confirmed records come from soft coastal cliffs and dry heaths, which fits with the Cornish find but this is the first in the West Country beyond the Dorset heaths. Its status was left as Data Deficient owing to the previous muddle in identification but it is a good candidate for 'Rare'.

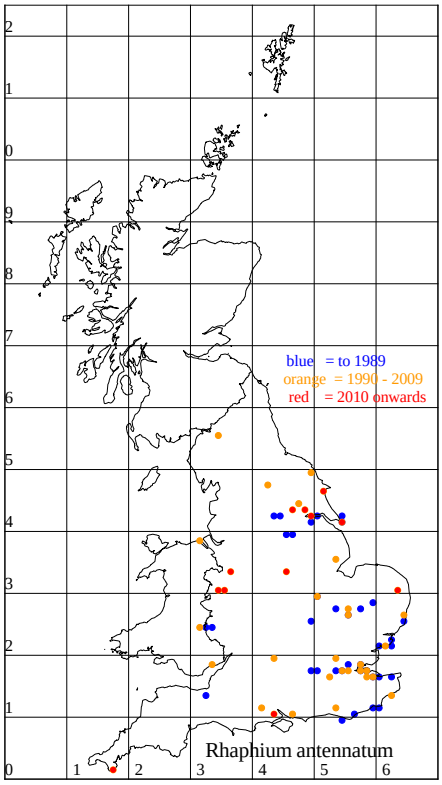
Thrypticus is unusual among dolichopodids in having herbivorous stem-mining larvae, and adults can sometimes be found by sweeping likely foodplants including spike-rush and bulrush (*Schoenoplectus lacustris*). At Bulrush Pool on Penhale dunes, *T. nigricauda* was frequent on the bulrush which suggests that it could be another host-plant for this fly, although spike-rush was very abundant too. I also found another species that I will be describing shortly – so I cannot spill the beans just yet; suffice to say that it looks just like *T. cuneatus* which has distinctive wings shaped like those of the common *Sciapus platypterus*.

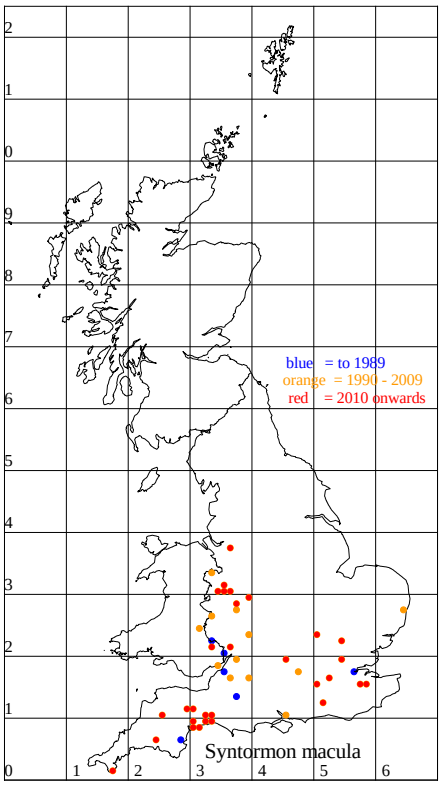
The final species to mention is *Aphrosylus raptor*, one of the two larger species in the genus and whose larvae may feed on barnacles, as do those of *A. celtiber*. It is far less frequently recorded than *A. celtiber* although it is found on the rocky coasts from the Solent to south-west Scotland. Maybe in Cornwall it is moderately common, but we still found it at only one site at Coverack compared to three for *A. celtiber* and four for the tiny *A. ferox*.

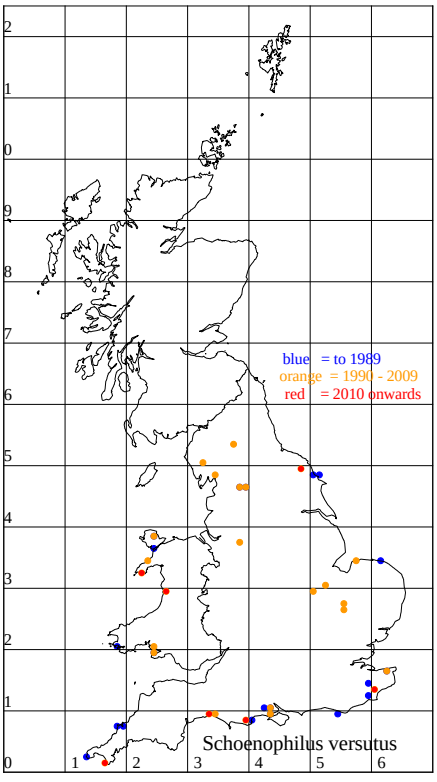
Many thanks to the numerous dipterists who handed their specimens to me during the meeting, making up over half of the records.

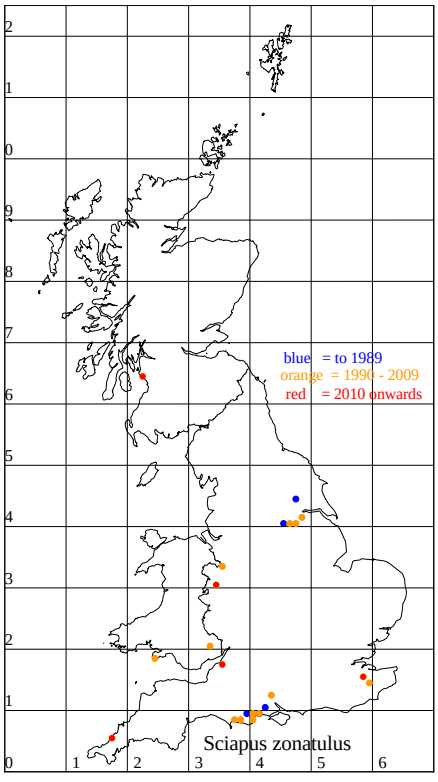












Rhamphomyia marginata (Empididae) on the move

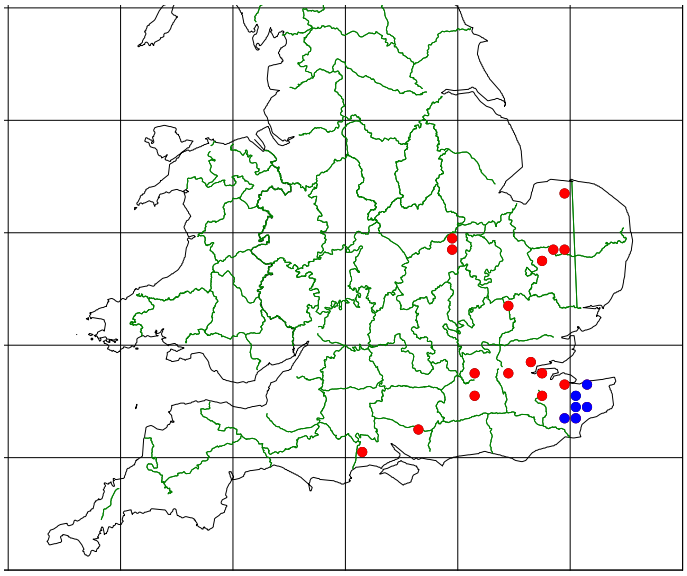
Nigel Jones

The 4-5mm length females of *R. marginata* are amongst the most distinctive of flies in the British fly fauna, having remarkably broadened wings, featuring a distinct dark brown apical band that extends more faintly around the hind margin. It was first discovered in Britain in East Kent in May 1973. The recording scheme database contains 53 records from the period 1973 – 2008, all from East Kent and West Kent. In Newsletter no. 16 (Autumn 2011), Adrian Plant reported that a first record from outside Kent had come from the New Forest in April 2009. No further ex-Kent records were submitted to the scheme until 2013, since when there has been a slow but steady trickle of records submitted from another seven vice counties. It appears that after gaining a very firm foothold in Kent over the period 1973 – 2008, the species has begun to extend its UK range. Since 2017 records have been made every year, often from new vice counties. So far the range, though considerably extended, is restricted to south east England, including the following nine vice counties,

Hampshire, East Kent, West Kent, Surrey, South Essex, Hertfordshire, West Suffolk, West Norfolk and Northamptonshire.

R. marginata is most often found along rides in broadleaf, conifer and mixed woodland between late April and early June, peaking throughout May (recorded UK dates 18 April – 6 June). It will come to light traps, but can be found quite readily by searching woodland rides from late afternoon until 20:30 hours. Laurence Clemons has had particular success finding it at these times, most notably as part of a determined blitz search on 19 May 1995 when he found *R. marginata* males and females at 12 sites in East Kent! Look for aerial swarms. Separate male and female swarms have been found, but "role reversal" is the norm with females establishing swarms and males flying into these to select a female partner. Swarms can be low flying or at up to 6 metres height. The fly has also been found resting on foliage and by sweeping both ground vegetation and tree foliage.

Rhamphomyia marginata (f) Grafton Park Wood, Northamptonshire. Photo: Ron Porch.



Known distribution of *Rhamphomyia marginata* at July 2022. Blue – before 1990, red, 1990 to 2022.

Dolichopodids of a small London wetland

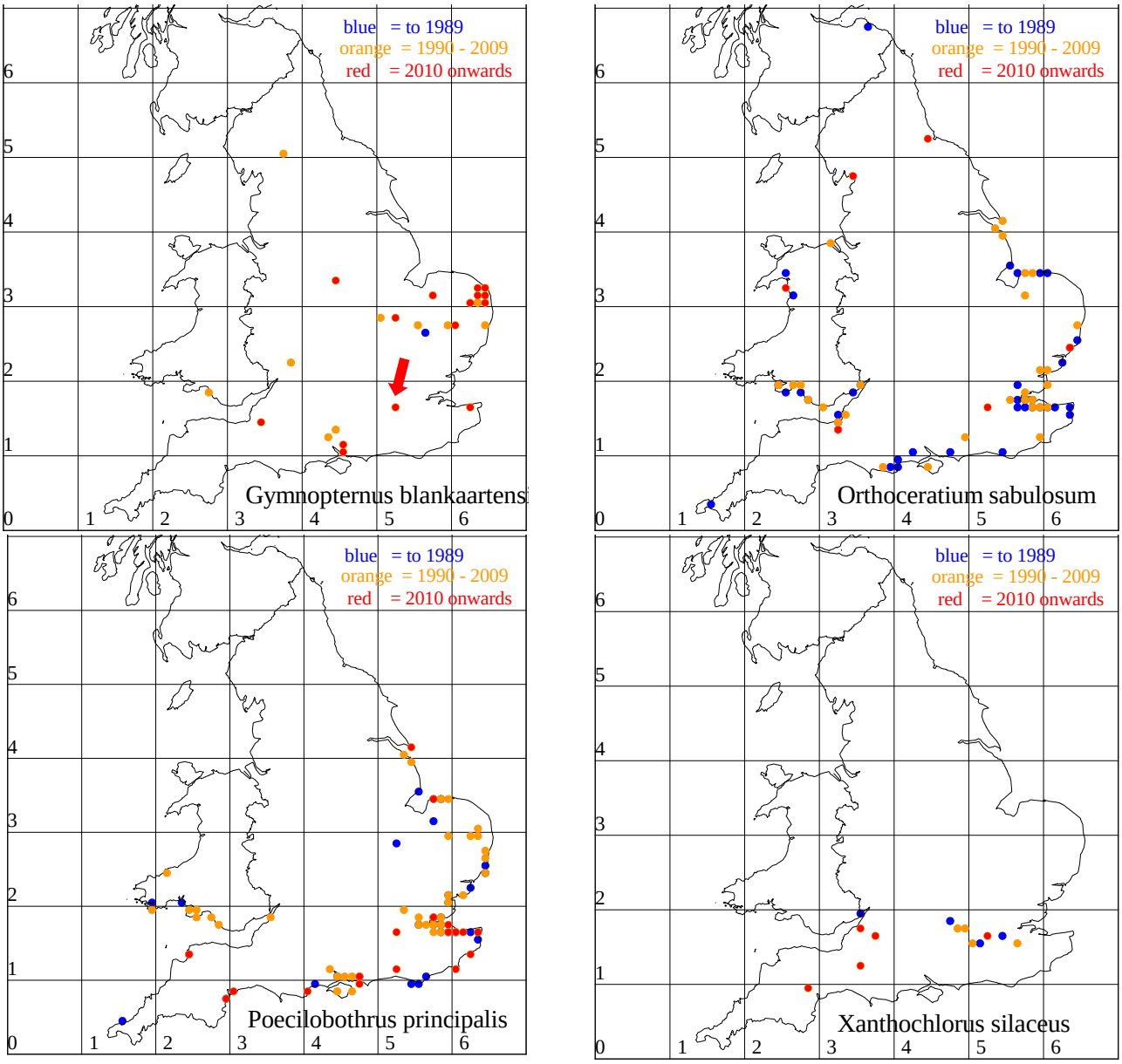
Martin Drake

Roger Morris and Derek Coleman ran a Malaise trap at Spencer Lane Wetlands, a small Local Nature Reserve in Surrey managed by London Wildlife Trust (TQ279667). The reserve developed from an area where watercress was grown by the River Wandle, a base-rich chalk-stream just right for watercress. Now it is a mix of reedbed and willow carr with limited dead wood. Glancing at a road atlas you'd think that it was in the middle of endless housing and industry of Greater London. So not very promising except in a London context. But the dolichopodids that I identified form a remarkable and almost ecologically impossible assemblage for its geographical position.

As might be expected, there was an assemblage of species associated with fens, including lots of *Ethiromyia chalybea* and occasional *Poecilobothrus chrysozygos* and *Teuchophorus spinigerellus*. The most unexpected was *Gymnopternus blankaartensis* which was commonest species by far in the samples, with nearly 700 individuals representing nearly half entire catch. I normally expect this uncommon species in top-notch fens such as those of Norfolk. There were also other species of good swamps, such as plenty of *Hercostomus plagiatus* and singletons of *Campsicnemus picticornis*, *Achalcus flavicollis* and *Hercostomus parvilamellatus*. But then there were four coastal species, or at least species that are very rarely recorded far from the coast, and two of them have a conservation status: *Orthoceratium sabulosum* (1♂) and *Syntormon mikii* (2♂ on different dates). Then a male of *Poecilobothrus principalis*, a species of saltmarshes, and a couple of *Syntormon pseudospicatum* although this last species does occur rarely inland. The nearest stretch of the River Thames lies about 8.5km away across a swathe of old built-up London, but its reinforced banks are hardly suitable habitat for such specialists. The river is tidal here but probably only just brackish. So these saltmarsh or coastal species clearly have not read the text-books or they survive on presumably substandard habitat. As their numbers were very low they could be strays, but one would not apply that argument to explain, say, the single *Teuchophorus spinigerellus* trapped in the middle of a reedbed, its normal habitat. I suspect that some saltmarsh species have wider tolerances than we normally assume.

Other uncommon species were more probable residents. *Syntormon macula* is turning out to be moderately widespread in southern England but males remain elusive (Drake 2021a, b). On three dates between 15 August and 5 September, four males were caught. Roger tells me that there is not much dead wood on the site, just old willows, so these are probably the larval development site for *Systenus* ?*pallipes* (1♀) and *Australachalcus melanotrichus*. It was good to see a population of *Xanthochlorus silaceus* flying for several weeks in the absence of other commoner species in the genus; this record lies in the middle of a local band stretching across the London Clay and just into the flanking Chalk.

Many thanks to Roger Morris for picking out the dolichopodids from a year's worth of Malaise-trap samples and for comments on the site. Apologies to Scotland for chopping off record-free area on the maps.



Distribution of four dolichopodids found at Spencer Lane Wetlands (arrow on *Gymnopternus blankaartensis* map).

Empididae workshop key – index

Nigel Jones

I've recently made an index for the Empididae key produced for the Dipterists Forum workshop in 2019. Members who would like a copy of this should make their request to me at nipajones@talktalk.net

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Contacts

Dolichopodids

Martin Drake – martindrake2@gmail.com

Empididae & Brachystomatidae

Nigel Jones – nipajones@talktalk.net

Hybotids & Atelestidae

Stephen Hewitt – 28 Castle Drive, Penrith, Cumbria CA11 7ED smhewitt@hotmail.co.uk