

Heleomyzid Recording Scheme

Newsletter #1



A warm welcome to the first Newsletter of the Heleomyzid Recording Scheme. As the late Phil Withers lamented, when hearing of the scheme being set up back in 2020...*there are just not enough heleomaniacs*. So, welcome heleomaniacs old and heleomaniacs new, just starting out on the exciting journey into the world of spiny-winged flies within caves and carrion, fungi and ferns, burrows and bird nests!

Scheme resources

The scheme recording page on the Dipterists Forum website holds a number of resources to help with identification...

<https://dipterists.org.uk/heleomyzid-scheme/home>

An illustrated version of the Stubbs and Sivell key is available here...

https://dipterists.org.uk/sites/default/files/scheme-files/Heleomyzidae%20Key%202025_01_21.pdf

An illustrated version of Withers key to *Suillia* here

<https://dipterists.org.uk/sites/default/files/scheme-files/Withers%20illustrated%20key%202025.pdf>

There are also links to the German key of Czerny, the Hungarian key of Papp and the Russian key of Gorodkov, all of which are useful.

Scheme records

The scheme records are held on iRecord, which is the preferred medium for new data, though excel spreadsheets are welcome and can be easily added to iRecord once checked. iNaturalist records are also welcomed, with the caveat that essential data like full recorder name, full location details...etc do

need to be added by the recorder. Shortly after starting up in 2020, there were few records at all across the scheme's two families, Heleomyzidae and Trixoscelididae, but some spreadsheets soon appeared and by late 2021 iRecord held 3440 records; that has now crept up to a respectable 7540 accepted records at December 2025. Coverage is fairly good up to Yorkshire and then predictably falls away to the north (See Fig.1). This is a frustration since many of the scarcer heleomyzids are strongly associated with upland habitats in Scotland. Recent recording in areas like Ben Lawers has shown that apparently rare species like *Scoliocentra flavotestacea* (Zetterstedt, [1838]) are there to be found, so it would be great if a concerted effort could be made to target the families in the highlands and more widely in the north. There is so much we do not yet know about the distribution of many heleomyzids.

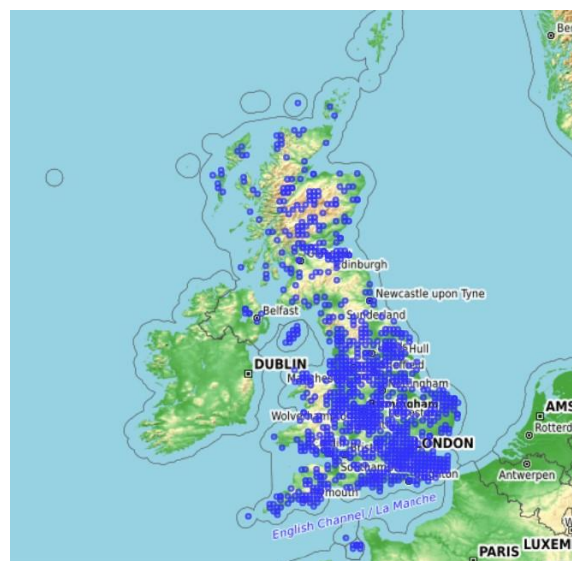


Figure 1. All accepted scheme records December 2025

The records as held now on iRecord for the most part should be reliable, but there could still be problems with some older records, as is very much the case with many records on NBN, which are based on previous versions of keys. Good as those keys were, they relied upon a certain experience of the family to judge features, and understanding of certain identification features was understandably a bit shaky. 'Understandably', since many heleomyzids are genuinely scarce, even within museum collections, and so checking features against multiple specimens was just not possible...nor until very recently were there any reliable photographs available online. Things are improving in that respect and a priority of the scheme since inception has been to compile photographs of UK species, to help with confirming IDs alongside the Stubbs and Sivell key. Currently 46 species are illustrated here

<https://www.flickr.com/photos/52163027@N02/collections/72157663629072770/>

European spiny-winged flies on iNaturalist

A project to record Heleomyzidae and Trixoscelididae across Europe was set up in September 2020 and has now amassed over 9100 records, of 74 species.

<https://www.inaturalist.org/projects/european-heleomyzid-flies-diptera-heleomyzidae>

It's interesting to see the proximity to the UK of species like *Suillia gigantea* (Meigen, 1830) and it gives an insight into the diversity of the different genera as you move north and East within Europe. It's recommended, if only for a browse to enjoy the variety of spiny-wings across the continent.

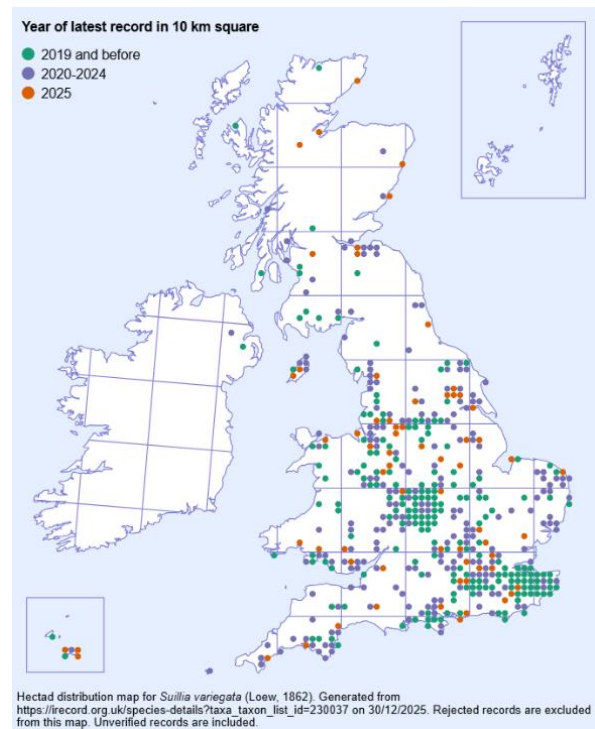


Neoleria propinqua (Collin 1943) Cali Heath 04.ii.2025

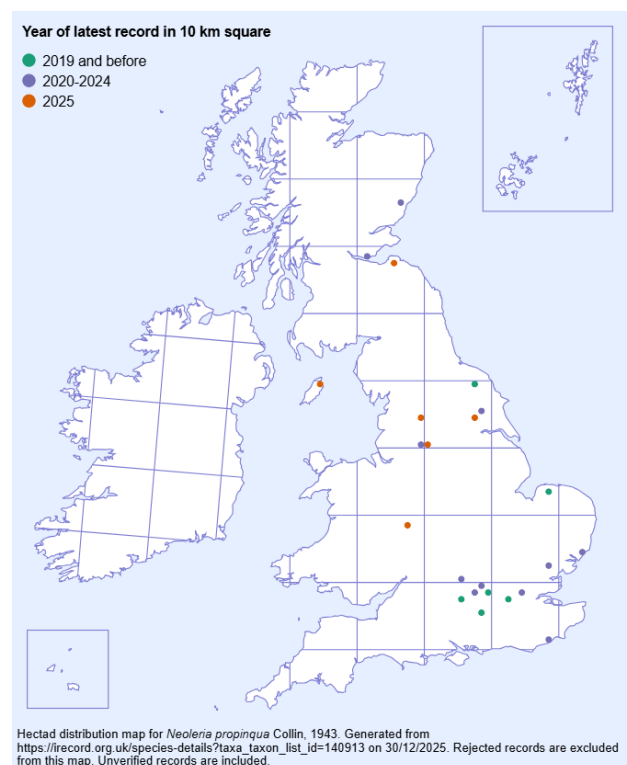
iRecord Species maps

A selection of maps follows, taken from iRecord and readily available there by going to Explore – Species Details/Maps.

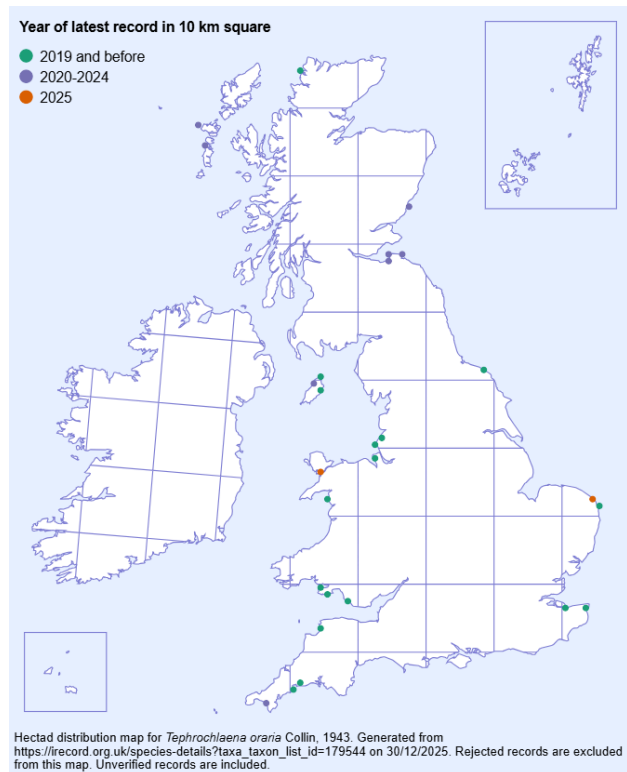
***Suillia variegata* (Loew, 1862)** The most frequently recorded spiny-winged fly, largely southern in distribution.



***Neoleria propinqua* (Collin 1943)** pNearThreatened in the 2016 status review of acalyptrates, but there have been 65 records since 2018, largely because recorders have started to target carrion in winter. Records are mostly from December through to March, from roe, fallow and red deer, badger, fox, hare, mallard, pheasant and more.



Tephrochlaena oraria (Collin, 1943) A coastal species recorded around the UK. The presence of an apparently not uncommon *Tephrochlamys* sp. with pre-sutural dorsocentral bristles, and so keying out to *Tephrochlaena*, had led to a number of inland records, but anything keying to this species away from the coast will almost certainly be in error.



Notable recent records

Schroederella iners (Meigen, 1830)

Perhaps the most surprising record since the scheme started was made by Rob Stephens in the dunes at Holme, Norfolk on 7th November 2023. By his own admission, Rob is no dipterist, but he knew enough to photograph an unusual pinkish fly sitting



Schroederella iners (Rob Stephens)

on a holly leaf. The photo was picked up on Twitter and led to a suspicion of it being *Schroederella iners*, a species only recorded once before in the UK, in Cambridge in 1910. Andrzej Woźnica confirmed the ID from the photos. Colour alone is a good clue to the species, which has the reddish-yellow tone across all parts of its body. No specimen was taken, but the photos show enough detail to be sure of the species...the overall colour, small setae above the vibrissae, a long arista...etc. The habitat was coastal dunes, inland from salt marsh and there was evidence of rabbits nearby, so it could be another species utilising their burrows.



Habitat at Holme Dunes NNR (photo: Rob Stephens)

It is thought on the continent to be a winter-active species with a possible carrion association (Withers 2010)...it would be well worth looking out for it around any carrion and rabbit burrows found along the Norfolk coast between October and March.

Suillia vaginata (Loew, 1862)

Suillia vaginata is a very scarce fly, not initially known to Collin (1943), but included by him in his additions and corrections paper (1951) from specimens from Aviemore in November 1943 and 1948, Kincaig in November 1947. Withers (1987) noted that following those of Collin, very few additional records had been made and there was no accessible material in the British Museum (Natural History). So, it is extremely pleasing to report that three adults have recently been recorded from Scotland. A male was swept by Rob Wolton on 13 October 2019 in hyper-oceanic temperate rain forest in the North-West Highlands, within a mixture of willow carr, hazel stands and birch woodland beside Loch Nedd, on the Duart peninsula (NC134329). Then, Steve Crellin recorded two males in 2025: One at Glen Strathfarrar while sweeping in an area of marshy ground in a hollow, in an area where there were plenty of birch and

pinces; the second in Glen Affric, in a small area of willow carr between a road embankment and a shingle bank beside a river.



Suillia vaginata (Loew, 1862) (leg. R.Wolton 13.x.2019)

***Morpholeria dudai* (Czerny, 1924)**

Withers 2010 mentions it being found in Sweden in 40-50 year-old pine forest with bilberry *Vaccinium myrtillus* understorey, but generally this is a rare fly across Europe whose biology is not properly understood. Peter Chandler has two older records, but the only recent record is a male swept by Rob Wolton 27th June 2024, during the DF summer field meeting, from Grubbins Wood, Arnside, just within Cumbria (SD446780). The site is an ancient wood remarkable for its large stands of yew trees, their dense shade resulting in very little undergrowth or ground flora apart from occasional patches of ferns; there are also some stands of ash beneath which there is a fuller ground flora. It is similar to the common *Morpholeria ruficornis* (Meigen, 1830), but slightly smaller, with only a single bristle dorsally on the hind femora.

A few species of interest

Neoleria prominens (Becker, 1897) is a species associated with seabird colonies on offshore islands in the far north, but potentially could be lurking unfound around remote mainland seabird colonies as well. Any inland records will be confusion with common *Neoleria* spp. No recent records.

***Suillia oxyphora* (Mik, 1900)** has 7 records on NBN, but only the two from Lochinver in 1911 are likely to be correct. It is a scarce (declining?) fly across Europe, probably restricted to northern or upland woodland in the UK. A plain-winged species, the scutellum has a strong tubercle apically, more

extreme than in the similar and common *Suillia fuscicornis* (Zetterstedt, 1847).

***Tephrochlamys laeta* (Meigen, 1830)**

is a very small member of its genus, with only 4 acrostichal rows and the first post-sutural dorsocentral very small. Exactly what the status of this is in the UK is hard to say, as confusion with small, atypical examples of *Tephrochlamys rufiventris* (Meigen, 1830) perhaps clouds the issue. There are no known recent records.

Oecothea praecox Loew, 1862 was confused by Collin with the more common *Oecothea fenestralis* (Fallén, 1820), which is associated with burrows of rabbits across the UK. Whether *praecox* exists here in association with caves, as on the continent, is hard to say...there are certainly no recent records. There are 23 records on NBN still, most (all?) of which will be misidentifications, and Withers (pers.comm. 2019) was of the opinion that *praecox* and *fenestralis* may in fact be the same species...the smaller eye of *praecox* possibly an adaptation to a subterranean existence. Košel and Woźnica 2019 discuss the presence of *praecox* in European caves.

***Heleomyza captiosa* (Gorodkov, 1962)**

remains a tricky one, but on the continent it is considered an obligate species of caves, absent from mountainous areas (Woźnica 2006). If it even exists in the UK, it is likely to be similar here. The only *Heleomyza* seen recently from UK caves have been *serrata*, but it would be interesting to see more cave specimens of the genus in case *captiosa* is lurking somewhere.

Some recent photos of spiny-winged flies



Oecothea fenestralis (Fallén, 1820) at the entrance to a rabbit burrow at Cali Heath YWT reserve VC61 03.xi.2023. The long aristae and small eye typical of species leading a largely subterranean existence.



Gymnomus caesius (Meigen, 1830) Allerthorpe
Common VC61 31.x.2025. Males of this species will seek out any elevated position (up to about 30cm?) from which to hold territory...here sitting atop a discarded pink child's doll within a pine plantation woodland.



Neoleria ruficauda (Zetterstedt, 1847) Allerthorpe
Common VC61 23.iii.2019. A male waiting for females to arrive at a fallow deer corpse, sitting atop the deer's swollen eyeball.



Suillia atricornis (Meigen, 1830) Cali Heath YWT reserve
VC61 03.x.2024. The only member of its genus with black antennae and with a humeral bristle.



Trixoscelis obscurella (Fallén, 1823) Outside a rabbit burrow on sand at Cali Heath YWT reserve VC61
16.viii.2023.

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