

# Sciomyzidae Recording Scheme Newsletter 8

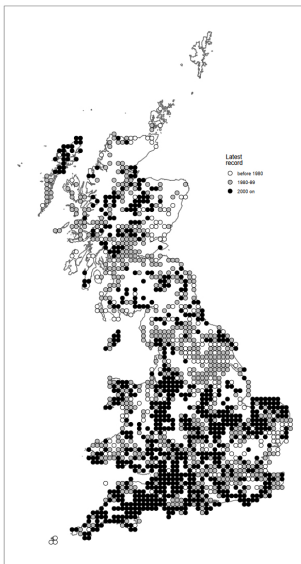
Autumn 2025

## Ian McLean

This issue gives a brief update on the Sciomyzidae Recording Scheme, suggests how adult Sciomyzidae can be recorded in winter and includes extracts from an assessment of the distribution, status and conservation of *Salicella fasciata* (Meigen, 1830), the only member of the family in Britain currently listed as a priority threatened species for conservation action.

## Update on the Sciomyzidae Recording Scheme

Since Newsletter 7 in Autumn 2021, Matt Harrow has had to relinquish his role verifying Sciomyzidae for iRecord due to other priority work and we thank him now for all his efforts in verifying many records for the scheme. This task will now be taken on by Ian McLean, who will tackle the current backlog of unverified records this autumn/winter. As of August 2025 there are 8,430 records of Sciomyzidae on iRecord, of which 6,455 have been verified so far (Martin Harvey, BRC *pers. comm.*). The main dataset held by Stuart Ball currently contains 31,045 records from 1,612 hectads.



Current coverage map for Sciomyzidae Recording Scheme

## Submitting Sciomyzidae records

Records can be sent on a spreadsheet (Microsoft Excel or the free Google Sheets) to [ianfgmclean@gmail.com](mailto:ianfgmclean@gmail.com). One record per spreadsheet row with binomial species name in one cell, locality name, OS grid reference, Vice-county, date, collector/observer, determiner, number seen (preferably with males and females listed separately) and if applicable notes (to include

habitat association(s), identification issues, identification source used etc.).

Alternatively if you use iRecord that is fine; paper records or queries about photographs or an individual record should be sent to: [ianfgmclean@gmail.com](mailto:ianfgmclean@gmail.com).

## Recording Sciomyzidae in winter

In common with many flies Sciomyzidae adults are under-recorded in winter. Most dipterists venture out with their nets and pooters infrequently in winter due to adverse weather conditions and the general scarcity of Diptera. Nevertheless, flies include many species that overwinter as adults and so are available to study when many other insects are largely hidden away in their early stages. Several species of Sciomyzidae are known to occur in winter and it is possible that others may overwinter as adults. There are great opportunities to increase our knowledge of the phenology and distribution of Sciomyzidae, along with other flies that are overlooked in the cold months of the year.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
17	13	87	342	2313	8860	9962	3100	2221	954	20	14

Monthly totals of records for all species in the Sciomyzidae RS database

Winter months are defined here as January, February and March, where cold conditions dominate and only a few days will be fine, dry and mild enough to be worth fieldwork. Use of a net and pooter will need to concentrate on those areas with at least the tips of vegetation dry enough to sweep and allow flies to be caught without getting wet. Sparse Rushes (*Juncus*), Reeds (*Phragmites*) and Bracken (*Pteridium*) are all worthwhile, concentrating upon their fringes without hitting deep into dense and damp areas.

While tussocking, that is pooting into clumps of grasses (sometimes with other plants mixed in) and into small mammal runs, can be productive for many small acalyptrates such as Sphaeroceridae and Chloropidae, but so far I have not found any Sciomyzidae with this technique. However, there may be some Sciomyzidae species that might be found this way in winter and these sheltered places can be productive for finding other flies and are generally much less cold so that even with a light frost above adult Diptera can still be active.

A third option is trapping, so Malaise traps, water traps and bait traps will continue to catch flies through the cold months of the year. Experience has shown that water traps are more attractive to Tetanocerini (notably *Tetanocera*) than to Sciomyzini (including *Pherbellia*), as shown by results from the Nature Conservancy Council wetland surveys in Wales and East Anglia. Nevertheless, worthwhile results for Sciomyzidae are possible from both Malaise and water traps in suitable locations.

Sciomyzidae that are known to occur in winter in Britain include: *Pherbellia albocostata*, *P. argyra*, *P. brunnipes*, *P. dubia*, *P. schoenherri*, *P. ventralis*, *Elgiva cucularia*, *E. sollicita*, *Hydromyia dorsalis*, *Pherbina coryleti*, *Psacadina*

spp., *Tetanocera hyalipennis* and *Trypetoptera punctulata*. These are mostly quite common species, but other scarcer species could also occur.

If you have not tried collecting in winter previously, why not give it a go next season? While you may not accumulate masses of material (that might be a bonus in itself!) you may be surprised by some of the species that turn up, possibly including records of flies you have never seen before and that you can add to your site lists.

### ***Salticella fasciata* a review by Alan Stubbs**

Alan Stubbs has been conducting a detailed examination of the available records of *Salticella fasciata* Meigen, together with a literature review of the life history and biology. There is only space in this newsletter to include brief extracts from what Alan has compiled, concentrating here on British observations. The principal published paper on *S. fasciata* in Britain is Knutson *et al.* (1970). I am grateful to Alan for kindly making a preliminary version of his investigation available to abstract for this newsletter.



*Salticella fasciata* - Darwyn Sumner

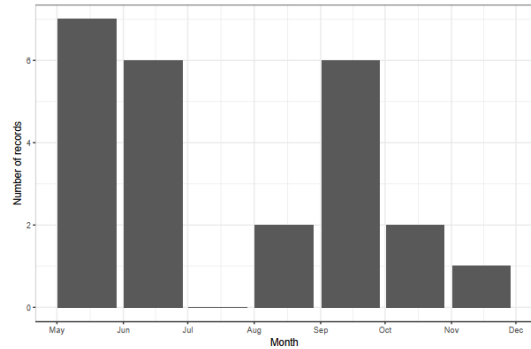
Sciomyzidae recorders will be interested in his findings concerning the only member of the family currently accorded a conservation status. The principal flight period of *S. fasciata* is from now into the autumn, so if you have coastal sand dunes within reach please take the opportunity to see if you can find this species, or check for its presence if it has been recorded previously.

### **Brief Extracts from a Review of *Salticella fasciata* in Britain and Ireland by Alan Stubbs**

#### **Life history**

There are some differences between accounts in the literature, but Knutson *et al.* (1970) using livestock from Tenby, Pembrokeshire in laboratory conditions, found that eggs are laid on the shells of living snails (or sometimes inside the mouth of dead snails), the larval duration is 13-28 days, later instars feed on dead snails (1-3 consumed). Most larvae leave the host shell to pupariate, this stage lasts 21-33 days. Adults

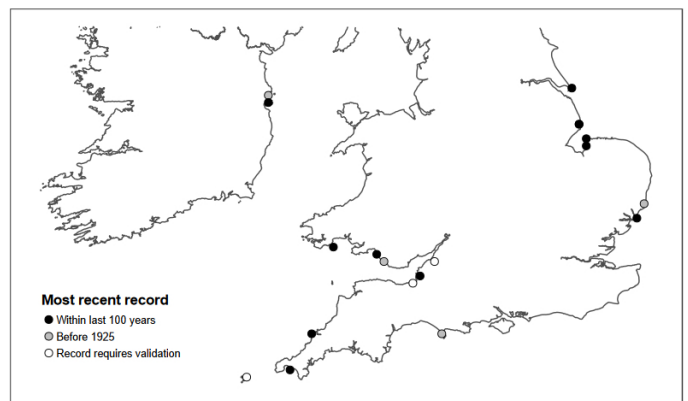
can be long-lived, one female reached 167 days and others over a hundred days. Knutson *et al.* (1970) collected 18 species of terrestrial snail from South Wales but only found larvae of *S. fasciata* in *Ceruella virgata* and *Cepaea hortensis*. Blair (1933) bred the fly from *Theba pisana*. Adults have been recorded in Britain from May to October, peaking in May-June and September-October, but note the total number of records is small.



Provisional monthly records totals for *S. fasciata* in Britain and Ireland

### **East England Regional Summary**

Localities are listed from North to South along the North Sea coast. There is a long history of *S. fasciata* on Spurn peninsular, South-east Yorkshire (VC61), with by far the most records from any site, from 3 August 1919 (Cheetham) to 4 June 2001 (Crossley). From South Lincolnshire (VC53) it is recorded from North of Skegness in 1993 (ISR); Gibraltar Point NNR three records from the South end of the reserve, 1952 (White), 7 September 1987 (Stubbs), 8 October 2010 (Whiteley). From West Norfolk (VC28) Snettisham 20 September 1986; Holme Dunes Norfolk Wildlife Trust, near West end of reserve, on six dates from 1986 to 2019. From East Suffolk (VC25) Aldeburgh a male 20 May 1910 and a female 1 June 1910 (Verrall-Collin Collection, OUM); North of Felixstowe, three males and seven females 10 May 2024 (Perry).



Hectad distribution of *S. fasciata* in Britain and Ireland

## South-west England Regional Summary

Localities are listed from East to West along the English Channel and then back up to the Bristol Channel. Dorset (VC9) Portland (exact location and habitat not known), one 24 November 1869 (C.W. Dale). West Cornwall (VC1) Looe Bar 5 May 2005 (Falk) and 29 September 2020 (Harrow); Isles of Scilly a distribution “dot” in Knutson et al. (1970) record not yet traced; Constantine Bay, Padstow 1904 (Lamb) and Harlyn Bay, Padstow 1904 (Lamb). North Somerset (VC6) Berrow Dunes a distribution “dot” in Knutson et al. (1970) record not yet traced; Weston-super-Mare golf links 1904 (Lamb). West Gloucestershire (VC34) Coombe Dingle 19 June 1947 (Fonseca) record requires confirmation.



Looe Bar in 2005 - Steven Falk

## Ireland Summary

Haliday (1833) found it on sand dunes at Portmarnock, north of Dublin, voucher specimens are in his collection at Dublin Museum, undated. Dr Martin Speight recorded one on 6 October 1979 from Bull Island, Dublin (Chandler, 1972), now in Peter Chandler’s collection donated by Martin Speight, who confirmed that this was the only time he has found the species in Ireland; details of the exact location and habitat were not recorded.

## References

- Blair, K.G. 1933. *Lucina fasciata* Mg. bred from *Helix pisana*. *Entomologist's Monthly Magazine* **69**: 102.
- Knutson, L.V., Stephenson, J.W. and Berg, C.O. 1970. Biosystematic studies of *Salpicella fasciata* (Meigen), a snail-killing fly (Diptera: Sciomyzidae). *Transactions of the Royal Entomological Society of London* **122**: 81-100.
- Perry, I. 2025. *Salpicella fasciata*. *Bulletin of the Dipterists Forum* **99**: 18.

## Future recording of *Salpicella fasciata*

By Ian McLean

General points: it can be hard to find your location accurately in large dune systems, so using a geolocation app for a smartphone will achieve this and enable you to share sampling positions accurately with others. A compass app will give an accurate direction for a transect. You can use a fixed point, such as a concrete block or groyne, as the start and/or finish point for a transect.

There is ample scope for dipterists to improve our knowledge of *S. fasciata* in Britain and Ireland. Due to its restricted habitat here, it is quite likely that it has been overlooked from sand dunes where it occurs. It has been long reported that adults can occur in quite small areas of apparently suitable fore-dune habitat, so it is important to try to cover a large area when sweeping for *S. fasciata*. The distinctive wing markings and spotted femora (see photo of adult above) are features that should be observable in the field, more easily with a hand lens. Needless to say, restraint should be exercised when taking voucher material, 1-2 specimens will be sufficient. When you have experience of seeing the species and have confirmed identifications, you can take a photo in a glass tube for the record and then release your capture(s).

As well as prospecting for new sites, it would be very worthwhile for recorders with access to known locations for this species to monitor populations, preferably using standardised samples (e.g. the same number of sweeps over the area occupied). Regular monthly visits could give a better idea of adult phenology, including potentially whether they occur outside the known flight period. In winter it is possible that adults might shelter in Marram (*Ammophila arenaria*) tussocks behind fore-dunes, if they can survive the cold months in this way, but it will be very hard to find them. Perry (2025) found teneral females in May, suggesting that the spring population may not have over-wintered.

Bear in mind that the area occupied by *S. fasciata* may change over time so that it will be best to sample a wider area than the known colony location if this is possible. In addition, observing the behaviour of *S. fasciata* in the field will be worthwhile when you have located a colony, but this may be very difficult if adult flies are in low numbers and they may be hard to see. If there are aggregations of snails, which can occur in hot, dry periods, then it is possible that adult *S. fasciata* may be found in the vicinity. Observing oviposition in the field and photographing this behaviour would be of great interest (include measuring the diameter of the snail on which an egg is laid), but this will be very difficult to achieve in practice.

For *S. fasciata* it will also be helpful to receive reports of localities searched without success, particularly if the number of sweeps and the timing of visits is recorded. We look forward to receiving reports of new localities for *S. fasciata*, as well as for sites where it could not be found