

Flat-footed Fly Recording Scheme

Newsletter 4 Spring 2021

Introduction

Previous newsletters have reported low numbers of platypezid records in all years from 2016 to 2019, while at the same time including substantial extensions to the ranges of several species and adding new data on a number of rare species. Flat-footed flies have also been noted as sparsely recorded on Forum field meetings in these years.

In 2020, due to covid, there were no Forum field meetings, and field activity by many recorders was constrained and often limited to their own immediate areas. It was not therefore anticipated that many records of flat-footed flies would be achieved in the year. However, a steady stream of records has been forwarded to me by a stalwart band of active fieldworkers, providing some unexpectedly interesting results. While more records no doubt remain to be reported, it is considered worthwhile to produce this interim report of the situation as known at the end of 2020.

Newsletter 3 (Chandler 2020) reported the first records of this family from the Isle of Man, *Lindneromyia dorsalis* and *Paraplatypeza atra*. Steve Crellin (2020) then reported that, in September 2019, he had found two more species there, *Platypeza hirticeps* and *Callomyia dives*. This was also the first record of *C. dives* in the British Isles since 2014.

Results of recording in 2020

Platypezid data for 2020 have been provided by Peter Andrews, Phil Brighton, John Coldwell, Steve Crellin, Andrew Cunningham, Martin Drake, Neil Halligan, Andrew Halstead, Jane Hewitt, Tony Irwin, Nigel Jones, Gary Lowe, Ryan Mitchell, Ivan Perry, Sam Rees, Alistair Shuttleworth, Donald Smith, Steve Tomlinson, Genevieve Tompkins, Judy Webb, Jo Weightman and Rob Wolton. I thank everyone for the interest they have shown.

Altogether, I have so far received 260 records of Platypezidae, recorded on separate dates in 2020 at 50 sites in 35 hectads, and 23 of *Opetia* in five hectads. There are records of 24 species of Platypezidae from 2020, including *Microsania vrydaghi* and *Platypezina connexa* not recorded in other recent years. More recorders are still needed to gain a clearer picture of the status and distribution of flat-footed flies, and much is still to be learned about their biology, as shown by the following observation.



Dead insects as a food source

Important new information obtained in 2020 has already been reported in a note by Peter Andrews (2021). This concerns observations on the activity of females of *Agathomyia cinerea*, photographed while feeding on dead insects. Members of this family are well-known to feed, while running about on leaf surfaces in their characteristic rapid jerky fashion, but it had been thought that their food was restricted to surface deposits such as honeydew, pollen grains and microbes.

Then Jane Hewitt made a similar observation on 6 November, when a female of *Agathomyia falleni* was seen to be feeding on a shrivelled up very small insect that was not identifiable. She noticed that it was very keen on feeding from this insect and that it kept returning to it. It is possible that feeding on dead insects is a regular occurrence in this family although, since it has not apparently been observed before, it could perhaps be considered opportunistic.



Agathomyia falleni female with dead insect (photo Jane Hewitt)

Another species new to the Isle of Man

Steve Crellin swept a female of *Protophythia modesta* from a patch of unidentified toadstools growing on the woodland floor close to the main duck pond in Bishopscourt Glen (SC332923) on 14 October 2020. This brings the species list of Platypezidae for the island to five.

New records of *Platypezina connexa*

This species is presumably a recent arrival in this country, having before 2020 been found only once, on 17 October 2015, when Andrew Halstead swept two females in Burley New Inclosure in the New Forest, Hampshire, a mixed deciduous and conifer woodland with open rides. Since then it was unknown whether it had become established here. Halstead (2016) noted that it may have extended its range in Europe recently, with the first record from the Netherlands only in 1994, and it had also been first found in Denmark in 2015. Reemer & de Jong (2016) included a map showing that it is now widespread across central regions of the Netherlands. Its larval biology is unrecorded, but four males had been found in an emergence trap over a moss-covered soft rotten trunk of Norway spruce, *Picea abies*, in Finland (Ståhls and Kahanpää 2006).

On 17 October 2020, Ryan Mitchell swept a female of *P. connexa* in Besselsleigh Wood (SP450014), south-west of Oxford. This is an ancient woodland, but including a conifer plantation, and close to where the specimen was found are conifers amongst oak, beech and sycamore. Ground vegetation is limited, with some ferns and bracken growing sporadically throughout the woodland.



***Platypezina connexa* female from Besselsleigh Wood (photo Ryan Mitchell)**

Remarkably, on the same day, Ivan Perry caught a female of *P. connexa* in mixed woodland, at Brandon Country Park (TL788850), Suffolk, in mixed beech and conifer woodland, with the conifers predominantly spruce, and without much ground vegetation. He returned to the site on 16 October and caught another female. On both occasions they were swept close to the ground and were not recognised as platypezids in the field. Ivan has carried out extensive fieldwork at this site since 2004 and, although it is a few years since he had made an autumn visit, he considers that it must be a recent arrival there.

This species is evidently now widespread across south and east England, so should be looked out for among autumnal catches. The male, illustrated in Halstead (2016), but yet to be recorded in Britain, is mainly deep black in colour with brownish wings, strongly contrasting with the holoptic red eyes.

Flat-footed Flies Recording Scheme Newsletter 4

A first for Melksham

My only Diptera record for 2020 was a male of *Lindneromyia dorsalis*, which was observed on 13 September, running about with great footwork on the relatively small leaves of a *Cotoneaster* bush in my garden (ST8958462394), about a metre from the ground. Having tubed it, it was necessary to refrigerate it for a few minutes before it was calm enough to be examined under the microscope, enabling its identity to be confirmed. This was the most likely species in the absence of woodland, although its usual hosts *Agaricus* species have not been noticed in the vicinity. Having returned it to room temperature, it was released where it was found, and it flew off rapidly to an uncertain future. This was not only the first platypezid seen in my garden, but only the fourth species of the family to be recorded in the hectad ST86. None have been seen since.

A better garden for flat-footed flies

From late August through to October, Jane Hewitt was recording almost daily sightings of platypezids in her garden (SK027870) at Birch Vale, Derbyshire. Altogether she found eleven species: *Agathomyia antennata*, *A. cinerea*, *A. falleni*, *Callomyia amoena*, *Paraplatypeza atra*, *P. bicincta*, *Platypeza consobrina*, *P. fasciata*, *Polyporivora ornata* (the species serving as the logo of this newsletter), *P. picta* and *Protoclythia modesta*.

Her garden backs onto a disused railway, lined with trees (sycamore, ash and birch, with some oak), where the local council makes an effort to leave felled and fallen trees as dead wood. Within the garden, one particular spot favoured by the flies is a shady corner under two very large sycamore trees, where they are found feeding on dogwood or damson leaves, sometimes hazel or apple leaves, only occasionally the sycamore leaves. A male of *Paraplatypeza bicincta* was found here on a damson leaf on 6 October. The profile of the genitalia, visible in her photograph, confirms its identity.



***Paraplatypeza bicincta* male from Birch Vale (photo Jane Hewitt)**

Jane also regularly visited a nearby wet woodland site at Hayfield (SK032870) on most days. There *Agathomyia falleni* was easy to find, nearly always on the same hazel bush. On 7 October a male of *Platypeza hirticeps* was found on sycamore at the edge of the disused railway. Eight species were recorded there, including two others not seen in her garden, *Agathomyia unicolor* and *Lindneromyia dorsalis*. She observed that feeding females, in particular, are less easily disturbed than other flies; it was possible to gently pull down hazel branches from above head height and find them “still happily feeding away”.

Other hot spots

Ryan Mitchell concentrated on recording at Besselsleigh Wood near Oxford and, in addition to *Platypezina connexa* discussed above, he recorded a further 12 species, notably *Agathomyia woodella* (♂ 7 October, ♀ 11 October) and *Paraplatypeza bicincta* (♀ 11 October). Also found were *Agathomyia antennata*, *A. falleni*, *A. unicolor*, *Callomyia amoena*, *Paraplatypeza atra*, *Platypeza consobrina*, *Polyporivora ornata*, *P. picta*, *Protoclythia modesta* and *P. rufa*. He obtained most by sweeping sycamore randomly above head height. On 20 September he recorded one more species, a female of *Lindneromyia dorsalis* on ivy in a field adjacent to Cumnor Cricket Club (SP4593603753).

Peter Andrews regularly photographed Platypezidae in the Savernake Forest area of Wiltshire, recording 13 species. The areas visited were Hen’s Wood (SU240690) and East Croft Coppice (SU2368). His observations on *Agathomyia cinerea* have already been published (Andrews 2021). Other significant records were *A. boreella* (♀ 29 September), *A. woodella* (both sexes seen, six dates from 26 September to 15 October) and *Paraplatypeza bicincta* (3♀ 15 October). Other species seen were *A. antennata*, *A. falleni*, *A. unicolor*, *Callomyia amoena*, *Paraplatypeza atra*, *Polyporivora ornata*, *P. picta*, *Protoclythia modesta* and *P. rufa*.



Agathomyia boreella female at East Croft Coppice in Savernake Forest (photo Peter Andrews)

Ivan Perry mainly restricted his fieldwork away from home to Brandon Country Park, Suffolk, where platypezids were recorded on five visits in October and November. In addition to his finds of *Platypezina connexa* discussed above, he recorded seven other species: *Agathomyia cinerea*, *A. falleni*, *A. unicolor*, *A. woodella*, *Paraplatypeza bicincta*, *Platypeza consobrina* and *Protoclythia modesta*. These findings increased to 15 the platypezid species known from this site, as a result of Ivan’s previous recording there.

Smoke flies in 2020

Martin Drake found *Microsania pectipennis* on 20 October at Bewley Down (subsite Hell Bottom) (ST285064), Devon (but in V.C. 9), in the smoky fire of rhododendrons, of which many acres had been felled by a local landowner “in his excellent efforts to restore mire and wet heath” to their parish. He caught seven males, all of this species.

Ivan Perry also recorded a male of *M. pectipennis* at a bonfire in his garden at Lode (TL531626), Cambridgeshire on 28 September. He had previously caught a male of *M. vrydaghi* at Hopton, Suffolk on 30 July, also in bonfire smoke. There are only three previous British records of *M. vrydaghi*, in 2002, 2004 and 2006. On the last occasion, when I found it at Bath University Campus, it was together with a much larger number of *M. pectipennis*. It must always be recognised that two or more species of *Microsania* may be found at the same bonfire.

I can only repeat what has been said in previous newsletters that there are five British species of *Microsania*, all found at smoke but rarely seen otherwise, and the mystery of their larval biology remains to be unravelled.

Other 2020 records

Phil Brighton found *Polyporivora ornata* in his garden at Croft (SJ637932), Warrington on 19 April and *Paraplatypeza atra* at Houghton Green Pool (SJ624925) on 29 August. He recorded *Opetia nigra* regularly at the latter site from March to August.

John Coldwell recorded *Agathomyia antennata* on 8 September and *Paraplatypeza atra* on 26 June, in the Dodworth (SE3105) area of South Yorkshire.

Andrew Cunningham found four species in his garden (SS965135) at Cowleymoor, Tiverton: *Protoclythia rufa*, *Platypeza consobrina*, *P. fasciata* and *Polyporivora ornata*; the first two were females at honey fungus *Armillaria*. And, in pine woodland at Knightshayes (SS962155), Devon on 16 October he found two females of *Agathomyia cinerea* and a male and two females of *Paraplatypeza bicincta*, its second Devon record; on earlier visits to this site in October he also found *P. rufa*, *P. fasciata* and *Paraplatypeza atra*.

Neil Halligan provided the only Irish record of the year when he photographed a female of *Polyporivora ornata* in Grove Wood (S221336) near Fethard, Co Tipperary on 19 September.

Andrew Halstead recorded at eight sites in Surrey, finding eight species: *Agathomyia falleni*, *A. unicolor*, *Callomyia amoena*, *C. speciosa* (♂ at Barley Mow Wood, SU965593, on 30 July), *Platypeza consobrina*, *Polyporivora ornata*, *Protoclythia modesta* and *P. rufa*.

Nigel Jones found two females of *Bolopus furcatus* under a bracket of *Cerrioporus* (formerly *Polyporus*) *squamosus*, at Cheney Longville (SO423853), Shropshire on 9 June, the only 2020 *Bolopus* record so far. He also recorded four other species in Shropshire, including two in his Shrewsbury garden (SJ491113): *Paraplatypeza atra*, a female on ash foliage on 4 June, and *Platypeza consobrina*, a female running about on a tile on a dustbin lid, on 14 October.

Gary Lowe caught a male of *Protoclythia rufa* in a moth trap at Boyton (TM380473), Suffolk on 15 September.

Ivan Perry found two species in his garden at Lode (TL531626), Cambridgeshire: a female of *Polyporivora picta* at its fungus host *Trametes versicolor* on a birch log on 18 September, and two females of *Platypeza consobrina* on *Bergenia* leaves on 18 October.

Sam Rees photographed a male of *Callomyia speciosa* in a garden at Shrewsbury (SJ4849413106) on 11 August, and a male of *Agathomyia wankowiczii* on foliage at Shrewsbury (SJ4892611875). This is apparently only the fourth occasion that an adult has been observed in the field in England, most records being of galls including a few rearings from them.



Agathomyia wankowiczii male at Shrewsbury (photo Sam Rees)

Alistair Shuttleworth found a female of *Polyporivora picta* at Dalgety Bay (NT1484), Fife on 10 October.

Donald Smith found a female of *Agathomyia antennata* in mixed woodland at Newbyth (NT586795), East Lothian on 31 May.

Steve Tomlinson recorded six species in the Liverpool area, all confirmed from photographs. He found a female of *Agathomyia antennata* in a Liverpool garden (SJ408863) on 10 September, and a female of *Lindneromyia dorsalis* on *Agaricus campestris* near Allerton Golf Course (SJ412863) on 19 September. At the Festival gardens (SJ367865), Otterspool on 18 October males of *Protoclythia modesta* and

P. rufa were seen on hazel leaves. At Otterspool Park (SJ379862) on 22 October two females of *Agathomyia falleni* were on a rotten tree stump with fungi, probably its host *Bjerkandera adusta*, and he swept a female of *Platypeza consobrina* from sycamore.

Genevieve Tompkins provided a photograph of a female of *Callomyia speciosa* from Abernethy Forest (NH993196) in the Scottish Highlands on 9 June. Together with the records mentioned above, there have been only three sightings of this species in 2020.

Will Watson found galls of *Agathomyia wankowiczii* on *Ganoderma applanatum* at Berrington Hall (SO507630), Herefordshire on 29 December (Jo Weightman *pers. comm.*)

Judy Webb reared *Seri obscuripennis* from its regular host *Picipes badius* (= *Polyporus durus*), the bay polypore, collected on 8 October at Dunstan Park (SP541080), Oxford. The fungus was on a rotting fallen trunk in the centre of a small fen restoration area; it was kept indoors in a rearing pot and, although most of the fungus went mouldy, four adults emerged from 28 to 30 October.

Susan Weeks photographed a female of *Polyporivora picta* at Old Catton (TG230123), Norwich on 25 October (Tony Irwin *pers. comm.*).

Rob Wolton recorded *Protoclythia modesta* and *Platypeza consobrina* at Killerton Park (SS972006), Devon on 10 October, and *Polyporivora picta* on a blackcurrant leaf at Locks Park Farm (SS518022) on 18 October. He also recorded *Opetia nigra* at both sites and at Ausewell Wood.

Acknowledgements

All recorders are thanked for the data and information about their finds, and Peter Andrews, Jane Hewitt, Ryan Mitchell and Sam Rees for the use of their photographs.

References

- Andrews, P. 2021. *Agathomyia cinerea* (Zetterstedt) (Diptera, Platypezidae) feeding on dead insects. *Dipterists Digest (Second Series)* **28**: 88.
- Chandler, P.J. 2020. Flat-footed Fly Recording Scheme Newsletter 3 Spring 2020. 4 pp. *Bulletin of the Dipterists Forum* No. **89**.
- Crellin, S. 2020. *Platypeza hirticeps* Verrall and *Callomyia dives* Zetterstedt (Diptera, Platypezidae) new to the Isle of Man (V.C. 71). *Dipterists Digest (Second Series)* **27**: 18.
- Halstead, A.J. 2016. A flat-footed fly, *Platypezina connexa* (Boheman) (Diptera, Platypezidae), new to Britain. *Dipterists Digest (Second Series)* **22**(2015): 145-146.
- Reemer, M. & de Jong, H. 2016. *De Nederlandse breedvoetvliegen en basterdbreedvoetvliegen (Platypezidae & Opetiidae)*. 134 pp. Entomologische tabellen 10. Supplement bij Nederlandse Faunistische Mededelingen.
- Ståhls, G. & Kahanpää, J. 2006. New data on Platypezidae and Opetiidae (Diptera) of Finland. *Sahlbergia* **11**: 1-6.

Peter Chandler