### Flat-footed Fly Recording Scheme

Newsletter 3 Spring 2020

#### Introduction

The Flat-footed Fly Recording Scheme was launched in the 2016 Autumn Bulletin, and the first Newsletter (Chandler 2016) reported the recording situation as it was at the end of July 2016. The scheme covers the 35 British species of the family Platypezidae, but also accepts records of the single British species of Opetiidae. The female of *Polyporivora ornata* (above photo by Jeremy Richardson) has been adopted as the emblem of the Recording Scheme.

Records are acceptable in any form and specimens can be submitted to me for checking. Data received is being added to the spreadsheet begun in 2016, which now includes all records known to me, presently around 5000 of Platypezidae and 1040 of Opetiidae.

The first Newsletter included sections on identification, fieldcraft (with smoke flies *Microsania* treated separately), fungus hosts, recognition of immature stages, phenology of adults, and the history of platypezid studies in the British Isles. The second Newsletter (Chandler 2018b) reported on the then imminent Status Review (Chandler 2018a), and included a map showing the national coverage up to the end of 2016 which had been the basis for that Review. It also covered significant new records of *Agathomyia* species, including *A. cinerea* new to Scotland and *A. falleni* new to Wales. An account by Nigel Jones of the rich platypezid fauna of Shropshire was also included. Both Newsletters, and a manuscript key to the British species, are available as pdfs on request. Reemer & de Jong (2016) is also recommended for identification.

A presentation *Flat-footed Flies – a challenge to record* at the 2018 AGM of Dipterists Forum outlined progress to date, including some of the new findings for 2018 that are also presented here. The main theme was fieldcraft to maximise the chances of finding platypezids. The host fungi and larval biology where known were highlighted.

### Results of recording in 2018 and 2019

As with 2016 and 2017, the latest two years have also been fairly unproductive of platypezid records and they have continued to be sparse on Forum field meetings.

Flat-footed Flies Recording Scheme Newsletter 3

The 2018 summer meeting at Stoke-on-Trent produced only one record by Rob Wolton of *Agathomyia antennata* from Hopton Quarry on 27 June. The 2019 meeting at Stirling provided three records: *Paraplatypeza atra* was found at Stirling University grounds on 22 June by Nigel Jones, and on 25 June I caught *P. atra* at the River Tay reedbeds (on a giant hogweed leaf) and *Polyporivora ornata* at Tentsmuir, in conifer plantations behind the dunes.

Platypezid data for 2018 and/or 2019 have been provided by Peter Andrews, John Barnard, Howard Bentley, Laurence Clemons, John Coldwell, Steve Crellin, Andrew Cunningham, Martin Drake, Andrew Halstead, Jane Hewitt, Gordon Jarvis, Nigel Jones, Ryan Mitchell, Ivan Perry, Alistair Shuttleworth, Donald Smith, Judy Webb and Rob Wolton. iRecord (via Martin Harvey) provided records (to end of 2018) from Graham Calow, Stephen Foster, Susan Morris, Sandy Rae, Andy Slater, Lowri Watkins, Michael Woods and Tim Worfolk. I thank everyone for the interest they have shown.

There are records of 24 species from 2018/2019 together; 22 were found in 2018 and 19 species have so far been reported for 2019, with 17 species found in both years. This means that 11 species, nearly a third of the British species of the family, have not been noticed by recorders in these years. Some others were found but rarely, as recounted in the notes below although, as will be seen, several species are clearly extending their ranges. More recorders are 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.

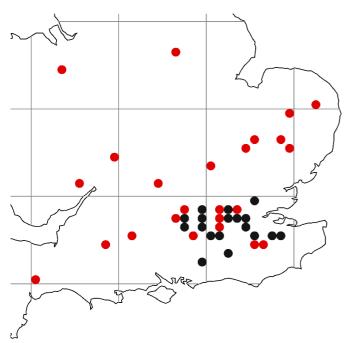
# Agathomyia collini – a new record from Cambridgeshire

When reporting a new record for South London from 2012 in Newsletter 2, it was mentioned that the only other record for this rare species in the present century was a male caught by Ivan Perry at Bradfield Wood (TL930573), Suffolk in 2007. The larval biology remains unknown, its occurrence in orchards and gardens suggesting its host may be a fungus that grows on old fruit trees of the family Rosaceae, e.g. *Phellinus tuberculosus* (= *P. pomaceus*).

In 2019, Ivan encountered *A. collini* again at Fulbourn Fen (TL528562), Cambridgeshire, and he exhibited specimens at the 2019 Exhibition of the British Entomological & Natural History Society. He first found it there on 5 April, when a male was swept from secondary woodland at this site. On three further visits during April, 11 more males and 4 females were also found there, and another female on 27 June. All were swept from an area where fallen and standing trees were largely covered in ivy and no suitable fungus host was seen. He suggested that they may have originated from one of the large mature gardens, with fruit trees, nearby.

### Agathomyia falleni now in Yorkshire and other records

In Newsletter 2, *A. falleni* was recorded as new to Wales; it was also remarked that the most northerly English records were from two sites in Norfolk, in 2004 and 2013 – this overlooked that David Gibbs had found it at Edwinstowe, Nottinghamshire in 2007, as seen on the map below which shows the distribution to the end of 2017.



#### Black first record 1952-1999 (18 hectads) Red first record 2000-2017 (24 hectads)

As explained in Newsletter 1, my interest in Platypezidae began in 1966 when I found *Agathomyia falleni* at Knole Park, Kent (Chandler 1968), the second British record after first being found by Len Parmenter (1953) at Box Hill in 1952. As seen from the map, records in the rest of the 20th century were concentrated in the south-east, but in the present century it has spread to occupy much of southern England, plus the records from North Wales and Notts. The only 2018 record known to me is a female I found on 19 October on lime *Tilia* foliage in the lime avenue at Swinley Park (SU8967), Berkshire, a new hectad for it – it had been

recorded previously from the other two hectads of Windsor Forest and Great Park (SU97 and SU96), and from Yateley Common, Hampshire, in SU85 in 2017.

By contrast, in 2019 it was reported from Sussex, Wiltshire, Oxfordshire and, most surprisingly, from Yorkshire, to confirm that its range is still expanding. John Coldwell found a male on 17 September at Silkstone Wagonway (SF295066) near Barnsley. Then on 2 October, John Barnard photographed a male at Tophill Low Nature Reserve (TA072486), in East Yorkshire, inland from Hornsea, a bird reserve with a wooded fringe around a reservoir –a long way from other likely habitat for *A. falleni*.





Agathomyia falleni  $\Diamond$  above,  $\Diamond$  below (photos Peter Andrews)

At the same time I heard from Peter Andrews that he was photographing this and other platypezids at Coate Water (SU180815) near Swindon, Wiltshire. It was observed on five dates from 25 September to 10 October (altogether 5 males and 7 females). Then, on 22 October, he came across a female at Cothill Fen (SU459997), Oxfordshire.

This and other species found at Coate Water were feeding on leaves of an introduced dogwood species, with quite large white berries. This had been planted in a small copse to screen a walkway to a hide, and had spread through the small woodland, which has mature willows, poplars, and dead wood (Peter Andrews *pers. comm.*).

Gordon Jarvis observed *A. falleni* at sites near Peasmarsh (TQ82), Sussex on dates from 23 September to 2 October 2019 (5 males and 4 females, all on leaves of sweet chestnut at a height of about 4ft).

Thus six hectads can be added to the distribution of *A. falleni*, bringing the total to 48, with 30 added this century.

#### Agathomyia lundbecki new to Ireland

#### by Ryan Mitchell

This autumn I have been looking for Platypezidae with some success, mainly finding two fairly common species *Protoclythia modesta* and *Agathomyia unicolor* in most woodland sites around the Belfast area in Northern Ireland. Late in 2019, on 2 October, during some casual fieldwork in Belvoir Park Forest, located in south Belfast along the banks of the river Lagan (Irish Grid Ref: J33217 69420) I was lucky to find a single female *Agathomyia lundbecki* – this was a rather nice surprise as this species has never been recorded in Ireland previously.

The female has a distinctive coloration on the abdomen, so it can be easily distinguished from other species in the genus. It seems rather unlikely to be a recent arrival and has probably been missed, as the adult has a late flight period in September to October. The ecology of this species has been well documented, with a strong association with the common alder bracket fungus *Xanthoporia* (*Inonotus*) *radiata* so is likely to be a widespread species across Northern Ireland and possibly Ireland as a whole.



*Agathomyia lundbecki* from Belvoir Park Forest, Northern Ireland (photo Ryan Mitchell)

Also, whilst undertaking fieldwork at Clandeboye Estate, Newtownards, Northern Ireland. I collected a single female specimen of *Platypeza aterrima/hirticeps*; unfortunately the females currently cannot be separated reliably and both species are currently not on the Irish Checklist, so with further effort recording Platypezidae in Ireland it seems likely there are more exciting discoveries to be made.

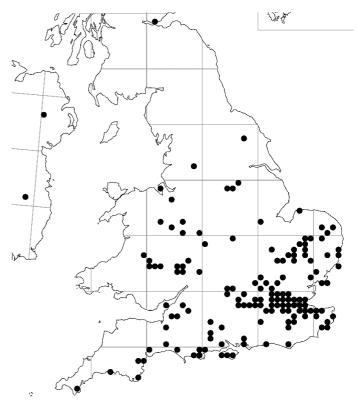
#### Flat-footed Flies Recording Scheme Newsletter 3

## Lindneromyia dorsalis new to Scotland and to the Isle of Man

A female was swept on 26 September 2018 by Alistair Shuttleworth at Dalgety Bay (NJ1683), Fife, from mixed habitat at the edge of housing, woodland and farmland. This is the first record north of Yorkshire, excepting one from Northern Ireland, as seen on the map, which was prepared in 2018 to show this extension to its range – it shows all British Isles records of which I was then aware.

This species develops in field mushrooms *Agaricus* spp, and can occur in more open habitats than most other platypezids, so there is no obvious reason why it should have been restricted to a southern distribution in Britain. It provides yet another example of a species that is extending its range northwards.

Perhaps more surprising is that it has got as far as crossing the Firth of Forth without being noticed in the intervening regions. However, on 30 August 2019, Donald Smith observed 8 females on an unidentified mushroom in coniferous woodland at Clerkington (NT505724), East Lothian, so it's also on the south side of the Firth.



It has also come to notice that Steve Crellin had swept a male of *L. dorsalis* from sycamore foliage on 25 August 2018 at Close Sartfield Manx Wildlife Trust Reserve (SC359955), on the Isle of Man. He also informed me that he had earlier swept a male of *Paraplatypeza atra* from tree foliage at the same site on 21 June 1995.

As far as I am aware these are the first records of the family Platypezidae from the Isle of Man.

#### Microsania pallipes

In Newsletter 2, I stated that there have been no records at all of the genus *Microsania* in the British Isles since 2008 – suggested as being due to potential recorders not encountering bonfire smoke attracting male swarms. However, Andrew Halstead reminded me that he had found a swarm of *M. pallipes* at bonfire smoke on his allotment at Brookwood, Surrey on 1 July 2015. Then, at the 2018 BENHS Exhibition, he exhibited a specimen from Snakes Field, Ockham Common, Surrey, where males were attracted to hot wood ash, with little smoke remaining, from a conservation volunteers' bonfire, on 7 October 2018.

There are 5 British species of *Microsania*, all found at smoke but rarely seen otherwise (see Newsletter 1), and their larval biology is still unknown. More attention from recorders is needed to unravel the mystery of *Microsania*.

### Paraplatypeza bicincta

The first British record of this species was in Surrey in 2001 (Chandler 2002), but it has since spread widely in southern England, reaching Norfolk and Shropshire. As its females are distinctively marked, and so likely to attract the attention of dipterists, it is likely to have been a recent arrival in this country. The all-black male closely resembles the male of the widespread species *P. atra*, of which the females are also dark coloured.

There have been three new hectads, all records of single females, to bring the national total to 30. Nigel Jones caught it at Maddox's Coppice (SJ380031), Shropshire on 9 October 2018. I swept one at Swinley Park (SU8967), Berkshire on 19 October 2018. Then Peter Andrews observed it at Coate Water (SU180815), Wiltshire, on 2 October 2019 (see p. 2 above regarding this locality).



Paraplatypeza bicincta female (photo Peter Andrews)

#### Other recent records

Andrew Halstead exhibited 8 species found in Surrey in 2018 at the 2018 AGM of Dipterists Forum. A report on his

exhibit entitled 2018 – A good year for platypezids? appeared in Dipterists Digest (Second Series) 26: 170).

**Agathomyia boreella**. Ivan Perry found both sexes in alder carr at Flitwick Moor in 2018 ( $1 \circlearrowleft 5.v, 2 \circlearrowleft 19.v, 1 \circlearrowleft 2.vi$ ) and a female at Brandon Country Park, Suffolk on 21.v.2019. This remains the only member of the *A. elegantula* group to be recorded in Britain.

**Agathomyia woodella.** Ivan Perry found a female at Flitwick Moor on 3.x.2018. Peter Andrews photographed a male at Coate Water on 23.ix.2019.

**Bolopus furcatus.** Two females were seen under a bracket of *Polyporus squamosus* at Cothill Fen, Oxfordshire on 4 May 2018, when I visited the site with Judy Webb. I have not heard of other records since I recorded it on its host fungus at Blenheim in 2017, as reported in Newsletter 2.

*Platypeza hirticeps.* Nigel Jones caught a male at Bucknell Wood (SO3473), Shropshire on 3.x.2018.

#### Acknowledgements

Stephanie Rorke kindly provided the maps included here. I am grateful to Ryan Mitchell for his note on *Agathomyia lundbecki*. Martin Harvey continued to inform me of the platypezid records on iRecord. Peter Andrews, John Barnard, John Coldwell, Steve Crellin, Andrew Halstead, Gordon Jarvis, Nigel Jones, Ivan Perry, Alistair Shuttleworth and Donald Smith are thanked for the information on their finds included here, and Peter Andrews for use of his photographs. I also thank all other recorders for their contributions.

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