

## LESSER DUNG FLY (SPHAEROCERIDAE) STUDY GROUP

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Recent contacts between members specializing in this family have indicated an interest in setting up a study group within the DF series. The Lesser Dung Fly study group welcomes and seeks to promote interactions with all those interested in this extraordinary fly family, including help with identification.

That there is not a Sphaeroceridae recording scheme may reflect the kind of identification challenges associated with this fly family: most are small (<5 mm) to tiny (1 mm) dark flies that need to be mounted and sometimes dissected to display subtle features of body parts, including genitalia.

The Sphaeroceridae of Britain and Ireland currently comprises 141 species in 33 genera and 3 sub-families: Copromyzinae (18 species, 5 genera), Sphaerocerinae (10 species, 3 genera) and Limosiniinae (113 species, 25 genera). Distinction at sub-family level is easily done using wing venation. There is a wealth of identification aids available for this family. The key to the British fauna is Pitkin (1988) and is a useful guide and first port-of-call, although another 27 species have been added since its publication. However, there are numerous additional keys by Rohacek and Marshall to the Old and New World faunas with superbly illustrated genitalia that supplement Pitkin. There are very few studies of the immature stages of these flies. Skidmore (1993) provides a key to puparia of many British sphaerocerids.

Specimens are usually pinned/card-pointed, with any separate genitalia held in glycerine in a vial that is pinned with the specimen. Dissection of terminalia, particularly for limosinines, is sometimes necessary for definitive identification. Specimens can be dissected and slide-mounted along the lines of Disney (1983).

The main purposes of setting up this study group are:-

- 1) To promote the study of Sphaeroceridae by forming a network of specialists (not necessarily experts!) who share an interest in this family and to exchange information, ideas and tips on study methods, both in the field and at home.
- 2) To undertake targeted surveys of particular species or genera to improve knowledge of their likely status and habitat requirements.
- 3) To study behaviour, phenology, immature stages and interactions with other invertebrates.
- 4) To help with identification and the recognition of new-to-Britain/Ireland species.

Paul Gatt is the taxonomic expert for this study group.

### References:

BR Pitkin (1988) ; Lesser Dung Flies, Diptera, Sphaeroceridae. *Handbook for the Identification of British Insects*, Vol 10, Part 5e.

P Skidmore (1993); Notes on the puparia of British Sphaeroceridae. *Dipterists Digest*, 13, 6-22.

RHL Disney (1983) Scuttle Flies, Diptera, Phoridae (except *Megaselia*). *Handbook for the Identification of British Insects*, Vol 10, Part 6.

