Identifying soldierflies and allies: soldierflies in genus *Stratiomys*

Compiled by Martin C. Harvey for the Soldierflies and Allies Recording Scheme

Version 3 at 27 December 2020

These guides are only possible thanks to the generosity of the brilliant photographers who have allowed their images to be used. Special mention must be given to Malcolm Storey and Steven Falk, whose photo collections form the backbone for most of the species guides:

Malcolm Storey's BioImages website – Steven Falk's photo collections on Flickr

Other photographers included in this guide are Andrew Green, Ian Andrews, Jeremy Richardson, Judy Webb, Neil Marks, Peter Andrews, Simon Knott, Tim Hodge and Will George.

Males are shown first, one page for each species, then females. The pages for males include distribution maps taken from the recording scheme's **provisional atlas** (Harvey 2017).

As far as possible, these guides show features that can be seen on live insects in the field, or are likely to be visible in photographs. For comprehensive identification keys and species accounts see <u>British</u> <u>soldierflies and their allies</u>, by Alan Stubbs and Martin Drake. See also the recording scheme's <u>additional notes</u> to accompany the Stubbs and Drake keys.

For lots more information on soldierflies and allies go to the recording scheme <u>website</u>, <u>Twitter</u> page or <u>Facebook</u> group.

For lots more information and events, and to support the study and conservation of flies, please consider joining <u>Dipterists Forum</u>.

Records wanted! Once you have identified your fly, please let the recording scheme have the details! Add to <u>iRecord</u> or send to the <u>recording scheme</u> so that we can share the records for conservation and research.

> The Soldierflies and Allies Recording Scheme is supported by the UKCEH Biological Records Centre



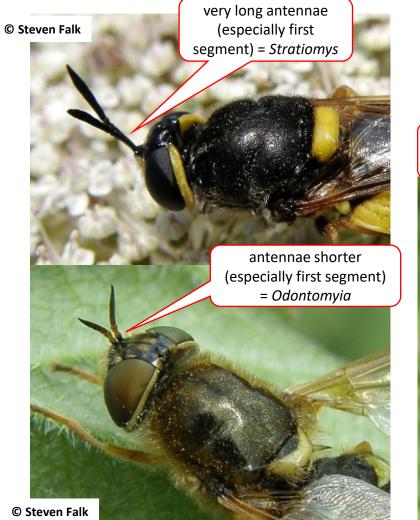
The Soldierflies and Allies Recording Scheme is part of Dipterists Forum



Recognising the genus: Stratiomys (plus Odontomyia ornata)

Genus *Stratiomys* contains four large species (12–15mm long), and this guide also includes the Ornate Brigadier, *Odontomyia ornata*, which is a similar size and is sometimes confused with the *Stratiomys* species. These are 'typical' soldierflies: they are broad-bodied, with a pair of spines on the scutellum and most have wasp-mimic markings (the exception, *Stratiomys longicornis*, is a bee mimic).

There are some differences in markings between males and females, which can readily be told apart by the eyes (males have eyes meeting on top of the head, females have a fairly broad gap).

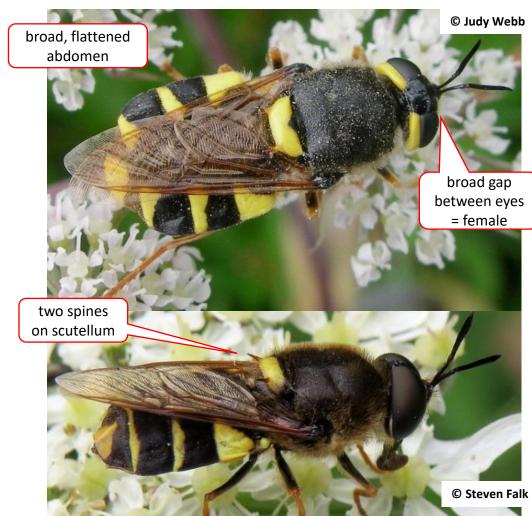




All of this genus have larvae that develop in water, in ditches or at the edges of shallow water bodies, with each species having its own requirements.

Their habitats have come under threat from land drainage and from changes in water quality, and changes in management affecting both the water bodies and the supply of flowers that the adults need. Although none of these species are common, there have been signs of range expansion in recent years for all except the very rare *S. chamaeleon*.

For more information on these species see Stubbs, A. 2015. <u>Bringing soldierflies to attention</u>. *British Wildlife* 26(6): 409–415.



© Tim Hodge via iRecord

This species is a similar size to genus Stratiomys, and has similar markings, so is included here for comparison (other species of Odontomyia are smaller).

Odontomyia ornata (Ornate Brigadier) – MALE

link

iRecord link

> legs mostly yellow, with femora black at base, and a dark ring on the hind tibia

© Steven Falk

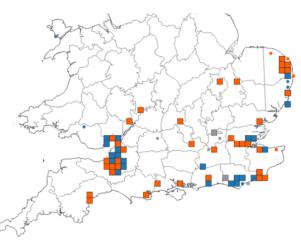
spines and edge of scutellum pale **Steven Falk** © Steven Falk

angled pale spots at edges of abdomen

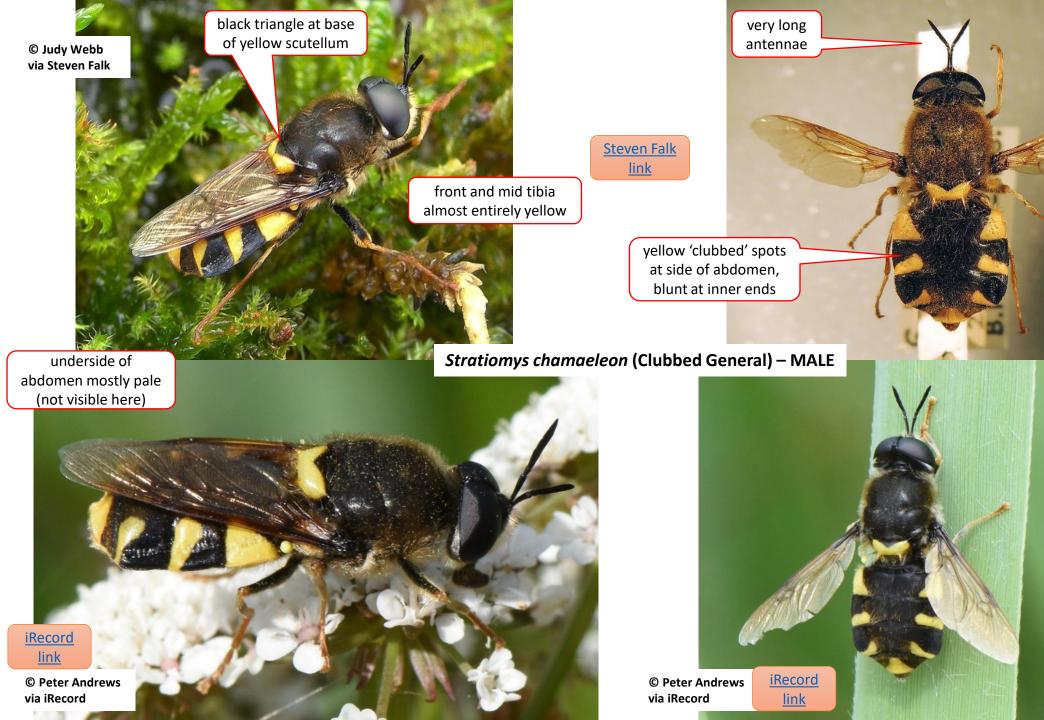
© Steven Falk

Odontomyia ornata is most frequent near the coast, but is increasingly being found inland.

- ID difficulty: 2
- Flight period: late Apr to late July, peak in Jun
- GB threat: Least Concern GB rarity: Nationally Scarce
- scattered in southern Britain
- ditches in grazing levels
- No. of records: 549 % since 2000: 47%



first segment of antennae much shorter than Stratiomys

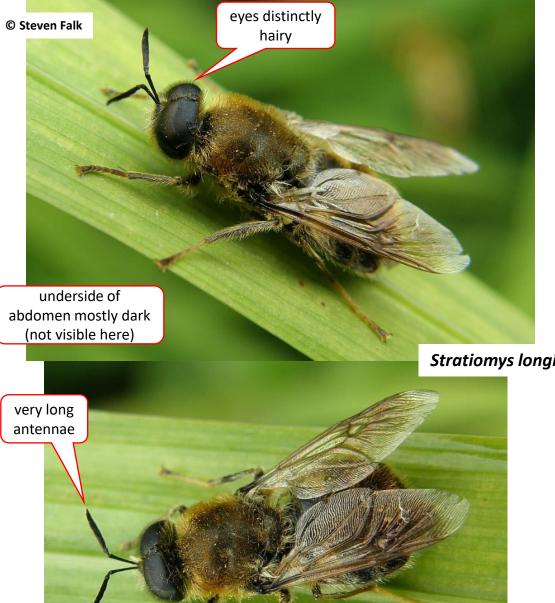


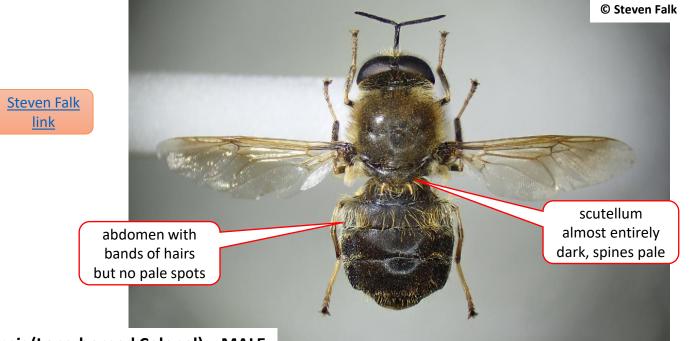
© Steven Falk

ID difficulty: 2

- Flight period: late Jun to early Sep, peak Jul and early Aug
- GB threat: Endangered GB rarity: Nationally Rare
- known from just three areas, one each in England, Wales and
- Scotland (formerly more widespread)
- fen pools and seepages
- No. of records: 108 % since 2000: 28%





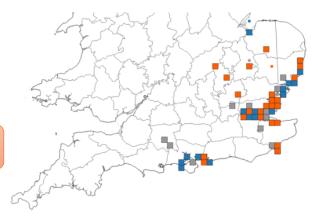


Stratiomys longicornis (Long-horned Colonel) – MALE





- ID difficulty: 2
- Flight period: late May to mid Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- coasts of south-east England, spreading inland
- brackish and salt marsh
- No. of records: 161 % since 2000: 51%





very long

antennae

lan Andrews link

© Ian Andrews

underside of abdomen mostly pale

yellow bands at side of abdomen, pointed or meeting at inner ends

Steven Falk link

Stratiomys potamida (Banded General) – MALE

© Steven Falk

front and mid tibia almost entirely yellow

ID difficulty: 2

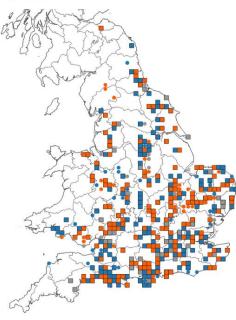
scutellum mostly

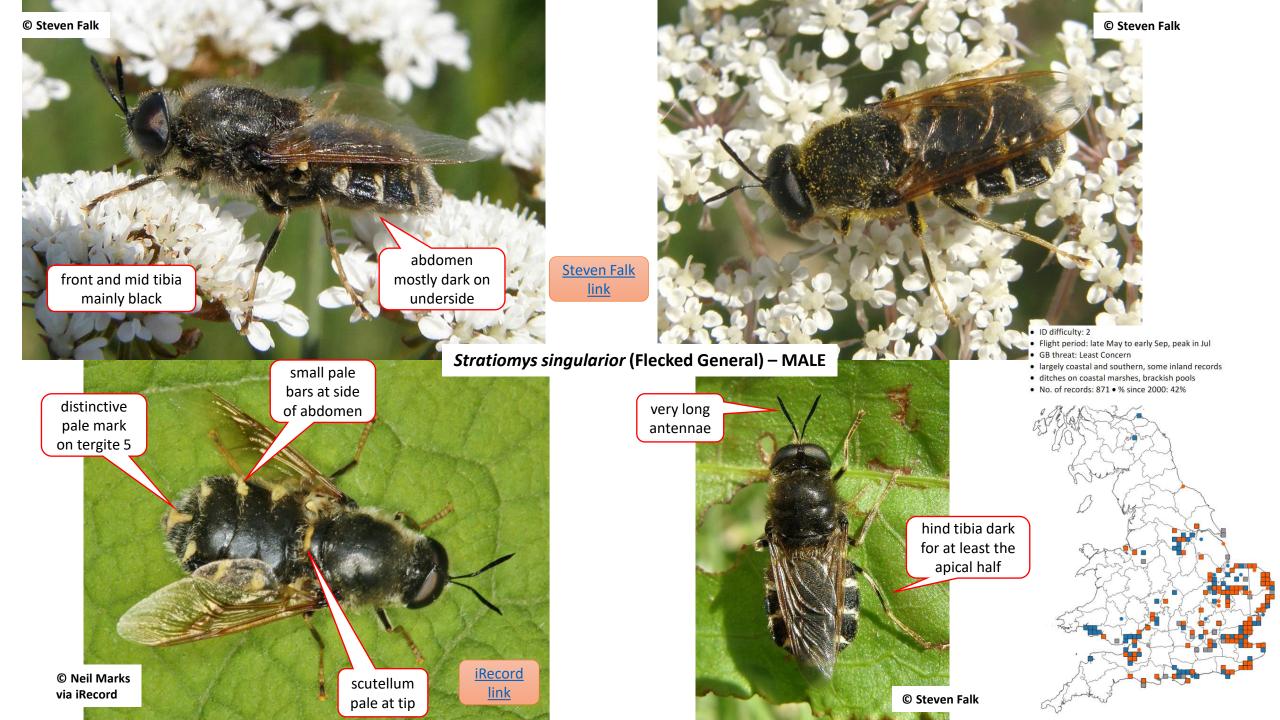
yellow, no black triangle

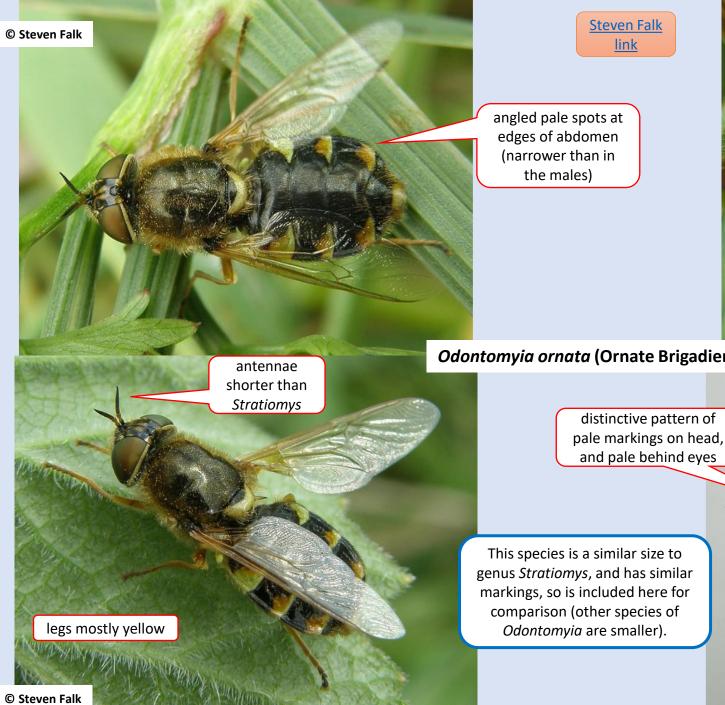
• Flight period: late May to early Sep, peak late Jun and Jul

© Steven Falk

- GB threat: Least Concern
- widespread, scarcer in the north, not in Scotland
- wet meadows with ditches, streams, springs or seepages, pools and ponds, sometimes in carr or along lowland rivers
- No. of records: 847 % since 2000: 36%









Odontomyia ornata (Ornate Brigadier) – FEMALE

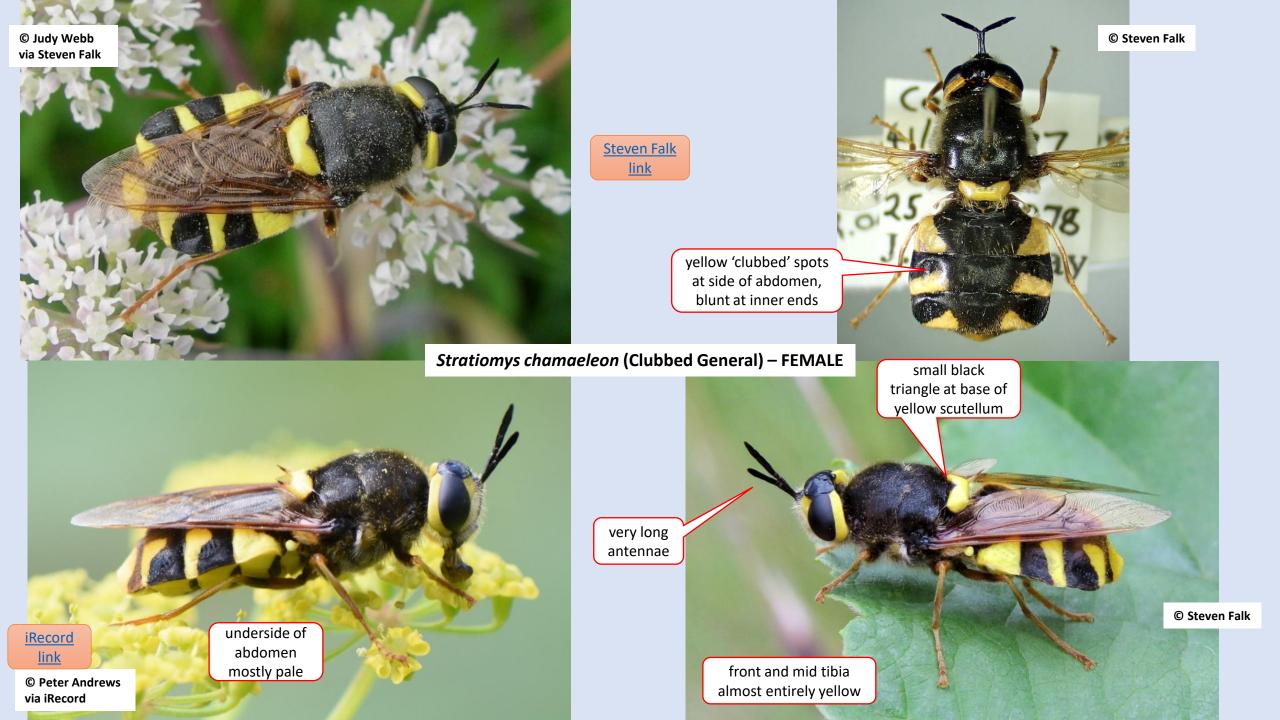
Steven Falk

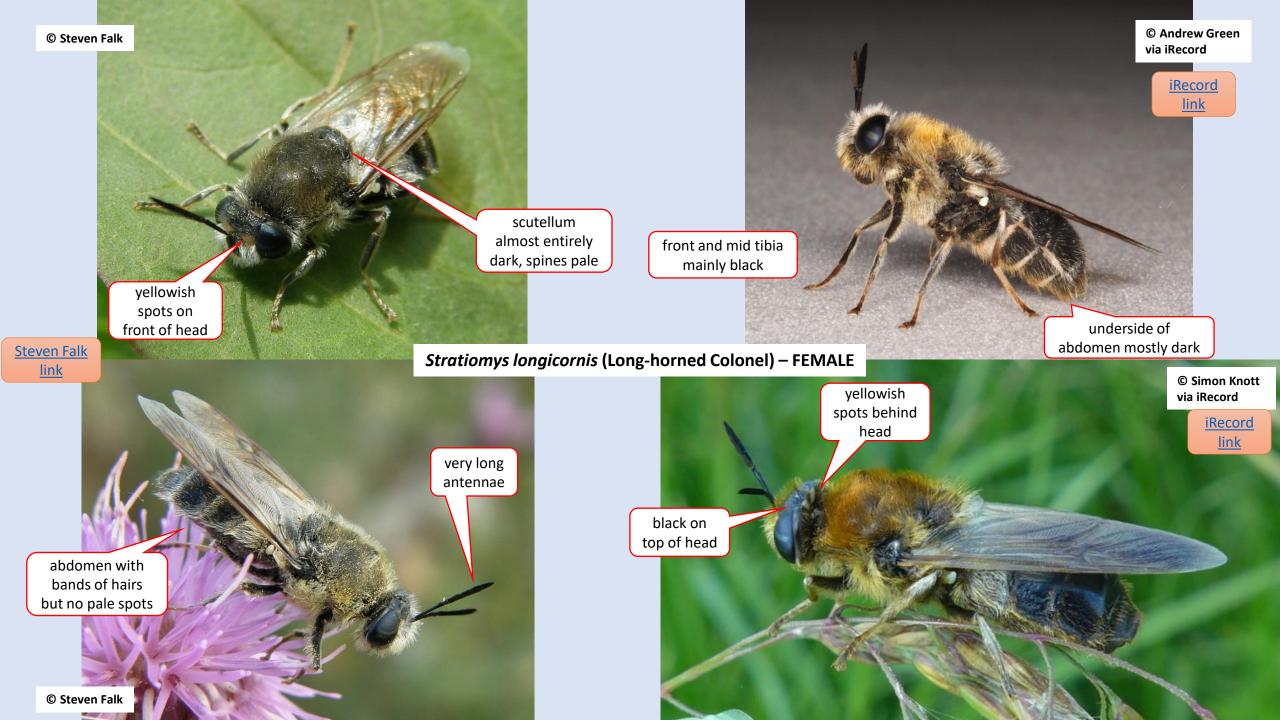
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spines and most of scutellum pale

This species is a similar size to genus Stratiomys, and has similar markings, so is included here for comparison (other species of Odontomyia are smaller).

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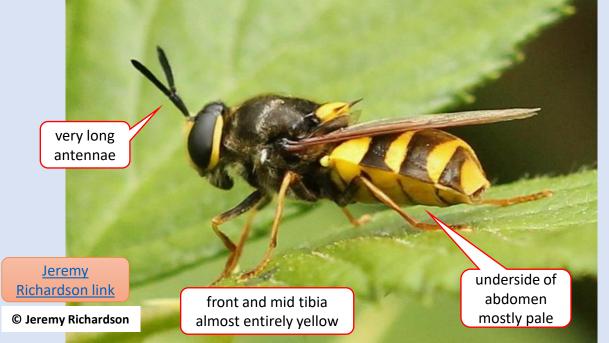
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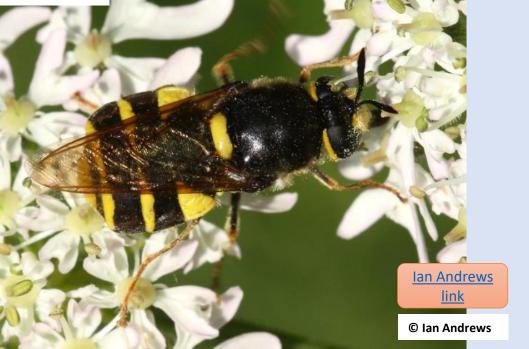
scutellum mostly yellow, no black triangle

Steven Falk link

> yellow bands at side of abdomen, pointed or meeting at inner ends

Stratiomys potamida (Banded General) – FEMALE





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