# Provisional atlas of soldierflies and allies – DRAFT version

Version 0.1 at 11 February 2018, compiled by Martin C. Harvey for the <u>Soldierflies and Allies Recording Scheme</u>

A text summary and map is provided for each species, arranged alphabetically by family and then by species. The maps are based on data from the recording scheme database (including data from iRecord) up to 15 January 2018 (just over 100,000 records), plus data from numerous sources as displayed on the NBN Atlas at February 2018 (just over 50,000 records).

All the species maps are colour-coded for the same time-periods:

Recording scheme database





- 1970 to 1999
- before 1970

### Caveats:

- Verification has been carried out on most of the recording scheme data, but so far on only a small proportion of the data sourced via the NBN Atlas. The maps do contain errors; where these are believed to be significant a note on caveats has been added.
- There is still some recent data waiting to be incorporated into the recording scheme database.
- On the maps the recording scheme data is shown as the top layer, which means that in some cases there may be records on the NBN Atlas from a more recent time-period than shown by the recording scheme 10km squares.

### Acknowledgements:

Many thanks to c. 3,000 people who have sent in records for the last 200 or so years, and to my predecessors as recording scheme organisers who built the firm foundations on which this atlas is constructed: Tony Irwin, Martin Drake and Simon Hayhow. Thanks to Malcolm Smart for expert advice and assistance with checking the records of Asilidae (robberflies). Thanks also to Steph Rorke, Jim Bacon and colleagues at the Biological Records Centre within the NERC Centre for Ecology and Hydrology, for providing database and website support.

Flight period, distribution and habitat information largely based on Stubbs, A.E, and Drake, M. *British soldierflies and their allies* (BENHS 2014), with updates where distributions have changed.

GB threat and rarity statuses, and some additional habitat and distribution details, are taken from Drake, M. A review of the status of larger Brachycera flies of Great Britain (Natural England 2017).

### Technical details:

Maps were produced in <u>QGIS</u> using the biological recording plugin provided by the <u>Tomorrow's Biodiversity</u> <u>project</u> at the Field Studies Council.

### Citation:

• Harvey, M.C. 2018. Provisional atlas of soldierflies and allies. Unpublished draft version.

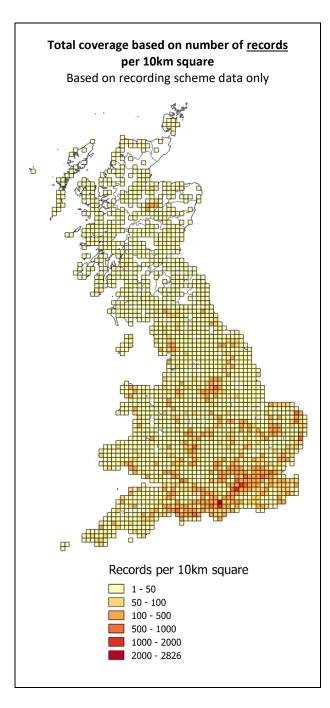


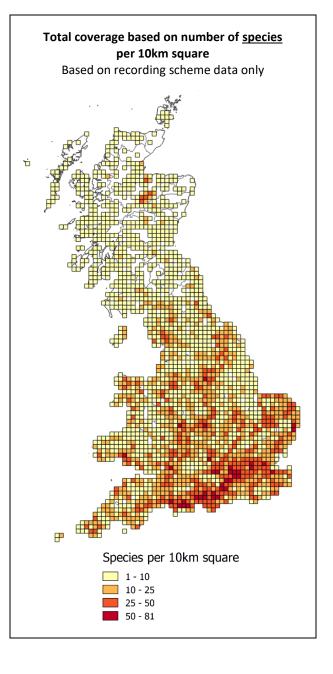


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Family: Xylomyidae (wood-soldierflies)
Family: Xylophagidae (awl-flies)

### **Coverage maps**



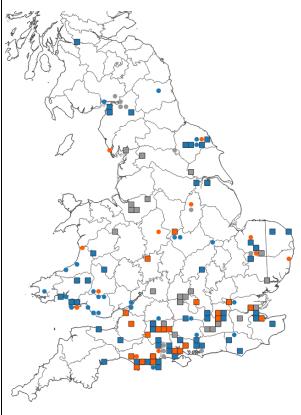


### Family Acroceridae (hunchback-flies)

### Family: Acroceridae

### *Acrocera orbiculus* (Fabricius, 1787) Top-horned Hunchback

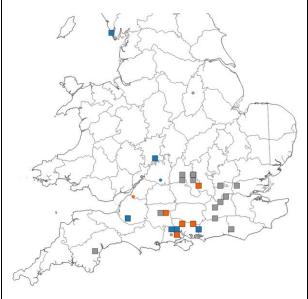
- ID difficulty: 2
- Flight period: early May to early Sep, peak mid Jul to mid Aug
- GB threat: Least Concern 
   GB rarity: Nationally Scarce
- mainly southern, some records from Wales and Scotland
- dry grassland, heathland, fens, bogs
- No. of records: 190 % since 2000: 17%



### Family: Acroceridae

### *Ogcodes gibbosus* (Linnaeus, 1758) Smart-banded Hunchback

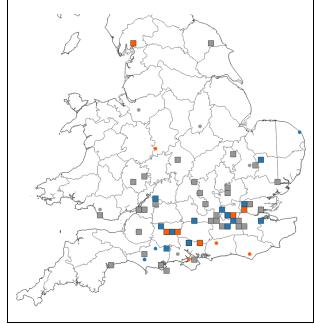
- ID difficulty: 2
- Flight period: mid Jun to late Aug, peak early Jul
- GB threat: Near Threatened GB rarity: Nationally Rare
- mostly southern England (plus single record in VC69)
- wet grassland, chalk grassland, bogs, isolated trees and scrub
- No. of records: 83 % since 2000: 14%



### Family: Acroceridae

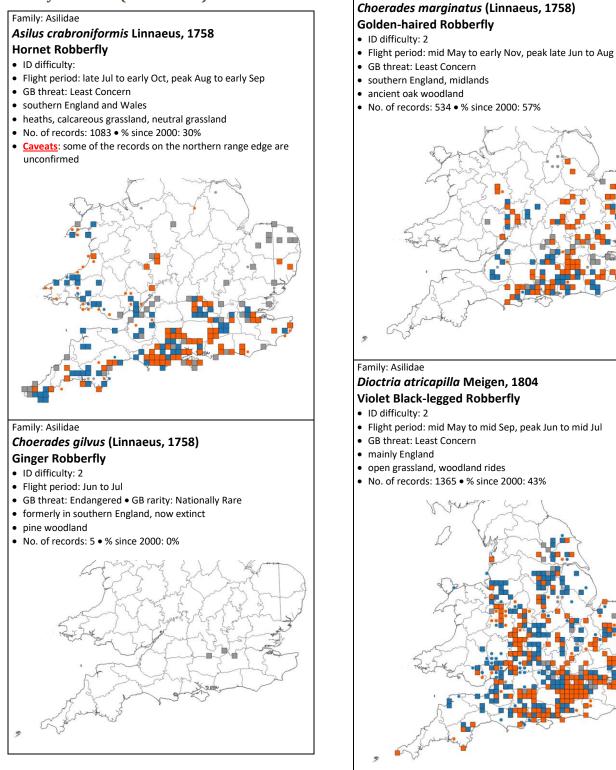
### *Ogcodes pallipes* Latreille in Olivier, 1812 Black-rimmed Hunchback

- ID difficulty: 2
- Flight period: late May to mid Aug, peak Jul
- GB threat: Least Concern 
   GB rarity: Nationally Scarce
- southern England
- calcareous grassland with scrub
- No. of records: 85 % since 2000: 9%



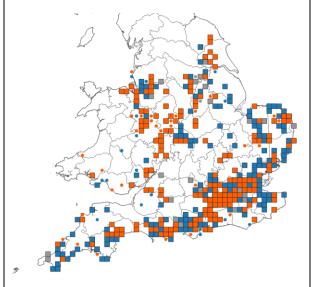
Family: Asilidae

### Family Asiliidae (robberflies)



### Family: Asilidae Dioctria baumhaueri Meigen, 1820 Stripe-legged Robberfly

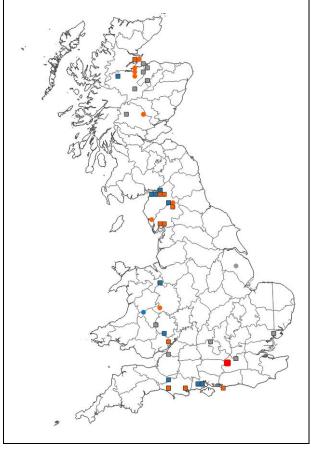
- ID difficulty: 2
- Flight period: early May to Aug, peak late Jun to early Jul
- GB threat: Least Concern
- mainly England
- edges of woods and scrub
- No. of records: 1421 % since 2000: 40%

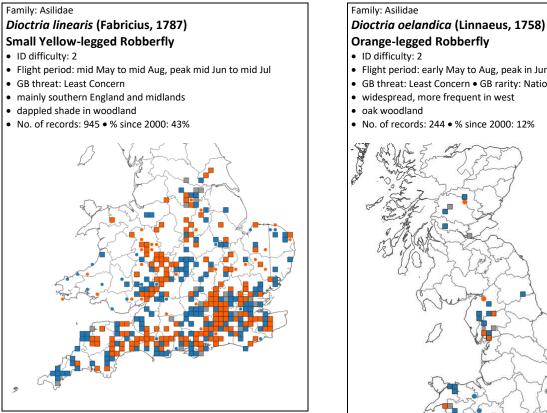


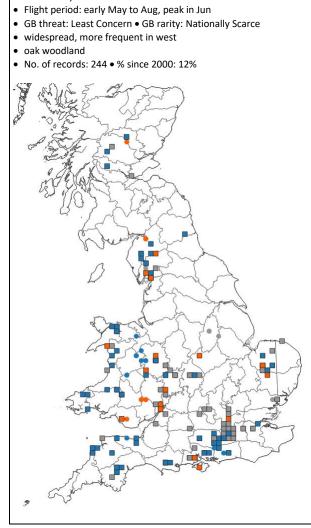
Family: Asilidae

### *Dioctria cothurnata* Meigen, 1820 Scarce Red-legged Robberfly

- ID difficulty: 3
- Flight period: May to Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- scattered
- wet woodland, river banks
- No. of records: 77 % since 2000: 29%





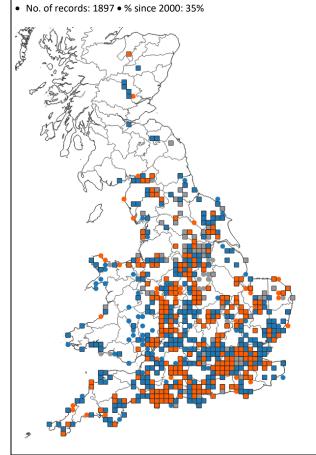


### Family: Asilidae

### *Dioctria rufipes* (De Geer, 1776) Common Red-legged Robberfly

• ID difficulty: 3

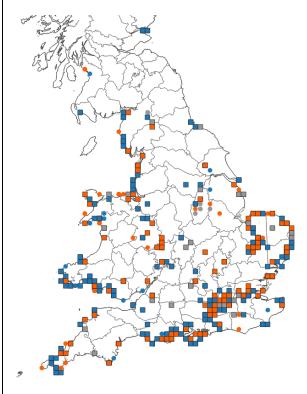
- Flight period: early May to early Aug, peak in late May and Jun
- GB threat: Least Concern
- widespread in England, local in Wales and Scotland
- grassland with scrub, woodland margins



### Family: Asilidae

### *Dysmachus trigonus* (Meigen, 1804) Fan-bristled Robberfly

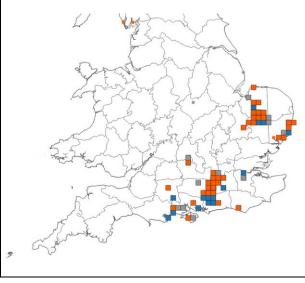
- ID difficulty: 2
- Flight period: May to mid Sep, peak in Jun and Jul
- GB threat: Least Concern
- very widespread, more frequent in south
- sandy soils: heaths and dunes, mainly coastal in north
- No. of records: 889 % since 2000: 31%

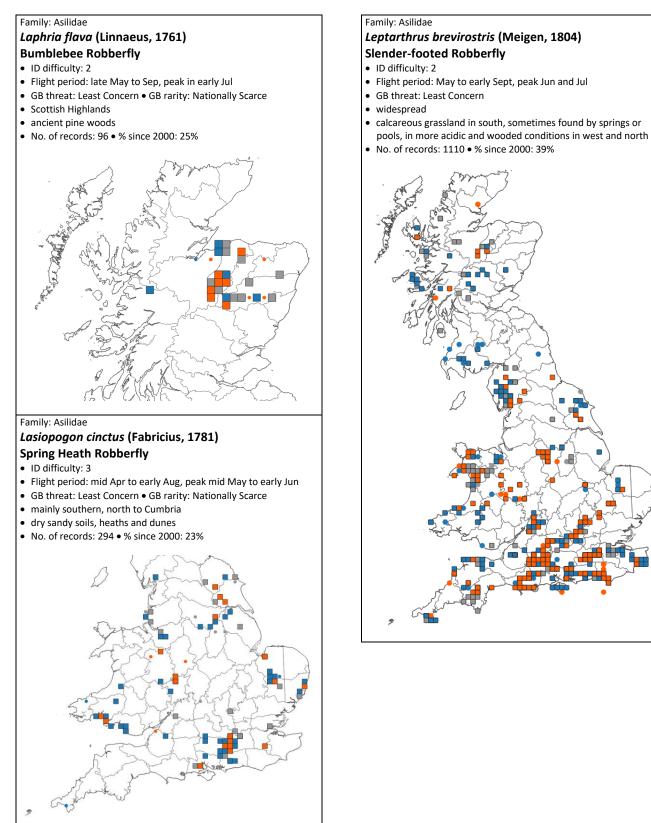


### Family: Asilidae Futolmus rufibar

### Eutolmus rufibarbis (Meigen, 1820) Golden-tabbed Robberfly

- ID difficulty: 2
- Flight period: early Jun to late Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- south-eastern England
- heaths, with some grassy areas, edges of woodland on sandy soil
- No. of records: 345 % since 2000: 44%
- <u>Caveats</u>: the southern Lake District records are unconfirmed, and the midlands ones are incorrect



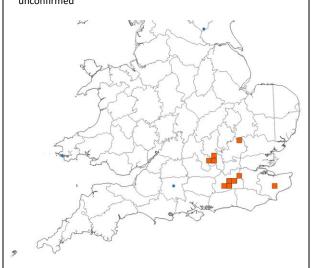


### Family: Asilidae

### *Leptarthrus vitripennis* (Meigen, 1820) False Slender-footed Robberfly

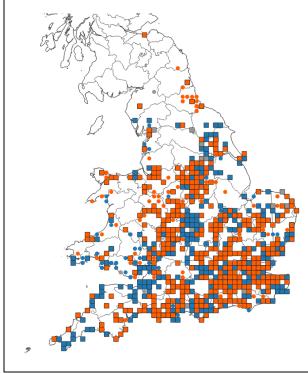
• ID difficulty: 2

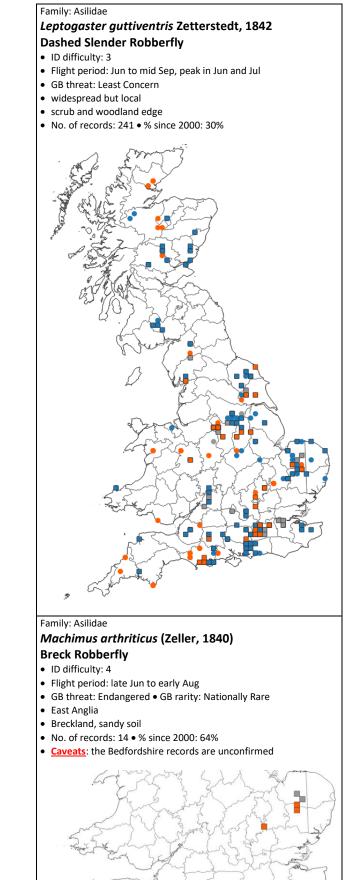
- Flight period: Jun to Aug
- GB threat: Least Concern GB rarity: Nationally Rare
- south-east England
- calcareous grassland, recently found in floodplain grasslands
- No. of records: 24 % since 2000: 71%
- <u>Caveats</u>: the isolated records to the west and north are unconfirmed



### Family: Asilidae *Leptogaster cylindrica* (De Geer, 1776)

- **Striped Slender Robberfly**
- ID difficulty: 2
- Flight period: mid May to Aug, peak in late Jun to mid Jul
- GB threat: Least Concern
- widespread in England, especially south, more local in Wales, rare in Scotland
- tall, open grassland on dry soils
- No. of records: 2618 % since 2000: 52%





# Family: Asilidae Family: Asilidae Machimus atricapillus (Fallén, 1814) Machimus cingulatus (Fabricius, 1781) Kite-tailed Robberfly **Brown Heath Robberfly** • ID difficulty: 3 • ID difficulty: 3 • Flight period: late May to late Oct, peak in late Jul and Aug • Flight period: early Jun to mid Oct, peak in early Aug to early Sep • GB threat: Least Concern • GB threat: Least Concern • widespread in south, becoming rare north to Scotland • widespread in south, becoming rare north to Scotland • open habitats on dry soils, with some shelter • sandy heaths and dunes, coastal in north and west • No. of records: 2768 • % since 2000: 53% • No. of records: 852 • % since 2000: 59%

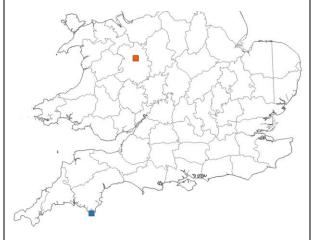
## Family: Asilidae Family: Asilidae Machimus cowini (Hobby, 1946) Neoitamus cothurnatus (Meigen, 1820) **Irish Robberfly** Scarce Awl Robberfly • ID difficulty: 4 • ID difficulty: 4 • Flight period: late Jun to late Aug • Flight period: early Jun • GB threat: Endangered • GB rarity: Nationally Rare • GB threat: Critically Endangered • GB rarity: Nationally Rare • Ireland, Isle of Man, Cumbrian coast • south Wales (fomerly in woods near Oxford) • sandy soils with low scrubby vegetation • open woodland, bracken slopes • No. of records: 5 • % since 2000: 0% • No. of records: 24 • % since 2000: 42% Family: Asilidae Neoitamus cyanurus (Loew, 1849) **Common Awl Robberfly** • ID difficulty: 3 • Flight period: mid May to early Oct, peak in mid Jun to mid Jul • GB threat: Least Concern • widespread, rarer in north • woodland, especially ancient, usually along rides Family: Asilidae • No. of records: 752 • % since 2000: 35% Machimus rusticus (Meigen, 1820) **Downland Robberfly** • ID difficulty: 3 • Flight period: early Jun to Aug • GB threat: Least Concern • GB rarity: Nationally Scarce south-east England • calcareous grasslands • No. of records: 136 • % since 2000: 54% <u>Caveats</u>: apparently known from Breckland in East Anglia (Stubbs and Drake 2014), but no record details are available

and the

### Family: Asilidae

### *Neomochtherus pallipes* (Meigen, 1820) Devon Red-legged Robberfly

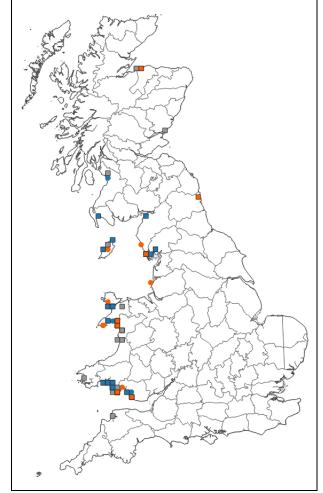
- ID difficulty: 4
- Flight period: Jul to Aug
- GB threat: Critically Endangered 
   GB rarity: Nationally Rare
- SHropshire, formerly on south coast of Devon
- grassland with exposed rock, on sandy soils
- No. of records: 7 % since 2000: 86%



Family: Asilidae

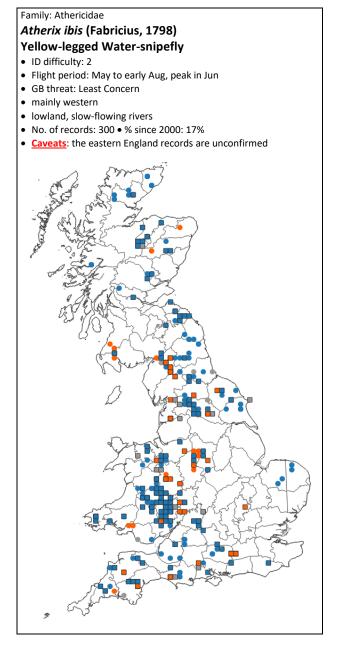
### Pamponerus germanicus (Linnaeus, 1758) Pied-winged Robberfly

- ID difficulty: 2
- Flight period: mid May to early Aug, peak in Jun
- GB threat: Least Concern GB rarity: Nationally Scarce
- mostly west coast of England and Wales, north to Scotland
- sand dunes
- No. of records: 168 % since 2000: 8%
- <u>Caveats</u>: there are apparently some inland records (Taylor 1965 quoted in Stubbs and Drake 2014)



# Family: Asilidae Family: Asilidae Philonicus albiceps (Meigen, 1820) Rhadiurgus variabilis (Zetterstedt, [1838]) **Dune Robberfly** Northern Robberfly • ID difficulty: 3 • ID difficulty: 3 • Flight period: mid May to mid Oct, peak in mid Jun to mid Jul • Flight period: Jun to Aug, peak in mid Jun to mid Jul • GB threat: Least Concern • GB threat: Vulnerable • GB rarity: Nationally Rare • Scottish Highlands (formerly more widespread in Scotland) • mostly coastal, rarer in Scotland • sand dunes, occasional on heaths inland • forest glades and margins, and wooded river margins • No. of records: 57 • % since 2000: 2% • No. of records: 616 • % since 2000: 26% 3

### Family: Athericidae (water-snipeflies)

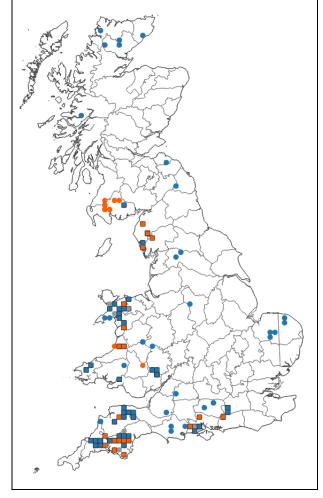


Family: Athericidae Atrichops crassipes (Meigen, 1820) Least Water-snipefly • ID difficulty: 3 • Flight period: late Jun to Jul • GB threat: Least Concern • GB rarity: Nationally Scarce • southern England and Wales • lowland, non-acidic rivers • No. of records: 32 • % since 2000: 41% • Caveats: the northernmost records are unconfirmed • Gaveats: the northernmost records are unconfirmed • Official offici

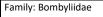
### Family: Athericidae

### *Ibisia marginata* (Fabricius, 1781) Black-legged Water-snipefly

- ID difficulty: 2
- Flight period: Jun to Aug, peak mid Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- mostly western
- small rivers with stony beds, mainly in the hills
- No. of records: 139 % since 2000: 23%
- <u>Caveats</u>: Scottish and eastern England records are unconfirmed

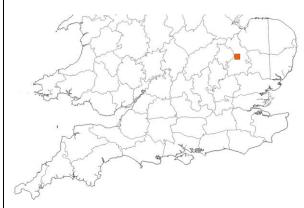


### Family: Bombyliidae (bee-flies)



### Anthrax anthrax (Schrank, 1781) Anthracite Bee-fly • ID difficulty: 2

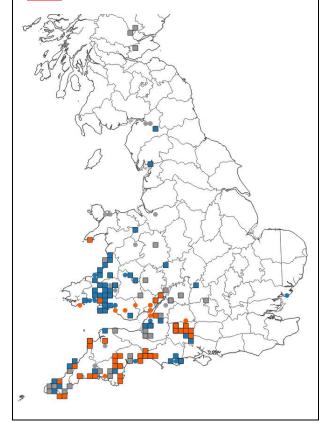
- Flight period: Jul to Sep
- GB threat: Not Evaluated
- One record in Cambridgeshire, 2016
- gardens and parks
- No. of records: 1 % since 2000: 100%



### Family: Bombyliidae

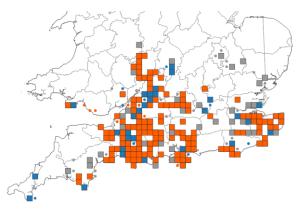
### Bombylius canescens Mikan, 1796 Western Bee-fly

- ID difficulty: 2
- Flight period: early May to mid Aug, peak Jun to early Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- mostly western
- a variety of open habitats, including hillsides, gorges, landslips, open woodland, shingle grassland etc.
- No. of records: 292 % since 2000: 34%
- Caveats: the east coast record is erroneous



### Family: Bombyliidae Bombylius discolor Mikan, 1796

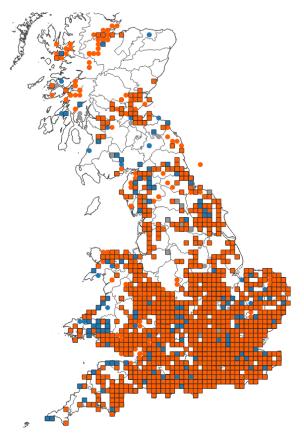
- Dotted Bee-fly
- ID difficulty: 2
- Flight period: late Mar to mid Jun, peak Apr
- GB threat: Least Concern
- southern England and Wales
- gardens, calcareous grassland, woodlands, landslipped cliffs
- No. of records: 697 % since 2000: 68%



Family: Bombyliidae

### Bombylius major Linnaeus, 1758 Dark-edged Bee-fly

- ID difficulty: 1
- ID difficulty: 1Flight period: mid Mar to late Jun, peak mid Apr to May
- GB threat: Least Concern
- ob timeat. Le
  widespread
- various, usually open and sunny with bee populations
- No. of records: 7234 % since 2000: 74%

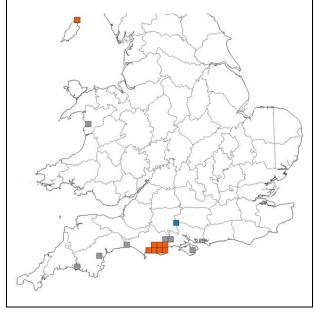


### Family: Bombyliidae

### *Bombylius minor* Linnaeus, 1758 Heath Bee-fly

### • ID difficulty: 2

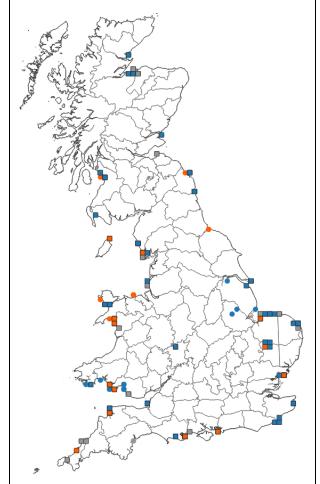
- Flight period: early Jul to late Aug
- GB threat: Vulnerable GB rarity: Nationally Rare
- South-east Dorset and the Isle of Man (older records more widespread in south-west England and Wales)
- heaths, sandy banks and pits
- No. of records: 205 % since 2000: 40%





• ID difficulty: 2

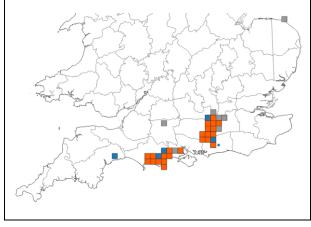
- Flight period: late May to mid Aug, peak in late Jun to early Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- mostly coastal
- sand dunes, sandy heaths
- No. of records: 210 % since 2000: 19%



Family: Bombyliidae

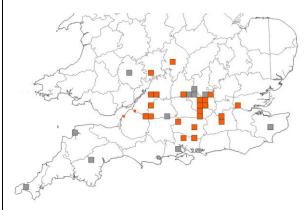
### *Thyridanthrax fenestratus* (Fallén, 1814) Mottled Bee-fly

- ID difficulty: 1
- Flight period: late May to early Sep, peak in Jul and early Aug
- GB threat: Least Concern 
   GB rarity: Nationally Scarce
- southern England
- sandy heaths
- No. of records: 537 % since 2000: 37%



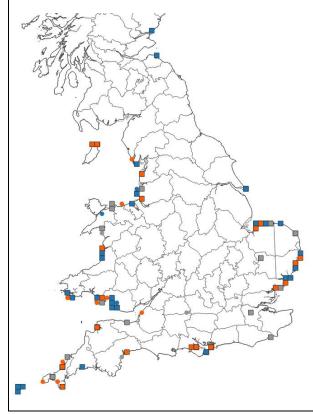
### Family: Bombyliidae *Villa cingulata* (Meigen, 1804) Downland Villa

- ID difficulty: 3
- Flight period: Jun to Aug, peak mid Jul to mid Aug
- GB threat: Least Concern GB rarity: Nationally Rare
- southern England
- grassland, usually calcareous
- No. of records: 93 % since 2000: 83%



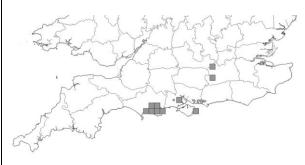
### Family: Bombyliidae

- Villa modesta (Meigen, 1820)
- Dune Villa
- ID difficulty: 3
- Flight period: Jun to early Sep
- GB threat: Least Concern GB rarity: Nationally Scarce
- mostly coastal
- sand dunes (partly fixed), old records for Breckland
- No. of records: 198 % since 2000: 37%
- <u>Caveats</u>: inland records (other than the Brecks) are probably erroneous



### Family: Bombyliidae Villa venusta (Meigen, 1820)

- Heath Villa
- ID difficulty: 4
- Flight period: mid Jul to late Aug
- $\bullet~$  GB threat: Critically Endangered  $\bullet~$  GB rarity: Nationally Rare
- southern Englanddry heathland
- No. of records: 30 % since 2000: 0%



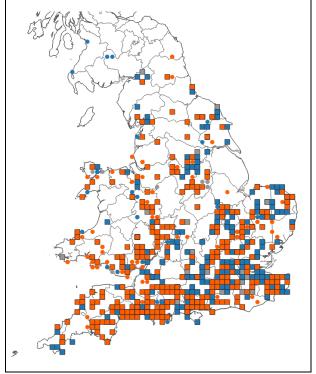
### Family: Rhagionidae (snipeflies)

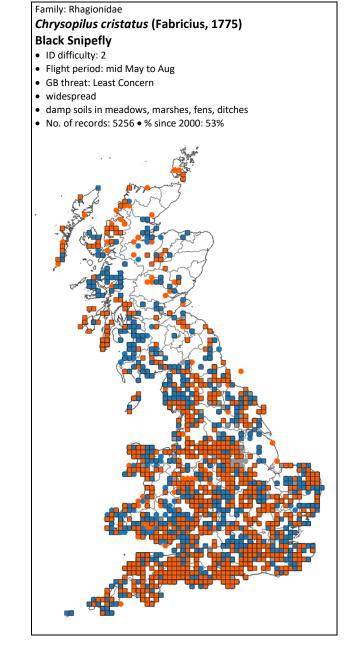
### Family: Rhagionidae

### Chrysopilus asiliformis (Preyssler, 1791)

### **Little Snipefly**

- ID difficulty: 2
- Flight period: late May to late Aug, peak mid Jun to mid Jul
- GB threat: Least Concern
- widespread, local in north
- various: gardens, hedgerows, woodland margins, marshes and fens
- No. of records: 1653 % since 2000: 63%

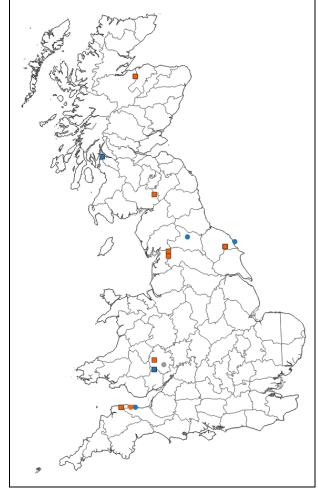




### Family: Rhagionidae

### Chrysopilus erythrophthalmus Loew, 1840 Silver-banded Snipefly

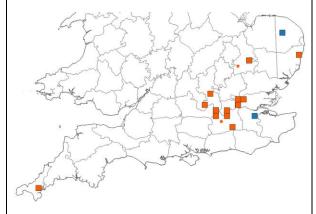
- ID difficulty: 3
- Flight period: mid Jun to early Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- northern and western uplands
- stony streams in upland areas, perhaps needing calcareous conditions
- No. of records: 15 % since 2000: 73%



### Family: Rhagionidae Chrysopilus laetus Zetterstedt, 1842

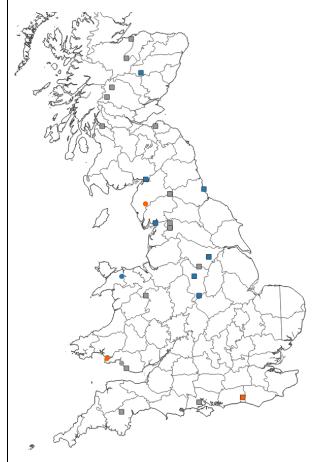
### Tree Snipefly

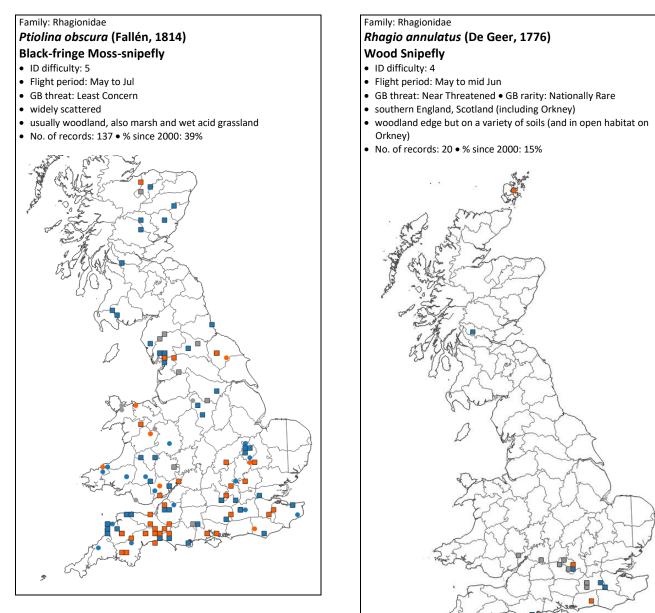
- ID difficulty: 4
- Flight period: Jun? to Jul • GB threat: Near Threatened • GB rarity: Nationally Scarce
- southern England
- wood mould in old trees, often but not always in ancient
- woodland • No. of records: 27 • % since 2000: 81%
- Caveats: a 2009 record for Gloucestershire is not yet mapped

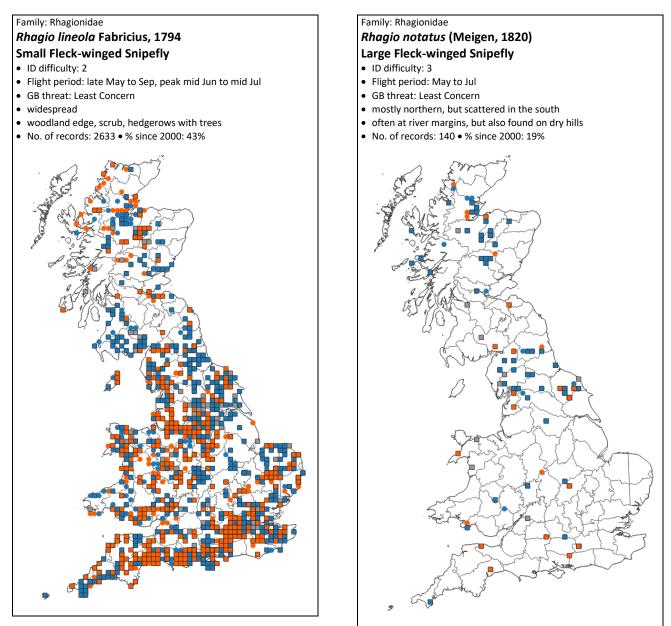


### Family: Rhagionidae Ptiolina nigra Staeger in Zetterstedt, 1842 Pale-fringed Moss-snipefly

- ID difficulty: 5
- Flight period: May to Jun
- GB threat: Least Concern GB rarity: Nationally Scarce
- widespread but very local
- dunes, moorland, woodland
- No. of records: 29 % since 2000: 3%





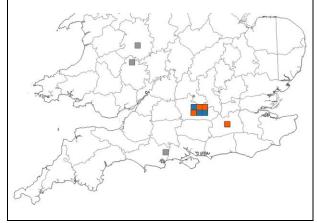


# Family: Rhagionidae Rhagio scolopaceus (Linnaeus, 1758) Downlooker Snipefly 9 10 difficulty: 1 9 17 9 17 9 17 17 18 18 19 19 19 10 17 17 17 17 17 18 18 19 10 117 128 129 129 120 120 120 120 120 121 121 121 121 121 121 121 121 121 121 121 121 121 121 1221 1221 12221

### Family: Rhagionidae

### *Rhagio strigosus* (Meigen, 1804) Yellow Downlooker Snipefly

- ID difficulty: 4
- Flight period: Jun to mid Sep, peak Jul
- GB threat: Vulnerable GB rarity: Nationally Rare
- southern England (Chilterns, North Downs)
- woodland edge, also isolated trees and telegraph poles, in calcareous areas
- No. of records: 153 % since 2000: 29%
- <u>Caveats</u>: the three westernmost records are thought erroneous

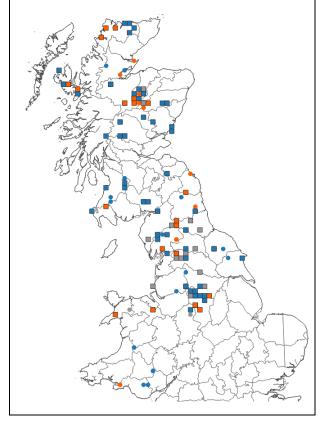


# Family: Rhagionidae Family: Rhagionidae Rhagio tringarius (Linnaeus, 1758) Spania nigra Meigen, 1830 **Marsh Snipefly** Liverwort Snipefly • ID difficulty: 2 • ID difficulty: 4 • Flight period: May to Sep • Flight period: late May to early Aug, peak early to mid Jun • GB threat: Least Concern GB threat: Least Concern • widespread, scarcer in Scotland • widespread • marshes and wet meadows, pond edges, woodland • associated with liverworts, usually in open habitats but • No. of records: 2139 • % since 2000: 47% sometimes in woodland • No. of records: 90 • % since 2000: 24%

### Family: Rhagionidae

### Symphoromyia crassicornis (Panzer, [1806]) Moorland Snipefly

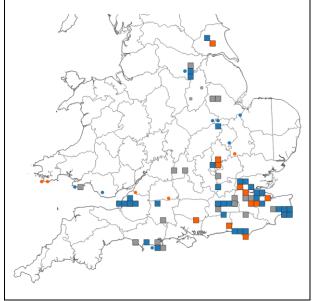
- ID difficulty: 3
- Flight period: Jun to Jul
- GB threat: Least Concern
- western and northern Britain
- upland bogs, marshes and streams, lowland wet meadows and marshes
- No. of records: 144 % since 2000: 23%



### Family: Rhagionidae

### *Symphoromyia immaculata* (Meigen, 1804) Limestone Snipefly

- ID difficulty: 3
- Flight period: mid May to late Aug, peak mid to late Jun
- GB threat: Least Concern GB rarity: Nationally Scarce
- southern and eastern England north to Yorks
- dry calcareous grassland, sometimes on clay
- No. of records: 136 % since 2000: 12%

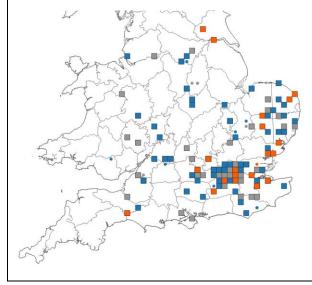


### Family: Scenopinidae (windowflies)

### Family: Scenopinidae

### *Scenopinus fenestralis* (Linnaeus, 1758) House Windowfly

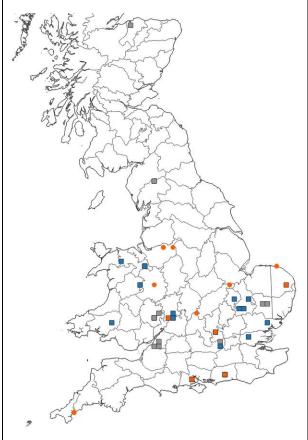
- ID difficulty: 3
- Flight period: Jun to Aug
- GB threat: Least Concern
- more frequent in the south, north to Humber
- synanthropic; houses, stables, flour mills
- No. of records: 233 % since 2000: 19%



### Family: Scenopinidae *Scenopinus niger* (De Geer, 1776) Forest Windowfly

• ID difficulty: 3

- Flight period: late May to early Aug
- GB threat: Near Threatened GB rarity: Nationally Scarce
- mostly southern England, scattered in Wales and Scotland
- old, decaying trees
- No. of records: 52 % since 2000: 15%

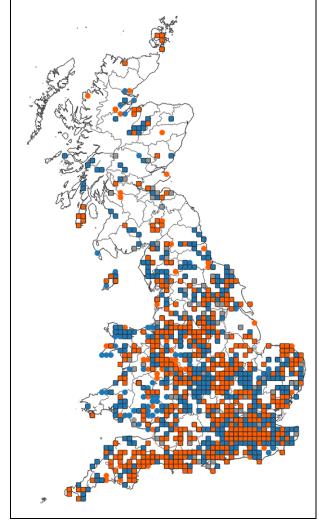


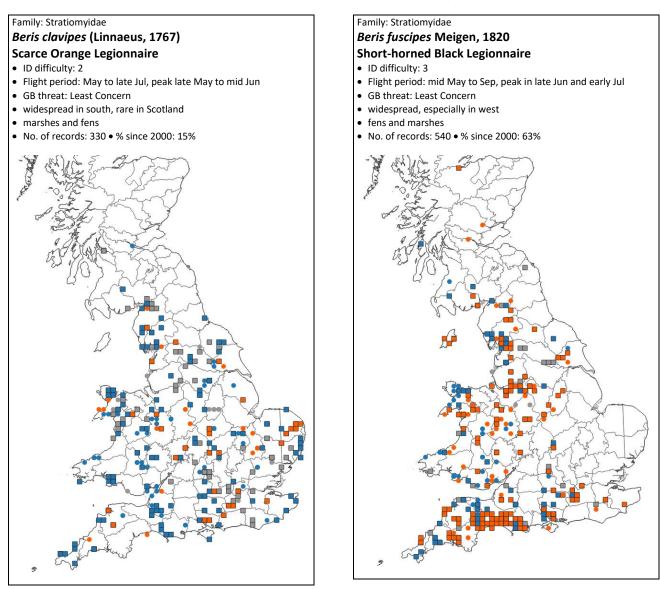
### Family: Stratiomyidae (soldierflies)

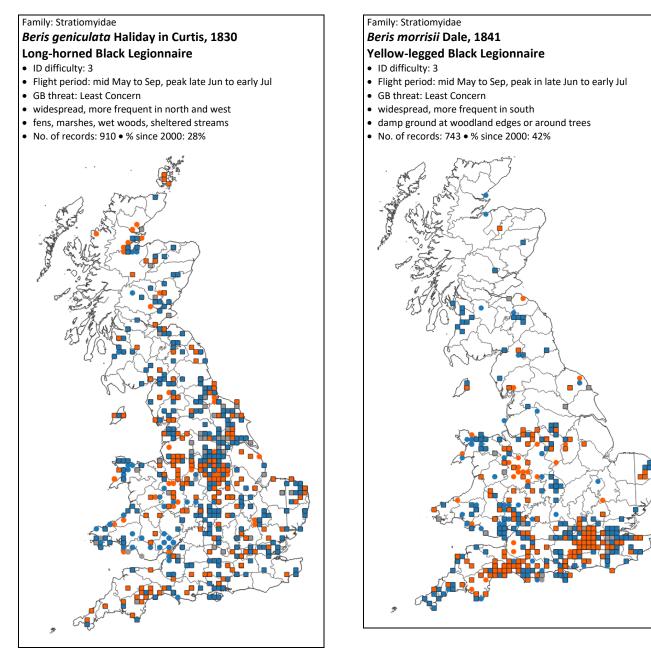
### Family: Stratiomyidae

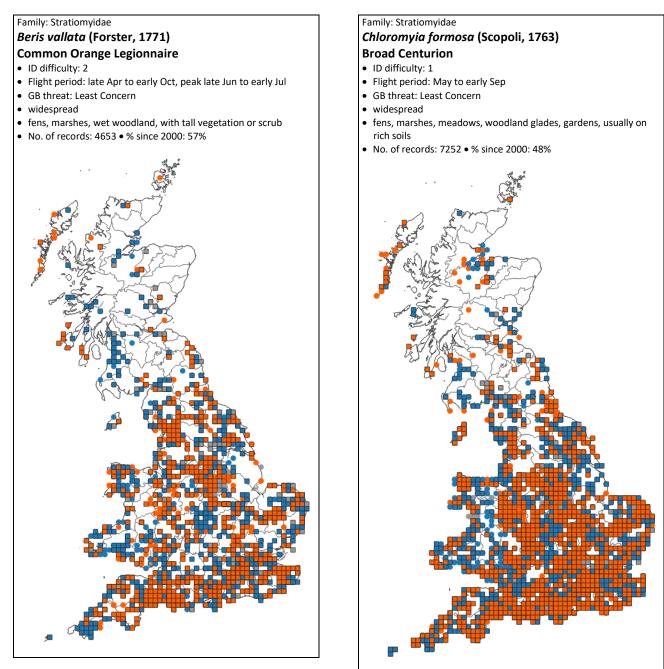
### Beris chalybata (Forster, 1771)

- **Murky-legged Black Legionnaire**
- ID difficulty: 3
- Flight period: late Apr to mid Sep, peak mid May to early Jun
- GB threat: Least Concern
- widespread
- lush vegetation at woodland edges, rides and hedgerows, also gardens, marshes, fens
- No. of records: 3144 % since 2000: 43%



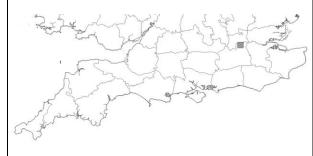






# Family: Stratiomyidae Family: Stratiomyidae Chorisops nagatomii Rozkošný, 1979 Chorisops tibialis (Meigen, 1820) **Bright Four-spined Legionnaire Dull Four-spined Legionnaire** • ID difficulty: 3 • ID difficulty: 3 • Flight period: May to early Oct, peak in Aug • Flight period: mid May to late Sep, peak in Jun GB threat: Least Concern • GB threat: Least Concern • widespread in England and Wales, found in Scotland in 2017 • widespread in England and Wales • fens, peat soils • shaded conditions, woodland rides • No. of records: 1321 • % since 2000: 50% • No. of records: 341 • % since 2000: 54% Family: Stratiomyidae Clitellaria ephippium (Fabricius, 1775)

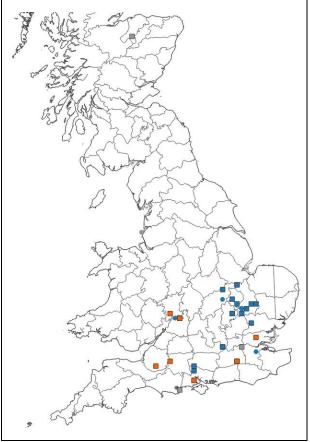
- ID difficulty: 4Flight period: June
- GB threat: Regionally Extinct
- At least one record in Surrey (1812), possibly also in Kent in the early 19<sup>th</sup> century
- No. of records: 1 % since 2000: 0%



### Family: Stratiomyidae

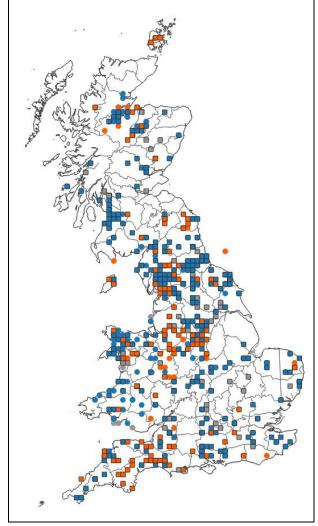
### *Eupachygaster tarsalis* (Zetterstedt, 1842) Scarce Black

- ID difficulty: 3
- Flight period: May to Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- scattered
- rot-holes in deciduous trees
- No. of records: 32 % since 2000: 31%



### Family: Stratiomyidae *Microchrysa cyaneiventris* (Zetterstedt, 1842) Black Gem

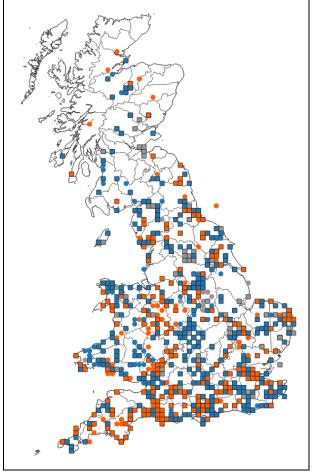
- ID difficulty: 2
- Flight period: May to Sep, peak in late Jun to mid Jul
- GB threat: Least Concern
- widespread
- woodland edge, hedgerows, isolated trees and bushes
- No. of records: 767 % since 2000: 21%

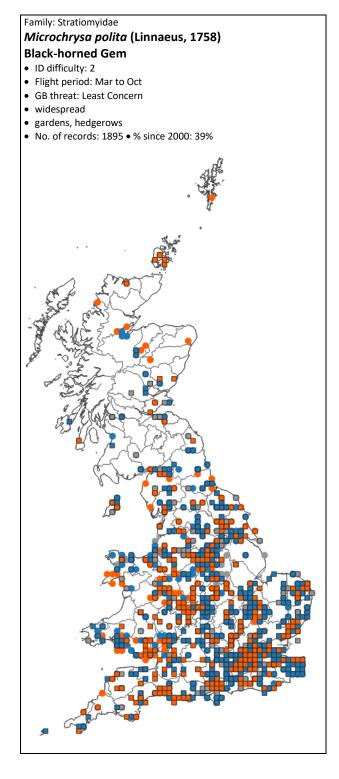


### Family: Stratiomyidae *Microchrysa flavicornis* (Meigen, 1822) Green Gem

• ID difficulty: 2

- Flight period: early May to Sep, peak in mid Jun to mid Jul
- GB threat: Least Concern
- widespread
- woodland edge, hedgerows, isolated trees and bushes
- No. of records: 1200 % since 2000: 31%

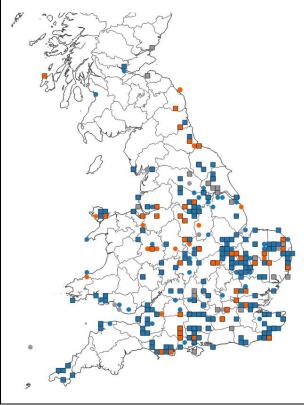


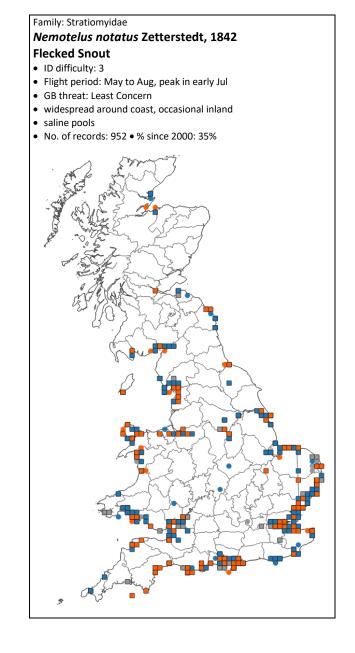


### Family: Stratiomyidae Nemotelus nigrinus Fallén, 1817

All-black SnoutID difficulty: 3

- Flight period: May to Aug, peak late Jun to early Jul
- GB threat: Least Concern
- widespread in south, less so in north
- calcareous fens and marshy ground, coastal ditches and dune pools
- No. of records: 563 % since 2000: 21%

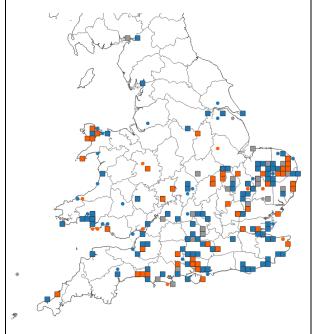


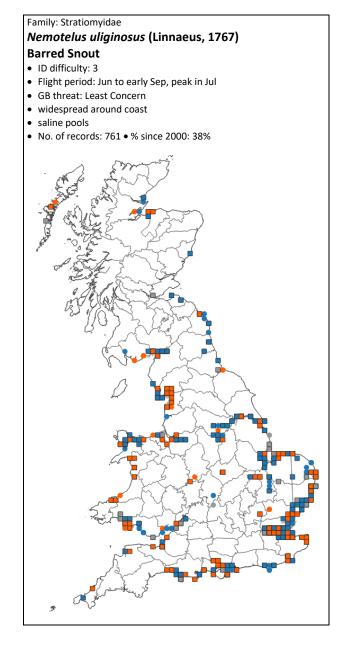


### Family: Stratiomyidae Nemotelus pantherinus (Linnaeus, 1758)

### Fen Snout

- ID difficulty: 3
- Flight period: Jun to Aug
- GB threat: Least Concern
- widespread in south, scarcer in north
- seepages, including damp fen and meadows, ponds and ditches
- No. of records: 467 % since 2000: 28%

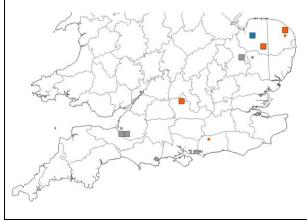




# Family: Stratiomyidae Neopachygaster meromelas (Dufour, 1841) **Silver-strips Black** • ID difficulty: 3 • Flight period: Jun to late Aug, peak Jun • GB threat: Least Concern • GB rarity: Nationally Scarce • scattered, mostly south-east, north to Yorks and Cumbria • under bark of various trees • No. of records: 71 • % since 2000: 23% Family: Stratiomyidae Odontomyia angulata (Panzer, [1798])

### **Orange-horned Green Colonel**

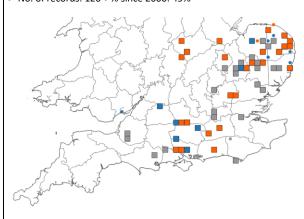
- ID difficulty: 3
- Flight period: Jun to early Aug
- GB threat: Vulnerable GB rarity: Nationally Rare
- Fens in Oxon, New Forest and East Anglia (formerly also Somerset and Wales)
- fenland pools, pingos, may need ancient pools; mires with baserich conditions
- No. of records: 22 % since 2000: 18%
- <u>Caveats</u>: old records for Wales (Stubbs and Drake 2014) not mapped



### Family: Stratiomyidae Odontomyia argentata (Fabricius, 1794)

### Silver Colonel

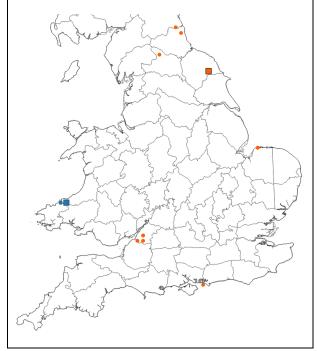
- ID difficulty: 2Flight period: late Apr to early Jun
- GB threat: Least Concern GB rarity: Nationally Scarce
- OB threat. Least conce
   south-east
- fens, marshes, floodplain pools and ditches
- No. of records: 120 % since 2000: 49%



### Family: Stratiomyidae

### *Odontomyia hydroleon* (Linnaeus, 1758) Barred Green Colonel

- ID difficulty: 3
- Flight period: Jul
- GB threat: Critically Endangered GB rarity: Nationally Rare
- Yorkshire, fomerly Ceredigion in Wales
- seepages in meadows
- No. of records: 18 % since 2000: 56%
- <u>Caveats</u>: the only confirmed records are from west Wales and north-east Yorkshire – this species is frequently recorded erroneously

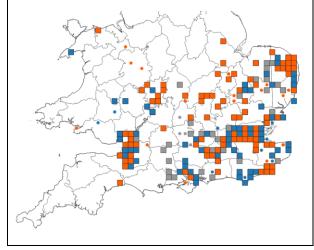


# Family: Stratiomyidae Odontomyia ornata (Meigen, 1822) Ornate Brigadier • ID difficulty: 2 • Flight period: late Apr to late July, peak in Jun • GB threat: Least Concern • GB rarity: Nationally Scarce • scattered in southern Britain • ditches in grazing levels • No. of records: 549 • % since 2000: 47%

### Family: Stratiomyidae **Odontomyia tigrina (Fabricius, 1775)**

### Black Colonel

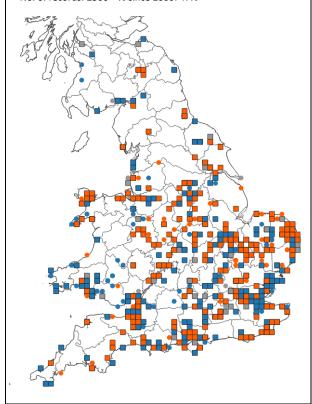
- ID difficulty: 2
- Flight period: mid Apr to early Aug, peak late My to early Jun
- GB threat: Least Concern
- scattered in south, scarcer in north
- margins of ponds, ditches and canals
- No. of records: 815 % since 2000: 36%
- <u>Caveats</u>: Stubbs and Drake (2014) mention Scottish records, for which record details are not available



### Family: Stratiomyidae

### *Oplodontha viridula* (Fabricius, 1775) Common Green Colonel

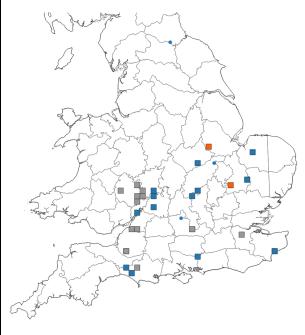
- ID difficulty: 3
- Flight period: late May to Aug, peak in late Jun to mid Jul
- GB threat: Least Concern
- widespread, more frequent near coast
- open habitats with lush vegetation on alluvium, clay or fen peat
- No. of records: 2360 % since 2000: 47%



### Family: Stratiomyidae

### *Oxycera analis* Wiedemann in Meigen, 1822 Dark-winged Soldier

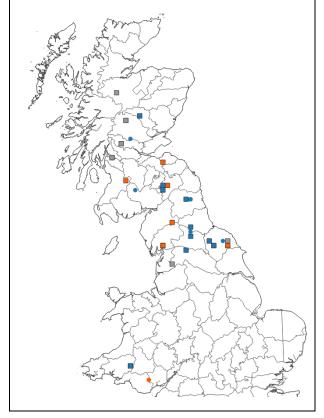
- ID difficulty: 2
- Flight period: late May to late Jul, peak in mid Jun to early Jul
- GB threat: Vulnerable GB rarity: Nationally Rare
  scattered across southern half of England, more restricted in
- scattered across southern half of England, more restricted in recent years
- fen, marsh, calcareous spring-fed streams at edge of woodland or in open woodland
- No. of records: 36 % since 2000: 6%



Family: Stratiomyidae

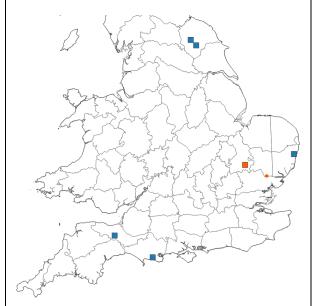
### *Oxycera dives* Loew, 1845 Round-spotted Major

- ID difficulty: 2
- Flight period: Jun to Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- Scotland, northern England, Wales
- seepages at edges of woodland, moorlands, often but not always at calcareous sites
- No. of records: 41 % since 2000: 24%



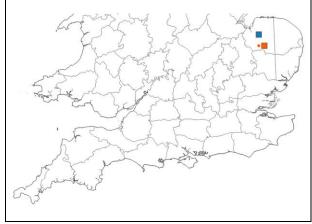


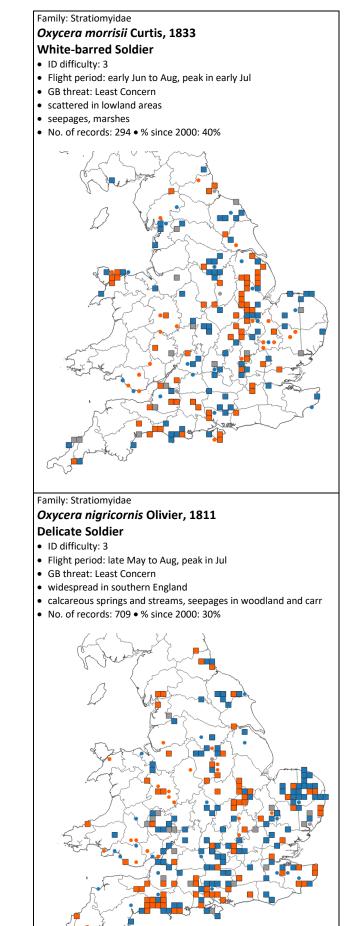
- ID difficulty: 2
- Flight period: Jun to Aug, peak late July to Aug
- GB threat: Vulnerable GB rarity: Nationally Rare
- Yorks and Ireland
- calcareous springs, seepages, streams
- No. of records: 8 % since 2000: 13%
- <u>Caveats</u>: the only confirmed British records are from north-east Yorkshire



#### Family: Stratiomyidae Oxycera leonina (Panzer, [1798]) Twin-spotted Major

- ID difficulty: 3
- ID difficulty: 3
  Flight period: ?May to Jul, peak Jun to Jul
- GB threat: Vulnerable GB rarity: Nationally Rare
- Norfolk and Suffolk only
- calcareous springs, seepages, often with Alder carr
- No. of records: 4 % since 2000: 50%
- <u>Caveats</u>: Suffolk records (Drake 2017) not mapped (record details not available)

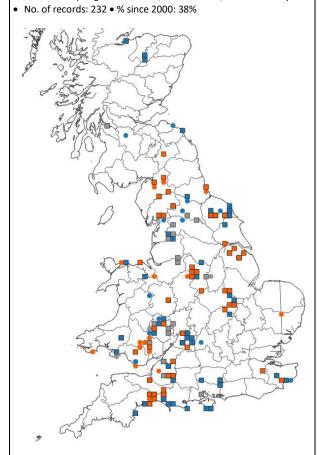




#### Family: Stratiomyidae Oxycera pardalina Meigen, 1822

Hill Soldier

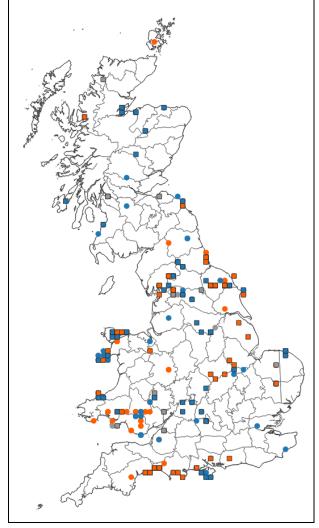
- ID difficulty: 3
- Flight period: early Jun to Aug, peak late Jun to early Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- scattered, most frequent in northern England
- calcareous springs and streams, often on hills, coastal landslips



#### Family: Stratiomyidae

#### *Oxycera pygmaea* (Fallén, 1817) Pygmy Soldier

- ID difficulty: 3
- Flight period: late May to early Aug, peak mid Jun to mid Jul
- GB threat: Least Concern
- widespread
- calcareous seepages on open sites, occasionally in woodland
- No. of records: 308 % since 2000: 32%



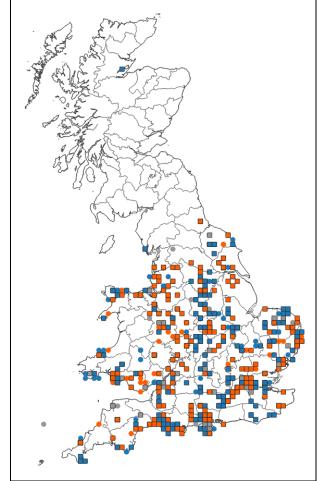
Family: Stratiomyidae

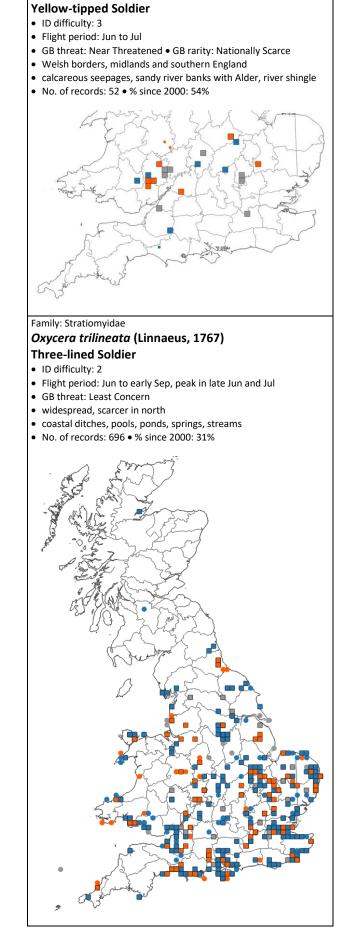
Oxycera terminata Wiedemann in Meigen, 1822

#### Family: Stratiomyidae *Oxycera rara* (Scopoli, 1763) Four-barred Major

#### • ID difficulty: 2

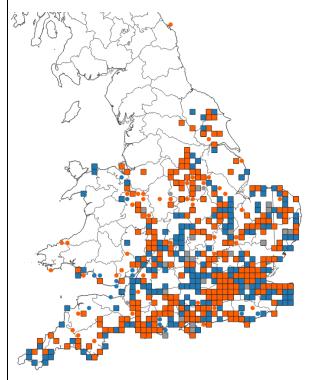
- Flight period: late May to Aug, peak in Jul
- GB threat: Least Concern
- widespread in southern half of England and in Wales
- seepages and wet mud at edge of ponds and ditches, coastal landslips, wet meadows, marsh and fen, sometimes in brackish conditions
- No. of records: 816 % since 2000: 40%
- Caveats: the Scottish record requires confirmation





#### Family: Stratiomyidae Pachygaster atra (Panzer, [1798])

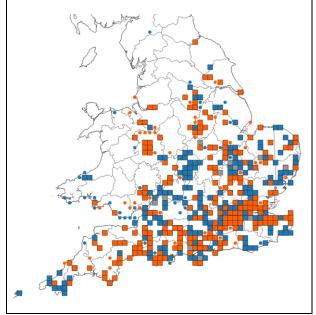
- **Dark-winged Black**
- ID difficulty: 2
- Flight period: May to mid Aug, peak in late Jun and Jul
- GB threat: Least Concern
- widespread in south, becoming rarer in north
- trees and bushes, woodland edges and hedgerows
- No. of records: 1713 % since 2000: 48%
- <u>Caveats</u>: the northernmost record requires confirmation



Family: Stratiomyidae

#### Pachygaster leachii Stephens in Curtis, 1824 Yellow-legged Black

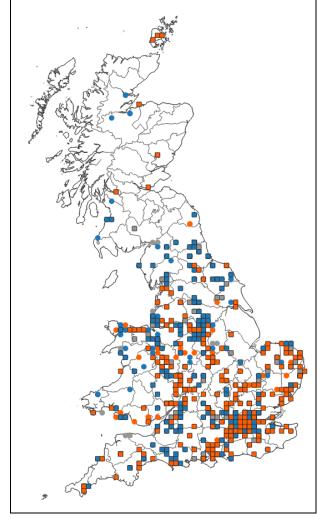
- ID difficulty: 2
- Flight period: late May to early Sep, peak in Jul
- GB threat: Least Concern
- widespread in south, becoming rarer in north
- trees and bushes, woodland edges and hedgerows
- No. of records: 1379 % since 2000: 51%

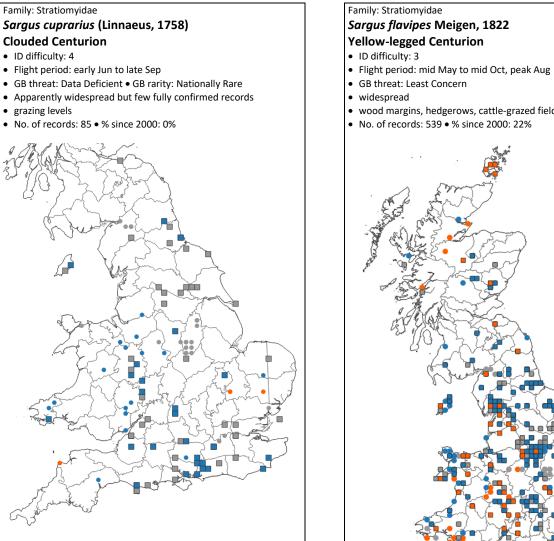


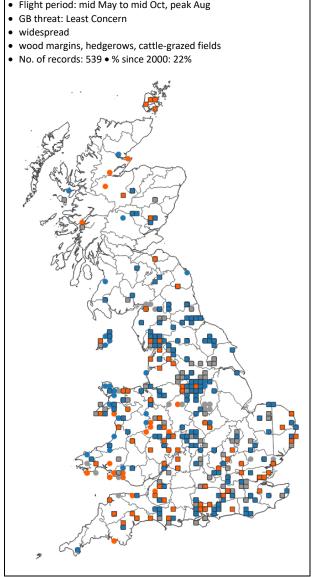
#### Family: Stratiomyidae

#### Sargus bipunctatus (Scopoli, 1763) **Twin-spot Centurion**

- ID difficulty: 2
- Flight period: early Jul to Nov, peak in Sep
- GB threat: Least Concern
- widespread in lowland Britain
- wood margins, hedgerows, gardens, cattle-grazed fields
- No. of records: 1015 % since 2000: 45%





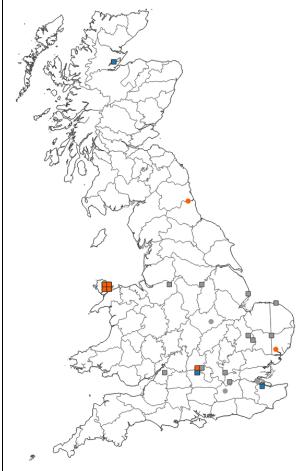


## Family: Stratiomyidae Sargus iridatus (Scopoli, 1763) **Iridescent Centurion** • ID difficulty: 4 • Flight period: May to mid Sep, peak in mid Jun to mid Jul • GB threat: Least Concern • widespread in lowland Britain • wood margins, hedgerows, cattle-grazed fields • No. of records: 964 • % since 2000: 22%

#### Family: Stratiomyidae

#### Stratiomys chamaeleon (Linnaeus, 1758) Clubbed General

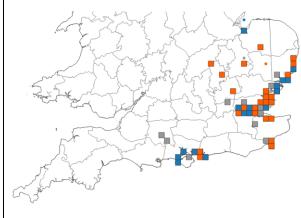
- ID difficulty: 2
  - ID difficulty: 2
- Flight period: late Jun to early Sep, peak Jul and early Aug
- GB threat: Endangered 
   GB rarity: Nationally Rare
- known from just three areas, one each in England, Wales and Scotland (formerly more widespread)
- fen pools and seepages
- No. of records: 108 % since 2000: 28%



Family: Stratiomyidae

#### Stratiomys longicornis (Scopoli, 1763) Long-horned General

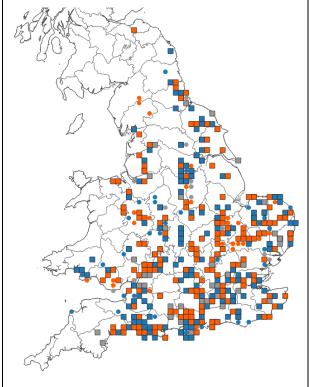
- ID difficulty: 2
- Flight period: late May to mid Jul
- GB threat: Least Concern 
   GB rarity: Nationally Scarce
- coasts of south-east England, spreading inland
- brackish and salt marsh
- No. of records: 161 % since 2000: 51%



#### Family: Stratiomyidae

#### Stratiomys potamida Meigen, 1822 Banded General

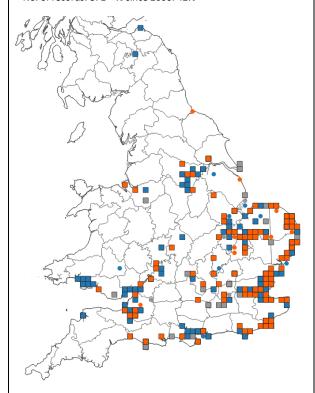
- ID difficulty: 2
- Flight period: late May to early Sep, peak late Jun and Jul
- GB threat: Least Concern
- widespread, scarcer in the north, not in Scotland
- wet meadows with ditches, streams, springs or seepages, pools and ponds, sometimes in carr or along lowland rivers
   No. of records: 247 a % circa 2000; 26%
- No. of records: 847 % since 2000: 36%



#### Family: Stratiomyidae

#### *Stratiomys singularior* (Harris, [1776]) Flecked General

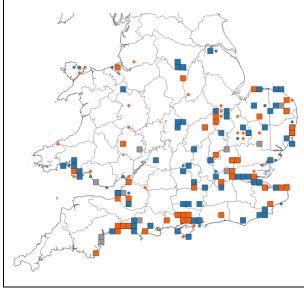
- ID difficulty: 2
- Flight period: late May to early Sep, peak in Jul
- GB threat: Least Concern
- largely coastal and southern, some inland records
- ditches on coastal marshes, brackish pools
- No. of records: 871 % since 2000: 42%



#### Family: Stratiomyidae

#### Vanoyia tenuicornis (Macquart, 1834) Long-horned Soldier

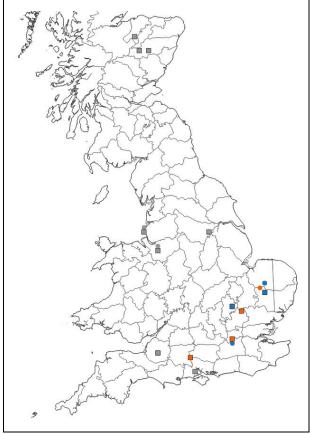
- ID difficulty: 3
- Flight period: late May to early Aug, peak mid Jun to mid Jul
- GB threat: Least Concern
- widespread in lowlands of southern Britain
- fens, wet meadows, seepages, dune slacks
- No. of records: 351 % since 2000: 34%



#### Family: Stratiomyidae

#### *Zabrachia tenella* (Jaennicke, 1866) Pine Black

- ID difficulty: 3
- Flight period: Jun to Jul
- GB threat: Endangered GB rarity: Nationally Rare
- South-east England (formerly widespread in GB)
- pine woods (larvae under bark)
- No. of records: 17 % since 2000: 18%

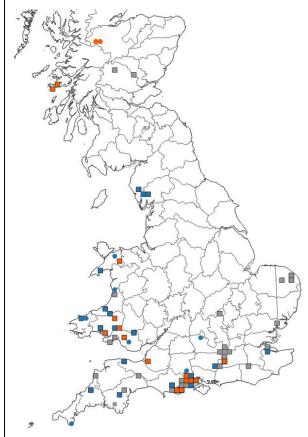


#### Family: Tabanidae (horseflies)

Family: Tabanidae

#### Atylotus fulvus (Meigen, 1804)

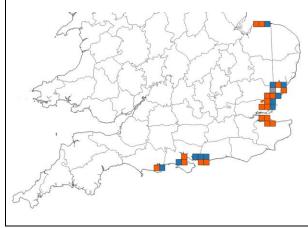
- **Golden Horsefly**
- ID difficulty: 3
- Flight period: mid Jun to mid Aug, peak in Jul
- GB threat: Least Concern GB rarity: Nationally Scarce
- local in southern England, rare further north
- heathland valley mires, hillside mires
- No. of records: 205 % since 2000: 18%

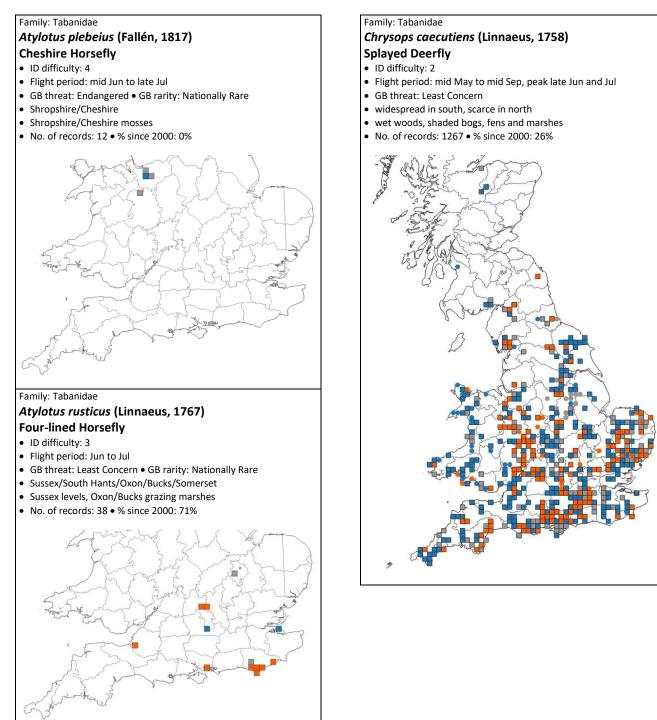


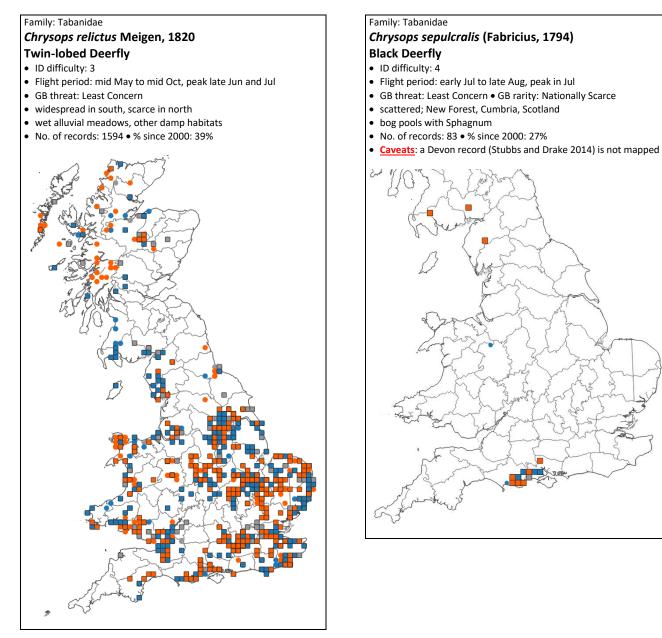
#### Family: Tabanidae

*Atylotus latistriatus* Brauer in Brauer & von Bergenstamm, 1880

- Saltmarsh Horsefly
- ID difficulty: 3
- Flight period: late Jun to Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- south-east coasts
- saltmarsh
- No. of records: 167 % since 2000: 33%





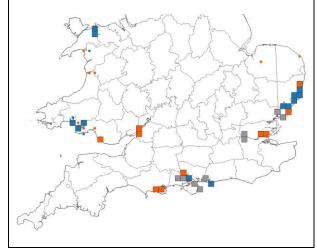


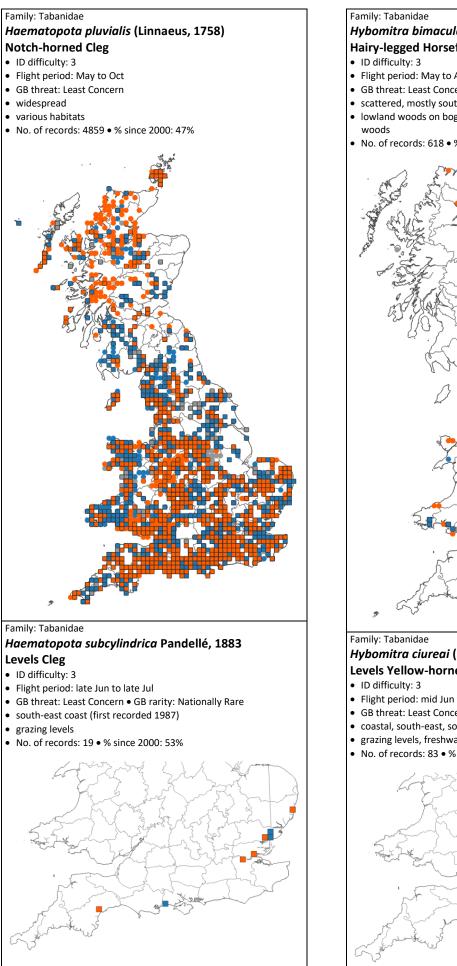
### Family: Tabanidae Family: Tabanidae Haematopota bigoti Gobert, 1880 Chrysops viduatus (Fabricius, 1794) Square-spot Deerfly **Big-spotted Cleg** • ID difficulty: 3 • ID difficulty: 3 • Flight period: late May to Sep, peak in Jul • Flight period: early Jul to Aug, peak in Jul • GB threat: Least Concern • GB threat: Least Concern • GB rarity: Nationally Scarce • widespread in south, scarce in north • coastal, more frequent in south • wet grassland, mires, water margins, wet woods coastal marshes • No. of records: 461 • % since 2000: 34% • No. of records: 76 • % since 2000: 24%

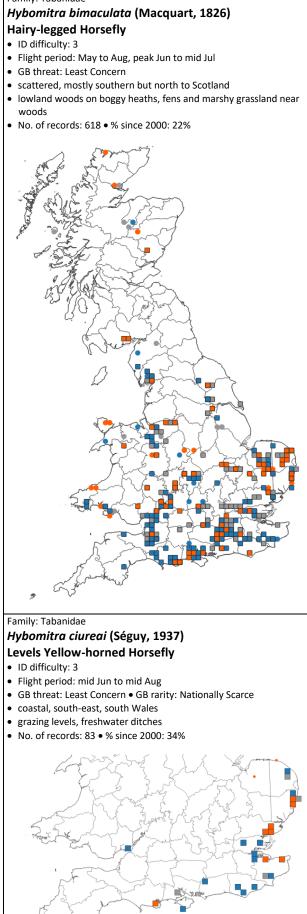
# Family: Tabanidae Haematopota crassicornis Wahlberg, 1848 **Black-horned Cleg** • ID difficulty: 3 • Flight period: mid May to early Sep, peak in late Jun and Jul • GB threat: Least Concern • widespread, less common in south • uplands, lowland grazing levels, open habitats • No. of records: 850 • % since 2000: 33%

#### Family: Tabanidae Haematopota grandis Meigen, 1820 Long-horned Cleg

- ID difficulty: 3
- Flight period: late Jun to Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- mainly coastal, mostly south-east plus Wales, Surrey
- saltmarsh, carr adjoining saltmarsh
- No. of records: 79 % since 2000: 25%
- <u>Caveats</u>: a recent Surrey record (J. Early pers comm) is not yet mapped







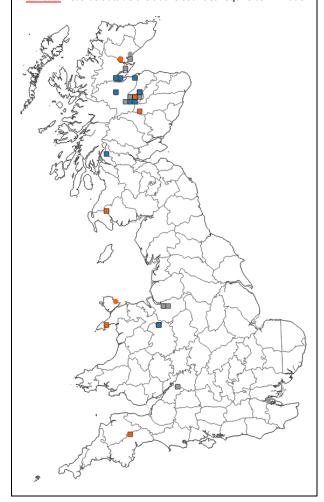
### Family: Tabanidae Hybomitra distinguenda (Verrall, 1909) **Bright Horsefly** • ID difficulty: 4 • Flight period: early Jun to Sep, peak in late Jun to mid Jul • GB threat: Least Concern • widespread, scarcer in north • wet meadows and pastures, wet woods, heaths and bogs • No. of records: 589 • % since 2000: 26% Family: Tabanidae Hybomitra expollicata (Pandellé, 1883) **Striped Horsefly** • ID difficulty: 4 • Flight period: early Jul to early Aug • GB threat: Near Threatened • GB rarity: Nationally Rare

- coastal, south-east
- brackish marshes
- No. of records: 51 % since 2000: 27%



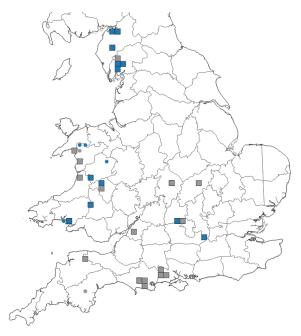
#### Family: Tabanidae Hybomitra lurida (Fallén, 1817) **Broad-headed Horsefly**

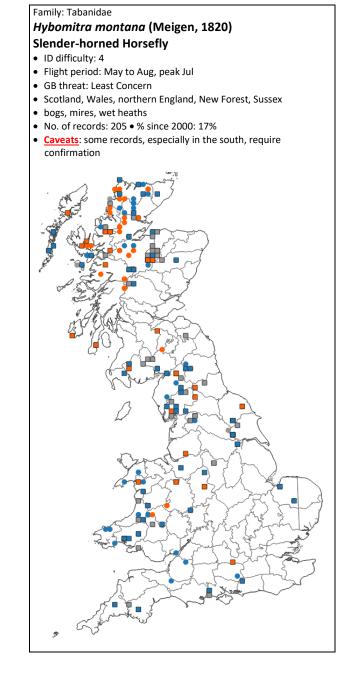
- ID difficulty: 4
- Flight period: May to late Jul, peak in early Jun
- GB threat: Vulnerable GB rarity: Nationally Rare
- Scotland, north Wales, Cumbria, Shropshire/Cheshire
- mires, Shropshire/Cheshire mosses
- No. of records: 63 % since 2000: 11%
- <u>Caveats</u>: records outside the above counties require confirmation



#### Family: Tabanidae Hybomitra micans (Meigen, 1804) Black-legged Horsefly

- ID difficulty: 3
- Flight period: mid May to Jun, peak in mid Jun
- GB threat: Vulnerable GB rarity: Nationally Rare
- scattered in England and Wales, an old record for Scotland
- wet grassland next to woodland
- No. of records: 57 % since 2000: 0%

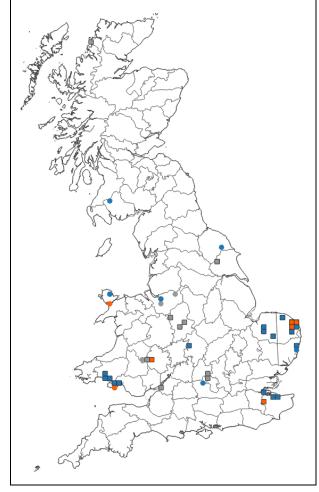




#### Family: Tabanidae

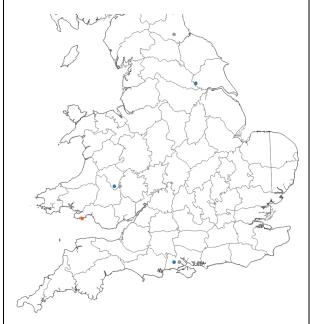
#### *Hybomitra muehlfeldi* (Brauer in Brauer & von Bergenstamm, 1880) Broadland Horsefly

- ID difficulty: 4
- Flight period: Jun to Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- Norfolk, Wales, many unconfirmed records from elsewhere
- fens, in conjunction with pingos and bogs
- No. of records: 87 % since 2000: 24%
- Caveats: many records require confirmation



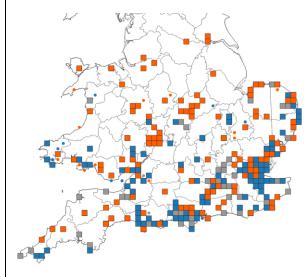
#### Family: Tabanidae Hybomitra solstitialis (Meigen, 1820)

- Scarce Forest Horsefly
- ID difficulty: 4
- Flight period: Jun to Jul
- GB threat: Endangered 
   GB rarity: Nationally Rare
- New Forest, Oxfordshire
- mires and fens
- No. of records: 15 % since 2000: 0%
- <u>Caveats</u>: with the exception of the New Forest records, it is likely that all the dots on this map are erroneous; records from New Forest in 2008 and near Oxford in 2011 are not yet mapped



#### Family: Tabanidae *Tabanus autumnalis* Linnaeus, 1761 Large Marsh Horsefly

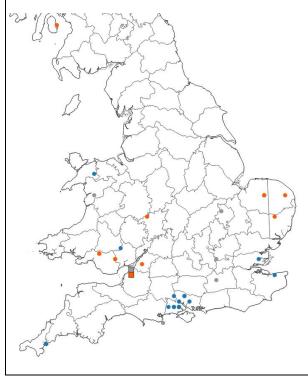
- ID difficulty: 3
- Flight period: mid May to Sep, peak in late Jun to Jul
- GB threat: Least Concern
- widespread in south, more frequent near coast
- coastal levels, inland grazing marsh
- No. of records: 684 % since 2000: 37%



#### Family: Tabanidae

#### Tabanus bovinus Linnaeus, 1758 **Pale Giant Horsefly**

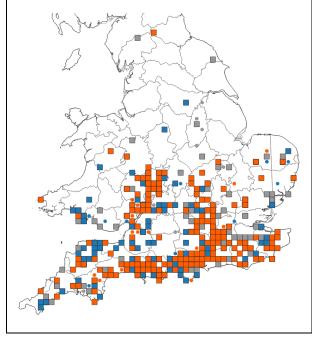
- ID difficulty: 5
- Flight period: Jun to ?Aug
- GB threat: Endangered GB rarity: Nationally Rare
- New Forest, Somerset
- grazing marsh ditches
- No. of records: 2 % since 2000: 50%
- <u>Caveats</u>: with the exception of some of the New Forest records and those near Bristol it is likely that all the dots on this map are erroneous

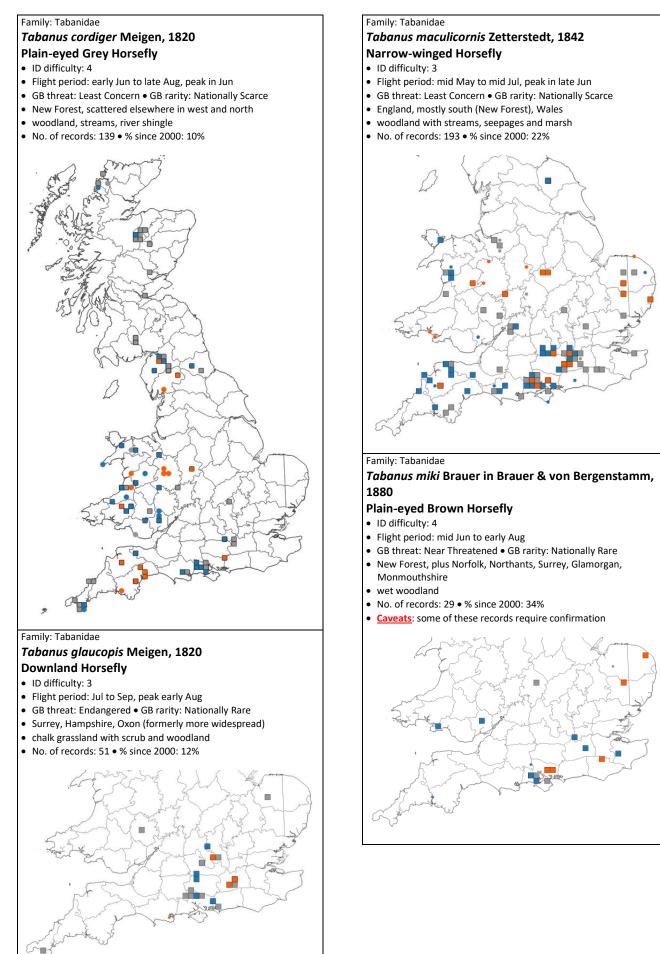


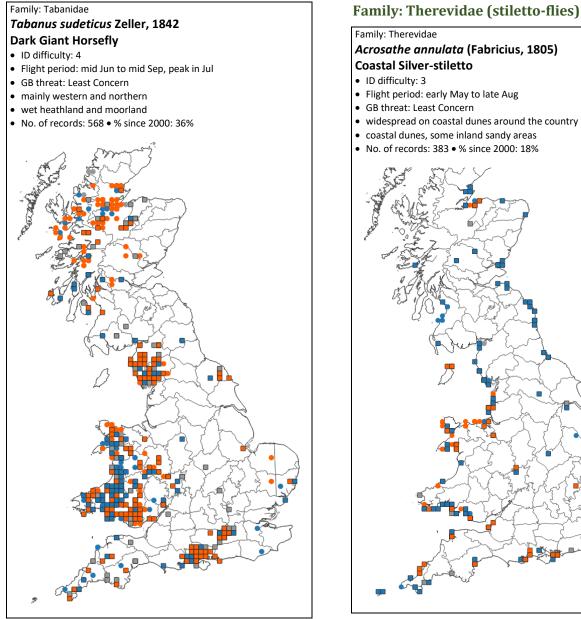
#### Family: Tabanidae

#### Tabanus bromius Linnaeus, 1758 **Band-eyed Brown Horsefly**

- ID difficulty: 3
- Flight period: late May to Aug, peak Jun and Jul
- GB threat: Least Concern
- southern England and Wales
- woodland (formerly more widespread in meadows)
- No. of records: 1096 % since 2000: 53%



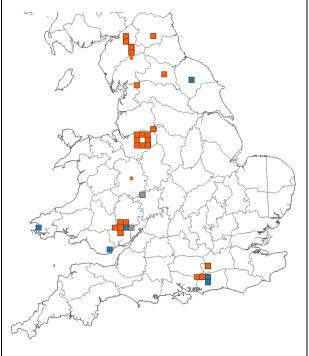




#### Family: Therevidae (stiletto-flies)

#### Family: Therevidae Cliorismia rustica (Panzer, [1804]) Southern Silver-stiletto • ID difficulty: 3 • Flight period: late Jun to mid Aug • GB threat: Least Concern • GB rarity: Nationally Scarce

- southern and midland England
- lowland rivers in sandy districts
- No. of records: 127 % since 2000: 54%



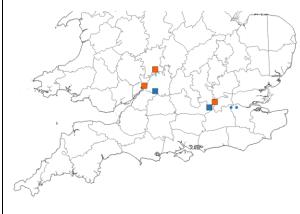
## Family: Therevidae Dialineura anilis (Linnaeus, 1761) Swollen Silver-stiletto • ID difficulty: 3 • Flight period: May to Jul, peak in late Jun to early Jul • GB threat: Least Concern • GB rarity: Nationally Scarce • coastal • dunes • No. of records: 89 • % since 2000: 11%

#### Family: Therevidae

#### *Pandivirilia melaleuca* (Loew, 1847) Forest Silver-stiletto

5

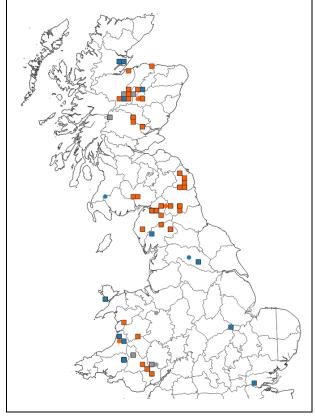
- ID difficulty: 3
- Flight period: May to Jul
- GB threat: Near Threatened GB rarity: Nationally Rare
- central England, mostly Thames valley and Gloucs-Worcs
- old trees, often in ancient parkland
- No. of records: 14 % since 2000: 43%



Family: Therevidae

#### Family: Therevidae *Spiriverpa lunulata* (Zetterstedt, [1838]) Northern Silver-stiletto

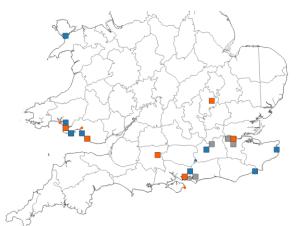
- ID difficulty: 3
- Flight period: late May to mid Aug, peak Jun
- GB threat: Least Concern 
   GB rarity: Nationally Scarce
- Scotland, northern England and Wales
- sandy alluvium alongside rivers
- No. of records: 225 % since 2000: 38%



### Thereva bipunctata Meigen, 1820 Twin-spot Stiletto • ID difficulty: 3 • Flight period: late May to early Sep, peak in mid Jun to early Aug • GB threat: Least Concern • widespread on coast, occasionally inland • coastal dunes, sandy soils inland • No. of records: 288 • % since 2000: 30% Family: Therevidae Thereva cinifera Meigen, 1830 Large Plain Stiletto • ID difficulty: 4 • Flight period: Jul • GB threat: Near Threatened • GB rarity: Nationally Rare • Wales, Sussex, Kent • dunes, sandy soils at river edges, shingle • No. of records: 9 • % since 2000: 89% • Caveats: the Sussex record (Drake 2017) is not yet mapped

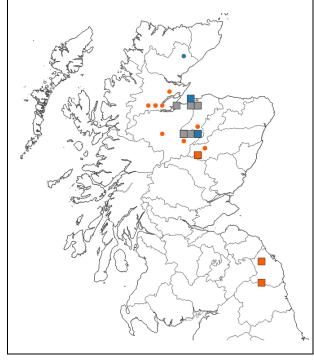
#### Family: Therevidae *Thereva fulva* (Meigen, 1804) Small Plain Stiletto

- ID difficulty: 4
- Flight period: mid Jun to Jul
- GB threat: Near Threatened GB rarity: Nationally Rare
- southern England and Wales
- usually on sandy soils, once on calcareous grassland
- No. of records: 55 % since 2000: 29%

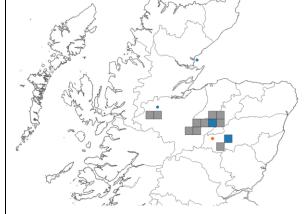


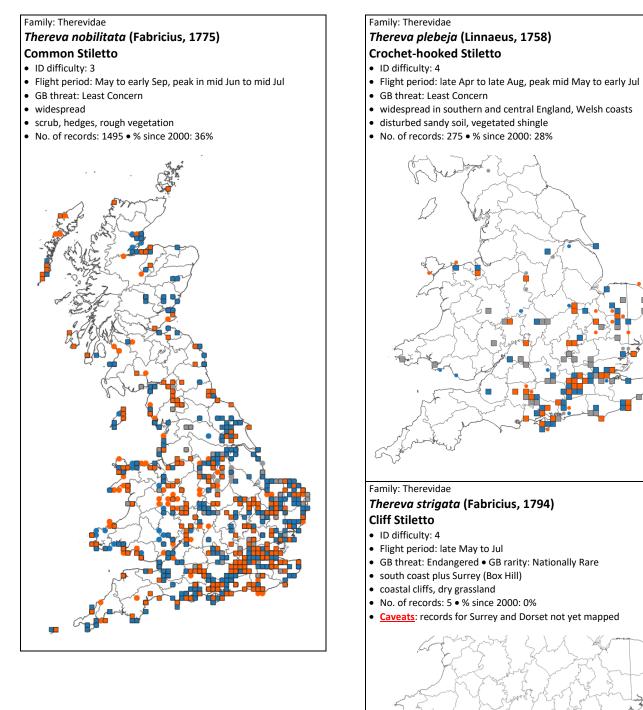
#### Family: Therevidae *Thereva handlirschi* Kröber, 1912 Golden Scottish Stiletto

- ID difficulty: 4
- Flight period: late Jun to early Sep, peak early Aug
- GB threat: Least Concern GB rarity: Nationally Scarce
- Scotland (Highlands)
- sandy soils at woodland edges
- No. of records: 24 % since 2000: 21%



#### Family: Therevidae **Thereva inornata Verrall, 1909 Light Scottish Stiletto** • ID difficulty: 4 • Flight period: mid Jun to early Sep, peak Jul • GB threat: Endangered • GB rarity: Nationally Rare • Scotland (mostly Highlands) • sandy soils • No. of records: 27 • % since 2000: 0%

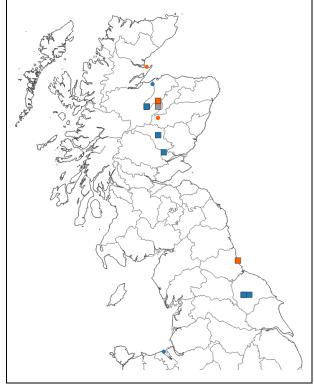




#### Family: Therevidae *Thereva valida* Loew, 1847 Dark Northern Stiletto

#### ID difficulty: 4

- Flight period: early Jun to late Jul
- GB threat: Least Concern GB rarity: Nationally Rare
- Scotland and Yorkshire
- drained soils close to streams, floodplain marshes, seepage meadows
- No. of records: 24 % since 2000: 8%

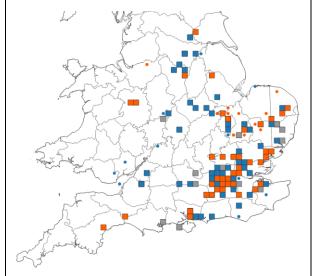


#### Family: Xylomyidae (wood-soldierflies)

#### Family: Xylomyidae

#### Solva marginata (Meigen, 1820) Drab Wood-soldierfly

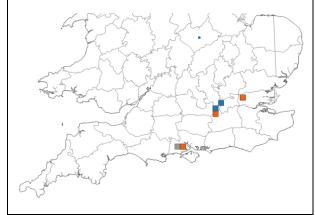
- ID difficulty: 2
- Flight period: May to Aug
- GB threat: Least Concern
- widespread in southern and central England
- associated with poplar trees, larvae under bark
- No. of records: 338 % since 2000: 46%
- <u>Caveats</u>: some of the westernmost records require confirmation



#### Family: Xylomyidae

#### *Xylomya maculata* (Meigen, 1804) Wasp Wood-soldierfly

- ID difficulty: 2
- Flight period: May to Jun
- GB threat: Vulnerable GB rarity: Nationally Rare
- New Forest, Epping Forest, Windsor Forest
- ancient woodland, rot-holes
- No. of records: 33 % since 2000: 21%
- <u>Caveats</u>: the northernmost record requires confirmation



#### Family: Xylophagidae (awl-flies)

