Identifying soldierflies and allies: horseflies (clegs) in genus *Haematopota*

Compiled by Martin C. Harvey for the Soldierflies and Allies Recording Scheme
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These guides are only possible thanks to the generosity of the brilliant photographers who have allowed their images to be used. Special thanks to Steven Falk, whose photo collections form the backbone for this species guide:

Steven Falk's [photo collections on Flickr](#)

Other photos included in this guide are by Andy Grayson, Janet Graham and Martin Harvey, some using specimens from the Natural History Museum in London, taken with the photo-stacking camera equipment in the Angela Marmont Centre at the NHM.

Males are shown first, one page for each species, then females. The two common species (*H. crassicornis* and *H. pluvialis*) are shown first. 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 [British soldierflies and their allies](#), by Alan Stubbs and Martin Drake. See also the recording scheme’s [additional notes](#) to accompany the Stubbs and Drake keys.

For lots more information on soldierflies and allies go to the recording scheme [website](#), [Twitter](#) page or [Facebook](#) group.

For lots more information and events, and to support the study and conservation of flies, please consider joining [Dipterists Forum](#).

Records wanted!
Once you have identified your fly, please let the recording scheme have the details! Add to [iRecord](#) or send to the [recording scheme](#) so that we can share the records for conservation and research.

The Soldierflies and Allies Recording Scheme is part of Dipterists Forum
The Soldierflies and Allies Recording Scheme is supported by the UKCEH Biological Records Centre
Recognising the genus: *Haematopota*

The 'clegs' in genus *Haematopota* are part of the horsefly family Tabanidae, and unpopular with many people, due to the painful bites that females of some of the species can inflict on humans. There are five species confirmed from the UK, with the possibility that others could be here but not yet recognised.

As a genus *Haematopota* is fairly distinctive: medium-sized flies (7–13mm long) with colourful eye patterns and mottled grey markings on the wings. Identifying the species can be more of a challenge, and it is not always possible to confirm them from photographs. Specimens would be welcomed by the recording scheme for the three rarer species, and for any individual that doesn’t seem to match the typical appearances.

For the best chance of identifying the species, photographs need to show the antennae as clearly and closely as possible, with a directly side-on view. The colours and patterns on the abdomen are also important features, but this can be very hard to observe on flies in the field, because the mottled wings obscure the abdomen markings. The colour of the femora is also a useful distinguishing feature for *H. bigoti*.

The antennae show some good characters for identification, especially in the females. Take care when examining the antennae for a 'notch' in the first segment – people often confuse this notch with the gap between the first and second segments. Also look out for how much greysich ‘dusting’ there is on the first segment.

There are two species that are frequent in many parts of the UK, both on the coast and inland, and these are the ones that most people see most of the time: *H. crassicornis* and *H. pluvialis*. These are shown first in this guide, with extra comparison pages for the males and females.

The other three species are mostly confined to coastal habitats: *H. bigoti*, *H. grandis* and *H. subcylindrica*, found in marshes, saltmarshes and grazing levels. *H. grandis* has occasionally been found inland.

The inland *Haematopota* species are most often found in wet, marshy habitats, including grasslands, woodlands and uplands, the three coastal species are associated with saltmarsh and ditch systems. The larvae that are predators, usually found in wet soils, although *H. pluvialis* at least can develop in drier soils as well.

Female clegs, especially *H. pluvialis*, are well-known for being persistent biters of humans. The males do not need a blood meal, and may sometimes be found on flowers.

![Typical appearance of female *Haematopota*](https://example.com/haematopota_female_typed.png)

**Haematopota MALE**

**Haematopota FEMALE**

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Haematopota crassicornis (Black-horned Cleg) - MALE

1st antennal segment mostly polished black, very little dusting at base; slightly tapered towards tip.

Antennae entirely black.

discal cell usually with just one or two pale bands in centre.

Tergites 2 and 3 usually without spots or median stripe.

Abdomen black all over, no orange at sides (can be hard to see under wings).

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Haematopota pluvialis (Notch-horned Cleg) - MALE

- Antennae mostly black, orange at base of 3rd segment
- 1st antennal segment mostly polished black, some dusting at base; more bulbous towards tip
- Antennae mostly black, **orange at base of 3rd segment**
- Abdomen pattern often indistinct
- Discal cell usually with paired pale bands at each end of cell
- Orange at base of abdomen at the sides (can be hard to see under wings)

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COMPARISON of *Haematopota crassicornis* and *Haematopota pluvialis* MALES

**Warning!**: none of these distinctions is 100% reliable on its own, but taking several together should give confidence in the identification.

- **Antennae**: *crassicornis* entirely black; *pluvialis* partly orange
- **1st segment**: *crassicornis* slightly tapered; *pluvialis* slightly bulbous
- **Discal cell**: *crassicornis* usually with multiple pale bands; *pluvialis* 1–2 central pale bands
- **Abdomen**: *crassicornis* entirely black; *pluvialis* orange at base

Photos © Steven Falk
Haematopota crassicornis (Black-horned Cleg) - FEMALE

- antennae mostly black, can be orange at base of 3rd segment
- 1st antennal segment without a notch, dusted in basal half
- all femora dark
- discal cell usually with just one or two pale bands in centre
- tergites 3 or 4 to 6 usually with paired spots

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**Haematopota pluvialis** (Notch-horned Cleg) - FEMALE

- Antennae black plus orange at base of 3rd segment
- 1st antennal segment with a notch, dusted in basal half (depth of notch varies)
- Tergites usually weakly marked
- Discal cell usually with four pale bands in centre
- All femora dark
- Antennae black plus orange at base of 3rd segment

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COMPARISON of *Haematopota crassicornis* and *Haematopota pluvialis* FEMALES

**Warning!** None of these distinctions is 100% reliable on its own, but taking several together should give confidence in the identification.

- **Antennae**
  - *crassicornis*: almost entirely black
  - *pluvialis*: usually obviously orange

- **1st Segment**
  - *crassicornis*: without a notch
  - *pluvialis*: with a notch

- **Discal Cell**
  - *crassicornis*: usually with 1–2 central pale bands
  - *pluvialis*: usually with multiple pale bands

- **Abdomen**
  - *crassicornis*: dark with clear spots
  - *pluvialis*: usually weakly marked

*Photos © Martin Harvey / Natural History Museum*
Haematopota bigoti (Big-spotted Cleg) - MALE

- long dense hairs on top surface of eyes
- rounded spots on tergite 3
- 1st antennal segment mostly polished black
- front tibia mostly yellow on upper surface
- orange at base of abdomen at the sides (can be hard to see under wings)

- ID difficulty: 3
- Flight period: early Jul to Aug, peak in Jul
- Gb status: Least Concern • Gb rarity: Nationally Scarc
- coastal, more frequent in south
- coastal marshes
- No. of records: 76 • % since 2000: 24%
**Haematopota grandis** (Long-horned Cleg) - MALE

- **1st antennal segment** entirely dusted, less bulbous than other species.
- Antennae mostly black, orange at base of 3rd segment.
- The largest *Haematopota* in the UK, up to 13mm long.
- 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%
- **Caveat**: A recent Surrey record (J. Early pers comm) is not yet mapped.

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Haematopota subcylindrica (Levels Cleg) - MALE

- 1st antennal segment extensively dusted on top surface
- 1st antennal segment fairly long, narrowing towards apex, and polished black on underside
- 3rd antennal segment extensively orange
- Orange at base of abdomen at the sides (can be hard to see under wings)

© Andy Grayson

- ID difficulty: 3
- Flight period: late Jun to late Jul
- GB threat: Least Concern • GB rarity: Nationally Rare
- South-east coast (first recorded 1987)
- Grazing levels
- No. of records: 19 • % since 2000: 53%
**Haematopota bigoti** (Big-spotted Cleg) - FEMALE

- 1st antennal segment mostly dusted, can have shallow notch towards tip
- Antennae usually obviously orange at base of 3rd segment
- Mid and hind femora usually pale, at least in middle (but dark-legged forms can occur)
- Tergite 2 (and most other tergites) with rounded spots and broad median triangle

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**Haematopota grandis (Long-horned Cleg) - FEMALE**

- Paired spots on tergites 2 to 6
- Antennae mostly black, orange at base of 3rd segment
- 1st antennal segment with a notch, long and narrow, entirely dusted
- The largest *Haematopota* in the UK, up to 13mm long
Haematopota subcylindrica (Levels Cleg) - FEMALE

- Antennae mostly black, orange at base of 3rd segment
- 1st antennal segment without a notch, fairly narrow, mostly dusted
- Tergite 2 with paired spots small or absent
- Mid and hind femora entirely dark
- Haematopota subcylindrica (Levels Cleg) - FEMALE

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