Family Staphylinidae

This is the largest family of beetles in Britain comprising around a quarter of the beetle fauna. It is split into a number of subfamilies, some of which are very easy to recognise. The following key is based on that of Tottenham (1954) and updated to the current checklist.

Reference:

Tottenham (1954) Handbooks for the Identification of British Insects Volume 4, Part 8a

Checklist of subfamilies


- ALEOCHARINAE Fleming, 1821
- EUAESTHETINAE Thomson, C.G., 1859
- HABROCERINAE Mulsant & Rey, 1876
- MICROPEPLINAE Leach, 1815
- OMALIINAE MacLeay, 1825
- OXYPORINAE Fleming, 1821
- OXYTELINAE Fleming, 1821
- PAEDERINAE Fleming, 1821
- PHLOEOCHARINAE Erichson, 1839
- PIESTINAE Erichson, 1839
- PROTEININAE Erichson, 1839
- PSELAPHINAE Latreille, 1802
- PSEUDOPSINAE Ganglbauer, 1895
- SCAPHIDIINAE Latreille, 1806
- SCYDMAENINAE Leach, 1815
- STAPHYLININAE Latreille, 1802
- STENINAE MacLeay, 1825
- TACHYPORINAE MacLeay, 1825
- TRICHOPHYINAE Thomson, C.G., 1858

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Family Staphylinidae
Key to British subfamilies

Note that if you have a black beetle which is over 10 mm in length it is probably in subfamily Staphylininae (couplet 11).

1  Elytra shortened so that at least three segments of the abdomen are exposed. ............................................................... 2

Elytra covering most of the abdomen, leaving at most 1-2 segments of the abdomen exposed. ................................................. 22
Tarsi with three segments. Abdomen not particularly hardened and tending to collapse on drying. Elytra usually much broader than the pronotum. Last segment of the antennae and of the palps often conspicuously enlarged or with appendages. Length under 3 mm. .....................

Subfamily **PSELAPHINAE**
One genus has only five segments to the antennae.

Tarsi with five segments (occasionally four or three, but if with three then not agreeing with the other characters above)...........................
3. Antennae with nine segments, the last segment forming a distinct club. Pronotum, elytra and abdomen with distinct ridges or keels; size 1-2 mm. ..................................................
........ Subfamily **MICROPEPLINAE**
Genus *Micropeplus*

Antennae with eleven segments (rarely with ten in Hypocyptini, subfamily Aleocharinae). Pronotum, elytra and abdomen with or without ridges, keels or furrows. ...............................................................
Last segment of the labial palps very large, dilated and somewhat crescent shaped; mandibles very large, held forward (but crossed) in repose.

Subfamily **OXYPORINAE**

Only one species *Oxyporus rufus*. Length 6-10 mm. Found in the gills of fungi. Local but widespread, sometimes common.

Labial palps with the last segment about equal in thickness with the previous one; mandibles smaller.
Pronotum and elytra with distinct ridges. Abdominal tergites with oblique furrows from the middle of the base towards the apical angles and with stout bristle-like hairs at the sides which are curved backwards. Brown species with a distinctive appearance. ........ ........ Subfamily PSEUDOPSINAЕ
A single species in Britain, *Pseudopsis sulcata* which was formerly quite common as it lived in haystacks. A similar habitat where it has been found is in piles of cut reed litter.

Pronotum and elytra without ridges or not *both* having distinct ridges. .....6
Male (illustrated on the left) with large curved extensions on the mandibles. Rather flat species, more or less parallel-sided and of characteristic appearance; from below the front coxae are circular. .................................

........... Subfamily PIESTINAE

One species which is locally common in the south, *Siagonium quadricorne*, found under damp bark, especially elm in the winter. Hairless, with small prominent eyes. Antennae with all the segments elongate, more so in males than females. Pronotum rather diffusely punctured with large and small punctures. Length 4.0-5.5 mm.

Mandibles without curved extensions. ..............................................................
Antennae inserted clearly on the upper surface of the head, at or near the level of the front margin of the eyes; the insertion point of the antennae is clearly visible from above. ..........................................................8
It is helpful here to inspect the head directly from the side to assess whether the antennae are attached on the top or from the sides of the head.

Antennae inserted otherwise, under a ridge on the side margin or on the front; the extreme base of the antennae may or may not be visible when viewed from above. ..........................................................9
When the antennae are inserted on the front they are sometimes on a small projection or are attached to a short vertical drop from the frons.
Head large and broad; eyes large, bulging, occupying most of the sides of the head; pronotum more or less barrel-shaped without a side border. Last segment of the abdomen long nearly parallel-sided, appearing sheared off or rounded at the apex. Insects of distinctive appearance. ........ Subfamily STEININAE
Species of damp habitats feeding on springtails, catching them by turning their mouth-parts inside-out like a chameleon (if collected in fluid the mouth-parts may be in this extended state).

Head comparatively smaller without bulging eyes; side of head usually continuing behind the eyes (forming the temples). Pronotum not barrel-shaped. Last segment of the abdomen otherwise. ........................................ Subfamily ALEOCHARINAE
97 Antennae inserted at the front of the head, inside the base of the mandibles. ...............10

Antennae inserted on the sides of the head, usually under a ridge OR if they are inserted at the front of the head they are outside the base of the mandibles. .................................................................12
Antennae with a club consisting of two segments. Head with the eyes removed towards the base, therefore with long cheeks. Pronotum with two longitudinal depressions. Elytra very short and broad, at suture shorter than pronotum. Front coxae very small. Tiny species not exceeding 2 mm; with a distinctive compact appearance. ........................................ Subfamily **EUAESTHETINAE**
Four species in two genera

Antennae not having a club formed of two segments. Head with the eyes in the middle or removed towards the front, thus with distinct temples and short cheeks. Pronotum without longitudinal depressions. Front coxae large. Length 3-30 mm. .................................................................
Antennae a long way apart, further from each other than they are from the eyes. Underneath the beetle the prosternum does not project forwards under the neck. Elytra touching at the suture but not overlapping. Last segment of abdomen with long styles. 

Subfamily **STAPHYLININAE**
The prosternum is the plate underneath the pronotum which extends from the neck to the base of the front legs.

Antennae closer to one another than they are to the eyes. Prosternum projecting forwards to form a “neck plate”. Elytra usually overlapping at the suture. Last segment of abdomen without long styles. 

Tribe **XANTHOLININI**
In subfamily Staphylininae
129 Antennae extremely slender, with very long hairs ringed round the tips of most segments. ............13

Antennae otherwise. ............................................................................................................14
Coxae of the hind legs triangular, prominent. Pronotum and elytra without punctures or hairs and very shining. Length 2.8-3.5 mm. .........................

.......... Subfamily **HABROCERINAE**
One species *Habrocerus capillaricornis*. Local, among dead leaves; it runs very rapidly.

Coxae of the hind legs broader than long. Pronotum and elytra closely punctured and hairy, consequently dull. Length 2.5-3.0 mm. ....

.......... Subfamily **TRICHOPHYINAE**
One species *Trichophya pilicornis*. Local in moss etc.; it very readily takes to flight. Photograph from U Schmidt.
14\textsuperscript{12} Vertex of head with one or two ocelli. ...... 15

Vertex of head without ocelli. ........................................................................ 16
15 Vertex of head with two ocelli. Tarsi 5-segmented. .........................
.......... Subfamily OMALIINAE
Note that the head may be partly withdrawn under the front of the pronotum so the ocelli may be obscured.

Vertex of head with one ocellus in the middle near base; head in front of eyes somewhat 5-sided. Pronotum much broader than long, the sides almost straight with feeble wide teeth and with the hind angles excised. ......................
.......... Subfamily PROTEININAE
Metopsia clypeata keys here - the rest of the subfamily are at couplet 19. In moss, etc.; often common, somewhat local, but widely distributed.
16. Tarsi with three segments. .................................................................
........ Subfamily OXYTELINAE

Tarsi 4- or 5-segmented. ...................................................................... 17
Very small species, 1.5-2.0 mm; tapering a little towards each end, cylindrical, covered with long grey hairs. .................................................................

Subfamily PHLOEOCHARINAE

One species Phloeocharis subtilissima. The absence of ocelli distinguishes this species from subfamily Omaliinae, and the 5-segmented tarsi differentiate it from most of the Oxytelinae. It differs from both these subfamilies by the strongly developed posterior trochanters which are about one third of the length of the coxae (Oxytelinae - about one-fifth). Under bark in moss on trees, etc.; not common, local, but widespread.

Species not very hairy, or if hairy then distinctly larger and of different appearance. ...........................................................................................................
Body nearly always distinctly tapering at the front and back; the abdomen is strongly narrowed from base to apex. Head often sunk into the pronotum, hiding the temples (area behind the eyes). Front femora scarcely visible from above. Head usually broader than long, with sloping cheeks and small temples. Hind coxae broader than long. Tarsi with four or five segments. Last segment of the female abdomen with four lobes. .......... ........... Subfamily **TACHYPORINAE**

Body not tapering towards the front and back. ...........................................
Shape of pronotum and general form as illustrated – the pronotum is much broader than long, the sides are almost straight with feeble, widely-spaced teeth and often with a notch before the hind angles. Small broad insects less than 3 mm. long. ..............................

......... Subfamily PROTEININAE
Genus Cypha (Subfamily Aleocharinae, tribe Hypocyphtini) will key to here having a similar shape but appearing much dumpier (illustrated to the right) - the species are 0.5-1.5 mm and the antennae have ten segments.

Shape of pronotum and general form quite different; mostly much larger species, if very small then narrow and elongate. ..............................................20
Coxae of hind legs broader than long. Tarsi 5-segmented. Last segment of abdomen without styles. ..........................................................21

Coxae of hind legs conical. Maxillary palps with the last segment extremely small and often scarcely visible; second to last segment becoming broader towards the tip. Body parallel-sided and slender. Front femora plainly visible from above, stouter than the middle and hind femora and with distinct prominence or tooth on the underside (except in Paederus). Head in front of the eyes usually with parallel cheeks; temples as long as or longer than the eyes. Last segment of the abdomen with distinct styles. .................. Subfamily PAEDERINAE
Exposed segments of the abdomen without pairs of pale grey-white spots. Abdomen, viewed from below with eight visible segments and from above with six. Appearance as illustrated. ........ Subfamily OXYTELINEAE

*Syntomium aeneum* (top left, 2-3 mm), *Coprophilus striatulum*, (top right, 5-7 mm), *Dolaeaster dichrous* (bottom left, 6.5-8.6 mm) and *Manda mandibularis* (6-8 mm) key here. Other genera in the subfamily have three tarsal segments and key out in couplet 16a.

First two visible segments of the abdomen with a pair of small grey, circular to oval patches of hair either side of the centre line used to assist the folding of the wings (sometimes the front of these lies under the tips of the elytra). Abdomen, viewed from below with only seven visible segments and from above with 4-5. ........ Subfamily OMALEINAE

This subfamily keys to here if you missed the ocelli which are often very difficult to make out on species with black heads.
Pronotum appearing more or less rectangular with the width at the front about equal to the width at the rear. Vertex of head with two ocelli. Tarsi with the basal segments of all tarsi broadened and fringed with long hairs. ........................

Subfamily OMAIINAE
Some species of genus *Eusphalerum* will key here.

Pronotum much narrower across the front than the rear margins. Vertex of head without ocelli. .................................................................................................................. 23
Upper surface completely bare and shining. Antennae inserted on the upper surface of the head so that the base is clearly visible from above; antennae with the basal segments slender and then the last five or three broadened forming a club. Outline of the beetle, viewed from above, continuous from the elytra onto the pronotum, making them appear more streamlined and tidy. .............. Subfamily **SCAPHIDIINAE**

Upper surface with a variable amount of hair. Antennae attached to the sides of the head so the base appears to come from the head outline when viewed from above; antennae with the basal segments not appearing distinctly narrow and usually broadening more gradually into a club. Outline of the beetle, viewed from above not showing an even curve from the elytra onto the pronotum. .............. Subfamily **SCYDMAENIDAE**

Found near water, under stones or bark.