

Subfamily Denticollinae (Elateridae)

Key to British species

Source material

Lompe (2015) Käfer Europas, Elateridae, published at <http://www.coleo-net.de/coleo/texte/elateridae.htm>. Translated and adapted by Mike Hackston

Checklist

From the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff, recently updated and available [here](#). Species with over 100 records on the NBN Atlas are highlighted in red, those with over 500 have a red asterisk and over 1000 have two red asterisks (accessed May 2020)

Tribe CTENICERINI Fleutiaux, 1936

Genus **ACTENICERUS** Kiesenwetter, 1858

sjaelandicus (Müller, O.F., 1764)

Genus **ANOSTIRUS** Thomson, C.G., 1859

castaneus (Linnaeus, 1758)

Genus **APLOTARSUS** Stephens, 1830

angustulus (Kiesenwetter, 1858)

incanus (Gyllenhal, 1827)*

Genus **CALAMBUS** Thomson, C.G., 1859

bipustulatus (Linnaeus, 1767)

Genus **CTENICERA** Latreille, 1829

cuprea (Fabricius, 1775)*

pectinicornis (Linnaeus, 1758)

Genus **PARAPHOTISTUS** Kishii, 1966

impressus (Fabricius, 1792)

nigricornis (Panzer, 1799)

Genus **PROSTERNON** Latreille, 1834

tessellatum (Linnaeus, 1758)*

Genus **SELATOSOMUS** Stephens, 1830

aeneus (Linnaeus, 1758)

cruciatus (Linnaeus, 1758)

melancholicus (Fabricius, 1798)

Tribe DENTICOLLINI Stein & Weise, 1877 (1848)

Genus **ATHOUS** Eschscholtz, 1829

bicolor (Goeze, 1777)

campyloides Newman, 1833

haemorrhoidalis (Fabricius, 1801)**

subfuscus (Müller, O.F., 1764)

vittatus (Fabricius, 1792)

Genus **CIDNOPUS** Thomson, C.G., 1859

aeruginosus (Olivier, 1790)

Genus **DENTICOLLIS** Piller & Mitterpacher, 1783

linearis (Linnaeus, 1758)**

Genus **DIACANTHOUS** Reitter, 1905

undulatus (De Geer, 1774)

Genus **HEMICREPIDIUS** Germar, 1839

hirtus (Herbst, 1784)*

Genus **LIMONIUS** Eschscholtz, 1829

poneli Leseigneur & Mertlik, 2007

Genus **LIMONISCUS** Reitter, 1905

violaceus (Müller, P.W.J., 1821)

Genus **STENAGOSTUS** Thomson, C.G., 1859

rhombeus (Olivier, 1790)*

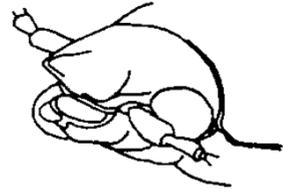
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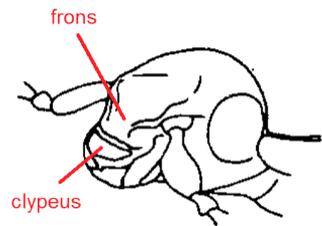


Subfamily Denticollinae (Elateridae) Key to British species

- 1 Ridge on the frons very distinct over the insertion points of the antennae, continuing into the middle to form a common ridge along the front of the frons. This ridge separates the frons from the clypeus, which are sharply angled from one another; the front margin of the frons is higher than the clypeus. Tribe Denticollini.2



- Ridge on the frons absent over the insertion points of the antennae or it is well-developed and then runs obliquely towards the front; these two ridges then do not join up parallel to the front of the clypeus. Frons and clypeus run into one another on the same level separated by a groove. Tribe Ctenicerini.9



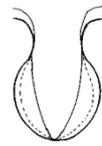
- 2 Head with the mouth-parts forwardly directed (prognathous). Eyes located further forward on the head so that there is a gap between the back of the eyes and the front of the pronotum. Front margin of the frons curved; frons running into the clypeus. Middle coxae very close together. Process of the metasternum narrow and pointed. Abdomen viewed from below with an additional free sixth segment.
 ***Denticollis linearis***
 Length 9-12.5 mm



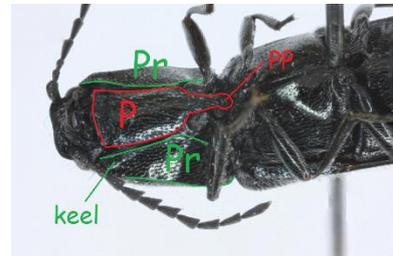
Hind margin of the eyes very close to the front margin of the pronotum. Middle coxae broadly separated. Abdomen viewed from below with five visible segments.3



- 3 Inner margin of the proepisternum **Pr** shining and separated from the prosternum **P** by a fine line which becomes a raised keel towards the front; this keel forms the outer edge of a short furrow which accommodates the first segment of the antennae at rest. Process of the prosternum **PP** broad with winged edges.4



process of the prosternum (between base of front legs)



- Inner margin of the proepisternum without a fine line or if with a fine line there is no furrow present towards the front. Process of the prosternum with a blunt point without winged edges.6



- 4 Hind edge of the proepisternum bent near the hind angles of the pronotum and then running into the hind angles. Pronotum densely punctured with the area between the punctures narrower than the puncture diameter.
..... ***Limoniscus violaceus***
Length 10-11 mm.



Hind margin of the proepisternum running straight to the blunt hind angles. 5



- 5 Segments two and three of the antennae button-shaped, at most as long as wide; segment three no longer than segment two.

..... ***Limonius poneli***

The British species has long been known as *Kibunea minuta* but this was transferred to *Limonius* by Cate (2007). Leseigneur & Mertlik (2007) showed that two closely related species were present differentiated by the male genitalia and all British material has so far proved to be *poneli*. *L. minutus* appears to be a species with a more southerly distribution, although it could turn up in Britain. Length 6-7.5 mm.



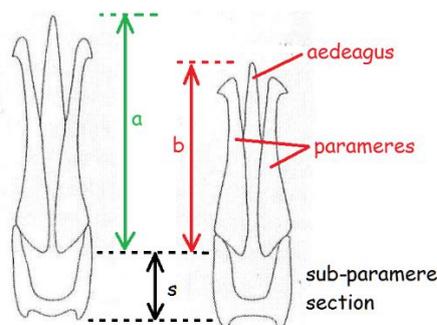
Segments two and three of the antennae elongate, longer than broad; segment three somewhat longer than the second segment.

..... ***Cidnopus aeruginosus***

Length 8.5-12 mm.



Genital capsules in *Limonius poneli* and *L. minutus*



L. poneli

L. minutus

(From Leseigneur & Mertlik, 2007)

Note the difference in length between the sub-paramere section and the aedeagus above it (labelled a and b) and the difference in the shape of the top of the parameres.



- 6 Antennae with segments four onwards only weakly triangular. Pronotum black and elytra more brown, with varying amounts of contrast between them; elytra with the hairs uniformly distributed, not forming stripes. Length 8-13 mm.

..... Genus *Athous*

Antennae slender and often filamentous. Prosternal suture simple. Body slender and narrow at least in males with most species showing a distinct difference between the sexes, females being larger and broader with a broader, more rounded pronotum.

Antennae with segments three onwards triangular with the antennae appearing serrated. Length 12-21 mm.7

The British species in this lead

- are uniformly black
- are uniformly reddish-brown
- have a black pronotum with browner elytra with zig-zag bands of paler hair.



- 7 Fourth segment of the middle and hind tarsi very small, no broader than the last segment (bearing the claws) and without a pad of hairs underneath. Predominantly black species. 12-17 mm.

..... ***Hemicrepidius hirtus***

Antennae with the third segment scarcely smaller than the fourth. The ridge on the front edge of the frons extends forwards in the middle so that the clypeus here is very narrow. The labrum is fully visible when viewed from the front at ninety degrees to the frons.



Fourth segment of the middle and hind tarsi smaller than the third segment but considerably broader than the last segment and hairy underneath. At least the elytra are reddish-brown.8



- 8 Hind angles of the pronotum without a keel, viewed from below appearing long-pointed and obliquely directed outwards due to a deep concavity in the hind margin of the proepisterna as it slopes from the hind angles. Pronotum with dense punctures and appearing dull. Elytra with zig-zag bands of hair. 12.5-19 mm.

..... ***Diacanthous undulatus***

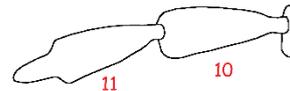
Antennae distinctly serrated with the third segment as large as the fourth. Sides of the prothoracic episternum separated as a smooth angle which narrows to the front.



Hind angles of the pronotum distinctly keeled and less sharp, more directed backwards. Pronotum more or less shining. 15-21 mm.

..... ***Stenagostus rhombeus***

Third segment of the antennae triangular and as large as the fourth; segments of the antennae with a rather darker and smoother longitudinal line; eleventh (last) segment narrowing and then drawn out into a conical tip. Viewed from the side the hind margin of the proepisterna runs straight down at an angle from the hind angles.



- 9 Upper surface patterned due to patches of different coloured hairs.
..... ***Prosternon tessellatum***
Length 10-12 mm.



Upper surface not patterned due to patches of different coloured hairs but may be patterned due to hairy areas contrasting with non-hairy areas.10



10 Pronotum very finely and diffusely punctured, more closely at the sides. Head and pronotum black, legs paler. Elytra black with an orange-brown marking over each shoulder or completely pale. Length 6-8 mm.
..... ***Calambus bipustulatus***



Pronotum closely punctured, densely at the sides.11



- 11 Pronotum with the sides strongly concave before the hind angles, the tooth being more outwardly directed and without a keel. Pronotum densely punctured throughout. Pronotum, head, antennae and legs black; elytra yellowish brown with the tip black.
 ***Anostirus castaneus***
 Length 9-10.5 mm.



Pronotum with the sides at most indistinctly concave before the hind angles, the tooth being at most indistinctly directed outwards with a longitudinal keel on its upper side.12



12 Antennae pectinate, or strongly serrate, the serrate angle distinctly acute.13

Antennae not pectinate with segment three not serrate and segments 5-10 less serrate, the serrate angle about a right angle.14



13 Elytra with patches of white hair forming a variegated pattern; sutural angle a right angle. Serrate segments of the antennae with the angle less acute. Black species with a slight bronze or coppery sheen. Pronotum without or with a slight longitudinal furrow in the middle. Last segment of the antennae narrower in males than in females. Length 12-14 mm.

..... ***Actenicerus sjaelandicus***

Local in marshy habitats.

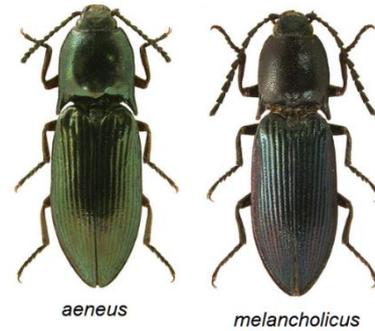


Elytra without hair or almost so; sutural angle distinctly acute. Segments of the antennae with the serrate angle much more acute in females and pectinate in males. Pronotum with a slight or well-marked longitudinal furrow in the middle. Males narrower than females with the pronotum more narrowed towards the front and less rounded at the sides. Length 12-17 mm.

..... [Genus *Ctenicera*](#)



14 Strongly metallic, hairless, comparatively broad species. Green, blue, bronze-black with the legs black or red. Length 10-14 mm.
..... Genus *Selatosomus*



Not, or only slightly metallic. Comparatively narrow and slightly hairy. Length 7-14 mm. 15



15 Pronotum with fine punctures which are quite dense. Black species with the legs paler (one variety has the elytra brownish-yellow). General appearance more elongate. Length 7-8 mm.
..... Genus *Aplotarsus*



Pronotum with strong punctures on top which are more scattered. General appearance more compact. Length 9-14 mm.
..... Genus *Paraphotistus*



Genus *Aplotarsus*

Antennae almost filamentous, with the segments from three onwards longer than wide; segment three rather narrower but no shorter than the fourth. Inner edge of the prosternal episternum shining and separated by a fine line. Process of the prosternum rod-shaped. Medium-sized species, 7-9 mm.

- 1 Pronotum weakly shining or (particularly in females) with the rear half dull with very short hairs. The punctures on the pronotum are extremely fine, being very dense in males or more spread out in females, with the gaps between them narrower than the diameter of the punctures (except for just behind the front edge). Elytra with the striae deep and the intervals between them with punctures that run into one another, much larger than those on the pronotum. Sides of the pronotum in males narrowing almost straight and weakly rounded in females, about as wide in the middle as across the hind angles. Black species with a weak leaden sheen (variety *ochropterus* has the elytra dark brown or brownish yellow). Legs more or less brownish yellow. Length 7-8.5 mm.....
..... ***Aplotarsus incanus***
By far the commoner species.



Pronotum shining with stronger punctures which are only moderately dense in males with the distance between them at least as wide as the diameter of the punctures; punctures not becoming sparser towards the base and at least as strong as those on the intervals between the striae on the elytra. In females only the front half of the pronotum is shining; towards the sides and the base the punctures become very fine and dense. Upper surface clearly grey-brown hairy. Black shining species usually with a metallic sheen on the top. Legs more or less brownish yellow. Comparatively more slender. Length 7-8 mm.
..... ***Aplotarsus angustulus***
Known from the mountains of south mid-Wales and Somerset.

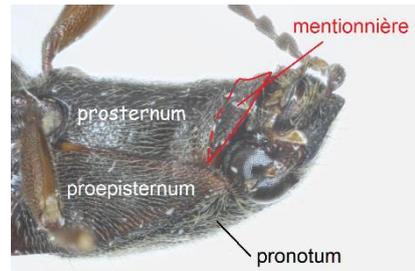


Genus *Athous*

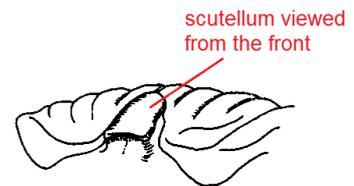
Antennae slender and often filamentous, the segments only slightly broadening on the inner edge from the fourth segment onwards. Prosternal suture simple. Body slender at least in males. Several species show marked differences between males and females – females are larger and broader and have the pronotum appearing more spherical.

The mentionnière

Viewing the thorax from below, the front of the prosternum can be seen to be extended forwards, forming a curved lobe-like structure which covers the base of the mouth-parts. This is termed the mentionnière in the French literature and this term will be used here.



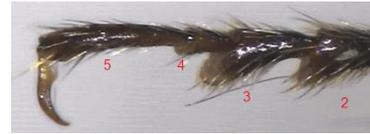
- 1 Scutellum flat, bordered by a rim at the front, completely filling the depression between the bases of the elytra. Top surface of the pronotum often quite closely punctured, but not densely.2



- Scutellum humped or domed, without a ridge at the front but sloping and thus not completely filling the space between the bases of the elytra.4



- 2 Fourth segment of the tarsi very small and narrow, no broader than the last segment; third segment of the tarsi with a two lobed hairy pad which extends under the fourth segment making it difficult to see from above.3



Fourth segment of the tarsi smaller than the third segment, but considerably broader than the last segment and without lobes.

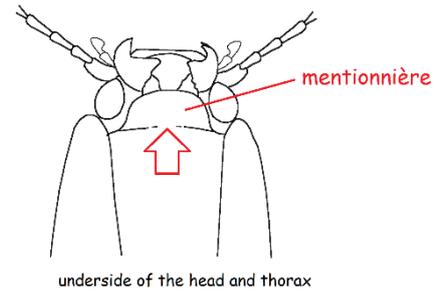


..... ***Athous subfuscus***

Length 7.8-10.5 mm.



- 3 The furrow between the prosternum and the mentionnière fades in the middle. First segment of the antennae black. Top surface of the pronotum with strong, dense punctures, the distance between the punctures sometimes less than and sometimes equal to the diameter of the punctures; the punctures are very dense towards the base and the sides. Upper surface with rather long hairs. Black or blackish-brown with the elytra occasionally paler brown. Legs black to pale brown. Abdomen reddish at the sides, with the last segment often conspicuously reddish; examples do occur with the whole abdomen darkened or all reddish. Often the elytra are darker brown towards the sides than in the middle or they have a paler brown longitudinal stripe. Length 9.5-15 mm.



..... ***Athous haemorrhoidalis***



The furrow between the prosternum and the mentionnière is complete, remaining about equal in depth right across. First segment of the antennae and the hind angles of the pronotum almost always reddish. Top surface of the pronotum less strongly and densely punctured, with the distance between them significantly greater than their diameter. The punctures are denser towards the sides. Upper surface with the hairs comparatively finer and shorter. Colouration very variable. Normal form is dark brown, with the elytra pale brownish-red, with a more or less broad dark brown stripe along the centre line, sometimes extending to the 7th or 9th interval. The pronotum may have the front and hind angles reddish or the whole pronotum may be pale reddish. The elytra may be mainly pale with two narrow dark stripes, or completely pale. Conversely the dark brown colour may predominate on the elytra so that only a narrow pale stripe remains which itself may be reduced to a pale patch in the front half. The elytra may be completely dark brown and these examples cause confusion with *haemorrhoidalis*. Length 9-11.5 mm.



..... ***Athous vittatus***

Several authors have used the character of the relative size of the third and fourth segments of the antennae. This appears to be unreliable in central Europe.



- 4 Fourth segment of the tarsi very small, measured along its upper surface from the side only half as long as the third segment. First segment of the hind tarsi viewed from the side longer than segments two and three combined. Pronotum densely punctured, the spaces between the punctures reduced to narrow wrinkles. Male: pronotum dull, slender, narrowing towards the front, much longer than wide; elytra with the striae strong with the intervals coarsely punctured. Female: pronotum with a slight shine, slightly rounded at the sides and somewhat longer than wide; intervals on the elytra with the punctures forming transverse wrinkles. Black or blackish-brown; sides of the pronotum rather reddish-brown; legs yellowish-red, femora and front legs usually black. Elytra brownish-yellow, often with a black edge or with a broad black stripe along the suture; very rarely the elytra are completely dark; sometimes (particularly in females) the whole beetle is pale brownish-red. Length 8-11 mm.



..... ***Athous bicolor***

Fourth segment of the tarsi small, about half the length of the third segment. First segment of the hind tarsi not longer than segments two and three combined. Punctures on the pronotum often very dense; in the middle of the front half the areas between the punctures are smooth and therefore this area appears quite shiny. Elytra with finer striae. Males 9.5-12 mm; females 11.5-13 mm. Frons impressed right to the front margin, extending slightly beyond the clypeus. Uniformly reddish-brown, or with the head and pronotum darker brown, sometimes with paler front margins. Elytra sometimes longitudinally dark along the suture and sides. Male: pronotum longer than broad, narrowing towards the front and rather shiny, with the punctures in the middle and the front half fine and quite dense and those to the sides denser; elytra three times as long as the pronotum. Female: larger, broader and more convex.



..... ***Athous campyloides***

Illustration from <http://www.thewcg.org.uk/elateridae/0758.htm>



Genus *Ctenicera*

Moderately large, elongate species with a metallic shine at least on the head and pronotum. Pronotum slender with a deep central furrow and long-pointed keeled hind angles. Menthonnière short and straight in the middle. Males have combed antennae. Larvae feed in the ground or on rotting wood. Adults are usually found on low vegetation particularly flowering grasses and shrubs and more rarely on the ground or understones. Adults are very active in sunshine.

- 1 Male antennae much more strongly pectinate; female antennae more strongly serrate. Metallic green. Length 13-17 mm.
..... *Ctenicera pectinicornis*



- Male antennae much less strongly pectinate; female antennae slightly less strongly serrate. Entirely metallic-green or purple or with the pronotum green or purple and the elytra brownish-yellow with the apical third black. Length 12-15 mm.
..... *Ctenicera cuprea*



Genus *Paraphotistus*

- 1 Pronotum with the central longitudinal furrow present only at the base. Elytra with yellowish hair. Length 9-11 mm. Black species, sometimes with a slightly greenish shine. Antennae brownish, legs reddish-yellow.
..... ***Paraphotistus nigricornis***



- Pronotum with the central furrow extending the whole length. Elytra with grey hairs. Length 11-14 mm. Black, sometimes with a slight bronze reflection. Antennae black, legs black or reddish-brown (v. *rufipes*).
..... ***Paraphotistus impressus***



Genus *Selatosomus*

Body robust with a comparatively small head. Hairs on the pronotum often fine and short, but always mainly directed towards the sides or partly towards the rear. Pronotum with a more or less distinct keels on the hind angles which appear broadly blunt when viewed from underneath. The pronotal lobe (mentonniere) is collar-like, mainly covering the mouthparts at rest. Inner edge of the prosternal episterna sometimes narrowly smooth but never with a linear border. Prosternal processes (backwards between the front coxae) laterally compressed and thickened. Second segment of the antennae shorter than the third; third segment as long as (rarely longer than) the fourth segment. Antennae with the segments broadening on the inner surface from the fourth segment onwards or serrate. Adults are found under stones, crawling on the ground or on low-growing vegetation in warmer weather. The larvae are mainly or exclusively phytophagous in the roots of low-growing plants.

- 1 Antennae long and slender, clearly extending beyond the hind angles of the pronotum. Antennae with segment four clearly longer than the third and scarcely longer than the fifth; the segments before the tip are very elongate, particularly in males. Body more slender with a sparse covering of hairs. Striae on the elytra deeply indented. Elytra twice as long as wide (females) or more than twice (males). Rear half of the anal sternite broadly bulging. Black species with the elytra having a green or blue sheen but only with a weak metallic shine. Sometimes the legs are yellowish red. Length 12-17 mm.
..... ***Selatosomus melancholicus***
Currently known from Ireland but not Great Britain.

Antennae shorter, not exceeding the hind angles of the pronotum. Antennae with the fourth segment not longer than the third, but considerably longer than the fifth. Comparatively more compact and without an obvious covering of hairs. Elytra at most twice as long as wide. Anal sternite evenly flat. Striae on the elytra comparatively much shallower. Shining metallic bronze, greenish, bluish or violet. Legs pale reddish to almost black. Size very variable from 10-16 mm.
..... ***Selatosomus aeneus***

