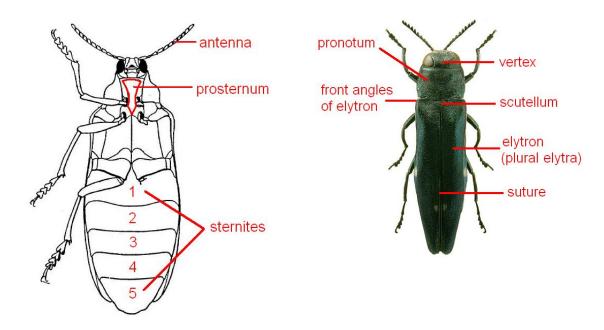
Family Buprestidae

Adapted from Levey (1977), Handbooks for the Identification of British Insects Vol. V, Part 1(b) and Thery (1942), Faune de France, 41



Checklist from the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff. (available from www.coleopterist.org.uk/checklist.htm).

Subfamily BUPRESTINAE Leach, 1815 Genus ANTHAXIA Eschscholtz, 1829 nitidula (Linnaeus, 1758) quadripunctata (Linnaeus, 1758) Genus MELANOPHILA Eschscholtz, 1829 acuminata (De Geer, 1774)

Subfamily AGRILINAE Laporte, 1835 Genus AGRILUS Curtis, 1825 angustulus (Illiger, 1803) biguttatus (Fabricius, 1777) cuprescens (Ménétries, 1832) cyanescens Ratzeburg, 1837 laticornis (Illiger, 1803) sinuatus (Olivier, 1790) sulcicollis Lacordaire, 1835 viridis (Linnaeus, 1758) Genus APHANISTICUS Latreille, 1829 emarginatus (Olivier, 1790) pusillus (Olivier, 1790) Genus TRACHYS Fabricius, 1801 minuta (Linnaeus, 1758) scrobiculatus Kiesenwetter, 1857 subglaber Rey, 1891 troglodytes Gyllenhal in Schönherr, 1817

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Key to the British species of family Buprestidae Adapted from Levey (1977) and Thery (1942)

Elytra tapering to a point; completely black; length 6-12 mm. Melanophila acuminata

Associated with forest fires, the larvae feeding under the bark of scorched conifers. Rarely recorded from southern counties of England.



Elytra not shaped like this; if completely black then length less than 4 mm.2

2¹ Basal margin of pronotum almost straight; microscopic sculpture near the sides composed of a polygonal meshwork enclosing shiny raised granules. Length 4.5-7.0 mm. Genus Anthaxia.3

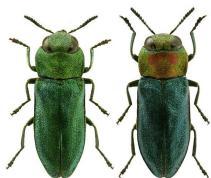
Basal margin of pronotum twice curving; sculpture of the pronotum not as

above. <u>4</u>

3² Overall colour shining blue to green, sometimes with tinges of rusty red on the pronotum. No pair of distinct depressions in the middle of the pronotum. Front margin of pronotum clearly curving forwards. Eyes touching the front of the pronotum. Elytra longer compared to their width (about twice as long as wide).

..... Anthaxia nitidula

Larvae feed on woody members of the rose family, particularly Prunus species. Adults have been collected from hawthorns, Vibernum opulus, rose and cultivated cherry species from mid May to late July. Very local and sporadic. New Forest.



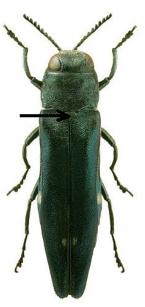
Overall colour black to blackish-grey. Pronotum with a depression each side of the mid line slightly in front of half way. Front margin of pronotum curved forwards only very slightly. Eyes smaller with part of head showing between the eyes and the pronotum. Elytra shorter compared to their width (less than 1.75 as long as wide).

...... Anthaxia quadripunctata

Larvae feed on coniferous trees.



4² Scutellum large, equal to about a quarter of the width of the pronotum at the base; microscopic sculpture of the pronotum consisting of curving transverse ridges. Genus Agrilus.<u>5</u>



Scutellum small, equal to about a twentieth of the width of the pronotum at the base; microscopic sculpture not as above.12

5 <u>4</u>	Colour blue or green, with patches of white hair on the elytra
	next to front angles and three-quarters of the way back near the
	suture. Patches of white hair also on the abdomen underneath
	the elytra on tergites 1, 3, 4 and 5 and on sternites 3-5. Length
	10.0-13.0 mm.



..... Agrilus biguttatus

Adults found on trunks and branches of oaks. Larvae tunnel in thick oak bark. Adult June to early July. Very local, and not recently recorded from any of its known localities except the New Forest, W. Kent, Surrey, Hampstead, Hertfordshire and Sherwood Forest.

Elytra and abdomen without patches of white pubescence.6

 6^{5} Pronotum without a small ridge on the hind angles. Blue, rarely green or violet. Front border of the prosternum with an angular notch. Lower surface black or very dark blue, apparently without hair. Length 4.5-6 mm. Agrilus cyanescens

A recent addition to the British list and spreading through the south Midlands. Polyphagous species



Pronotum with a small ridge on the hind angles.7

7⁶ Pronotum distinctly grooved along its length, the groove reaching at least from the base to half way and always quite narrow; no transverse impression present behind the front margin or if present then very faint. Furrow inside the posterior margin of the last abdominal sternite curving back to form an angle at the apex.8



8 <u>7</u>	Groove on the pronotum well-marked, completely or almost fading towards the
	front. Male antennae without special features; second sternite with two small
	areas of ridged sculpture close together at the middle of the posterior margin; 5th
	(last visible) sternite impressed throughout its length9

Groove of the pronotum poorly defined, sometimes divided; sides of the pronotum more rounded. Male antennae abnormally dilated in the middle section. Abdominal sternites without special features. Length 5-6 mm. ...



98 Length 6-8 mm. 5th (last visible) sternite asymmetrical at the rear and grooved in front. Male aedeagus much broader and distinctly asymmetrical; tips of parameres in the form of a beak. Agrilus sulcicollis

First recorded in 1990 in Hertfordshire, and spreading from there.



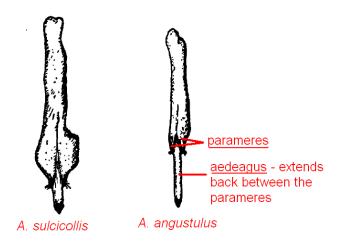
Length 4.5-6 mm. 5th sternite with an enlarged impression to the rear. Male aedeagus less asymmetrical and narrower: parameres narrower and progressively tapering.

...... Agrilus angustulus

Can be beaten from oaks, especially dying branches with leaves still attached (larval host). Adult May to mid-August. Fairly common. England south of NE Yorkshire and east of Herefordshire.



If inspection of the male genitalia is required, separate the elytra to expose the top parts of the abdominal segments. Hold the beetle still by pushing down on segment three and then gently insert a mounted needle between segments four and five. It should possible then to push gently backwards and the genitalia will emerge from the back opening. If this doesn't work then the segments may have to be torn to expose the genitalia.



10 <u>7</u>	Underneath the thorax, the front margin of prosternum has only a slight curve in the middle; shining species11
	Underneath the thorax, the front margin of prosternum has a deep notch in the middle. Underside purple or coppery. Elytra usually with a streak of white pubescence along the posterior third of the
	suture. Length 7-9 mm
	Agrilus sinuatus
	Adults can be beaten from old, decaying hawthorn (larval host) and also other trees. Adult late April to late September (peaking in July and August). Local and uncommon. SE England.

11¹⁰ Vertex without a median furrow. Elytra widening around the middle, more or less concave along the suture, each elytron tapering at the tip. Blue green or green. Length 7-9 mm.

..... Agrilus viridis

Adults can be beaten from old, decaying, coppiced Salix cinerea and stunted oaks (larval hosts). Adult June to early August. Very local. Scattered records; old records confused with angustulus and laticornis. Many colour varieties have been described but none have been recorded from Britain.



Vertex slightly furrowed. Elytra little widened in the middle and not tapering, giving the effect of a sheared off tip. Most often uniformly bronze in colour, but sometimes metallic olive-green. Length 4-6 mm.

...... Agrilus cuprescens

A recent addition to the British list, recorded from SE London; not showing evidence of spreading as yet. On Rubus.



12⁴ Elongate beetles. Last four segments of the antennae toothed, segments being at least 2.5 times as long as wide. Genus Aphanisticus.13





Short, more oval beetles. Last five segments of the antennae toothed, the segments being wedge-shaped, less than twice as long as wide. Genus *Trachys.*14



13 <u>12</u>	Elytra about 2.5 times as long as their combined width. Length 3.0-
	3.75 mm

...... Aphanisticus emarginatus

Can be swept from rushes, especially *Juncus articulatus*, which is a larval host. Hibernates as an adult. Adult late May to late September. Very local. North Devon, Dorset, Isle of Wight, North Hampshire, Berkshire.



Elytra about twice as long as their combined width. Length 2.25-3.0 mm.

Hibernates as an adult in plant refuse. Most records from southern counties of England, but also from Lancashire and Yorkshire.



 14^{12} Viewed from underneath, the last segment of the abdomen has a \searrow doubled notch on the apical margin on the mid line; elytra violet or blue, with green reflections, usually differing in colour

Apical margin of the last segment of the abdomen evenly curved; elytra bronze or black.<u>16</u>

15 ¹⁴	Base of the elytra interrupting the outline from pronotum to elytra, due to small humeral callosity. Elytra with large punctures but without tiny punctures in between them.
	Transition from the pronotum to the elytra smooth, as the humeral callosities are very small. Elytra with large punctures and with tiny punctures usually obvious between them

16¹⁴ Elytra with four transverse, wavy, white hairy patches (these can get rubbed off). Humeral callosities of elytra well marked. Length 3.0-3.75 mm.

..... Trachys minuta

Larvae are leaf miners on various woody plants such as willows and hornbeam. Adult mid-May to late-July. Hibernates as an adult. Local. Dorset eastwards and northwards to Lincolnshire.





Elytra without distinctive hairy patches. Humeral callosities not well marked (at most as illustrated). Length 1.5-2.8 mm.

...... Trachys scrobiculatus

Larvae are miners of Glechoma hederacea (recorded from mints on the Continent). Hibernates as an adult in moss. Adult April to December. Local. Dorset eastwards to Kent and northwards to Leicestershire.



