

Guides to British Beetles

11. *Asaphidion* Velvetbacks Ground Beetles (Coleoptera; Carabidae)



These distinctive beetles have large protruding eyes and are similar in appearance to *Elaphrus* but much smaller in size. The elytra are covered in small pits and short hairs. The striae on the elytra are very indistinct. All have the hind-wings fully developed.

This guide will enable identification of the four *Asaphidion* found in Britain.

Key to species of *Asaphidion*

1a Body length 5.0 - 6.0 mm..... *pallipes*

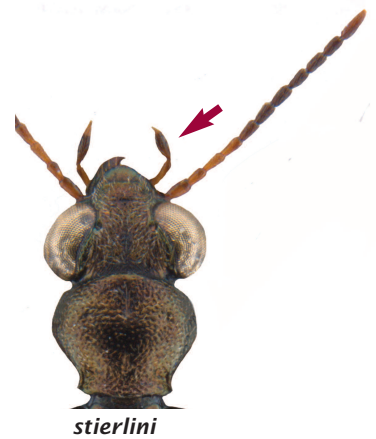
1b Body length 3.9 - 4.7 mm..... 2

2a Penultimate (largest) segment of maxillary palp yellow with metallic blackening over most of the upper surface..... *stierlini*

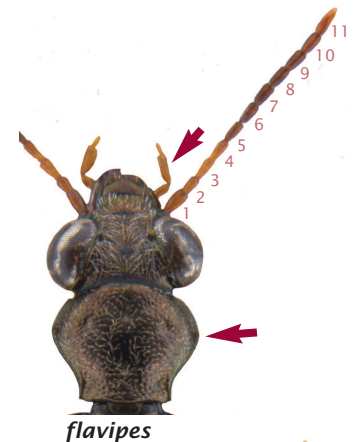
2b Penultimate (largest) segment of maxillary palp entirely yellow or sometimes faintly darkened making the segment slightly darker than adjacent segments..... 3

3a Antennae darker. Antennal segments 6-10 brown to blackish-brown. Antennae more contrasting, with segments 1-4 yellow and 5-11 brown to blackish-brown (usually darkest on segments 6-10, so with 5 and 11 paler). The contrast in colour between segments 4 and 5 is greater than between segments 5 and 6. Sides of pronotum more evenly rounded with a bulge at the lateral seta. Penultimate segment of maxillary palp sometimes brownish though normally yellow. Legs darker yellow, usually with knees darker. Upper surface sometimes more strongly punctured *flavipes*

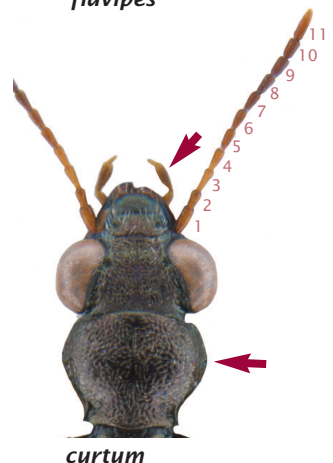
3b Antennae paler. Antennal segments 6-10 yellowish-brown, never blackish-brown. Antennae less contrasting, with segments 1-4 yellow, darkening from 5 onwards with segments 7-10 being the darkest, and 11 paler. The contrast in colour (if any) between segments 4 and 5 is the same as between 5 and 6. Sides of pronotum more angular, almost straight in front of and behind the lateral seta and forming a more distinct angle at the seta. Penultimate segment of maxillary palp always yellow. Legs paler yellow, usually without any darkening at the knees. Upper surface not as strongly punctured..... *curtum*



stierlini



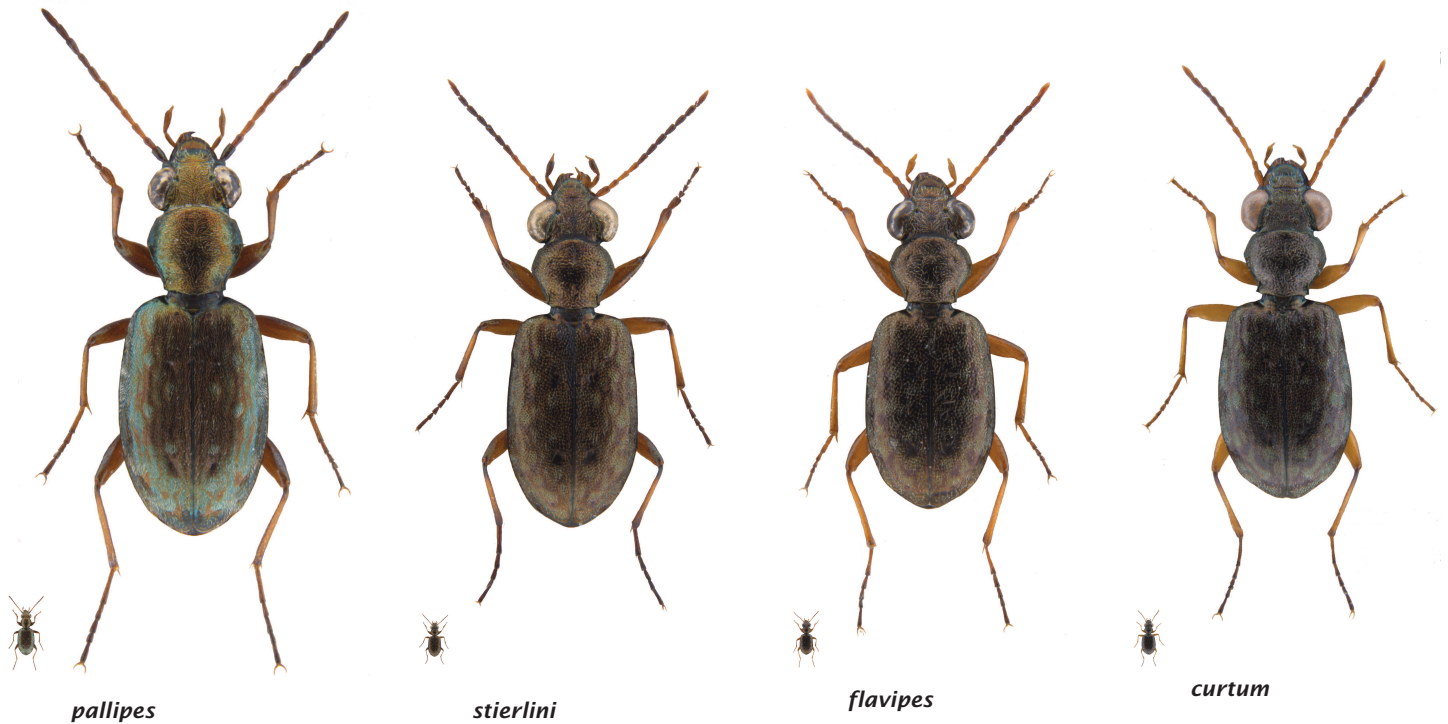
flavipes



curtum

Until the publication of a 1986 paper, British coleopterists were unaware that what they had been calling '*Asaphidion flavipes*' was actually composed of three very similar species: *curtum*, *stierlini* and the true *flavipes*. The key features to separate them are the colour of the antennae, palps and legs.

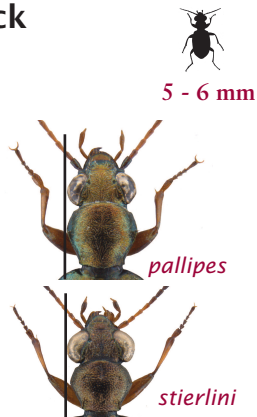
Knowledge of their current distributions is fairly well-known but not as complete as for many of Britain's ground beetles.



Asaphidion pallipes Great Velvetback

Separated from all other species by: its **larger size**; the **head (including eyes) is not wider than the pronotum** (in all other species the head is slightly wider than the pronotum); and the **reddish-bronze upperparts**. The legs are brown with slight metallic reflection.

A scarce and local species found in scattered locations throughout Britain. Lives on bare sand and silt in damp conditions including river banks and soft-rock cliffs.



The head is the same width as the pronotum in *Asaphidion pallipes*.

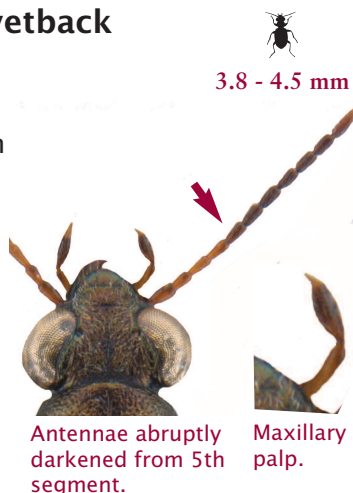


Asaphidion pallipes Great Velvetback

Asaphidion stierlini Arable Velvetback

The penultimate segments of the maxillary **palps are black above**. The **antennae are abruptly darkened from the 5th to 10th segment**. The **legs are pale with extensive darkening around the knees**. The upperparts are metallic-bronze.

A common species found in dry sandy, chalky or rocky habitats such as field margins and quarries mainly in central and eastern England.



Antennae abruptly darkened from 5th segment. Maxillary palp.



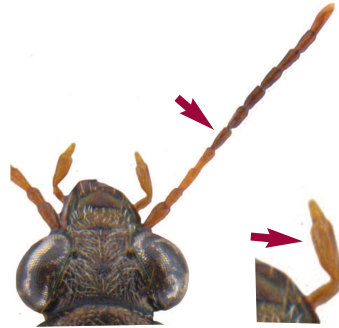
Asaphidion stierlini Arable Velvetback

Asaphidion flavipes Yellow-legged Velvetback



3.9 - 4.7 mm

The antennae are abruptly darkened from the 5th to 10th segment. The maxillary palps are usually all pale (the penultimate segment may be slightly darkened). The legs are pale with slight darkening at the knee joints (arrowed in right hand photograph). Upperparts are metallic-bronze.



Antennae abruptly darkened from 5th segment.

Maxillary palp.



Asaphidion flavipes Yellow-legged Velvetback

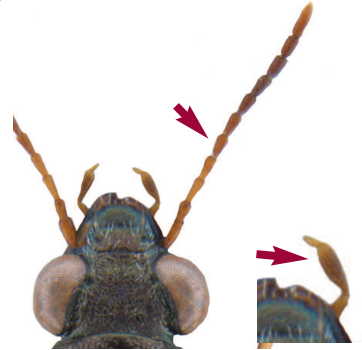
A scarce and local species found on open or partly-shaded river banks on sand and clay. Widespread in England and Wales but rare in Scotland.

Asaphidion curtum Common Velvetback



3.8 - 4.5 mm

The antennae are gradually darkened from the 5th segment to the tip, they are sometimes all pale. The maxillary palps are all pale. The legs are pale but can sometimes be darkened very slightly around the knee joints (arrowed in right hand photograph). The upperparts are metallic-bronze.



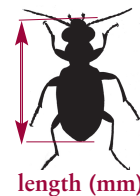
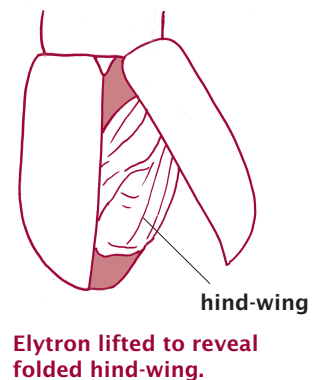
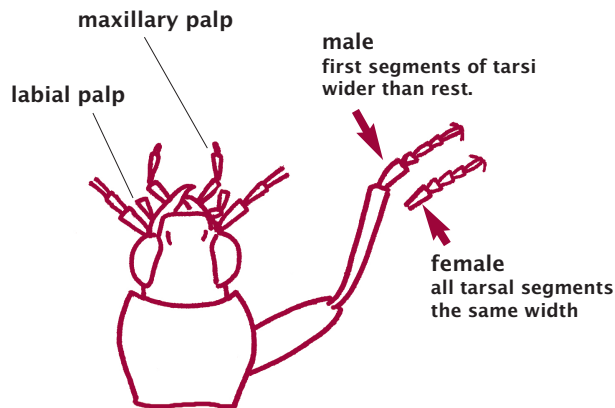
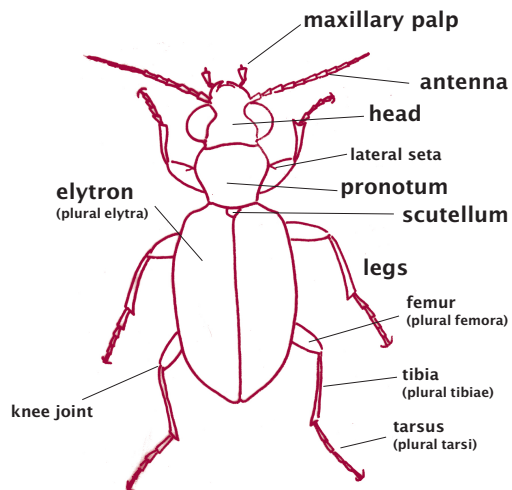
Antennae gradually darkened from 5th segment.

Maxillary palp.



Asaphidion curtum Common Velvetback

The commonest species. Found in damp situations usually near water in a variety of habitats including marshes and woodlands. Widespread in England and Wales but rare in Scotland.



length (mm)

Thanks to John Paul and Oxford University Museum of Natural History for help during the preparation of this guide.