

Higher taxonomy

The following is a brief outline of the higher taxonomy of Coleoptera, which consists of four suborders and a number of superfamilies into which the families are placed.

Suborder Archostemata

These living fossils are represented in Australia by one superfamily (Cupedoidea) with two small families.

Superfamily Cupedoidea

They are moderately large, elongated beetles, with visible notopleural sutures on the prothorax; their hind coxae are somewhat moveable although attached to metasternum; the wings have a peculiar venation (usually with a distinct apical cell) and on their abdomen five sternites are visible. Their tarsal segmentation is 5-5-5. The Australian species generally are clothed in scale-like setae. (See pages 46–47.)

Suborder Myxophaga

Beetles belonging to this suborder are minute (usually less than 1 mm), with visible notopleural sutures on the prothorax and with short, clubbed antennae.

Superfamily Sphaeriuoidea

The Sphaeriuoidea consists of a small number of species, divided into four families. It is represented in Australia by only one family: Sphaeriusidae. (See page 48.)

Suborder Adephaga

This suborder comprises of one superfamily (Caraboidea), several families and a relatively large number of genera and species, many of them highly specialised. They differ from the preceding suborders by having rigidly fixed coxae and six abdominal ventrites.

Superfamily Caraboidea

The most distinctive feature of these beetles is that their first abdominal segment is divided by the hind coxae. Their antennae are usually thread-like, but sometimes bead-like, clubbed or even extraordinarily flattened (Carabidae: Paussini). Most beetles belonging to this superfamily are predaceous. Many of them are terrestrial, others are aquatic or semi-aquatic. (See pages 49–63.)



The carabid ground beetle, *Ametroglossus ater* (16 mm), from north-east coastal Queensland is an arboreal species but also roams the forest floor at night, hunting for invertebrates.