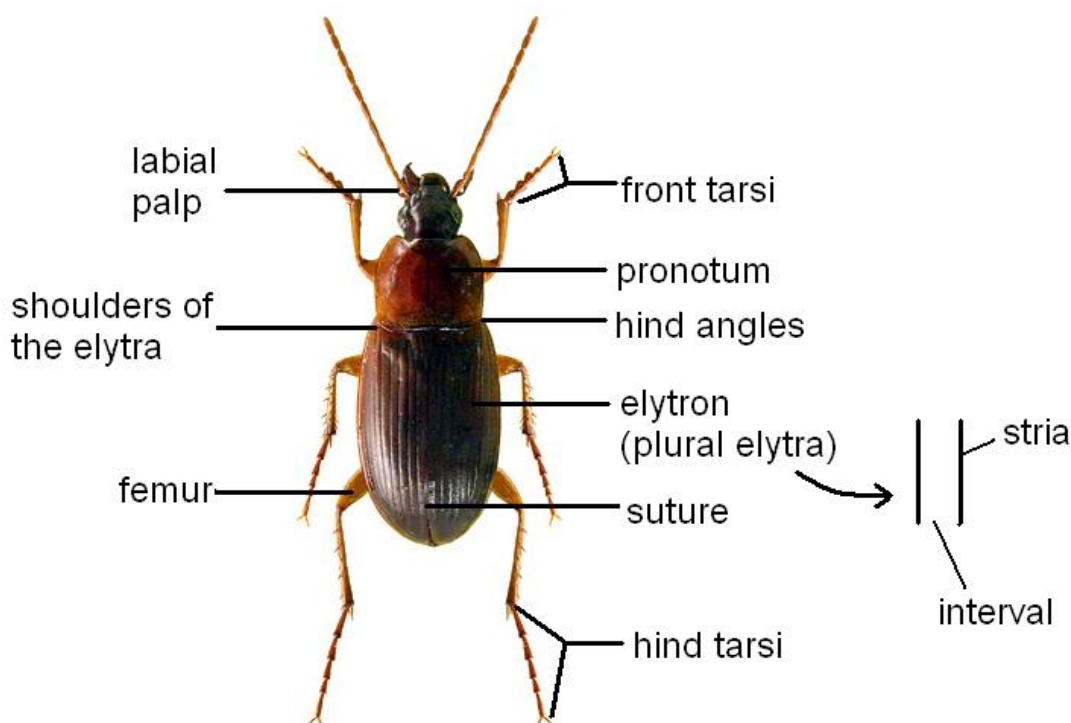


## Key to the British species of tribe Sphodrini

Adapted from Lindroth (1974) by Mike Hackston

Medium-sized to large carabids distinguished by

- the unfurrowed front tibiae
- the claws which may be smooth or have a comb of small teeth
- the prosternal process which is very narrowed between the front coxae and not rounded
- the number and arrangement of sensory bristles on the gonocoxites and gonosubcoxites in females
- male aedeagus with a short preputial field and unequal parameres (the right paramere is usually long, sometimes reaching the tip of the aedeagus (except in *Platyderus* and *Synuchus*))



### Reference

Adapted from Lindroth, C.H. (1974) Coleoptera, Carabidae. Handbooks for the identification of British insects, volume 4, part 2. London: Royal Entomological Society.



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## Checklist of genera

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

Tribe Sphodrini Laporte, 1834

Genus *Platyderus* Stephens, 1838

*depressus* (Audinet-Serville, 1821)

Genus *Synuchus* Gyllenhal, 1810

*vivalis* (Illiger, 1798)

Genus *Calathus* Bonelli, 1810

Genus *Sphodrus* Clairville, 1806

*leucophthalmus* (Linnaeus, 1758)

Genus *Laemostenus* Bonelli, 1810

## Image Credits

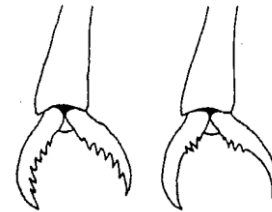
The photographs in this key are reproduced from the Iconographia Coleopterorum Poloniae, with permission kindly granted by Lech Borowiec. Line drawings are from Lindroth (1974) reproduced under the terms of the Creative Commons Licence.



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## Key to the British species of tribe Sphodrini

- 1 Claws toothed or comb-like on the inner surface, at least towards the base. ....2



from Assmann (2004)

- Claws smooth. ....4



- 2 All tarsi hairy on their upper surface. Upper surface of body with a metallic lustre. Length 13 mm. or more. ....  
..... Genus **Laemostenus**  
Formerly *Pristonychus*

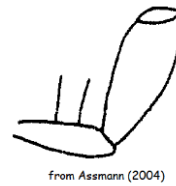


Tarsi without hair above, at most with two hairs at the tip of some segments.  
Body not metallic. Usually smaller. ....3



- 3 Last segment of the labial palps rather pear-shaped. Basal margin of elytra only slightly curved. ....  
 ..... ***Synuchus vivalis***

Males have the right paramere narrower than the left, but not longer.



from Assmann (2004)



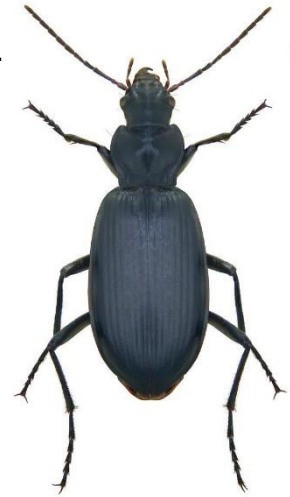
Last segment of the labial palps almost cylindrical. Basal margin of elytra strongly curving. ....

..... **Genus *Calathus***

Males have the right paramere much longer than the left, often reaching the tip of the aedeagus.



- 4 Length more than 20 mm. Pronotum with the front margin evenly concave. Elytra without any dorsal punctures. ....  
..... ***Sphodrus leucophthalmus***



- Smaller species, 5.5-9 mm. Pronotum with the front margin extended forwards at the middle in a gentle curve. Elytra with at least one dorsal puncture on the third interstice. ....  
..... ***Platyderus depressus***



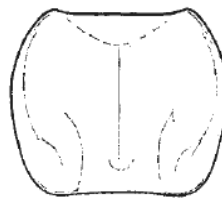
# Genus *Calathus*

Adapted from Lindroth (1974) by Mike Hackston

Genus **CALATHUS** Bonelli, 1810

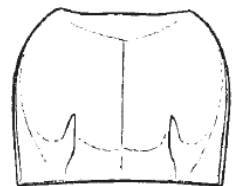
- ambiguus*** (Paykull, 1790)
- cinctus*** Motschulsky, 1850
- erratus*** (Sahlberg, C.R., 1827)
- fuscipes*** (Goeze, 1777)
- melanocephalus*** (Linnaeus, 1758)
- micropterus*** (Duftschmid, 1812)
- mollis*** (Marsham, 1802)
- rotundicollis*** Dejean, 1828

- 1 Pronotum with the hind angles completely rounded and the base and much narrower than elytra measured across the shoulders. Male with the front tarsi unmodified. Dark brown-black, with all margins and usually also the suture of the elytra somewhat translucent; legs and antennae reddish but the femora are sometimes darker. At least 4 dorsal punctures on the elytra. Length 8.5-10.5 mm. ....



..... ***Calathus rotundicollis***  
A woodland species, usually under deciduous trees, notably beech, also in gardens. Fairly common and widespread.

- Pronotum with the hind-angles well-marked; base not or barely narrower than elytra over shoulders. Male with three of the segments on the front tarsus dilated. ....2



2<sup>1</sup> Elytra with dorsal punctures on the third and fifth intervals. Basal depressions of the pronotum with coarse punctures. Antennae, with first segment pale. Mouth-parts dark reddish. Legs varying from almost black to reddish, though tips of tarsal segments always dark. Wings rudimentary. Length 10-14.4 mm. ....

..... ***Calathus fuscipes***

In moderately dry meadows and grassland, often on cultivated soil; also in thin woodland. Common and widely distributed.

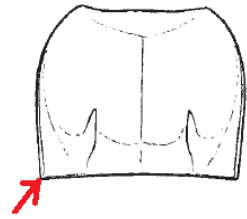


Elytra with dorsal punctures on the third interval only. Basal depressions of the pronotum smooth or with fine punctures. ....[3](#)

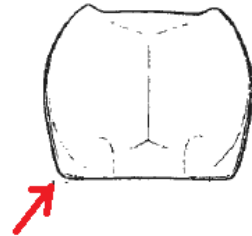




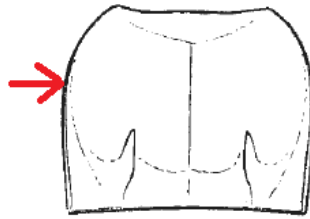
3<sup>2</sup> Hind angles of pronotum sharp, almost right angles. Third elytral interval almost always with only 2 dorsal punctures. ...4



Hind angles of pronotum rounded at tip. Third elytral interval with three or more punctures. ....5



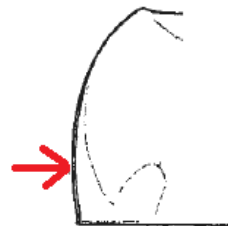
4<sup>3</sup> Greatest width of pronotum before the middle. First segment of the hind tarsus without an internal furrow but with a ridge externally. More slender and flatter. Black to dark brown with the margins of the pronotum translucent and the elytra sometimes faintly greenish or bluish. Antennae and legs reddish to chestnut brown. Pronotum with an oblique depression inside hind angles; basal depressions clearly impressed. Basal margin of elytra strongly curved. Wings either fully-developed or strongly reduced. Length 8.5-11.8 mm. ....



..... ***Calathus erratus***

Habitat as *erratus* with which it is often associated. Common and widespread.

Pronotum widest beyond the middle, often close to the base. First segment of the hind tarsus with a shallow internal furrow. Broader and duller brown, with the margins of pronotum more broadly translucent and the elytra never metallic. Antennae and legs pale chestnut brown. Antennae thinner. Pronotum flatter with the basal depressions absent. Basal margin of elytra less curved. Wings always full size. Length 8.4-11.6 mm. ....



..... ***Calathus ambiguus***

Habitat as *erratus* with which it is often associated; also in chalk pits. More local but also widespread.



5<sup>3</sup> Pronotum reddish, contrasting with the black head and black elytra. Melanic individuals occur in which the pronotum is darkened perhaps in the centre to being black except for narrowly translucent margins. If this is the case, the legs, at least the tarsi, are also darkened. Wings normally reduced into a narrow scale. Length 6.0-8.8 mm. ....

..... ***Calathus melanocephalus***

On all kinds of open, moderately dry soil with grass, meadow or weedy vegetation. Common and widespread.




Pronotum reddish brown, contrasting with the more sombre brown head and elytra. ....

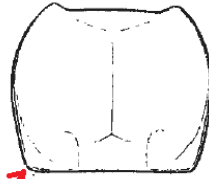
..... ***Calathus cinctus***

Associated with sandy areas particularly coastal sand dunes. Recognised as British in 1994 (Anderson & Luff) with records before that mixed with the previous species and *Calathus mollis*. .

Head and top of pronotum the same colour (or head very little darker): black or brown. Legs and antennae entirely pale. . ....[6](#)



6<sup>5</sup> Almost black, only margins of pronotum paler. Sides of pronotum converging towards the base; hind angles forming an obtuse angle. Pronotum and elytra with narrower base; elytra with more rounded sides. Wings reduced. Length 6.5-8.8 mm. 



..... ***Calathus micropterus***

Mainly a woodland species, living among humus litter under both deciduous and coniferous trees. SW and N England. Wales, Scotland.

Brown with paler margins to the pronotum and elytra. Sides of pronotum hardly converging towards the base; hind angles at 90 degrees or almost so. Head never quite black and not, or little, contrasting against the top of the pronotum. Length 6.6-9.2 mm.



..... ***Calathus mollis***

On dry, sandy ground with sparse vegetation, especially near the coast. Locally abundant; widespread.



# Genus *Laemostenus*

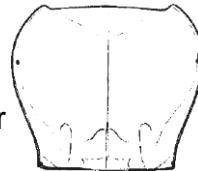
Adapted from Lindroth (1974) by Mike Hackston

Genus **LAEMOSTENUS** Bonelli, 1810

***complanatus*** (Dejean, 1828)

***terricola*** (Herbst, 1784)

- 1 Hind tibiae covered with dense hair internally in the apical half. Pronotum more constricted at base. Dark coloured with the underside, legs and antennae dark brown; elytra with a bluish or violet shine. Eyes small and flat. Wings reduced into a tiny scale. Male with 4 dilated segments on the front tarsus and the middle tibiae curved. Length 13-17.5 mm. ....



..... ***Laemostenus terricola***

In and around houses, in cellars, stables, etc., also outdoors under bark. Rather rare but widespread.

Hind tibiae without internal brush of hair. Pronotum with less rounded sides. Similarly coloured. Body somewhat more slender with narrower thorax. Eyes more prominent. Wings full size. Male with only 3 dilated segments on the front tarsus and a straight middle tibiae. Length 13-16 mm. ....



..... ***Laemostenus complanatus***

from A widespread coastal species.

Originating from N. Africa, this species has been dispersed by trade to ports in most continents. Recorded from various coastal sites in the British Isles.

