

Tribe TRECHINI

Reference

Translated from Lompe (2006) Käfer Europas Trechinae and linked pages (http://coleonet.de/coleo/texte/trechini_me.htm)

This is a well-defined group, characterised by having complete furrows on the frons and concave temples and/or with a hook-like continuation of the sutural stria on the elytra. The last segment of the maxillary palps is usually as broad at the base as the preceding segment and is often conically tapered to the tip (in *Perileptus* and *Aepus* it is rod-like, cylindrical and rather similar to tribe Bembidiini). The outer furrow of the mandibles bears a bristle. The head has two supraorbital bristles each side, next to the eyes; the eyes are large, except in species adapted to living underground where the eyes are reduced or even absent. The elytra have nine striae but the outermost may be indistinct or absent. The third stria generally has two large bristles in the middle section (discal bristles) and one before the tip (apical bristle). Towards the sides, behind the shoulders are four bristles – the humeral group and their arrangement may be important. Upper surface and abdomen usually bare, rarely with short erect hairs. In males the first and second segments of the front tarsi are broadened and are extended inwards at the tip forming a tooth. In the non-British genus *Orotrechus* only the first segment is broadened. It is often advisable to dissect out the aedeagus in males; the aedeagus should be mounted so the internal structures are visible or it should be glued so it can be viewed from above and from the side.

Checklist

The checklists through the key are from the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff

- Genus **AEPUS** Leach, 1819
marinus (Strøm, 1783)
robinii (Laboulbène, 1849)
- Genus **BLEMUS** Dejean, 1821
discus (Fabricius, 1792)
- Genus **PERILEPTUS** Schaum, 1860
areolatus (Creutzer, 1799)
- Genus **THALASSOPHILUS** Wollaston, 1854
longicornis (Sturm, 1825)
- Genus **TRECHOBLEMUS** Ganglbauer, 1891
micros (Herbst, 1784)
- Genus **TRECHUS** Clairville, 1806
- Subgenus **EPAPHIUS** Leach, 1819
rivularis (Gyllenhal, 1810)
secalis (Paykull, 1790)
- Subgenus **TRECHUS** Clairville, 1806
fulvus Dejean, 1831
obtusus Erichson, 1837
quadristriatus (Schrank, 1781)
rubens (Fabricius, 1792)
subnotatus Dejean, 1831

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- 1 Last segment of the maxillary palps thin, cylindrical and considerably narrower than the preceding segment which is rather thickened. More or less pale species usually with the upper surface hairy. Length 2-3 mm. Front tibiae with an outer spur. Elytra without a hooked sutural stria or this is indistinct.2



- Last segment of the maxillary palps as wide at its base as the preceding segment, narrowing conically to the tip. Upper surface bare or hairy; if hairy then much larger or lacking eyes. Front tibiae without an outer spur. Elytra with a hooked sutural stria.3



- 2 Eyes hairy, large, much longer than the temples.
..... ***Perileptus areolatus***



- Eyes bare, small, much shorter than the temples.
..... Genus *Aepus*



- 3 Base of the elytra with a raised border running from the shoulders to the scutellum, which is interrupted by the scutellum by a bristle-bearing pore. Elytra with the hook of the sutural stria linked to the third stria; upper surface lacking hair.

..... ***Thalassophilus longicornis***

A very flattened beetle. Very rare on river banks in NW England from Shropshire to Cumbria, North Wales and the western lowlands of Scotland. 3.5-4 mm.



(C) U Schmidt (2008)

Base of the elytra lacking a border – the raised edge of the side of the elytra running around the shoulders reaches round onto the front at most to the third stria. Hook of the sutural stria reaching to the fifth or the third stria – if reaching the third then the upper surface is hairy.4



4 Elytra hairy.5

Elytra bare.
..... [Genus *Trechus*](#)



- 5 Eyes of normal size, their diameter more than twice as long as their distance to the point of insertion of the antennae. First stria next to the suture curved back at the tip to join the fifth stria. Length 4.4-5.5 mm.

..... ***Blemus discus***

In similar habitats as *Trechoblemus micros* and often occurring with it. England (except the south west) northwards to Cumbria.



Pronotum covered with fine hair that lays on the surface (similar to those covering the elytra). Eyes small, their diameter not greater than their distance from the insertion points of the antennae. First stria next to the suture curved back at the tip to join the third stria. Length 4.0-4.5 mm.

..... ***Trechoblemus micros***

Usually on the banks of running water, hidden in crevices, or in the burrows of rodents and moles. Widely distributed but local.



Genus *Aepus*

- 1 Eyes flat, longitudinal diameter much less than length of segment 1 of antennae; elytra parallel-sided.
..... ***Aepus marinus***
Local species



- Eyes convex, longitudinal diameter nearly long as segment 1 of antennae; elytra somewhat rounded at sides distinctly broadening towards the apex.
..... ***Aepus robinii***
Very local species



as

Genus *Trechus*

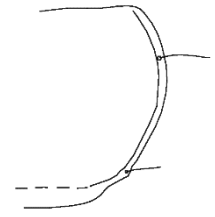
The largest genus of the tribe in Europe, worldwide with around 1000 known species. The species are extremely similar to one another and dissection of males is often required for identification. They are found in damp, relatively cool habitats, often montane.

- 1 The apical bristle-bearing puncture on the third stria of the elytra is a long way from the front one, more than twice as far from the tip of the elytron as from the suture. Second stria of the elytra continuing straight to the tip. Tooth of the mentum unmodified. Subgenus *Epaphius*.2

The apical bristle-bearing puncture on the third stria of the elytra close to the sutural angle, about as far from the tip as from the suture. The second stria curves outwards before reaching the tip. Tooth of the mentum divided into two. Subgenus *Trechus*.3



- 2 Base of the pronotum concave next to the hind angle, meaning the hind angle itself is hardly visible. Sides of the pronotum curving equally towards the front and rear. Pale reddish brown with the antennae, legs and palps paler. Elytra with rows of coarse punctures along the striae; striae and punctures fading towards the tips and sides. Head, pronotum and basal third of the elytra shining, smooth, without microscopic sculpture. Length 3-4 mm.

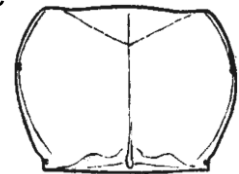


..... ***Trechus secalis***

In shaded and somewhat moist places, both in deciduous forests and rich meadows. England northwards to Cumbria.



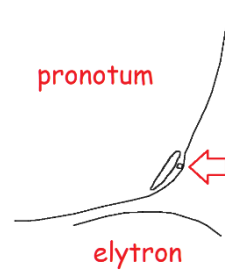
Hind angle of the pronotum clearly obtuse or right-angled. Base of the pronotum straight. On average larger, 4.5-5 mm. Pale to dark brown. Striae with indistinct punctures; second striae not continuing to the tip. Head with a microscopic sculpture of rounded cells and pronotum and elytra with a reticulate sculpture forming transverse cells. Elytra with a blue, iridescent sheen.



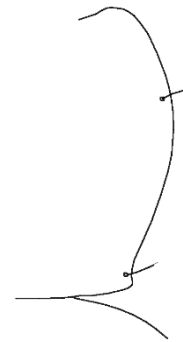
..... ***Trechus rivularis***

In dark swampy woodland with *Sphagnum* amongst damp sedge litter. Very rare in the Fens.

- 3 Base of the pronotum, viewed from above sloping from the hind angles towards the scutellum so the hind angles are obtuse and rounded, with a tiny tubercle from which the hind marginal bristle arises. Pronotum narrowing weakly convexly towards the rear. Base of the elytra slightly curving forwards towards the shoulders.4



Base of the pronotum more or less orientated at right angles to the axis of the body; hind angles more or less acute or right-angled. Rarely the hind angles may be obtuse or rounded, in which case the sides of the pronotum strongly narrow towards the hind angles, straight or concave and the elytra do not curve forwards towards the shoulders.5



- 4 The rear bristle by the eye is inserted very close to the frontal furrow. Elytra less elongate and with the striae not as deep. Pronotum and head often darkened. Winged and wingless forms occur. Length 3.5-4.5 mm.

..... ***Trechus obtusus***

In open country. Widely distributed but local.



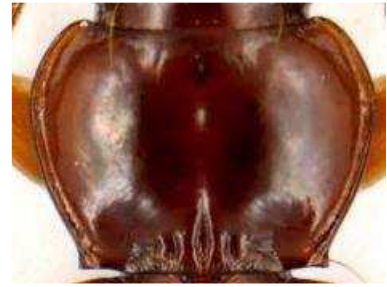
The rear bristle by the eye is inserted about half way between the eye and the frontal furrow. Elytra usually rather more domed and distinctly parallel-sided. Striae of the elytra deeper and more clearly defined. Winged. Length 3.5-4.5 mm.

..... ***Trechus quadristriatus***

In open, rather dry country with short vegetation. Common and widely distributed



- 5 Hind-angles of pronotum reduced to a tiny tooth, the sides diverging immediately in front of them. Elytra occasionally with more or less distinct pale spot towards the tip. Almost black to brown, elytra with the shoulders and extreme side-margins pale; elytra strongly iridescent. Length 4.5-5.0 mm.



..... ***Trechus subnotatus***

Usually near the coast, probably introduced with ballast. Recorded from Devon (Teignmouth and Dartmoor), Yorkshire (Huddersfield and Manchester), west London and Ireland (near Dublin). Usually on river banks often of quite polluted rivers. A Mediterranean species.

Pronotum with hind angles right angled or acutely angled and sides curving in front of them. Elytra not spotted.6

- 6 The fifth stria of the elytra continues without interruption into the sutural hook; striae deep and complete with even the outer one continuing to the tip without becoming weaker. Eyes flat, about as long as the temples. Elytra elongate, flattened, with parallel sides. The whole body is yellowish brown. Length 4.8-5.8 mm.



aedeagus from Lompe (2013)

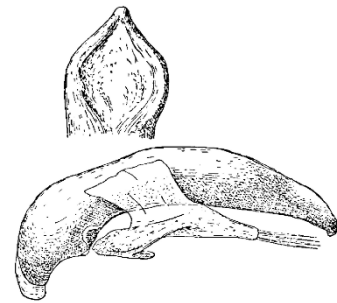
..... ***Trechus fulvus***

Under stones on rocky or sandy sea-shores near high-water mark. England: south and east coast, Cheshire. S. Wales. Scotland. Shetland.

The fifth stria of the elytra fades towards the tip and does not continue into the sutural hook. Elytra elongate oval with parallel sides, somewhat broadening to the tip, pale or dark reddish brown. Length 5.0-6.5 mm.

..... ***Trechus rubens***

More or less underground but often flying at night. Among leaves and debris or under big stones, often near water. Local but widely distributed.



Male aedeagus from Jeannel (1926)