

Phryganophilus ruficollis

Description: *Phryganophilus ruficollis* is a two-coloured beetle 12 to 16 mm in length. The head and elytra are black and the pronotum is red-orange. The body shape is elongated, and the antennae are of an even width. The larva is light in colour, cylindrical in shape, and approx. 2 cm in length.

Life cycle: Adults are active from June until early July, during which period they lay their eggs on suitable trunks of deciduous trees or conifers. Larval development takes two to three years, after which the larvae pupate in a pupation chamber in late summer. The pupation chamber is found at a depth of 3 to 5 cm in hard wood. Fully grown or pupating larvae live over winter.

Food: *Phryganophilus ruficollis* larvae feed on wood decomposed by wood-decay fungi. Adult beetles feed on the spores of wood-decay fungi, including *Fomes*, *Phellinus* and *Piptoporus*.

Tree species: Spruce and birch, sometimes other tree species.

Decaying wood type: A spruce or deciduous tree that has been lying on the ground for 10 to 15 years with white rot. Trees decomposed by *Canopora subfuscoflavida* and possibly also other wood-decay fungi that cause white rot, which typically have a strong odour. The decayed wood is yellowish and porous.

Habitats: Heath forests with plenty of decaying wood, forest fire sites, warm hillside forests.

Distribution: A species of the boreal and deciduous tree zones, which has been found in the eastern and northern parts of Finland.

Status: Vulnerable.

Status under legislation: A species under strict protection, listed in EU Habitats Directive Annexes II and IV.



Recommendations for habitat management on forestry land

- Retaining dead spruces and deciduous trees, both snags and logs, in connection with fellings and the harvesting of damaged trees. Trees that have died more than a year ago can be selected for this, eliminating the risk of insect damage. Less care is needed when preserving decaying deciduous trees. At most 10 cubic metres per hectare of spruces that have died and been damaged less than a year ago may be left on the ground or standing.
- Favouring a deciduous tree mix in silviculture.
- Preserving retention tree groups with multiple tree species. The trees in retention tree groups will later produce suitable habitats for species living in decaying wood.
- In connection with harvesting, care should be taken not to damage trees lying on the ground that have bracket fungi and that have decomposed to the point of becoming soft.
- Prescribed burning for forest management purposes in compartments with retention tree groups.
- Preserving trees on sites where harvesting is difficult or the expected yield is low, including forests on rocky terrain, or on parts of such sites. The trees may be left to develop towards a more natural state, or into an uneven-aged forest where decaying wood is created at a more even rate.

Further information:

Mattila, J. 2017. Kaskikeiju (*Phryganophilus ruficollis* Fabricius, 1798)
– In: Nieminen, M. & Ahola, A. (eds.), Euroopan unionin luontodirektiivin liitteen IV lajien (pl. lepakot) esittelyt. Suomen ympäristö 1/2017, pp. 31–34.