

ALPINE LONGHORN BEETLE

SCIENTIFIC NAME: *Rosalia alpina*

CONSERVATION STATUS: **Vulnerable (VU)**

FACT FILE

- PHYLUM: ARTHROPODA
- CLASS: INSECTA
- ORDER: COLEOPTERA
- FAMILY: CERAMBYCIDAE
- GENUS: ROSALIA
- IT IS A PROTECTED NATURA 2000 SPECIES THAT THE PROGRAMME IS TRYING TO HELP IMPROVE THEIR DISTRIBUTION & HABITAT



Threats

It is threatened by habitat loss and destruction due to changes in methods of forest maintenance and felled wood processing. Trees are being cut down and harvested for timber and firewood before they reach a suitable age to be able to support developing larvae, and dead wood is being rapidly removed to facilitate 'reforestation'. In the past, felled trunks were often stored along forest roads and remained there for long periods of time, attracting groups of breeding beetles. Now, felled trunks are usually cut and immediately moved. Forests rich in the preferred habitat of beech and ash have also been transformed into coniferous forests during recent decades. Fertilisers have helped accelerate forest growth and the development of closed canopies, which block out sunlight and prevent the essential drying of dead wood required for larvae development. Indeed, damp, humid conditions promote rotting and fungal growth in dead wood, conditions in which the metamorphosis of larvae into the adult beetle form cannot occur. It is also taken from the wild for commercial trade, with its distinctive pattern and bright colour making it attractive to collectors.

One of the most striking and elegant of all beetles, with its beautiful steely blue-grey colouration and large, dominating black spots. The extremely long antennae on the front of the head are also adorned with groups of black hairs, which contrast dramatically with the blue-sky colour of the bare parts, appearing as alternating bands of black and blue. Males can be distinguished from females by their longer antennae, which can greatly exceed the length of the body.



Habitat

Deciduous forests where there is a reasonable amount of sunlight exposure - beech forests are preferred in Central Europe but other tree species are also used, such as ash. Larvae develop in dead, decaying, relatively dry wood, or on living trees in wounds and abrasions. Although adults are capable of flight, they are often content to simply remain on or near the tree trunks in which they developed as larvae.



Biology

Eggs are deposited in the crevices of bark, cracks and fissures formed in drying wood of withering tree trunks. Larvae take around three years to develop and towards the end of their development, pupation takes place in a chamber close to the surface of the tree trunk, usually between the end of May and the end of June. After metamorphosis, adult beetles emerge between June and August, depending on the area and altitude. The lifespan of the beetle is only three to six weeks, during which mating and egg depositing must occur. Frequently, competitive males are seen fighting before mating, presumably for access to females. Adult beetles feed on sap exuded from the trees, and also on leaves.

Conservation

The Alpine Longhorn is protected in nearly all of its range nations, but it is its diminishing habitat that is perhaps in greater need of protection. It has therefore been generally recommended that more protected habitat be established, particularly forest areas that support old, damaged or dead beech trees. Additionally, landowners should be advised to leave dead wood on the forest floor where possible, or to move it and then leave it in exposed, sunny areas. With appropriate methods of forest management these stunning beetles should be able to flourish once more.

