Blue ground beetle

(Carabus intricatus)





The Blue ground beetle is a large distinctive species with metallic blue markings, long legs and sculptured wing-cases. Growing to over an inch long, it is Britain's largest ground beetle. Until recently, this Nationally Rare species was seemingly confined to a handful of sites in Devon and Cornwall. In 2015, however, a population was confirmed in South Wales at Coed Maesmelin, Neath. Subsequent surveys by Buglife Cymru have revealed additional sites in the lower Neath Valley supporting this globally threatened beetle. The key to expanding the range of this species is to restore or create more areas of suitable woodland habitat.

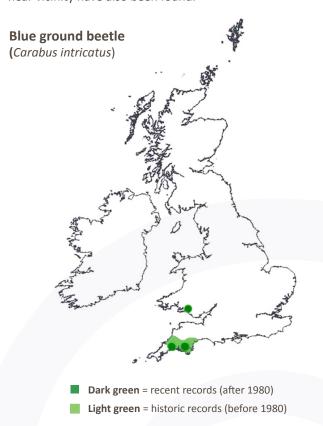
Life cycle

The adult beetles are active from late March until June. Adults mate and lay eggs in the spring, the larvae develop through the summer with new adults emerging in the autumn. The adult beetles hibernate under moss-laden dead bark and are thought to live for 2 to 3 years. The adults and the larvae both feed on slugs, in particular the Tree slug (*Limax marginatus*) and the Ash-black slug (*Limax cinereoniger*). Adults are most likely to be found climbing tree trunks at night in search of their prey.

Distribution map

This species has always had a restricted distribution in Britain and until recently, was seemingly restricted to a handful

of sites in Devon and Cornwall (an historic record from the Somerset Levels is probably an error). A further population was confirmed in 2015 at Coed Maesmelin near Neath, South Wales - an ancient semi-natural woodland dominated by sessile oak (*Quercus petraea*). Further populations in the near vicinity have also been found.





Blue ground beetle habitat.

Habitat

The Blue ground beetle lives in moist deciduous woodlands of oak and beech, usually on south-facing slopes of river valleys. Most sites are ancient pasture woodlands with sparse ground vegetation, high humidity and an abundance of mosses. In Cornwall it has also been found in a young beech plantation adjacent to ancient oak woodlands containing a population of the beetle.

Threats and causes of decline

Habitat loss and the decline in habitat quality restrict this species' distribution. At least one UK site is known to have been lost through clear felling and replanting with conifers. Changes or removal of grazing from ancient oak or beech woodlands is a particular concern. The continuity of light grazing, presence of mature trees, abundant deadwood and a sparse understorey of vegetation are the prime factors in supporting the current populations of this beetle.

Habitat management

Maintain or re-establish light grazing regimes in ancient woodlands. There will be synergy with conservation of oak woodlands which are managed to control against invasive species (e.g. Sycamore and Rhododendron) or a dense understorey (e.g. Bramble) and to maintain a supply

of deadwood within the habitat. In addition to leaving deadwood *in situ*, some sections of fallen trunks may be "planted" into the ground to simulate rotten tree stumps. These are less prone to desiccation than fallen timber left lying on the woodland floor. Tree planting to expand the woodland on existing sites is a management option, but care must be taken to ensure the adjacent habitat does not support other rare species that may be negatively impacted.

References

This sheet can be accessed at www.buglife.org.uk

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