

# Heath tiger beetle

(*Cicindela sylvatica*)



**The Heath tiger beetle (sometimes called the Wood tiger beetle) is Britain's largest tiger beetle reaching up to 18 mm in length. This is a distinctive dark brown beetle with pale yellow markings on the wing cases and very large mandibles, the latter are characteristic of all tiger beetles. The adults and the larvae are both predatory, feeding on other invertebrates on areas of bare ground.**

**The loss of heathland habitat and a decline in the quality of surviving heathlands have reduced the number of Heath tiger beetle populations; for this reason the beetle is listed on the UK Biodiversity Action Plan.**

## Life cycle

The Heath tiger beetle is thought to have a two-year life cycle with overlapping generations. Adults can be found from late April to early September. They breed in late

spring and early summer and are most frequently seen during May and August. The adults are active in bright sunshine and fly readily, although it is unlikely that these flights lead to long range dispersal as the heathlands in which they live are very fragmented. The larvae live in vertical burrows in the soil and ambush prey that passes by the entrance.

## Distribution map

The Heath tiger beetle is found in the heathlands of southern central England, but its range has shrunk and it is estimated that more than half of Britain's Heath tiger beetle populations have disappeared over the past 25 years. Now this beetle is restricted to sites in Dorset, Hampshire, Sussex and Surrey. New populations have been discovered on MoD land in recent years, where disturbance from vehicle training maintains the open habitat this species prefers.



Dark green = recent records (after 1980)  
Light green = historic records (before 1980)



Heath tiger beetle habitat

### Threats and causes of decline

The loss of heathland habitat and the loss of structural variety within heathlands are the main threats to this species, especially a reduction in bare ground and early successional vegetation. The encroachment of scrub and the use of imported aggregates to consolidate paths and prevent erosion restricts the amount of suitable habitat available to the beetle. In areas of high recreational use the over-trampling of paths and adjacent heather can also be a problem.

### Habitat

The Heath tiger beetle is a species of lowland heaths, sometimes among open coniferous woodland. Adults and larvae both need areas of warm, open sandy ground where the adults can hunt other invertebrate prey and where the larvae can dig their burrows. Adjacent tall heather may be important as a refuge for adults when they are not hunting or when they are disturbed. At some sites in

Dorset larval burrows were found beneath algal mats that formed on the sand. The significance of this association is unclear.

### Habitat management

Maintain areas of bare sandy ground in heathlands, preferably within the vicinity of tall patches of heather. Scraping the soil surface and cutting heather on rotation will maintain a suitable mosaic of heathland structure. Scrub clearance will be required where this encroaches, and the stabilisation of paths should be avoided. All current populations of Heath tiger beetle occur on Nature Reserves or Sites of Special Scientific Interest (SSSI) where management should be sympathetic to the beetle's needs.

The creation of new and restoration of degraded heathland areas is the key to halting the decline of this species and expanding its current range. Heath tiger beetles may have to be translocated to new sites if these are too far from existing populations to be colonised naturally.

### Environmental stewardship options

#### HLS options

- HO1** Maintenance of lowland heathland
- HO2** Restoration of lowland heathland
- HO3** Restoration of forestry areas to lowland heathland
- HO4** Creation of lowland heathland from arable or improved grassland
- HO5** Creation of lowland heathland on worked mineral sites

### References

This sheet can be accessed on the web at [www.buglife.org.uk](http://www.buglife.org.uk)

Boyce, D.C. 2004. Scarce ground beetle project. Final report on work 2000-2004. English Nature contract no: 20-37-014.

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