

Aculeate Information Sheets

How the habitat requirements of BAP aculeates relate to their HAP



4. *Homonotus sanguinolentus*, a spider-hunting wasp of southern heathlands

**Produced by Hymettus Ltd -
The UK Aculeate Conservation Group.**

Conservation Action for Ants, Bees and Wasps

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General Biology

This wasp preys on a single species of spider, *Cheiracanthium eraticum*, which lives on the damper parts of heathlands. Between late June and August the female spider makes a purse-like web by spinning together flowering grass stems, flowering heads of heathers or leaves of small bushes. She lives in this web until she has laid her eggs and the young have hatched. A hunting female wasp forces its way into the spider purse-web and if it finds a female spider which is ready to lay eggs, the wasp quickly paralyses the spider with a sting. The wasp lays its own egg on the front of the spider's abdomen and although the spider revives, it never leaves the web again, nor does it lay eggs. The wasp egg hatches within three days and the larva feeds on the spider, finally killing it after about ten days. The fully-fed wasp larva then spins its cocoon within the spider's web. The web needs to remain intact and above the ground until the following July when the new adult wasps emerge.

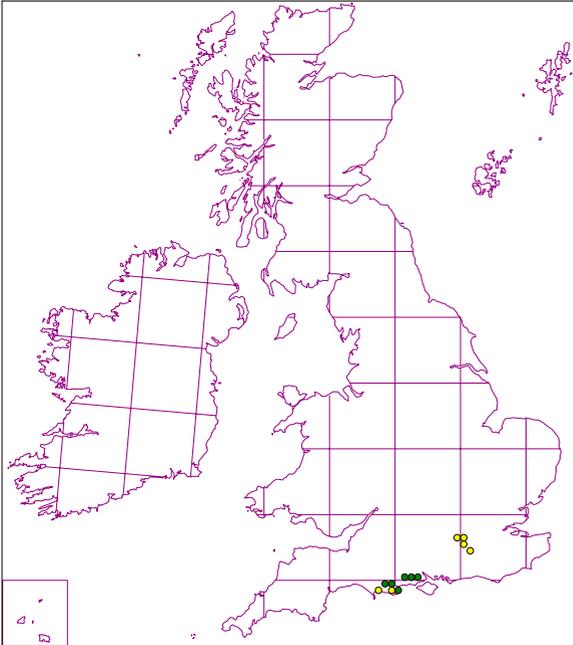


**Egg-laying retreat
of prey spider
*Cheiracanthium
eraticum*.**

**Almost fully-grown
Homonotus larva on
Cheiracanthium eraticum.**



Homonotus sanguinolentus



Distribution in UK

Homonotus sanguinolentus has always been difficult to find, but its previously known distribution covered the heaths of the Thames Basin in Surrey and the Dorset Basin around Wareham. Although Hymettus led surveys have managed to find the wasp at a number of locations within the Dorset heaths, attempts to re-find it in Surrey and on other Thames Basin heaths have been totally unsuccessful.

Habitat for
Homonotus on
Bloxworth Heath,
Dorset.



Habitat management

In order for the wasp population to survive there must be:

- i) a large population of the spider;
- ii) a high probability of webs surviving, in situ, at least until the following spring and, in a dry position, until the following July.



Habitat for *Homonotus* on Vales Moor, New Forest.

Areas which support the wasp must have taller vegetation present over at least a twelve-month period. However, as the heather canopy closes over, the microclimate becomes colder and less suitable for the spider and the wasp. Active management is required to maintain the desired mix of vegetation and physical characteristics. There are several ways in which this might be achieved:

- rotational localized high density grazing over a span of several years
 - an untried technique;
- very low density grazing management - this level of grazing is achieved in only two parts of the New Forest area and without control of the stock levels the habitat can be severely compromised;
- rotational cutting management- a technique that has been implemented effectively on Forestry Commission lands;
- intermittent burns – unplanned management, but both spider and wasp are still frequent on urban heath within Bournemouth.

Whatever management technique is chosen, it is important that dramatic changes do not regularly happen over all of the available habitat at any one time.