

Armed nomad bee

(*Nomada armata*)



The Armed nomad bee is a 'cuckoo' (cleptoparasite) on the Large scabious mining bee (*Andrena hattorfiana*), its 'host'. Both bees have declined substantially, and because the Armed nomad bee is so rare it is a Section 41 Conservation Priority Species. The Large scabious mining bee forages almost exclusively on Field scabious and Small scabious, and so these plants are critical to the survival of both species.

Life cycle

Adult Armed nomad bees fly from late June till early August, which coincides with the peak of activity of its host the Large scabious mining bee, and the flowering of scabiouses. Females seek out nests of the host, enter and lay an egg in a nest. The resulting larva then uses the host's food to grow. The larva eventually pupates and overwinters within the host's nest, emerging as an adult the following summer.

Distribution map

The Armed nomad bee has always been much more restricted than its host, which has a long

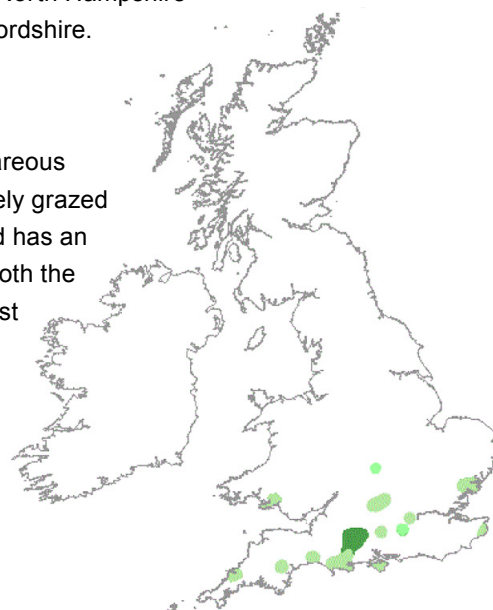
history in areas like the South Downs, North Downs and East Anglia where the Armed nomad has had little if any historical presence. Today it is almost entirely restricted to Salisbury Plain which offers a vast quantity of scabious-rich calcareous grassland. There are also more isolated recent records from North Hampshire and it may still survive in Oxfordshire.

Habitat

The preferred habitat is calcareous grassland that is not intensively grazed in summer, or cut for hay, and has an abundance of scabiouses. Both the Armed nomad bee and its host have also occurred on less calcareous coastal grassland and coastal heathland in southern England and Wales in the past.

Reasons for decline

The loss, fragmentation and deterioration of scabious-rich habitats through agricultural improvement, development and inappropriate management. Scabiouses are particularly vulnerable to overgrazing.



Post 1980 Dark green, pre1980 light green



Scabious-rich chalk grassland on Salisbury Plain where a strong Armed nomad bee population is present (left). Chalk grassland of the South Downs where the host still persists at low levels (right).

Habitat management

- Maximise the abundance of flowering scabiouses between June and August by avoiding grazing and cutting between 15 April and 15 September
- In species-rich grassland, avoid applying fertilizers and herbicides and remove arisings that result from any cutting
- Known or potential nesting areas should be kept free of encroaching vegetation such as coarse grasses, bramble or scrub
- Create new scabious-rich areas on former species-poor grassland, or through arable reversion and seeding and planting of scabious
- A well-designed Farm Environment Plan could be crucial in providing stepping stones and corridors to link suitable sites

Environmental Stewardship options (with promotion of scabiouses as a primary target)

Note other options may also be suitable depending on individual sites. These options are available in England, although Wales and Scotland have similar schemes in place.

HLS options

- HE10** - Floristically enhanced grass buffer strips
- HE11** - Enhanced strips for target species on intensive grassland
- HF1** - Management of field corners
- HF4** - Nectar flower mixture

HF9 - Unfertilised cereal headlands within arable fields

HF14 - Unharvested, fertiliser-free conservation headland

HF20 - Cultivated fallow plots or margins for arable plants

HJ3 - Arable reversion to unfertilised grassland to prevent erosion or run-off

HK6/7/8 - Maintenance/restoration/creation of species-rich, semi-natural grassland

HK15/16/17 - Maintenance/restoration/grassland for target features

HLS capital item

GS - Native seed mix

ELS options

EE1-6/OEE1-6 - Buffer strips on cultivated land/intensive grassland

EF1 - Management of field corners

EF4/EG3 - Nectar flower mixture on arable land or grassland areas

EF9 - Unfertilised cereal headlands

EK3 - Permanent grassland with very low inputs

EF2/EG2 - Wild bird seed mixture on arable land or grassland areas (with the addition of Field Scabious and Small Scabious)

References and further information

This sheet can also be accessed on the web at www.buglife.org.uk

Bees, Wasps and Ants Recording Society www.bwars.com. Species accounts for *Nomada armata* and *Andrena hattorfiana*.

Falk, S. J. (1991) A review of the scarce and threatened bees, wasps and ants of Great Britain. Research and Survey in Nature Conservation No. 35. Nature Conservancy Council, Peterborough.

Hymettus (2006) Aculeate Information Sheet 1. *Nomada armata*, a cuckoo bee of grasslands. Hymettus.

www.buglife.org.uk Tel: 01733 201210 Follow us: @buzz_dont_tweet

Buglife - The Invertebrate Conservation Trust is a company limited by guarantee.

Registered in England at Bug House, Ham Lane, Orton Waterville, Peterborough, PE2 5UU.

Company no. 4132695, Registered charity no. 1092293, Scottish charity no. SC040004.