

# Long-horned bee

(*Eucera longicornis*)



**The Long-horned bee is one of the UK's largest solitary bees. Males are extremely distinctive due to their long antennae.**

**The Long-horned bee requires large areas of unimproved, legume-rich habitat.**

**It is a Section 41 Conservation Priority Species, because in the last century it declined dramatically across Britain. It is also the host for the rare Six-banded nomad bee (*Nomada sexfasciata*).**

## Life cycle

Adults emerge in May and forage until early July. Females obtain pollen from legume flowers. Males also visit Bee orchid and Yellow archangel. A female Long-horned bee digs a burrow in bare or sparsely-vegetated ground, typically a south-facing slope. Being a solitary bee each female excavates her own nest, though females will nest in aggregations.

## Distribution map

The bee was once widespread across southern Britain both inland and along the coast. It now

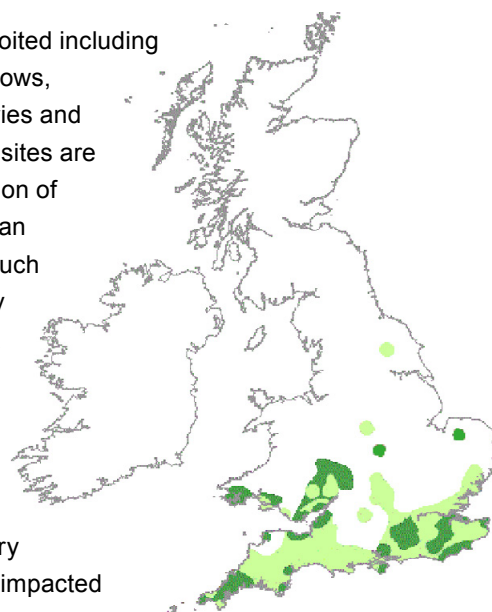
survives at just a few dozen sites nationally, most of which are concentrated along the south coast and it is now very rare inland.

## Habitat

A variety of habitats are exploited including soft rock cliffs, flowery meadows, coastal grazing marsh, quarries and woodland clearings. Known sites are characterised by a combination of suitable nesting habitat plus an abundance of key legumes such as Meadow vetchling, Kidney vetch, clovers and bird's-foot trefoils.

## Reasons for decline

The Long-horned bee requires large areas of flowery habitat. It has been badly impacted by the 97% loss of flower-rich grassland during the 20th century. It is particularly vulnerable to overgrazing and poor management of grassland. Coastal development and stabilisation of soft-rock cliffs have also contributed to its decline.



Post 1980 Dark green, pre1980 light green



Examples of Long-horned bee sites: soft-rock cliffs on the Devon coast (left), coastal grazing marsh with Meadow vetchling at Pevensy Levels (middle) and an old quarry in Warwickshire (right).

## Habitat management

- The creation of legume-rich wildflower areas could provide new foraging habitat within a couple of years. Maximise the abundance of flowering legumes such as Meadow vetchling, Kidney vetch, clovers and bird's-foot trefoils, between May and early July, preferably over a number of fields within a farm.
- Hay-cutting and other mowing (e.g. on sea walls) should be avoided until 15 July, and areas of pasture should be left ungrazed between 15 April and 15 July.
- In species-rich grassland, avoid applying fertilisers and herbicides and remove arisings after any cutting.
- Nesting sites in bare ground or sparsely vegetated areas should be kept free of encroaching vegetation such as coarse grasses, bramble or scrub.
- Encourage an extensive habitat mosaic that affords plentiful foraging and nesting habitat in close proximity.
- A well-designed Farm Environment Plan could be crucial in providing stepping stones and corridors to link suitable sites

## Environmental Stewardship options

### HLS options

- HB14** - Management of ditches of very high environmental value
- 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

**EB6-10** - Ditch 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 suitable legumes such as Meadow vetchling, Kidney vetch, clovers and bird's-foot trefoils)

The above options will encourage a much larger assemblage of bees including various mining bees that forage of legumes, plus a variety of bumblebees including several scarce species.

## References and further information

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

Bees, Wasps and Ants Recording Society [www.bwars.com](http://www.bwars.com). Species accounts for *Eucera longicornis* and *Nomada sexfasciata*.

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.

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