

Habitat management for the Narrow-bordered Bee Hawk-moth

The overall aim is to maintain abundant foodplants in a mosaic sward with a range of turf heights and a good supply of nectar sources in sunny situations.

- ◆ The type of damp meadows in which the species occurs are also known to support a range of other scarce insects, including the Marsh Fritillary butterfly *Euphydryas aurinia* and the Double Line moth *Mythimna turca*, and any management should also take these species into consideration.
- ◆ On damp grassland, areas of shorter (4-12cm) vegetation appear to be needed for the Narrow-bordered Bee Hawk-moth, whilst Marsh Fritillary larvae are typically found in longer (8-25cm) sward, emphasising the need for a mosaic of sward heights.
- ◆ On chalk grassland the requirements of both species appear to be for slightly shorter (<15cm) vegetation.
- ◆ On wetter sites, low intensity widespread grazing by cattle or ponies in spring and summer is ideal, although low intensity autumn/winter grazing or all-year grazing can also be suitable.
- ◆ Sheep grazing may be less suitable because they can remove larger food-plants, although light sheep grazing can be suitable on larger sites.
- ◆ Some scrub cutting may be necessary to keep sites open. It is best to cut a little each year, between October and February. Avoid clearing all the scrub as other insects and birds use it for shelter and breeding.



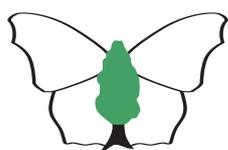
How to survey/monitor

Despite its large size this species is particularly difficult to survey and can prove elusive. Adults fly in sunshine and are most often seen well when hovering to take nectar at flowers. Unlike bumblebees, this species does not alight to feed, and it is rather larger than the bee-flies *Bombylius* spp., with which it is sometimes confused. Adults can reportedly be lured to cut Lilac blossom.

The larvae may be found by careful searching of the foodplant, although this can be rather labour-intensive. Typical feeding damage and an accumulation of frass (droppings) caught on the hairs of the foodplant can help to identify plants likely to support larvae and reduce searching time. Small larvae tend to leave a peppering of small holes across a leaf while larger larvae take half-moon shaped bites from the edge of the leaf, both of which are different from the more extensive damage typically left by molluscs. As many species feed on scabious, however, it is necessary to find the larvae to confirm its presence.



top Narrow-bordered Bee Hawk-moth larva
middle Ideal chalk downland habitat
bottom Devil's-bit Scabious,
one of the larval foodplants



Butterfly Conservation

Saving butterflies, moths and their habitats

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