

# Waved Carpet

Hydrelia sylvata

Conservation status Priority Species in UK Biodiversity Action Plan.

Larval record 1999 to 2004
Adult record 1999 to 2004

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The Waved Carpet belongs to a group of moths named for their flattened postures at rest and their intricate wing patterns, rather than any particular association with carpets! 'Hydrelia' means 'watery' and the wavy lines on the usually greyish-white forewings may have been the basis for this part of the scientific name. The species name 'sylvata' is derived from the Latin for 'woodland', indicating the habitat where the moth is found. Although formerly more widely recorded in England and Wales, the Waved Carpet was never considered to be a common moth. It is currently largely restricted to south-west England, south and west Wales with darker and intermediate forms of the moth occurring locally in south-east England, particularly in Sussex and Kent. Elsewhere, the moth is still present in a few sites in Herefordshire and central Surrey, and is very scarce in Hampshire.

#### Foodplants

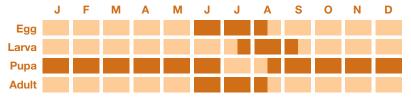
The larvae feed on the leaves of Alder *Alnus glutinosa*, birches *Betula* spp., sallows *Salix* spp. and Sweet Chestnut *Castanea sativa*. Hazel *Corylus avellana* is a possible larval foodplant as it is often abundant where the moth occurs and is a foodplant of many other related species associated with birches and sallows.

#### Habitat

The Waved Carpet is frequently associated with actively managed, often damp, woodland or scrub, but is also known from scrub on heathland, chalk and hilly sites on sandstone. The decline of coppicing has been put forward as a reason for the contraction in this moth's distribution. On one site a preference for mid-aged Sweet Chestnut coppice has been demonstrated.

#### Life cycle

The Waved Carpet is single-brooded. The eggs are laid from June to early august and the larvae feed and develop from late July to mid September. The pupa overwinters in an cocoon in the soil or amongst leaf litter. The adults emerge in June or July to early August. The adults fly at night, while during the day they hide in bushes or remain motionless on tree trunks or branches.



## Habitat management for the Waved Carpet

The precise ecological requirements of the Waved Carpet needs to be studied further; in particular a better understanding of the use of different foodplants by the larvae in woodland and other habitats is necessary. The provisional management guidelines are to maintain or establish a coppice (rotational cutting) cycle in the woodland or scrub where the moth is found. Such open woodland with varied shrub and tree growth will also benefit a wide range of other wildlife.

- Maintain sheltered clearings of at least 0.5 hectare (1.25 acres) in areas with potential foodplants in a range of growth stages.
- Coppice management is likely to be the simplest way of maintaining such clearings, with small patches cut on short rotation to provide the variety of growth stages. The length of the rotation is likely to vary, depending on the site and coppice species. In southern England the rotation of Sweet Chestnut coppice should be about 20 years, whilst ensuring a continuity of mid-age coppice. Some individual 'standards' may also be retained.
- Occasional coppicing along woodland rides and watercourses lined with Alder may be beneficial.

### How to survey/monitor

The easiest method is to search for adults by light-trapping from just after dusk. The larvae are difficult to find, but they can be located by beating tree branches over a white sheet, near areas where the adults are found.



above Rideside habitat right top Coppice management is often vital to maintain suitable habitat right bottom Medium-aged coppice is thought to be ideal







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