



Argent & Sable

Rheumaptera hastata

Conservation status

Priority Species in UK Biodiversity Action Plan.

'Argent' and 'Sable' are Heraldic terms that simply mean white and black. The outer black bands on both fore- and hindwings are broken by spearhead-shaped patches of white, giving rise to the *hastata* part of the scientific name (*hasta* meaning spear). Two forms are found in the UK, *R. hastata hastata*, which occurs in scattered localities in England, Wales, Ireland and southern Scotland, and the smaller, more intricately patterned form, *R. hastata nigrescens*, which is found mainly in the north and west of Scotland. The species has declined in England and Wales in recent years, although in western Scotland it is widely distributed and possibly under-recorded.

Foodplants

The larva feeds on Silver Birch *Betula pendula*, Downy Birch *B. pubescens*, some willow species *Salix sp.* or Bog Myrtle *Myrica gale*. Larvae predominantly feed on Bog Myrtle in Scotland, although they have been found on birch. In England and Wales birch is the main foodplant, although Bog Myrtle and willow species may be utilised.

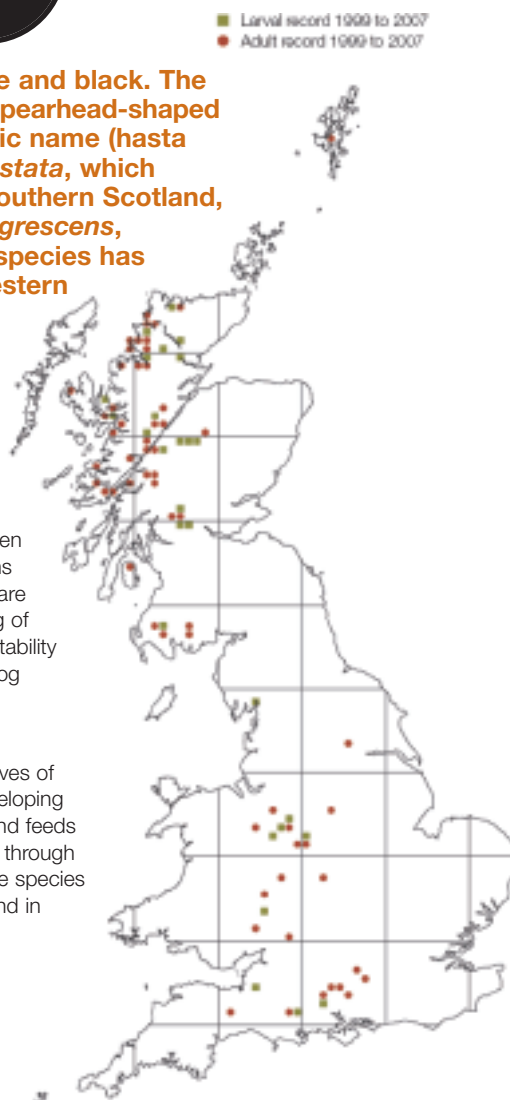
Habitat

R. hastata hastata occurs both in open woodland with birch regrowth and in more open grassland and moorland where Bog Myrtle is present. Small birches in sunny situations appear to be favoured, although some shade can be tolerated. Most larval spinnings are found on birches less than 3 metres high. It is also reported that a degree of browsing of birch by mammals can be tolerated and may even be favourable in prolonging the suitability of regrowth. *R. hastata nigrescens* occurs on wet, open moorland and bogs where Bog Myrtle is plentiful, particularly those at higher altitude or in more maritime locations.

Life cycle

The species is single-brooded. The eggs are laid singly on the underside of young leaves of the foodplants, between May and July, with the chocolate-brown and gold larvae developing from June to September. On birch the larva spins one, two or three leaves together and feeds from within the chamber, eating just the inner leaf surface when small and later eating through the leaf. It feeds among the terminal leaves of Bog Myrtle shoots in the same way. The species overwinters as a pupa, apparently among plant debris at the base of the foodplant, and in woodland it reportedly pupates in the moss at the base of the trees.

	J	F	M	A	M	J	J	A	S	O	N	D
Egg												
Larva												
Pupa												
Adult <i>hastata</i>												
<i>nigrescens</i>												



Habitat management for the Argent & Sable

Woodland with birch

- ◆ Aim to provide a continuity of small (< 3m) birch in sunny conditions.
- ◆ Maintain a succession of young birch by cutting patches on rotation and allowing natural regeneration and seedling growth. Short rotation coppice of birch (e.g. 5-10 years) provides ideal breeding conditions for this species. As small birches in full sunlight often seem to be preferred breeding locations, ensuring that young coppice growth has open edges and is not shaded by neighbouring trees may be an important factor.
- ◆ Regular rideside cutting of birch (on 5 - 10 year rotations) to simulate coppiced conditions is important to provide breeding conditions for this moth. The creation of box junctions that are cut on a rotation of several years will also benefit the species.

Bog Myrtle habitats

- ◆ Aim to maintain areas of abundant Bog Myrtle with varying age structure. Young growth may be preferred.
- ◆ The role of grazing in maintaining suitable breeding conditions needs further research. Light cattle grazing prevents encroachment of excessive scrub onto the open moor. High stocking densities of sheep and cattle should be avoided as this can rapidly destroy large stands of Bog Myrtle.
- ◆ Muirburn (heather burning) should be small-scale and avoid stands of Bog Myrtle.

How to survey/monitor

The best method is to search for adults on warm sunny days. Larval searches (in June and July in southern England, and from late July to early September in the north) can be worthwhile to identify foodplants and key breeding areas. Care should be taken when searching for the larva as it can be confused with other species which feed on birch and Bog Myrtle in a similar way.



above Larval spinning on Bog Myrtle
below left Ideal habitat with birch regrowth
below top Ideal Bog Myrtle habitat
below bottom Larval spinning on birch



Butterfly Conservation

Saving butterflies, moths and their habitats

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This scheme includes Higher Level Stewardship which supports management for targeted butterflies, moths and other biodiversity.