

# **REVISED PLAN NOVEMBER 2021**

# ARGENT & SABLE Rheumaptera hastata hastata

# 1. INTRODUCTION

The argent and sable moth is a striking black and white moth of wingspan 34-38mm that inhabits woods and heaths. It flies only during the daytime and is visible inflight from some distance due to its prominent black and white chequered markings. The flight is fairly swift and erratic, often spanning the higher canopy. It prefers sunny and warm weather but may be observed on overcast days if warm and humid. It is single-brooded, flying in May and June, usually peaking in late May and into the first week of June.



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Argent and sable sites must contain a wealth of the larval food plant, and for woodland sites this is young birch. Many of the prime sites for this moth are afforded warmth and shelter by adjacent mixed stands of conifers and mature silver birch. The species needs a continuous supply of young birch ideally between 0.3 -1.4 m growing in open sunny situations for it to thrive. Birch coppicing is therefore essential for this species whose caterpillars feed on 2-3 year old growth in July and August; the pupae overwinter at the base of the stools and the adult moth flies in the higher birch growth.

To fulfil the needs of all these stages of the life cycle sympathetic ride management and an on-going programme of coppice restoration, to create large clearings and flight corridors along sunny rides, are of paramount importance. Overgrown and increasingly shaded woodlands pose the greatest threats to this species. It is the birch-feeding race, *R.h.hastata*, which is covered by this action plan. Another race, *R.h.nigrescens*, feeds on bog myrtle in the north and west of Britain.

2.	OBJECTIVES	TARGETS			
	Associated Action Plans are: 'Woodland' and 'Lowland Heathland'				
PLEASE CONSULT THE 'GENERIC SPECIES' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS					
A.	Continue to monitor the last remaining Warwickshire site and collate results to determine population status.	ongoing			
B.	Maintain extent of habitat by encouraging the protection and appropriate management of the known site.	ongoing			
C.	Check former sites to establish whether this species is still present.	ongoing			

#### 3. NATIONAL BAP OBJECTIVES & TARGETS

This species is classified as Medium priority both regionally and nationally by <u>Butterfly Conservation</u>. The immediate major objectives of the Butterfly Conservation National Biodiversity Action Plan are:

- To halt the decline of this species in England.
- To maintain viable networks of populations throughout its current range.
- To conduct research into the exact habitat requirements for the argent and sable.
- To investigate aspects of its larval ecology.
- To restore its 1950 range (long-term objective).

#### 4. CURRENT STATUS

The argent and sable is found locally in suitable woodland locations over the greater part of England. In recent decades prior to 2000 it has undergone a dramatic decline due mainly to the cessation of coppicing. Waring (1997) classified this species as National Notable (i.e. found in less than 100 10-km squares nationally).

It has been identified to be a high priority moth regionally (Joy & Williams, 2008) and is currently strongest in Shropshire and Staffordshire although it used to be more widespread in the south of the region (see Joy & Williams 2008 for a summary of recent survey work undertaken on various argent & sable sites in the West Midlands region).

The species is on the verge of extinction in Warwickshire, its only site being Hay Wood (104ha), owned by the <u>Forestry Commission</u> (FC) and a designated Local Wildlife Site (LWS). The moth occurs specifically along the main ride and the widening of this ride in 2012/13 to enable timber extraction has significantly disturbed its habitat; the impact of this will be assessed through monitoring. In 2015 it was reported that the moth was no longer seen, having been last seen in 2006, and this was confirmed in 2021. It seems that the devastation of the ride dealt this vulnerable species a fatal blow (David Brown, pers.comm.2021).

# 4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the Wild Birds Directive (1979), the Wildlife and Countryside Act (1981), the Conservation Regulations (1994) and EC Habitats Directive (1992). Protection of sites is afforded nationally through SSSI, Special Areas of Conservation (SAC) and Local Nature Reserve (LNR) statutory status. Other sites are offered recognition of their value through Local Wildlife Site status (LWS),, Local Character Areas and identified Landscape Scale Areas. The National Planning Policy Framework (2012) chapter/section 11 states conditions with regard to any development negatively affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats (paragraph 118). The Wildlife & Countryside Act and schedule 2 of the Conservation of Habitats & Species

Regulations (2010) make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

The wood white, however, is not protected under the Wildlife & Countryside Act.

# 4.2 Current Factors Affecting the Species

- Lack of coppicing leading to overgrown, shaded rides and clearings.
- Deer browsing is possibly reducing the number of suitable saplings for egglaying. Deer browsing may also be destroying larvae which occur in leaf spinnings.
- **Isolation** i.e. the lack of suitable habitat in close proximity to existing colony.
- Coniferisation of woodland leading to a lack of birch.

# 5. LOCAL ACTION

- In 2013 the Ecology Team at the Warwickshire County Council, led by David Lowe, Principal Ecologist, was awarded the 'Marsh Promotion of Lepidoptera' Award in recognition of its exceptional contribution to the conservation and promotion of butterflies and moths in the county.
- The Warwickshire Forestry Design Plan for 2011-2021 (see below) includes the thinning of conifers at Hay Wood to create 8.2ha of open space; there has already been discussion concerning improvements to a minor ride during tree removal:

Hay Wood - proposed Forest Structure in 2014: broadleaves are well established across two thirds of the woodland. Most of the stands are even aged and have a uniform stand structure. Early clearfells have taken place along the forest roads to create new areas of open space.



Hay Wood - proposed Forest Structure in 2025: broadleaves are well established across two thirds of the woodland. Most of the stands are even aged and have a uniform stand structure. Early clearfells have taken place along the forest roads to create new areas of open space.



- FC, in liaison with <u>Butterfly Conservation Warwickshire</u> (BCW) has carried out ride-side coppicing since 2008 at Hay Wood to benefit the species.
- BCW: the needs of the moth were highlighted in a meeting between BCW and FC in 2012 and there is a need for further communication on the finer details of habitat management. The moth is highly vulnerable due to its very limited distribution and therefore its habitat needs sensitive management. The widening of the main ride for timber access in 2012 raises some concerns.
  - survey of former locations and other sites has continued since 2003 but none has yet been found.
  - an area for action called the North West Woodlands Warwickshire Landscape has been defined; this includes Hay Wood where work is being undertaken to increase the area of young birch by thinning conifers by 30% and widening the main rides.
  - In 2016 a provisional management plan was agreed with the FC of 3 ride side scallop with 4 yr. rotation for heather regeneration: to cover the entrance ride, the surfaced ride to the left and the path that goes straight on. This has resulted in a good heather population.
  - the establishment of connective corridors with three adjacent woodlands is in progress.

# 6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	Ву	
PLEASE CONSULT THE 'GENERIC SPECIES' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS				
Policy, Legislation & Protection				
<b>PL1.</b> Designate all new sites for argent and sable that qualify as LWSs at the earliest instance.	LWSP	WWT HBA LAs	ongoing	
Site / Species Safeguard & Management				
<b>SM1.</b> Continue to work with other interested parties to develop and implement a management plan which fulfils the habitat requirements of the argent and sable at Hay Wood.	FC	WWT BCW	ongoing	
<b>SM2.</b> Restore the condition of other rides within the Hay Wood to enable wider distribution of the moth.	FC	WWT BCW	ongoing	
<b>SM3.</b> Continue to establish connective corridors from Hay Wood to other woodlands.	BCW	WDC FC NE WWT LOs	ongoing	
<b>SM4.</b> Encourage the appropriate management of suitable woodland in both present and past argent and sable sites to enable future spread of the species.	BCW	WWT WDC FC NE LOs	ongoing	
Advisory				
<b>A1.</b> Continue to circulate information to landowners of potential sites and other interested parties on beneficial management for argent and sable.	BCW	WWT NE FC	ongoing	
Research & Monitoring				
<b>RM1.</b> Continue regular monitoring at Hay Wood to assess population size and determine extent of colony including the recovery of the species on the main ride and its presence on other rides.	BCW	WWT FC	annual	
RM2. Continue to survey former locations to see if species is still present, e.g. Wappenbury Wood.	BCW	WWT FC	ongoing	

Abbreviations: BCW - Butterfly Conservation Warwickshire, FC - Forestry Commission, HBA - Habitat Biodiversity Audit partnership, , LOs - Landowners, LWSP - Local Wildlife Sites Project, NE - Natural England, WDC - Warwick District Council, WWT - Warwickshire Wildlife Trust.

#### 7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Progress with this plan up to 2019 can be seen at <a href="https://www.warwickshirewildlifetrust.org.uk/LBAP">https://www.warwickshirewildlifetrust.org.uk/LBAP</a>.

#### 8. BIBLIOGRAPHY

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Waring, P. (1997). Annotated List of the Macro Moths recorded in the British Isles. Butterfly Conservation News. No.78. Autumn (2001). Woodland management for butterflies benefits priority moths, Pg19.

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Lawton, J.H. (2010) <u>Making Space for Nature</u>: a review of England's wildlife sites and ecological network. Report to Defra, advocating a landscape-scale approach guided by four key principles, summarised as 'more, bigger, better and joined'.

Butterfly Conservation (2010) <u>The Provisional Atlas of the UK's Larger Moths</u> is based on the first 11 million moth records collated by the National Moth Recording Scheme and represents a landmark in moth recording.

DEFRA (2011) <u>Biodiversity 2020</u>: A strategy for England's wildlife and ecosystem services.

Forestry Commission (2012) Warwickshire Forest Design Plan 2011 – 2021.

Butterfly Conservation (2012) <u>Landscape-scale conservation for butterflies and moths</u>: Lessons from the UK.

Butterfly Conservation (2013) <u>The State of Britain's Moths</u> shows that Britain's moths are in decline, with a 40% decrease in total abundance in southern Britain.

Townsend, M. et al. (2014) Concise Guide to the Moths of Great Britain & Ireland.

RSPB (2016) <u>State of Nature</u> – a stocktake of all our native wildlife by over 50 wildlife organisations.

Natural England (2016) <u>Conservation Strategy for the 21<sup>st</sup> Century.</u> Sets out how NE will help deliver DEFRA's ambitions for the environment to reverse biodiversity loss, sustain distinctive landscapes and enhance engagement with nature.

Waring, P., Townsend, M. & Lewington, R. (2017) Field Guide to the Moths of Great Britain & Ireland

Worldwide Fund for Nature (2018) <u>The Living Planet Report:</u> aiming higher. Published in collaboration with the Zoological Society of London.

#### 9. FURTHER INFORMATION

**Buglife** - the Invertebrate Conservation Trust

Butterfly Conservation - Argent & Sable information

Butterfly Conservation: Woodland management for butterflies and moths: a best practice guide - intended for anyone involved in the management of woodland, it provides guidance on the woodland habitat features needed by butterflies and moths, and how to create, maintain and improve them. ISBN-13:9780956221681

Butterfly Conservation - <u>Woodland Scallops</u> - a management factsheet on ride side scallops that can help provide habitats for many rare and declining species.

Kirby, P. (1992). <u>Habitat management for Invertebrates</u>: a Practical Handbook. RSPB.

<u>Moths Count</u> aims to encourage interest in moths throughout the UK and to run the <u>National Moth Recording Scheme</u> to improve knowledge and conservation of the 900+ species of larger moths.

#### 10. CONTACT

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