



## WOOD WHITE

### *Leptidea sinapsis*

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#### 1. INTRODUCTION

The wood white is the smallest butterfly in the *White* family of butterflies. It is renowned for having one of the most delicate flights of any British butterfly and this has given it the evocative nick-name of "Lady of the Woods".

In Britain the wood white traditionally bred in ancient deciduous woodland with a long history of coppicing. The number of wood white colonies rapidly declined in size and number as coppicing ceased at most woodland sites during the mid 1900s.. In the second half of the twentieth century there was a brief renaissance in the butterfly's fortunes as it moved to colonise a wider range of habitats including young conifer plantations planted on clear felled ancient woodland sites and disused railway lines following closure. Unfortunately the conifer plantations grew rapidly and disused railway lines soon scrubbed up causing a further round of extinctions. There are approximately 70 colonies left in England and Wales . The butterfly will only breed in sunny open rides or recent coppice areas that are lightly shaded (20-50% canopy cover) by the surrounding trees. In woods where the species survives, colonies tend to be concentrated in rides running between young crops or young coppice plots.



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The growth structure of the butterfly's four known larval foodplants is the critical factor in the butterfly's survival. Larval foodplants of the wood white are meadow vetchling (*Lathyrus pratensis*), tufted vetch (*Vicia cracca*), common bird's-foot-trefoil (*Lotus corniculatus*), and greater bird's-foot-trefoil (*L. pedunculatus*). For any of these foodplants to be used they must grow through and protrude above the surrounding vegetation and in less than 50% shade conditions.

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2. OUR OBJECTIVES AND TARGETS	Targets
A. Develop transects or timed count recording at all known sites in the sub-region.	2004
B. Determine its presence or absence at sites within the vicinity of existing colonies (9 woods on the Gloucestershire/Warwickshire border and 7 woods in the Princethorpe complex)	2005/6
C. Raise awareness of potential landowners/ managers of the management needs of the species	by 2005/6
D. Introduce or continue with positive management at all existing sites and at least 3 potential sites to create the potential for natural colonisation	by 2006

<b>ASSOCIATED HABITAT PLANS</b> <ul style="list-style-type: none"> <li>• <u>Woodlands</u></li> </ul>	<b>ASSOCIATED SPECIES PLANS</b> <ul style="list-style-type: none"> <li>• <u>Dormouse</u></li> </ul>
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### 3. NATIONAL BAP OBJECTIVES & TARGETS

**UK BAP Status:** Species of Conservation Concern.

**Butterfly Conservation National Priority:** Medium.

The wood white is listed in the Species of Conservation Concern in Biodiversity: The UK Steering Group Report (DOE, 1995). Butterfly Conservation has produced a National Species Action Plan and has classified the species as "high priority" for conservation action. The species is also included as High Priority within Butterfly Conservation's Regional Action Plan for the West Midlands.

The immediate major objectives of the Butterfly Conservation Action Plan are:

- *Halt rapid decline in England and Wales*
- *Maintain viable networks of populations throughout its current range*

A long-term objective of the Plan is:

- *Restore its 1950 range .*

## 4. CURRENT STATUS

The butterfly has declined seriously in England and Wales. The Irish population has recently been shown to be a different species, *L.reali* which has expanded rather than declined within its range. The range of *L.sinapsis* has declined by 36% in the number of colonies and by 62% in range in the last 25 years preceding 1982 (Warren et al. 2000). Historically declines have been mainly due to the widespread cessation of traditional coppice management in woodland. This leads to food-plants becoming shaded out by trees and scrub. Scrub encroachment through lack of management has been a major factor behind the loss of colonies at non-woodland sites such as railway lines.

The Millennium Atlas Survey 1995-1999 (Asher et al. 2001) found 1 site, Wolford Wood, for wood white in Warwickshire. Following a number of years with intermittent single sightings, the butterfly has also been recorded for the last 4 years (2001-4) in Ryton Wood where in 1986 the butterfly was observed for the first time since 1950). In 2004 a total of 70 individuals were recorded, for the first time not confined to the centre of the wood but up to 1km away. This is more likely a remnant population that has responded to positive management rather than the result of reintroduction.

At both sites breeding has been confirmed following both observations of female butterflies and eggs searches.

### 4.1 Legal and Policy Status

In Britain the wood white is listed on Schedule 5 of the 1981 Wildlife and Countryside Act, which only protects the species from sale. It is fully protected under the Wildlife (Northern Ireland) Order (1985).

### 4.2 Current Factors Affecting The Species

- **Lack of traditional coppice management** – coppice plots connected by rides allow light into woodlands, encourage the growth of suitable foodplants and assist movement of the butterfly from one potential breeding site to another. In large woodland complexes, this butterfly survives well along ride systems alone and also has quite good powers of dispersal along them, enabling it to colonise new areas.
- **Isolation of existing suitable woods, combined with the wood white's limited colonising ability**
- **Continuing decline in the market for coppice products**
- **Even aged nature of many potential woodland sites**, leading to high shade levels >50%
- **Lack of woodland management** - insufficient continuity of coppicing programmes or cleared areas situated suitably close to each other and/or connected by wide sunny rides

- **Inappropriate woodland ride edges management** - too frequent mowing of tall herb edge leading to an absence of appropriate foodplants growing with the right growth structure; where colonies persist in rides 3-4 year mowing of tall herb edge is recommended; good management regimes exist at both Wolford and Ryton Woods
- **Scrub encroachment and other successional changes** – rendering non-woodland sites such as railway lines unsuitable

## 5. CURRENT LOCAL ACTION

- Management by the landowner at Wolford Wood is ideal for the existence of the wood white and the species appears to be prospering. Ride and coppice management are regularly creating suitable breeding habitat adjacent to or near to current breeding areas. The herb-rich rides are regularly mown and the ditch and bank edges are cut in a piece meal fashion.
- At Ryton Wood sympathetic management for the wood white by Warwickshire Wildlife Trust volunteers includes 3 main coppice regimes and 11 other ride side coppice regimes. The main north-south ride has been divided into 6 sections with two sections mown each year.
- In 2003, a number of woodlands close to the Wolford Wood colony were visited but no wood white sightings were made.
- Butterfly Conservation visited Bourton Woods (Gloucestershire) some 7km to the west of Wolford Wood, with the site manager. Suitable habitat was present but no sightings were made. Management advice was given and public notices erected to encourage the public to report any wood white sightings.
- In 2005 habitat assessment surveys were undertaken on past and potential sites for wood white, to determine management action required to encourage recolonisation (Slater, 2005)

## 6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partner	By	Meets objective
<b>Policy &amp; Legislation</b>				
<b>PL1.</b> Ensure that all relevant species policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9).	LBAPSG	BC WWT RBC SDC	2005	D

<b>Site / Species Safeguard &amp; Management</b>				
<b>SM1.</b> Secure the long-term management of all known wood white colonies.	BC	SDC RBC LOs	by 2004	C, D
<b>SM2.</b> Secure long term management of at least two other sites in each woodland complex (Princethorpe & Wolford) to allow for meta-populations to form.	BC	WWT FC EN Private	by 2005	C, D
<b>Advisory</b>				
<b>A1.</b> Hold a training day for landowners and managers of potential wood white sites on the ecology and management requirements of this species.	BC	FC WWT EN LOs DEFRA	2006	C, D
<b>Research &amp; Monitoring</b>				
<b>RM1.</b> Survey all suitable locations in the vicinity of existing colonies to assess opportunities for recolonisation.	BC		2006	A
<b>RM2.</b> Establish a species transect at Wolford Wood and continue monitoring at Ryton Wood.	BC	WWT	2004	A
<b>RM3.</b> Promote and support ecological research aimed at promoting measures to assist long-term conservation of the species if current decline continues.	BC	All	2006	
<b>Communication, Education &amp; Publicity</b>				
<b>CP1.</b> Raise awareness of the decline of the wood white butterfly and its conservation management needs, through articles in the media related to local activities and issues.	BC	All	ongoing	C, D
<b>CP2.</b> Work with Butterfly Conservation in Gloucestershire to determine distribution of species along the Warwickshire/ Gloucestershire border.	BC		2005 onwards	B
<b>CP3.</b> Erect notices in suitable woods with public access to encourage reports of any sightings.	BC	LOs	2005 onwards	B

**Abbreviations:** BC – Butterfly Conservation, DEFRA – Department for Environment Food and Rural Affairs, EN – English Nature, FC - Forestry Commission, LBAPSG – Local Biodiversity Action Plan Steering Group, LO – Landowner, RBC – Rugby Borough Council, SDC – Stratford District Council, WWT – Warwickshire Wildlife Trust.

## 7. REFERENCES

Asher,J., Warren,M., Fox,R., Harding,P., Jeffcoate,G. & Jeffcoate,S. (2001). *The Millennium Atlas of Butterflies in Britain and Ireland*. Oxford University Press. Oxford.

Warren,M.S. & Bourn,N.A.D. (2000). *Wood White (Leptidea sinapsis) Species Action Plan*. Butterfly Conservation.

**8. FURTHER INFORMATION** (see separate **Links** web page for links to web sites)

Joy,J. (1997). West Midlands Regional Action Plan. Butterfly Conservation, West Midlands Branch.

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Slater, M (2005) Conservation Report: Wood White, *Leptidea sinapsis*

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