



## CHALK CARPET

### *Scotopteryx bipunctaria*

#### 1. INTRODUCTION

The chalk carpet moth inhabits calcareous grassland (overlying chalk and limestone), particularly that which has formed in old limestone quarries and other sites with a history of disturbance. The moth is nocturnal but can be readily disturbed during the daytime and flies short distances before re-settling amongst grasses or on bare ground. Its whitish-grey coloration and medium size (wingspan 32-38 mm) enables it to be easily monitored. Moth recording with mercury vapour lights after dark is another good way of attracting this species.



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Chalk carpet sites must contain an abundance of birds-foot trefoils and clovers, which are the main food-plant of the caterpillar. The caterpillars feed at night and a pupa is formed in a cocoon on the ground. The moth overwinters as a larva and adults fly in July/August.

#### 2. OUR OBJECTIVES & TARGETS

	Target
A. To maintain up-to-date listings of sites and population sizes.	2004-2015
B. To maintain the size and range of known populations of the chalk carpet.	2004-2015
C. To increase the population size and range by doubling the number of Warwickshire sites where chalk carpet occurs.	2010
D. Raise awareness of the chalk carpet, its life cycle and habitat requirements.	2004-2015

#### ASSOCIATED HABITAT PLANS

- Quarries & Gravel Pits
- Disused Industrial & Railway Land
- Lowland Calcareous Grassland
- Roadside Verges

#### ASSOCIATED SPECIES PLANS

- Dingy Skipper
- Small Blue
- Rare Bumblebees
- Cuckoo Bee
- Dotted Bee-fly

### 3. NATIONAL BAP OBJECTIVES & TARGETS

The chalk carpet moth is a UK BAP Priority Species. The national objective for the species is to “*maintain the range of the chalk carpet*”.

Butterfly Conservation also has an action plan, the immediate major objectives of which are:

- *To halt the decline of this species in the UK.*
- *To maintain viable networks of populations throughout its current range.*
- *To conduct research on the distribution and ecology of the species to enable its effective conservation.*

### 4. CURRENT STATUS

The chalk carpet is widespread in Southern England where it is found locally in calcareous habitats. It becomes much more localised in the Midlands and isolated colonies occur in North Wales, Yorkshire and Co Durham. Waring (1997) categorised this species as Nationally Notable (estimated to occur in less than 100 10-km squares nationally).

In Warwickshire this species has always been very local and is presently known to occur at 4 sites. The largest colony is currently found at Bishops Hill with further small colonies at the adjacent Bishops Bowl, Nelson’s Quarry and Kites Hardwick (the latter up to 1990). The species appears to have disappeared from Wilmcote Rough and Ufton Fields (similar to the declines shown by various other insects requiring early successional stages of limestone habitat).

#### 4.1 Legal and Policy Status

This species is not protected under the Wildlife and Countryside Act 1981.

Bishops Hill and Bishops Bowl were designated as a single large SINC in 2003. Nelsons Quarry is part of a larger SSSI.

#### 4.2 Current Factors Affecting The Species

- **Scrub encroachment and other successional changes** that result in the loss of suitable habitat and food-plants
- **Increasing fragmentation and isolation of existing colonies**
- **Loss of suitable habitat** development, unsympathetic landscaping, conversion to intensive agriculture or other damaging land operations
- **Trampling and flattening** of grassland with good populations of food-plants by people on foot and motorbikes (locally a problem at Bishops Hill, though some trampling and disturbance can help promote the presence of food-plants).

## 5. CURRENT LOCAL ACTION

- There is currently no management taking place at any of the sites containing chalk carpet colonies though informal disturbance at Bishops Hill and Bishops Bowl, and rabbit activity, is helping to maintain patches of suitable habitat.
- Some monitoring takes place through the work of the local Butterfly Conservation branch.

## 6. PROPOSED LOCAL ACTIONS (some dates amended - Core Steering Group - Feb 2008)

ACTION	Lead	Partners	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	WWT BC SDC	2004- 2015	B
<b>PL2.</b> Ensure all known surviving chalk carpet sites are considered for designation as SINCs or SSSIs	WBRC	WWT BC WM NE WSP	2004	B
<b>Site / Species Safeguard &amp; Management</b>				
<b>SM1.</b> Encourage the protection of calcareous grassland and post-industrial sites where chalk carpet colonies occur.	BC	WWT LOs SDC DEFRA	2004- 2015	B
<b>SM2.</b> Seek to ensure that sites with colonies have management plans which use best practice for chalk carpet conservation.	BC	SDC WWT	2005	B D
<b>SM3.</b> Encourage the protection and appropriate management of calcareous grassland and former industrial sites which could be new sites for the chalk carpet.	BC	WWT SDC LOs	2004- 2015	B C
<b>Advisory</b>				
<b>A1.</b> Circulate information to landowners to introduce management for chalk carpet and provide feedback.	BC	WWT SDC	2005	D

Research & Monitoring				
<b>RM1.</b> Survey former locations where current status of the chalk carpet is not clear.	BC	WWT	2004	A
<b>RM2.</b> Establish monitoring at key sites to determine any change in status of the chalk carpet.	BC	WWT	2004-2015	A
<b>RM3.</b> Promote and support ecological research that assists long-term conservation of the chalk carpet.	BC	WWT BC SDC	2010	A B D
Communication, Education & Publicity				
<b>CP1.</b> Raise awareness amongst landowners of existing and potential sites of the decline of chalk carpet moth, its importance and conservation management needs.	BC	WWT SDC BC	2004-2015	B C D
<b>CP2.</b> Maintain communication with national recording scheme and the relevant staff / representatives of English Nature.	BC		2004-2015	A, B, C
<b>CP3.</b> Encourage more moth recording in the region through a series of public events	BC		2004-2015	A, D

**Abbreviations:** BC – Butterfly Conservation, DEFRA – Department for Environment, Food and Rural Affairs, NE – Natural England, LBAPSG- Local Biodiversity Action Plan Steering Group, LO – Landowner, SDC – Stratford District Council, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust.

## 7. REFERENCES (also see LBAP Bibliography web page)

Waring, P. (1997) *Annotated List of Macro Moths recorded in the British Isles.*

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

UK Biodiversity Action Plan no.568

## 9. CONTACT

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