

SPECIES ACTION PLAN : Wall Brown Butterfly
(*Lasiommata megera*)

Associated Species Action Plans
Orchids
Skylark

1. Current Status

Formerly a widespread and common species to be expected in a wide range of grassland habitats but now an increasingly scarce butterfly throughout the region which appears to be undergoing significant decline. There are no signs of recovery and there is a growing list of sites from which this species has been lost. This species is known to have experienced several expansions and contractions since recording began.

Associated Habitat Action Plans
Canals
Gardens, allotments, parks and open space
Grassland (all types)
Urban "wasteland"

In the 1860s a series of cold wet summers is believed to have been the factor behind a marked decline while, more recently, some apparent expansion of range in the 1970s was followed by dramatic declines from the mid-80s onwards.

While there have been some signs of more recent recovery in parts of southern Britain, this has not been the case within the West Midlands region. The butterfly has sharply declined within Gloucestershire, where it used to be a common roadside verge species, and it is on the verge of extinction in Worcestershire, where it has only recently been recorded on the Malvern Hills. In Herefordshire, Warwickshire, the West Midlands county, Staffordshire and Shropshire, the species has fared slightly better but even here there is evidence of rapid decline.

In Birmingham and the Black Country, the species is strongly associated with old industrial sites and canal towpaths and, while the species is probably still under-recorded within the area, there is clear evidence of decline. Historically, the butterfly was fairly widespread, occurring in all LA areas, but most of the records held on EcoRecord now date back to the eighties and there are relatively few post 1990 records. A similar picture emerges from Butterfly Conservation's Provisional Atlas of the Butterflies of the West Midlands covering the years 1995-98 with, regionally, wall brown reported from less than 200 of the 2374 tetrads so far recorded. Nationally, declines have been reported from most of inland lowland Britain with coastal areas now being the stronghold for this species.

2. Current factors affecting species

The reason for declines are not clearly understood and numbers have fallen on both managed and unmanaged sites. Probable factors within Birmingham and the Black Country include:

- Housing & industrial development
- Destruction of unimproved grassland
- Cessation of grazing
- Accidental fires
- Scrub encroachment

3. Current Action

3.1 Legal status

None.

3.2 Management, research and guidance

Survey work is urgently required to establish the current distribution and status of the wall brown within Birmingham and the Black Country. Casual records submitted to EcoRecord and Butterfly Conservation suggest a major decline (West Midlands Butterfly Conservation 1998). Regionally at 10km square level, the wall brown shows a 38% decline over the past 17 years (Joy, J. 1997); at tetrad level this decline is likely to be considerably greater. Regionally, only brown hairstreak, pearl-bordered fritillary, high brown fritillary and marsh fritillary show higher rates of decline over the same period. Formerly recorded on 20 transects in the region, in 1998 it was only recorded on three and, in each case, the population index for the year was in single figures.

No in depth ecological studies have yet been carried out on the wall brown but the species favours areas of dry, unfertilised grassland with bare patches where the butterfly likes to bask. Eggs are laid on various species of grasses but particularly cocksfoot, wavy hair grass and common bent. The aspect of the foodplant, however, is probably more important than the actual species of grass as the wall brown favours grasses where the adjacent ground has broken away to leave the tuft of grass exposed such as within a depression caused by animal hoofprints or rabbit grazing, or along a crumbling bank (Dennis, R. 1983).

4. Action Plan Objectives and Targets

Objective	Target
1. Survey former locations where current status of this species is not clear to determine the extent of the decline.	By 2002
2. Establish monitoring at key sites as a means of monitoring changes in status and distribution and disseminate results to landowners and other interested parties.	By 2003
3. Raise awareness of the decline of the wall brown with other conservation partners and the general public and its importance in conservation management	Ongoing
4. Promote protection and best practice management plans at all known wall brown sites	Ongoing
5. Support ecological research aimed at promoting measures that will assist the long term conservation of this species if current declines continue	By 2006

5. Proposed action with partners to meet objectives

ACTION	POTENTIAL DELIVERERS		YEAR							Meets objective number
	Lead	Partner	2001	2002	2003	2004	2005	2006	2011	
5.1 Policy and legislation										
Seek the inclusion of effective measures which protect wall brown butterflies and their habitats in the preparation of Unitary Development Plans and/ or other policy documents.	LA's	WT BC	As UDPs and other policy documents are prepared.							4
5.2 Site / species management and protection										
Protect all surviving wall butterfly colonies	LA's LO's	EN WT BC	•	•	•	•	•	•	•	4
Seek opportunities to extend suitable breeding areas within or adjacent to existing habitat	BC	EN LA's WT			•					4
Ensure sites with wall brown butterflies have adequate protection and management plans which use best practice for wall butterfly conservation	LA's EN	WT BC LO's	•							4
5.3 Advisory										
Disseminate information to landowners to introduce specific management for wall brown butterflies	BC EN	WT FWAG	•	•	•	•	•	•	•	3, 4

ACTION	POTENTIAL DELIVERERS		YEAR							Meets objective number
	Lead	Partner	2001	2002	2003	2004	2005	2006	2011	
5.3 Advisory (continued)										
Promote best practice guidelines for wall butterflies.	BC	EN WT LA's FWAG	•	•	•	•	•	•	•	3, 4
5.4 Future research and monitoring										
Undertake survey of sites with wall records to determine current status.	BC	WT LA's LO's	•	•						1, 2
Establish monitoring at key sites to determine any change in status.	BC	WT LA's LO's	•	•	•					2
Promote and support research aimed at measures to assist long term species conservation.	BC	EN WT LA's					•			5
5.5 Communications and publicity										
Raise awareness of the decline of wall brown butterflies and its importance in conservation management.	BC	All	•	•	•	•	•	•	•	3, 4
5.6 Links to other action plans										
Grassland (all types); Urban "wasteland"; Gardens, allotments, parks and open space; Canals										

6. Co-ordination and Review

This Biodiversity Action Plan will be implemented over 10 years with a first review after 5 years. The Butterfly Conservation Group, West Midlands Branch, will co-ordinate implementation and monitoring of the Action Plan and report to the Biodiversity Action Plan Steering Group. This group will meet at a minimum on a yearly basis, for this purpose.

Review will be carried out in conjunction with related Habitat and Species Action Plans as appropriate and will consist of measuring achievement of targets. The group will, with the support of the Steering Group, develop and implement appropriate monitoring methods, which will inform the review process.

The Action Plan will be revised and updated in the light of review results and any relevant changes in circumstances and / or additional information which becomes available during the review period.

In line with national guidance, the Steering Group will report to the UK Biodiversity Steering Group.

7. References

Dennis, R 1983. *Egg-laying cues in the wall brown butterfly Lasiommata mergera* (L.). *Entomologist's Gazette* 34: 89-95.

Joy, J. 1997 *West Midlands Regional Action Plan. West Midlands Butterfly Conservation 1998. A Provisional Atlas for Butterflies of the West Midlands 1995-98.* West Midlands BC