

Species and Habitat Action Plan Assessment Form

Field 1: Action Plan details

Species/Habitat Action Plan	High Brown Fritillary
Lead Partner/Agency	Butterfly Conservation
Steering Group/Other organisations	Yes, Butterfly Conservation, English Nature, Countryside Council for Wales, National Trust, Dartmoor National Park Authority, Exmoor National Park Authority, Farming and Rural Conservation Agency (representing MAFF), Forestry Commission.
Work programme in existence?	Yes

Field 2: Objectives and targets overview

Number and text	UK	E	NI	S	W	Comments
4.1 Halt the current decline and maintain at least 50 self-sustaining populations.		✓			✓	
4.2 Restore suitable habitat within its former range and encourage spread to 10 additional sites by 2005, using re-introductions if necessary.		✓			✓	The Steering Group felt that there was potential for natural re-colonisation in Dartmoor and Exmoor but very limited potential for re-introductions into former woodland sites.
4.3 Ensure that a minimum number of colonies are protected within SSSIs.		✓			✓	The Steering Group assumed that a 'minimum' number refers to the 20 sites mentioned in action 5.2.1, in which case this objective has been reached as 23 colonies occur on SSSIs with a further 8 colonies partly within SSSIs

Field 3: Proposed actions overview

Number and text	UK	E	NI	S	W	Action significant?	Action complete or ongoing?
5.1.1 Following further survey and research to identify the ecological requirements of this species, encourage the uptake of incentives for favourable land management on existing and potential sites within the Morecambe Bay area, Dartmoor, Exmoor and Herefordshire, specially through existing ESA and Countryside Stewardship schemes.		✓			✓	✓	Ongoing
5.1.2 Ensure the habitat requirements of this species are considered when drawing up or reviewing management prescriptions and grants in ESAs and other agri-environmental schemes, with particular attention to the need for bracken control.		✓			✓	✓	Ongoing

5.1.3 Encourage the uptake of the Woodland Grant Scheme for coppice restoration and management in the Morecambe Bay area.		✓				✓	Ongoing
5.2.1 Ensure that at least 20 colonies lie within SSSIs across the current geographical range of the species.		✓			✓	✓	Yes
5.2.2 Encourage favourable management for the species on existing sites and seek to restore favourable management to former sites where opportunities for colonisation or re-introduction exist.		✓			✓	✓	Ongoing
5.3.1 Following restoration of the habitat, encourage the spread of the butterfly to 10 additional sites by 2005, using re-introduction techniques if necessary.		✓			✓	✓	Ongoing
5.4.1 Produce a guide for landowners and managers in target areas advising on how to manage land for the butterfly.		✓			✓	X	Yes
5.5.1 Promote research into the butterfly's ecological requirements to identify the management and conservation needs of the butterfly, including research on habitat management techniques and their impact on this species (especially in bracken habitats).	✓	✓			✓	✓	Ongoing
5.5.2 Investigate the effects of habitat loss and isolation of colonies on genetic variation and population viability.		✓			✓	X	Not started
5.5.3 Survey all former and potential sites to identify precise breeding areas and suitable sites for re-introduction.		✓			✓	✓	Ongoing
5.5.4 Encourage regular monitoring of extant sites, collating transect data annually and using this information to compare trends on individual sites.		✓			✓	✓	Yes
5.5.5 Pass information gathered during survey and monitoring of this species to JNCC or BRC so that it can be incorporated in national databases.		✓			✓	X	Yes
5.5.6 Provide information annually to the World Conservation Monitoring Centre on the UK status of the species to contribute to maintenance of an up-to-date global red lists.		✓			✓	✓	Action dropped
5.6.1 Promote opportunities for the appreciation and conservation of the High Brown Fritillary and its habitat.		✓			✓	X	Ongoing

Field 4: Assessment of status

	Not appropriate	Recovered	Signs of recovery	No change	Declining	Lost	Insufficient information
<i>UK</i>							
<i>England</i>				✓			
<i>Northern Ireland</i>							
<i>Scotland</i>							
<i>Wales</i>				✓			
<p>In the last five years there has been a slight drop in the number of colonies to approximately 50, although surveys in Wales and Cumbria have found a few new colonies. These populations are very small and may not be viable in the long term. Monitoring indicates that many colonies remain at low or declining population levels. The problems are particularly acute in Wales and the West Midlands, where populations remain at dangerously low levels.</p>							

Field 5: Summary statement

Overview

The High Brown Fritillary is estimated to have declined in range by over 90% this century. Much of this decline has occurred in woodland and almost all of the remaining colonies occur on bracken slopes on Dartmoor, Exmoor, Cumbria, the Malverns and Wales. In these areas a significant proportion of populations are subject to sympathetic management agreements (circa 50%) but the continuing loss of populations without appropriate conservation measures serves to weaken the viability of metapopulations at a landscape scale. Further efforts are required to bring as many populations within suitable management regimes as possible before the effects of habitat fragmentation result in widespread losses.

In bracken habitats, the High Brown Fritillary is dependent upon low intensity, traditional agriculture and is a victim of changes in agricultural practice and policy in the post-war period. Site-based conservation strategies (the notification of SSSIs or acquisition of nature reserves) have not been able to stem the decline and wider countryside initiatives are now crucial to the survival of this species. The importance of agri-environment schemes to High Brown Fritillary conservation should be recognised by ensuring adequate funding, appropriate management prescriptions, and targeting. The threat to this species is so acute over much of its range that it should be regarded as a priority and the conservation of High Brown Fritillary seen as a measure of the ability of agri-environment schemes to deliver sustainable agriculture.

Summary of work programme

- **Survey** – In England and Wales further surveys have been undertaken. A detailed baseline survey of breeding habitats in south-west England was conducted by BC in 1996-98, funded by EN.
- **Status** - Monitoring and survey between 1995 and 1999 indicate that numbers have been generally low on many sites, especially in 1998 and 1999.
- **Monitoring** – The High Brown Fritillary is monitored annually on a large number of sites co-ordinated by BC (and others including the HBF Action Group in south Lakes and consultants funded by CCW in Wales). EN fund BC to collate this data and a summary report was produced in 1996.
- **Management/Restoration** - Agri-environment and other schemes which operate at the landscape scale are essential to halt the decline of the High Brown Fritillary. A substantial numbers of sites are now entered into schemes and sensitive, flexible management prescriptions are essential to ensure the schemes deliver BAP targets. A new project to increase/restore grazing in the Malvern Hills (the High Brown Hills Project) was launched in by EN in 1999.
- **Research** – low level research on habitat management techniques are on going but much more needs to be done.
- **Threats** – change in habitat suitability, resulting from under-grazing, is believed to be the main cause for the lack of any recovery in High Brown Fritillary numbers. Planting woodland on marginal grasslands remains a threat in some areas.
- **Constraints** – Financial resources are still too limited to achieve the targets through Agri-environment and other management agreements.
There is a lack of knowledge on the best long-term management of bracken stands with High Brown Fritillary (and other priority Fritillaries) present.
Other actions are constrained by a lack of resources – volunteers and staff.
- **Future work** - Increase the level of funding for the agri-environment programme and continue to monitor and develop these schemes in response to the results. Review opportunities for targeting and the ranking systems developed. Further advisory and site based work in England and Wales. Continue research, particularly on management of bracken stands. Fund raising.

Field 6: Signing off

Contact details	Lead Partner	Contact Point
Name	Dr Nigel Bourn	Dr David Sheppard
Organisation	Butterfly Conservation	English Nature
Assessment date (dd/mm/yy)	30/9/99	30/9/99

Table A: Action Plan objectives and targets

Objective/target	4.1 Halt the current decline and maintain at least 50 self-sustaining populations.				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
<i>UK</i>					
<i>England</i>			✓		
<i>Northern Ireland</i>					
<i>Scotland</i>					
<i>Wales</i>			✓		
<p>England – Surveys in Cumbria have increased the number of sites by seven since 1995, while better knowledge of the Dartmoor sites has led to a reduction of four (sites have been merged or confirmed as unsuitable for the High Brown Fritillary). Populations in the West Midlands have declined in recent years and are now so low that they cannot be considered self-sustaining at the moment. Poor levels of monitoring in the SW of England over the last 2 years, combined with poor seasons for the species makes it difficult to be sure of the recent status of the butterfly in this area.</p> <p>Wales – Three new sites have been found in Wales since 1995, but all populations are very small and highly threatened.</p>					

Objective/target	4.2 Restore suitable habitat within its former range and encourage spread to 10 additional sites by 2005, using re-introductions if necessary.				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
<i>UK</i>					
<i>England</i>			✓		
<i>Northern Ireland</i>					
<i>Scotland</i>					
<i>Wales</i>			✓		
<p>The main objective is 4.1, to halt the decline of this species. However, should opportunities arise to encourage spread, they should be taken. For example, the ‘High Brown Hills Project’ has been launched by EN in 1999 to aid the restoration of grazing in the Malverns and includes specific management for the High Brown Fritillary such as bracken management and scrub control in targeted areas.</p> <p>There is considerable scope for restoring grasslands/bracken mosaics through the mechanism of ESAs particularly in Dartmoor and Exmoor. There is also some potential for re-introduction into other former sites (e.g. Ashdown Forest) if habitat restoration measures prove successful. There is limited potential to restore suitable habitats in woodland except on the limestone around Morecambe Bay. Several woodlands here have been entered into the Forestry Authorities Coppice for Butterflies Challenge and hopefully natural re-colonisation will occur.</p>					

Objective/target	4.3 Ensure that a minimum number of colonies are protected within SSSIs.				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
<i>UK</i>					
<i>England</i>		✓			
<i>Northern Ireland</i>					
<i>Scotland</i>					
<i>Wales</i>		✓			
<p>This objective has been reached as 23 colonies occur on SSSIs with a further 8 colonies partly within SSSIs.</p>					

Table B: Proposed actions

Published action/organisation(s) responsible	<p>5.1.1 Following further survey and research to identify the ecological requirements of this species, encourage the uptake of incentives for favourable land management on existing and potential sites within the Morecambe Bay area, Dartmoor, Exmoor and Herefordshire, specially through existing ESA and Countryside Stewardship schemes.</p> <p>ACTION CC, CCW, EN, MAFF (Countryside Commission deleted as Lead Agency as Countryside Stewardship is now administered by MAFF).</p>	
Work plan/organisation(s) responsible	<p>1 To ensure new Agri-environmental schemes and ESA reviews take account of the needs of the High Brown Fritillary. 2 Pass any new site information to relevant advisors. 3 Monitor the impact of these schemes on priority BAP species.</p>	
Action/workplan undertaken?	<p>Yes 1 2 No 3</p>	
Description of work taken and organisation responsible	<p>In England, the review of ESAs has targeted BAP species, but no extra funding for work on marginal areas such as bracken slopes, or for scrub control etc., appears to have been made available. Wales – New all Wales Agri-environment scheme launched in 1999 (Tir Gofal). Project Officers have undergone training by CCW including invertebrate conservation courses run by the specialists in CCW. Review of ESAs, of which Dartmoor and Exmoor is significant for High Brown Fritillary and to ensure generous funding for management of marginal areas such as bracken slopes, scrub control etc.</p>	
Output and timescale	<p>A Site Dossier for the High Brown Fritillary was completed in 1995 and will be updated in 1999/2000 to show breeding areas, incorporate new sites etc.</p>	<p>Action by MAFF, CCW, EN, BC</p>
Constraints to action	<p>The Steering Group expressed concern that the budget for Tir Gofal appeared low (£3 Million) in relation to the potential uptake (estimated at 600 farms) and that without targeting of BAP species (applicants are ranked on the basis of habitat) the scheme's contribution to the implementation of the BAP would be limited. Many of the ESA reviews, aims and objectives cannot be met without significant increases in funding to the schemes. The schemes will need to be flexible and will rely on the commitment and knowledge of the Project Officers. Lack of resources, particularly to target management on key sites and monitoring of impact. Precise figures are impossible for the steering group to determine, but are considerable.</p>	
Action complete or ongoing?	<p>Ongoing</p>	
Next steps	<p>A review of these schemes together with targeted monitoring will be essential to allow reporting back in future. Site dossier is to be updated by BC in 1999/2000.</p>	
Output and timescale	<p>Dependent on resources available.</p>	<p>Action by MAFF, CCW, BC.</p>
Published action/organisation(s) responsible	<p>5.1.2 Ensure the habitat requirements of this species are considered when drawing up or reviewing management prescriptions and grants in ESAs and other agri-environmental schemes, with particular attention to the need for bracken control.</p> <p>ACTION MAFF, WOAD (CCW added due to role in Agri-environment schemes in Wales)</p>	
Work plan/organisation(s) responsible	<p>To ensure site data from the High Brown Fritillary Site Dossier is made available to FRCA, FA Conservancies and other advisers.</p>	

Action/workplan undertaken?	Yes	
Description of work taken and organisation responsible	See 5.1.1 Summary information on SSSIs provided by CCW and EN.	
Output and timescale	An assessment of how much land is now in favourable land management has not been possible. A paper by BC to an International Bracken Conference subsequently presented to the UK Woodland Habitat Steering Group. Bracken for Butterflies leaflet produced and distributed SAP Progress reports published in 1996 and 1997 by BC as part of English Natures Species Recovery Programme.	<i>Action by</i> BC, CCW, EN, MAFF
Constraints to action	See 5.1.1	
Action complete or ongoing?	Ongoing	
Next steps	A review of these schemes together with targeted monitoring will be essential to allow reporting back in future. Lists of sites should be given to Agency local teams (SSSIs) and Wildlife Trusts (CWSs) to encourage further designation.	
Output and timescale	As appropriate.	<i>Action by</i> MAFF, EN, CCW

Published action/organisation(s) responsible	5.1.3 Encourage the uptake of the Woodland Grant Scheme for coppice restoration and management in the Morecambe Bay area. ACTION FA	
Work plan/organisation(s) responsible	Continue to target WGS entrants in Cumbria on or near HBF colonies.	
Action/workplan undertaken?	Yes	
Description of work taken and organisation responsible	FA employed a woodland consultant to encourage owners to apply and prepare applications and plans for the scheme in Cumbria. Forest Enterprise has written a GB plan for Butterflies on Forestry Commission land. The plans are based on a 'whole woods' approach and highlights the woodlands with priority BAP species where much can be achieved.	
Output and timescale	Report on the monitoring (by volunteers) of the Coppice for Butterflies Challenge, results indicate that it may take some time for butterfly populations to respond to the coppice management. BC and FC continue to liase over conservation of the HBF.	<i>Action by</i> FC, BC
Constraints to action	The Steering Group highlighted the need for a new initiative to build on the success of the Coppice for Butterflies Challenge. Uptake was poor in some targeted areas and it is clear that factors other than finance play a role in deciding whether to restore coppice or not, while it remains important that the restored coppice becomes economically viable. There is little evidence that further entrants would come forward in the pilot areas.	
Action complete or ongoing?	Ongoing	
Next steps	Continue to monitor situation. Continue to target key sites for WGS in Cumbria.	
Output and timescale	As appropriate. Increased area of woodland actively coppiced.	<i>Action by</i> FC, BC

Published action/organisation(s) responsible	5.2.1 Ensure that at least 20 colonies lie within SSSIs across the current geographical range of the species. ACTION CCW, EN	
Work plan/organisation(s) responsible	To monitor the situation and if sites with populations require designation to aid management or prevent damage then to designate as SSSI.	
Action/workplan undertaken?	Yes	

Description of work taken and organisation responsible	There are presently 23 colonies on sites designated as SSSI and a further 8 that are partly designated. CCW is reviewing the boundaries of an SSSI. On Exmoor all but one colony is designated SSSI.	
Output and timescale	As appropriate.	<i>Action by</i> CCW, EN
Constraints to action	None	
Action complete or ongoing?	Complete for currently known sites in England, ongoing in Wales.	
Next steps	To monitor situation.	
Output and timescale		<i>Action by</i> CCW, EN

Published action/organisation(s) responsible	5.2.2 Encourage favourable management for the species on existing sites and seek to restore favourable management to former sites where opportunities for colonisation or re-introduction exist. ACTION CCW, EN Add MAFF, WOAD, FA and FE to Lead Agencies as all involved in the delivery of this action.	
Work plan/organisation(s) responsible	See 5.1.2 and 5.1.3	
Action/workplan undertaken?	Yes	
Description of work taken and organisation responsible	Some progress has been made via the mechanisms discussed in 5.1.1, 5.1.2 and 5.1.3. A large number of sites, especially in the NW are nature reserves where populations have responded well to positive management in recent years. A wide range of organisations are currently involved in improving habitats on many other sites, for example in the Malvern Hills (see 4.2).	
Output and timescale	See 5.1.1, 5.1.2 and 5.1.3	<i>Action by</i> CCW, EN, MAFF
Constraints to action	See 5.1.1, 5.1.2, and 5.1.3.	
Action complete or ongoing?	Ongoing	
Next steps	See 5.1.1, 5.1.2 and 5.1.3	
Output and timescale	See 5.1.1, 5.1.2 and 5.1.3	<i>Action by</i>

Published action/organisation(s) responsible	5.3.1 Following restoration of the habitat, encourage the spread of the butterfly to 10 additional sites by 2005, using re-introduction techniques if necessary. ACTION CCW EN	
Work plan/organisation(s) responsible	BC to put together a database of sites where the High Brown Fritillary has recently become extinct and identify regions where there is most potential for habitat restoration.	
Action/workplan undertaken?	No	
Description of work taken and organisation responsible	The Steering Group felt that the main objective should be that of 4.1, to halt the decline of this species. However, should opportunities arise to encourage spread, they should be taken. A provisional study of opportunities in the Malverns has been undertaken. The Steering Group felt that it may actually be easier to restore grasslands/bracken mosaics through the mechanism of ESAs and that there was a need for specialist training of ESA project officers.	
Output and timescale		<i>Action by</i>
Constraints to action	Lack of suitable areas for restoration, particularly woodlands Lack of resources to implement, particularly as it is a lower priority for the time being.	
Action complete or ongoing?	Ongoing	

Next steps	There is a need for a data set of recently extinct sites to target any re-introductions.	
Output and timescale		<i>Action by</i>

Published action/organisation(s) responsible	5.5.1 Promote research into the butterfly's ecological requirements to identify the management and conservation needs of the butterfly, including research on habitat management techniques and their impact on this species (especially in bracken habitats). ACTION CCW, EN, JNCC	
Work plan/organisation(s) responsible	Continue to fund and seek further funding to enable more detailed research to be undertaken.	
Action/workplan undertaken?	Yes	
Description of work taken and organisation responsible	Research into the autecology of the High Brown Fritillary has been ongoing since 1990, funded by EN and BC. Low level trials on suitable management techniques on bracken slopes are continuing in the south-west, the west Midlands and in north-west England.	
Output and timescale	Better understanding of management, research results to date have been presented at numerous conferences, published in a book and have informed the Bracken for Butterflies leaflet.	<i>Action by</i> EN, BC
Constraints to action	Lack of financial resources to undertake long-term trials.	
Action complete or ongoing?	Ongoing	
Next steps	Dependent on funding	
Output and timescale		<i>Action by</i> CCW, EN, BC.

Published action/organisation(s) responsible	5.5.3 Survey all former and potential sites to identify precise breeding areas and suitable sites for re-introduction. ACTION CCW, EN, JNCC	
Work plan/organisation(s) responsible	New sites in England (Cumbria) and Wales to be added to Site Dossier. Add breeding information to sites as it becomes available. Survey sites in Wales and Cumbria for breeding areas.	
Action/workplan undertaken?	Yes	
Description of work taken and organisation responsible	Site Dossier produced by BC in 1995 for the UK (EN funded), recent surveys in 1996 and 1997 have found a few extra sites in Cumbria and Wales and detailed surveys have been made for all known habitats in the south west, for which a report was published in 1998.	
Output and timescale	Report, allowing the targeting of further management and advice on conservation of the High Brown Fritillary in Exmoor and Dartmoor.	<i>Action by</i> BC, EN
Constraints to action	None	
Action complete or ongoing?	Ongoing	
Next steps	Attempt to complete site dossier incorporating site information for Wales and Malverns	
Output and timescale	Further assessment of status, allowing the further targeting of management and advice on conservation of the High Brown Fritillary in Wales and the Malverns.	<i>Action by</i> BC, CCW, EN

Published action/organisation(s) responsible	5.5.4 Encourage regular monitoring of extant sites, collating transect data annually and using this information to compare trends on individual sites. ACTION CCW, EN, JNCC	
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Work plan/organisation(s) responsible	1 Produce a list of all monitored sites as resources allow 2 Review monitoring and develop proposals for monitoring new sites if necessary 3 Consider the feasibility of monitoring the impact of agri-environment schemes on the species.	
Action/workplan undertaken?	Yes 1 No 2 3	
Description of work taken and organisation responsible	The High Brown Fritillary is particularly difficult to monitor due to its rapid flight and difficulty separating it from the Dark Green Fritillary which is present on many sites. However, voluntary bodies monitor many sites every year. EN fund BC to co-ordinate and analyse the data from this monitoring, and a report is written at regular intervals. This task is aided by local co-ordinator meetings arranged annually.	
Output and timescale	Monitoring report on sites in England published in 1996. Regular monitoring reports are available of sites in Wales (Montgomeryshire by CCW, and Glamorgan by BC volunteers).	<i>Action by</i> CCW, EN, BC.
Constraints to action	Volunteer resource is limited in remote areas, financial resources to ensure fuller coverage of sites is required. This has become particularly acute in the south west of England.	
Action complete or ongoing?	Ongoing	
Next steps	Monitoring of the impact of ESAs and CS on BAP species is desirable, and may be possible using volunteers. Further efforts to encourage volunteers to monitor remote, difficult sites needed.	
Output and timescale	Report on impact of schemes, dissemination of the results and liaison with key players.	<i>Action by</i> MAFF, EN, BC.

Published action/organisation(s) responsible	5.5.6 Provide information annually to the World Conservation Monitoring Centre on the UK status of the species to contribute to maintenance of an up-to-date global red lists. ACTION JNCC	
Work plan/organisation(s) responsible	N/A	
Action/workplan undertaken?	No	
Description of work taken and organisation responsible	N/A	
Output and timescale	N/A	<i>Action by</i>
Constraints to action	WCMC do not wish to receive raw data sets as they are not established to maintain them.	
Action complete or ongoing?	Not started	
Next steps	Action dropped	
Output and timescale	N/A	<i>Action by</i>