



## Species and Habitat Action Plan Assessment Form

Please refer to the accompanying guidance for information about how to complete this form and an explanation of terms used

### Field 1: Action Plan details

<b>Species/Habitat Action Plan</b>	<b>Bombus sylvarum - Shrill Carder Bee</b>
<b>Lead Partner/Agency</b>	<b>WWF - UK (Contact Point - EN)</b>
<b>Steering Group/Other organisations</b>	Yes - WWF-UK, EN, CCW, SNH, Oxford University, Natural History Museum, National Museum of Wales, Bees, Wasps & Ants Recording Society (BWARS) & individual entomologists.
<b>Work programme in existence?</b>	Yes

### Field 2: Objectives and targets overview

Please list the targets for the action plan, indicating in which country/region the target is applicable, and additional comments including the rationale for new targets. For each new target please add new sequential paragraph numbers and target text. Please provide information about progress and country disaggregation in Table A for all targets.

Number and text	UK	E	NI	S	W	Comments
4.1 Survey to determine the current status of the bee by 2000.		✓			✓	
4.2 Identify its precise habitat requirements by 2000.		✓			✓	
4.3 Identify and maintain all strong populations.		✓			✓	
4.4 Ensure the long-term survival of the bee in the UK using habitat restoration and re-introductions as necessary.		✓			✓	

### Field 3: Proposed actions overview

Please list the proposed actions for the action plan, indicating in which country/region the action is applicable. For each new action please add new sequential paragraph numbers and action text. If the action is regarded as significant (please see guidance) indicate this in the box and provide further details in Table B. For actions not regarded as significant simply state if the action is ongoing or complete. Remember any action which is being dropped from the workplan will be regarded as significant for the first round of reporting.

Number and text	UK	E	NI	S	W	Action significant?	Action complete or ongoing? (Please state yes, not started, or ongoing.)

<b>5.2.1</b>	Consider notifying sites supporting viable populations of the shrill carder bee as SSSIs, where this is necessary to secure appropriate management.		✓			✓	No	Ongoing
<b>5.2.2</b>	Consider whether appropriate land management schemes can assist in encouraging the maintenance and, if necessary, restoration of herb-rich grasslands at known sites for this bee.		✓			✓	Yes	Ongoing
<b>5.2.3</b>	If less than 20 populations exist, use habitat restoration and re-introductions as necessary to secure the survival of the bee in the UK.		✓			✓	No	Not started
<b>5.3.1</b>	Consider establishing a captive breeding population with a view to undertaking re-introductions.		✓			✓	No	Not started
<b>5.4.1</b>	Provide advice on suitable management for relevant land managers.		✓			✓	No	Ongoing
<b>5.5.1</b>	Promote ecological research, to establish the habitat requirements of this species, the factors limiting breeding success at existing sites, dispersal ability and appropriate re-introduction methods.		✓			✓	Yes	Ongoing
<b>5.5.2</b>	Promote surveys to determine the current status of the bee by the year 2000.		✓			✓	Yes	Ongoing
<b>5.5.3</b>	Undertake surveys, monitor the status of known sites and to establish whether suitable receptor sites exist for re-establishing populations.		✓			✓	Yes	Ongoing
<b>5.5.4</b>	Encourage further research to identify the level of threat posed to this species by the introduction of non-native species and strains on <i>Bombus</i> used in pollinating greenhouses.		✓			✓	No	Not started
<b>5.5.5</b>	Pass information gathered during survey and monitoring of this species to JNCC or BRC so that it can be incorporated in national databases.		✓			✓	No	Ongoing
<b>5.5.6</b>	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.	✓					No	Action dropped (WCMC do not wish to receive raw data as they are not established to maintain raw datasets.)
<b>5.6.1</b>	Use this species to promote appreciation and conservation of threatened species of		✓			✓	No	Ongoing

bumblebee and their habitats.							
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**Field 4: Assessment of status**

Please tick the appropriate category to indicate the assessment of status of the species or habitat, for each country/region where appropriate, and provide a statement supporting the category selected.

	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>	X						
<i>Wales</i>					✓		

Brief text description justifying assessment of status: (~ no more than 100 words for each country/region)

UK maps compiled by BRC show some 60 sites for this species. Surveys as part of BAP found only 7 sites for this species. Countries - not applicable to assess status for each country as only 7 sites in whole of England and Wales.

**Field 5: Summary statement**

Please provide an overview of plan implementation, including new factors affecting the species or habitat which will accelerate or constrain progress towards meeting of the targets. Where a factor results in new action(s) please cross-reference back to the relevant numbers under Field 3 and Table B.

Surveys have revealed very few surviving colonies of shrill carder bee in England and Wales, but have indicated their dependence on traditional farming methods.

Problems of a landscape scale species which relies on an extensive agriculture systems are too large for this group to solve. Fundamental reform of the Common Agriculture Policy to ensure it is sustainable would be to this species advantage.

**Field 6: Signing off**

Please 'sign off' the form below to confirm that steering group members or key contacts have been consulted and agreed the information provided.

Contact details	Lead Partner	Contact Point
<b>Name</b>	Callumn Rankine	David Sheppard
<b>Organisation</b>	WWF - UK	English Nature
<b>Assessment date (dd/mm/yy)</b>	3/9/1999	17/9/1999

Completed forms should be submitted to JNCC

Biodiversity Information Service  
 Joint Nature Conservation Committee  
 Monkstone House  
 City Road  
 Peterborough PE1 1JY  
 Tel: 01733 562626  
 Fax: 01733 555948  
 E-mail: lpr99@jncc.gov.uk

**Table A: Action Plan objectives and targets (Copiable table)**

For each target please state how, if applicable, it has been disaggregated to the country level. Please insert the paragraph number, UK target and country-specific disaggregated target(s) into the table. Please tick the appropriate category to indicate progress against published and disaggregated targets. For each target please copy the table and detail the (existing or new [new paragraph numbers should run sequentially, under relevant headings in the published volumes]) paragraph number, target text and an assessment of progress.

<b>Objective/target</b> <i>(For new or revised targets please provide the new paragraph number and target text.)</i>		<b>4.1</b> Survey to determine the current status of the bee by 2000.			
<b>Country</b>	<b>Not appropriate</b>	<b>Target achieved</b>	<b>Some progress</b>	<b>No progress</b>	<b>Insufficient information</b>
<i>UK</i>					
<i>England</i>			✓		
<i>Northern Ireland</i>	X				
<i>Scotland</i>	X				
<i>Wales</i>			✓		
Text description of target progress (separate for each country/region):  During 1997/1998 searches and preliminary autecological investigations were carried out in England and Wales. Searches in 1997 found 3 populations in North Kent, Salisbury Plain & South Wales coast. Although the 1998 searches found many more individuals of this species than 1997 and confirmed the existence of 3 more population, the species remains the least known of the three most studied BAP bumblebees. Populations of this bumblebee are now confirmed at Kenfig/Margam Moors, Newport Levels, Somerset Levels, Salisbury Plain Training Area and the higher ground of the fringes of the North Kent and South Essex marshes.					

<b>Objective/target</b> <i>(For new or revised targets please provide the new paragraph number and target text.)</i>		<b>4.2</b> Identify its precise habitat requirements by 2000.			
<b>Country</b>	<b>Not appropriate</b>	<b>Target achieved</b>	<b>Some progress</b>	<b>No progress</b>	<b>Insufficient information</b>
<i>UK</i>					
<i>England</i>			✓		
<i>Northern Ireland</i>	X				
<i>Scotland</i>	X				
<i>Wales</i>			✓		
Text description of target progress (separate for each country/region):  Autecological work at Kenfig/Margham Moors gave very useful insights into the role of some biennial plants in foraging ecology of bumblebees - 1997/1998 Bombus Group Report. Further searches and preliminary autecological investigations will continue to identify the species precise habitat requirements.					

<b>Objective/target</b> <i>(For new or revised targets please provide the new paragraph number and target text.)</i>		<b>4.3</b> Identify and maintain all srtrong populations.			
<b>Country</b>	<b>Not appropriate</b>	<b>Target achieved</b>	<b>Some progress</b>	<b>No progress</b>	<b>Insufficient information</b>
<i>UK</i>					
<i>England</i>			✓		
<i>Northern Ireland</i>	X				
<i>Scotland</i>	X				
<i>Wales</i>			✓		
Text description of target progress (separate for each country/region):  Progress in identifying B.sylvarum pops. but unless the precise habitat requirements for this species are identified there will be little progress in maintianing these populations in the long-term.					

<b>Objective/target</b> <i>(For new or revised targets please provide the new paragraph number and target text.)</i>		<b>4.4</b> Ensure the long-term survival of the bee in the UK using habitat restoration and re-introductions as nescessary.			
<b>Country</b>	<b>Not appropriate</b>	<b>Target achieved</b>	<b>Some progress</b>	<b>No progress</b>	<b>Insufficient information</b>
<i>UK</i>					
<i>England</i>				✓	
<i>Northern Ireland</i>	X				
<i>Scotland</i>	X				
<i>Wales</i>				✓	
Text description of target progress (separate for each country/region):  If we are to restore bumblebee populations we need to know what kinds of restoration management are worth applying.					

**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	<b>5.2.2</b> Consider whether appropriate land management schemes can assist in encouraging the maintenance and, if necessary, restoration of herb-rich grasslands at known sites for this bee.	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Consider whether appropriate land management schemes can assist in encouraging the maintenance and, restoration of herb-rich grasslands at known sites for this bee - BWG, EN, CCW, WWF	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	No	
<b>Description of work taken and organisation responsible.</b>	Not started	
<b>Output and timescale</b>	None	<i>Action by</i>
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	Major limiting factor - restoration of suitable matrix of habitats in the wider countryside for this species. Several existing agricultural/environment schemes such as Countryside Stewardship/Arable stewardship, Tir cymen, ESA, Local Environment Agency Plans have considerable potential to aid this restoration. If such schemes can incorporate the more specific information such as advise on suitable flower mixes and grazing/cutting management, (which is being gathered through the BWG project), this potential can be achieved.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	Set up meetings with FRCA/MAFF and training days for land owner and land managers to encourage discussion of ideas concerning the requirements of the species - 1999/2000	
<b>Output and timescale</b>		<i>Action by</i> BWG, EN, CCW

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	<b>5.5.1</b> Promote ecological research, to establish the habitat requirements of this species, the factors limiting breeding success at existing sites, dispersal ability and appropriate re-introduction methods.	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Promote ecological research, to establish the habitat requirements of this species - BWG, EN, WWF, CCW	

<i>possible.)</i>		
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes	
<b>Description of work taken and organisation responsible.</b>	The Kenfig population was the study of some preliminary autecological investigation during 1998.	
<b>Output and timescale</b>	Autecological work at Kenfig/Margham Moors gave very useful insights into the role of some biennial plants in foraging ecology of bumblebees - 1998 Bombus Group Report	Action by BWG
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	?	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	<ol style="list-style-type: none"> <li>1. Collection of foraging data (pollen/nectar) at autecological study sites for all Bombus spp.</li> <li>2. Explore the possibility of quantifying habitat matrix of suitable habitats within a farmed countryside - Salisbury Plain (Defence Estate Organisation).</li> <li>3. Continuation of autecological work at Kenfig - investigating foraging, nest site, pop. extent and habitat niche.</li> <li>4. If we are to restore bumblebee populations we need to know what kinds of restoration management are worth applying.</li> </ol> <p>Two possible schemes planned: RSPB at Dungeness and farmer on Salisbury Plain - experiment on grazing regimes and clover-meadow regeneration. Both areas are adjacent to high-interest sites with possibility of colonisation by BAP species.</p>	
<b>Output and timescale</b>	Continuation of autecological and survey work - 1999/2000	Action by RSPB/BWG/EN/WWF/CCW

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	<b>5.5.2</b> Promote surveys to determine the current status of the bee by the year 2000.
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Bombus Working Group (BWG) - Carry out surveys to determine the current status of the bee by 2000.
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes
<b>Description of work taken and</b>	Searches and preliminary autecological investigations were carried out

<b>organisation responsible.</b>	during 1997/1998 for <i>B.sylvarum</i> in England and Wales. Further searches were concentrated in areas where the species had been sighted in earlier surveys in order to try and locate a suitable study pop. for more detailed work in 1999.	
<b>Output and timescale</b>	Searches found 7 populations of shrill carder bee in England and Wales during 1997/1998. (Bombus Working Group reports for EN/WWF)	<i>Action by</i> EN/WWF /BWG/C CW
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>		
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	There is still a need for basic surveys to assess the likelihood of remaining, uncatalogued populations and the likely size/extent of little known populations. Priority areas include Devon/Cornwall, Somerset Levels, North Kent marshes and North Wales/Angelsey.	
<b>Output and timescale</b>	Bombus Working Group reports for EN/WWF 1999/2000.	<i>Action by</i> EN/WWF /BWG/C CW