

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

Species/Habitat Action Plan	River Jelly Lichen <i>Collema dichotomum</i>
Lead Partner/Agency	Environment Agency
Steering Group/Other organisations	<i>Steering group in existence? Please state yes or no. Please list the organisations represented.</i> YES. Environment Agency, Countryside Council for Wales, English Nature, Scottish Natural Heritage, Scottish Environmental Protection Agency, Royal Botanical Gardens – Edinburgh, and British Lichen Society.
Work programme in existence?	<i>Please state yes or no. If in existence, please use the agreed work programme to update Field 3 and Table B.</i> YES [but not yet in a published state]

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 Establish the current status of the species in the UK	✓	✓	✓	✓	✓	New UK distribution map has been produced based on latest data [copy enclosed].
4.2 Safeguard known populations	✓	✓	✓	✓	✓	[Directly linked to 4.1 – latest distribution map available to relevant agencies.]
4.3 Undertake Research to ensure efficient conservation management	✓	✓	✓	✓	✓	
4.4 If feasible, re-establish populations at five former sites by 2005	✓	✓	✓	✓	✓	Population re-establishment not considered appropriate until reasons for loss understood.

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.)
5.1.1 Seek to eliminate the risk of water pollution, for example through the provision of advice on farm management where this species occurs	✓	✓	✓	✓	✓	No	Ongoing
5.1.2 Seek to include river catchments supporting this species within existing and new ESA designations	✓	✓	✓	✓	✓	No	Ongoing

5.2.1 Consider notifying key sites for this species as SSSIs/ASSIs where this is necessary to secure appropriate management	✓	✓	✓	✓	✓	Yes	Ongoing
5.2.2 Ensure river catchment management plans adequately reflect the water quality and quantity requirements for the river jelly lichen	✓	✓	✓	✓	✓	Yes	Ongoing
5.2.3 Ensure careful woodland management in riparian areas compatible with FA's Forest and Water Guidelines to remove additional problems caused by the removal of shade along rivers	✓	✓	✓	✓	✓	No	Ongoing
5.3.1 Following feasibility studies and identification of appropriate sites, seek to restore five populations to unoccupied sites when suitable conditions have been provided.	✓	✓	✓	✓	✓	No	Ongoing
5.4.1 Ensure land managers adjacent to extant sites, local-planning authorities and Water Management Authorities are aware of the presence, legal status and threats to the species and its community, and the importance of its conservation.	✓	✓	✓	✓	✓	Yes	Ongoing
5.5.1 Undertake survey of potential sites to establish the distribution of the species	✓	✓	✓	✓	✓	Yes	Ongoing
5.5.2 Encourage research into the ecological requirements of the species to determine the optimum conditions for growth and the feasibility for reintroduction.	✓	✓	✓	✓	✓	Yes	Ongoing
5.5.3 Investigate the effects of eutrophication and acidification of streams on this species and seek to reverse the impacts	✓	✓	✓	✓	✓	No	Ongoing
5.5.4 Establish a protocol for regular monitoring of this species and the water quality in the vicinity of known sites	✓	✓	✓	✓	✓	Yes	Ongoing
5.5.5 Encourage research on the ecology and conservation of this species on an international level and use the information and expertise gained towards its conservation in the UK	✓					No	Ongoing
5.5.6 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
5.5.7 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 Data List	✓					No	Ongoing
5.5.8 Use the river jelly lichen to highlight threats from eutrophication to the ecology of streams	✓	✓	✓	✓	✓	No	Ongoing

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
UK							
England			“√”				
Northern Ireland							✓
Scotland			“√”				
Wales							✓
Brief text description justifying assessment of status: (~ no more than 100 words for each country/region)							
<p>While information on distribution is still poor across UK the work of the steering group has led to the discovery of new, or the confirmation of possible, populations. The species is almost certainly under-recorded due to the lack of experts with a capability to identify it. Where ‘signs of recovery’ is listed this should be taken to mean that the known distribution of the species has increased since initial action plan publication. There is no evidence to indicate whether or not there has been any biological recovery of the species.</p>							

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.

The level of ecological knowledge about this species was extremely low at the time of its action plan being published. Expertise with regards to the species was/is restricted to a very limited number of individuals. Little co-ordinated work was taking place on this species behalf [with the exception of SNH’s lower plant conservation project in 1994].

The steering group has brought together almost every expert on this species in the UK. It has already been successful in raising the profile of the species and working, on its behalf, in a more co-ordinated fashion. The steering group decided that its immediate priority had to be to look at the known distribution – to verify unconfirmed site recordings and to seek new populations. Most of the effort to date has been to this end and the group has been successful in verifying some sites as well as finding new populations. It is now accepted that the species is under-recorded. Continued survey work is required to reach a more definitive position on the species’ distribution.

There is still a considerable lack of understanding of the ecological parameters that are influencing the species’ status. There is very little scientific basis, as yet, to support some of the assumptions that have been made e.g. that the species is being impacted by eutrophication. The steering group has recognised that this is the next area of work that needs attention and has already begun to plan some long-term surveillance projects and scientific examinations of abiotic and biotic parameters.

The third major area of work has been and continues to be awareness and raising the profile of the species to promote its better protection.

All of these elements require funding and this may prove to be one of the main constraints to future progress. Some attempts have been made to attract a “Champion” [including some jelly manufacturers] but to date there has been no success.

When a position is reached where there is a greater knowledge of the river jelly lichen’s distribution and ecology, some modification to the existing action plan may be required.

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
Name	Chris Formaggia Conservation, Recreation and Navigation Officer for Wales	<i>As Lead Partner</i>
Organisation	Environment Agency, Wales	<i>As Lead Partner</i>
Assessment date (dd/mm/yy)	24/08/99	<i>As Lead Partner</i>

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.

Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.1 Establish the current status of the species in the UK.				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK			✓		
England			✓		
Northern Ireland				✓	
Scotland			✓		
Wales			✓		
Text description of target progress (separate for each country/region):					
<p>England: Surveys carried out on the Barle, Exe, Eden, Coquet and North Tyne. Two sites on the Barle, and a new site on the Exe, have now been verified as having populations present and the known extent of the species on the Coquet has been extended. In total there are now six known sites in England and another four require verification. Wider survey work is then required.</p> <p>Northern Ireland: No progress</p> <p>Wales: Further surveys on mid Wales rivers have been carried out on an <i>ad hoc</i> basis and new populations have been found on the Wye and Irfon. A more detailed survey of the Irfon has identified large populations at two known sites. Seven sites without vouchers require verification. Wider survey work then required.</p> <p>Scotland: Some further survey work has been carried out since the work done for the Scottish Cryptogamic Conservation Project in 1995. 3 sites previously without vouchers have been verified and 1 new sites, on the River Almond has been found. 20 sites are without vouchers and require verification. Wider survey work is then required. Scottish field workers have received a training workshop on field identification.</p>					
Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.2 Safeguard known populations				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK			✓		
England			✓		
Northern Ireland					✓
Scotland			✓		
Wales			✓		
Text description of target progress (separate for each country/region):					
<p>England: Known English populations have been evaluated and are not considered to be threatened. Precautionary principle being applied to all sites.</p> <p>Northern Ireland: No Information</p> <p>Wales: Planning Permission refused because of river jelly lichen population on Irfon. Precautionary principle being applied on all sites. Concern that siltation is effecting populations on the Irfon and Wye</p> <p>Scotland: known Scottish populations appear to be healthy. Precautionary principle is being applied on all sites.</p>					

Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.3 Undertake research to ensure efficient conservation management				
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>			✓		
Text description of target progress (separate for each country/region):					
Scotland: Protocol for long-term monitoring of populations being developed.					
Wales: Protocol for long – term population monitoring of threatened Irfon and Wye populations being developed. Research Assistant examining ecological parameters [for UK populations].					
Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.4 If feasible, re-establish populations at five former sites by 2005				
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>					✓
Text description of target progress (separate for each country/region):					
All: Insufficient knowledge of current distribution and species' ecology to, consider re-introductions.					

Table B: Proposed actions (Copiable table)

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

Published action/organisation(s) responsible <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.1 Consider notifying key sites for this species as SSSIs/ASSIs where this is necessary to secure appropriate management [EN,CCW, SNH, DoE(NI)]	
Work plan/organisation(s) responsible <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Steering group to produce summary of sites already designated by 2000. Further site designation then to be reviewed as necessary [EN, CCW, SNH, DoE(NI)]	
Action/workplan undertaken? <i>(Please state yes or no.)</i>	Partially	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	Wales: Rivers Wye, Usk, Edw, Dulas and parts of Colwyn Brook are SSSI. River Irfon under review as possible SSSI during 1999. England: information awaited Scotland: Craighill Gorge, Den of Airlie, Tweed, are SSSI. Northern Ireland: information not known	Action by CCW EN SNH DOE(NI)
Constraints to action <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>	Time scale and resources: Further SSSI/ASSI designation is complex process and will require greater ecological understanding than is currently available.	
Action complete or ongoing? <i>(Please state yes, not started, or ongoing.)</i>	Ongoing.	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
Output and timescale	As stated in workplan.	Action by As stated in workplan.

Published action/organisation(s) responsible	Ensure that river catchment plans [<i>now known as Local Environment Agency Plans (LEAPs) in England and Wales</i>] adequately reflect the water quality and quantity requirements for the river jelly lichen [LAs, EA, SEPA, NIE&H]	
Work plan/organisation(s) responsible	Action dependant on Action 5.5.2 [see below]. As an interim measure presence of river jelly lichen to be noted in relevant plans in order to ensure precautionary principle applies.	
Action/workplan undertaken?	Partially for interim measure.	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	Presence of river jelly lichen and its importance has been placed on record in relevant LEAPs in England and Wales, for 1999. Scotland: Not Known Northern Ireland: No information	Action by EA SEPA DoE(NI)
Constraints to action	As stated above, published action dependant on 5.5.2.	
Action complete or ongoing?	Ongoing	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	

Output and timescale	As Ecological parameters become known reviews of Plans will include any necessary measures.	Action by EA, SEPA, DoE(NI)
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Published action/organisation(s) responsible	5.4.1 Ensure land managers adjacent to extant sites, local planning authorities and Water Management authorities are aware of the presence, legal status and threats to the species and its community, and the importance of its conservation [CCW, DoE(NI), EN, SNH, EA, FA]	
Work plan/organisation(s) responsible	Action to be undertaken where necessary for all known sites, by 2000, and for all new sites as located. Profile of species to be raised through information provision, by 2002.	
Action/workplan undertaken?	Partially	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	All: In general most land managers have been notified for known sites. Draft internet site for river jelly lichen has been produced and approved by Steering Group.	Action by All EA
Constraints to action	Funding required for information campaign	
Action complete or ongoing?	Ongoing	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
Output and timescale	Steering group will review land manager notification by 2000 Web pages will "go live" on Environment Agency internet site by 2000 Steering Group will produce a general species information leaflet by 2001	Action by All EA All

Published action/organisation(s) responsible	5.5.1 Undertake survey of potential sites to establish the distribution of the species [CCW, EN, SNH, DoE(NI), EA]	
Work plan/organisation(s) responsible	All known sites without vouchers to be verified, by 2000/2001. Range of potential new sites to be investigated.	
Action/workplan undertaken?	Partially	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	England: Four known sites re-confirmed in 97/98. One un-vouchered site, on Eden, visited by steering group and no population found. Further populations found extending the known Coquet site in 1999. Four un-vouchered sites, on Barle and Exe, surveyed – two of the Barle sites were confirmed and included a very large population. A new population was found on the Exe. Wales: Range of sites surveyed and 2 new populations located on the Irfon and one on the Wye. The Grwyne Fawr, Edw and Usk sites were re-surveyed but the lichen was not re-found. Scotland: Extensive survey carried out in 1994/95. 4 Further sites either un-vouchered or new have since been located on the Rivers Don and Almond. Northern Ireland: No Information	Action by EN/EA CCW SNH DoE(NI)
Constraints to action	Lack of experts with ability to recognise species and funding	
Action complete or ongoing?	Ongoing	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	

Output and timescale	All remaining un-vouchered sites to be verified by Steering Group by 2000/2001. Range of further sites to be surveyed as opportunity arises EA and Steering Group to arrange identification training courses for field staff in 1999/2000 Steering group to investigate the development of a predictive model for new site investigation.	Action by All All EA All
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Published action/organisation(s) responsible	5.5.2 Encourage Research into the ecological requirements of the species to determine the optimum conditions for growth and the feasibility of re-introduction [CCW, DoE(NI), EN, SNH]	
Work plan/organisation(s) responsible	Commission research amongst academic institutions and others to examine biotic and abiotic factors	
Action/workplan undertaken?	Commenced	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	Research Assistant currently analysing water quality, water quantity, and physiographical features of known populations for correlation, on an UK basis.	Action by EA/CCW
Constraints to action	Funding and absence of data	
Action complete or ongoing?	Ongoing	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
Output and timescale	Continued research and data gathering.	Action by All

Published action/organisation(s) responsible	5.5.4 Establish a protocol for regular monitoring of this species and the water quality in the vicinity of known sites [CCW, DoE(NI), EN, SNH, JNCC, EA, SEPA]	
Work plan/organisation(s) responsible	Long term population monitoring techniques to be developed in Wales [on Wye and Irfon] and Scotland [by Royal Botanical Gardens, Edinburgh], for UK application by 2005. Existing water quality monitoring schemes to be adjusted if necessary to better reflect distribution of species, by 2005.	
Action/workplan undertaken?	Commenced	
Description of work taken and organisation responsible	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
Output and timescale	Work only just starting.	Action by
Constraints to action	Funding and existing workloads on Steering Group members.	
Action complete or ongoing?	Ongoing	
Next steps	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
Output and timescale	As stated in work plan	Action by As stated in work plan.