



# 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><i>Cephaloziella nicholsonii</i> - Greater copperwort</b>
<b>Lead Partner/Agency</b>	<b>English Nature/The Natural History Museum (Contact Point - EN)</b>
<b>Steering Group/Other organisations</b>	<p><i>Steering group in existence? Please state yes or no. Please list the organisations represented.</i></p> <p>No - This BAP Report has been completed in liaison with David Holyoak (Bryologist and author of the EN reports, see below).</p>
<b>Work programme in existence?</b>	<p><i>Please state yes or no. If in existence, please use the agreed work programme to update Field 3 and Table B.</i></p> <p>Work programme in form of EN commissioned contract work on this species (together with other <i>Cephaloziella</i> spp. and associated bryophytes). Reports 1995, 1996, March 1998 and Feb 1999 &amp; proposed continuation of this work in 2000/2001.</p>

## 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 Maintain populations of greater copperwort at all extant sites, and increase their extent where appropriate and feasible.		✓				New sites discovered as a result of surveys, many now notified as SSSIs.
4.2 Establish by 2005 <i>ex situ</i> stocks of this species to safeguard extant populations.		✓				Low priority because of new sites discovered (20 to 30 pops, with some large populations).

## 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.)
5.2.1 Consider notifying as SSSIs sites with viable populations of greater copperwort where this is consistent with selection guidelines, and where it is necessary to ensure their long-term protection and appropriate management.		✓				Yes	<b>Cornwall:</b> yes & ongoing  Phoenix United Mine SSSI, West Cornwall Bryophytes SSSI (this SSSI includes 4 - 5 separate sites containing this species) & Crow's Nest SSSI are all notified for lower plants including <i>Cephaloziella nicholsonii</i> ; <i>C. nicholsonii</i> also occurs within Penberthy Croft Mine SSSI which is notified solely for geological interest.
5.2.2 Undertake clearance of gorse, heather and scrub where it threatens to shade out colonies of greater copperwort.		✓				No	<b>Cornwall:</b> not started
5.2.3 Assess the need to undertake some ground disturbance on greater copperwort sites, to reduce competition from encroaching vegetation.		✓				No	<b>Cornwall:</b> not started
5.2.4 Exploratory digging to relocate mine shafts should only be carried out where there are real safety concerns. Where such work is necessary, expert bryological advice should be sought so that damage to greater copperwort colonies is kept to a minimum.		✓				No	<b>Cornwall:</b> ongoing
5.2.5 Ensure that any proposals for landscaping mine spoil heaps on which greater copperwort occurs, or for redeveloping mine buildings which have colonies of greater copperwort growing on the walls, are accompanied by a conservation plan for this species, written with the guidance of an expert bryologist. The plan should set out ways to ensure the conservation of viable populations of greater copperwort during and after the work.		✓				Yes	<b>Cornwall:</b> ongoing on SSSIs and a lot of progress is being made on non-SSSIs by the Cornwall Wildlife Trust (Consultancy) - advice to local Councils and inclusion of bryophyte surveys for mine all sites they survey (ie: in relation to Derelict Land Grants).
5.3.1 Advise landowners and managers, and relevant agencies, of the presence and importance of greater copperwort, specific management for its conservation, and any potentially damaging actions. Landowners and managers should have access to specialist advice if needed.		✓				No	<b>Cornwall:</b> yes & ongoing on SSSIs and other sites.

5.5.1	Commission a survey for greater copperwort in Devon and Cornwall, concentrating on localities which have not been recently investigated. Particular care should be taken to ensure that all records are distinguished from <i>C. massalongi</i> , and that threats to all extant sites are assessed. The survey results should be used to refine the conservation action for this species recommended in other parts of this plan.		✓				Yes	<p><b>Cornwall:</b> Surveys and reports 1995, 1996, 1998 and 1999. All old sites in east Cornwall have been re-visited, although not much survey of potential sites. There is's scope for more survey in west Cornwall.</p> <p>Re distinguishing <i>C. nicholsonii</i> from <i>C. massalongi</i> - most Museum material has been re-assessed, but Jean Paton has material from about 12 sites which needs to be looked at.</p> <p>Assessment of threats - yes &amp; ongoing</p> <p><b>Devon:</b> No recent survey work done in Devon as far as we know.</p> <p><b>Cheshire:</b> New site VC58, single recent discovery by Martha Newton (I do not have any info on the extent).</p> <p><b>Wales:</b> Last record pre 1950, VC48</p>
5.5.2	Resurvey the site in Wales from which this species was formerly recorded.		✓				No	<p><b>Wales:</b> Last record pre 1950, VC48; no recent surveys (pers comm Alan Hale CCW).</p>
5.5.3	Undertake regular monitoring of all extant populations.		✓				No	<p><b>Cornwall:</b> some ongoing monitoring of SSSIs but not detailed because of the relatively large pops; some monitoring of non-SSSI sites.</p>
5.5.4	Commission research into the habitat requirements and population dynamics of this species in order to inform future conservation management.		✓				No	<p><b>Cornwall:</b> Quite a body of info on habitat requirements is available; from EN Reports, Jean Paton's new liverwort flora and unpublished notes by David Holyoak. Probably a low priority because it is not threatened.</p>
5.5.5	Undertake pilot studies to develop and refine ex situ conservation techniques for this species and other threatened bryophytes.		✓				No	<p>Low priority because species is not threatened. Plus we need to find out if it is a clone or not before considering ex-situ measures.</p>
5.6.1	Encourage bryologists to pass all records of greater copperwort,		✓				No	<p>yes &amp; ongoing. David Holyoak has a</p>

	including ecological information, to a national database.						database for Cornwall records.
5.6.2	Liaise with specialist societies to increase the awareness and identification skills of bryologists through publishing articles or holding identification workshops.		✓			No	Jean Paton's 'Liverwort Flora of the British Isles' published 1999, clearly identifies the differences between <i>C nicholsonii</i> and <i>C massalongi</i> ; a major step forward in the identification of <i>Cephaloziella</i> spp.
5.6.3	Use greater copperwort as an example of a threatened bryophyte associated with metal-rich mine spoil in order to publicise the important lowers plant communities of this habitat.		✓			Yes	<b>Cornwall:</b> 1999/2000 EN commissioned series of leaflets re nature conservation value of old mine sites, particularly bryophyte interest. Cornwall Biodiversity Initiative - Metalliferous Mines Action Plan.

#### 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>	X						
<i>Scotland</i>	X						
<i>Wales</i>						?	? ✓

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

Several sites known to have been lost, one was destroyed immediately prior to SSSI notification. Loss/decline of existing habitat and no new habitat being created. Cheshire site was overlooked in the past.

#### 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.

**Cornwall:** New SSSIs notified in 1999 - West Cornwall Bryophytes and Crow's Nest; and Phoenix United Mine notified in 1996. Phoenix SSSI supports one of if not the largest known population; and all three Cornish SSSIs together support a substantial proportion of the total Cornish population. Substantial surveys carried out but not yet complete.

**Devon:** North and south Devon have post 1950 records but no recent surveys. Survey of old sites is required.

**Wales:** Last Welsh record pre 1950 - Merioneth VC48. Surveys required.

**Cheshire:** One new site, VC58, Martha Newton record (see also above).

**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.

<b>Contact details</b>	<b>Lead Partner</b>	<b>Contact Point</b>
<b>Name</b>	Beth Tonkin/Fred Rumsey	Dave Stone (species co-ordinator)
<b>Organisation</b>	English Nature/Natural History Museum	English Nature
<b>Assessment date (dd/mm/yy)</b>	30/9/99	1 October 1999

Completed forms should be submitted to JNCC

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Joint Nature Conservation Committee  
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Peterborough PE1 1JY  
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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> Maintain populations of greater copperwort at all extant sites, and increase their extent where appropriate and feasible.		
<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>	X				
Text description of target progress (separate for each country/region):  New sites discovered as a result of surveys, many now notified as SSSIs. Some new sites discovered, some sites lost (eg: one site destroyed by Developer prior to notification - part of West Cornwall Bryophyte SSSI), but no net gain overall.					

<b>Objective/target</b> <i>(For new or revised targets please provide the new paragraph number and target text.)</i>			<b>4.2</b> Establish by 2005 <i>ex situ</i> stocks of this species to safeguard extant 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>	X				
Text description of target progress (separate for each country/region):  Low priority because of new sites discovered (20 to 30 pops, with some large populations). In addition this species may be a clone (it only reproduces vegetatively). Therefore, pending genetic research this species is not a priority.					

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

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

<p><b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)</p>	<p>5.1 etc Actions flagged up in Field 3 as significant should be reported in further detail here (i.e. Actions which contribute to success or actions which are important to delivering biological objectives and targets. You should aim to prioritise information to report important successes or biological blockages/constraints and avoid information overload. New, revised or dropped actions should be automatically regarded as significant.)</p>	
<p><b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)</p>		
<p><b>Action/workplan undertaken?</b> (Please state yes or no.)</p>		
<p><b>Description of work taken and organisation responsible.</b></p>	<p>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken</p>	
<p><b>Output and timescale</b></p>		<p>Action by</p>
<p><b>Constraints to action</b> (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.)</p>		
<p><b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)</p>		
<p><b>Next steps</b></p>	<p>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</p>	
<p><b>Output and timescale</b></p>		<p>Action by</p>