

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	Netted Carpet Moth <i>Eustroma reticulatum</i>
Lead Partner/Agency	The National Trust/Butterfly Conservation
Steering Group/Other organisations	Yes: The National Trust, Butterfly Conservation, Countryside Council for Wales, Lake District National Park Authority, Reading University, English Nature, Environment Agency + Correspondence members.
Work programme in existence?	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 Identify the precise habitat requirements of the species by 1997.		X			X	
4.2 Ensure that all existing habitat is appropriately managed by the year 2000.		X			X	
4.3 Increase number of moth populations to a minimum of 5 colonies in each core area by 2005		X				

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 etc							
5.1.1 Encourage sympathetic woodland management where the moth is present		X			X	Yes	Ongoing
5.1.2 Seek to ensure that road works do not affect colonies of the food plant		X				Yes	Ongoing
5.2 Site safeguard and							

management							
5.2.1 Consider notifying SSSIs to include all known colonies		X			X	No	Not started
5.2.2 Continue to develop and promote appropriate management of sites by liaison with land owners and managers		X			X	Yes	Ongoing
5.2.3 Consider habitat restoration within the range of existing colonies to increase the number of populations to a minimum of 5 in each core area.		X				Yes	Ongoing
5.3 Species management and protection							
5.3.1 Continue to encourage growth of the food plant colonies		X			X	Yes	Ongoing
5.4 Advisory							
5.4.1 Ensure land owners and managers are aware of the presence and importance of conserving the species and appropriate methods of management for its conservation		X			X	Yes	Ongoing
5.5 Future research and monitoring							
5.5.1 Undertake research into the long-term population dynamics of the species, effects of habitat management and dispersal abilities of the moth.		X				Yes	Ongoing
5.5.2 Undertake a systematic survey of potential habitats to locate any previously unknown or new colonies of the food plant		X			X	Yes	Ongoing
5.5.3 Encourage regular monitoring of extant sites		X			X	Yes	Ongoing
5.5.4 Pass information gathered during survey and monitoring of this species to JNCC or BRC so that it can be incorporated in national databases		X			X	Yes	Ongoing
5.5.5 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 list		X			X	Yes	Action dropped
5.6 Communications and publicity							
5.6.1 Produce an illustrated leaflet on the current status and requirements of the moth		X				Yes	Yes

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					X		
Northern Ireland							
Scotland							
Wales						X	

Brief text description justifying assessment of status:

In England the moth is restricted to the Lake District where it occurs in 7 core areas. The first survey of known sites took place in 1955, repeated in 1980 and again in 1990. Annual surveys have taken place since 1993 with selected sites monitored for numbers of foodplant and moth larvae every year. Of the previously known sites the results have been variable; some declined to extinction; others show marked decline and recovery and some remain relatively stable. A number of 'new' sites have been discovered; whether these are truly new colonies or previously overlooked is unclear and makes assessment of status difficult.

In Wales there are sparse historical records. Netted carpet larvae have been found in small numbers at two sites since 1990 but intensive recent surveys since 1995 have failed to find the moth., despite an abundance of the foodplant.

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.

Positive progress has been made in certain areas of the plan but in the key area of increasing the number of moth populations (5.2.3) there has been no movement. In England the species has been the subject of a continuing Species Recovery Programme providing valuable information on habitat requirements of the balsam foodplant and revealing the dynamic nature of both foodplant and moth colonies. Habitat management trials show that foodplant and moth populations can be boosted, at least temporarily. Attempts to establish new balsam stands have not yet been successful and questions remain about the ecology and genetics of the foodplant. In Wales recent searches for the moth have been unsuccessful despite strong colonies of foodplant; the moth may well be extinct in Wales.

Publicity in Cumbria has effectively raised the profile of the species with the public and key organisations. Public involvement has enhanced knowledge of distribution, as has the contribution of volunteer surveyors. Although a number of 'new' foodplant and moth sites have been discovered during the plan period, survey and monitoring has revealed the decline of many others, sometimes to apparent extinction. Comprehensive resurvey of all known balsam sites during 2000 should reveal whether there has been a net gain or loss in colonies of both moth and plant. There is need for more detailed research into factors governing success of the foodplant (5.5.1)

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	John Hooson/Nigel Bourn	David Stone
Organisation	National Trust/Butterfly Conservation	English Nature
Assessment date (dd/mm/yy)	31 September 1999	

Completed forms should be submitted to JNCC

**Biodiversity Information Service
Joint Nature Conservation Committee
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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 Identify the precise habitat requirements of the species by 1997				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK					
England			X		
Northern Ireland					
Scotland					
Wales			X		
Text description of target progress (separate for each country/region): Work has concentrated on understanding the ecology of the balsam foodplant. Investigation of numerous balsam colonies has given a better idea of the habitat and management requirements of the plant and its population dynamics. Levels of shade and ground disturbance are critical to the vigour of balsam colonies. Soil moisture and nutrient levels are also of importance. The literature assertion that <i>I noli-tangere</i> does not have a seed bank is questioned and steps are being taken to test this statement. Monitoring of larval numbers reveals that the larger balsam stands are most likely to support moth populations.					

Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.2 Ensure that all existing habitat is appropriately managed by the year 2000				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK					
England			X		
Northern Ireland					
Scotland					
Wales			X		
Text description of target progress (separate for each country/region): Habitat management trials have illustrated the difficulties of maintaining a strong balsam colony in a particular place over a number of years. However a better idea of 'appropriate management' has been developed and this approach is being implemented at a number of sites. Management of many other sites, particularly those in private ownership, has not been achieved yet. The apparent need for regular ground disturbance may be difficult to provide in many locations.					

Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.3 Accepted change to plan - that this target be reworded as;				
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<i>target text.)</i>	Increase the number of moth populations to a minimum of 5 colonies in each core area by 2005				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK					
England				X	
Northern Ireland					
Scotland					
Wales					

Text description of target progress (separate for each country/region): No new moth populations have been established. Effort is being targetted at successful establishment of new balsam colonies in areas where the moth would hopefully be able to colonize.

Table B: Proposed actions (Copiable table) For each significant action please copy and complete the table below.

Published action/organisation(s) responsible	5.1.1 Encourage sympathetic woodland management where the moth is present.	
Work plan/organisation(s) responsible	Organisation of a Netted carpet training day - 1998 Make available distribution data to key players eg LDNPA, EA Opportunities for proactive site management to be sought CCW to negotiate the management of a site with one owner EN to consider how to deal with planning applications which may affect moth sites which are not statutorily protected.	
Action/workplan undertaken? (Please state yes or no.)	Yes	
Description of work taken and organisation responsible	Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.	
Output and timescale	Training day carried out - 1998 Distribution data for moth and foodplant on EA database Distribution data not yet on LDNPA GIS database Active management carried out on a number of NT owned sites and on one privately owned site CCW in negotiation with site owner regarding sympathetic management EN to consider how to deal with planning applications which may affect moth sites which are not statutorily protected.	Action by NT, BC, LDNPA, EA, CCW, EN
Constraints to action	Difficulty of monitoring change and influencing	

	management at privately owned sites	
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	Utilize proposed comprehensive resurvey of all colonies in 2000 to push for sympathetic management on additional sites where necessary.	<i>Action by NT,FC,E N,LDNPA , BC</i>

Published action/organisation(s) responsible	5.1.2 Seek to ensure that road works do not affect colonies of the food plant.	
Work plan/organisation(s) responsible	National Trust to make County Council aware of roadside colonies and negotiate change to cutting regime. County Council to incorporate verges into register of important roadside verges.	
Action/workplan undertaken? (Please state yes or no.)	Yes	
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	County Council verge mowing regime to be modified from 1999	<i>Action by NT, Cumbria CC</i>
Constraints to action	Complexities of CCC organisational structure resulting in difficulty in translating planned actions into good management practice.	
Action complete or ongoing?	Ongoing	
Next steps	To maintain a watching brief on the management of any roadside colonies..	
Output and timescale	Monitor compliance with agreed regime.	<i>Action by NT,CCC</i>

Published action/organisation(s) responsible	5.2.2 Continue to develop and promote appropriate management of sites by liaison with land owners and managers.	
Work plan/organisation(s) responsible	Produce illustrated leaflet explaining significance of netted carpet and habitat management requirements. Organise netted carpet training day	
Action/workplan undertaken? (Please state yes or no.)	Yes	
Description of work taken	All known managers/owners of sites invited to training day. Over	

and organisation responsible	500 leaflets distributed in area.	
Output and timescale	Illustrated leaflet produced and distributed. Training day organised. Contact developed with a small number of private site owners Management of NT owned colonies regularly monitored.	Action by CCW, LDNPA, Reading University, NT, BC
Constraints to action	Difficulty of contacting and influencing many private owners of foodplant colonies. Staff resources to maintain and build on contacts, and to coordinate volunteers in survey/monitoring.	
Action complete or ongoing?	Ongoing	
Next steps	Comprehensive survey of all known foodplant sites in 2000 allowing renewed contact with owners.	
Output and timescale	Production of a site dossier to aid further implementation.	Action by Reading Uni, NT, BC, EN, LDNPA, EA

Published action/organisation(s) responsible	5.2.3 Consider habitat restoration within the dispersal range of existing colonies to increase the number of populations to a minimum of 5 in each core area.	
Work plan/organisation(s) responsible	Continue to identify opportunities to restore habitat. Inform MAFF of colony locations and target sites for entry into Agri-environment schemes.	
Action/workplan undertaken? (Please state yes or no.)	Yes	
Description of work taken and organisation responsible	LDNPA trying to establish balsam colony in privately owned woodland where there was a previous stand. NT attempting to establish a balsam colony in privately owned woodland in vicinity of existing sites.	
Output and timescale	Two restoration projects started on privately owned land. Restoration experiments attempted on NT land	Action by LDNPA/ NT
Constraints to action	Practical difficulties found in establishing new foodplant colonies in apparently favourable surroundings. Shortage of human resources required to undertake and monitor projects.	
Action complete or ongoing?	Ongoing	

Next steps	Develop further restoration projects.	
Output and timescale	Experimental restoration of sites at Derwentwater planned for early 2000	Action by NT/BC, EN,

Published action/organisation(s) responsible	5.3.1 Continue to encourage growth of the food plant colonies.	
Work plan/organisation(s) responsible	See 5.1.1, 5.1.2 and 5.2.2	
Action/workplan undertaken? (Please state yes or no.)	Yes	
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	See 5.1.1, 5.1.2 and 5.2.2	Action by NT/BC, EN, LDNP A, EA
Constraints to action	Lack of full understanding why some foodplant colonies decline so rapidly.	
Action complete or ongoing?	Ongoing	
Next steps	Further investigation of foodplant genetics and consideration of implication for species conservation.	
Output and timescale	During 2000	Action by Reading Uni, EN

Published action/organisation(s) responsible	5.4.1 Ensure land owners and managers are aware of the presence and importance of conserving the species and appropriate methods of management for its conservation	
Work plan/organisation(s) responsible	Organise netted carpet training day for owners, land managers, project officers etc. Produce and distribute leaflet on ecology, distribution and management of netted carpet. Ensure presence of netted carpet is taken into account in SSSI Site Management Statements.	
Action/workplan undertaken? (Please state yes or no.)	Yes	
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	Netted carpet training day -1998 Netted carpet leaflet produced and distributed 1998. Copies still being disseminated. SMS refer to netted carpet on SSSIs where	Action by NT/BC, EN

	appropriate	LDNPA, EA
Constraints to action	Human resources to maintain network of owners and managers, feedback reports etc.	
Action complete or ongoing?	Ongoing	
Next steps	Proposed comprehensive site survey - 2000	
Output and timescale	Improved communications with private owners encouraged by 2000 survey. Produce article on netted carpet for MAFF newsletter	Action by BC, NT, Reading University

Published action/organisation(s) responsible	5. 5.1 Undertake research into the long-term population dynamics of the species, effects of habitat management and dispersal abilities of the moth	
Work plan/organisation(s) responsible	Continue annual monitoring of a selection of English sites Undertake a comprehensive resurvey of all known foodplant sites - 2000 Continue to search for the moth in Wales Undertake habitat management experiments on a number of sites Develop costed research proposals into genetics of foodplant and moth	
Action/workplan undertaken? (Please state yes or no.)	Yes	
Description of work taken and organisation responsible	Monitoring continues.	
Output and timescale	Annual monitoring in 2 core areas continues Intensive survey for moth at foodplant sites in Wales Habitat management experiments undertaken and monitored Costed research proposals into genetics produced	Action by Reading University, NT, CCW
Constraints to action	Lack of funding for biodiversity research Lack of human resources to expand monitoring network.	
Action complete or ongoing?	Ongoing	
Next steps	Comprehensive resurvey of all known foodplant sites - 2000.	
Output and timescale	Improved knowledge of plant and moth distribution.	Action by Reading Uni, NT, BC

Published	5.5.2 Undertake a systematic survey of potential habitats
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action/organisation(s) responsible	to locate any previously unknown or new colonies of the food plant.	
Work plan/organisation(s) responsible	Encourage volunteers to help in future survey work. Encourage public to report locations of foodplant	
Action/workplan undertaken? (Please state yes or no.)	Yes	
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	Local BC members trained in what to look for and encouraged to undertake targeted survey Local press coverage informing public of netted carpet requirements and requesting details of any foodplant locations	Action by BC, NT
Constraints to action	Scale of area to be covered with limited human resources.	
Action complete or ongoing?	Ongoing	
Next steps	Continue to encourage volunteer surveyors and investigate all records submitted by members of the public.	
Output and timescale	Further survey and monitoring.	Action by BC, NT

Published action/organisation(s) responsible	5.5.3 Encourage regular monitoring of extant sites.	
Work plan/organisation(s) responsible	Continue annual monitoring of selected sites Inform NT of any additional sites which are being monitored Collate all records and compile a database	
Action/workplan undertaken?	Yes	
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	Annual monitoring of selected sites by Reading University Ad hoc resurvey of certain additional sites each year Site database produced	Action by
Constraints to action	Relatively short period of time during which larval counts can be undertaken.	

	Shortage of human resources to undertake monitoring.	
Action complete or ongoing?	Ongoing	
Next steps	Comprehensive resurvey of all known sites during 2000	
Output and timescale	Improved knowledge of plant and moth distribution	Action by Reading Uni, NT, BC

Published action/organisation(s) responsible	5.5.4 Pass information gathered during survey and monitoring of this species to JNCC or BRC so that it can be incorporated in national databases.	
Work plan/organisation(s) responsible	All records to be passed to national database through BC/JNCC moth recording project	
Action/workplan undertaken?	Yes	
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	Records submitted to BC/JNCC Moth Recording Project	Action by Reading Uni
Constraints to action	None	
Action complete or ongoing?	Ongoing	
Next steps	Continue submissions	
Output and timescale		Action by Reading Uni

Published action/organisation(s) responsible	5.5.5 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 list.	
Work plan/organisation(s) responsible	N/A	
Action/workplan undertaken? (Please state yes or no.)	No	
Description of work taken and organisation responsible	N/A	
Output and timescale	N/A	

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	Action by
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Published action/organisation(s) responsible <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.6.1 Produce an illustrated leaflet on the current status and requirements of the moth.	
Work plan/organisation(s) responsible	Produce illustrated leaflet - 1998	
Action/workplan undertaken? <i>(Please state yes or no.)</i>	Yes	
Description of work taken and organisation responsible	Leaflet produced and distributed	
Output and timescale	Leaflet produced	Action by Reading Uni, EN, NT, BC LDNPA
Constraints to action	None	
Action complete or ongoing?	Yes	
Next steps	Update and continue to distribute as required	
Output and timescale		Action by NT/BC, EN, LDNPA, EA