

# 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>	Medicinal leech <i>Hirudo medicinalis</i>
<b>Lead Partner/Agency</b>	RSPB
<b>Steering Group/Other organisations</b>	Steering Group in existence comprising representatives from SNH (contact point), EN, CCW, North Wales Wildlife Trust (NWWT), Hampshire Wildlife Trust (HWT) & Romney Marsh Countryside Project (RMCP). Also a wider circulation group comprising NT, EnvAge & Sussex & Dorset Wildlife Trusts plus other key individuals.
<b>Work programme in existence?</b>	Yes. This is decided annually during and following Steering Group meetings.

## 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 full extent of distribution by the year 2000	✓	✓		✓	✓	Forty-three out of 46 historical sites have been surveyed for medicinal leeches during 1995/96 (Scotland) and 1998/99 (England and Wales). An additional 321 sites in England, 29 in Wales and 62 in Scotland have also been surveyed during 1998 in order to locate new sites for this species. Additional surveys are taking place in 1999.
4.2 Safeguard all known sites	✓	✓		✓	✓	Not completed apart from in Scotland. Seeking to safeguard all known sites will undoubtedly be the main priority of the work carried out during Year 3 of our Glaxo-Wellcome sponsorship, details of which will be decided at our next Steering Group meeting.
4.3 Where appropriate, enhance existing populations through pond creation, supplementing with translocation if necessary	✓	✓		✓	✓	Not considered necessary in England and Scotland, since: 1) the surveys have found medicinal leeches to be more widespread than formerly thought in their key areas; 2) medicinal leeches are colonising recently created habitat in their most important area of Kent/Sussex. Pond creation adjacent to existing sites is taking place in Wales.

4.4 Ensure that wild stock is not used for medicinal purposes	✓	✓		✓	✓	Not possible to <i>ensure</i> that wild stock in the <u>UK</u> is not used for medicinal purposes. However, there is no evidence that wild stock from the UK are currently being used for medicinal purposes. The Wildlife & Countryside Act prevents collection of medicinal leeches without a license, & none of the statutory bodies would issue one for commercial exploitation of medicinal leeches.
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**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.

NB There are three medicinal leech action plans in existence: the original one in the UK BAP report, a subsequent plan for England and Wales (produced for EN, CCW & EnvAge) and another for Scotland (produced for SNH). Our Steering Group has worked to the actions identified in the latter two plans since they supersede the original one in the UK BAP report. However, the table below gives details of work against the actions in the plan in the UK BAP report as requested.

Number and text	UK	E	NI	S	W	Action significant?	Action complete or ongoing? (Please state yes, not started, or ongoing.)
5.1.1. Consider encouragement of sympathetic land-use around all occupied ponds including the use of financial incentives	✓	✓		✓	✓	Significant	Ongoing
5.2.1. Consider designating additional SSSIs for the species where this is necessary to secure appropriate management	✓	✓		✓	✓	Significant	Ongoing
5.2.2. Seek to secure favourable management for the species at all occupied sites, including ensuring that suitable hosts are available	✓	✓		✓	✓	Significant	Ongoing
5.2.3. Where appropriate, consider the creation of new pond habitat within 200 metres of existing sites	✓	✓		✓	✓	Significant	Carried out (ie considered) & subsequently dropped in England & Scotland. Ongoing in Wales.
5.2.4. If appropriate, develop and implement a policy on translocation of leeches to new sites	✓	✓		✓	✓	Significant	Completed
5.3.1. Retain on Schedule 5 of the WCA 1981 and issue licenses for non-damaging activities only	✓	✓		✓	✓	Significant	Ongoing
5.4.1. Provide management advice to owners or managers of leech ponds	✓	✓		✓	✓	Significant	Ongoing
5.4.2. Ensure that relevant societies and organisations are aware of the ecological and legal implications of collecting this species	✓	✓		✓	✓	Not significant	Not started as not aware of any such organisations. Therefore dropped.
5.5.1. Survey to identify the population status of all known and likely leech sites by the year 2000	✓	✓		✓	✓	Significant	Ongoing. Surveys carried out at 43 out of 46 historical sites and at large numbers of additional sites in their vicinity. However, it is always possible that further sites will be identified.
5.5.2. Encourage regular monitoring of extant sites and identify any further threats to the species	✓	✓		✓	✓	Significant	Ongoing
5.5.3. Promote further research on the ecological requirements of this species to identify habitat requirements and the most appropriate methods for re-introduction or translocation	✓	✓		✓	✓	Significant	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	✓	✓		✓	✓	Significant	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.	✓	✓		✓	✓	Significant	Not started because WCMC don't want this information at present
5.6.1. Advise relevant medical research institutions on the status of the leech and encourage use of alternative species for research	✓	✓		✓	✓	Significant	Dropped, because we're not aware that medicinal leeches are taken from the wild in the UK by such organisations,

#### 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.

NB the UK Medicinal Leech BAP doesn't contain any biological targets

	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>It is not possible to determine changes in status of the medicinal leech in Wales or Scotland due to deficiencies in historical information. Although surveys in 1995/96 and 1998 only found medicinal leeches at 7 out of 17 historical sites in Scotland and Wales, it is likely that only a proportion of these historical sites will have been occupied by medicinal leeches at any one time in the past anyway. Many Nineteenth Century records are likely to have referred to short-lived populations, resulting from leeches released into ponds following their use for medicinal purposes.</p> <p>In England, the 1998 surveys only found medicinal leeches at 15 out of 25 historical sites. Again, it is likely that only a proportion of these historical sites will have supported medicinal leeches at any one time in the past. However, the 1998 surveys also found medicinal leeches to be considerably more widespread than previously thought in their core areas of Kent/Sussex and Cumbria. Overall, they were found in 34 new ponds/lakes/tarns and in 38 new stretches of ditches in England. However, this increase in number of known sites is undoubtedly due to under-recording in the past, although medicinal leeches were also found to have colonised recently created ponds as well.</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.*

During the first two years of plan implementation since formation of the Steering Group, we have used funding from Glaxo-Wellcome, EN, CCW, EnvAge and the Federation of Zoological Gardens primarily to carry out surveys to determine:

- 1) The current status of medicinal leeches in England and Wales (Objective 4.1);
- 2) The habitat requirements of medicinal leeches.

Both of these have been pre-requisites to implementing Objective 4.2 and determining whether it is necessary to implement Objective 4.3. The status of medicinal leeches in Scotland had already been recently determined by SNH prior to the formation of a Steering Group.

The surveys only found leeches at 8 out of their 25 'isolated' historical sites in England, Scotland and Wales, but did find them at 66 additional sites in their core areas of Kent/Sussex and Cumbria. 7 extant sites were also located in the New Forest and Dorset. The discovery of these large numbers of hitherto unknown populations in Kent/Sussex and Cumbria now means that it is unlikely to be necessary to enhance populations through pond creation and/or translocation at the majority of sites (Objective 4.3).

The habitat requirements of medicinal leeches have been determined by comparing variables between sites where leeches were found and sites where they were not. Analysis of habitat data collected during the 1998 surveys shows that waterbodies in which leeches were found had significantly higher pH, shallower margins and greater cover of submerged and floating plants than waterbodies in which they were not found. Analysis of data collected during 1999 might provide further insights into their habitat requirements. Additional work is also currently taking place to identify the most important prey at some sites by identifying blood meals of leeches.

The next phase of plan implementation will (subject to decisions made at our next Steering Group meeting) almost certainly concentrate on seeking to safeguard existing sites (Objective 4.2). This will probably be done mainly by providing information to landowners on management aimed at maintaining the sites in a suitable condition for medicinal leeches, and if appropriate also seeking SSSI designation for key sites.

**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	Malcolm Ausden	David Phillips
Organisation	RSPB	SNH
Assessment date (dd/mm/yy)	27/9/99	27/9/99

**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 paragraph numbers should run sequentially, under relevant headings in the published volumes]) paragraph number, target text and an assessment of progress.

Objective/target	4.1 Survey to determine full extent of distribution by the year 2000				
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):					
* = The full extent of distribution can never be determined. Forty-three out of the 46 historical sites have been surveyed for medicinal leeches since 1995/96, together with several hundred site in the vicinity of these. However, it is inevitable that additional unknown populations will exist somewhere in the UK.					

Objective/target	4.2 Safeguard all known sites				
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):					

Objective/target	4.3 Where appropriate, enhance existing populations through pond creation, supplementing with translocation if necessary				
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):					
An additional pond has been created adjacent to an extant site on Anglesey.					

Objective/target	4.4 Ensure that wild stock is not used for medicinal purposes				
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):					

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

For each significant action please copy and complete the

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.1.1. Consider encouragement of sympathetic land-use around all occupied ponds including the use of financial incentives	
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	To be decided at next Steering Group meeting	
<b>Action/workplan undertaken?</b> (Please state yes or no.)	No	
<b>Description of work taken and organisation responsible</b>		
<b>Output and timescale</b>	To be decided at next Steering Group meeting	Action by
<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.)	Any action has been dependant on determining what constitutes 'sympathetic land-use around occupied ponds'. This has been investigated under Action 5.5.3. during 1998 and 1999. Analysis of habitat data collected during the 1998 surveys has shown that there are no marked differences in surrounding land use between sites where leeches were found and sites where they were not. It has therefore not been known what constitutes 'sympathetic land-use around occupied ponds'. Analysis of further habitat data from the 1999 surveys may provide further insights into this.	
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	Not started	
<b>Next steps</b>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	Action by

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.1. Consider designating additional SSSIs for the species where this is necessary to secure appropriate management	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	No	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	No	
<b>Description of work taken and organisation responsible</b>	Not applicable in Scotland since both extant sites are already SSSIs.	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<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>	Identifying the extant sites. This constraint will be more or less removed through successful completion of Action 5.5.1. However, the fact that Action 5.1.1. has found medicinal leeches to be considerably more widespread than previously thought, might mean that SSSI designation may not be appropriate at some of the sites.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Not started	
<b>Next steps</b>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.2. Seek to secure favourable management for the species at all occupied sites, including ensuring that suitable hosts are available	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	To be decided at next Steering Group meeting	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	No	
<b>Description of work taken and organisation responsible</b>	Grazing introduced at one site, Cors Goch, by NWWT, aimed at benefiting medicinal leech among other species.	
<b>Output and timescale</b>		<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>	Action has been dependant on determining what constitutes 'sympathetic land-use around occupied ponds'. This has been investigated under Action 5.5.3. during 1998 and 1999.  The next stage will be to encourage landowners to maintain the features of waterbodies which appear to be associated with the presence of medicinal leeches, and to discourage obviously damaging activities to waterbodies containing medicinal leeches. The results from the 1998 and 1999 surveys will be shared with relevant organisations eg EnvAge regarding licenses for fish introductions.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.3. Where appropriate, consider the creation of new pond habitat within 200 metres of existing sites	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Not considered necessary in England and Scotland because of the increase in number of known sites. Pond creation is taking place adjacent to one Welsh site, though.	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	No	
<b>Description of work taken and organisation responsible</b>	Pond dug by NWWT adjacent to extant site.	
<b>Output and timescale</b>	N/A	<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>	N/A	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.4. If appropriate, develop and implement a policy on translocation of leeches to new sites		
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Yes		
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes		
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	<b>Objective</b>	<b>Organisation</b>	<b>Year</b>
	1. To develop a translocation protocol by identifying the best stages of leech for translocation and the potential role, if any, of captive breeding; also to develop a protocol for monitoring translocated populations.	SNH	1996 & 1997
<b>Description of work taken and organisation responsible</b>	As above. It is not currently intended to implement such translocations anywhere in the UK because of the increase in number of known sites for medicinal leeches.		
<b>Output and timescale</b>	Report produced on above in 1997	Action by SNH	
<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>	None		
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Yes		
<b>Next steps</b>	N/A		
<b>Output and timescale</b>	N/A	Action by	

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.3.1. Retain on Schedule 5 of the WCA 1981 and issue licenses for non-damaging activities only	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Not required	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	No	
<b>Description of work taken and organisation responsible</b>	N/A	
<b>Output and timescale</b>	N/A	<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>	N/A	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	N/A	
<b>Next steps</b>	N/A	
<b>Output and timescale</b>	N/A	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.4.1. Provide management advice to owners or managers of leech ponds	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	Completed in Scotland. Details of workplan for England & Wales to be decided at next Steering Group meeting.	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes	
<b>Description of work taken and organisation responsible</b>	Site owners have been advised of the presence & broad needs of medicinal leeches at the two extant sites in Scotland by SNH and at some sites in the rest of the UK.	
<b>Output and timescale</b>	Details to be decided at next Steering Group meeting	<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>	Action has been dependant on determining what constitutes 'sympathetic land-use around occupied ponds'. This has been investigated under Action 5.5.3. during 1998 and 1999.  The next stage will be to encourage landowners to maintain the features of waterbodies which appear to be associated with the presence of medicinal leeches, and to discourage obviously damaging activities to waterbodies containing medicinal leeches.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.1. Survey to identify the population status of all known and likely leech sites 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>	<b>Objective</b>	<b>Organisation</b>	<b>Year</b>
	1. To assess the population of medicinal leeches at each of the 9 sites which had historical records and at all suitable sites within 3km of each.	SNH	1995
	2. Determine presence/absence of medicinal leeches at all historical sites in Cumbria (confirmed and unconfirmed). Also determine their presence/absence at all tarns or ponds marked on the NCC Phase 1 habitat map within a 5km radius of them to identify previously unrecorded sites and extent of under-recording.	RSPB/EN	1998 & 1999
	3. Determine presence/absence of medicinal leeches at all historical sites in the New Forest (confirmed and unconfirmed). Also determine their presence/absence at c40 randomly chosen ponds in the rest of the New Forest in order to identify additional sites and extent of under-recording.	HWT	1998 & 1999
	4. Determine presence/absence of medicinal leeches at all historical sites in the Dungeness/Romney Marsh area. Also determine their presence/absence at a sample of other waterbodies and lengths of ditch in the vicinity of these in order to identify additional sites and extent of under-recording.	RMCP/EN	1998 & 1999
	5. Determine presence/absence of medicinal leeches at all historical sites Wales. Also determine their presence/absence in a sample of other waterbodies in the vicinity of these in order to identify additional sites and extent of under-recording.	NWWT/ CCW	1998 & 1999
	6. Determine presence/absence of medicinal leeches at all other historical sites England. Also determine their presence/absence in the three closest waterbodies to each historical site, or at all waterbodies within a 3km radius of each historical site, in order to identify additional sites and extent of under-recording.	RSPB	1998
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes		
<b>Description of work taken and organisation responsible</b>	Forty-three out of 46 historical sites have been surveyed for medicinal leeches during 1995/96 (Scotland) and 1998/99 (England and Wales). An additional 321 sites in England, 29 in Wales and 62 in Scotland have also been surveyed in order to locate new sites for this species during these surveys. Additional survey work is taking place in 1999.		

<b>Output and timescale</b>	Reports have been written up for the individual surveys undertaken during 1998.	<i>Action by</i> RSPB, SNH, EN, CCW, RMCP, HWT, NWWT
<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>	None	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	Writing up of the 1999 survey work by the end of 1999	
<b>Output and timescale</b>	Writing up of the 1999 survey work by the end of 1999	<i>Action by</i> RSPB, EN, CCW, RMCP, HWT, NWWT

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.5.2. Encourage regular monitoring of extant sites and identify any further threats to the species		
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	<b>Objective</b>	<b>Organisation</b>	<b>Year</b>
	1. To develop a draft monitoring protocol determining the best sampling date and method by testing six sampling techniques at eight sites in Scotland with past records	SNH	1996
	2. To determine the optimum sampling time and number of sampling points so as to maximise the chances of locating medicinal leeches at survey sites.	RSPB	1998
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	Workplan regarding future monitoring to be decided at next Steering Group meeting		
<b>Action/workplan undertaken?</b> (Please state yes or no.)	Yes		
<b>Description of work taken and organisation responsible</b>	The above objectives have been achieved. Monitoring methods have also been trialed during survey work.		
<b>Output and timescale</b>	See above	Action by SNH & RSPB	
<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.)	Identifying the extant sites. This constraint will be more or less removed through successful completion of Action 5.5.1.  Experience gained during the 1998 and 1999 surveys suggests that it would be difficult to estimate numbers of leeches at a given site, let alone set limits of acceptable change.  Avermectins identified as a potential threat.		
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	Ongoing		
<b>Next steps</b>	To be decided at next Steering Group meeting		
<b>Output and timescale</b>	To be decided at next Steering Group meeting	Action by	

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.3. Promote further research on the ecological requirements of this species to identify habitat requirements and the most appropriate methods for re-introduction or translocation		
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	<b>Objective</b>	<b>Organisation</b>	<b>Year</b>
	1. To produce detailed management recommendations for all sites where the medicinal leech is found	SNH	1995/96
	2. To refine habitat management guidelines through further field study by examining leech populations at each of the two confirmed sites in Scotland	SNH	1996/97
	3. To determine habitat selection by medicinal leeches in Cumbria by comparing habitat variables between sites where leeches were found to be present or absent using standardised sampling methods.  To determine diet of leeches through analysis of disgorged blood meals.	RSPB/EN	1998 & 1999
	3. To determine habitat selection by medicinal leeches in the New Forest by comparing habitat variables between sites where leeches were found to be present or absent using standardised sampling methods.  To determine diet of leeches through analysis of disgorged blood meals.	HWT	1998 & 1999
	4. To determine habitat selection by medicinal leeches in the Dungeness/Romney Marsh area by comparing habitat variables between sites where leeches were found to be present or absent using standardised sampling methods.  To determine diet of leeches through analysis of disgorged blood meals.	RMCP/EN	1998 & 1999
	5. To determine habitat selection by medicinal leeches in Wales by comparing habitat variables between sites where leeches were found to be present or absent using standardised sampling methods.  To determine diet of leeches through analysis of disgorged blood meals.	NWWT/ CCW	1998 & 1999
5. To determine habitat selection by medicinal leeches in the rest of England by comparing habitat variables between sites where leeches were found to be present or absent using standardised sampling methods.	RSPB	1998	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes		

<b>Description of work taken and organisation responsible</b>	Habitat requirements have been identified by comparing variables between sites where leeches were found and sites where they were not. Analysis of habitat data collected during the 1998 surveys shows that waterbodies in which leeches were found had significantly higher pH, shallower margins and greater cover of submerged and floating plants than waterbodies at which they were not found. Analysis of data collected during 1999 might provide further insights into their habitat requirements.  Additional work is taking place to identify the most important prey at some sites by identifying blood meals of leeches.	
<b>Output and timescale</b>	SNH work written up in the form of two reports. There will also be a final report containing the results of the analysis of habitat selection by medicinal leeches in 1998 and 1999 (by January 2000)	<i>Action by</i> RSPB, EN, CCW, RMCP, HWT, NWWT
<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>	To be decided at next Steering Group meeting	
<b>Output and timescale</b>	To be decided at next Steering Group meeting	<i>Action by</i>

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	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	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	N/A	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	Yes	
<b>Description of work taken and organisation responsible</b>	Information passed on to JNCC and BRC following the completion of surveys	
<b>Output and timescale</b>	Information passed on to JNCC and BRC following the completion of surveys	<i>Action by</i> RSPB, SNH, EN, HWT, NWWT
<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>	None	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	Pass information to JNCC & BRC following writing up of this year's survey results.	
<b>Output and timescale</b>	Pass information to JNCC & BRC following writing up of this year's survey results.	<i>Action by</i> RSPB, SNH, EN, HWT, NWWT

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	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.	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	N/A because WCMC don't want this information	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	N/A	
<b>Description of work taken and organisation responsible</b>	N/A	
<b>Output and timescale</b>	N/A	
<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>	None	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	N/A	
<b>Next steps</b>	N/A	
<b>Output and timescale</b>	N/A	Action by RSPB, SNH, EN, HWT, NWWT

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.6.1. Advise relevant medical research institutions on the status of the leech and encourage use of alternative species for research. (This action has been dropped)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	N/A	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	N/A	
<b>Description of work taken and organisation responsible</b>	N/A	
<b>Output and timescale</b>	N/A	<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>	There is no evidence that leeches are currently taken from the wild in the UK for research purposes. Therefore this action has been dropped.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	N/A	
<b>Next steps</b>	N/A	
<b>Output and timescale</b>	N/A	<i>Action by</i>