

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

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| Species/Habitat Action Plan | Pool frog <i>Rana lessonae</i> |
| Lead Partner/Agency | English Nature and The Herpetological Conservation Trust |
| Steering Group/Other organisations | Yes English Nature, Anglian Water, The Herpetological Conservation Trust, University of Sussex, University of Greenwich, Chris Gleed-Owen/ Coventry University, Individuals (e.g. Dave Billings) |
| 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 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|----|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.0 a&b A favourable status should be achieved by 2025 in the UK and a monitoring programme to measure progress to this goal should be established by 2002. | X | | | | | New objective, and definition of 'Favourable Status', has been included to allow clearer aim for Plan and to link to EC objectives for the species. This sets a UK objective and guides the future development and expansion of the plan. |
| 4.1 Recover the population at the Norfolk site (if not already extinct). | | X | | | | Population now believed to be extinct |
| 4.2 Restore viable populations to three suitable sites in the likely former range of the species through (re)introduction by 2003. <u>This should only be undertaken if the native status of the pool frog is confirmed.</u> Further re-introductions will be needed over a longer time scale to restore the species to a Favourable Conservation Status in Britain by 2025. | | X | | | | Awaiting outcome of research regarding native status. This due to report for April 2000 and only limited conservation action will be undertaken before then. |

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.) |
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| 5.1 Policy and legislation | | | | | | | |
| 5.1.1 If the native status of this species is confirmed, and if extant populations are found or re-introductions undertaken, then add the species to Schedule 5 of the Wildlife and Countryside Act 1981. (ACTION: DETR, JNCC) | X | | | | | Medium | Not started (not yet applicable): UK action, though of significance only to England |
| 5.1.2 Review legislative mechanisms for restricting release to, and movement in, the wild pool frogs of non-native origin (eg through the Wildlife and Countryside Act 1981 Section 9 or 14, and Schedule 9 review). (ACTION: EN, JNCC; Add DETR) | X | | | | | Medium | Not started. |
| 5.1.3 Determine the most suitable approach to reintroduction of the species in the light of studies on its native status. <i>It appears unlikely that any true breeding British origin populations now exist (either in the wild or in captivity). There are potentially suitable breeding animals in colonies that are likely to have included progeny from British origin. A decision is needed as to whether any reintroduction should use 'part British' specimens or animals from pure breeding populations from other countries.</i> (ACTION: EN, JNCC; Add advice to be provided through the Pool Frog SAP SG) | | X | | | | Yes | Not started (not yet applicable) |
| 5.2 Site safeguard and management | | | | | | | |
| 5.2.1 Ensure appropriate management at a core area of the Norfolk site to allow the persistence of any remaining animals and prepare for possible reintroduction. (ACTION: EN; Add Norfolk Wildlife Trust with advice through Pool Frog SAP SG) | | X | | | | Yes | On-going |
| 5.2.2 Review protected status and security of other sites with potential for reintroduction; assess need for consents, etc., and potential impacts on other features of conservation interest (Action: EN, site owners [sites to be identified by Pool Frog SAP SG]) | | X | | | | Yes | Not started (not yet applicable) |

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| 5.3 Species management and protection | | | | | | | |
| 5.3.1 Continue to develop a captive breeding programme to maintain native origin animals (or at least to preserve some genetic material) and provide animals that could be used for release into the wild. This action should follow the proposals outlined in the Species Recovery Programme and, if necessary, captive breeding work should be extended to other suitable institutions. (ACTION: EN; <i>Add Pool frog SAP SG</i>) | | X | | | | Yes | <i>On-going: Captive breeding work should be developed from existing programmes in Norfolk and London using here possible animals descended (or presumed to be descended) from Norfolk origin animals. It appears unlikely that any pure breeding British animals remain</i> |
| 5.3.2 Following management to re-create suitable habitat, reintroduce the pool frog at three suitable former sites (subject to the outcome of research on native status) <i>by 2003</i> . (ACTION: EN; <i>add Pool Frog SAP SG, HCT and Anglian Water</i>) | | X | | | | Yes | Not started (not yet applicable) |
| 5.4 Advisory | | | | | | | |
| 5.4.1 Produce guidance on suitable management for pool frog habitats and distribute to landowners and managers at extant and restored sites, and sites where the species has been recorded in the recent past. (ACTION: EN; <i>add Pool Frog SAP SG</i>) | | X | | | | Medium | Not started (not yet applicable) |
| 5.4.2 Provide guidance on the management of non-native populations of pool frogs. This action should be informed by the work outlined under 5.5.4. (ACTION: EN; <i>add JNCC with advice from Pool Frog SAP SG</i>) | | X | | | | Medium | Not started (not yet applicable) |
| 5.4.3 Ensure that relevant agri-environment scheme Project Officers and members of regional agri-environment consultation groups are advised of actual or potential sites for this species, its importance and management needed for its conservation. (ACTION: EN; <i>add FRCA and FWAG</i>) | | X | | | | Medium | Not started (not yet applicable) |

| 5.5 Future research and monitoring | | | | | | | |
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| 5.5.1 Continue with research to determine whether the pool frog is native to Britain. A number of lines of investigation should be pursued including genetic studies, literature research, archaeological study and archiving of reference bone material, study of calls, behaviour and morphology. (ACTION: EN; add Pool Frog SAP SG and Anglian Water). | | X | | | | Yes | <p><i>On-going:</i></p> <p><i>Specific projects involve</i></p> <ol style="list-style-type: none"> <i>1. Genetic studies at Sussex and Greenwich Universities and collaboration with individuals and institutions throughout Continental Europe.</i> <i>2. Bio-acoustic study at Sussex University with help from British Sound Archive</i> <i>3. Palaeo-archaeological studies by Chris Gleed-Owen (Coventry University)</i> <i>4. Literature research /archive studies co-ordinated through HCT and Norwich Castle Museum</i> <i>5. Assessment of European populations, notably for habitat study and collection of bio-acoustic and genetic material by Kevin Morgan, with Sussex University and others from Pool Frog SAP SG and with support from individuals and institutions throughout Continental Europe.</i> |
| 5.5.2 Ensure the completion of the current initiative to survey all known former sites and to determine whether an extant population remains in Norfolk. (ACTION: EN; add Pool Frog SAP SG, HCT) | | X | | | | Yes | Yes (completed) |
| 5.5.3 Undertake a thorough survey of green frog populations with a view to identifying colonies of pool frogs that have so far gone undetected. (ACTION: EN; add Sussex University and ARGs) | | X | | | | Medium | Not started |
| 5.5.4 Review studies of habitat requirements and management needs, looking particularly at effects of numbers and sizes of ponds, shading, fish and pollution (ACTION: EN; add Pool Frog SAP SG) | | X | | | | Yes | On-going |

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| 5.5.5 | Undertake monitoring of water quality and water levels at the Norfolk site. This should be carried out with a view to maintaining suitable habitat. If necessary, action should be taken to curtail pollution and excessive water abstraction. (ACTION: EA, EN; <i>Add Anglian Water</i>) | | X | | | | Medium | Not started |
| 5.5.6 | If non-native populations of the pool frog are discovered, assess the threat that they may pose to the genetic identity of any reintroduced pool frog colonies. <i>Non-native populations of pool frogs are known – some of which may be ‘part British’ in origin. The conservation value of these needs to be assessed alongside any assessment of risk.</i> (ACTION: EN, JNCC; <i>add Pool Frog SAP SG</i>). | | X | | | | Medium | Not started |
| 5.5.7 | Undertake an assessment of the reasons for the decline (and possible extinction) of the pool frog in Britain and specifically at the last known ‘British’ site. (ACTION: EN/ Pool Frog SAP Steering Group) | | X | | | | Yes | On-going |
| 5.6 | Communications and publicity | | | | | | | |
| 5.6.1 | Continue to develop links with relevant European experts with a view to exchanging information on conservation management and <i>ex-situ</i> breeding techniques. (ACTION: EN; <i>add Pool Frog SAP SG, Sussex University and HCT</i>) | | X | | | | Medium | On-going |
| 5.6.2 | Depending on the outcome of the studies on native status and subsequent conservation actions/decisions, publicise the presence and conservation importance of a “new” British species. (ACTION: EN; <i>add Pool Frog SAP SG, HCT and Anglian Water</i>) | | X | | | | Medium | Not started (not yet applicable) |
| 5.7 | Links with other action plans | | | | | | | |
| 5.7.1 | There may be benefit in considering this action plan with those for fens. | | X | | | | Medium | Not started (not yet applicable) |

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 | | | | | | | |
| Brief text description justifying assessment of status: (~ no more than 100 words for each country/region) | | | | | | | |
| England: now believed that the only possibly native population is extinct. The last known individual from this population died in captivity in January 1999. However introduced populations do exist in England – some of these <i>may</i> have been established using animals from various origins including the ‘British site’. Therefore potential stock exists for re-introductions. Yet to confirm native status. | | | | | | | |

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 plan is progressing well to schedule. Many activities have yet to be initiated, but these are dependent on the outcome of fundamental research that is due to report in April 2000. The lack of action in many areas is in agreement with the proposed SAP work programme.

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 | Tony Gent | Richard Hall | Richard Hall |
| Organisation | Herpetological Conservation Trust | English Nature | English Nature |
| Assessment date (dd/mm/yy) | | | |

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.

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| Objective/target (For new or revised targets please provide the new paragraph number and target text.) | 4.0 a&b A favourable status should be achieved by 2025 in the UK and a monitoring programme to measure progress to this goal should be established by 2002. | | | | |
| Country | Not appropriate | Target achieved | Some progress | No progress | Insufficient information |
| <i>UK</i> | | | | X | |
| <i>England</i> | | | | X | |
| <i>Northern Ireland</i> | X | | | | |
| <i>Scotland</i> | X | | | | |
| <i>Wales</i> | X | | | | |
| Text description of target progress (separate for each country/region): | | | | | |
| This target has been added since the publication of the plan as a means to identify conservation goals. No progress has been made to recovering 'native' populations as the first part of the plan (to April 2000) is dedicated to determining native status. The target has both UK and England relevance as it is the UK that reports to Europe while the species is only found in England. | | | | | |

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| Objective/target (For new or revised targets please provide the new paragraph number and target text.) | 4.1 Recover the population at the Norfolk site (if not already extinct). | | | | |
| Country | Not appropriate | Target achieved | Some progress | No progress | Insufficient information |
| <i>UK</i> | X | | | | |
| <i>England</i> | X | | | | |
| <i>Northern Ireland</i> | X | | | | |
| <i>Scotland</i> | X | | | | |
| <i>Wales</i> | X | | | | |
| Text description of target progress (separate for each country/region): The target is inappropriate in England as the species is considered extinct as a native species on the site and recovery of the natural population is not achievable. It seems unlikely that other 'natural' populations still exist. | | | | | |

| Objective/target <i>(For new or revised targets please provide the new paragraph number and target text.)</i> | 4.2 Restore viable populations to three suitable sites in the likely former range of the species through (re)introduction by 2003. <u>This should only be undertaken if the native status of the pool frog is confirmed.</u> Further re-introductions will be needed over a longer time scale to restore the species to a Favourable Conservation Status in Britain by 2025. | | | | |
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| Country | Not appropriate | Target achieved | Some progress | No progress | Insufficient information |
| <i>UK</i> | X | | | | |
| <i>England</i> | | | | X | |
| <i>Northern Ireland</i> | X | | | | |
| <i>Scotland</i> | X | | | | |
| <i>Wales</i> | X | | | | |
| Text description of target progress (separate for each country/region): No progress has been made to achieving this target as the work has concentrated on determining native status. This research has made significant progress. The discovery of some further populations of introduced / mixed origin pool frogs has provided a potential source of animals for reintroduction. The longer term goal has yet to be agreed. | | | | | |

Table B: Proposed actions (Copiable table)

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

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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> | 5.1.3 Determine the most suitable approach to reintroduction of the species in the light of studies on its native status. <i>It appears unlikely that any true breeding British origin populations now exist (either in the wild or in captivity). There are potentially suitable breeding animals in colonies that are likely to have included progeny from British origin. A decision is needed as to whether any reintroduction should use 'part British' specimens or animals from pure breeding populations from other countries.</i> | |
| Work plan/organisation(s) responsible <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i> | <i>September 1999 to February 2000:</i> <ul style="list-style-type: none"> • Determine source of animals for any re-introduction. • Determine sites for initial re-introduction and discuss with owners and EN. • Determine habitat suitability and reason for historic losses and ensure these are addressed if appropriate. ACTION: EN, JNCC, Pool Frog SAP SG | |
| Action/workplan undertaken? <i>(Please state yes or no.)</i> | No. No formal action has been taken here, though opinions are beginning to be developed informally amongst the Action Plan Steering Group members. | |
| 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 | Choice of site(s) and identification of appropriate animals or release with target date for completed action February 2000. | <i>Action by EN, JNCC, Pool Frog SAP SG</i> |
| 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> | <ul style="list-style-type: none"> • May need further information about genetics of populations before decisions can be made about choice of animals for release. This may be provided by genetic research (by April 2000). • It may be difficult to determine reasons for decline and to assess habitat suitability. Initial release may be at original site; other sites may be harder to identify. | |
| Action complete or ongoing? <i>(Please state yes, not started, or ongoing.)</i> | Not started. | |
| Next steps | <i>Please outline future action/work including an indication of expected output, timescale and organisation responsible</i> | |
| Output and timescale | PF SG, EN and JNCC to discuss (Sept. to Dec. 1999). Choice of site(s) and identification of appropriate animals or release with target date for completed action February 2000. | <i>Action by EN, JNCC, Pool Frog SAP SG</i> |

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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> | 5.2.1 Ensure appropriate management at a core area of the Norfolk site to allow the persistence of any remaining animals and prepare for possible reintroduction. | |
| Work plan/organisation(s) responsible <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i> | <ul style="list-style-type: none"> Management of Norfolk site is being undertaken in conjunction between Norfolk Wildlife Trust and English Nature. | |
| Action/workplan undertaken? <i>(Please state yes or no.)</i> | 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 | Initially (from 1995) small specific areas were managed for pool frogs (using a prescription presumed to be appropriate and supported through the Species Recovery Programme) with significant further work being undertaken through Wildlife Enhancement Scheme. | <i>Action by EN; Norfolk Wildlife Trust with advice through Pool Frog SAP SG</i> |
| 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> | <ul style="list-style-type: none"> Timing of work may regrettably have been too late Knowledge of causes of decline of pool frogs on the site not complete; therefore hard to rectify problems Knowledge of habitat requirements of pool frogs at the site not fully understood. | |
| Action complete or ongoing? <i>(Please state yes, not started, or ongoing.)</i> | On-going – further refining of management likely to be required if re-introduction considered. | |
| Next steps | <i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i> | |
| Output and timescale | <ul style="list-style-type: none"> Assess site for habitat suitability, etc (Autumn 1999) Continue with site management plan (on-going) with specific additional work if needed for re-introduction (late Winter- early Spring 2000) | <i>Action by EN; Norfolk Wildlife Trust with advice through Pool Frog SAP SG</i> |

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| Published action/organisation(s) responsible (For new or revised actions please provide the new paragraph number and action text.) | 5.2.2 Review protected status and security of other sites with potential for reintroduction; assess need for consents, etc., and potential impacts on other features of conservation interest | |
| Work plan/organisation(s) responsible (Summary of work plan agreed by the steering group, broken down by year if possible.) | <ul style="list-style-type: none"> • Identify potential sites within range • Identify owners and discuss potential • Assess potential and level of protection/security on site • Determine (and implement) management needed on site • Assess potential impacts on ecological interest of sites | |
| Action/workplan undertaken? (Please state yes or no.) | No | |
| 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 | <p>Some potential sites have been identified but not fully appraised nor approaches made to land-owners, etc.</p> <p>Document required and site dossiers prepared to review position for on site by February 2000, for other sites by 2003</p> | Action by EN, site owners [sites to be identified by Pool Frog SAP SG] |
| Constraints to action (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.) | <ul style="list-style-type: none"> • Action subject to indication that the species is native • Likely shortage of possible sites • Time constraint on pool frog SG to undertake action • Possible resistance from owners • Possible need for significant management (and this may have ecological, logistical or financial constraints) • No other significant limitations | |
| Action complete or ongoing? (Please state yes, not started, or ongoing.) | Not yet started | |
| Next steps | Please outline future action/work including an indication of expected output, timescale and organisation responsible. | |
| Output and timescale | <ul style="list-style-type: none"> • Identification of 1 suitable site by February 2000 • Identification of 2 further suitable sites by 2003 • Revised target of more than 10 suitable sites by 2025 | Action by EN; Norfolk Wildlife Trust with advice through Pool Frog SAP SG |

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| Published action/organisation(s) responsible (For new or revised actions please provide the new paragraph number and action text.) | 5.3.1 Continue to develop a captive breeding programme to maintain native origin animals (or at least to preserve some genetic material) and provide animals that could be used for release into the wild. This action should follow the proposals outlined in the Species Recovery Programme and, if necessary, captive breeding work should be extended to other suitable institutions. | |
| Work plan/organisation(s) responsible (Summary of work plan agreed by the steering group, broken down by year if possible.) | <ul style="list-style-type: none"> • Build new vivarium in Norfolk • Provide support for vivaria in London and Norfolk • Look for suitable stock for captive breeding both in wild and currently in captivity and from over-seas • Prepare and sign 'captive loan' agreements with EN | |
| 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 | <ul style="list-style-type: none"> • Creation of captive breeding facilities in in London and Norfolk by 1998 • New vivarium built in Norfolk • Looked for suitable stock for captive breeding both in wild and currently in captivity and from over-seas • 'Captive loan' agreements signed with EN | Action by: EN; Pool frog SAP SG |
| Constraints to action (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.) | <ul style="list-style-type: none"> • Shortage of suitable breeding animals. Only known British origin specimen died. No other 'British origin' animals known • Some success in breeding with 'mixed' origin stock, including some believed to be 'part British' and that show similarities to British origin animals regarding coloration, etc. • Other practical constraints resulting from difficulties in captive breeding. • Keen to control level of 'out put' until results indicate this exercise to be important for conservation • Need decision on what stock is appropriate for release | |
| Action complete or ongoing? (Please state yes, not started, or ongoing.) | On-going | |
| Next steps | Please outline future action/work including an indication of expected output, timescale and organisation responsible. | |
| Output and timescale | <ul style="list-style-type: none"> • Continue project (on-going) • Select and locate appropriate stock for captive breeding • Build up robust captive breeding population which is linked to a defined programme of release to the wild. | Action by EN; Pool Frog SAP SG |

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| Published action/organisation(s) responsible (For new or revised actions please provide the new paragraph number and action text.) | 5.3.2 Following management to re-create suitable habitat, reintroduce the pool frog at three suitable former sites (subject to the outcome of research on native status) by 2003. | |
| Work plan/organisation(s) responsible (Summary of work plan agreed by the steering group, broken down by year if possible.) | <ul style="list-style-type: none"> • Identify potential sites within range • Identify owners and discuss potential • Assess potential and level of protection/security on site • Determine (and implement) management needed on site | |
| Action/workplan undertaken? (Please state yes or no.) | No | |
| 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 | <p>Some potential sites have been identified but not fully appraised nor approaches made to land-owners, etc.</p> <p>Document required and site dossiers prepared to review position for on site by February 2000, for other sites by 2003 (see 5.2.2 above)</p> <p>Initial re-introduction hopefully during Summer 2000</p> | Action by EN; Pool Frog SAP SG, HCT and Anglian Water |
| Constraints to action (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.) | <ul style="list-style-type: none"> • Action subject to indication that the species is native • Likely shortage of possible sites • Time constraint on pool frog SG to undertake action • Possible resistance from owners • Possible need for significant management (and this may have ecological, logistical or financial constraints) • Need to undertake assessment of reasons for decline, etc, where appropriate and an assessment of likelihood of success. • Possible difficulty in making re-introduction work successfully | |
| Action complete or ongoing? (Please state yes, not started, or ongoing.) | Not yet started | |
| Next steps | Please outline future action/work including an indication of expected output, timescale and organisation responsible. | |
| Output and timescale | <ul style="list-style-type: none"> • Selection of 1 suitable site by February 2000 • Initial re-introduction hopefully during Summer 2000 • Identification of 2 further suitable sites and undertake translocations by 2003 • Revised target of more than 10 suitable sites by 2025 | Action by EN; Pool Frog SAP SG, HCT and Anglian Water |

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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> | 5.5.1 Continue with research to determine whether the pool frog is native to Britain. A number of lines of investigation should be pursued including genetic studies, literature research, archaeological study and archiving of reference bone material, study of calls, behaviour and morphology. | |
| Work plan/organisation(s) responsible <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i> | <ul style="list-style-type: none"> • Genetic research to determine difference in green frog genetics; to provide an assessment of similarities/differences between populations throughout Europe and to assess possibility of extracting DNA from fossil bones: Action: Trevor Beebee, Inga Ziesett, Graham Rowe (Sussex University) and Charles Snell, Ivor Evans (Greenwich University) • Bioacoustic study to provide an assessment of similarities/differences between populations throughout Europe: Action: Julia Wycherley (now with Sussex University) assisted by British Sound Archives • Paleo-archaeological study to determine whether pool frog bones are found in archaeological sites. Action: Chris Gleed-Owen (Coventry University) • Literature search / archive studies to assess the former occurrence of the species in Britain: Action: HCT, Norwich castle Museum, Geoffrey Kelly • <i>Assessment of European populations, notably for habitat study and collection of bio-acoustic and genetic material by Kevin Morgan, with Sussex University and others from Pool Frog SAP SG and with support from individuals and institutions throughout Continental Europe</i> | |
| Action/workplan undertaken? <i>(Please state yes or no.)</i> | 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 | All projects working towards contributing to an English Nature Research Report that summarises all findings and conclusions by April 2000 | <i>Action by</i> EN; Pool Frog SAP SG and Anglian Water |
| 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> | <ul style="list-style-type: none"> • No constraints to action – only concern is whether results will be sufficiently robust to support conclusions. | |
| Action complete or ongoing? <i>(Please state yes, not started, or ongoing.)</i> | On-going | |
| Next steps | <i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i> | |
| Output and timescale | Research due to be completed with preparation of report in April 2000. | <i>Action by</i> EN; Pool Frog SAP SG |

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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> | 5.5.2 Ensure the completion of the current initiative to survey all known former sites and to determine whether an extant population remains in Norfolk. | |
| Work plan/organisation(s) responsible <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i> | <ul style="list-style-type: none"> • Survey at former site and at areas surrounding it (co-ordinated by EN, with Norfolk Wildlife Trust and latterly by HCT) • Investigation of other possible areas in 'fenland' (funded and co-ordinated by EN, including surveys by Paul Joslin and Jonty Denton) | |
| Action/workplan undertaken? <i>(Please state yes or no.)</i> | 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 survey effort since 1994 | <i>Action by EN; Pool Frog SAP SG, HCT</i> |
| 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> | <ul style="list-style-type: none"> • Weather dependent survey restricted time when work could be done and frequency and potential effectiveness of survey. • Species appears to be extinct | |
| Action complete or ongoing? <i>(Please state yes, not started, or ongoing.)</i> | Completed: though survey indicated no animals present | |
| Next steps | <i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i> | |
| Output and timescale | Report summarising survey effort to be produced by April 2000. | <i>Action by EN/HCT</i> |

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| Published action/organisation(s) responsible (For new or revised actions please provide the new paragraph number and action text.) | 5.5.4 Review studies of habitat requirements and management needs, looking particularly at effects of numbers and sizes of ponds, shading, fish and pollution | |
| Work plan/organisation(s) responsible (Summary of work plan agreed by the steering group, broken down by year if possible.) | <ul style="list-style-type: none"> • European site visits (Julia Wycherley and Kevin Morgan) • Discussion with experts in Europe • Acquisition of information / literature on pool frog habitat use • Study of habitat at Norfolk site; review of old aerial photographs of the site/ literature describing habitats | |
| 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 | <ul style="list-style-type: none"> • European site visits undertaken (1998/1999) (JW/KM) • Discussions with continental experts stated and literature acquisition on-going (PFSG) • Initial investigation of aerial photographs undertaken (NWT/EN) | Action by EN; Pool Frog SAP SG |
| Constraints to action (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.) | <ul style="list-style-type: none"> • Acquisition of information specific relevant to Norfolk circumstances may be hard to acquire. • Time: difficult to dedicate time to this specific investigation other than through dedicated contracts (e.g. to Kevin Morgan) • Resources needed to travel widely in Europe (though this aspect was funded) | |
| Action complete or ongoing? (Please state yes, not started, or ongoing.) | On-going | |
| Next steps | <i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i> | |
| Output and timescale | <ul style="list-style-type: none"> • Site visit to Norfolk in September 1999 • Summary report as part of final project publication in April 2000 | Action by EN; Pool Frog SAP SG |

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| Published action/organisation(s) responsible (For new or revised actions please provide the new paragraph number and action text.) | 5.5.7 Undertake an assessment of the reasons for the decline (and possible extinction) of the pool frog in Britain and specifically at the last known 'British' site. | |
| Work plan/organisation(s) responsible (Summary of work plan agreed by the steering group, broken down by year if possible.) | <ul style="list-style-type: none"> • Assessment of previous population levels at Norfolk site and surrounds • Literature review • Analysis of current status of site and identification of perceived problems • Water chemical analysis? Contact has been made with a Dutch institute (IBN) over this type of work. | |
| Action/workplan undertaken? (Please state yes or no.) | No | |
| 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 | <ul style="list-style-type: none"> • An assessment of the reasons for decline and whether they have been addressed needs to be in place before re-introduction can occur and therefore is needed by Summer 2000. | Action by EN/ Pool Frog SAP Steering Group |
| Constraints to action (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.) | <ul style="list-style-type: none"> • Absence of quantitative and qualitative data • Assessment likely to be subjective • Water quality analysis may be difficult, expensive and research at to early a stage to be able to identify what factors should be assessed. | |
| Action complete or ongoing? (Please state yes, not started, or ongoing.) | Not started | |
| Next steps | Please outline future action/work including an indication of expected output, timescale and organisation responsible. | |
| Output and timescale | <ul style="list-style-type: none"> • Review of need and possible ways forward to be made at SG meeting in September 1999 • An appraisal, subjective or otherwise, may be needed for the report in April 2000 and before re-introduction is considered in Summer 2000. | Action by EN/ Pool Frog SAP Steering Group |