

amphibian and reptile conservation

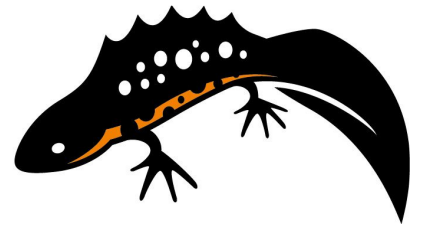


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Widespread Reptiles Species Action Plan

Version: July 2009


Next Review March 2010

Introduction

This document outlines the actions required to conserve the viviparous lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), grass snake (*Natrix natrix*) and adder (*Vipera berus*) in Britain and provides a framework for conservation work for these species. Detail of each action is provided in the implementation guide. Each action has been assigned the appropriate level for implementation i.e. United Kingdom, country, region or local. Key actions have been identified through a 'signposting' exercise; these statements are shown in two shades of green and the corresponding signposted actions are marked with a similarly coloured signpost symbol.

Action Level Key

- UK All high-level actions, including European actions
- C Country
- R Region
- L Local

 Signposted action related to each preceding Signpost Statement

Grass snake: Action at Country and LBAP level

Species probably absent from Scotland though awareness of the potential for this species needs to be considered in Scottish BAP, either in case the species is recorded, or if climate change alters actual/potential range north-wards.

Contents

Proposed Provisional Targets	2
1. Action Plan/SAP Management	2
2. Policy and Legislation	3
3. Species and Habitat Management	6
4. Advisory and Communications	8
5. Research and Monitoring	10



With support from



Proposed Provisional Targets

1. Maintain and increase the range of the species (10km squares)

2. Maintain the range of the species (vice counties)

3. Maintain and increase the number of occupied sites

Information about the Species Action Plan targets

The four widespread reptiles were added as a Biodiversity Action Plan priority species in the 2007 Priority Species review. The steering group will refine the target units and develop the appropriate values in the first year of the plan. Additional data will be sought to facilitate these assessments.

1. Action Plan/SAP Management

Objective 1.1

To provide direction and ensure efficient implementation of the widespread reptile Species Action Plans.

		<i>Action Level</i>
(i)	Coordination	UK, C, R, L
(ii)	Produce guidance as required	UK, C, R, L
(iii)	Review Action Plan	UK, C, R, L
(iv)	Review targets and objectives	UK, C, R, L
(v)	Reporting	UK, C, R, L
(vi)	Liaison with key BAP Partners	UK, C, R, L

2. Policy and Legislation

Objective 2.1

To have legislation and policy that is effective for widespread reptile conservation that ensures no net loss of conservation status and promotes opportunities for enhancement of the status of the species and their habitats and to ensure its effective transposition and implementation.

Slow-worm/Grass snake/Viviparous lizard Signposted Action

Wider Action Planning – This group of reptiles would benefit greatly from recognition of their habitat and management needs at the wider landscape scale. Requires adequate consideration under planning process. Taking account of/or determining their presence during the early stages of local authority development plans, land allocation (especially of ‘brownfield sites’), and then development schemes, could significantly enhance their current conservation status.

Adder Signposted Action

Wider Action Planning – Taking account of or determining its presence during the early stages of local authority development plans, land allocation could significantly enhance its current conservation status, particularly in areas adjacent to or including areas of semi-natural habitat (grassland, heathland, fen, blanket and raised bog, maritime cliff, sand dune). Countering the effects of habitat fragmentation at the local scale is a high priority. Planning access routes and recreation areas should take account of the effects of disturbance on this species.

		<i>Action Level</i>
(i)	sign post Evaluate the effectiveness of legislation in attaining conservation for the species, and identify and promote mechanisms for improvement.	UK, C
(ii)	sign post Use the Biodiversity Duty introduced by the Natural Environment and Rural Communities Act 2006 and the Nature Conservation (Scotland) Act 2004, to embed species conservation needs in all relevant policies. Promote the development and implementation of an equivalent duty in Northern Ireland (viviparous lizard only).	C, R, L
(iii)	sign post Interpret, implement and enforce legislation and policy in such a way as to ensure effective conservation for widespread reptiles.	UK, C, R, L
(iv)	sign post For key areas, encourage the preparation and implementation of supplementary planning guidance and local spatial strategies to ensure the strategic long term safeguard and management of populations.	C, R, L

(v)	sign post Promote the inclusion of widespread reptiles in development control policy frameworks and relevant strategic policies as a 'species of principal importance to nature conservation'.	C, R, L
(vi)	sign post Develop standard guidance and protocols to ensure consistent high quality advice and clear working practices in (to inform developers/consultants and local authorities).	C

Objective 2.2

Ensure adequate information and knowledge base is available for decision-making.

		<i>Action Level</i>
(i)	Ensure availability of and access to appropriate data and ecological knowledge early in policy development or decision-making and that there is an appropriate framework and skills base for interpretation.	UK, C, R, L
(ii)	Incorporate widespread reptile data/knowledge into strategic and spatial plans.	UK, C, R, L
(iii)	Ensure understanding of habitat use and distribution, and the extent and impacts of fragmentation and possible changes due to climate change, and that information is available to incorporate these into planning and policy decisions.	UK, C, R, L

Objective 2.3

To ensure mechanisms are in place to support policies that achieve BAP objectives.

Slow-worm and Viviparous Lizard Signposted Action

Wider Action – Agri-Environment: Declines in this widespread species most likely due to widescale habitat loss. Hence key to redress is through agri-environment policy and practice (restoration and/or installation of hedgerows, dry stone walls, buffer strips, etc).

		<i>Action Level</i>
(i)	sign post Ensure agri-environment schemes are able to support widespread reptile conservation and see that these are developed. Target agri-environment strategies to deliver habitat creation and management targets/objectives.	UK, C, R, L
(ii)	Review existing non-agricultural funding mechanisms for habitat creation, restoration and management and population linkages.	UK, C, R, L
(iii)	Consider and promote expansion of funding mechanisms where gaps exist.	UK, C, R, L
(iv)	sign post Integrate widespread reptile conservation needs into landscape and ecosystem level schemes and approaches.	UK, C, R, L

Objective 2.4

Ensure effective and appropriate site safeguard.

		<i>Action Level</i>
(i)	Review the role of all designated sites for widespread reptile conservation in England, Scotland & Wales, and evaluate and refine the selection criteria. (All SAC, SSSI and Local Sites).	UK, C, R, L
(ii)	Produce a register of key sites and, where appropriate, forward site details to SNCOs, NGOs and/or local authorities for consideration as protected sites.	UK, C, R, L
(iii)	Where appropriate ensure that widespread reptiles are noted as SSSI 'interest features' to promote appropriate habitat management.	UK, C
(iv)	Pursue opportunities for site acquisition to benefit the conservation of these species.	UK, C, R, L

3. Species and Habitat Management

Objective 3.1

To maintain the range and populations of the species through favourable management of occupied sites, linking populations and the restoration and creation of sufficient new sites to compensate for local losses.

Slow-worm/ Grass snake/ Viviparous Lizard Signposted Action

Grouped Species Action – General Habitat Management: Habitat management that provides suitable basking, feeding, breeding and hibernation sites in a connected landscape for *Natrix natrix*, *Anguis fragilis* and *Zootoca vivipara* should be incorporated into agri-environment schemes, highways schemes, brownfield development plans and land management by public bodies. Such management would include (not exhaustive list), scrub management, not planting up areas with trees, grassland management to suitable heights, provision of hibernacula, provision of egg-laying sites for *Natrix natrix*, pond and water management, providing habitat connectivity.

Adder Signposted Action

Wider Action – Habitat Management: This snake would benefit greatly from recognition of its habitat and management needs at the wider landscape scale in development schemes, agri-environment, highways schemes and land management by public bodies etc. Habitat management (grassland, heathland, fen, blanket and raised bog, maritime cliff, sand dune) that provides suitable basking, feeding, breeding and hibernation sites in a connected landscape for the adder is required. Such management would include (not exhaustive list), scrub management, not planting up areas with trees, grassland management to suitable heights, provision of hibernacula, providing habitat connectivity etc.

		Action Level
(i)	sign post Produce and distribute advice on habitat management and restoration to encourage positive management of habitats and to prevent losses through mismanagement or neglect: target owners/managers of all important sites.	UK, C, L
(ii)	sign post Identify sites which have potential for restoration or creation of new habitats.	UK, C, R, L
(iii)	sign post Distribute information on grant schemes that help conserve widespread reptiles to land owners/managers and encourage uptake.	UK, C, R, L
(iv)	sign post Implement positive management.	C, R, L

Objective 3.2

Increase the number of populations and range through habitat creation and management by encouraging natural dispersal and translocation where needed.

		<i>Action Level</i>
(i)	Develop means for effective targeting of habitat creation/expansion/management using spatial planning techniques and see targets integrated into landscape level projects, sub-regional and local plans etc.	UK, C, R, L
(ii)	Encourage landowner/land manager involvement in active widespread reptile conservation e.g. via liaison through local conservation groups, distributing management advice and information on grant schemes.	C, R, L
(iii)	Translocate widespread reptiles where appropriate according to good practice (eg JNCC/IUCN guidelines): develop and promote 'best practice' for deciding when translocations are appropriate.	UK, C, L
(iv)	Undertake positive management to manage/create habitats (ponds, manage terrestrial habitat) and link sites.	C, R, L

4. Advisory and Communications

Adder Signposted Action

Single Species Action – Site Specific: Mixed public attitudes towards a venomous species and the specific habitat requirements of the adder require `single species` actions, although these may differ according to location. The priority is to raise awareness of habitat requirements of this species and consequent habitat management measures. Key to this in England and Wales is identification of hibernation sites and protection of them and appropriate management of adjacent habitat.

Objective 4.1

To ensure understanding of habitat needs and management requirements, survey, conservation objectives and legal obligations by local authorities, land managers, volunteers, conservation professionals and others to raise standards and gain their further involvement to benefit widespread reptile conservation.

		<i>Action Level</i>
(i)	Review the need for advice; produce a list of desirable publications with suggested lead organisations for their development.	UK, C
(ii)	<p>sign post ▶</p> <p>Produce and disseminate documents including:</p> <ul style="list-style-type: none"> • guidance on habitat management • guidance on legislation and its application • the re-introduction process • bio-security • pond creation and management for grass snake • amphibians, reptiles and roads publication • produce reptile mitigation guidelines • produce reptile habitat guidance manual • measures to prevent accidental killing/capture • FCS Conservation Strategies for key areas • non-native species (animals and plants). 	UK, C
(iii)	Train professionals and volunteers involved in the surveying, management and conservation of widespread reptiles.	UK, C, L
(iv)	Provide advice to landowners/managers.	L

Objective 4.2

To achieve, through publicity, media and other approaches, a wider and more sympathetic understanding of widespread reptile conservation and provide opportunities for engaging more people.

		<i>Action Level</i>
(i)	Identify main audiences and messages to be conveyed to them to further widespread reptile conservation and the appropriate mechanisms and approaches to achieve this.	UK, C, L
(ii)	Undertake activities to further the understanding of widespread reptile conservation including the provision of seminars, conferences and workshops.	UK, C, R, L
(iii)	Produce information on widespread reptile conservation, including via articles, press releases, websites, television and radio etc. to reach a wide audience.	UK, C, L
(iv)	Encourage positive interpretation material and displays about widespread reptile conservation at country parks, visitor centres and zoological gardens etc.	UK, C, L
(v)	Develop widespread reptile based environmental education initiatives.	C, L
(vi)	Provide opportunities to see widespread reptiles in the wild and their habitats.	C, L
(vii)	Encourage the appreciation of widespread reptiles, and management to benefit them in schools, gardens, allotments and similar open spaces.	C, L

5. Research and Monitoring

Objective 5.1

Understand the conservation status and distribution of all widespread reptiles and changes therein.

Slow-worm Signposted Action

Monitoring – The National Amphibian and Reptile Recording Scheme (NARRS) should be implemented and resourced to improve survey data of this fossorial species, but also to monitor population levels so that success criteria and targets can be reported against.

Grass snake Signposted Action

Monitoring – The National Amphibian and Reptile Recording Scheme (NARRS) should be implemented and resourced to determine conservation status of this species and so that success criteria and targets can be reported against.

Adder Signposted Action

Monitoring – The National Amphibian and Reptile Recording Scheme (NARRS) should be implemented to determine conservation status and investigate extent of perceived declines.

Viviparous Lizard Signposted Action

Monitoring – The National Amphibian and Reptile Recording Scheme (NARRS) should be implemented and resourced to monitor conservation status, so that success criteria and targets can be reported against.

		<i>Action Level</i>
(i)	<p>sign post ▶</p> <p>Develop monitoring and surveillance schemes to address the information needs. Further refine and develop the National Amphibian & Reptile Recording Scheme (NARRS) projects.</p> <ul style="list-style-type: none"> • Implement one-off surveys at areas of suitable habitat to determine extent of the species occurrence in the UK. (Adder). 	UK, C, R, L
(ii)	<p>sign post ▶</p> <p>Maintain and develop monitoring/surveillance networks, including via workshops/ training etc. Clarify and develop relationships between recording bodies/ organisations and establish effective mechanisms for data exchange and the flow of information.</p>	UK, C, R, L
(iii)	<p>sign post ▶</p> <p>Undertake monitoring and surveillance exercises.</p>	C, R, L

(iv)	sign post Define appropriate measurable units/descriptors of status and develop a measure of Favourable Conservation Status.	UK, C
(v)	Consider developing appropriate indicators to reflect the status of widespread reptiles.	UK, C,
(vi)	Identify threats to the species, the risks of incidental capture and killing, and the activities that give rise to them.	UK, C, R, L
(vii)	Develop recording and monitoring schemes to assess the impact of threats e.g. incidental capture/killing, and relate these to impacts on Favourable Conservation Status.	UK, C, R, L
(viii)	Promote distribution surveys amongst volunteer groups, local authorities.	UK, C, R, L
(ix)	Make distribution data collected under contract available to local/national recording schemes wherever possible.	UK, C, L

Objective 5.2

Disseminate appropriate information to stakeholders and fulfil reporting requirements.

		<i>Action Level</i>
(i)	Prepare an analysis of stakeholder information needs as part of surveillance strategy.	UK, C, R, L
(ii)	Ensure data from wide range of sources is available in an appropriate format.	UK, C, R, L
(iii)	Undertake status reporting.	UK, C, R, L

Objective 5.3

Undertake research that benefits widespread reptile conservation.

		<i>Action Level</i>
(i)	Refine list of research subjects to be addressed, and identify appropriate organisations to undertake research.	UK, C
(ii)	<p>Establish and undertake research.</p> <ul style="list-style-type: none"> • Conduct Population Viability Analyses especially as related to isolated or fragmented populations. • Increase understanding of population genetics and their significance in different contexts e.g. populations on brownfield sites, those isolated by new development etc. • Conduct one-off exercise to determine appropriate units for conservation status assessment and target setting. • Determine the population structure of the viviparous lizard (e.g. do they exist in a metapopulation structure or do occupied pockets of habitat represent discrete populations). • Conduct fine-scale (e.g. 1km) presence/absence surveys to give a better idea of species distribution and ideally a relative measure of species abundance for slow-worm. • Investigate links between the extent of the species distribution and abundance and the quality of the habitat for slow-worm. • Determine the population structure, habitat needs within total range and features within that range (e.g. egg-laying sites) of grass snakes (e.g. do grass snakes exist in a meta-population structure or do occupied pockets of habitat represent discrete populations). • Determine whether habitat quality can act as a surrogate for the presence of grass snake. • Determine the population structure of adders (e.g. do adders exist in a metapopulation structure or do occupied pockets of habitat represent discrete populations). • Determine relationship between springtime adder counts and population sizes. • Pending the answer to the above action, determine whether habitat quality acts as a surrogate for the presence of adder. 	UK, C
(iii)	Disseminate results of the research and disseminate conservation messages.	UK, C