

**A framework for the conservation
of amphibians and reptiles in the UK: 1994-1999**

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A summary of the domestic and international legislation relating to the UK's native amphibians and reptiles.

1. Introduction

- 1.1 Six amphibian and six reptile species are native to the mainland UK; of these, two amphibian and one reptile species occur in Northern Ireland. In addition, five marine turtle species have been recorded in UK waters. There are also established populations of a number of non-indigenous species.
- 1.2 This document seeks to further the conservation of native amphibians and reptiles in the UK by:
 - (i) setting out aims and objectives for the conservation of amphibians and reptiles;
 - (ii) identifying the range of actions needed; and
 - (iii) encouraging cooperation and communication to achieve more effective collaborative effort.
- 1.3 The document provides a comprehensive framework within which specific plans for action can be developed by statutory and non-statutory bodies. The twelve species of amphibian and reptile vary in status and abundance, ranging from common to rare and from widespread to highly localised. Some of the work identified as necessary will be of low priority; other work will already have been successfully implemented for some or all species.
- 1.4 The framework covers the five year period 1994 - 1999. It builds on, rather than replaces, existing policies and guidelines (e.g. Nature Conservancy Council 1983) for England, Northern Ireland, Scotland and Wales.
- 1.5 This framework has been produced after extensive consultation. The Joint Nature Conservation Committee as led in its development, but the framework should not be considered exclusive to any one organisation, nor can its full implementation be achieved by any one organisation. This document should therefore form the basis of activity for many different groups. A way of co-ordinating involvement and of avoiding duplication of effort will need to be developed.
- 1.6 The following rationale sets the context for action.

Amphibians and reptiles are important and integral parts of the UK's natural and cultural heritage, and are valuable indicators of environmental change. Their future should be safeguarded. This will require a co-ordinated approach to integrate action conservation programmes at various levels, improve and disseminate knowledge of the species, and develop effective protection mechanisms.

Partnerships should be developed to further the conservation of these species and to achieve heightened awareness and concern among a wide audience. Through these partnerships, understanding of the ecology and distribution of these species should develop, thereby ensuring that viable populations are conserved throughout their traditional ranges.

2. Overall aims

The overall aims are, through the most effective use of resources, to:

- (i) prevent further declines in the range, distribution and viability of amphibians and reptiles; and
- (ii) where feasible, enhance the distribution and abundance of amphibians and reptiles.

3. Specific objectives

Objectives for the conservation of amphibians and reptiles in the UK are:

- (i) to ascertain the existing status (distribution, abundance, trends and threats) of amphibian and reptile species and to set objectives for the desired status of each species;
- (ii) to develop survey methods, monitoring systems and data storage systems which allow efficient access to, exchange of, and use of information;
- (iii) to refine knowledge of the ecology of all species and determine the value of conservation measures, so that future conservation action can be implemented more effectively;
- (iv) to define priority measures needed to conserve amphibians and reptiles and to clarify roles and responsibilities between relevant organisations for their implementation;
- (v) to promote the development and implementation of amphibian and reptile conservation policies within statutory nature conservation authorities and other governmental bodies;
- (vi) to increase the involvement of non-governmental bodies, local authorities and individuals in the development and implementation of amphibian and reptile conservation; and
- (vii) to promote a wide and more sympathetic understanding of amphibians and reptiles.

4. Priority areas for action

Four action areas are identified below. A brief overview is presented for each, followed by a series of possible initiatives.

4.1 Science and monitoring

The distribution and ecology of all twelve species of amphibian and reptile in the UK needs to be understood, and accurate scientific information is needed to underpin advice and management guidelines. A great deal is already known about some species but this knowledge should be brought together, reviewed and disseminated. For some species, further information may be needed and differing approaches are likely to be required for different

species. Priority should be given to recording species distribution and to developing our understanding of species distribution and requirements.

4.1.1 Recording species distribution

- (i) Development of standardised survey methods, and co-ordination of survey work, are needed to improve our knowledge of distributions. Population sizes should be quantified, so that both the total national resource and the significance of individual populations can be assessed. Important assemblages of species should also be identified.
- (ii) Effective recording, updating and data storage systems should be put in place to allow effective use of information at both local and national levels.
- (iii) Surveillance systems which allow the monitoring of changes in the distribution and size of populations of all native species (and certain non-native species where appropriate) need to be put into place.
- (iv) Threats to populations should be identified, recorded and collated so that information can be evaluated at regional and national levels.
- (v) Greater use for conservation should be made of data collected through statutory licensing schemes.

4.1.2 Understanding species' requirements and distribution

- (i) Important habitat features need to be identified, including terrestrial habitat for amphibians and over-wintering habitats for reptiles.
- (ii) Further data on range size, population densities, colonisation and dispersal behaviours are required, to allow the relation of population ecology to management practices to be assessed for some species.
- (iii) The impacts of habitat management, the causal mechanisms limiting distribution, and the factors affecting population size and translocation success should be addressed where appropriate and feasible. Genetic studies, life-table and mortality analyses and predictive modelling may support much of this work.

4.2 Development of conservation targets

The definition of qualitative and quantitative targets, and national and local level, should be the basis for any conservation strategy. Targets need to take account of the broad ecological units in which individual species occur, and should be realistic. The following specific initiatives are proposed:

- (i) overall conservation objectives for all species need to be determined at national, regional and local levels; and
- (ii) conservation targets, based on the protection and suitable management of habitats and species, need to be prepared.

4.3 Conservation

Effective conservation requires both that reactive issues are dealt with successfully and that opportunities for conservation are developed. While different approaches will be needed for individual issues or species, it is important to note that co-ordinated effect is likely to yield the most success. The two priority areas for action are described below.

4.3.1 Guidance and dissemination

- (i) Knowledge of the distribution and ecology of amphibians and reptiles needs to be more widely disseminated.
- (ii) Management guidelines for all species and their habitats are desirable.
- (iii) Guidance should be available on mitigation at threatened sites, especially for rare species, to ensure consistently high standards.
- (iv) Translocation protocols and guidelines should be developed where appropriate.
- (v) Clear advice should be available on the role of captive breeding in amphibian and reptile conservation.
- (vi) Guidance on garden ponds and landscape restoration schemes should be produced and disseminated.
- (vii) The protected status of amphibians and reptiles needs to be publicised further.

4.3.2 Development opportunities

- (i) Species conservation strategies should be developed locally and nationally. Many species have common needs: for example, pond protection aimed at great crested newts will benefit many other species.
- (ii) Project, such as the Species Recovery Programmes for natterjack toad and sand lizard, should be developed to improve the status of rare species.
- (iii) The needs of amphibians and reptiles should be fully incorporated within habitat management projects, and guidelines to help this should be developed.
- (iv) Conservation projects and objectives for amphibians and reptiles need to be included within wider countryside initiatives and habitat conservation projects such as Pond Action; English Nature's National Lowland Heathland Programme; and agricultural, planning and countryside initiatives such as the EC agri-environmental regulations, the Countryside Commission's Countryside Stewardship, and MAFF's Environmentally Sensitive Areas.
- (v) Captive rearing and release projects should be evaluated and developed as appropriate.

- (vi) There should be further emphasis on education and training about amphibian and reptile conservation, through dissemination of information to wider audiences such as local planning authorities and the general public.

4.4 **Legislation**

Current legislation and conventions relevant to the UK's amphibians and reptiles are listed in the Appendix. Government ensures that legislation to safeguard habitats and species is in place, and is responsible for the designation of protected sites under international legislation. The statutory nature conservation agencies (Countryside Council for Wales, English Nature and Scottish Natural Heritage) are responsible for providing advice to Government, for the administration and promotion of conservation legislation, for aspects of licensing, and for the designation of protected sites under domestic legislation. Local authorities have an important role in implementing conservation measures, especially through the planning system. A revised guidance note on nature conservation and planning policy in England and Wales is being prepared by the Department of the Environment. Priorities for action are as follows:

- (i) The effectiveness of Part I of the Wildlife and Countryside Act 1981 and Part II of the Wildlife (Northern Ireland) Order 1985 in protecting populations of reptiles and amphibians should be reviewed.
- (ii) The success of the SSSI/ASSI system in protecting reptile and amphibian populations should be evaluated. This should include a review of the site selection guidelines and notification programmes and the databases which underpin them. The role of National Nature Reserves in amphibian and reptile conservation should be evaluated.
- (iii) Appropriate mechanisms should be developed for informing local planning authorities and conservation organisations of the presence, or likely presence, of amphibian and reptile populations and of the resulting legal implications. This is particularly necessary for sites threatened by development proposals where important populations or protected species are present. Consideration also needs to be given to the question of how far it is feasible to inform individual landowners, bearing in mind the huge number of people involved.
- (iv) The JNCC and country agencies will continue to advise Government on the implementation of its international obligations under the relevant articles of the Bern Convention and EC Habitats Directive (EC92/43).
- (v) Preventing breaches of the law is preferable to enforcement; however, effective legislation requires scope for enforcement. Liaison between the country nature conservation agencies and law enforcement agencies should be further developed.
- (vi) Clear guidance about legislative provisions and their application needs to be developed and disseminated.

5. **Implementation**

- 5.1 This document provides a framework and direction for developing amphibian and reptile conservation in the UK. It is not a programme for any single organisation. Success will depend upon co-operation between a wide range of statutory and non-

statutory bodies, who will need to agree on responsibilities, priorities and implementation plans. Active partnerships between organisations are essential.

- 5.2 People outside the established conservation organisations should be encouraged to become more involved in herpetological conservation. More information about amphibians and reptiles should be made available, to widen understanding and appreciation of their interest and importance.

6. **Reference**

Nature Conservancy Council. 1983. *The ecology and conservation of species of amphibian and reptile endangered in Britain*. Peterborough.

Appendix

A summary of the domestic and international legislation relating to the UK's native amphibians and reptiles

The summaries of legislative requirements given in this Appendix should be used as guidance only. Reference should be made to the appropriate document when a full definition is required.

A1 Wildlife and Countryside Act 1981

Part I Section 9 of the Act states that it is an offence to do the following to any species of wild animal included in Schedule 5:

Section 9, subsection (1) - intentionally [a] kill, [b] injure or [c] take the species;

Section 9, subsection (2) - to be in possession or control of a live or dead specimen, or any part of a specimen;

Section 9, subsection (4) - intentionally damage or obstruct access to any place of shelter or protection or disturb the animal whilst occupying such a place of shelter or protection;

Section 9, subsection (5) - sell any live or dead specimen.

The following species are on Schedule 5:

Specific name	Common name	Section 9 subsections pertaining
<i>Vipera berus</i>	Adder	1a, 1b & 5 only
<i>Natrix natrix</i>	Grass snake	1a, 1b & 5 only
<i>Coronella austriaca</i>	Smooth snake	All
<i>Lacerta agilis</i>	Sand lizard	All
<i>Lacerta vivipara</i>	Common lizard	1a, 1b & 5 only
<i>Anguis fragilis</i>	Slow worm	1a, 1b & 5 only
<i>Rana temporaria</i>	Common frog	5 only
<i>Bufo bufo</i>	Common toad	5 only
<i>Bufo calamita</i>	Natterjack toad	All
<i>Triturus cristatus</i>	Great crested newt	All
<i>Triturus helveticus</i>	Palmate newt	5 only
<i>Triturus vulgaris</i>	Smooth newt	5 only
<i>Dermochelys coriacea</i>	Leatherback turtle	All
<i>Cheloniidae</i>	Sea turtles	All

Further site-specific protection is afforded by Part II of the Act, under which the country nature conservation agencies can designate areas as SSSIs if they are of the opinion that the land is of special interest by reason of its flora or fauna.

Part 1, Section 14 of the Act states that it is an offence to release or allow to escape into the wild any non-resident species, and any included on Schedule 9.

The following amphibian and reptile species are on Schedule 9:

Specific name	Common name
<i>Emys orbicularis</i>	European pond terrapin
<i>Podarcis muralis</i>	Common wall lizard
<i>Elaphe longissima</i>	Aesculapean snake
<i>Triturus alpestris</i>	Alpine newt
<i>Triturus carnifex</i>	Italian crested newt
<i>Bombina variegata</i>	Yellow-bellied toad
<i>Alytes obstetricans</i>	Midwife toad
<i>Rana esculenta</i>	Edible frog
<i>Rana ridibunda</i>	Marsh frog
<i>Hyla arborea</i>	European tree frog

It should be noted that the Isle of Man and the Channel Islands are not covered by the Wildlife and Countryside Act. Northern Ireland has its own legislation, as outlined below.

A2 The Wildlife (Northern Ireland) Order 1985

Part II Article 10 is similar to Part 1 Section 9 of the Wildlife and Countryside Act, and states that it is an offence to do the following to any species of wild animal included in Schedule 5:

Section 10, subsection (1) - intentionally [a] kill, [b] injure or [c] take the species;

Section 10, subsection (2) - be in possession or control of a live or dead specimen, or any part of a specimen;

Section 10, subsection (4) - intentionally damage or obstruct access to any place of shelter or protection or disturb the animal whilst occupying such a place of shelter or protection;

The following reptile and amphibian species are on Schedule 5:

Specific name	Common name	Section 9 subsections pertaining
<i>Lacerta vivipara</i>	Common lizard	All
<i>Triturus vulgaris</i>	Smooth newt	All

Part II Article 13, subsection (1) of the Act makes it an offence to sell any live or dead specimen listed on Schedule 7.

The following species are on Schedule 7:

Specific name	Common name
<i>Lacerta vivipara</i>	Common lizard
<i>Triturus vulgaris</i>	Smooth newt
<i>Rana temporaria</i>	Common frog

There is further site-specific protection afforded under the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985, Article 24, which allows for the designation of Areas of Special Scientific Interest (ASSIs).

Part II Article 15 of the Act states that it is an offence to release or allow to escape into the wild any non-resident species, and any included on Schedule 9.

No amphibian or reptile species are on Schedule 9.

A3 Other national legislation

Several other Acts are relevant in some respects to herpetological issues, e.g. the Dangerous Wild Animals Act 1976 and the Animals (Scientific Procedures) Act 1986. These are administered by a range of government departments.

A4 Bern Convention

The UK is a signatory to the *Convention on the conservation of European wildlife and natural habitats* (the Bern Convention), which makes provision for the protection of species, and places obligations on the UK in respect of implementation.

Article 2 requires that measures are taken to maintain populations of wild flora and fauna, whilst taking account of economic and recreational requirements. Article 6 seeks to ensure special protection for species listed in Appendix II of the Bern Convention. Article 7 seeks to ensure protection of species in Appendix III of the Bern Convention, and that their exploitation is regulated. Article 8 prevents the use of indiscriminate means of capture. Article 10 requires the co-ordination of effort between signatory states to protect migratory species. These appendices are implemented in the UK by the Wildlife and Countryside Act 1981 and the Wildlife (Northern Ireland) Order 1985.

The following species are on Appendices II and III:

Specific name	Appendix II	Appendix III
<i>Vipera berus</i>		*
<i>Natrix natrix</i>		*
<i>Coronella austriaca</i>	*	
<i>Lacerta agilis</i>	*	
<i>Lacerta vivipara</i>		*
<i>Anguis fragilis</i>		*
<i>Rana temporaria</i>		*
<i>Bufo bufo</i>		*
<i>Bufo calamita</i>	*	
<i>Triturus cristatus</i>	*	
<i>Triturus helveticus</i>		*
<i>Triturus vulgaris</i>		*
<i>Dermochelys coriacea</i>	*	
<i>Caretta caretta</i>	*	
<i>Lepidochelys kempii</i>	*	
<i>Chelonia mydas</i>	*	
<i>Eretmochelys imbricata</i>	*	

A5 EC Habitats and Species Directive

EC Directive 92/43 on the *Conservation of natural habitats and of wild fauna and flora* (the 'Habitats Directive'), adopted in May 1992, requires the conservation of habitats and of wild flora and fauna of community interest.

Articles 3, 4 and 6 require the designation and conservation of Special Areas of Conservation (SACs) for species listed on Annex IIa. Article 10 requires the UK to encourage the management of linear features. Article 11 requires the surveillance of species on Annexes IIa, IVa and Va. Article 12 requires strict protection of species on Annex IVa, prohibiting keeping, transport, etc., and requires the monitoring of any killing/capture; it also includes an obligation to take steps to prohibit habitat destruction and/or deterioration. Article 14 requires that the taking of species on Annex Va be compatible with the maintenance of their conservation status. Article 15 restricts the use of indiscriminate methods of killing of species on Annex Va.

The requirements for species on Annexes IV and V are currently implemented by the domestic legislation of the Wildlife and Countryside Act 1981.

The following species are on Annexes IIa, IVa and Va:

Specific name	Annex IIa	Annex IVa	Annex Va
<i>Triturus cristatus</i>	*	*	
<i>Rana temporaria</i>			*
<i>Bufo calamita</i>		*	
<i>Lacerta agilis</i>		*	
<i>Coronella austriaca</i>		*	
<i>Dermochelys coriacea</i>		*	
<i>Caretta caretta</i>		*	
<i>Lepidochelys kempii</i>		*	
<i>Chelonia mydas</i>		*	
<i>Eretmochelys imbricata</i>		*	

A6 International trade

The *Convention on International Trade in Endangered Species* is implemented in the UK through EC Directive 3626/82. The leatherback and other sea turtles are listed on Appendix I of CITES. Under that Appendix, introduction from the sea of either live or dead specimens is prohibited for commercial purposes and is only allowed where it benefits the conservation of the species.

The Joint Nature Conservation Committee is a forum through which the three country nature conservation agencies, the Countryside Council for Wales, English Nature and Scottish Natural Heritage, deliver their special statutory responsibilities for Great Britain as a whole and internationally. These special responsibilities, known as the special functions, contribute to sustaining and enriching biological diversity, enhancing geological features and sustaining natural systems. The special functions are:

- to devise and maintain common standards and protocols for nature conservation;
- to promote, through common standards, the free interchange of data between the country agencies and with external partners;
- to advise on nature conservation issues affecting Great Britain as a whole;
- to pursue wider international goals for nature conservation (encouraging sustainable development, biological diversity and earth science conservation), including the provision of relevant advice to the Government;
- to commission new research and collate existing knowledge in support of these activities, and to disseminate the results.

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HCT -	The Herpetological Conservation Trust
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EN -	English Nature
SNH -	Scottish Natural Heritage
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