

11.4 AMPHIBIANS

Application (all amphibian guidelines)

These guidelines are aimed at identifying and selecting important amphibian sites excluding domestic gardens. As well as the presence and absence of species the guidelines also utilise estimates of population sizes. These are based on the guidelines for the selection of SSSIs (JNCC, 1998). To rely on count data, information should be gathered by experienced personnel. Data should be available on three consecutive years.

The designation of sites should attempt to include both aquatic and terrestrial habitats of importance. Consequently as well as breeding ponds sites should include adjacent habitat known or likely to be used by the amphibian species for which the site is designated. Hibernating sites should be included wherever possible.

Where there are clusters of ponds that all contribute to maintaining a meta-population of an amphibian species they can all be included potentially as one site. The ponds should not be separated by any obvious barriers and preferably connected by suitable amphibian terrestrial habitat. In general water bodies within 100 metres of each other should be lumped together as a cluster. Where there are isolated ponds within 500 metres of the cluster they could also be considered for inclusion if they are connected by amphibian terrestrial habitat, known to be used or likely to be used by amphibians.

Justification (all amphibian guidelines)

All amphibian species are believed to have declined significantly over Britain in recent years, largely as a result of habitat loss and pollution. Derbyshire remains an important county for amphibians and has records of five native amphibians. The common frog and toad are widely distributed within the county, although their main breeding habitats (ponds) are threatened by infilling, lack of management and processes of natural succession. The smooth newt is relatively common across Derbyshire except in the Dark Peak where the palmate newt is more frequent. The great-crested newt is well established in parts of the White Peak Natural Area but has a scattered distribution in the east and south of the county.

The protection of the best breeding sites and associated terrestrial habitat is justified for all species.

Amphibian Selection Guidelines

Sites that meet one or more of the following guidelines will be eligible for designation as a Wildlife Site.

Am1 Any site that regularly supports four or more species of amphibian native to Derbyshire.

Application

Sites identified under this heading should exclude garden ponds, swimming pools and any known introduced populations. The boundary of the site should also include an appropriate amount of adjacent land for hibernation and foraging.

Justification

The presence of four or more amphibian species is considered to be a significant assemblage of amphibians for Derbyshire.

Am2 Any site which scores 7 or more from table 10 on its amphibian species assemblage.

Application

To determine the amphibian assemblage score reference should be made to Table 10. The scores have to be for breeding sites surveyed during the breeding season. Daytime netting should be made during a 15 minute period for sites for every 50 metre of water's edge. To compute the total score, add the scores for individual species. Add one point for three species being present.

Justification

Six species of native amphibian are recorded from the UK. All of which have declined in the UK over the last 50 years as a result primarily of habitat loss. As well as number of species the number of individual amphibians is also important in assessing the value of a site for amphibian species.

Table 10: A scoring system for the selection of sites with assemblages of amphibians. (derived from JNCC 1998 and NCC, 1989).

| Species | Method | Low population Score 1 point | Good population Score 2 points | Exceptional population Score 3 points |
|---------------------|----------------------|---------------------------------|--------------------------------------|---|
| Great crested newts | See/netted in day | <5 | 5-50 | >50 |
| | Counted at night | <10 | 10-100 | >100 |
| Smooth newt | Netted in day | | | |
| | Counted at night | <10 | 10-100 | >100 |
| Palmate newt | Netted in day | | | |
| | Counted at night | <10 | 10-100 | >100 |
| Common toad | Estimated | <500 | <500-5,000 | >5,000 |
| | Counted | <100 | <100-1,000 | >1,000 |
| Common frog | Spawn clumps counted | <50 | 50-500 | <500 |

Am3 Any site that supports a good population of Great Crested Newt.

Application

Any site is eligible provided a 'good' population as defined in Table 10 is satisfied. The sites may consist of one or more water bodies as described above.

Justification

The Great Crested Newt is a species of European importance (Natural Habitats etc Regulations) and sites supporting the species should be protected.

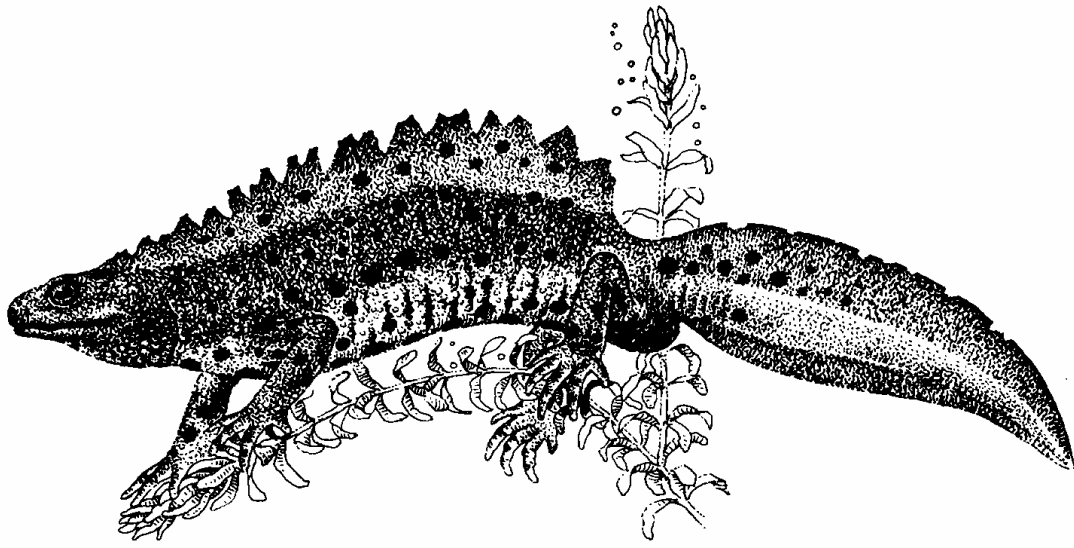
Am4 Any site which regularly supports an 'exceptional' population of any amphibian species.

Application

An exceptional population will be determined by reference to Table 10.

Justification

Six species of native amphibian are recorded from the UK. All of which have declined in the UK over the last 50 years as a result primarily of habitat loss. The presence of an exceptional assemblage of an amphibian species is rare and merits protection.



Great Crested Newt

11.5 REPTILES

Application

These guidelines are aimed at identifying and selecting important reptile sites excluding domestic gardens. As well as the presence and absence of species the guidelines also utilise estimates of population sizes.

The designation of sites should attempt to include both aquatic and terrestrial habitats of importance e.g. for grass snake. Consequently as well as foraging and breeding habitat sites should include adjacent habitat known or likely to be used by the reptile species for which the site is designated. Hibernating sites should be included wherever possible.

Justification

Derbyshire has records of four native reptiles in the county, the adder, the common lizard, the slow worm and the grass snake. The slow worm is sparsely distributed in the county but there is concentration of records around Little Eaton, Ambergate and Matlock. Adder populations are rare in Lowland Derbyshire with only one population currently known. The common lizard is widely distributed but less common in the south and the east of the county. Grass snakes are found in the east and south often associated with river and canal corridors, but also with waterbodies that support abundant amphibians upon which to prey.

All of these four species are protected under the Wildlife and Countryside Act 1981 (as amended). Under Section 9 and Schedule 5 it is illegal to kill or injure them or sell any live or dead reptile or anything derived from it such as the skin. However, this does not protect the habitat that the reptiles live in and use for foraging.

The identification of site boundaries should take account of the area of habitat used by the species throughout the year. In particular, hibernation sites and favoured feeding habitat should be included.

The slow worm, grass snake and the adder as listed as Species of Conservation Concern in the UK BAP, due to the loss of habitat. The common lizard is listed as a Local species in the Lowland Derbyshire BAP (DLBAP Technical Working Group 2001).

Reptile Selection Guidelines

Sites that meet one or more of the following guidelines will be eligible for designation as a Wildlife Site.

Rep1 Any site that supports an established and viable population of one or more of the following reptile species:

Grass snake

Common lizard

Slow worm

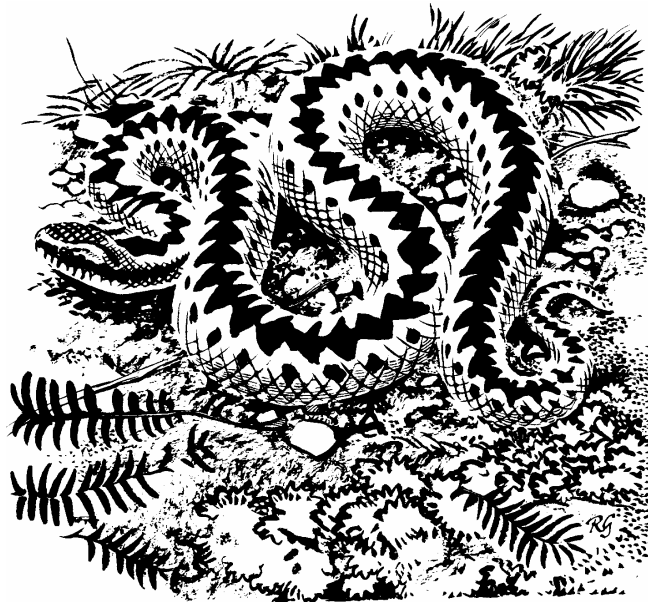
Adder

Application

Site boundaries should take account of habitat area utilised by these species at all times of year where they contribute to the essential requirement of the species e.g. hibernating habitats. For a population to be considered as established and viable there should be recent records for 3 out of the last 5 years.

Justification

All of these reptiles are considered to have declined in Derbyshire and are now relatively rare in Lowland Derbyshire. It is important that established populations are protected in order to maintain current distribution.



Adder

11.6 FISH

There are about 60 species of British fish of which about half have been recorded from Derbyshire. Many of these are widespread nationally and in Derbyshire, but seven species are believed to be uncommon in Derbyshire. Of these salmon, barbel and bleak are expanding their range or maintaining established populations and are therefore not considered under these guidelines.

Fish Selection Guidelines

Sites that meet one or more of the following guidelines will be eligible for designation as a Wildlife Site.

Fi1 Any stretch of watercourse that supports a native population of fish listed in Annex 2 of the EC Habitats Directive that is either

- a) recorded from 5 or fewer sites in Derbyshire or
 - b) from more than 5 sites in Derbyshire where the site makes a significant contribution to the distribution of the species or the total population size in the county.
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Application

This guideline should be applied to all watercourses that regularly support these species. The boundaries of the designated area should include these sections of the river important for the development of fry, migration and spawning. The determination of a 'site' requires further data analysis. Sites should be designated in consultation with the Environment Agency.

Justification

These species are noted as of importance in the European context in the Conservation (Natural Habitats etc) Regulations. Consequently, populations of these species should be protected, especially where they are sparsely located.

Fi2 Any stretch of watercourse that regularly supports a native population of one of the following species: -

Brook lamprey
Silver bream
Spined loach
Ten-spiked stickleback

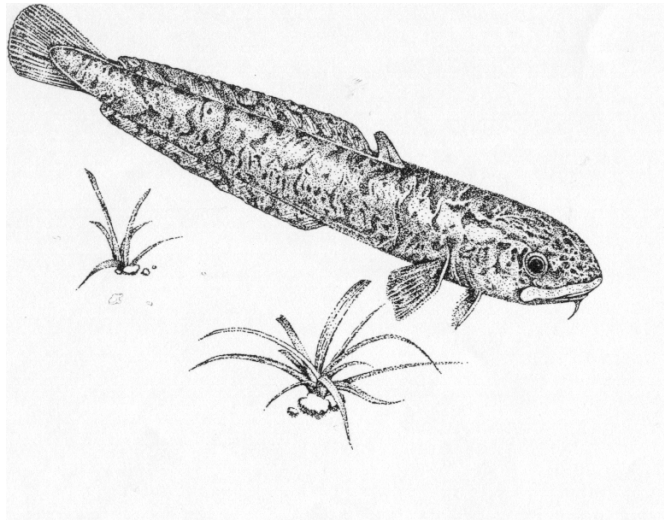
Application

The boundaries of the site should attempt to include key areas of habitat required for feeding, spawning, migration and the development of fry. The ten-spined stickleback is thought to be under-recorded and up to date information on its conservation status and

national and local distribution should be sought as part of any designations related to this species.

Justification

These fish are nationally or locally rare and merit protection to avoid further declines.



Burbot (Extinct in the UK. Once present in River Trent)