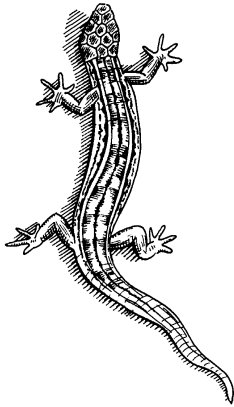


# Protected Reptiles and Development



## Introduction

This leaflet has been prepared by Kent Reptile and Amphibian Group, Kent Wildlife Trust and English Nature as information for anyone dealing with development proposals which might affect reptiles. The leaflet provides background on the legal status of British reptiles, and a checklist by which any proposed survey or mitigation work may be assessed. It should be noted that the recommendations in this leaflet represent current best practice and that they are not statutory requirements. However, following the recommendations will normally ensure compliance with current legislation.



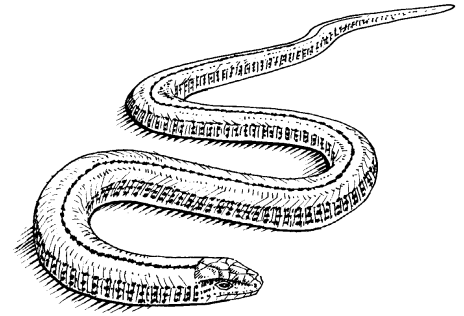
## Background

Adder *Vipera berus*, grass snake, *Natrix natrix*, slow-worm *Anguis fragilis* and viviparous lizard *Lacerta vivipara* all occur in Kent and are all protected, under the Wildlife and Countryside Act 1981 (as amended), against intentional killing or injury. In practice, this means that a developer would be expected to take all reasonable steps to prevent the killing or injury of reptiles that might result from development work or from any associated activities. This not only applies to sites where reptiles are already known to occur, but to any site where they might reasonably be expected to occur.

Grass snake, slow-worm and viviparous lizard are all widespread and may even be abundant in suitable habitats in Kent. Adder is a less common species, occurring in Kent primarily on the North Downs but with scattered populations elsewhere in the county.

The following checklist identifies the steps which should be followed in any planning application in order to ensure compliance with current best practice. Any report which accompanies a planning application and which deals with reptiles, or protected species in general, should clearly show that

- All necessary steps have been followed, and
- Work for reptiles has been carried out in accordance with the guidance from Herpetofauna Groups of Britain and Ireland (HGBI) contained in the leaflet *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*.



## Has consideration been given to protected species?

- Consideration should be given to protected species, including reptiles, in the assessment of any planning application.

## Has there been a search for existing records?

- Kent Reptile and Amphibian Group should be contacted for any existing records of reptiles within the site of any proposed development and the local area.

## Is there a need for a survey for reptiles?

- There should be a dedicated survey for reptiles if the development site, or land close to the site, supports any suitable habitat. This would generally include any grassland (with the exception of closely mown amenity grassland or closely grazed pasture), scrubby grassland, open scrub, open woodland, mature gardens, old building bases, piles of fly tipping, and scrubby brownfield land adjacent to such habitats (including river banks and grassy road verges).

## Has the survey effort been adequate?

- To determine presence or likely absence of reptile species, there should be a minimum of SEVEN survey visits between mid/late March and late June and/or between late August and late September during appropriate weather conditions (see Foster & Gent, 1996 or *Froglife Advice Sheet 10: Reptile Surveys* for

guidance). Visits in late August/September are particularly useful to confirm whether breeding takes place on the site, as young animals are most likely to be detected at this time.

- To allow a relative population estimate to be made, there should be a minimum of twenty survey visits within the relevant period(s) and during appropriate weather conditions (see Foster & Gent, 1996 or *Froglife Advice Sheet 10: Reptile Surveys* for guidance).

### **Has an appropriate methodology been used?**

- The most important survey methods for detecting reptiles are
  - Walk-over surveys in appropriate weather conditions;
  - Searching natural or other existing refugia; and
  - Searching artificial refugia placed in suitable locations for the purpose of survey.
- Artificial refugia should always be used unless the site suffers a high level of uncontrollable disturbance.
- Artificial refugia should be
  - Made of a range of materials, not just roofing felt (as this may not attract adders or large adult grass snakes);
  - Be at least 0.5m<sup>2</sup> (70cm by 70cm) in size, and ideally larger; and
  - Be set out at a density of at least ten per hectare.
- More detailed information these survey techniques can be found in *Froglife Advice Sheet 10: Reptile Survey*

### **Have the results been presented properly?**

- Reports on reptile surveys should ideally present
  - The raw data obtained from each survey method used; and
  - The maximum number of adults of each species found during any one visit.
- If there were at least twenty survey visits between mid/late March and late June and/or between late August and late September, then populations can be classed as 'low', 'good' or 'exceptional' according to the criteria set out on Page 9 of *Froglife Advice Sheet 10: Reptile Surveys*. Otherwise, no judgement about population size should be made.

### **Have hibernation sites been identified?**

- The impact of development on reptile hibernacula can be critical to their survival on a site. This is particularly true of snakes, and especially of adders, which have high site fidelity. Survey reports should therefore make at least some reference to known, suspected or potential hibernacula.

### **Have appropriate recommendations been made regarding the need for mitigation?**

- Any proposals for mitigation should follow the guidance contained in *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*.
- The level of capture effort proposed should be in accordance with Table 2 in *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*.
- Capture depletion curves are sometimes used as a way of judging that most animals on a site have been trapped and removed. Care is needed in the interpretation of these curves, as reptile activity is seasonal and varies with weather conditions, and rates of capture would be expected to drop in midsummer and in autumn and at other times when weather conditions are unsuitable.
- Where habitat creation is proposed to replace that lost to development, then this replacement should normally be like-for-like and area-for-area as an absolute minimum. In some circumstances, it may be acceptable to create an area of habitat smaller than that lost, but only if the replacement habitat is of higher quality.

- Where animals are being translocated off site, the receptor site
  - Must be a suitable habitat for the species concerned, in terms of available foraging habitat, refuges and hibernacula;
  - Must NOT have an existing population of the species concerned; AND
  - Must be safe from any future development.
- In exceptional cases, it may be possible to translocate animals to a site which already supports a population of the species concerned IF the site is only marginally suitable for that species AND is capable of being improved in order to increase the carrying capacity for the species.
- Translocation of snakes is to be avoided where possible, as it appears that they will attempt to return to their home sites.
- Particular care is required when dealing with adder, which is a scarce and threatened species in Kent.

### **Has appropriate monitoring been proposed?**

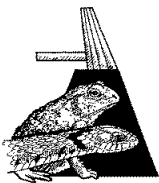
- All mitigation projects should be subject to at least medium-term monitoring to ensure they are achieving their aims. Appropriate monitoring will record the continued presence of translocated animals and record breeding success for at least one full season following translocation.
- Summary results of monitoring programmes should be made available at the end of each season to all interested parties, including Kent Reptile and Amphibian Group and Kent Wildlife Trust.

### **References**

Foster, J and Gent, T (eds.) (1996) *Reptile survey methods*: proceedings of a seminar held on 7 November 1995 at the Zoological Society of London's meeting rooms, Regent's Park, London. English Nature Science Report no. 27. EN, Peterborough.

*Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*. This document can be downloaded from the HGBI website [www.froglife.fsnet.co.uk/HGBI/HGBI.htm](http://www.froglife.fsnet.co.uk/HGBI/HGBI.htm).

*Froglife Advice Sheet 10: Reptile Survey*. See the Froglife website [www.froglife.fsnet.co.uk](http://www.froglife.fsnet.co.uk) for details of how to obtain this publication.



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