

Reptiles

Do I need a reptile survey?

Any development where there is a reasonable likelihood of reptiles being present and affected by the development will require a survey by a suitably experienced ecologist.

Reptiles are found in a variety of habitats including heathland, rough/rank grassland, allotments and gardens, scrubby areas, brownfield sites, wetlands (grass snakes) and hedgerows adjacent to the aforementioned habitats.

Examples of suitable reptile habitat



Development involving removal of tussocky (rough) grassland, wet grassland, flower rich grassland or heathland will require a reptile survey. However, this list is not exhaustive and reptiles may be present in the habitats listed above.

If reptiles are likely to be present, planning authorities will require a report indicating:

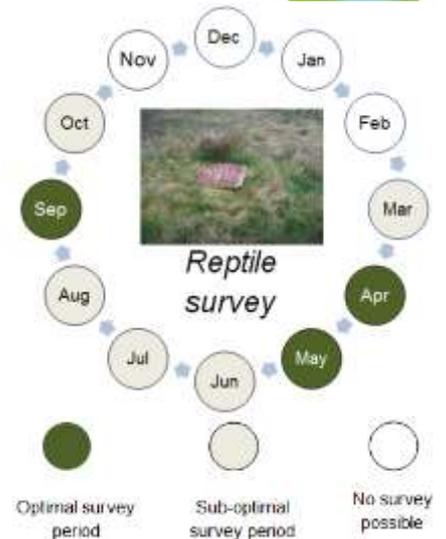
- Details of habitats where reptiles might be present;
- Survey methods undertaken to investigate potential presence of reptiles;
- Evidence of reptiles found;
- The predicted impact that the proposal is likely to have on reptiles and what can be done by way of mitigation;
- Consideration of whether the impact is necessary or acceptable.

Ecology, field signs and survey



There are six native reptiles found in the UK. These include:

- Adder (*Vipera berus*) – prefers heathland but may also be found in grassland and woodland edge habitats
- Common (or viviparous) lizard (*Zootoca vivipara*) – found in heathland and grassland
- Grass snake (*Natrix natrix*) – found in heathland, grassland and wetlands
- Slow worm (*Anguis fragilis*) – found in heathland, grassland and patchy scrub
- Smooth snake (*Coronella austriaca*) – only known to be present on a small number of heathland sites in southern England
- Sand lizard (*Lacerta agilis*) – found on heathland and sand dune habitats.



Reptiles are cold-blooded vertebrates. Most lay eggs (except adder and common lizard which give birth to live young and slow worm which retains its eggs internally, giving birth to young within a thin egg membrane that is almost immediately ruptured). Their bodies are covered in scales and they shed their skin at least once a year. Being cold blooded, they rely on the sun or warm objects to control their body temperature, and favour open sunny spots to 'bask' and warm up. All UK reptiles hibernate during the winter in places such as underground, in burrows or under logs and rocks, usually between October and March.

Surveying for reptiles includes two methods:

- Direct observation - involves searching areas favoured by reptiles, e.g., scrubby areas, rough grassland, under logs or rubbish, etc.
- Refuge survey - using artificial refugia, usually consisting of 0.5m² pieces of mineral roofing felt or corrugated metal, spread over areas likely to be used by reptiles.

Reptile surveys are dependent upon suitable weather conditions, when they are likely to be actively basking. Current survey guidelines are available in [Froglife Advice Sheet 10 – Reptile Survey](#), although Natural England is currently producing technical guidance on reptile surveys, so it is advised to check their [website](#) and [Standing Advice for Reptiles](#) for any updated guidance.

The amount of reptiles found and species present can be used to consider the importance of the site and whether it is a 'key' reptile site. This will also inform appropriate mitigation (see below).

Legislation and licensing

Under the the [Wildlife and Countryside Act 1981 \(as amended\)](#) it is an offence *inter alia* to deliberately kill or injure, trade or sell any reptile.

The smooth snake and sand lizard receive additional protection under the [Conservation of Habitats and Species Regulations 2010 \(as amended\)](#) making them [European Protected Species \(EPS\)](#).

Avoidance and mitigation measures

Avoidance

Where reptiles are present, measures must ensure that they are protected from harm during development work and there is sufficient quality and quantity of habitat to maintain the favourable conservation status of reptile populations on or off-site. Options may include:

- design to avoid areas used by reptiles;
- encouraging reptiles to leave the development area through management of habitats, e.g., careful strimming of long grass areas. This is best done when reptiles are in hibernation and should only be done where there is suitable adjacent habitat for them to move to;
- capture of reptiles and exclusion from the development site using reptile fencing.

Mitigation

This may be required in advance of development commencing, and may involve:

- onsite habitat enhancement, including habitat creation (e.g. reptile hibernacula) in areas not being developed;
- selection and management of a suitable receptor site (preferably adjacent to the development site) for translocation of reptiles;
- capture and exclusion of reptiles to a suitable receptor site (weather and time dependent);
- post-development monitoring of populations.

If smooth snake or sand lizard are affected, a European protected species licence will be required, although this is unlikely, as these species are most often found in Special Areas of Conservation, which receive the highest level of ecological site protection.



Where should I go for further information?

- Natural England (2012) Standing Advice Species Sheet – [Reptiles](#)
- Natural England (2004) [Reptiles: guidelines for developers \(IN151\)](#)
- [Amphibian and reptile groups of the UK \(ARG\)](#)
- [Froglife](#)

Important note

Legislation, survey guidelines, species distribution and best practice mitigation may be subject to change and this note may not necessarily include the latest information. It is therefore recommended that other sources of information be consulted or professional advice sought as necessary.