



Cyngor Cefn Gwlad Cymru  
Countryside Council for Wales

# Badgers:

## Guidelines for developers



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Countryside Council for Wales,  
Maes y Ffynnon, Penrhosgarnedd, Bangor,  
Gwynedd LL57 2DW  
Enquiry line: 0845 1306 229

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# Badgers: Guidelines for developers

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## Introduction

Badgers are among Britain's best loved wild mammals but, due to their mainly nocturnal habits, they are seldom seen except as road casualties. The grey coat and striking black and white head makes the badger instantly recognisable, but little is generally known about the animal's lifestyle and biology. This is gradually changing as most areas of Wales now have voluntary badger groups established to promote better understanding of the animal and to assist with scientific recording and research into its needs and habits. In many areas these groups may also assist developers by giving advice and guidance.

Understanding some facts about badgers can help to identify ways in which badgers and developments may co-exist while meeting the welfare aspects of current badger legislation.

This booklet is intended as a basic guide for developers and should not be used as a substitute for professional advice where badgers are affected by development.

## Biology and lifestyle

Adult badgers grow up to a metre long and males can weigh up to 14kg. They accumulate fat reserves in late summer and autumn and lose weight over the winter. Their powerful jaws and sharp teeth belie their most common food which is earthworms (up to 200 in a single meal!). But a whole range of grains, acorns, insects and fruit is eaten when available.

Badgers live in family or social groups of related mature and young adults and cubs, sometimes known as clans, and each group will fiercely defend a territory which contains water and a variety of food sources which support the family throughout the year. Serious injury can occur between badgers fighting in defence of territory.

Within their territory badgers live in a number of underground tunnel systems – setts – which

provide safety and shelter from the weather. Some setts are always occupied and are also used for breeding and raising young in the winter and spring. These are main setts which can be very extensive. Some have over forty entrances, others as few as two. Some main setts are extremely ancient, having been in use for many centuries. Badgers are very loyal to these setts and will often continue to occupy them despite considerable disturbance.

There are other types of setts which are classified as annex, subsidiary, or outlier setts according to how they are used and how important they are to the social group. These setts may be occupied seasonally rather than being used throughout the year.

Badgers have powerful claws and legs with which they can dig and move earth. Opening up

new setts and maintaining and extending old setts is a constant occupation, with bursts of even greater activity at certain times of the year. The pattern of setts and their use can therefore steadily change over the years, or very quickly in response to short term problems such as drought or flood.

Badgers do not hibernate but they often stay below ground for long periods in winter, especially during very cold or wet weather.

Badgers mate throughout the year but pregnancy starts around the end of November, or early December, when the previously fertilised cells implant into the sow's uterus. Often only the most dominant sow in a family group will produce cubs, usually two or three per litter. These are born underground usually towards the end of January or beginning of February, emerging for the first time after about 8 weeks. The cubs remain dependent upon

the sow for a further few weeks until they are weaned and learn how to fend for themselves.

For these reasons, disturbing badgers and damaging setts should be avoided completely between December and June inclusive.

Badgers are creatures of habit. They tend to use the same pathways to foraging areas and will continue to try to do so despite any obstacles which are placed in their way. New fences may be broken down and new roads crossed despite any difficulty, or danger presented.

## Badgers and the planning system

Developers need to be aware that planning authorities are required to take account of protected species and habitat conservation when they consider planning applications.

It is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development is established before the planning permission is granted.

Guidance to local planning authorities on the consideration of protected species in the planning process is captured in Planning Policy Wales Technical Advice Note 5 – Nature Conservation and Planning (Welsh Assembly Government September 2009)

CCW licenses sett interference only after full planning permission has been granted so that there is no conflict with the planning process.



## Badgers and the law

The law protecting badgers is based primarily on the need to protect badgers from baiting and deliberate harm or injury. It also contains restrictions which apply more widely and it is important for developers to know the ways in which this may affect their work. The following is a summary of the offences contained in The Protection of Badgers Act 1992. The Act itself should always be referred to for the exact wording. The following are criminal offences:

- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- To intentionally or recklessly interfere with a sett, by:
  - Damaging or destroying a sett or any part of it
  - Obstructing access to, or any entrance of, a badger sett;

- Disturbing a badger when it is occupying a sett.

Developers should take care when carrying out any work near setts as offences can result from both reckless and intentional damage, disturbance or destruction.

A badger sett is defined in the legislation as “any structure or place which displays signs indicating current use by a badger”. Some badger setts, such as outlier setts, may be used seasonally and CCW takes the Badgers Act definition to include such seasonally used setts. Before a sett can be damaged or closed without a licence it would have to be demonstrated that the sett had been abandoned by badgers and is not just currently unoccupied. Monitoring for a period of up to 12 months may be needed to demonstrate this.

There are offences other than those mentioned above, but they cover the deliberate persecution of badgers and are not applicable to land development. In addition the Act contains several defences to persecution, which include mercy killing and unavoidable injury to badgers and damage to setts in certain circumstances.

Penalties for infringing the law can be severe and fines of up to £5,000 plus up to six months imprisonment can be levied by a court for each sett interference, or badger death or injury, which results from illegal or reckless activity. The legislation however recognises the need for a whole range of activities to be carried out and allows licences to be granted for certain purposes permitting work which would be otherwise illegal.

CCW is the licensing authority for activities which will result from land development and for preventing damage to scheduled monuments. For licenses

relating to agriculture or forestry operations, preventing damage to property the appropriate authority is the Welsh Government.

## What should you as a developer consider?

An understanding of badger biology can help developers to reduce the effects that their proposals may have on resident badgers. CCW recommends that when any protected species is found on site early advice is sought from professional consultants, or from local experts, as this can prevent costly delays at a later date. Some of the situations encountered may

require complex mitigation which needs to be considered within the development budget and which may affect the time of year when certain works can be carried out. Where badgers are living at low densities, particularly in urban areas, the usual pattern of territories and setts can break down and this can make studying badgers very difficult in these situations.



The following advice and sound working practices need to be considered in the light of proposed building work.

### Planning your work:

Any scheme proposed to offset the effects of development must be based on competent advice and, where necessary, survey carried out at the correct time of year, with sufficient effort to provide reliable information.

Observations may be necessary over a period of time before insight can be gained into how badgers are using a site. The best time to undertake a badger survey is in the spring when badgers are particularly active but the vegetation is not so dense as to cover field signs.

Bait marking is a useful technique to determine the territory boundaries of badgers. Badgers are fed coloured pellets in food at the main sett and these are then located in dung

pits on the boundaries of their territory. Badgers of different social groups can be fed different coloured pellets. The need for bait marking will depend on whether the additional information is needed to inform consideration of the proposal.

At times, particularly in winter, it is often extremely difficult, even for the experts, to tell whether or not a sett is occupied. For this reason, and due to the possible presence of a pregnant or nursing sow with cubs and the reluctance of the badger to emerge for long periods in winter, sett exclusion and destruction is nearly always limited to July to November inclusive.

Large development schemes should take into account the effect the work will have on the territory of each badger social group and the number of setts which may be lost. If feeding territory is lost, measures should be taken to create or enhance

remaining areas through habitat management.

Small developments should ensure that badger paths are not obstructed and small, but seasonally important, water sources and feeding areas are not destroyed.

Badgers can cause considerable damage to gardens and they should not be encouraged to

rely solely upon these as a source of food or for places in which to dig new setts.

If the destruction of a badger sett can not be avoided, it may be necessary to provide an artificial sett. Destruction of main setts should be considered only where all other options have been examined. If a main sett has to be destroyed an artificial sett will need to be

constructed in a suitable location well in advance of the development work. The need for an artificial sett to compensate for the loss of other types of setts is considered on a case by case basis. However, the closure of an outlier sett would not normally require the provision of an artificial sett. See section on artificial setts for further information.

### **Managing your work on site:**

Badger setts can be extensive therefore, to minimise disturbance, a protection zone of 30 metres from the outermost holes of the sett is recommended. It is advisable to fence the protection zone off leaving a gap of 25 cm at the base of the fence.

Those in charge of a development must ensure that clear instructions are given to all the workforce where care needs to be taken not to cause unlicensed damage to setts or

disturbance to badgers. Any activity which may cause disturbance to badgers or their setts should be undertaken as far away as possible from the protection zone.

Fires should only be lit, and chemicals stored, well away from the setts. Any trenches left open over night should have a means of escape for any animals that might fall in.

Trees should be felled so that they fall away from active setts. Badger paths should not be blocked. Vegetation should not be removed from the vicinity of the sett.

Machinery used near setts, or to destroy setts, should be operated by experienced persons with fine control of excavators or other groundwork technology, preferably supervised by someone who can advise competently on badgers.



## Badger disturbance

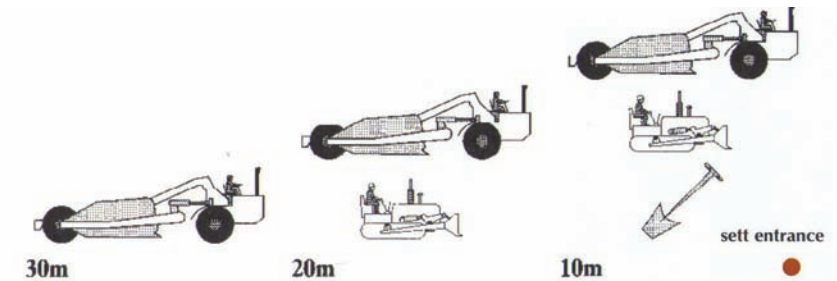
Work that disturbs badgers is illegal without a licence. Badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett. Because it is difficult to know what badgers will find disturbing in each particular circumstance, CCW has guidelines on the types of activity which it considers should be licensed within certain distances of sett entrances. Using very heavy machinery within 30 metres of any entrance to an active sett, and lighter machinery (particularly for any digging operation) within 20 metres, or light work such as hand digging or scrub clearance within 10 metres, all require a licence.

There are some activities which can cause disturbance at far greater distances (such as explosives or pile driving) and these should be given individual consideration. As a guide

blasting activities within 100m of a sett may require a licence, but the level of disturbance will depend on the type and nature of the blasting and the geography of the surrounding area.

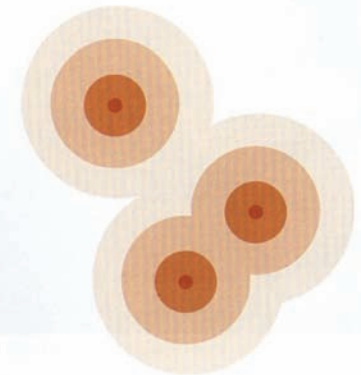
The illustration on the following page shows how areas around sett entrances can overlap.

## Examples of activities requiring a licence near a badger sett.



The illustration on the right shows how areas around sett entrances can overlap.

- sett entrance
- 0 - 10 metres
- 10 - 20 metres
- 20 - 30 metres



**These distances do not indicate the amount of land which badgers need to sustain their long-term survival after development.**



## Artificial setts for badgers

Where an artificial sett is required it is important that the sett is properly constructed and in a suitable location. Setts that have been badly designed may be unsuitable for badgers. Setts should be constructed well in advance of the exclusion of badgers from the affected sett.

The design and construction of an artificial sett should be supervised by a suitably experienced badger ecologist and should adhere to the following guidelines:

- build the sett at the top of a slope for good drainage. The base of the sett in clay or non porous soil should slope slightly downhill. Tunnels should slope away from chambers.
- include at least 3 exit holes, one of which is higher for ventilation. This higher pipe should have a bend in it at

the exit to prevent rain from entering.

- build the sett as close as possible to the original one in a quiet location.
- build at least two chambers in a site area of at least 100m<sup>2</sup> as replacement for the loss of a small sett.
- use pipes of 30 cm in diameter. Where joins leave gaps, exterior grade ply should be placed over to prevent infill. Plastic pipes are best cut lengthways to form an arch over an earth floor.
- leave open ends of pipes facing an earth bank (as well as leading to chambers) so that the badgers can extend the sett for themselves.
- do not make the chambers too small. The chambers should be at least 35 cm high and about 90cm by 60cm in size.

- cover the sett with steel mesh (to deter illegal badger diggers) and then with about a metre depth of soil covering the sett.
- include a 30m exclusion zone around the sett.
- plant scrub cover plants around the sett

Any licence application should include a simple and clear plan of the sett including dimensions and a site plan including elevation to show slope.



## Obtaining a licence

A licence will be needed from CCW before any work goes ahead which will cause damage to setts, or disturbance to badgers. Licences cannot be issued retrospectively so an application should be made at least six weeks in advance of the proposed work. The following are guidelines on the sort of information CCW will require in a licence application for a development affecting badgers:

Details of the final planning permission granted for the site, including a copy of any section 106 agreement.

Information on the location and use by badgers of any setts which will be affected by the development.

Proposals showing how it will be ensured that there are no badgers occupying setts that need to be damaged or destroyed.

The location and number of alternative setts where excluded animals may shelter when a main sett is to be lost.

How badgers will be accommodated on site when setts are to be destroyed and no alternative setts are available?

Details of any artificial sett that has been constructed including a clear plan of the sett and photographs of the sett under construction and once completed. Evidence of use of the sett by badgers should also be included. Note that we recommend you consult CCW regarding proposed artificial setts prior to their construction.

Details of fencing and underpasses, where necessary, to permit access by badgers to existing feeding areas, and to prevent obstruction to sett. Main, or seasonally important, feeding areas or water sources should be maintained or

replaced where they may be affected;

The names and addresses of those who will be carrying out specialised badger work, capable of operating to a suitable standard to ensure the work is carried out effectively;

Assurances that machinery used near setts, or to destroy setts, shall be operated by competent persons;

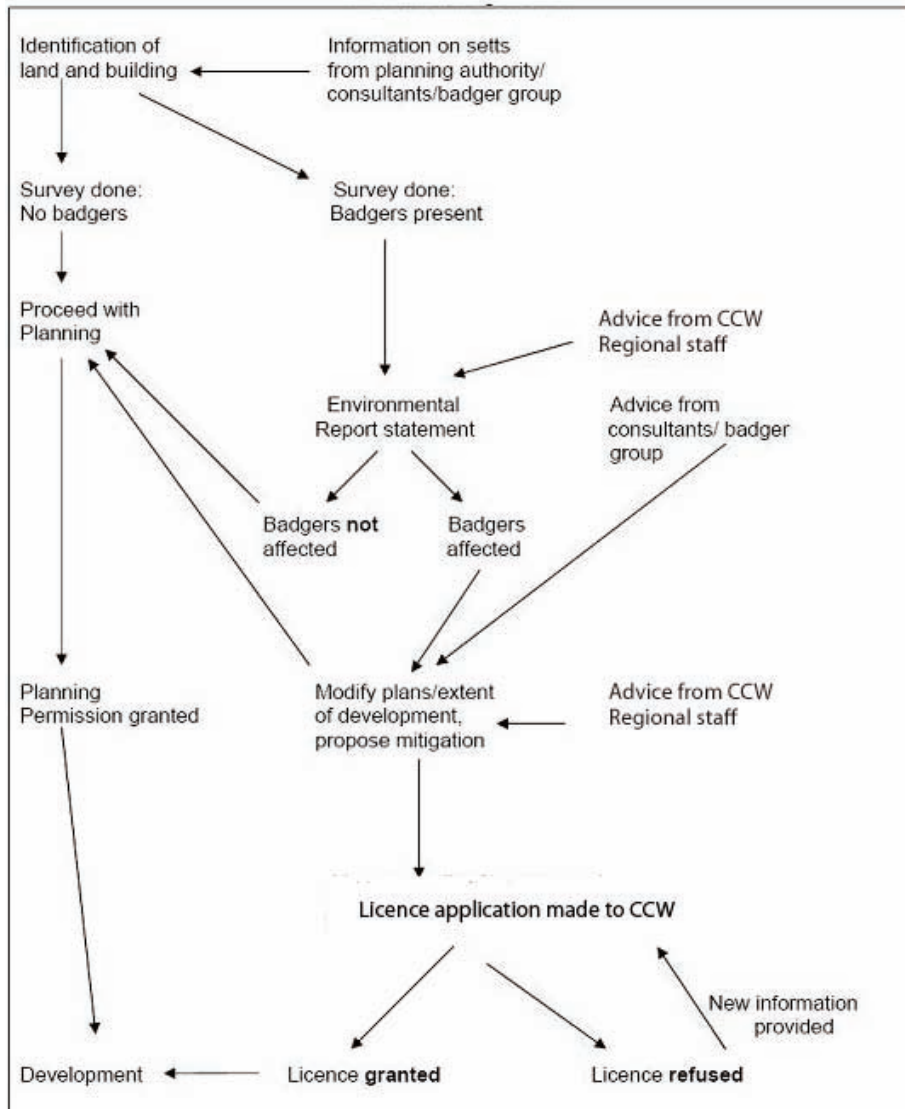
Dates between the months of July and November inclusive when the work will be carried out or mitigating reasons or circumstances for any work to be undertaken outside this period.

Details of monitoring to be undertaken during and post-construction.

General operating practices on site must ensure that badgers are not inadvertently harmed or trapped.

Note that the law does not permit licences to capture badgers for development purposes. Relocating badgers by translocation is not an option.

## The various stages involved in developing land which contains badger setts



**Note:** click on web address to link to the site

### Further reading

*Badgers* (1994) Michael Clark Whittet British Natural History Series

*The Badger* (2010) by Michael Woods, The Mammal Society.

*Design manual for Roads and Bridges* Volume 10, Section 1, Part 5 (1997)

<http://www.standardsforhighways.co.uk/dmrb/vol10/section4/ha5992.pdf>  
<http://www.standardsforhighways.co.uk/dmrb/vol11/section3.htm>

*Forest operations and Badger Setts* (1995). Forest practice Guide 9. Forestry Commission.  
[http://www.forestry.gov.uk/pdf/fcpg9.pdf/\\$FILE/fcpg9.pdf](http://www.forestry.gov.uk/pdf/fcpg9.pdf/$FILE/fcpg9.pdf)

### Useful contacts

RSPCA, Wilberforce Way, Southwater, Horsham, West Sussex, RH13 9RS (0300 1234 555)  
<http://www.rspca.org.uk>

The Mammal Society, 3 The Carronades, New Road, Southampton, SO14 0AA  
 Tel: 0238 0237874  
<http://www.mammal.org.uk>

### The Wildlife Trusts

<http://www.wildlifetrusts.org>

### The Badger Trust Trusts

Information on local badger groups can be obtained from:

The Badger Trust, P.O. Box 708, East Grinstead, RH19 2WN Tel: 08458 287878 <http://www.nfbg.org.uk>

Application forms for licences are available from:

Countryside Council for Wales Species Protection Team, Maes y Ffynnon, Penrhosgarnedd, Bangor, Gwynedd LL57 2DW Tel. 0845 1306229.

<http://www.ccw.gov.uk/landscape--wildlife/habitats--species/species-protection/licensing/application-forms.aspx?lang=en>

### Welsh Government

Farm Development Division, Rhodfa Padarn, Llanbadarn Fawr, Aberystwyth, Ceredigion SY23 3UR  
 Tel: 03000 622241

<http://new.wales.gov.uk/topics/environmentcountryside/consmanagement/conservationbiodiversity/wildlifelicences/ukspecies/3559557/?lang=en>