

Woodland Management in the presence of the dormouse: Guidance for compliance with the Habitats Regulations¹

OTTER

¹ The 'Habitats Regulations' refers to The Conservation of Habitats and Species Regulations 2010

Purpose of document

To provide advice for woodland managers and operators on a) how to establish presence of otter (*Lutra lutra*) particularly their breeding sites or resting places, and b) how to manage woodlands so as to avoid or minimise the risk of committing offences under the Habitats Regulations. Otter are protected by the Habitats Regulations and are European Protected Species (EPS).

This guidance should be used alongside the Decision tree to aid planning of woodland operations and protecting EPS.

1. Look at your woodland. What is the probability of otters being present in your woodland or habitat type?

A) Is it within 50m of a river, canal, pond, lake or wetlands?

Even small streams and ditches can be used for foraging or as corridors.

B) Does the woodland have thick scrub or dense vegetation cover?

Breeding sites are more likely to occur in woodlands which:

- are relatively **undisturbed** by humans,
- are **ungrazed** by stock,
- are close to **water (<50m)**
- are rarely flooded or are just above the floodplain level
- contain large patches (**at least 0.5ha**) of **dense cover** such as scrub thickets, weedy young plantations, timber stacks and log piles, groups of windblown trees, large bank-side root systems, hollow trunks or stands of tussocky, tall, fen vegetation.

Above ground **resting sites** tend to be close to **water (<50m)** but they may be found in woodlands as **small as 0.5ha** or less provided they contain patches of dense (at ground level) scrub, thickets or the features listed above. The less disturbed a site, the higher the possibility that otters may use otherwise sub-optimal sites for resting.

Otters do not have a fixed breeding season, but most births occur in winter or spring. Otters occupy large home ranges – up to 40km along a river for a male otter but less than half that for a female. They utilise a wide variety of habitats including rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs. They are also found in coastal areas and on estuaries where fresh water is available for keeping their fur washed and in good condition.

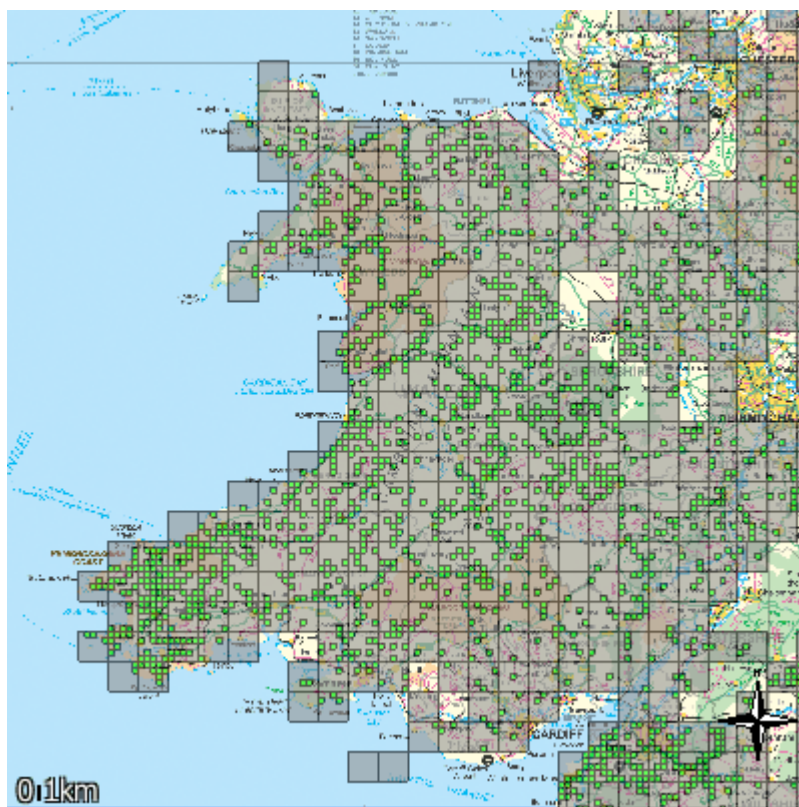
Otters feed mainly on fish and in spring frogs and toads may become important prey, with small mammals and birds also taken occasionally. Fish farms, fishing

lakes and collections of ornamental fish can also attract otters. Each otter will use a number of different places for shelter within its home range. Two kinds are used: underground holts and above ground couches. Otters tend to make us of existing structures, such as cavities among tree roots, rock piles or sometimes holes abandoned by other animals. Man-made structures such as tunnels and pipes may also be used even those some distance from a water course.

Couches are nest-like structures (0.3 to 1metre in diameter) used for resting. Often made from nearby vegetation, they can be simply a depression in a stick pile or under a windblown tree. Couches are often in a patch of vegetation such as a thicket of scrub, a reedbed or an area of rough grassland where it is the patch, rather than the couch site itself, which is important.

2. Are otters known, or likely to be present, in or near (within 2km) this particular wood?

a. *Is your woodland approximately within current known range of the species?*
Please note that not all recent occurrences of otter may be mapped.



Otter (*Lutra lutra*) distribution.
Source: National Biodiversity Network copyright C
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b. Consult the National Biodiversity Network, available on the web, www.searchnbn.net/interactive/map.jsp?srchSp=NBNSYS0000005133, for presence of otters near or in your woods.

By using the interactive map, zoom to your area of interest (please note that a lack of records does not necessarily confirm otter absence). Your local Countryside Council for Wales or County Wildlife Trust representative, is also likely to be able to give site specific information on likelihood of otter presence as may the Local Biological Records Centre www.lrcwales.org.uk Natural History Societies and local Mammal Groups - contact details from: www.mammal.org.uk

3. Would the proposed operations or activities have an impact on otters if present?

If otters are, or are likely to be, present will your planned operation impact in any of the following ways?

- Kill or injure an otter.
- Cause disturbance to otters that is likely to impair their ability to survive, breed, reproduce or hibernate; or affect significantly their local distribution or abundance.
- Damage or destroy an otter resting-place or breeding site.

Killing or injuring an otter is unlikely to occur as a result of forest operations, unless these affect a breeding site where there are dependent young present. A lone adult otter may move away from an area if forest operations are being undertaken.

Disturbance caused by forest operations are again unlikely to be so severe as to constitute an offence unless a mother and her young are directly affected.

A licence may be issued to allow a resting place to be destroyed (if one has been identified). However if a breeding site has been identified every effort should be made to retain the site in a condition suitable for continued use as a breeding site. Avoid disturbance to the breeding site during nearby works, for example by cordoning off the area and creating a buffer zone around it.

The following types of operations have a risk of resulting in offences being committed if otters are present:

- Harvesting, including felling or thinning of stands
- Tending and establishment
- Road construction and maintenance
- Engineering works
- Riparian Zone works

Table 1 lists forest operations and the risk of committing an offence associated with each operation.

4. After Habitat assessment can the activity be modified to avoid and impact on otters?

It may be possible to adapt the operation to avoid committing offences and therefore allowing the operation to continue without need for a licence.

Table 1 provides further information on how you may alter operations to reduce the risk of committing an offence and the need for a licence. During operations the aim should be to avoid damaging or destroying a holt or resting site or

disturbing otters at these sites. If the operation you are planning does not have a satisfactory, low-risk alternative as indicated within Table 1 then you may decide to apply for a licence.

5. If otters are present or likely and impacts cannot be avoided is survey information available?

Otters may occur in any woodland in Wales, though lowland woodlands and those close to water courses are more likely to support resident otters. If you suspect that otters are present in your woodland and you intend to carry out management you will need to assess the risk that you may commit an offence.

The organisations listed in **section 2b** are most likely to know of recent surveys. If surveys are available go to **section 8**, if not then move to **section 6**.

6a. Can the landowner/manager do an initial survey of the site?

Confirming presence

To reduce the risk of committing an offence look for evidence of otters and if they are found adjust management plans in the light of the guidance given in tables 1 and 2.

Signs or indicators for otters

- Sightings: otters are large animals that are easily distinguished from the smaller mink by being up to 1 metre long. They have spiky fur when wet, a broad, flat muzzle and long tapering tail which is thick at the base. Otters give a general impression of being the size of a small dog, whereas mink are at most cat-sized.
- Signs: spraint (excrement) are best seen within a metre of the water's edge at regular signing sites such as at the foot of bridges, the saddle of overhanging bank-side trees or large rocks on the bank and in-channel. Other signs include footprints and feeding remains.
- Finding proven resting sites and holts is usually very difficult and requires experience. Difficulty in detecting holts or resting places would suggest that commissioning a specialist survey may be a sensible step, **See 6b**.

6b. Specialist Survey required to identify and locate any breeding sites or resting places.

Determining the location of holts or resting places will be important when planning operations so they remain lawful (see table 1). Commission a specialist survey or, alternatively, consider engaging local specialists to visit your woodlands, Natural History Societies and local Mammal Groups may be willing to help - contact details from: <http://www.abdn.ac.uk/mammal/index.shtml>

7. Evaluate the results of surveys.

If by self-assessment and survey or specialist survey you are confident that otters are not using your woodland then no further action is necessary and the operation may proceed. It would be sensible to keep a record of your decision and information used to reach it (for example record of survey).

If otters or fresh signs of otters are discovered during operations (especially from likely holts or resting places) you should immediately stop work, seek advice from the Statutory Nature Conservation Organisation (SNCO) and review your plans as required. It is therefore important for operators to remain vigilant for otters and other protected species while undertaking work.

8. Can the work be undertaken, or proposals modified to avoid an offence being committed?

Once holts or resting places have been identified through survey you may decide to go ahead with woodland management by avoiding them or the area of woodland supporting otters. Use best practice management (see table 2 and good practice references below).

(NB marking breeding site areas on felling and/or design plans will indicate that the operation has been guided by survey information.)

9. Can you provide evidence to support a licence application that satisfies the criteria in section 9 of the decision tree?

If avoidance is not possible a licence is required before the operation is undertaken. The licence application will require details about the holts or resting places and that there is no satisfactory alternative to committing the offence in question i.e., disturbing an otter while using the holt or resting place, or damaging or destroying such places even when otters are not present. However licences will only be issued where there is overriding public interest, issues of public safety etc and are subject to strict tests. There is no guarantee that a licence will be granted. Speculative licence applications will not be considered.

Consider potential for long term provision of habitat for otter

Consider the potential for maintaining populations and securing resting sites by planning regular but sensitive active management that will provide a continuity of habitat over time and will ensure that populations are maintained in a favourable conservation status. Woodland habitats can be improved for otter by increasing the amount of connected woodland along watercourses, encouraging long-term presence of a shrub layer through intervention, and by reducing disturbance. Specific guidance includes:

- Landscape measures - planting new woodland/scrub cover that links up woodlands along riparian corridors or expanding cover towards or to incorporate open wetland areas.
- Woodland management - thin or group fell to produce sunny glades that provide continuity for areas of scrub cover relatively close to water courses/bodies. Leave areas of establishment/ pre-thicket tree crop uncleaned or allow scrubby regeneration. Create conditions suitable for scrub regeneration through selective felling or creating clearings on a 5-10 year cycle. Encourage coppice re-growth or scrub composed of ash, willows, hazel, blackthorn, hawthorn, field maple, spindle, buckthorn and dogwood over areas of 25m² (for daytime resting site) to 50 m² (for breeding area), ideally. Remove conifers from alongside watercourses.
- Site management - stock or deer fence using an otter friendly mesh size, minimum 150mm mesh. If this mesh size is inappropriate for example if Muntjac deer are present provide pipe access for otters. Fence either the entire site, or parts of the woodland adjacent to water, to prevent damage to dense thicket habitat, breeding or resting sites by grazing animals and to deter human access and disturbance by dogs or stock. Leave uncut margins to watercourses and encourage wet woodland development. Leave long lengths of large diameter tree trunks lying on the ground close to water. Construct log pile otter holts close to water in undisturbed locations.

Good practice reference list

www.english-nature.org.uk/lifeinukrivers/species/otter_breeding.pdf

.Jefferies, D.J & Woodroffe, G.L. (2008) The otter. In: Mammals of the British Isles: Handbook 4th

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Liles, G. (2006) Rhododendron Clearance: Recommendations for reducing the impact on the otter (*Lutra lutra*). Unpublished guidance to CCW.

Strachan R., Liles, G. & Fairfield, T. (2004) Managing woodlands in the presence of otters. In: Eds. Quine, Trout & Shore. Managing woodlands and their mammals. Joint FC and Mammal Society conference, November 2002. 31-35. Forestry Commission. Edinburgh.

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Additional notes

1. Woodlands, particularly small patches of wet woodlands, carr and thick scrub or woods that are generally within about 50m of rivers, canals, ponds, lakes, and wetlands, may be used by otters. Small streams and ditches are used as foraging habitat and corridors if they are within the home ranges of individuals. Otters often have a home range of 10-40km or more of a waterway. In landscapes where waterside vegetation and undisturbed wetlands are limited, woodlands often provide the best, and sometimes the only, cover in which otters can lie-up and breed.

2. Breeding sites can either be subterranean dens 'holts' or above ground, specially constructed 'couches'.

Otter holts may be used more often in winter and above ground resting sites are used more in the summer when growth of vegetation provides cover; breeding holts can be used at any time of year. Further information on habitat requirements of otters is available from the reading list.

3. Routine forestry / woodland management activities can potentially result in offences being committed if otters or their breeding sites or resting places are present and it is vital that managers review planned activities to identify such risks.

The offences that may be committed under Regulation 39 are listed in Annex A in the Part 1 guidance.

Table 1. Forest operations, risk of committing an offence associated with each operation and procedure for reducing risk.
 Forest operations are in **bold** type, risk control procedures in plain type; risk classed as high and low.

Risk of committing an offence	HIGH RISK-Operations that are likely to damage or destroy breeding or resting sites of otters.	Alternative approaches to high risk operations that may reduce the risk.	Managing risk: Options for low risk approach	
Operation	Sub-operations (and brief description of impact)		Safest	Some risk
ESTABLISHMENT	Clearing scrub for planting close to watercourse may damage or destroy holts / resting places.	1. Avoid clearing scrub within 30m of watercourse. 2. Restrict scrub clearance and planting to small patches when within 50m of watercourse. 3. Start the day's work furthest away from water's edge. This offers a signal of human activity and an option to move before actual disturbance as the activity comes closer.	Carry out alternative approach 1	2+3
	Fencing using small mesh (e.g. rabbit fencing): can create barriers between watercourses and woodland used by otter. High risk if preventing access to entire wood.	1. Use minimum 150mm mesh fencing 2. Sink pipes of 150-200mm into wet ground under new rabbit fence between watercourse and habitat.	1 or 2	N/A
TENDING	General overspraying or weeding of thick vegetation close to watercourse: may damage or destroy holts/resting places.	1. Avoid clearing shrub within 30 m of watercourse. 2. Limit actions to small areas, leaving areas of thick cover.	1	2
	General overspraying with herbicide: could pollute wet feeding areas affecting food of otters (fish & amphibians).	1. Avoid spraying within 30m of watercourse. 2. Avoid overspraying drains and within 10m of a permanent watercourse. (follow water guidelines)	1	2
	Coppice/scrub cutting, brashing, pruning or clearance or burning close to watercourse may destroy or destroy holts / resting places.	1. Avoid clearing scrub within 30m of a watercourse, where resting places are likely to be present. Provide buffer zone of 100m - 200m around breeding sites (seek advice). 2. Check riparian scrub thickets individually before removal and leave several adequate refuges e.g. by leaving thick patches of scrub thickets, retain brash piles, old piles of timber/fallen trees/root plates.	1	2

HARVESTING	Thinning and clearfelling: can damage or destroy holts and resting sites.	1. Avoid carrying out work within 30 m of a holt or resting site. Provide buffer zone of 100 - 200m around breeding sites (seek advice), 2. If working within 50m of watercourses ensure young coppice, areas of scrub, tussocky sedge and reedbeds have minimal disturbance during operations.	1	2
	Removing brash piles following thinning and clearfelling operations: if carried out months after brash production, could damage or destroy holts and resting sites.	1. Retain brash piles and leave undisturbed. 2. Remove quickly (within 1-2 months) from site following production of brash.	1	2
	Extraction of timber close to watercourses: disturbing or removing whole old fallen trees may damage or destroy holts / resting places.	1. Do not remove or disturb old fallen trees within 50m of watercourses.	1	N/A
	Timber stacking close to watercourse: if timber is removed months or years after production could damage or destroy holts / resting sites.	1. Move timber 50m or more away from watercourses and from likely otter locations for stacking. 2. Remove timber shortly (within 1-2 months) from site following stacking.	1	2
ACCESS	Making new public access tracks through woodland beside watercourse: may damage or destroy holts/ resting places.	1. Avoid making new roads or public access through wetlands or woodland with habitat suitable for breeding otters or leave large undisturbed areas with access to water courses. Avoid damage to existing holts.	1	N/A
	Footpath building near waterway or anywhere in a small (10ha) wood: results in increased public access that could disturb otters enough to affect local distribution or abundance of species.	1. Avoid building paths in/ restrict access to small woodlands, and those parts of large woodlands near watercourses and water bodies where otters are present. 2. Ensure paths are at least 30m from features associated with otter (see Section 2b.)	1	2
ENGINEERING WORKS	Road construction, culvert works and fencing: can all hinder access by otters. A high risk only if preventing access into an entire wood.	1. Construct new culverts with access ledges, erect diversionary fences to assist otter movement, maintain drains used by otters to ensure they remain open and accessible.	1	N/A

Table 2 – Best practice approach for carrying out operations in the presence of Otters. An EPS licence may include additional conditions due to local circumstances.

Operation	Sub-operations	Best practice guidance
<i>ALL OPERATIONS</i>	Planning	<ul style="list-style-type: none"> • Within 50m of watercourses identify all possible holts and resting places, Assess site for suitable habitat for breeding otters as 100 – 200m buffer zone will need to be left.
<i>HARVESTING</i>	Thinning	<ul style="list-style-type: none"> • Phase the thinning of riparian zones over a period of years; i.e. don't work a large area in one go. • Leave areas of good cover within 50m of a watercourse undisturbed, e.g. young coppice, scrub, sedge and reedbeds. • Avoid carrying out thinning within 30 m of a holt or 100 – 200m of a breeding site. (Seek advice)
	Clearfelling	<ul style="list-style-type: none"> • Limit clearfell in riparian zones to retain woodland cover. • Leave brash piles • Avoid carrying out thinning within 30 m of a holt or 100 – 200m of a breeding site.
	Extraction of timber	<ul style="list-style-type: none"> • Do not disturb old fallen trees within 50m of watercourses and if possible leave some large diameter trunks on ground near the water or create artificial holts.
	Timber Stacking	<ul style="list-style-type: none"> • Stack timber 50m or more from watercourses and dispatch within 1-2 months.
<i>GROUND PREPARATION</i>	Scarification/ploughing/cultivation	<ul style="list-style-type: none"> • Avoid within 50m of known holts or resting places
<i>TENDING & ESTABLISHMENT</i>	Brush/scrub cutting or clearance	<ul style="list-style-type: none"> • Avoid clearing scrub within 30m of watercourse
	Spraying vegetation	<ul style="list-style-type: none"> • Avoid treating vegetation within 30m of watercourse unless invasive non-native. (See protocol for rhododendron removal)REF
	Planting	<ul style="list-style-type: none"> • Start the days planting furthest away from waters edge. This offers a signal of human activity and an option to move before actual disturbance as the activity comes closer
<i>RIPARIAN ZONE MANAGEMENT</i>		<ul style="list-style-type: none"> • Create small openings in the canopy to encourage scrub growth. • Remove conifers from the water's edge. • Avoid large disturbance to the riparian zone, work small areas over period of years.
CONSTRUCTION & MAINTENANCE OF INFRASTRUCTURE	Creating roads/tracks and permanent woodland clearance	<ul style="list-style-type: none"> • Follow guidance for CLEARFELLING. • Construct new culverts with access ledges, maintain drains used by otters to ensure they remain open and accessible.

