

Technical Advice Note#2

Otter Surveys:



This Technical Advice Note (TAN) summarises key aspects of guidelines for surveys of the Eurasian otter (*Lutra lutra*), which set the standard required by Scottish Natural Heritage (SNH) in relation to development. This TAN aims to ensure developers understand what information must be provided to the Planning Authority, prior to a planning determination being made, where otters are likely to be affected by a development.

Before considering whether or not to approve a planning application⁴, Planning Authorities must establish whether European Protected Species (EPS), such as otters, are present on, or near, development sites and what the implications of this might be. Applications for planning permission may be recommended for withdrawal or refused without adequate information, including relevant, up to date surveys.

Such information will enable the LPA to determine whether otters are present, are likely to be affected by the development and to fully consider potential impacts on otters prior to the determination of a planning application^{4,5}. Planning permission will not be granted without the LPA having satisfied itself that the proposed development either will not impact adversely on otters, or that, in its opinion, three tests necessary for the eventual grant of an EPS licence are likely to be satisfied¹.

These three tests are:

- 1: The development is in the interest of public health/safety or other over-riding interests (e.g. social/economic)
- 2: There is no satisfactory alternative
- 3: Authorised actions relating to the development will not be detrimental to the maintenance of an EPS (e.g. otters) at a favourable conservation status⁶ in its natural range

This Technical Advice Note summarises information on the ecology of otters, the types of development that may require otter surveys, survey requirements, reporting and Species Protection Plans. **Detailed advice from a specialist otter surveyor should be sought at an early stage in the planning process, in order to identify potential impacts and prevent costly delays.**

1. Otter ecology

Otters are more likely to be present on potential development sites in Scotland than anywhere else in Britain, as more than half of the UK population live in Scotland. Otters are widespread in the Scottish Borders, breeding and thriving in a range of waterbodies, aquatic and riparian habitats, including the River Tweed and its tributaries. Otters are a qualifying interest of the River Tweed's international designation as a Special Area for Conservation².



Otters have webbed feet, a tapering tail and flat head

Otters' presence in waterways and wetland can be an indication of high quality habitat. Although predominantly found in freshwater habitats in the Scottish Borders, they are also found on coasts where they have access to freshwater, especially rocky shores and estuaries. In freshwater areas, otters tend to be nocturnal. In coastal areas they can be seen during the day (diurnal). Their diet includes fish, amphibians, eels, crustaceans and occasionally small birds or mammals. Otters tend to be solitary, except when breeding and have large territories; males can range up to 35km in freshwater areas. Otters take shelter in a variety of resting places, sometimes underground (often called *holts*), sometimes above ground (commonly termed *couches*). They may breed in these resting places and also use temporary sites or lie-ups. An individual otter may use several of these resting places within its home range.

2. Types of Development Requiring Otter Surveys⁷

As they are dependent on freshwater, otters are vulnerable to pollution, river management and recreational activities. Light and noise may also negatively impact otters. An otter survey is likely to be required if there will be a direct or indirect impact on a waterbody that has suitable habitat or features that otters may use; for example, where development may result in:

- Habitat loss or degradation in or within 200m of water bodies that have suitable features for otters, (where there is good, unobstructed connectivity between the waterbody and surrounding habitat)
- Fragmentation of habitats otters may use (e.g. by segregating waterbodies)
- Removal of, or disturbance to resting places or breeding sites
- Changes to water quality, which could also affect food sources
- Disturbance to otters' usual routes e.g. road bridge/culvert works within 200m of waterbodies or other suitable otter habitat (this forces otters to use roads or bridges, increasing the likelihood of otters being killed or injured on the road)

Examples of projects that may affect otters (not an exhaustive list):

Developments in riparian/aquatic habitats

- Flood protection schemes
- River realignment or culverting
- Dam construction
- Road construction with a direct or indirect effect on a water body/riparian habitat
- Tree felling in the riparian zone and associated wet woodland habitats
- Floodlighting that affects riparian habitat
- Housing or recreation development or demolition, where riparian habitat corridors will be segregated and/or increased recreational use may cause disturbance to riparian areas
- Control of invasive species near riparian/aquatic habitats otters may use
- Other development affecting riparian areas

Developments in coastal habitats

- Coastal/sea defences
- Other development affecting coastal areas

A survey will also be required if distribution/historical records suggest otters may be present on or within 200m of a development.

3. Otter Survey Requirements

For development projects within 200m of freshwater or coastal habitats, developers have a responsibility to take reasonable steps to check whether otters may be using the proposed site by commissioning otter surveys.

Surveys can be undertaken at any time of year, but ideally when water levels and vegetation are low and otter signs are therefore more visible. Emerging research suggests October to February may be optimal during the breeding season in the Tweed Catchment³. Signs can include footprints, otter paths and slides, spraint or food remains. Several surveys may be required.

It is essential that otter surveys are undertaken by an experienced otter specialist, particularly if a survey may result in disturbance to otters (e.g. if intrusive survey methods such as trail cameras or endoscopes are to be used at known resting places – whether or not the resting place is in use), in which case the otter specialist must be licensed to carry out surveys. References and evidence of experience should be sought. Some otter specialists are also members of CIEEM (Chartered Institute of Ecology and Environmental Management) and subscribe to a professional code of conduct.

Survey effort should be proportional to the development in question, as outlined in the table below, which summarises advice provided by SNH, with examples of development types⁷:

Small Schemes	Major Linear Developments	Large, Extensive Developments
<p><i>For example:</i></p> <ul style="list-style-type: none"> • Repair of individual bridges • Pipeline crossings • Local river bank works • Individual houses • Erection of 1 or 2 wind turbines 	<p><i>For example:</i></p> <ul style="list-style-type: none"> • Major or national road schemes • Other major linear developments 	<p><i>For example:</i></p> <ul style="list-style-type: none"> • Large wind farms • Major industrial or housing schemes

Suggested survey parameters:

A survey of suitable habitat within 200m of proposed works including a survey of 200-250m both upstream and downstream of the site, with a survey corridor of at least 50m on each side of the waterbody. Particular attention should be paid to features such as reed beds, stream islands, tree roots and rabbit holes.

A survey of at least 250m either side of planned linear routes and the same distance beyond the end of the scheme. In some cases, a survey of a broader corridor of 500m either side of the planned route may be required. Distances should be extended if small watercourses provide routes to lochs or watershed crossings, as these may be important otter routes. These routes may not follow linear features, but cut across them.

A survey of suitable habitat within 200m of the development, including a survey of at least 250m upstream and downstream of the development site. A detailed survey within a radius of 250m around each proposed wind turbine location and associated infrastructure. A survey of at least 100m on either side of any indicative proposed routes for access tracks to the development site. Consideration of possible effects of proposals on the river catchment as a whole – e.g. if loss of flood-plain area is anticipated.

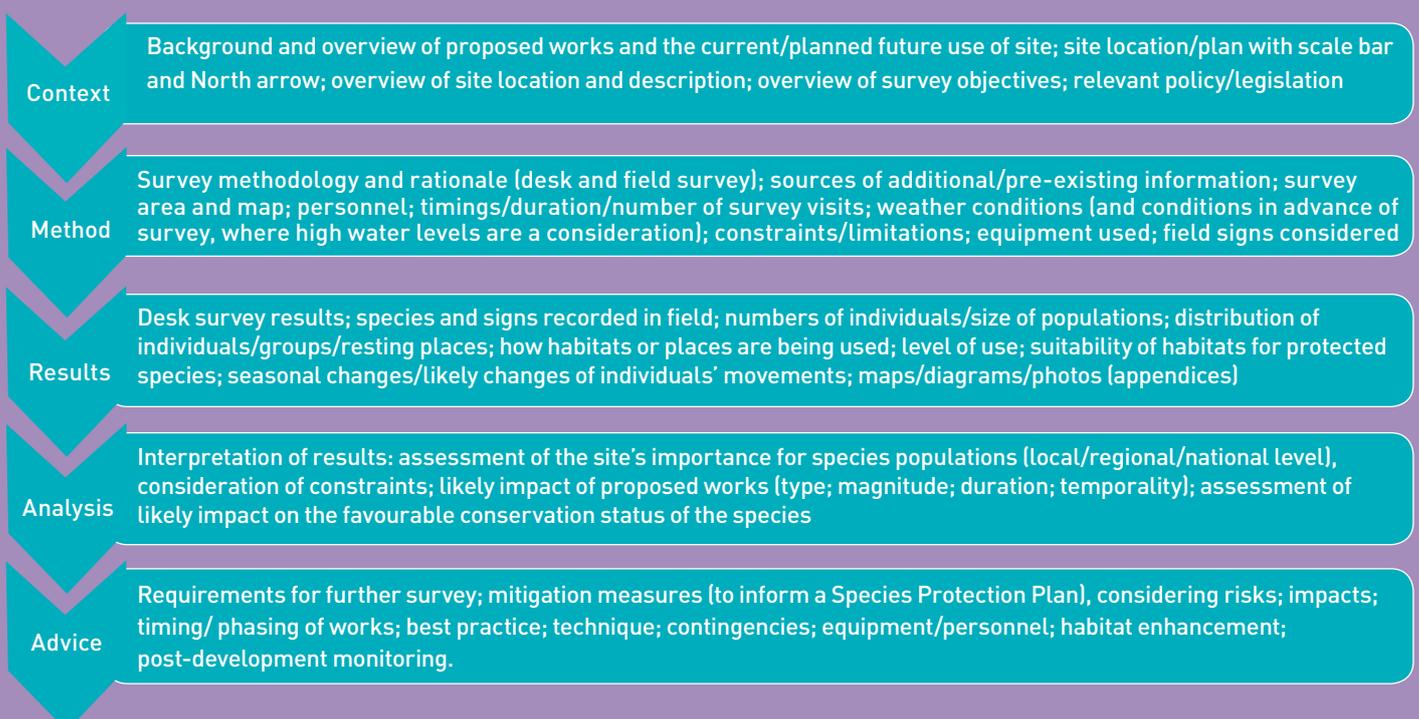
If a development is likely to significantly affect the River Tweed SAC, which includes otter as a qualifying interest, it will require a **Habitats Regulations Appraisal (HRA)**, requiring survey and assessment of impacts undertaken by a competent and qualified ecologist. If the development proposal is judged likely to have a significant effect on the SAC, an Appropriate Assessment will be required as part of the HRA to determine whether the development proposal will not adversely affect the integrity of the SAC.

4. Otter Survey Reports

A formal report of otter surveys should be submitted to the LPA **prior to determination of the planning application**. Detailed, well-presented information is required, based on thorough surveys undertaken in accordance with best practice guidelines⁷, including records of otters and/or resting places present, their value and significance and how they are likely to be impacted by the proposed development. The report should advise on how likely impacts might be avoided or mitigated, to result in no net loss (and if possible a net gain) to the favourable conservation status of otters.

The LPA will take a decision about the environmental consequences of permitting the development and whether a licence is required, based on the likelihood of disturbance to otters. A licence will be required if it is not possible to establish exclusion zones around resting places. Exclusion zones are 30m for non-breeding resting places and 200m for otters known, or suspected to be breeding (in some cases this may be reduced to 100m depending on the nature of the works, topography and natural screening, which will require judgement from an experienced ecologist).

Details of what to include in otter survey reports are provided in the diagram below. In addition, an executive summary and contents page, supporting materials (maps, photos etc.) in appendices and a list of references should be included.



5. Species Protection Plan

Regardless of whether an EPS licence is required, if otters are present and could be affected by the development proposal, the LPA will request provision of a formal Species Protection Plan (SPP) as a condition of the planning permission. If a licence is required a SPP is mandatory. The SPP must be informed by the results and analysis of surveys and must outline approaches that will enable development to go ahead whilst safeguarding otters. Mitigation measures outlined in the Advice section of the report may be included.

A Species Protection Plan can help avoid delays to the processing of any planning consent or EPS licensing.

The Species Protection Plan should:

- Include details of how the development is likely to impact otters
- Outline methods to avoid impacts on or disturbance to otters and their resting places
- Include details of mitigation and/or compensation where impacts are unavoidable
- Identify whether or not a licence is necessary (by showing where an offence would otherwise be committed)
- Outline how development works (including licensed works) will be undertaken in relation to otter, through a detailed method statement

Examples of avoidance, mitigation and compensation measures based on SNH guidance⁷:

Dealing with potential impacts on otters could include:		
Avoidance	Mitigation	Compensation
<p>Try to avoid impacts in the first instance, e.g. by:</p> <ul style="list-style-type: none"> • Not working on or near the water body and known otter habitat • Not disturbing otters e.g. by leaving a buffer zone along a river and around resting places* • Avoiding night works (in darkness and at dusk and dawn) in freshwater areas • Not obstructing otters' access to paths/open water 	<p>If negative effects cannot be avoided, mitigation measures can be employed, e.g.:</p> <ul style="list-style-type: none"> • Retain otter habitats in a water body/river bank • Use otter-proof fences to stop otters getting into the development site during and after works** • Plant thicket-type vegetation to reduce noise/visual disturbance • Cap exposed pipes and provide exit ramps from exposed holes/trenches • Ensure safe storage of oils and chemicals • Toolbox talks on otter given to all contractors on site 	<p>If there are any remaining negative impacts for otters, compensation measures can be incorporated into the development, e.g.:</p> <ul style="list-style-type: none"> • Constructing artificial holts to replace those that have been damaged/removed • Installing mammal ledges on bridges/culverts to allow otters to pass alongside water bodies • Restoring or improving habitats to compensate for those that are lost • Building underpasses to allow otters to cross barriers like major roads
<p>*Buffer zones of 30m must be established between development works and a known or suspected otter resting place (200m if a breeding site), otherwise a licence will be required.</p> <p>**Fences must be designed and erected with extreme care and attention to detail to ensure they are effective and to avoid harming otters (e.g. by leaving them trapped in a development area or road scheme).</p>		

The LPA will assess what difference avoidance, mitigation or compensation would make to the anticipated effects of the development and will decide whether the three key tests required for any derogation under an EPS licence are met, if impacts on otters are such that a licence is likely to be necessary.

References

- 1 Conservation (Natural Habitats &c.) Regulations 1994 (as amended)
- 2 Council Directive 92/43/EEC of 21 May 1992 on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive)
- 3 Findlay, M. (2016) CIEEM Training Session on otter survey including emerging research concerning optimal times for surveys.
- 4 Scottish Executive Environment and Rural Affairs Department (2001). *European Protected Species, Development Sites and the Planning System: Interim guidance for local authorities on licensing arrangements*. Scottish Executive, Edinburgh.
- 5 Scottish Government (2014) Scottish Planning Policy. Scottish Government, Edinburgh.
- 6 Scottish Natural Heritage (2015) *Species Licensing Guidance Notes*. SNH, Inverness. Available at: <http://www.snh.gov.uk/docs/B879301.pdf>
- 7 Scottish Natural Heritage (2016) *Protected Species Advice for Developers: Otter*. Available at: <http://www.snh.gov.uk/docs/A1959316.pdf> (Updated October 2016)

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