



**Baseline
Ecological Survey**
Planning advice
PA2023-17

September 2023

Purpose of this Planning Advice

The purpose of this planning advice is to detail the requirements of a baseline ecological survey in order to allow a full assessment of the impact of a proposed development on both habitats and species but also the wider ecosystem services provided by the site. The document outlines good practice in relation to ecological surveys and promotes the use of established methodologies for this work.

Submission of all the relevant information will avoid delays in the processing of the planning application.

National Planning Framework 4 requires development to contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. NPF4 Policy 3 *Biodiversity* requires major development to demonstrate that the proposal will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention, and local development to include appropriate measures to conserve, restore and enhance biodiversity. Any potential adverse impacts must be minimised through careful planning and design.

In order to understand the baseline ecological position and to inform the most appropriate biodiversity enhancements a baseline ecological survey will often be required.

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1. Introduction

A baseline ecological survey provides an initial assessment of the ecological interest of a site, informs the layout of the development and identifies whether there may be a need for further detailed habitat and species surveys. This information is required in order to assess the proposals against the Aberdeenshire Local Development Plan 2023 (ALDP) Policy E1 Natural Heritage which aims to protect sites of nature conservation interest, important habitats, protected species and wildlife within the wider countryside.

This work should be undertaken at an early stage in the consideration of a development site to allow any additional surveys to be carried out at the correct time of year, and to inform the layout and character of the development. The outcome should be to inform actions to minimise potential impact and to identify opportunities to deliver positive benefits for biodiversity. Submission of a planning application with all the relevant information will avoid delays in the processing of the planning application.

The survey should assess the impact of the proposed development on ecosystem services¹ and should assess any cumulative impacts.

Following the mitigation hierarchy², the default position should be the retention of all habitats and features of biodiversity value within the new development. The survey should provide sufficient details to allow the calculation of loss of any lower value habitats in order to inform the biodiversity enhancement needed to demonstrate an overall positive effects for biodiversity as required by National Planning Framework , Policy 3 and LDP 2023 Policy P1 Layout, Siting and Design. 'Planning Advice 2023-10 Securing positive effects for biodiversity on development sites' is also relevant here and the baseline ecological survey will need to gather data to meet the needs of any assessment of positive effects required.

¹ Ecosystem services are the direct and indirect contributions of the natural environment to human wellbeing, such as clean water, food production and flood protection.

² The mitigation hierarchy is a framework for managing risks and potential impacts relating to biodiversity. The key elements of this framework are dealing with avoidance, mitigation, compensation and enhancement in that order.

Surveys help to identify opportunities to enhance biodiversity, for example through the improvement of existing habitats, the creation and linking of new areas of habitats, or through green infrastructure such as Sustainable Urban Drainage ponds and wetlands.

2. Timing and extent of survey

Ideally initial surveys would be undertaken during May to September when species are more active, and vegetation can be recorded. However, there may be other optimal times for survey depending on which species are present. Signs of badger and water vole presence are generally easier to see early in the year before the vegetation grows too tall, whereas winter surveys may be required if the site is likely to be important for overwintering birds.

It may be necessary to visit the site more than once and to survey at different times of the day to identify the full range of protected or notable species likely to be present. Surveys should include both the proposed development site, together with adjacent areas which may be impacted by the proposed development for example due to disturbance or to changes in drainage.

Any limitations resulting from the timing or extent of surveys should be clearly identified.

A baseline ecological survey should be carried out by competent and suitably qualified persons who can demonstrate that they are able to undertake a full assessment of the range of interest of the site.

3. Scope and content of surveys

The content of the survey and subsequent report will vary depending on the nature of the site and the features present but, where relevant, Aberdeenshire Council would expect, as a minimum, for it to cover the following:-

- a) Location and site plan to indicate the area to be surveyed and assessed.
- b) Results of a desktop study to identify the likely ecological interest of the site. This should include the extent and details of any designated sites, habitat data from previous surveys and species records. This information is available from the North-East Scotland Biological Records Centre, NBN and local recording groups (see below for contact details).

- c) Dates of visits and any surveys carried out.
- d) A description of the site including physical characteristics, altitude and any features present such as watercourses or floodplains.
- e) Identification and mapping of wildlife habitats using UKhab, Phase 1, Integrated Habitat System (IHS) or National Vegetation Classification (NVC). A list of key plant species present should be provided with an approximate measure of abundance. Details of the area covered by each habitat type, an assessment of its quality and distinctiveness and information on its current management should be provided. Connectivity of habitats both within and out with the development should be mapped.
- f) Features such as hedgerows, ponds and drystone walls should be mapped together with any significant individual or groups of trees.
- g) The presence of any protected or notable species should be recorded together with an indication of numbers and the way in which this species is using the site for example for feeding, roosting or breeding. Signs such as droppings, walkways or nests should be recorded together with the potential for the site to support notable species e.g. any buildings or trees which may be suitable for bat roosts. Where appropriate, an assessment of the importance of this site for protected species should be made, together with an assessment of any cumulative impact.
- h) The presence and extent of any invasive non-native species should be mapped.
- i) Any features of geological or geomorphological interest should be mapped and detailed.
- j) The requirement for any additional surveys, and the scope of those surveys, should be identified. It may be useful to discuss further surveys with the Aberdeenshire Council Planning Department before carrying them out to ensure that all the necessary information is gathered. These surveys should be carried out at the correct time of year by a competent person following agreed methodology as outlined in NatureScot standing advice.
- k) The report should include an initial assessment of the likely impact, both short-term and long-term, of the proposed development on any designated sites, wildlife habitats and protected and notable species. Following the mitigation hierarchy, the retention and enhancement of habitats and features of nature conservation value should be the default position and where appropriate, recommendations for avoidance of impact should be provided such as re-siting elements of the proposal or the timing and method of works to avoid or reduce impact on species.
- l) Following the incorporation of avoidance and mitigation measures, any residual impact on biodiversity should be detailed. This might include the loss of lower value habitats such as improved agricultural land, and where

this is the case an accurate area of loss, if any, of each habitat type should be provided. This will allow calculations of habitat loss and ensure that adequate compensation can be provided. Information should ideally be provided in the form of a table to provide clear and transparent information on habitat retention and loss resulting from the development.

- m) Opportunities to enhance the site to ensure that there is an overall net gain for biodiversity should be detailed, including the improvement of retained habitats, the creation and linking of new areas of habitat, or through incorporating native species planting in green infrastructure such as Sustainable Urban Drainage ponds and basins.
- n) Photographs should be included where they assist with the understanding of the site.

If a survey report is submitted that does not include any of this information a full disclosure is required as to why this element was not included and what alternative methods were used to provide the relevant information.

4. Protected and notable species

These include those identified by the following:-

- Conservation and Natural Habitats & c. Regulations 1994
- Wildlife and Countryside Act 1981
- UK and Local Biodiversity Action Plan priority species lists
- Scottish Biodiversity List
- Species of Conservation Concern

5. Sources of data & information

- North East Scotland Biological Records Centre (NESBReC)
www.nesbrec.org.uk
- National Biodiversity Network (NBN) <http://data.nbn.org.uk>
- Nature Scot (NS) [NatureScot](http://www.naturescot.org.uk)
- North East Scotland Biodiversity Partnership (NESBiP)
www.nesbiodiversity.org.uk
- Royal Society for the Protection of Birds (RSPB) [The RSPB Wildlife Charity: Nature Reserves & Wildlife Conservation](http://www.rspb.org.uk)
- Bat Conservation Trust [Bat Conservation Trust \(bats.org.uk\)](http://www.bats.org.uk)

- North East Raptor Study Group [Scottish Raptor Study Group | | North East](#)
- Scottish Badgers www.scottishbadgers.org.uk
- Botanical Society for the British Isles Scotland <http://bsbi.org/scotland>
- Chartered Institute of Ecology and Environmental Management for guidance on Preliminary Ecological Assessment (PEA) and register of Members www.cieem.net

6. Data Sharing

Aberdeenshire Council encourages the release of habitat and species information recorded during any surveys to the Local Records Centre (NESBReC – North- East Scotland Biological Records Centre) and other relevant data holders.