

Baseline Ecological Survey to Guide Development

Undertaking a baseline survey makes it possible to provide a quick assessment of the ecological interest of a site and to identify the need for further habitat and species surveys. A major advantage of this approach is the streamlining of the planning process and the time it saves for all involved.

The baseline (or walkover survey as it is sometimes called) survey should be carried out as early as possible in the planning of a development proposal so that it can inform the layout and design of the development to minimise impact on biodiversity. Such a survey can also identify opportunities to enhance biodiversity e.g. by identifying opportunities to link areas of habitat to create networks, or through creation of ponds in Sustainable Drainage Systems (SuDS).

Timing of surveys

- Ideally May to September when species more active and vegetation easier to record;
- There may be other optimal times for species depending on species present. E.g. badger and water vole signs are generally easier to see early in the year before vegetation grows too tall or the presence of geese may be obvious over the winter;
- Make clear any limitations imposed by the timing of your survey;
- It may be necessary to visit more than once and at different times of the day to identify the full range of protected species present.

Prior to undertaking a walkover survey a desktop study should be carried out to gather existing information about the site including habitat and species records. Aberdeenshire is fortunate in having a local records centre (NESBReC) www.nesbrec.org with a good range of records. Also the site owner, local residents and groups mentioned in the list at the end of this note can often help.

Walkover surveys should be carried out by a suitably qualified person who can undertake a full assessment of the range of interest of the site, although on occasion it may be necessary for other specialists to visit to assess for individual species groups – again this will depend entirely on the size and nature of your plans.

A walkover survey to assess the ecological interest of a site should in general cover the following:-

- Location and site plan
- Results of desktop study to identify likely ecological interest of the site including extent and detail of any designated sites together with habitats and species records. Information can be supplied by NESBReC, NBN and others.
- Timing of survey including date(s) and time(s) visited (details of any limitations due to timing).
- A description of the site including physical characteristics, altitude, watercourses, floodplains
- If wildlife habitats are present, identification and mapping of habitats using Phase 1 or Integrated Habitat System. A list of key species present is also useful together with some assessment of the quality of the habitat
- Identification and mapping of features such as hedgerows, drystone walls, ponds and significant individual trees or groups of trees
- Identification of presence of protected or important species with an indication of numbers and the way they use the site i.e. whether they are roosting, feeding or breeding on the site
- Identification of signs of protected or important species such as droppings, walkways, nests etc together with location.
- Assessment of suitability of the site to support protected or important species and what the

site is likely to be important for i.e. roosting, foraging

- Suitability of any buildings on or adjacent to the site as bat roosts
- Presence of watercourses and water bodies together with identification of a suitable buffer
- Opportunities for enhancement for biodiversity such as habitat restoration or creation.

The baseline survey should determine the need for further survey and the scope of such surveys. It may be useful to discuss the scope of further surveys with the Local Authority Environment Team before carrying them out to ensure that all the necessary information is gathered. These surveys should then be carried out at the correct time of year by a competent person following agreed methodology which can often be found on Scottish Natural Heritage's website – www.snh.gov.uk/snh-for-you/planners-and-developers/, or the Institute of Ecology and Environmental Management website – <http://www.ieem.net/surveymethods.asp>

Species which should be considered include those identified and protected by the following:-

- Conservation and Natural Habitats &c. Regulations 1994
- Wildlife and Countryside Act 1981
- UK and Local BAP Priority Species Lists
- Scottish Biodiversity List
- Species of Conservation Concern

Sources of data and information:-

- North East Scotland Biological Records Centre (NESBReC) www.nesbrec.org
- National Biodiversity Network (NBN) <http://data.nbn.org.uk>
- Scottish Natural Heritage (SNH) www.snh.org.uk
- North East Local Biodiversity Action Plan (NE LBAP) for lists of priority species. www.nesbiodiversity.org.uk
- Royal Society for the Protection of Birds (RSPB)
- North East Raptor Study Group www.scottishraptorgroups.org/areas/north_east
- Scottish Badgers www.scottishbadgers.org.uk/groups
- Botanical Society for the British Isles Scotland www.bsbscotland.org.uk
- Institute of Ecology and Environmental Management www.ieem.net