

Biodiversity Checklist

Biodiversity is the variety of life on Earth. It includes rare and common species of plants and animal and the diverse habitats that support them. It is not confined to beautiful landscapes or specially protected nature reserves, and is an essential component of the rural and urban areas in which we live and work.

Biodiversity occurs all around, often including sites proposed for development and re-development as well as neighbouring nature reserves, parks and other open spaces. Where a proposed development may have impacts on biodiversity, information is required on the existing biodiversity interest of the site and careful consideration needs to be given to the possible impacts of development on those species or habitats. Where there will be negative impacts, it will be necessary to devise measures to try to avoid impacts, or if that is not possible then to mitigate and as a last resort compensate for impacts and losses.

The likely impacts on biodiversity and the mitigation measures required to prevent, reduce or compensate for losses are an essential consideration of many planning applications. Legally protected and notable species are a material consideration in the planning process and national and local planning policies are in place to protect species and habitats of particular value and the connections between them.

It is therefore a requirement of many planning applications that ecology survey is undertaken prior to a planning submission, which will assess the existing biodiversity and its value and allow for assessment of the likely impacts of development. Initial ecology survey usually involves both desk and field based survey work involving consultation with Nottinghamshire Biological and Geological Records Centre and an initial walkover of the site by a suitably qualified ecologist.

Where an initial desk based assessment, site walkover, Phase 1 survey, or similar has indicated the possible presence of protected species on the application site or deemed that protected species may otherwise be impacted by the development, further species-specific surveys would be required. This information is also to be provided prior to the application being determined, to allow a full assessment of the application, in view of all material considerations.

When do you need to do an ecological assessment?

If the application site or development type falls into any of the below categories, then ecology survey and assessment are required, unless otherwise agreed during a pre-app process:

- All major developments.
- All developments within or within 100m of SSSI, Ancient Woodland, SAC or SPA.



- All developments within or adjacent to Local Wildlife Sites (LWS; formerly known as SINCs), Local Nature Reserves or Ancient Woodland.
- Householder applications that involve demolition or any works affecting
 the roof, weather boarding or hanging tiles of a building that is located
 adjacent to an area of open greenspace, woodland or linear corridor
 such as a railway or water course.
- Minor applications and demolitions that involve removal of or will otherwise affect hedgerows, trees, water courses, water bodies, significant areas of scrub or grassland, habitats listed as Priority Habitats under the Nottinghamshire Biodiversity Action Plan or that are located within or adjacent to open greenspace.
- Development affecting agricultural buildings constructed of brick or stone, or affecting bridges, or underground structures.
- Floodlighting of churches, listed buildings, trees or open greenspace.
- Development that may otherwise affect protected species or Priority Species under Nottinghamshire Biodiversity Action Plan
- Where highlighted as a requirement in written pre-application advice

Protected and Priority species may be present on both green and brownfield sites; especially those sites with a mix of different habitats, that have some connectivity to the wider landscape, or those adjacent to linear habitats such as watercourses and railway lines, those with buildings or other structures, and abandoned or derelict sites that have been left to colonise by plants naturally.

Ecology assessment may not be required for very small sites that do not support vegetation, where buildings or other structures are not present, and are isolated from areas of open space or linear habitats. If uncertain, seek advice from Development Management or LPA Biodiversity Officer.

What should a survey report include?

Ecological survey reports should follow a standard format including the following information:

- Details of the application site and the proposed development. Including maps and photographs where necessary
- Ecologist experience and/or qualifications and licence details (where applicable)
- Background data search* with local records centre (Nottinghamshire Biological and Geological Records Centre), and interpretation of results
- Timings and weather conditions of surveys
- Methodology; including reference to any standard published guidance or methodologies, information on the equipment used and how surveys took place
- Results; including annotated maps and photographs where necessary
- Conclusion of surveys from interpretation of the results



- Discussion of likely impacts on protected and notable species and valued habitats
- Recommendations for necessary avoidance or mitigation measures and/ or further ecology survey
- Suggestions for appropriate ecological enhancement measures

*Required for all but householder applications or those involving demolition of single properties

If a European Protected Species is present (e.g. bats, otter, great crested newts) all necessary surveys should be submitted with the planning application along with an outline mitigation plan written by a licensed ecologist. The production and implementation of a detailed mitigation plan will then be required to inform a licence application to Natural England and will be monitored through a planning condition. A Natural England granted licence is likely to be required before you can proceed with development works. If adequate mitigation is not possible then development proposals are likely to be rejected.

When can survey be carried out?

Species are surveyed for at different times of the year, so it is important that they are considered at the initial stages of the development process to avoid unnecessary delays.

Optimal	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Suboptimal												
Habitats												
Bats (hibernating)												
Bats (internal/external inspection)												
Bats (emergence/return to roost)												
Bats (foraging/ commuting)												
Badgers												
Birds (breeding)												
Birds (overwintering)												
Water voles												
Reptiles												
Great Crested Newts (aquatic)												
Great Crested Newt (terrestrial)												
Otters												
White-clawed Crayfish (manual searching and trapping)												
White-clawed Crayfish (torching)												

How can development improve biodiversity?

In line with National planning policy, it should be considered early on how biodiversity could be incorporated into the design of the scheme and how the development can contribute to its preservation and enhancement. For example, try to incorporate some of the following:



- Retain and enhance existing features that are beneficial to biodiversity.
- Landscaping schemes should consider native species grown locally, preferably nectar and berry producing species.
- Landscaping schemes should avoid non-native species that can be invasive (refer to Schedule 9 of the Wildlife and Countryside Act 1981 for a list of species to specifically avoid).
- Corridors through development location of new and retained open space and landscaping should be located appropriately to provide connectivity with neighbouring habitats, use gaps to allow passage under fences and create habitats continuous with the wider landscape.
- Provision for wildlife homes install some bat boxes, bird boxes, hedgehog homes, insect homes and log piles.
- Wildflower meadow mixes or flower-rich lawns can be used instead of amenity mixes; they add colour and interest as well as promoting biodiversity.
- Include a wildlife pond.
- Sustainable Drainage Systems (SuDS) designed specifically to be of benefit to wildlife can be used to collect clean water run-off using ditches, ponds and reedbeds before water enters ground or natural watercourses or is re-used on the site.
- Planters, pots and window boxes all provide space for planting in areas that lack gardens.
- Living walls, green or brown roofs can significantly help energy efficiency as well as promoting biodiversity.
- Do not use peat-based products, as this damages scarce resources and offsite habitats.
- Always devise and implement an appropriate management plan to maintain the ecological value of retained and created habitats.
- For major development, underpasses or green bridges can be utilised for maintaining connectivity across roads.