

Biodiversity Guidance for Full Permission, Outline Permission, Listed Building Consent, Permission in Principle

Biodiversity is one of several material considerations when local planning authorities are considering planning applications. A material consideration is a factor that the LPA is obliged to consider.

Any development can affect biodiversity. If you are making a planning application, it is important to consider and identify the potential adverse impacts on biodiversity at an early stage. This can prevent invalidation, delays or refusal of your planning application.

However, development can also have positive impacts on biodiversity. Opportunities for enhancements should be integrated into all developments in order to meet the requirements of the climate and ecological emergencies that have been declared by all the local authorities in Publica. For more information on these, please visit:

- <https://www.cotswold.gov.uk/environment/climate-action/cotswold-climate-and-ecological-emergencies/>
- <https://www.fdean.gov.uk/environment/climate-action/>
- <https://www.westoxon.gov.uk/environment/climate-action/climate-action-and-what-we-are-doing/>

The following frequently asked questions should help you to identify what needs to be submitted with your planning application, why this information is required, how to go about obtaining this information, when biodiversity surveys should usually be carried out and what types of enhancements could be provided.

1. Why is information on biodiversity necessary for planning applications?

In order for the local planning authority to judge whether an application meets the requirements of the National Planning Policy Framework (NPPF 2021) and Local Plan policies any application that may affect biodiversity should be accompanied by the appropriate level of information.

Paragraph 8 of the NPPF describes the environmental objective of sustainable development as “to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”.

Paragraph 119 of the NPPF requires planning policies and decisions to promote the effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment, and encourages the use of previously developed or ‘brownfield’ land (where this would not conflict with other policies, including causing harm to biodiversity).

Paragraph 145 of the NPPF refers to retaining and enhancing biodiversity within Green Belts.

Paragraph 153 of the NPPF requires plans to take a proactive approach to mitigating and adapting to climate change, taking account of the long-term implications on biodiversity.

Chapter 15 is entitled “conserving and enhancing the natural environment”.

Paragraph 174 requires planning policies and decisions to contribute to and enhance the natural and local environment by:

- protecting and enhancing sites of biodiversity or geological value and soils;
- recognising the wider benefits from natural capital and ecosystem services, including the economic value of trees and woodland;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherence ecological networks that are more resilient to current and future pressures;

Paragraph 175 requires plans “...to take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure, and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

Paragraph 179 requires plans to protect and enhance biodiversity and geodiversity by

- identifying, mapping and safeguarding components of wildlife-rich habitats and wider ecological networks, including designated sites of importance for biodiversity; the wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation (e.g. Nature Recovery Network); and
- promoting the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identifying and pursuing opportunities for securing measurable net gains for biodiversity.

Paragraph 180 requires local planning authorities to apply a list of principles for determining planning applications, including:

- if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigation or, as a last resort, compensated for, then planning permission should be refused;
- development whose primary objective to conserve or enhance biodiversity should be supported, while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature, where this is appropriate.

The Planning Practice Guidance states “*Information on biodiversity and geodiversity impacts and opportunities needs to inform all stages of development (including site selection and design, pre-application consultation and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. Pre-application discussions can help to scope whether this is the case and, if so, the survey work required*” (Paragraph: 018 Reference ID: 8-018-20190721 – Revision date: 21/07/2019).

This is also highlighted in Circular 06/2005, which states at para 99 “*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted...*”

The need to protect and enhance biodiversity (and the need to understand the biodiversity resources that might be affected by development proposals) are also emphasised in:

- Cotswold District Local Plan 2011-2031 policies (EN1, EN8 and EN9)

- Forest of Dean District Council Local Plan policies – (CSP1, AP7 and AP8)
- West Oxfordshire District Council Local Plan policy EH3
- British Standard BS 42020:2013 Biodiversity Code of Practice for Planning and Development
<http://shop.bsigroup.com/ProductDetail/?pid=000000000030258704>
- Natural England standing advice <https://www.gov.uk/guidance/protected-species-and-sites-how-to-review-planning-proposals>

2. How do I know if I need a biodiversity report?

We need to fully understand all the impacts, both negative and positive, of a proposed development, including the impacts on wildlife and biodiversity. When submitting a planning application, it may be necessary for you to include a Biodiversity Report to provide this information.

The Biodiversity Self-Assessment form has been developed to guide you and help you understand when a biodiversity report is needed to support your planning application. It is a broad brush approach and cannot be specific to every individual application site. There may be cases where you are advised to undertake biodiversity survey work even if the checklist does not immediately indicate this.

You should submit a biodiversity report with a planning application when the development proposals (including any associated off-site works) will affect the following:

- designated sites
- priority habitats
- other biodiversity features
- species protected by law
- priority species

These are wildlife habitats that are listed at section 41 of the Natural Environment and Rural Communities Act 2006 as being habitats of principal importance for biodiversity conservation. In Gloucestershire and Oxfordshire this includes:

- Ancient or species-rich hedgerows
- Floodplain grazing marsh
- Fen, marsh, swamp and reedbeds
- Lowland beech and yew woodland
- Lowland calcareous grassland (e.g. species-rich chalk and limestone grasslands)
- Lowland meadows (e.g. species-rich neutral grassland)
- Lowland mixed deciduous woodland (including areas identified as ancient woodland)
- Lowland wood-pasture and parkland
- Rivers and streams
- Standing open water and canals (e.g. lakes, ponds and flooded gravel pits); and

- Wet woodland

There are other important habitats and features that are not included in the national list of priority habitats, but are of great local importance. These include:

- Secondary woodland
- Mature, ancient or veteran trees
- Caves, mines and disused tunnels
- Trees and scrub (potential bird nesting areas)
- Previously developed land with biodiversity interest
- Urban green space (such as allotments, disused railway lines); and
- Ponds (where not qualifying as priority habitat).

There are a number of species that are protected by law, for example under the Wildlife and Countryside Act 1981 as amended and The Conservation of Habitats and Species Regulations 2017 (as amended)., for example:

- Badgers
- Bats
- Dormouse
- Great crested newts
- Nesting birds
- Otters
- Reptiles
- Water voles

Priority species are those that have been included on the list of “species of principal importance for biodiversity” in accordance with Section 41 of the Natural Environment and Rural Communities Act 2006 in England, for example:

- Brown hare
- Skylark
- Common toad
- Hedgehog

You may already be aware of certain protected or priority species being present at the application site, e.g. roosting bats, barn owls and other nesting birds (e.g. swallows and house sparrows). If you have this local knowledge of the application site, then you should commission an ecological consultant to carry out an appropriate survey.

The Wildlife Assessment Check available at: <https://www.biodiversityinplanning.org/wildlife-assessment-check/> is a free online tool for **householders** and **small to medium-scale developers** who want to undertake a development project to check whether they will need expert ecological advice before submitting a planning application. This tool is *not* intended for large development

projects where formal Environmental Impact Assessments (EIA) are required according to EIA regulations. The tool considers whether there are any protected and priority wildlife species and statutory designated sites that may be impacted by a development project. It will enable users to undertake a **simple check** at the pre-planning application stage, before a planning application is submitted. This will help clarify for applicants and planners whether a proposed site needs professional ecological advice and further assessment. The key aims of the Wildlife Assessment Check are to:

- Ensure protected and priority species and statutory designated sites for nature conservation are considered early in the planning process
- Ensure professional ecological input is sought at an early stage of a development project
- Ensure necessary ecological assessments are carried out and submitted as part of a planning application

This tool may help you complete the Biodiversity Self-Assessment form that is part of the requirement for all full applications.

3. *Where do I find an ecological consultant to carry out a survey?*

You will need to appoint a professional and/or appropriately qualified and/or experienced ecological consultant to prepare the relevant ecological submission. The consultant would need to be specifically licensed to carry out any surveys for the following protected species: bats, dormouse, great crested newt, otter and white clawed-crayfish.

Information on how to find such a professional ecological consultant can be found on the Chartered Institute of Ecology and Environmental Management (CIEEM) website (where you can search their Registered Practices Directory by geographical location and specialism) <https://cieem.net/i-need/finding-a-consultant/>

4. *What type of biodiversity report do I need to submit?*

There are two main types of biodiversity report that would be sufficient for submission with a planning application. This relates to the type of assessment that has been carried out and whether there would be any biodiversity impacts arising from the proposed development.

- a) Preliminary Ecological Appraisal (PEA) report comprises a scoping assessment to identify important biodiversity features, further surveys and biodiversity enhancement opportunities. It is not usually suitable for submission with a planning application unless no additional surveys are required, no significant impacts would arise and no mitigation is necessary (other than precautionary working methods). Surveys and reports should be carried out in accordance with best practice guidelines (Chartered Institute for Ecology and Environmental Management (CIEEM): <https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/>
- b) Ecological Impact Assessment (EcIA) report collates the results from the individual habitat and species surveys, assesses the impacts of the proposal and proposes mitigation, compensation and enhancements. Suitable for submission in most cases. Surveys, impact assessment and reports should be carried out in accordance with best practice guidelines (CIEEM): <https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/>

Other types of report such as those to provide specific species survey information (e.g. “Bat Survey”

or “Preliminary Building Assessment for Bats”) might be sufficient where only certain impacts relating to these species would occur and no other habitat or species would be affected. However, even in these cases, a Preliminary Ecological Appraisal should be conducted first to identify the habitats present, search for evidence of species and identify potential for species to be present, as there could be other direct or indirect impacts that would not be immediately obvious, for example, machinery access and storage areas, as well as other species to take into account (e.g. nesting birds) and opportunities for biodiversity enhancements.

5. When should biodiversity surveys be carried out?

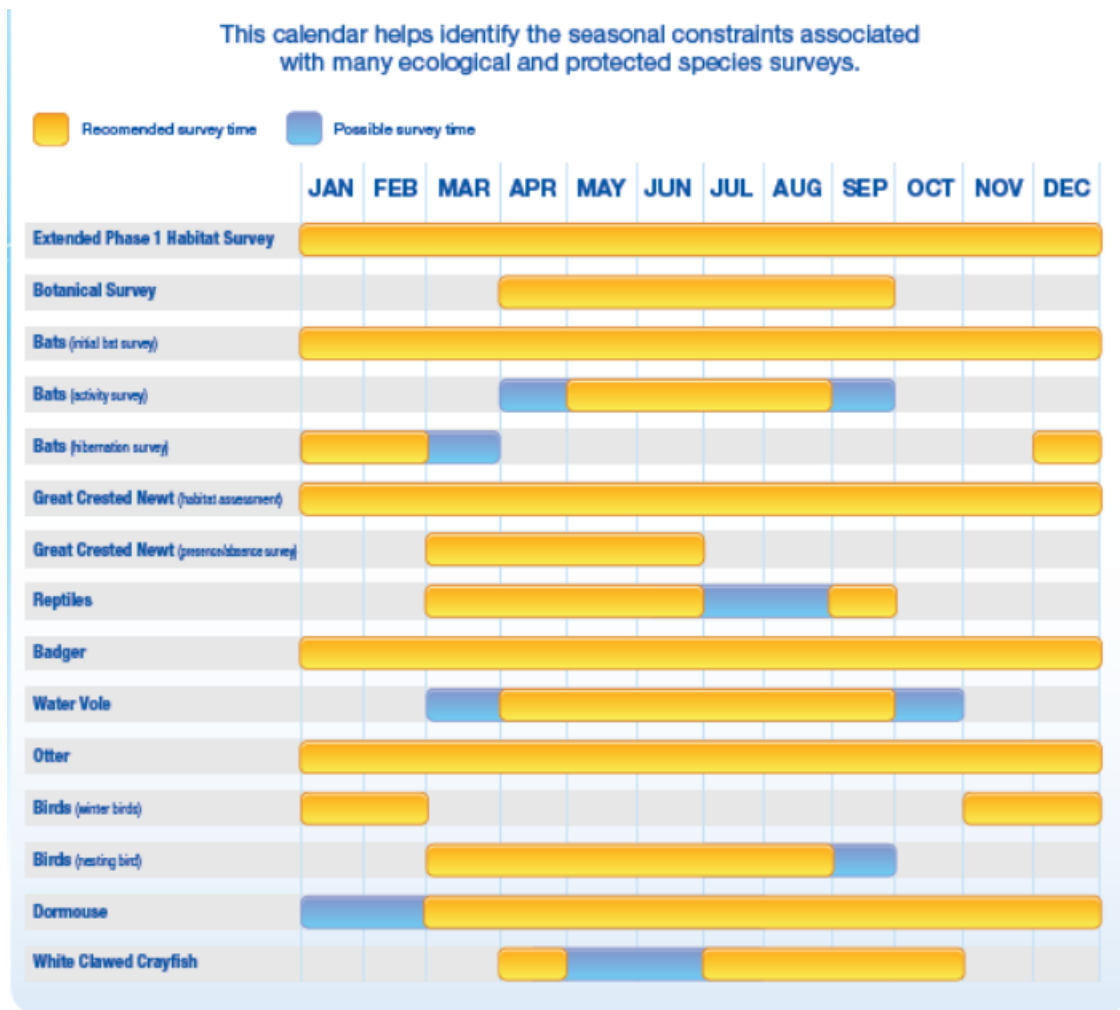
Assessments carried out to inform a Preliminary Ecological Appraisal report can usually be carried out at any time of year.

Depending on the outcome of the preliminary assessment, though, there might be a requirement for seasonally constrained habitat and/or species surveys. This is because there are optimal times of year to survey when there is peak activity, e.g. during the summer months for bat roosts or when habitats tend to “look their best” and the majority of flowering plants are present, for example, April-May for ancient woodlands. A chart has been provided below to give you an indication of when ecological surveys are most appropriate. However, your ecological consultant would be able to advise you on this as part of the PEA report.

If subsequent surveys are necessary to inform an Ecological Impact Assessment report, then these must be carried out at the appropriate time of year and by a competent (i.e. suitably qualified and/or experienced) person.

General advice about when to survey is included in the advice issued by Natural England:

<https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications#when-to-survey>



6. Where do I obtain existing biodiversity data from?

CIEEM Guidelines for Accessing and Using Biodiversity Data:

https://cieem.net/resource/guidelines_for_accessing_and_using_biodiversity_data/

The above guidance document provides some useful information about the need for and use of biodiversity data. Usually when a biodiversity report is needed as part of a planning application, the ecological consultant will advise you to obtain a data search, which forms part of their assessment of the proposed development site.

Biodiversity data includes species records (including absence), habitat information and designated site details. Biodiversity data includes information that is freely available online as well as information held by local environmental records centres (LERCs) or other organisations/individuals, which will provide them in response to a data search request, for example local recording groups.

For your biodiversity report to properly assess the impacts of a proposed land use change, a comprehensive desk study should be undertaken to inform the Preliminary Ecological Appraisal and any subsequent detailed Ecological Impact Assessment.

Biodiversity datasets are, by their nature, incomplete with some species groups being better represented than others, whether nationally or locally. There are a large number of species in the UK, many of which are not easily identified or detected, and access for surveys must be permitted by the landowner. The number and types of records available therefore depends on recording effort,

where recorders live and how often sightings are made by the general public. It is therefore entirely possible that records of very common species will be unavailable in some areas, but this does not mean that the species is not present. Absence of evidence is not the same as evidence of absence.

“Absence” records where a survey has been carried out and no evidence of a given species was found will also provide useful information and may be held by the LERC.

Data should therefore be obtained from a variety of sources.

- Gloucestershire: Gloucestershire Centre for Environmental Records, GCER: <https://www.gcer.co.uk/datasearch.html>
- Gloucestershire Geology Trust (glosgeotrust.org.uk)
- Oxfordshire: Thames Valley Environmental Records Centre, TVERC: <https://www.tverc.org/cms/content/data-searches>
- WeBS (Wetland Bird Survey) <http://www.bto.org/volunteer-surveys/webs>
- Multi-agency Geographic Information for the Countryside – MAGIC www.magic.gov.uk
- National Biodiversity Network (NBN) www.nbn.org.uk
- Natural England <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals>
- Cotswold Water Park Nature Recovery Plan <https://www.cotswold.gov.uk/planning-and-building/landscape/cotswold-water-park/>

7. What is the great crested newt district licensing scheme?

Great crested newts have protected status through UK and European legislation and must be considered as part of the planning application process.

Ponds are critical to great crested newts for breeding and, whilst on land, they are also dependent upon other habitats such as woodland, hedgerows, rough grassland and scrub. They are generally found within 500m of ponds, although may travel further than this.

Unless it can be demonstrated that there is no risk of impacts on great crested newts or their habitats, you may need a licence to carry out development work where the species is present. You can get a licence by:

- Applying directly to Natural England <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>
- Joining the district level licensing scheme authorised by the relevant council.

Natural England have produced a guidance document for all planning authorities using the District Licensing Scheme (https://naturespaceuk.com/wp-content/uploads/2021/06/DLL-Guidance-Document-for-LPAs-NatureSpace-Partnership_March2021.pdf), which explains that local planning authorities can rely on the “Impact Risk Zone” maps to identify where great crested newts are likely to be. In the higher risk areas (red and amber zones), planning applicants must now set out how risks to great crested newts will be dealt with. The “Impact Risk Zone” map is available on <https://naturespaceuk.com/gismaps/impact-risk-map/>

Whenever (*non-householder*) applications fall within the red/amber zones, information is required at validation.

If the application site lies within either the amber or the red impact risk zone, it means that suitable habitat is nearby and the species is likely to be present. In accordance with Natural England's Interim Guidance to LPAs (published March 2021), planning applicants impacting land in these zones should provide sufficient information to either demonstrate that their proposal poses no risk to great crested newts, or submit an assessment of the risk to this species, detailing any mitigation and licensing requirements. Assessments must be prepared by a suitably qualified and experienced ecologist. Where impacts on great crested newts cannot be ruled out, the applicant could apply to join the district licensing scheme.

If using the district licensing scheme, the applicant does not necessarily need to obtain any detailed great crested newt surveys and would be licensed (with certain obligations) to start works without applying for a separate licence from Natural England. If great crested newts are found during works, they can be moved out of harm's way (to best practice mitigation principles) without having to stop works and apply for a Natural England licence.

The district licensing scheme is voluntary and is delivered on behalf of the three councils by NatureSpace and The Newt Conservation Partnership.

The applicant should contact NatureSpace who will carry out a free, up-front assessment to determine eligibility and all associated costs, timing and mitigation requirements by submitting an enquiry form at: <https://naturespaceuk.com/enquiry-form/> You can also call them on 01865 688307 or email: info@naturespaceuk.com

Further information regarding licensing options can be found at:

- Cotswold District Council: <https://www.cotswold.gov.uk/planning-and-building/wildlife-and-biodiversity/great-crested-newt-district-licensing-scheme/>
- Forest of Dean District Council: <https://fdean.gov.uk/planning-and-building/wildlife-and-biodiversity/great-crested-newt-district-licensing-scheme/>
- West Oxfordshire District Council: <https://www.westoxon.gov.uk/planning-and-building/wildlife-and-biodiversity/great-crested-newt-district-licensing-scheme/>

8. What else should be submitted in a biodiversity report?

If mitigation and compensation proposals have been recommended within the biodiversity report, you should illustrate them on your submitted drawings. For example, if a bat loft is recommended within a barn conversion, you should detail its location, dimensions, materials and access points in the submitted plans so that the Local Planning Authority can be satisfied that the mitigation measures can be achieved as part of the development.

The biodiversity report should be used to inform the design of the proposed development as part of a holistic approach. The biodiversity mitigation and enhancement recommendations of the biodiversity report should be taken in conjunction with the landscaping, green infrastructure and built environment proposals to ensure that they are effectively integrated into the development. If there are any discrepancies between the recommendations of the biodiversity report and the other disciplines within the planning application, these will be picked up by the local planning authority and may result in delays to determination.

9. Is a measured biodiversity net gain required?

‘Biodiversity net gain’ is defined as an approach that aims to leave the natural environment in a measurably better state than before development. Where a development has an impact on biodiversity the approach encourages developers to provide an increase in appropriate natural habitat and ecological features over and above those being affected in such a way that it is hoped that the current loss of biodiversity through development will be halted and ecological networks restored.

Under the [Environment Act 2021](#), all planning permissions granted in England (with a few exemptions) will have to deliver at least 10% biodiversity net gain from an as yet unconfirmed date, expected to be in November 2023. BNG will be measured using Defra’s biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and
- mandatory spatial strategies for nature: Local Nature Recovery Strategies or ‘LNRS’.

Further information about mandatory BNG and the Environment Act is available on the planning Advisory Service website: <https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain-local-authorities>

“Biodiversity net gain still relies on the application of the mitigation hierarchy to avoid, mitigate or compensate for biodiversity losses. It is additional to these approaches, not instead of them. Put simply, it involves the use of a metric as a proxy for recognising the negative impacts on habitats arising from a development and calculating how much new or restored habitat, and of what types, is required to deliver sufficient net gain.” - visit the CIEEM website for more information and to download a copy of the Biodiversity Net Gain Principles published by CIEEM, IEMA and CIRIA (2016) <https://cieem.net/i-am/current-projects/biodiversity-net-gain/>

Until such time as appropriate systems for mandatory Biodiversity Net Gain have been established the following currently applies:

West Oxfordshire District Council is implementing a mechanism for biodiversity net gain as part of development management in accordance with Local Plan Policy EH3. Please refer to the specific guidance that has been published on the council website to explain the requirements for planning applications, including data standards: <https://www.westoxon.gov.uk/planning-and-building/planning-permission/make-a-planning-application/planning-application-supporting-information/>

Cotswold District Council / Forest of Dean District Council are seeking biodiversity net gain within development proposals where possible

The biodiversity net gain approach requires the use of the Defra Metric to provide a measure of the level of net gain to be provided. Details submitted with a planning application should include a biodiversity net gain assessment within the EclA report (or as a separate report) along with a baseline habitats plan, proposed habitats plan, GIS layers and a ‘live’ copy of the metric spreadsheet. At the moment, the level of biodiversity net gain is negotiable until it becomes either mandatory or Local Plan policy.

All methods of avoidance and on-site mitigation must be fully explored and proven to the Council that they cannot be satisfactorily achieved on site before any off-site contributions will be considered. It must also be recognised that not all habitats can be re-created, such as ancient woodland, which is considered to be irreplaceable. Development proposals must clearly demonstrate that an overall net gain in biodiversity would be achieved.

Other biodiversity enhancements should also be included such as bird and bat boxes, hedgehog boxes, bee bricks, etc, and other species-specific measures, particularly for priority species that are known to be present on site and in the wider surrounding area, for example food plants for butterflies and moths or a barn owl nest box.

10. What types of biodiversity enhancements can be incorporated into development?

There is a huge range of different types of biodiversity enhancements that can be incorporated into developments. It is important to consider what these might be at an early stage in the design of your development proposal.

For obvious reasons, public open spaces provide the most significant opportunity to retain and enhance existing habitats and to create new habitats. This will enhance the environment for local people as well as for wildlife. Interaction with nature is vital for our mental health and wellbeing, so a biodiverse green infrastructure should be viewed as an essential part of any new development.

Alternatively, there are many small enhancements that can be incorporated such as flowering lawns and wildlife boxes. Even at the small scale, allowing some areas to grow “wild” can provide food and shelter for hedgehogs, common toads, house sparrows and slow worms (priority species). Section 11 below provides some useful links to additional information sources that may guide you to decide what you could achieve in your site.

Biodiversity enhancements include the following:

- Habitat creation using native plants, for example:
 - Native, species-rich hedgerow planting (at least 6 woody species) - creating new or filling gaps in existing hedgerows;
 - Native broadleaved woodland planting - extending/buffering existing woodland or improving connectivity or providing ‘stepping stones’;
 - Native tree and shrub planting;
 - Orchard planting using local varieties;
 - Wildflower meadow creation using a seed mix of local provenance;
 - Tussocky grassland creation that requires minimal management (e.g. cut every 2-3 years);
 - Flowering lawns (grassland containing plants that respond well to regular cutting);
 - Green roofs and living walls;
 - Wildlife pond creation (shallow margins, left to colonise naturally for 2 years and no fish) or restoration of existing ponds;
- Non-native or ornamental planting with recognised wildlife benefits (e.g. food source for pollinating insects) in more formal amenity areas and gardens; and
- Wildlife boxes and other features such as:
 - Built-in (preferred) or externally-mounted bat boxes;
 - Built-in or externally- mounted bird boxes;

- Insect/bee bricks;
- Artificial refugia (e.g. log piles, compost heaps); and
- 'Hedgehog highways', i.e. 150mm gaps under fences or holes through walls to provide permeability for this species through a development site.

11. Where can I find more information and guidance?

Below are some links to external websites where additional information about biodiversity and related topics can be found. **Inclusion on the list below does not infer any recommendation by the councils.** The list provides examples of where guidance can be found and is not comprehensive (e.g. only certain species are included).

Also, please check the relevant council's website for a range of Biodiversity Specifications that are being produced to provide guidance to planning applicants and to use as conditions on planning consents instead of asking for information to be submitted for approval. These include precautionary working methods, amphibian and reptile enhancements, native hedgerow planting and swift brick installation. ***Note: these specifications are due to be published in instalments in from 2022.***

<https://www.fdean.gov.uk/planning-and-building/wildlife-and-biodiversity/biodiversity-specifications/>

<https://www.cotswold.gov.uk/planning-and-building/wildlife-and-biodiversity/biodiversity-specifications/>

<https://www.westoxon.gov.uk/planning-and-building/wildlife-and-biodiversity/biodiversity-specifications/>

The following list is in alphabetical order by subject/type of guidance.

A

Amphibians

- Amphibian and Reptile Conservation (ARC) Trust publications:
 - Common toads and roads: <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=2590c9bf-f39c-4180-8b9f-f32ca13c15ef>
 - Amphibian habitat management handbook: <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=8b3624ae-3aec-4f00-a362-f41d70fe450c>
 - Delivering wildlife-rich communities for future generations (creating and managing sustainable habitats in partnership with housing developers): <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=153a58bf-eaba-4056-a3ec-6ef8ebbfd64>
 - Guidance on building development (England) with respect to amphibians and reptiles <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=cd0b787f-22fd-4aa9-989d-571ab0299f99>

B

Badgers

- Natural England and Defra Standing Advice: <https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects>
- Planning Portal advice: https://www.planningportal.co.uk/info/200187/your_responsibilities/40/other_permissions_you_may_require/4

Bats

- Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines): https://cdn.bats.org.uk/pdf/Resources/Bat_Survey_Guidelines_2016_NON_PRINTABLE.pdf?mtime=20181115113931&focal=none

Best Practice

- CIEEM Guidelines for Preliminary Ecological Appraisal (PEA): <https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/>
- CIEEM Guidelines for Ecological Impact Assessment (EcIA): <https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/>
- CIEEM ecological report writing guidelines: <https://cieem.net/resource/guidelines-for-ecological-report-writing/>
- CIEEM good practice information for habitats and species: <https://cieem.net/resource/good-practice-guidance-for-habitats-and-species/>
- CIEEM longevity of ecological reports: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>
- CIEEM Guidelines for Accessing and Using Biodiversity Data: https://cieem.net/resource/guidelines_for_accessing_and_using_biodiversity_data/
- British Standard BS42020:2013 Biodiversity – Code of practice for planning and development: <https://shop.bsigroup.com/products/biodiversity-code-of-practice-for-planning-and-development?pid=00000000030258704>

Biodiversity

- Royal Town Planning Institute guidance (November 2019): <https://www.rtpi.org.uk/media/1563/biodiversityinplanningpracticeadvice2019.pdf>
- Biodiversity and Planning in Oxfordshire: <https://www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentalndplanning/countryside/naturalenvironment/Wholedocument.pdf>

Biodiversity Net Gain (BNG)

- Planning Practice Guidance (PPG): <https://www.gov.uk/guidance/natural-environment#biodiversity-geodiversity-and-ecosystems>
- Local Government Association, including FAQs: <https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain>
- West Oxfordshire District Council – Local Plan Policy EH3; the Sustainability Checklist, BNG and BNG Data Standards guidance documents are available to download at: <https://www.westoxon.gov.uk/planning-and-building/planning-permission/make-a-planning-application/planning-application-supporting-information/>
- National guidance on using the metric approach: <https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development>

- CIEEM/CIRIA/IEMA Biodiversity Net Gain: Good Practice Principles for Development (2016): <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/>
- CIEEM/CIRIA/IEMA Biodiversity Net Gain Practical Guide (2019): <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/>
- CIEEM/CIRIA/IEMA Biodiversity Net Gain Case Studies (2019): <https://cieem.net/resource/biodiversity-net-gain-case-studies/>
- CIEEM BNG Report and Audit Templates (2021): <https://cieem.net/resource/biodiversity-net-gain-report-and-audit-templates/>

C

Construction Industry Research and Information Association (CIRIA)

- <https://www.ciria.org/CIRIA/Home/CIRIA/default.aspx?hkey=b9b32704-f151-4cb8-83fc-c9da82a10893>

D

Data Searches

- Cotswold and Forest of Dean: Gloucestershire Centre for Environmental Records (GCER): <https://www.gcer.co.uk/datasearch.html>
- West Oxfordshire: Thames Valley Environmental Records Centre (TVERC): <https://www.tverc.org/cms/content/data-searches>
- MAGIC: <https://magic.defra.gov.uk/MagicMap.aspx>
- National Biodiversity Network Atlas: <https://nbnatlas.org/>

Dormouse

- Dormouse Conservation Handbook: <https://ptes.org/wp-content/uploads/2014/06/Dormouse-Conservation-Handbook.pdf>
- CIEEM best practice: <https://cieem.net/resource/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects/>
- Natural England Standing Advice: <https://www.gov.uk/guidance/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects>

E

Ecological Consultants

- CIEEM directory of 'Registered Practices' - search by geographical area or specialism: <https://events.cieem.net/RegisteredPracticeDirectory/Registered-Practice-Directory.aspx>

Ecological Impact Assessment Checklist and Declaration Form

- <https://cieem.net/resource/ecological-impact-assessment-ecia-checklist/>

F

G

Green Infrastructure and Biodiversity

- Planning Practice Guidance (PPG): <https://www.gov.uk/guidance/natural-environment#biodiversity-geodiversity-and-ecosystems>
- Building with Nature <https://www.buildingwithnature.org.uk/>
- Gloucestershire Green Infrastructure Pledge <https://www.gloucestershirenature.org.uk/green-infrastructure-pledge>
- Cotswold District Council Green Infrastructure pre-application advice note - download from: <https://www.cotswold.gov.uk/planning-and-building/landscape/landscape-development-and-planning/>

Great crested newts

- Amphibian and Reptile Conservation (ARC) Trust species information, including identification: <https://www.arc-trust.org/great-crested-newt>
- Natural England Standing Advice: <https://www.gov.uk/guidance/great-crested-newts-surveys-and-mitigation-for-development-projects>
- CIEEM best practice information: <https://cieem.net/resource/great-crested-newt-mitigation-guidelines/>
- Conservation Handbook: https://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf

Great crested newt district level licensing - NatureSpace UK

- Natural England guidance: https://naturespaceuk.com/wp-content/uploads/2021/06/DLL-Guidance-Document-for-LPAs-NatureSpace-Partnership_March2021.pdf
- NatureSpace Partnership and how the scheme works: <https://naturespaceuk.com/>
- NatureSpace free enquiry form: <https://naturespaceuk.com/contact-us/#Enquiry%20Form>
- NatureSpace - a Practitioner's Guide: <https://naturespaceuk.com/wp-content/uploads/2019/10/A-Practitioners-Guide-to-NSP-District-Licensing.pdf>
- NatureSpace Mitigation Principles: <https://naturespaceuk.com/wp-content/uploads/2019/09/NatureSpace-GCN-Mitigation-Principles.pdf>

Government Policy and Guidance

- National Planning Policy Framework: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Guidance on the natural environment, including the mitigation hierarchy: <https://www.gov.uk/guidance/natural-environment>
- National guidance on protected species and development (Natural England Standing Advice): <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

H

Hedgehogs

- <https://www.hedgehogstreet.org/about-hedgehogs/>
- <https://www.hedgehogstreet.org/about-our-hedgehog-street-campaign/stateof/>

- Hedgehog Highways: <https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/>
- <https://www.mammal.org.uk/species-hub/full-species-hub/discover-mammals/species-hedgehog/>
- <https://www.rspca.org.uk/adviceandwelfare/wildlife/animals/hedgehogs>
- <https://www.britishhedgehogs.org.uk/the-basic-facts-2/>
- <https://www.wildlifetrusts.org/what-do-if-you-find-wild-animal/help-hedgehog>
- <https://www.gloucestershirewildlifetrust.co.uk/urban-wildlife/hedgehog-way>
- <https://www.bbwt.org.uk/wildlife-explorer/mammals/european-hedgehog>

Hedgerows

- DEFRA Hedgerow Survey Handbook:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69285/pb11951-hedgerow-survey-handbook-070314.pdf
- <https://hedgelink.org.uk/hedgerows/hedgerow-management-advice/>
- https://hedgelink.org.uk/cms/cms_content/files/30_complete_good_hedge_management_guide_leaflet.pdf
- <https://www.gov.uk/guidance/plant-and-manage-hedgerows>
- <https://ptes.org/hedgerow/managing-hedgerows-top-tips/>
- <https://www.wildlifetrusts.org/wildlife/managing-land-wildlife/how-manage-hedgerow-wildlife>
- <https://www.ceh.ac.uk/our-science/projects/hedgerow-management-and-rejuvenation>
- Forest of Dean District Council hedgerow planting specification:
<https://www.fdean.gov.uk/media/rk2dr2ul/hedge-planting-specifications.pdf>

I

Invertebrates

- Government advice: <https://www.gov.uk/guidance/protected-invertebrates-protection-surveys-and-licences>
- Buglife: <https://cieem.net/resource/good-practice-planning-for-invertebrates/>
- B-Lines: <https://www.buglife.org.uk/our-work/b-lines/>
- Bumblebee Conservation Trust: <https://www.bumblebeeconservation.org/>
- Creating green roofs for invertebrates: https://cdn.buglife.org.uk/2019/07/Creating-Green-Roofs-for-Invertebrates_Best-practice-guidance.pdf

J

K

L

M

- Mammal Society: <https://www.mammal.org.uk/>

N

Natural Capital

- Gloucestershire Natural Capital Mapping (ongoing revisions and updates)
<https://naturalcapital.gcerdata.com/>
- Enabling a Natural Capital Approach (ENCA) guidance:
<https://www.gov.uk/guidance/enabling-a-natural-capital-approach-enca>
- Wildlife Trust information on natural capital: <https://www.bbowt.org.uk/wildlife/nature-matters/natural-capital-and-ecosystem-services>
- Building with Nature (green infrastructure standards):
<https://www.buildingwithnature.org.uk/about>
- Interim West Oxfordshire Green Infrastructure Study:
<https://www.westoxon.gov.uk/media/dyyduqtn/interim-green-infrastructure-study-june-2011.pdf>
- CIRIA SuDS Manual:
https://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx
- Oxfordshire Trees for the Future Project: <https://www.oxtrees.uk/mapping>
- Environmental Benefits for Nature tool (beta test version 2021):
<http://publications.naturalengland.org.uk/publication/6414097026646016>

Nature Recovery Network

- Emerging Oxfordshire Nature Recovery Network:
<https://www.wildoxfordshire.org.uk/biodiversity/oxfordshires-nature-recovery-network/>
- Gloucestershire Ecosystem and Natural Capital Mapping, including the nature recovery network map (ongoing revisions and updates) <https://naturalcapital.gcerdata.com/>

Nesting Birds

- National guidance: <https://www.gov.uk/guidance/wild-birds-protection-surveys-and-licences>
- CIEEM best practice: <https://cieem.net/resource/guidance-for-bird-surveys-in-relation-to-development-natural-england/>
- British Trust for Ornithology (BTO) summary information:
<https://www.bto.org/understanding-birds/birdfacts/about-birdfacts/key-facts>
- State of the UK's Birds (BTO): <https://www.bto.org/our-science/publications/state-uks-birds/state-uks-birds-2020>
- BS 42021 Biodiversity and the built environment - Specification for the Design and Installation of Bird Boxes (not yet published):
<https://standardsdevelopment.bsigroup.com/projects/2017-03102#/section>
- Natural England reports (birds - protection and conservation):
<http://publications.naturalengland.org.uk/category/40030>

O

Otter

- Natural England Standing Advice: <https://www.gov.uk/guidance/otters-protection-surveys-and-licences>
- CIEEM - best practice for monitoring: <https://cieem.net/resource/monitoring-the-otter/>

- Mammal Society (general information): <https://www.mammal.org.uk/species-hub/full-species-hub/discover-mammals/species-otter/>

P

- Plantlife:

Q

R

Reptiles

- Amphibian and Reptile Conservation Trust publications:
 - Guidance on Building Development with respect to amphibians and reptiles: <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=cd0b787f-22fd-4aa9-989d-571ab0299f99>
 - Reptile Habitat Management Handbook: <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=e32fe83a-fd68-4046-80b4-445708346803>
 - Delivering wildlife-rich communities for future generations (creating and managing sustainable habitats in partnership with housing developers): <https://www.arc-trust.org/Handlers/Download.ashx?IDMF=153a58bf-eaba-4056-a3ec-6ef8ebbefd64>
- RSPB: <https://www.rspb.org.uk/our-work/policy-insight/land-use-planning/the-rspb-and-planning/>

S

State of Nature Reports

- UK State of Nature Report 2019: <https://jncc.gov.uk/news/uk-state-of-nature-2019-report/>
- Oxfordshire State of Nature report: <https://www.wildoxfordshire.org.uk/stateofnature/>

Sustainable Drainage Systems

- CIRIA Manual: <https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/update-to-the-suds-manual>
- National Standards for Sustainable Drainage (SusDrain): <https://www.susdrain.org/delivering-suds/using-suds/legislation-and-regulation/national-standards-for-sustainable-drainage.html>

T

Trees

- Gloucestershire Tree Strategy: <https://www.gloucestershirenature.org.uk/glos-tree-strategy>
- Oxfordshire Treescape Project: <https://www.oxtrees.uk/>

U

V

W

Wetlands

- Wildflowl and Wetlands Trust
-

Wildlife Assessment Check

- <https://www.biodiversityinplanning.org/wildlife-assessment-check/>

Woodlands

- Planning applications affecting trees and woodlands:
<https://www.gov.uk/guidance/planning-applications-affecting-trees-and-woodland>
- Ancient woodland standing advice: <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>
- Tree planting and woodland creation advice: <https://www.gov.uk/guidance/tree-planting-and-woodland-creation-overview>
- Woodland Trust planning for ancient woodland - planners' manual July 2019
<https://www.woodlandtrust.org.uk/media/3731/planners-manual-for-ancient-woodland.pdf>
- Planning new woodlands in England: <https://www.gov.uk/government/publications/a-guide-to-planning-new-woodland-in-england>
- England Trees Action Plan 2021-2024:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/987432/england-trees-action-plan.pdf
- UK Forestry Standard for Planners
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/880171/UKFS for Planners.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/880171/UKFS_for_Planners.pdf)