

# 3 BIODIVERSITY

## BIODIVERSITY IN SOUTH OXFORDSHIRE

### GOAL: Working with and enhancing biodiversity

Biodiversity simply describes all living things – the variety of life on earth – all plants, animals and the places that they live. The protection and enhancement of biodiversity is a key indicator and component of sustainable development. In the design guide, biodiversity is used to describe important habitats and species which may be affected by, or could be enhanced by development activity.

The aim of this technical guide is to provide basic guidance on what the Council expects in relation to the protection and enhancement of biodiversity related to development proposals. It should give applicants and developers greater certainty and avoid delays in processing planning applications. Information on providing biodiversity enhancements and designing wildlife habitats into new developments can be found throughout the main body of the design guide. There is a wealth of published information available elsewhere which will be referred to and should be used to aid developers in making biodiversity related decisions.

South Oxfordshire contains a rich variety of natural habitats of local, national and international importance. There are a total of 192 designated nature conservation sites in South Oxfordshire including 4 Special Areas of Conservation (SAC), 38 Sites of Special Scientific Interest (SSSI), 150 proposed or confirmed Local Wildlife Sites (LWS) and 4 Local Nature Reserves.

In addition to protected habitats, there are a large number of protected and priority species found in South Oxfordshire. The majority of protected species receive protection as a result of them being rare or of limited distribution, but also as a result of persecution, as is the case with badgers. As a result, it is perhaps unsurprising that the majority of biodiversity issues associated with planning applications arise as a result of the presence of a protected species.

In line with the National Planning Policy Framework, all developments in South Oxfordshire will be expected to contribute to the Governments commitment to halt the loss of biodiversity and deliver net gains where possible.

This guide will provide basic information on the habitats and species most commonly encountered in the planning process as well as laying out the steps that a developer/ applicant will need to take when considering these issues.

### Legislation

All protected species and habitats mentioned within this document are covered within one of the following pieces of legislation:

- The Wildlife and Countryside Act 1981 as amended
- The Countryside and Rights of Way Act 2000 (the CRoW Act 2000)
- The Conservation of Habitats and Species Regulations 2010
- The Badgers Act 1992
- The Hedgerow Regulations 1997
- The Natural Environment and Rural Communities Act 2006

Differing procedures and processes will need to be followed depending on the piece of legislation concerned and the penalties for not complying with the legislation will vary accordingly. In addition to the legislation the Council takes a strong stance in the protection of non-statutory sites (LWS) and priority habitats and species.



Watervole



Habitats for butterflies



### Additional useful and interesting resources:

- The National Planning Policy Framework (NPPF), particularly chapter 11
- ODPM Circular 6/2005 Biodiversity and Geological Conservation – Statutory Obligations and their impact within the planning system
- Biodiversity – Code of practice for planning and development BS 42020:2013

### Protected species


Protected species are present throughout South Oxfordshire and they are the biodiversity issue most often encountered in the planning system. The Council takes a pragmatic approach to protected species issues and will only ask for surveys where it believes that there is a reasonable likelihood of a particular species being present. Protected species occur in many types of habitat although there are clearly some types of application, which have a much higher probability of affecting protected species, and these are outlined in Table 1 of this technical document.


Protected species are a material consideration when the Council is considering a development proposal. Full information about the presence of a protected species will be required before the planning application can be determined. In line with the NPPF, the council will expect developers to provide net gains for species and habitats when considering development proposals.

Applicants are strongly advised to enter into pre-application discussions to ensure all the relevant information is provided before submitting an application. It is important to note that with many species, surveys can only be satisfactorily conducted at certain times of the year when the species is active. Early consultation is therefore important to avoid undue delays to applications arising as a result of the need to carry out surveys within the relevant seasons.

Surveys will not be conditioned as part of a planning permission. Surveys should be carried out by a suitably qualified ecologist and provide sufficient detail to allow the Council to make informed decisions. As a guide the Council would as a minimum require the following information to be provided in the survey:

- What species are involved?
- What is the population level likely to be affected by the proposal?
- What is the impact of the proposal on protected species?
- Is the impact necessary or acceptable?
- What can be done to mitigate the impact?
- Will a licence be required from Natural England?

 **To inform your design:**  
Technical studies including ecological surveys

 **To communicate your design:**  
- Habitat plans

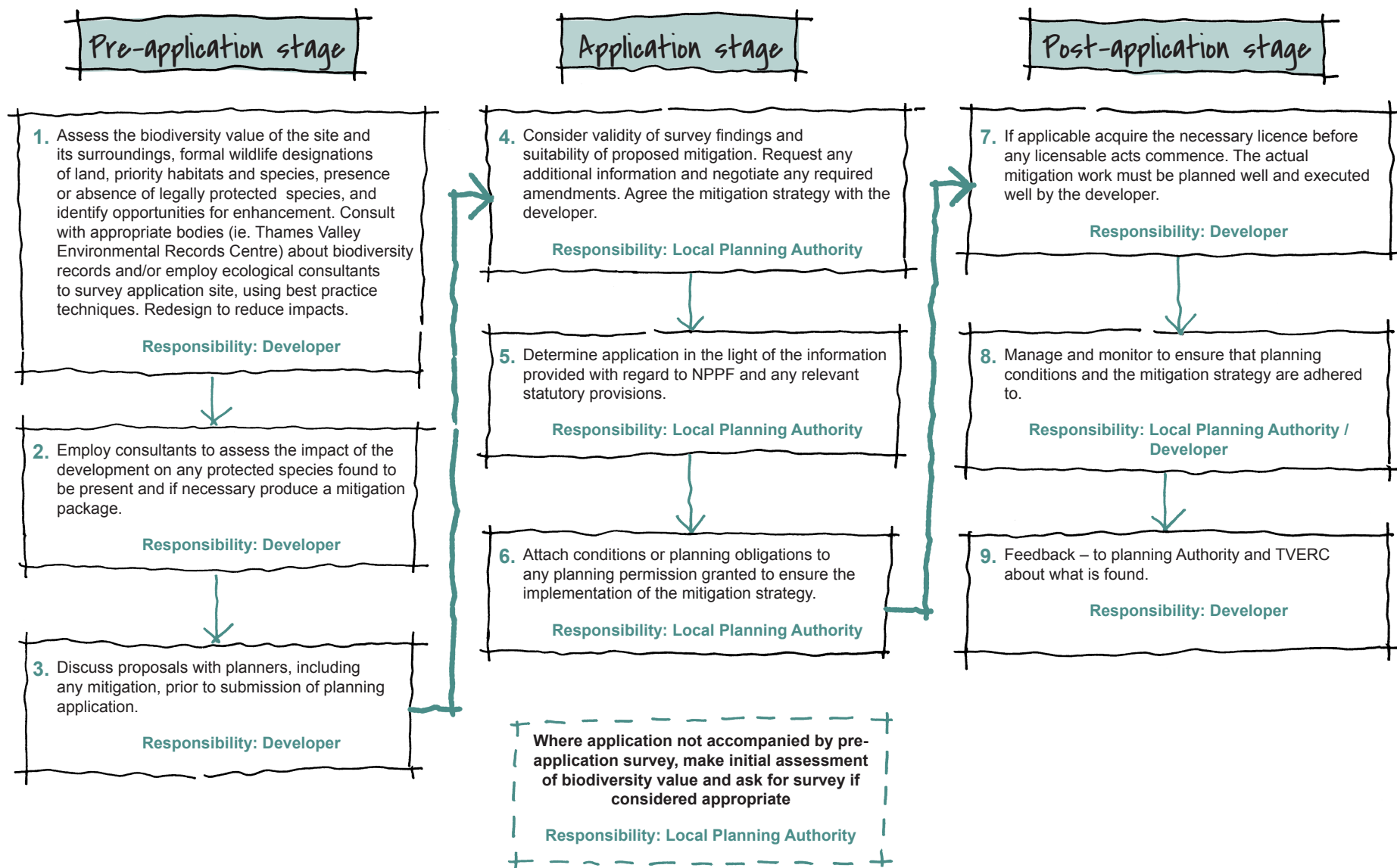
### TEST YOUR DESIGN:

Where protected species are impacted by a proposal, the Council will require the following before it can determine the application:

- |   | Meets criteria           | If not, reason for not meeting |
|---|--------------------------|--------------------------------|
| 3.1 up to date surveys to an appropriate degree of detail carried out by a suitably qualified ecologist;                                    | <input type="checkbox"/> | <input type="text"/>           |
| 3.2 where appropriate, information on how the development will avoid harming the species in its existing location;                          | <input type="checkbox"/> | <input type="text"/>           |
| 3.3 details of measures to enhance the provision of species within the development or create new additional opportunities for that species; | <input type="checkbox"/> | <input type="text"/>           |
| 3.4 details of mitigation measures employed to mitigate the harm caused by the development to that species where avoidance is not possible; | <input type="checkbox"/> | <input type="text"/>           |
| 3.5 details of the compensation measures to be provided where mitigation is not possible.   | <input type="checkbox"/> | <input type="text"/>           |

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Stages of the planning process for a site where protected species may be present:



## SPECIES

The species most commonly encountered in development proposals in South Oxfordshire are set out in below. This also sets out the issues associated with them, guidance on what can be done and who can help.

Species	What is the issue?	What can I do?	Further information
Bats	The majority of planning cases in South Oxfordshire where a protected species survey is likely to be needed relate to bats. This is because bats are often associated with man made structures and can occur in just about any type of building.	Bat provision can usually be designed into new developments or onversions but it is important that this is identified at an early stage of planning to avoid undue delays.	Bat mitigation guidelines – A.J. Mitchell-Jones <a href="http://roost.bats.org.uk/resources/publications">http://roost.bats.org.uk/resources/publications</a> Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition – Bat Conservation Trust (2016) <a href="http://www.bats.org.uk/pages/batsurveyguide.html">http://www.bats.org.uk/pages/batsurveyguide.html</a>
Great crested newts	Great Crested Newts (GCN) breed in ponds, but spend 5% of their lifecycle on land in long grass or rough vegetation up to 500 metres away. They hibernate in the gaps between stones in walls or rockeries, and in piles of logs.  Just about any pond can have GCN resident, from small garden ponds up to farm field ponds. Development sites that do not contain ponds can still be affected if they provide terrestrial habitats for GCN resident in nearby ponds.	Mitigation to avoid damage or disturbance to GCN populations is usually possible. The type and cost of the mitigation is dependant on the population size and the potential impacts of the proposal.  Early consultation with the council is advised if there are likely to be any impacts on GCN.	Great crested newt mitigation guidelines – English Nature publication
Nesting birds	All nesting birds receive protection under the Wildlife and Countryside Act 1981, as you may expect nesting birds are found in many places but particular care should be taken where a scheme involves the removal of trees, hedgerows or other dense vegetation. Care should also be taken for work involving roof structures and the eaves of buildings where swifts, swallows and house martins may be present.	In general work which may involve disturbance to nesting birds should only be undertaken outside of the nesting season which runs from the end of February to early August. Where there is a loss of nesting habitat as a result of a development the Council would normally expect appropriate replacement nesting opportunities to be provided as part of the development.	Contact the RSPB: <a href="http://www.rspb.org.uk">www.rspb.org.uk</a> 01767 693 690 Swift Conservation: <a href="http://www.swiftconservation.org/">http://www.swiftconservation.org/</a>
Barn owls	As the name suggests barn owls are often associated with barns and all types of agricultural buildings but they are also associated with a wide variety of derelict and unused buildings.	Barn owls should not be disturbed whilst they are nesting. The nesting season runs from the beginning of April to the end of September. Nesting and roosting sites should be protected, where it is not possible to avoid impacts developers will be required to provide alternative roosting or nesting locations as near to the original nesting sites as possible.	The Barn Owl Trust: <a href="http://www.barnowltrust.org.uk">www.barnowltrust.org.uk</a>

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Species	What is the issue?	What can I do?	Further information
Badgers	<p>Badgers can be found in woodlands, in areas of scrub, large gardens, (particularly if there are relatively undisturbed) and on undeveloped or brownfield sites within towns. Their setts have large holes which are broadly oval in shape. Badger setts are sometimes confused with enlarged rabbit holes or foxes holes (earth's). If you are unsure contact the council for advice or employ an appropriately qualified consultant to determine what species are involved.</p>	<p>Badgers have very large territories and will use various setts within this area. Mitigation for badgers is often a complex and costly business and it is best to avoid impacting on badger setts and the surrounding areas if at all possible.</p>	<p>Badgers: Surveys and Mitigation for Development Projects  <a href="https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects">https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects</a></p>
Reptiles	<p>All native reptiles are protected. In the district grass snakes and slow-worms are the most often encountered whilst adders and the common lizard are less common.</p> <p>Reptiles can be found on a variety of habitats including urban areas and are often associated with brownfield sites, old railway lines and other open sunny habitats.</p>	<p>As with all protected species it is best to avoid impacts but where this is not feasible it is often possible to provide appropriate mitigation and or compensation to offset any negative impacts.</p>	<p>Reptiles: Guidelines for developers (English Nature, 2004)</p>
Water voles	<p>Water voles are associated with watercourses including canals, rivers, streams, ditches and even sometimes ponds. They are found in both rural and urban areas and although in decline are found throughout South Oxfordshire.</p> <p>Water voles are fully protected. Any development that is likely to either directly or indirectly affect a habitat that has potential to be used by water voles will be expected to provide survey information to determine the presence or absence of the species.</p>	<p>Providing mitigation and compensation measures for water voles is often expensive and time consuming and development impacts on water voles are best avoided.</p>	<p>Water Voles: surveys and mitigation for development projects (Natural England and Department for Environment, Food &amp; Rural Affairs, 2015)</p>
Otters	<p>The population of otters in the district is expanding following the national trend for the recovery of the species. Otters are primarily associated with river systems but occasionally may be found in smaller streams and ditches particularly near where these connect to the main rivers.</p> <p>Any development that affects the banks of rivers should consider the potential for the development to impact on local otter populations.</p>	<p>Developments that are likely to affect otter holts are unlikely to be permitted. Mitigation is often very expensive and complex.</p>	<p>Contact the Environment Agency (01491 828355)</p>

#### Important note:

Proposals which disturb or in any way affect many of the species above are likely to require a Licence from Natural England and no development will be possible without first obtaining a licence. Licences are only granted where planning permission has been secured and all relevant conditions discharged.





Great crested newts, brown long ear bat and watervole

## HABITAT

Protected habitats are less often encountered in development proposals as their locations are relatively well known and documented. Proposals for development on any undeveloped site (brownfield or greenfield) should consider the potential for direct or indirect impacts on designated sites (this includes statutory and non statutory sites) and priority habitats (as defined in S.41 of the Natural Environment and Rural Communities Act). Information on the location of these sites can be obtained from the Thames Valley Environmental Records Centre (TVERC).

Priority habitats have not all been mapped and it is not uncommon for these to be identified as a result of development proposals. If this is the case the presumption would be against allowing development unless it can be demonstrated that the proposals can avoid impacts on the priority habitats and provide enhancements for the long term. If it is not possible to avoid impacts on priority habitats or provide sufficient on site mitigation then the developer would be expected to provide off site compensation. Biodiversity offsetting is favoured as a means of compensating for the loss of Priority habitats.

Early consultation with the Council is recommended for any development that has direct or indirect impacts on a designated site or priority habitat. Indirect impacts would include things such as disturbance resulting from noise, light, dust or increased pressure from people or their domestic pets.



Wildflower meadows

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The types of habitat most commonly encountered in the planning system are listed below:

Habitat	Value	Associated protected species	Advice and references
Ponds	Ponds are a priority habitat. Ponds of all shapes and sizes can have significant ecological value, including small garden ponds and seemingly dry and derelict ponds.	<ul style="list-style-type: none"> <li>- Great crested newts</li> <li>- Water voles</li> <li>- Bats</li> <li>- Reptiles</li> <li>- Invertebrates</li> </ul>	<p>Restoration" of ponds is often not the best option – it is better to create new ponds adjacent to the existing ones to provide a variety of habitats. Where ponds are lost to development new ponds should be created in compensation.</p> <p><a href="http://www.freshwaterhabitats.org.uk">http://www.freshwaterhabitats.org.uk</a></p>
Hedgerows	Native hedgerows provide many important habitat functions such as winter food sources for birds, nesting sites and safe commuting routes connecting otherwise isolated habitats.	<ul style="list-style-type: none"> <li>- Nesting birds</li> <li>- Reptiles</li> <li>- Badgers</li> <li>- Bats</li> <li>- Great Crested newts</li> <li>- Dormice</li> </ul>	Efforts should be made to retain hedgerows within developments. Retained hedgerows should be buffered from surrounding development and not incorporated into domestic boundaries. Where retention is not possible native species rich hedgerows should be provided in compensation.
Rivers, streams, canals and ditches	Watercourses are important wildlife corridors allowing the movement of species throughout the landscape. They are also important habitats in themselves.	<ul style="list-style-type: none"> <li>- Water voles</li> <li>- Great crested newts</li> <li>- Native crayfish</li> <li>- Bats</li> <li>- Reptiles</li> <li>- Fish</li> </ul>	Any development which impacts on a watercourse either directly or indirectly may need the consent of the Environment Agency and it is best to contact them early in the planning process.
Wildflower grasslands	Some of the most diverse habitats in the district occur on the chalk grassland of the Chilterns and North Wessex Downs as well as the rich riverside meadows along the Thames.	<ul style="list-style-type: none"> <li>- Nesting birds</li> <li>- Reptiles</li> <li>- Invertebrates</li> </ul>	Most of the important grasslands are within designated sites and development of these areas should be avoided. If priority habitat grasslands are identified on development sites then the developer should consider how to avoid direct or indirect impacts. Mitigation should be provided where impacts cannot be avoided and as a last resort compensation will be required if it is not possible to demonstrate a net gain in biodiversity.

Habitat	Value	Associated protected species	Advice and references
Ancient or veteran trees	Old trees provide habitats for many species as well as being important landscape features in themselves.	<ul style="list-style-type: none"> <li>- Bats</li> <li>- Nesting birds</li> <li>- Invertebrates</li> </ul>	Impacts on ancient or veteran trees should be avoided wherever possible. Applications involving the loss or deterioration of ancient trees will be strongly resisted.
Woodlands	Ancient woodlands are irreplaceable habitats which are widespread across the district.	<ul style="list-style-type: none"> <li>- Bats</li> <li>- Nesting birds</li> <li>- Badgers</li> <li>- Dormice</li> <li>- Reptiles</li> <li>- Invertebrates</li> </ul>	<p>Impacts on ancient woodland should be avoided. Mitigation for impacts is generally difficult. The diverse nature and structure of ancient woodlands means that replacement planting is generally not considered to be adequate mitigation / compensation.</p> <p>Applications involving the loss or deterioration of ancient woodlands will be strongly resisted.</p>
Traditional orchards	Traditional Orchards are a priority habitat.	<ul style="list-style-type: none"> <li>- Bats</li> <li>- Nesting birds</li> <li>- Badgers</li> <li>- Dormice</li> <li>- Reptiles</li> <li>- Invertebrates</li> </ul>	Traditional fruit tree orchards and cobnut plants, whilst of artificial origin, have often escaped agricultural intensification and are important refuges for a wide range of wildlife. The total area of traditional orchards has declined drastically in recent years and the conservation of the remaining orchards is a high priority.



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## PLANNING POSITIVELY FOR BIODIVERSITY

Biodiversity enhancement is the target outcome for all planning decisions, with a no net loss in biodiversity resource being the minimum standard. Paragraphs 109 and 117 of the NPPF seek to achieve a no net loss of biodiversity with enhancements wherever possible. This has been translated into local policies within the local plan and core strategy.

The Council applies a form of Biodiversity Accounting to help it understand if development proposals are able to achieve the policy requirements. Biodiversity accounting takes account of the biodiversity value of the site prior to the development (baseline condition) as described in the biodiversity survey report. It then values the site post development, including any specific or inherent mitigation to determine if the proposals meet policy requirements.

Where proposals do not achieve a no net loss, the Council will seek amendments to the scheme to avoid impacts and / or, to increase the level of mitigation so that the proposals can demonstrate no net loss. Where net loss is unavoidable, the Council may require the developer to provide offsite compensation by entering into a Biodiversity Offsetting agreement or through other offsite works designed to compensate for the value of biodiversity lost. Offsetting or other compensation are not appropriate for dealing with impacts on protected species or designated sites. In certain circumstances where no net loss cannot be adequately demonstrated and compensation proposals are inappropriate or inadequate, the Council may refuse planning permission.

In order to ensure that development proposals meet the policy requirements we recommend that biodiversity requirements are considered early in the design process. All good ecological consultants should be able to advise on how to ensure your proposals achieve no net loss.

### Biodiversity calculators:

There are a number of freely available biodiversity impact calculators which can help you and your ecological advisors to ensure that your proposal meets the policy requirements:

- Warwickshire impact calculator
- Environment bank impact calculator

We recommend that you work with your ecological advisors to run development proposals through an impact calculator prior to submitting a planning application to determine if it meets the policy requirements.

There are several different types of common biodiversity enhancements which cannot be easily quantified in biodiversity calculators, such as the addition of bat boxes or artificial bird nesting sites. Where the use of these features is considered appropriate and they will contribute to the site's biodiversity value, the Council will take a pragmatic approach and will give them appropriate weight in coming to a decision (for example on urban sites where there are few other options).



Incorporate wildflower meadows into new development



Biodiversity enhancement by integration of blue infrastructure (Courtesy of CIRIA, SuDS in Cambridgeshire)



Barn owl



Insect hotel (Didcot)

## THE USE OF PLANNING CONDITIONS

In certain circumstances, the council may use planning conditions to ensure that a development proposal achieves a no net loss or a net gain for biodiversity.

Where the council considers that proposals have the potential to achieve policy compliance but the applicant has not submitted sufficient detail to allow a detailed assessment to be made we will consider attaching a planning condition requiring the submission of a Biodiversity Enhancement Strategy.

The Biodiversity Enhancement Strategy will need to be prepared in conjunction with the detailed landscaping scheme to ensure that the proposed enhancements work in conjunction with the landscaping proposals.

In assessing an application to approve the details required by condition for a Biodiversity Enhancement Strategy, the council will use the Biodiversity Accounting principles described above. A Biodiversity Impact Calculator will be used to determine if the proposals meet the requirements of the condition. We recommend the use of impact calculators (see page 20) prior to the submission of details required by condition to check your proposals are likely to meet the condition requirements.

### + Additional useful and interesting resources and relevant contacts:

- The BS 42020:2013 Biodiversity - Code of practice for planning and development.

British Standards Institute:

- Guidelines for Ecological Impact Assessment in the United Kingdom - IEEM 2016

Key contacts:

- Thames Valley Environmental Records Centre (TVERC), c/o Oxfordshire County Council, Signal Court, Old Station Way, Eynsham, OX29 4TL. Tel: 01865 815451.  
[tverc@oxfordshire.gov.uk](mailto:tverc@oxfordshire.gov.uk)