

# **GOOD PRACTICE GUIDE**

**BIODIVERSITY & THE  
PLANNING PROCESS IN  
KINGSTON UPON THAMES**

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## **1 INTRODUCTION**

### **PURPOSE OF THE DOCUMENT**

Biodiversity is the variety of life on earth. This Good Practice Guide (GPG) sets out fundamental considerations for biodiversity conservation and enhancement alongside new development, in both the buildings and the adjoining wider environment. It has been produced, in partnership, by the Kingston Local Biodiversity Action Plan Partnership and Council Officers in Planning and Development and Environment and Sustainability to provide advice on good practice.

Each development will have subtle differences and each will be considered on individual merits. The Borough Ecologist will be able to discuss any further issues you may have after reading this document with regard to biodiversity and planning.

**The guiding principle of the  
Kingston Biodiversity Action Plan  
is to allow no further net loss of biodiversity and achieve  
positive gain.**

### **WHO NEEDS TO KNOW?**

The purpose of this GPG is to guide all those involved with planning applications. This includes developers, local residents, development control planners and councillors about the planning process and its implications with regard to biodiversity. The guide will help those involved to make informed decisions which could contribute to the maintenance and enhancement of biodiversity in Kingston.

Accompanying this document are 'checklist' leaflets aimed specifically at different groups of people who become involved in the planning process. For example:

Developers  
Householders  
Development Control  
Building Control  
Highways and Transportation Officers

### **CONTACTS**

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## 2 UNDERSTANDING THE PRINCIPLES

### WHAT IS BIODIVERSITY?

*Biodiversity is the variety of all life on earth.*

Biodiversity is recognised as a key indicator of sustainable development. Biodiversity offers social, economic and environmental benefits in terms of quality of life, local distinctiveness and recreation. Consideration for biodiversity, ecology and wildlife are similar concepts with subtle differences between them.

Wildlife and development can often be in conflict. Nature conservation is just one of the many demands being made of a finite resource – land. If we are to retain and enhance our natural inheritance, we cannot leave it to chance. We must plan ahead.

#### **Making the ecological connection**

An ecosystem is a complex web of interactions, linking living (plants, animals and microbes) and non-living (air, water and the non-living aspect of soil etc) parts to form a stable system. When everything is working we should have a healthy ecosystem. If the system is upset or unbalanced it becomes degraded. It is important to remember that humans are part of an ecosystem as well.

For example: small mammals such as bank voles and field voles are found in urban situations mainly in rough long grass near some tree cover. They have defined home ranges and are susceptible to disturbance if these home ranges become decreased by development. Bank and field voles are herbivores and provide the primary diet of kestrels.

Grassland plant communities are sometimes dismissed as weed species and therefore of no value. However, many of these species are either the larval or adult foodplant of butterflies or moths. Many birds eat butterfly and moth caterpillars, and moths are a primary food source of the larger bat species such as noctule and Daubenton's.

Invertebrates contribute various important roles in the food web. Many species are saprophagous (feeding on dead or decaying organic matter). Dead wood, standing or felled is a very important urban habitat for these species. Other invertebrates are pollinators, predators or pest species and some such as butterflies and dragonflies, are important biological indicators of ecosystem health.

#### **LAND USE AND BIODIVERSITY IN KINGSTON**

In general terms Kingston Borough is perceived as green and leafy. It shares boundaries with the London Borough of Richmond and the Borough Councils of Elmbridge and Epsom & Ewell. These boundaries benefit from large areas of

green land such as Richmond Park to the north, Hampton Court Park to the west and Epsom Common and Horton Country Park to the south. But, only 13% of Kingston is open land, much of which is taken up by highly managed private gardens, golf courses and small farms with occasional pockets of semi-natural land. Some of these pockets are Council owned or leased and managed for nature conservation, and others are privately owned.

There is continuing pressure on land available for development in Kingston, which puts an ever-increasing strain on natural resources. Biodiversity loss and negative environmental impact run contrary to the aims and objectives of our Community Plan, our Biodiversity Action Plan and the principles of sustainable land use.

## **WHY PROTECT BIODIVERSITY?**

There are sound reasons why we need to protect biodiversity with regard to development.

### **Legislation**

The law protects certain species of plants and animals. If the law is broken fines, costs and even custodial sentence could result. Being pro-active in the conservation of wildlife is relatively low-cost compared with getting it wrong

### **Conservation**

Biodiversity is under threat worldwide. Why destroy or damage wildlife when this avoidable or unnecessary? If done properly development can minimise and even mitigate harm.

### **People**

Wildlife has intrinsic value especially to local people. If a developer is perceived to be irresponsible the result may be bad publicity. Conversely good environmental practice can earn respect and attract residents, visitors and investors.

### **Sustainable development**

A healthy ecosystem ensures that the biological building-blocks and natural cycles of the planet function. When we disrupt these cycles, as seen clearly following environmental degradation worldwide there are changes in local climate, soil, water and global carbon balance that puts our survival at risk. Essentially, if biological processes are removed or irreversibly interrupted the system's ability to cope with changes is eroded, as we are beginning to experience with climate change.

## **LEGISLATION, GUIDANCE & LOCAL POLICIES**

### **Legislation**

Important species and habitats are afforded protection through various Acts and Regulations including:

National Parks and Access to the Countryside Act 1949  
Countryside Act 1968  
Countryside and Rights of Way Act 2000  
Council Directive (92/42/EEC) on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) 1992  
Conservation (Natural Habitats etc) Regulations 1994  
Wildlife and Countryside Act 1981 (as amended)  
Hedgerow Regulations 1997  
Protection of Badgers Act 1992  
Deer Act 1991  
Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

### **Published Guidance and Reference**

There is a wealth of information on biodiversity and planning. The following are the types of documents used by RBK, when considering planning applications.

Planning Policy Statement 9 – Biodiversity and Geological Conservation  
Connecting with London's Nature: the Mayor of London's Biodiversity Strategy 2002  
The London Plan: Spatial development Framework for Greater London. 2004  
[www.london.gov.uk](http://www.london.gov.uk)  
The Royal Borough of Kingston upon Thames Unitary Development Plan : first alteration. 2005  
UK Biodiversity Action Plan, 1994 [www.ukbap.org.uk](http://www.ukbap.org.uk)  
London Biodiversity Action Plan 2001 [www.lbp.org.uk](http://www.lbp.org.uk)  
Kingston Biodiversity Action Plan 2004 [www.kingston.gov.uk](http://www.kingston.gov.uk)  
Design for Biodiversity, a guidance document for development in London. 2004  
Working with the Grain of Nature: a biodiversity strategy for England, DEFRA, 2002

### **Unitary Development Plan Policies**

The Unitary Development Plan First alteration (UDP) provides the local planning framework for guiding development within the borough. It contains detailed policies to guide the Council in determining planning applications. The following policies control the ways in which the natural environment can be protected and enhanced to ensure that the borough's wildlife is protected from injurious development schemes.

## **Policy**

STR7	Safeguarding and Enhancing Open Land
STR7a	Biodiversity
STR7b	Water Resource Management
OL1	The Green Belt
OL4	Metropolitan Open Land
OL6	Protection of Other open Land
OL7	Open Space Improvement and Ancillary Development
OL9	Development of Adjoining Open Space
OL10a	Green corridors
OL11	Sites Important for Nature Conservation
OL11a	Species Protection
OL13	Footpaths and Bridleways
OL17	The River and Water Environment
BE9	Trees and Soft Landscaping

The Local Development Framework (LDF) will over time, replace the Unitary Development Plan for Kingston. Protection and enhancement to biodiversity will be an important objective of the LDF.

## **Protected & Important Species**

The presence of a protected species is a material consideration when considering a development proposal, which, if carried out, would likely to result in harm to the species or habitat. It is a legal requirement for developers to avoid or mitigate adverse effects if protected species are present on site. The most frequent protected species found in Kingston are bats, badgers, kingfishers and stag beetles, although this is, by no means, an exhaustive list.

In London and/or in Kingston there are species that are the subject of a Species Action Plan (SAP) within either the London Biodiversity Action Plan or Kingston Biodiversity Action Plan (KBAP). Developers must have regard for these species whether they are protected or not.

In addition, there are many other important species that have been recorded in South West London that are nationally and/or locally rare, scarce or notable. Some may occur in statutorily protected sites such as Local Nature Reserves (LNR) and Sites important for Nature Conservation (SINC), but more often they are found outside, and so are vulnerable to threats such as built development and land-use changes. Other species may not attract special notification but legislation recognises various animal welfare issues such as the Abandonment of Animals Act 1960.

## Protected & Important Sites

There are a variety of statutory and non-statutory designations that cover sites of nature conservation and wildlife value in Kingston. The following table summarises the various designations for sites and habitats.

Designation	Type	Number and Area in Kingston
Sites of Metropolitan Importance	Non-statutory UDP	6 sites
Local Nature Reserves	Statutory UDP	10 sites 102.4 ha
Site Important for Nature Conservation Grade 1	Non- statutory UDP	14 sites
Site Important for Nature Conservation Grade 2	Non-statutory UDP	15 sites
Site of Local Importance	Non-statutory UDP	11 sites
Wildlife Features and BAP Habitats	KBAP London BAP, UK BAP	Woodland,
Tree Preservation Orders	Statutory UDP	
Local Open Space	Non-statutory UDP	69 sites 205.4 ha
Non-designated sites	From PPG17 study	Info not available at present

*Table 1*

More information will be available in the audit chapter of the Kingston Biodiversity Action Plan.

## Green Chains and Green Corridors

Green Chains and Green corridors are locally designated areas of land contributing to biodiversity and landscape quality.

Green corridors are relatively continuous areas of open space that run through the built environment which may link site to each other and the Green Belt or Metropolitan open Land (MOL). The UDP proposals map illustrated the designated green corridors in Kingston. They consist of railway embankments and cuttings, roadside verges, canals, parks and playing fields and rivers. They allow animals and plants to be found further into the built up area than would otherwise be the case and provide an extension to the habitats of the sites they join.

Green Chains have been designated as the open land surrounding the borough's major watercourses. These are defined as a series of elongated undeveloped green spaces linking the green Belt and broader areas of open land within the urban area. Map OL3 in the borough's UDP illustrates the designated Green Chains.

The council will, where, appropriate, use the community benefit policy (UDP RES8) to obtain Section 106 contributions for maintenance and improvements to these areas

### **Undesignated sites**

It is inevitable that land managed for nature conservation will attract wildlife to the area. This in turn will have an influence on surrounding locations that may not be designated, and they in turn influence the health and viability of the designated land and its wildlife. This influence must always be taken into consideration. Many of the sites identified as having potential for development have no land designation attributed to them. This does not mean they are not worthy; it may be they are not designated because of historic ownership changes or are residual pieces of land from previous development. Often, these sites are an important link in the biodiversity chain of the area.

### 3 THE DEVELOPMENT PROCESS – APPLYING THE PRINCIPLES

The development process generally follows five stages:

<b>Pre-application</b>	This is arguably the most important stage of the process. It enables an opportunity for developers to create, manage and enhance wildlife habitats and natural landscape. Consider the impact of the proposal, gather ecological and biological information, have round-table meeting with relevant organisations to flush out concerns and ideas.
<b>Design</b>	Plan how to avoid harm in the first instance, look for potential genuine biodiversity gains. Mitigate if avoidance is unachievable and compensate when significant or total loss occurs.
<b>Application</b>	For full applications the Council has the power to require information to be submitted under various provisions (which provision applies is dependent on the type of application. Decisions will be made according to the information submitted.
<b>Construction</b>	The construction process is often a neglected issue in relation to nature conservation, and it is one that can cause irreparable harm in a very short space of time. Ensure damaging processes are recognised and avoided.
<b>Post Construction</b>	Any new benefits will require monitoring and/or management methods.

It is important that biodiversity issues are taken into account at **each** stage of the development process.

#### PRE-APPLICATION

##### Impacts of the Development

**Prior** to application it is important to consider how the proposal will impact on biodiversity. It could produce:

- *Direct habitat or species loss.* All habitats support a variety of plants and animals; some of these maybe very obvious for example, birds, trees and badgers. Others such as ground beetles and butterflies and their food plants are easily overlooked, but are just as, if not more, important. Habitat loss may not always be obvious – the refurbishment of a building

including re-pointing of brickwork and replacement of the roof may result in the loss of habitat for nesting birds such as swifts or house martins, for roosting bats, or for plants such as mosses or ferns.

The losses may be:

- *Permanent* – once gone, gone forever.
  - *Temporary* – lost during construction phase, but with good landscaping creation and management may be regained in due course. However in practice ‘temporary’ loss is uncertain, as recovery of sensitive species or ecosystems can never be guaranteed.
  - *Direct* – e.g. loss of a tree with a bird’s nest or the loss of a water vole burrow if a stream is being filled in; removal of dead wood may remove the final food stage of the emerging adult Stage Beetle.
  - *Indirect* – e.g. disintegration of a bat foraging area so they can no longer survive in that area; pollution of a water course that results in fish spawning downstream from the pollution site.
- 
- *Disturbance.* Particularly during the construction stage of the development but also subsequently. Noise, pollution, artificial light and human presence all have a detrimental effect on some species preventing them from breeding successfully, or feeding in the area. It is illegal to disturb some animals when they are breeding. Other types of disturbance can have a negative impact, such as soil compaction or affecting the hydrology. Effects of disturbance can result in loss of species and changes in habitat type.
  
  - *Fragmentation.* One of the most important factors when considering urban nature conservation is to facilitate the migration, dispersal and genetic exchange of wild species through habitat networks and avoid habitat fragmentation. Fragmentation occurs when an area is split into two or more parts, usually with a different type of land-use in between. Each part is smaller and so maybe unable to support the remaining species. In some cases species may try to cross the divide, resulting in death. This is particularly relevant to many non-flying animals such as badgers who follow familiar well-worn routes and toads which have declined throughout southeast England.
  
  - *Introduction of pest species or causing them to spread* – not all biodiversity is considered desirable. Feral pigeons, rats and plants such as Japanese Knotweed can pose problems to development if not handled in the right way, especially once the construction phase is over. Pests can also endanger native wildlife; amphibians in Britain as elsewhere, are threatened by the spread of a devastating fungus spread by the aquarium trade.

## Survey Information

*It is important to collect survey information **BEFORE** submitting a planning application. This will save time and demonstrate that biodiversity has been considered as an integral part of the application.*

On larger development proposals, or where a site contains significant areas of habitat or wildlife potential any ecological assessments, which may include detailed surveys, should be completed before design work or submission of the planning application. Ecological Assessments completed ahead of applying for planning permission could save time and money.

### *Consultation and Scoping*

Information may already exist for the site. Consultation with the relevant statutory and non-statutory nature conservation organisations may provide information. In addition, the Local Authority holds relevant data. This information is usually supplemented by up to date field surveys undertaken by a trained ecologist. The ecologist needs to complete a scoping study to identify any ecological constraints and/or opportunities and the nature of any further field survey work.

### *Ecological Surveys*

When there is no existing ecological data available for the site, or it is incomplete or out of date, ecological surveys must be commissioned. Desktop research can often be misleading therefore the *timing* of these surveys can be critical. Many plants and animals are not evident at certain times of the year – carrying out surveys at inappropriate times will be of limited use in judging the interest of a site. Detailed surveys – especially of protected species – may take months to complete. An experienced and knowledgeable field ecologist or natural historian should carry out surveys. Always consider using an ecological surveyor who is a member of a professional association such as the Institute of Ecological and Environmental Managers (IEEM). When dealing with protected species the surveyor may need a licence. Anecdotal evidence can only be used if supported by qualitative and in some cases, quantitative data.

If an application is submitted on a site without an appropriate survey the LPA will normally request one to be undertaken and this may delay an application. If you are unsure how and when to do surveys contact the Borough Ecologist who will be able to advise you. For larger or sensitive developments **always** employ a professional ecological consultant. They will be able to identify important species both on the site and in the surrounding environs. The ensuing report should include any proposed mitigation measures.

**Guidance on Appropriate Survey Timing**

Survey Type	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
<i>Scoping walkover</i>	■	■	■	■	■	■	■	■	■	■	■	■
<i>Phase 1 habitat</i>	■	■	■	■	■	■	■	■	■	■	■	■
<i>Botanical</i>	□	□	■	■	■	■	■	■	■	□	□	□
<i>Badgers</i>	■	■	■	■	■	■	■	■	■	■	■	■
<i>Wintering birds</i>	■	■	■	□	□	□	□	□	□	□	■	■
<i>Breeding Birds</i>	□	□	■	■	■	■	■	■	■	■	■	■
<i>Reptiles</i>	□	□	□	■	■	■	■	■	■	■	■	■
<i>Amphibians</i>	□	□	■	■	■	■	■	■	■	□	□	□
<i>Invertebrates</i>	□	□	■	■	■	■	■	■	■	□	□	□
<i>Water voles</i>	■	■	■	■	■	■	■	■	■	■	■	■
<i>Otters</i>	■	■	■	■	■	■	■	■	■	■	■	■
<i>Bats</i>	□	□	■	■	■	■	■	■	■	■	□	□

- Optimal time of the year for surveying
- Sub-optimal time of the year for surveying
- Unsuitable time of year for surveying

**Table 2**

**Insufficient information**

If, for whatever reason, an applicant is unable to provide adequate information on potential nature conservation impacts, the LPA should assess the effects of the development on the basis of the information that is available. This may result in planning permission being refused or delayed. In the absence of such information the development proposal cannot be adequately judged against relevant Unitary Development Plan policies.

**DESIGN STAGE**

The design of all developments should seek to incorporate and enhance the features of existing nature conservation value on, or adjacent to, a site. All urban developments has a cumulative impact on biodiversity, and this should be offset in keeping with the Community Plan.

**Avoid and Protect**

Significant negative impacts on the biodiversity of the site must be avoided during all phases of the development. Throughout the design stage consideration of how *important* habitats and species are to be protected is a minimum requirement. This may include:

- Special protective fencing;

- Construction undertaken outside sensitive life-stage periods
- Translocation of particular species.

‘Important’ in this context does not only mean species and habitats which are protected by law or through land-use planning mechanisms, but those elements of the site identified from the ecological survey as being important for their local distinctiveness and/or their general contribution to the biodiversity of the area.

The ecological importance of the site within the wider environment should be considered. In many cases the proposal site may be at present a buffer or ‘stepping stone’ for adjacent wildlife areas. Linking habitats and identified significant wildlife corridors or ‘stepping stones’ should be shown on a location plan at an early stage. It is important to keep existing features and avoid leaving isolated fragments of semi-natural habitat.

Site design should retain the key features that benefit wildlife e.g. green corridors. These retained features will generally be outside the individual householder boundaries and so proposals for their management must also be included. For example at least a 5m buffer strip is needed to safeguard ditches and hedges, and up to 10m for woodland.

### **Mitigate, Enhance and Compensate**

In exceptional circumstances where damage to existing habitats is unavoidable mitigation can reduce adverse effects. However, mitigation still implies harm of some form. Where a site or its surroundings have clear biodiversity value, and the proposed mitigation steps are insufficient to protect this value, then planning permission can be refused on these grounds once all other planning issues have been taken into account. This action accords with policies OL11 and OL11a of the UDP.

Mitigation steps may be proposed by the developer and/or the council and will normally be the subject of planning conditions or obligations in accordance with policies RES2 and RES8 of the UDP. This may be on design, methods or timing of development.

Evidence should be provided to demonstrate that mitigation measures are likely to be as effective as predicted and that the applicant is capable of achieving their implementation.

### **Potential mitigation measures**

Developers must provide details to show how impacts will be avoided which could include some or all of the following mitigation measures.

## Mitigation Measures

Mitigation Measure	Detail
<b>Timing</b>	Construction undertaken outside breeding seasons of species present.
<b>Buffer zones</b>	Establish a section between sensitive areas and the development area to reduce disturbance to habitats.
<b>Drainage systems</b>	Ensure the hydrological status of sensitive areas is maintained through design of the drainage infrastructure.
<b>Movement structures</b>	Ensure new structures are built to enable the movement of wildlife to continue (bridges, culverts, bat and bird boxes etc).
<b>Translocation</b>	Removal and relocation of species from destroyed habitat. This will be only considered with expert endorsement and only as a last resort.
<b>Financial contribution</b>	For the management of nearby wildlife sites where the development could lead to increased pressure e.g. noise and disturbance through increased amenity use.
<b>Nesting/roosting opportunities</b>	Nearly all developments regardless of size can increase the opportunity for species to nest or roost, by erecting bat and bird boxes or including specialised bricks into walls and roofs.
<b>Native planting schemes</b>	Where substantial native species have been lost, landscaping schemes should include a large proportion of native species and/or wildlife friendly plants, taking nearby habitats into account.

Table 3

### ***Compensate for loss***

There are only very limited circumstances where total loss is justified. It will only be considered after all other planning issues have been taken into account and only if it is considered that there is no viable alternative.

Established habitats acquire their biodiversity value over a very long period of time. Artificially recreated habitat will in the beginning usually be greatly inferior to established habitat. There is no such thing as a 'quick fix' when compensating for biodiversity. Where possible it is better to let nature take its own course. This allows plants and animals to colonise naturally, thus ensuring the 'new' environment is sustainable.

When loss is unavoidable and the consequences dramatic, new habitats can be created with the aim of replacing 'like for like' or better. The existing environment, soils and landscape should be considered. The starting point should be the existing vegetation, whether composed of native and/or non-native species.

Where there is limited space for natural settings, especially in high-density urban settings the establishment of 'green roofs' and climbing plants offers

some biodiversity opportunities. The Sustainable Construction SPG provides further guidance on green roofs.

**Compensation for lost habitat will not make an unacceptable development proposal acceptable.**

However, where compensation is appropriate the scheme will normally be the subject of planning conditions or obligations. Any scheme must be sensitive to both the needs of the local people and of biodiversity.

**Examples of what can be created on a development site**

<b>What is present?</b>	<b>What can be created</b>	<b>Types of development</b>
<i>Habitats</i>		
Pond, river other water features	Enhance water feature or create new one. Create habitat suitable for water voles/ water fowl/wading birds/amphibians	Riverside development, commercial/industrial/residential
Existing buildings of all ages	Incorporate bat bricks, boxes and bird boxes nesting and roosting opportunities. Nesting/over wintering sites for ladybirds/solitary wasps	Building conversions
Grassland	Area of wildflower meadow, glades or grassland strip	Minor and major residential development, commercial/industrial development
Woodland and hedgerow	Retain as many trees/shrubs dead wood and leaf litter as possible, plant new native trees/shrubs/underplanting erect bat and bird boxes	Minor and major residential development, commercial/industrial development
Mature trees	Maintain as many trees as feasible. Pollard or coppice. Plant new trees	Minor and major residential development, commercial/industrial development
Nothing	Any of above	Any of above. This may include off site mitigation.
<i>Species</i>		
Bats	Incorporate bat bricks/lofts/boxes within conversion. Retain mature/decaying trees Suitable planting and habitat links	Building conversion, residential/commercial/industrial development
Water voles	Undisturbed bank-side vegetation	Riverside development
Small mammals	Undisturbed rough grassland Native planting and habitat links	Minor and major residential development, commercial/industrial development

Amphibians	Create accessible ponds with some shading	Minor and major residential development, commercial/industrial development
Reptiles	Create undisturbed areas of habitat and basking areas of bare ground/short grass on south facing slopes. Create log piles	Minor and major residential development, commercial/industrial development
Kingfishers	Trees by river/stream undisturbed bank-side	Riverside development
Other birds	Swift, swallow and house martin boxes attached to buildings. Other bird boxes on trees etc. Native planting of species which produce berries and seeds	Minor and major residential development, commercial/industrial development Building conversions
Stag beetles	Leave standing/fallen deadwood. Create log piles	Minor and major residential development, commercial/industrial development
Invertebrates	Allow areas of natural generation/grassland/bramble Plant nectar-rich plants and larval foodplants. Retain riparian vegetation for dragonflies.	Minor and major residential development, commercial/industrial development
Wildflowers	Plant native species of local regional genetic origin and allow natural expansion/colonisation	Minor and major residential development, commercial/industrial development
Trees	Plant native species of local regional genetic origin and allow natural expansion/colonisation	Plant native species of local regional genetic origin and allow natural expansion/colonisation

**Table 4**

*Adapted from: Biodiversity Supplementary Planning Guidance for Norfolk*

## APPLICATION

Generally it will not be appropriate to grant a planning permission unless adequate information is available about the ecological effects of the development. Decisions will be given after statutory consultation process and period has been undertaken.

## Conditions

The council may use planning conditions, or obligations where appropriate for one or more of the following purposes:

- To avoid adverse impacts or to remove the likelihood of adverse impact occurring.

- To mitigate or reduce adverse impacts.
- To compensate for loss or impacts that could not be avoided or mitigated.
- To enhance aspects of nature conservation and enjoyment of nature.

## **DURING CONSTRUCTION**

There are a variety of simple measures that can be done before and during construction. These include:

- Mapping important wildlife features to be retained
- Establishing potential areas of conflict between important nature conservation features and construction activities
- Identifying wildlife protection zones
- Informing the site manager and construction site workers of the issues

## **POST-CONSTRUCTION – MANAGEMENT AND AFTERCARE**

Where steps have been taken to avoid, mitigate, enhance and compensate for ecological damage developers should arrange for continued management and monitoring according to any conditions, legal agreements or obligations.

Such requirements may include:

Provision for the appropriate management of retained features and of new or enhanced habitats through a 5-year (or longer) management plan with the developer, management company or subsequent owner. This should include monitoring of any new or retained features and replacement as necessary and in the case of a fixed-term plan, a projection of how biodiversity value will be maintained (or self-maintaining) after the obligatory management phase is completed.

Details should be submitted to the LPA of how the site will be monitored during and post-construction to discover any effects on wildlife especially protected species.

Details should be submitted to the LPA demonstrating how the community/commercial interest in the long-term management of the site is to be administered. This is especially relevant for new householders where biodiversity opportunities have been incorporated into the structure of the dwellings.

A commuted sum of money for management secured through a planning obligation (S106 agreement) to cover long-term maintenance costs.