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Supplementary Planning Document Nature Conservation

1.0 Introduction - The Purpose and Status of this Supplementary Planning Document

- 1.1 This document provides guidance on means of complying with nature conservation policies set out in the Development Plan and to provide guidance on how the authority expects nature conservation to be taken into account in the development control process.
- 1.2 Whilst this guidance does not have equivalent status to Development Plan Documents, compliance with Supplementary Planning Document guidance is a material consideration in planning decisions. Applicants should therefore bear in mind that disregard of this guidance may result in planning permission being withheld.
- 1.3 The Development Plan polices relevant to this guidance are:
 - NC1 Biodiversity
 - NC2 Special Areas of Conservation and Sites of Special Scientific Interest
 - NC4 Local Nature Reserves and Sites of Importance for Nature Conservation
 - NC5 Sites of Local Importance for Nature Conservation
 - NC6 Wildlife Species
 - NC7 Geological Resource
 - NC9 Mature Trees
 - NC10 The Urban Forest
 - DD10 Nature Conservation and Development
 - **DD11 Watercourses** This guidance should be read in conjunction with these policies and with consideration of all relevant Development Plan policies. These policies are reproduced in full in Appendix 6.
- 1.4 This SPD is in conformity with national planning guidance, the Regional Spatial Strategy, the Development Plan and the Community Strategy. It has been subject to a Sustainability Appraisal and screening for Strategic Environmental Assessment (SEA). Public consultation has taken place in line with the Statement of Community Involvement. A statement of the consultation undertaken, the representations received and the authority's responses to these representations can be found in the Statement of Community Involvement and Consultation Summary Report.
- 1.5 In order to secure development that meets policy requirements, officers of the Authority are available to discuss the advice set out in this

guidance with applicants before they submit a planning application. The early submission of supporting information is recommended and, in some cases, required. A list of useful contacts and references, including the relevant contacts in the Borough, can be found at the end of this guidance.

1.6 In implementing the policies covered by this guidance the authority will actively consider the use of a number of strategies, including the use of article 4 directives, conditions and planning obligations/agreements.

2.0 Background to the Supplementary Planning Document

2.1 Sustainable Development and Care of our Natural Heritage

- 2.1.1 The Council is committed to moving towards sustainable development and to the care of its natural heritage in line with the following:
 - A Better Quality of Life A Strategy for Sustainable Development for the UK
 - Working with the Grain of Nature A Biodiversity Strategy for England
 - Planning Policy Statement 9 (PPS9) Biodiversity and Geological Conservation
 - The Regional Spatial Strategy for the West Midlands
 - The Black Country Study
 - The Black Country Study Urban Park concept
 - The UK Biodiversity Action Plan
 - The West Midlands Regional Biodiversity Strategy
 - The Birmingham and Black Country Biodiversity Action Plan
 - The Dudley Local Agenda 21 Strategy
 - The Dudley Community Strategy
 - The Black Country Geodiversity Action Plan
- 2.1.2 The Government's objectives for conservation of biodiversity and geological heritage through planning are laid out in PPS9:
 - **"To promote sustainable development** by ensuring that biological and geological diversity are conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity and geological diversity with other considerations
 - To conserve, enhance and restore the diversity of England's wildlife and geology by sustaining, and where possible improving, the quality and extent of natural habitat and geological and geomorphological sites; the natural physical processes on which they depend; and the populations of naturally occurring species which they support.

- To contribute to rural renewal and urban renaissance by: enhancing biodiversity in green spaces and among developments so that they are used by wildlife and valued by people, recognising that healthy functional ecosystems can contribute to a better quality of life and to people's sense of well-being; and ensuring that developments take account of the role and value of biodiversity in supporting economic diversification and contributing to a high quality environment."
- 2.1.3 The Council concurs with the Government stance that the provision and maintenance of a healthy, sustainable and attractive natural environment is an essential element in ensuring continuing economic prosperity as it contributes to quality of life. The natural environment is a public health asset and helps foster favourable perceptions of the Borough as a place in which to live and invest.
- 2.1.4 The Council is also aware of the need to encourage development, which it views as being crucial to the regeneration and the general wellbeing of the Borough both now and in the future. It should be possible for all development to make some contribution to the maintenance and enhancement of the natural heritage of the area. To achieve this, the Council will seek to work in partnership with the development and regeneration sectors to find means of delivering quality development and contributing to environmental protection and enhancement.

2.2 Nature Conservation in the Black Country

- 2.2.1 The Black Country contains within its boundaries a diverse natural heritage. An intimate pattern of mining and industrial development side by side with traditional farming and undisturbed pockets of woodland, meadow and wetland has resulted in a mosaic of ancient and more recent habitats interspersed among built development. The area is underlain by a rich and complex geology which, where it is exposed, presents a valuable window into the ancient past and is an important part of economic and community history. Geological exposures are also good for rare and vulnerable flora and fauna.
- 2.2.2 Although ancient woodlands, traditional grasslands and other habitats survive, many of the Black Country's most valuable wildlife has become established after mineral extraction or industrial use, as the physical and chemical conditions which result from past extractive or industrial uses can support diverse habitats and rare species. Well known examples in Dudley include rare limestone grassland at Wrens Nest National Nature Reserve and wetland and spoil-heap grassland rich in dragonflies and butterflies at Saltwells Local Nature Reserve.
- 2.2.3 In Dudley, ancient woodlands such as the streamside dingles; traditional meadows and pastures, now largely horse-grazed; and remnants of once widespread heath are among the significant habitats

which preserve longstanding ecological diversity while more recently developed woodlands, grasslands and wetlands can also be important parts of the wildlife network.

- 2.2.4 Additional important habitat originates from the development and use of the canal system, such as that found at the Fens Pools and Bumble Hole Local Nature Reserves, and from restoration or natural colonisation of industrial and quarrying sites. Some of these habitats, and man-made structures such as mines, tunnels and even buildings, can be important for a range of rare or protected species, such as great crested newts, water voles and bats.
- 2.2.5 Many of the habitats and species covered by this guidance are priorities within the UK and Birmingham and Black Country Biodiversity Action Plans, the West Midlands Regional Biodiversity Strategy and the Action Plan for Nature Conservation in Dudley.
- 2.2.6 The Birmingham and Black Country Biodiversity Action Plan was adopted in 2000. The plan describes, evaluates and prescribes actions to protect and enhance habitats and species of national and regional importance. It is one of many local Biodiversity Action Plans which have been produced across the country to ensure that the UK Biodiversity Action Plan is implemented at, not only a national, but also a local level. As a partner in the Birmingham & Black Country Biodiversity Action Plan, the Council is committed to furthering its objectives for habitat and species protection and recovery. This guidance is designed to aid in fulfilling this commitment.
- 2.2.7 The Regional Biodiversity Strategy for the West Midlands was adopted by the Regional Assembly and launched in 2005. The Strategy identifies the main issues and opportunities facing the region's wildlife. *Towns, Cities and Development* is a key sector identified by the Strategy which links a green and attractive environment that sustains biodiversity to the RSS objective of encouraging urban living rather than out-migration to rural areas. Means of contributing to this through the planning system include ensuring that new development supports biodiversity.
- 2.2.8 The importance of the green network and habitat mosaic for wildlife, and the potential for the Borough to contribute to regional and national biodiversity is recognised by the identification in the Regional Spatial Strategy, of a Biodiversity Enhancement Area (BEA), extending from mid Worcestershire northwards and covering the majority of Dudley. BEAs are identified by the RSS as *"some of the best prospects for retaining environments with a rich and resilient biodiversity resource"*. Means of meeting RSS policy for these areas include support of existing biodiversity, protecting important habitats from adverse impacts, restoring and re-creating locally characteristic habitats and linking them together.

2.2.9 The Black Country, and Dudley in particular, is situated in one of the most geologically diverse areas of the world. Dudley has international recognition for the unique palaeontology of Wrens Nest National Nature Reserve and Castle Hill and its role in the development of the science of geology. The Borough is underlain by a rich and varied geology, which has had strong influences on its historic and industrial development and remains apparent in the landscape and patterns of development. Geological exposures left behind by centuries of limestone, coal, clay, sandstone and other mineral extraction thus have cultural as well as scientific value. Geological sites and features are covered by a range of designations reflecting their national and local importance. This varied geology was the basis of the industrialisation of the Black Country and plays a fundamental part in local community history.

2.3 National and Regional Policy Context

- 2.3.1 Planning Policy Statement 9 (PPS9) lays out a set of key principles that planning authorities should follow to ensure that biodiversity and geological heritage are fully considered in the decision making process. The accompanying ODPM Circular 06/2005 *Biodiversity and Geological Conservation- Statutory Obligations and their Impact within the Planning System* gives guidance on how the legal provisions for site and species protection, and local authority duties for nature conservation, need to be taken into account. This SPD is designed to help the Council adhere to the PPS9 principles and meet legal obligations.
- 2.3.2 The PPS9 Key Principles state that planning decisions should be based on up-to-date information on biodiversity and geological resources. They should aim to maintain, restore, enhance or add to existing biodiversity and geological interest, including that on previously developed land. The aim of all planning decisions should be to prevent harm to nature conservation interests. This means ensuring that where significant nature conservation interest is involved, alternatives have been fully considered and adequate mitigation is provided.
- 2.3.3 In order to meet these requirements it is clear that adequate information must be obtained to inform planning decisions and to allow appropriate mitigation to be incorporated into development proposals. Circular 06/2005 (Paragraph 99) states: "It is essential that the presence or otherwise of protected species is established before the planning permission is granted otherwise all relevant material considerations may not have been addressed in making the decision" and that "the need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances". Paragraph 99 also makes it clear that survey and assessment should be required where there is a reasonable likelihood of a protected species being affected by a

proposal. The survey should be completed and any mitigation measures should be in place before permission is granted.

- 2.3.4 Paragraph 84 of the Circular makes it clear that, in addition to legal provisions, UK and local Biodiversity Action Plan habitats and species are a material consideration in planning decisions and therefore require the same scrutiny. Paragraph 14 of PPS9 advises that, when considering development proposals, local authorities should maximise opportunities for building in benefits for biodiversity and geological interest.
- 2.3.5 PPS9 and Circular 06/2005 complement other national and international guidance such as the Conservation (Natural Habitats &c) Regulations 1994, the Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, and the EC Directives on the conservation of wild birds (1979) and of natural habitats and of wild fauna and flora (1972).
- 2.3.6 Policy QE7 in the West Midlands Spatial Strategy (RSS) "Protecting, managing and enhancing the Region's Biodiversity and Nature Conservation Resources" also makes clear the priority nature conservation assets that are important at the strategic level:
 - species and habitats of international, national and sub-regional importance as identified in the West Midlands Regional Biodiversity Audit, Local Biodiversity Action Plans (LBAPs) and other BAPs;
 - those that receive statutory protection; and
 - the biodiversity enhancement areas
- 2.3.7 This SPD is designed to ensure that the Council is able to comply with Government guidance, the Regional policy framework and statutory obligations for nature conservation in exercising its development control function.

2.4 Development Plan Nature Conservation Policies and the Role of this Guidance

2.4.1 NC1 Biodiversity

The UK Government is committed to biodiversity and the delivery of Biodiversity Action Plan targets and has issued guidance that all Local Authorities have a key role to play in this respect. Though predominately an urban borough with large areas of residential development and both traditional and recent industrial facilities, a key feature of the Borough is the extensive network of open space, which brings natural habitats and rural landscapes into the heart of the built up area and gives people opportunities for contact with nature. Wildlife does not thrive in isolation and many species need to be able to move to feed and breed. This means that, in addition to key nature conservation sites, the overall network of linked sites, linear habitats and "stepping stones" are important for the Borough's biodiversity.

2.4.2 NC2 Special Areas of Conservation and Sites of Special Scientific Interest

The Council's commitment to protection and enhancement of Dudley's natural heritage has resulted in a series of designations, which reflect the value of the most important nature conservation sites and aim to give appropriate protection. Some of these sites have statutory, as well as Development Plan, protection. Fens Pools Special Area of Conservation (SAC), designated for its great crested newt population, is one of only two sites of European importance within the West Midlands County. Wren's Nest National Nature Reserve (NNR) is internationally known for its exceptional palaeontology and surface mine and quarry features. There are six other Sites of Special Scientific Interest (SSSI); of which five are designated by English Nature for their geological interest. The SAC is strictly protected under the Conservation (Natural Habitats &c.) Regulations1994. The Wildlife and Countryside Act 1989 (as amended) and Countryside and Rights of way Act 2000 give protection to the NNR and SSSIs.

2.4.3 NC4 Local Nature Reserves and Sites of Importance for Nature Conservation

Some of the Black Country's most significant habitats, species and geological features are found within the SAC, NNR and SSSIs. These represent, however, only a tiny fraction of the Borough's natural heritage that is selected for protection at the national level. These sites alone cannot maintain the area's overall biodiversity or earth heritage value. The most important sites outside the statutory system are designated as Sites of Importance for Nature Conservation (SINCs) for their West Midlands county-wide value. SINCs are identified by means of application of approved selection criteria and endorsed by a panel representative of local nature conservation expertise. Local Nature Reserves are declared, by the Council, with the support of English Nature, under the terms of the National Parks and Access to the Countryside Act 1949, for their nature conservation interest and their value for public education and enjoyment.

2.4.4 NC5 Sites of Local Importance for Nature Conservation Other sites that support important wildlife habitat and geological features, form links between protected sites, and are part of the overall network supporting biodiversity, are identified as Sites of Local Importance for Nature Conservation (SLINCs). SLINCs are of significance at the Ward to Borough level and frequently form important links between other designated sites. This designation does not preclude development that respects and preserves their value and function for nature conservation and does not compromise important wildlife or geological features. Examples of SLINCs that are important linear features are canals and watercourses. Section 3.0 gives guidance on how designated sites and their nature conservation interest should be taken account of in the development control process.

2.4.5 NC6 Wildlife Species

Many rare and protected species and the habitat upon which they depend are found outside of the network of protected sites and may only be discovered when development is proposed. **Section 4.0 Wildlife Species** is designed to inform developers on the means of taking protected species' needs into account in development proposals.

2.4.6 NC7 The Geological Resource

PPS9 highlights the nature conservation importance of geological sites. The most important geological sites are designated as SSSIs and SINCs. There are other features, however, that fall outside these sites but are of value for scientific research, education and amenity. These features are rarely a constraint to development but can easily be lost or damaged if not taken into account. Even where no exposures are present, geological strata are often near to the surface and there will be circumstances where development provides opportunities to create temporary or permanent exposures of interest for scientific study. **Section 5.0 Geology and Development** gives guidance on the incorporation of geological considerations into development.

2.4.7 NC9 Mature Trees and NC10 The Urban Forest

The Black Country Urban Forest is a network of established and recently planted woodlands and street trees that contributes to environmental quality and supports biodiversity. Particularly significant are the remnant ancient woodlands, some of the most diverse habitats in the country. As well as benefits for nature conservation, landscape and amenity, recent research *Trees and Sustainable Urban Air Quality* published by the Centre for Ecology and Hydrology has shown that urban trees contribute to environmental quality by removing pollutants from the air as well as absorbing carbon dioxide.

2.4.8 **DD10 Nature Conservation and Development**

As well as taking into consideration existing habitat and species, new development has the potential to enhance the Borough's biodiversity, or to compensate for any loss, by incorporating features of value to wildlife into landscape and built design. However in some instances compensation will not be justified such as where networks of surrounding habitat and meta-population could be destroyed by the loss of one particular piece of habitat or where habitat are not readily recreated.

2.4.9 **DD11 Watercourses**

Watercourses are important linear features for wildlife and can provide essential habitat for several rare and protected species. Despite the urban and industrialised nature of the Black Country and a history of pollution, water quality is improving and many river and stream stretches are of value for wildlife while others are recovering. Past development often marginalized watercourses and modified or culverted them, reducing their wildlife value and breaking ecological connectivity. New development often offers opportunities to restore watercourses for both wildlife and amenity.

2.4.10 Section 6.0 Nature Conservation and Development of this guidance sets out requirements for nature conservation for all new development, aims to aid developers in identifying protection and enhancement measures and suggests ways of implementing them. The aim is to assist in the delivery of high quality development that contributes to environmental regeneration.

3.0 Guidance for planning proposals that might affect designated nature conservation sites

3.1 Policy background

3.1.1 Policy protection for nature conservation sites is commensurate with their position within the national and international hierarchy as shown in Table 1. Policy will be applied in line with the requirements of relevant legislation. Where protected species are found on designated sites, additional legal protection and policy requirements will apply.

Table 1 Hierarchy of nature conservation sites

Site	Designation basis and type	Status
SAC	Special Area of Conservation, designated under the EU Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (Directive 92/43/EEC) and the Conservation (Natural Habitats etc.) Regulations 1994, also SSSI. Representative (best examples for European priority habitats and species)	European Proposals damaging to the special interest are not permitted. Appropriate Assessment required. GDO proposals are also subject to assessment
NNR	National Nature Reserve, declared by English Nature under section 19 of the National Parks and Access to the Countryside Act 1949 or section 35 of the Wildlife & Countryside Act 1981 (as amended), also SSSI.	UK Proposals damaging to the special interest are not permitted unless full mitigation is secured.
SSSI	Site of Special Scientific Interest notified by English Nature under section 28 of the Wildlife and Countryside Act 1981 (as amended). Representative (best examples of UK habitat types and species populations)	UK Proposals damaging to the special interest are not permitted unless full mitigation is secured.
LNR	Local Nature Reserve declared by the local authority with the support of English Nature under section 21 of the National Parks and Access to the Countryside Act 1949. Selected for both nature conservation interest and value for public education and enjoyment	Borough-Sub- Region
SINC	Site of Importance for Nature Conservation selected by a panel representing English Nature, the Birmingham & Black Country Wildlife Trust, the Black Country Geological Society and the Local Authority. Applied to all sites that meet the selection criteria	West Midlands County
SLINC	Site of Local Importance for Nature Conservation identified by the local authority. Applied to all sites that meet the selection rationale	Ward-Borough

- 3.1.2 Designated nature conservation sites are a key element of nature conservation strategy from local right up to international levels. Areas of land are designated for the habitats, species and/or geological features that they support. They are often also important for the opportunities that they give for local people to come into contact with wildlife and earth heritage and for their educational potential. Biodiversity is an important component of environmental quality and good environmental quality is a clear determinant of a good quality of life.
- 3.1.3 It is Council policy to maintain and enhance the designated site network so that it can continue to provide vital support to local biodiversity. The following habitats and features are of particular significance in the national and/or Black Country contexts:
 - Woodland: ancient woodland, "aged" or "veteran" trees, native broadleaved woodland and scrub and wet woodland such as alder or willow carr;
 - Grassland: unimproved or semi-improved neutral, calcareous, acid or marshy grassland (as defined by JNCC 1993 *Handbook for Phase 1 Habitat Survey.*), whether managed or not;
 - Heathland: heather, bilberry or gorse heath, wet heathland and bog, acid grassland/heath mosaic where heather is present in any proportion;
 - Open water and wetland: watercourses, canals, reservoirs, ponds and their banks, reed beds and swamps;
 - Networks of natural habitats of linear and stepping stone features* providing potential for use by wildlife such as: hedgerows (especially where species-rich), disused railways, canals, river and stream corridors, green lanes, groups of small woods, ponds.
 - Geological exposures and features.

*These features are covered by Regulation 37 of the Habitats Regulations 1994 which requires the encouragement of management of features of the landscape which are of major importance for wild flora and fauna. These features are those which, because of their linear and continuous structure or their function as stepping stones, are essential for migration, dispersal and genetic exchange.

3.1.4 Some of these habitats, such as ancient woodland and traditional grasslands are long-standing but many have developed on disused industrial or extractive sites. Status as previously used land does not compromise nature conservation interest and Development Plan nature conservation policies apply equally to land irrespective of its past or current uses.

3.2 Requirements for planning proposal affecting designated sites

3.2.1 In judging whether planning proposals might affect designated nature conservation sites, consideration should be given not only to sites directly affected, but also to those adjacent to a development site or

subject to environmental changes such as water table or other hydrological change, pollution, shading, isolation or severance of connecting features. This is particularly the case for SACs where Appropriate Assessment must be made of all planning applications that are likely to have a significant effect on the internationally important interest features of the site, alone, or in combination with other plans or projects.

- 3.2.2 Proposals for development may come within the scope of schedules 1 or 2 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. If this is the case then the assessment must encompass the impacts of the development on flora, fauna and geological features and consider alternative siting, design and layout and the Environmental Statement should spell out mitigation measures.
- 3.2.3 Where an EIA is not required then the applicant should undertake an ecological appraisal consisting of:
 - A records search. Nature conservation records for the site and its surroundings should be consulted. This means contacting relevant organisations likely to hold records (see contacts list appended to this guidance).

Consultations should include

- EcoRecord (the ecological database for Birmingham & the Black Country) for all searches;
- Dudley MBC Nature Conservation Officer for all searches;
- The Wildlife Trust for Birmingham & the Black Country for all searches;
- Butterfly Conservation for all searches;
- English Nature (Natural England from October 2006) where SSSIs and SACs might be affected;
- the Environment Agency where rivers or streams are affected; British Waterways where canals are affected;
- Local conservation groups where appropriate.
- Ecological survey. Later sections of this guidance and appendices provide further detail regarding survey requirements. Should site-based advice be required, consultation with Dudley MBC Nature Conservation Officer is recommended. Minimum requirements are likely to be: habitat mapping using Phase 1 habitat survey methodology (JNCC 1993); protected species survey (see section 4), site description, botanical species list, identification of rare/uncommon species. Further detail may be required, especially where designated sites are involved. Survey should be carried out at the appropriate time of year (Table 2). Allowance for survey at the appropriate time of year for the habitats and/or species present or suspected to be using the site should be programmed in to planning application preparatory work to avoid later unplanned

delays. Applicants are advised to consider nature conservation policy requirements at an early stage in preparation of an application. Ecological consultants are encouraged to copy their survey data to EcoRecord to help in keeping records up-to-date in line with Institute of Ecology and Environmental Management (IEEM) guidelines.

- *Ecological evaluation* covering: key habitats/features (s.3.1.3); analysis of habitat quality; rare/uncommon habitat/species; role of the site in the wider habitat network.
- *Evaluation of the effect of the development* on key features and habitats present and on other areas of nature conservation value.
- *Mitigation and/or compensation measures proposed*
- Beneficial biodiversity enhancement proposals.
- 3.2.4 If in the course of carrying out the ecological appraisal it is found that there are protected species present the relevant policy and guidance will apply. Applicants should be aware that some species not covered by legal protection may nevertheless be of local importance and are covered by policy. The Birmingham and Black Country Biodiversity Action Plan lists local priority species. EcoRecord can provide details of species' rarity in the Black Country.
- 3.2.5 The appraisal of effects of development and design proposals should address the following:
 - In order of preference: avoiding, minimising, mitigating and compensating for, any impacts on the site's biodiversity and that of its surroundings; focusing on key habitats, species and features;
 - Protection of important habitats, species and features during development;
 - Opportunities for enhancement that the development may provide, including towards the aims of any relevant Biodiversity Enhancement Areas, such as by the creation of new habitat, improvement of existing habitat, creation or enhancement of habitat links, better public access.
 - Opportunities for sustainable drainage measures such as the instatement of wetlands for waste/surface water disposal.
 - Habitat creation or mitigation works appropriate for the site and its surroundings.

- Consideration of the aims and objectives of relevant national and/or local Biodiversity Action Plans and how to contribute to relevant targets.
- The management necessary to ensure the ongoing viability of important habitat and/or features during the lifetime of the development.
- Monitoring of the impacts of development on key features and habitat.
- Monitoring of habitat restoration, creation or translocation schemes carried out as part of mitigation works.
- 3.2.6 The protection and enhancement of biodiversity should be incorporated into development proposals at an early stage. Landscape design should be integrated into overall site layout and design from the beginning with ecological needs taken into full consideration. Habitat works should be planned well in advance to allow the use of the most suitable techniques at the appropriate times of year. The inclusion of Sustainable Urban Drainage (SUDs) principles at the early stages of development can make a significant contribution to enhancing the biodiversity value of new developments.
- 3.2.7 The science of habitat and species translocation is young and developing, many techniques being as yet unproven. Some habitat types and species are difficult or impossible to translocate. Translocation breaks ecological linkages and frequently results in changes to the ecological communities involved. Therefore translocation schemes should not be viewed as a substitute for *in-situ* retention of habitats and species but used only where this is not possible as a last resort.
- 3.2.8 Habitat creation is now an established means of enhancing wildlife value or compensating for loss. Newly created habitats cannot, however, fully replace established ecological communities with their complex webs of interdependencies and particular adaptations to local environmental conditions. Some habitats, such as ancient woodland and long established species-rich grassland should be regarded as irreplaceable. The ecological suitability and sustainability of newly created habitats can be maximised by the use of appropriate techniques. Considerations in the design of new habitats include: replacement role, local ecology, habitats and species, the local Biodiversity Action Plan, long-term management resources and techniques.
- 3.2.9 When designing and carrying out habitat restoration or creation, native trees, shrubs and wildflower species in keeping with the local area and its ecology should be used. These should be sourced, if at all possible, from local nurseries and have been grown from local stock in order to

maintain local genetic distinctiveness and diversity. Seed collection from local wildlife sites may be an option for some habitat types.

- 3.2.10 The Council accepts that applicants may wish to incorporate an amount of ornamental planting within development. Where this is the case species beneficial for wildlife; such as berry bearing shrubs and plants attractive for bees and butterflies are recommended.
- 3.2.11 If in carrying out any landscape works extra soil material is required this should be matched to local geology and ecology. Care needs to be taken to ensure that invasive species such as Japanese knotweed are not unintentionally introduced and any imported soil will need to be carefully sourced. Where natural habitat restoration or creation is proposed, for example wildflower meadow or heathland, the use of topsoil is not appropriate due to nutrient levels. In these cases, clean, graded subsoil should be used.
- 3.2.12 Applicants will need to demonstrate that long-term management will be carried out and that responsibilities for this are clearly identified. Monitoring of the outcomes of habitat and species works and their management will be required. In many cases submission of a Management Plan will be a condition or planning obligation.

Habitat	J	F	М	Α	М	J	J	Α	S	0	Ν	D
Rivers, canals,												
ponds												
Grassland and												
marsh												
Reedbed and												
swamp												
Heathland												
Woodland and												
scrub												
Hedgerows												

Table 2 Optimum survey times for habitats

Table 3 Optimum times for species survey

Species		J	F	Μ	Α	Μ	J	J	Α	S	0	Ν	D
Birds	Breeding												
	Wintering												
Reptiles	Breeding												
	Basking												
Great crested	Breeding												
newt	Habitat												
Badger	Setts												
	Habitat												
Water vole	Presence												
	Habitat												
Bats	Breeding												
	Hibernating												
Otter	Presence												
	Habitat												
Crayfish													
Luronium													
natans													
Lepidoptera	Presence												
	Habitat												

4.0 Wildlife Species Guidance

4.1 Introduction

- 4.1.1 The Conservation (Natural Habitats etc.) Regulations 1994 (more commonly termed "the Habitats Regulations"), derived from the E U Habitats Directive, the Wildlife & Countryside Act 1981 (as amended) and the Countryside & Rights of Way Act 2000 are the principal mechanisms for the legislative protection of wildlife in Britain. Part 1 of the 1981 Act is concerned with the protection of wildlife and contains the Schedules (1, 5 and 8) which collectively define which species are protected and the extent of protection. Schedules 2, 3 and 4 of the Habitats Regulations list European protected species. Badgers and their setts are protected by the Protection of Badgers Act 1992. Some of the protected species covered in this guidance are the subject of Local Biodiversity Action Plans and this is indicated where appropriate.
- 4.1.2 Planning Policy Statement 9 Biodiversity and Geological Conservation advises that local authorities should ensure that species of conservation priority and their habitat are protected from the adverse effects of development. For legally protected species, policy NC6 extends protection beyond legal provisions to cover the habitat that protected species need to survive and maintain their populations. Species' life cycles may depend upon the existence of different habitats at different life stages and a species may require a range of habitats, which may, or may not, be found exclusively within a proposed development site. It is for this reason that the guidance requires an ecological survey and impact assessment where protected wildlife species breed on a development site or otherwise depend on it.
- 4.1.3 Policy NC6 Wildlife Species applies to species protected by law and their to their habitat; to those rare and vulnerable in the Black Country (as defined by the Standard Species Rarity Index developed by EcoRecord, the local biological records centre^{*}); and to those covered by a Species Action Plan in the UK or Birmingham & Black Country Biodiversity Action Plan.
- 4.1.4 In addition to species protected by law and covered by Biodiversity Action Plans, the Government has identified a list of species requiring conservation action as species of principal conservation importance in England. This list of species was drawn up in response to section 74 of the Countryside and Rights of Way Act 2000 and can be found on the Defra website[‡]. PPS9 paragraph 16 requires local authorities to ensure these species are protected from the adverse effects of development, where appropriate and to take measures to protect their habitats through Development Plan policies. Appendix 3 lists the section 74 priority habitats and species recorded in the Black Country.

^{*} Available from EcoRecord, 28 Harborne Road, Edgbaston, Birmingham, B15 3AA enquiries@ecorecord.org.uk

[‡] www.defra.gov.uk/wildlife-countryside/cl/habitats/habitats-list.pdf

4.2 Requirements for Proposals Affecting Wildlife Species

- **4.2.1** Information required for submission with the planning application Where species covered by Development Plan policy are recorded or reported to be present on or proximate to a site, the Council will require developers to carry out appropriate appraisal of the effects of the development on the species breeding, feeding, resting and/or hibernating requirements, consisting of:
 - Records search.

To include obtaining relevant records from EcoRecord, the local biological records centre (see 3.2.3), Dudley MBC, local and specialist conservation groups where appropriate.

- Ecological survey. Consultation should take place with the LPA regarding the level of detail and coverage required. Minimum requirements are likely to be: breeding status, location and requirements, hibernation/roosting/resting sites, feeding habitat and requirements, habitual routes of movement. Survey should be carried out at the appropriate time of year (see table 2). Appropriately experienced/qualified surveyors/consultants should be utilised. As a minimum, bat and great crested newt surveys should be carried out in accordance with published English Nature guidelines[§]. Intending developers must note that it can take over a year to gather sufficient ecological survey information to meet planning and licensing requirements. An ecological scoping study and initial survey should be commissioned at the earliest possible stage.
- Ecological evaluation covering the effect of development on breeding, feeding, resting and hibernation habitat and on the population using the site. Off-site effects on species should also be considered.
- **Mitigation and/or compensation** measures proposed and how they will be incorporated into development and maintained through the lifetime of the development.
- 4.2.2 The appraisal of effects of development, and design proposals, should address the following:
 - Accommodation of the species within design and layout of development, including by considering alternatives in terms of design, layout, and location;
 - Timing of work to avoid disturbance during the breeding or hibernating season;
 - Protection of the species and its habitat during development;
 - Avoiding, mitigating (reducing/minimising) impact and compensating for loss of habitat;
 - Opportunities for enhancement, such as by the creation of new breeding or resting sites or feeding habitat;
 - Consideration of the aims and objectives of relevant national and/or local Biodiversity Action Plans;

[§] English Nature *Great crested newt mitigation guidelines* (2001) *Bat Mitigation Guidelines* (2004)

- The management necessary to ensure the ongoing viability of habitat and/or features important to the species after development. Where possible these arrangements should be designed so that long term management can be secured;
- Monitoring of the impacts of development on the species;
- Monitoring of habitat restoration, creation or translocation* schemes carried out as part of mitigation works.

*It should be noted that species translocation schemes are regarded as a poor substitute for the retention of the species in its existing situation and should only be considered as a last resort where there is no alternative that can achieve in-situ conservation.

4.3 Protected Species Planning Application Checklist for Applicants and Development Control Officers

4.3.1 Prior to submission of application:

- Is there a reasonable likelihood of a protected species (including any breeding birds) being present on site or being affected by the development? Previously developed land can be important for rare species. (If uncertain request a survey or seek further advice)
- Has adequate information about the presence of a species or otherwise, the potential impact on the species and potential mitigation/ compensation been obtained to inform the planning application? Developments affecting European Protected Species should, as a minimum, include a Method Statement and Mitigation Strategy. This information will also be needed when applying for a protected species licence.
- Have the local authority, English Nature (when full survey information is available) and the Birmingham and Black Country Wildlife Trust been consulted and have they commented?
- Has appropriate mitigation and/or compensation, incorporating the results of consultation, been incorporated into the development proposal?

4.3.2 Submission and determination of application

- Following submission of the application it may be that further information is required. The need for this can be minimised by pre-application discussions.
- Once all information is received and mitigation and/or compensation proposals agreed, the planning application can be determined. This may result in conditions and/or planning obligations being attached to provide for implementation of protection, mitigation and compensation measures.

4.3.3 After determination of application

- Has English Nature been informed about the permission and the details of conditions?
- The Rural Development Service (part of the Department for Environment Food and Rural Affairs 'Defra') or English Nature may now have to issue a licence for work or operations connected with the species in order for work connected with the development to proceed.
- Occasionally, a protected species may be found, where not previously anticipated, when work to implement a planning application has begun.

Works on-site should stop immediately and the steps above should be taken.

4.3.4 Further guidance on habitat requirements, information and survey requirements and design considerations relevant to the species covered by this guidance is found in the Appendices to this guidance. These appendices will be periodically updated as legal protection, Biodiversity Action Plan status and local rarity status are amended. A list of sources of advice and information is also found in the Appendices.

4.4 European Protected Species Additional information will be required to allow the Council to carry out its role in relation to European Protected Species under Regulation 44 of the Conservation (Natural Habitats &c.) Regulations 1994

- 4.4.1 Under the Habitats Regulations there are three tests that must be met before a licence can be issued for work affecting European Protected Species (EPS) and their resting, and breeding habitat. These need to be considered in the planning application process and information needs to be submitted with the planning application to allow assessment of these three factors. Case law has established that EPS survey and assessment cannot be covered by conditions but must be carried out prior to approval so that adequate mitigation can be designed into the application. This requirement is included in Circular 06/2005.
- 4.4.2 The Rural Development Service (RDS) will not issue a licence unless English Nature advise that the proposal will not be detrimental to the species favourable conservation status and the LPA can provide evidence that EPS have been adequately considered in the planning process having had regard for the first two tests above. The following guidance gives detail of the information that the Council will require to demonstrate that this has been done.
- 4.4.3 Policy NC6 Wildlife Species in the Revised Deposit UDP reflects the three criteria found under Regulation 44 of the Conservation (Natural Habitats &c.) Regulations.
- 4.4.4 Regulation 44(2)(e) states that licences may be granted or the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment."
 Regulation 44(3)(a) states that a licence may not be granted unless the RDS is satisfied "that there is no satisfactory alternative". and

Under Regulation 44(3)(b) a licence cannot be issued unless the RDS

is satisfied that the action proposed "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range".

English Nature have advised that they assess this requirement at the local population level – i.e. the mitigation proposed will need to be sufficient to avoid impacts on the population of European Protected Species using the development site and immediate area.

4.4.5 The applicant will need to supply information to show that the development meets these criteria:

1. That the development for public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment

This means showing how the development meets national, regional and local planning policy; showing the economic, social and environmental benefits of the proposal such as improvements to the environment of redevelopment of previously used land, better incorporation of biodiversity into design; how the new proposal will benefit the environment, local economy and local community.

2. That there is no satisfactory alternative

The applicant should show that alternative sites have been considered and/or that alternatives, in terms of design and layout, to development that would result in damage to European Protected Species' habitat have been considered, justifying the option selected.

3. That the proposal will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range

The applicant will need to show that adequate mitigation will be provided in terms of protection of the species population, habitat protection or replacement, feeding and commuting habitat protection, creation and enhancement, timing of works, precautions taken during demolition, site preparation, construction or other works and that appropriate monitoring will be carried out to allow assessment of the effectiveness of mitigation measures.

The information submitted will help the Council to prepare suitable conditions and planning obligations as appropriate. It will also allow assessment of whether the planning application will meet licence requirements and to fulfil the local authority's consultative role in this process.

5.0 Geology & Development

5.1 The Need for and Scope of the Guidance

- 5.1.1 Dudley's geological heritage comprises several hundred recorded sites (including sites of national and international importance) and an exceptional unexposed sequence of rocks. Together these constitute a unique and irreplaceable resource. Through partnership with geologists, developers have a key, and positive, role to play in the preservation and enhancement of this resource for the benefit of this and future generations. In Dudley and the wider Black Country the geology is fundamentally linked to cultural and economic development and has been recognised in the Black Country Study review of the Regional Spatial Strategy as a key heritage feature.
- 5.1.2 Development undertaken without consideration for existing geological features can rapidly and needlessly damage or destroy them. However, development can also create new exposures, both temporary and permanent, and the opportunity to utilise these for research, education or recreation. This is certainly the case in Dudley, where the majority of sites designated for their geological interest are a direct result of past human activity; notably road, rail and canal cuttings, and active or disused mines and quarries.
- 5.1.3 This guidance therefore sets out the procedures developers should follow wherever their proposals affect existing geological features or are likely to expose fresh sections through the bedrock. It is relevant to **all** those involved in promoting new development, council officers, statutory undertakers and government agencies, as well as private developers.

5.1.4 Who This Guidance is for

All those who promote, facilitate or undertake new development or infrastructure projects or modifications to existing built development or infrastructure should consider themselves as developers in the context of this guidance. Developers therefore include:

- Local Government departments and officers
- Statutory undertakers (Water, Gas, Electricity etc)
- Government departments and agencies
- Private sector developers and planning consultants

In every case geological matters can be considered most rapidly and cost effectively if discussions are held at the outset of planning for new development. The key to the successful coexistence of new development and geology is early consultation. Records of the Borough's geological sites are held by the Council's Keeper of Geology and Nature Conservation Officer.

5.2 The Geological Resource

- 5.2.1 Dudley is endowed with a rich and unique geological heritage. Not only were the rocks under the Borough key to its industrial development and growth, but they have also played a key role in the history of geology as a science, and have yielded some of the finest fossil remains in the world.
- 5.2.2 The Borough lies at the southern extremity of the South Staffordshire Coalfield. Rich deposits of coal, fireclay and ironstone of the Middle (or Productive) Coal Measures, together with older seams of Silurian (Wenlock) limestone were all exploited locally. Other raw materials, notably Carboniferous dolerite, and Silurian and Triassic sandstones have also been worked.

All these natural resources are now depleted, but the legacy of manmade surface exposures and spectacular limestone caverns left after centuries of mining and quarrying make Dudley by far the most important Borough for geological sites in the Midlands.

- 5.2.3 There are over 200 recorded sites of importance for geology, including 6 SSSIs (Sites of Special Scientific Interest), 28 SINCs (Sites of Importance for Nature Conservation) and Wren's Nest which was designated Britain's first National Nature Reserve for geology in 1956.
- 5.2.4 The Wenlock Limestone at Wren's Nest and nearby Castle Hill is internationally renowned as the source of a rich supply of superbly preserved marine invertebrate fossils, notably of trilobites, crinoids and corals. Many of these are displayed in museums through the world and illustrated in hundreds of publications, particularly important reference texts. Over 600 fossil species occur in the limestone, more than half of these were first identified and classified in Dudley making it one of the most cited locations for fossils in British and global geology.
- 5.2.5 Dudley boasts other important fossil-bearing rocks such as unique plant and vertebrate horizons in the Coal Measures, and late Silurian bone beds containing the remains of some of the earliest known terrestrial flora and fauna. Most of these horizons are poorly exposed if at all, so any exposure brought about through development can yield potentially crucial evidence in our understanding of the history of the planet.

5.3 Policy Requirements for Geology

5.3.1 Dudley Council is committed to the preservation and use of its unique geological heritage wherever possible. Development Plan policies for geology are in accordance with national planning policy guidance as expressed in Planning Policy Statement 9 Biodiversity and Geological Conservation, with the West Midlands Regional Spatial Strategy and the Dudley Community Strategy.

Figure 1 lays out the sequence of events related to planning applications and geological heritage. In brief, although every site is different, policies may be used to require:

5.3.2 **Conservation of existing designated geological sites**

This will always be sought as a first option and can often be achieved by the sensitive design of new development. Planning permission may be refused where development proposals would result in unacceptable damage to or loss of important geological sites or features.

5.3.3 Conservation by the recording of temporary exposures

This will be required through planning condition or legal agreement where physical preservation of a site or exposure cannot reasonably be achieved.

5.3.4 Conservation by preservation of site investigation samples and boring/geological records

Development or redevelopment of land often offers the only opportunity to gather information on earth heritage and geological science. Where indicated by the Keeper of Geology, non-confidential, non-sensitive records generated during site investigation that are relevant to the geological heritage of the area should be offered to Dudley Museum at the conclusion of site investigation. Borehole and other samples that are to be discarded following site investigation should be offered to the Museum for preservation and future scientific study.

5.3.5 Geological assessment

This is based on a desk study of all known information relating to the geology of a development site.

5.3.6 In order to avoid delay and allow for arrangements for recording, early discussion of these issues, with the Keeper of Geology, is required. The Council considers it reasonable for developers to fund geological recording work arising from their proposals.

5.4 Activities that can affect geological sites or features or create new sites or features

- Road schemes, rail links, canals and related infrastructure
- Water, gas, electricity infrastructure
- New building developments and redevelopment
- Ground investigation and site investigation for new development
- Derelict land reclamation schemes and landscaping
- Tourism and related development, particularly of geological sites
- Landfill operations, tipping, disposal and deposit of materials
- Agricultural and forestry activity, including planting and afforestation and grading, or seeding of rock faces
- Council or other environmental improvement schemes of all types

- Council plans and policy formulation affecting geological sites and surface or sub-surfaces geological features
- Council highways, building schemes, structural engineering services, including those affecting mines and caverns
- Council land and building acquisition, management and sale
- Council economic development activities
- Mineral extraction and quarrying
- Unsolicited removal of geological material from sites, including illicit commercial collecting or over-collecting
- Unsolicited use of foreign hardcore or other aggregate-type materials on or adjacent to geological sites.

5.5 All developers should...

- Recognise their obligation to enter into dialogue and to assess the geological implications of development proposals at the earliest possible stage and to provide full information as to the likely impact of the proposals
- Recognise that information on all known important geological sites in the Borough is held in the Geological Records Centre at Dudley Museum and Art Gallery and this is the most useful source of immediately relevant information
- Recognise that the Council requires that effective early consultations must have taken place **before** schemes affecting geological features are offered for planning approval or brought towards implementation
- Recognise that it may be necessary for a full geological assessment of a development site to be undertaken prior to consideration of a planning application
- Recognise that where a proposed development identifies that a conflict with an existing geological site of designated quality and importance will occur; it shall be the Council's first priority to enter into early liaison about this development to seek alternative layouts or mitigation for the likely damage that may be caused to the designated feature. In the extreme example where no alternative layouts or acceptable mitigation are possible the development will be refused.
- Recognise that if the most appropriate course of action is deemed to be conservation by record only, i.e., sampling and recording, access and time will need to be made available by the developer. A contribution towards associated costs may also be requested.
- Recognise that in the unlikely event that existing features cannot be accommodated then it will be necessary to create new geological features in alternative areas in agreement with the Keeper of Geology where geological conditions are equivalent or acceptable as mitigation for the feature to be compromised in the development.

- Recognise that the principle set out in national policy in PPS9 is that proposals should aim to maintain, and enhance, restore or add to geological conservation interests.
- For practical examples of methods and typical considerations involved in conservation of geological sites the developer should refer to English Nature's 2006 publication "Geological Conservation – a guide to good practice". However each site will have its own characteristics and challenges and early consultation about the individual sites is essential.
- Recognise that the Council can provide expert advice on geological matters and in addition will:
 - Arrange expertise for site investigation and recording on behalf of developers if requested
 - Provide developers with details of geological contractors capable of carrying out necessary recording work
 - Monitor geological work carried out for developers, to ensure compliance with the specification and completion of the work to the satisfaction of the local planning authority.

5.6 What the Council will typically require

- Early consultation regarding ground investigation and design and layout proposals
- Access to the site before and during works for recording and sampling for geological heritage purposes
- Design and layout to avoid damage to or obstruction of geological features and allow future access for scientific and educational purposes
- Creation of equivalent replacement exposures where damage is unavoidable
- Consideration of opportunities to improve geological features
- Provision for long term maintenance and management of geological features
- Consideration of provision of interpretation of geological heritage appropriate to the scale of the development

Conditions and/or planning obligations will be used to secure these requirements.

Is Your Potential Development Site Geologically Significant?

If you are unsure in any way, please contact the Borough Geologist to discuss. The sequence of options below will then be initiated

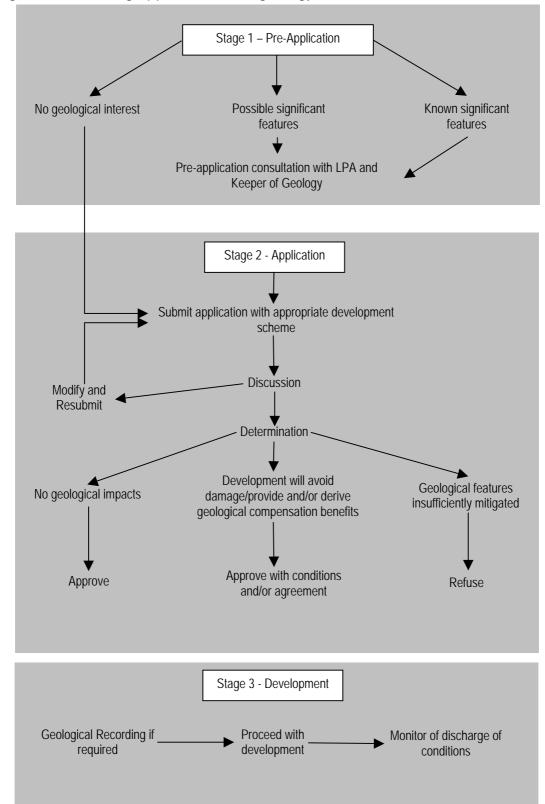


Figure 1 – Planning applications and geology

6.0 Nature Conservation and Development

6.1 Introduction

- 6.1.1 Government guidance, expressed in PPS9 Biodiversity and Geological Conservation and the accompanying ODPM Circular 06/2005, requires all development to take account of nature conservation interest. Sites of national, regional and local importance are covered by Development Plan nature conservation policies. Protection of these sites alone cannot, however, sustain the overall biodiversity and geological heritage of the Borough. New development has the potential to contribute to the protection and enhancement of the Borough's biodiversity by incorporating features of value to wildlife into landscape and built design. This guidance accompanies the Development Plan policy on Nature Conservation and Development.
- 6.1.2 In addition to protecting what is already there, the development of land often carries with it opportunities to bring benefits to wildlife, by improving neglected habitats, creating new ones, imaginative landscaping schemes, or the incorporation of habitat features into the built environment. As PPS9 states, a healthy green environment that allows people contact with wildlife contributes to quality of life and people's sense of well-being.
- 6.1.3 The Council intends to make the most of these opportunities by working in partnership with developers and by offering this guidance about means of protecting wildlife and building nature conservation into all new development.
- 6.1.4 As part of its contribution to this partnership and to help developers to bring nature conservation into their development, planning and nature conservation officers are happy to give advice to developers at a pre-application stage.
- 6.1.5 Proposals which further the aims and objectives of the Birmingham and Black Country Biodiversity Action Plan will be encouraged. Developed as part of the UK commitment to the 1992 Biodiversity Convention, the Biodiversity Action Plan focuses on nationally and locally important habitats and species that are important elements of overall biodiversity. Many of these are threatened or declining. The plan is a partnership initiative involving local authorities, government agencies, conservation organisations and local community and interest groups.
- 6.1.6 The plan identifies objectives for protection and enhancement of these habitats and species. The species and habitats covered are listed in the Appendix to this guidance. Copies of the plan or advice on its aims and objectives can be obtained by contacting the Borough's Nature Conservation Officer.

6.2 Incorporating Nature Conservation into Development

- 6.2.1 This guidance relates to the survey and evaluation work needed to take nature conservation into account in the preparation of planning applications; the design of development to incorporate features of wildlife value; opportunities for enhancement; provisions for management; and the information the Borough would like to see submitted with applications. Guidance on the protection and enhancement of geological features is found in section 5.0 Geology and Development.
- 6.2.2 The Council may use planning conditions or agreements/obligations to implement nature conservation proposals.

6.3 Site Survey and Evaluation

- 6.3.1 Before preparing development proposals it is important to determine the nature conservation interest of the site and its links to its surroundings. This is best done by carrying out a records search and commissioning a survey in order to enable an assessment of the value of the site for nature conservation to be made.
- 6.3.2 The records search should identify if the proposal affects any designated site covered by nature conservation policies in the Development Plan such as a Site of Special Scientific Interest, a Local Nature Reserve, a Site of Importance for Nature Conservation or a Site of Local Importance for Nature Conservation. If this is the case the relevant policies and/or guidance will apply.
- 6.3.3 The complexity of the survey will depend on a number of factors which will include the size, nature and location of the site, the type of development proposed, and the extent of relevant information already available (determined through records search). Advice on the level of detail and coverage required can be obtained from Dudley Council, but will usually be to a minimum of Phase 1 Habitat Survey (JNCC 1993) standard.
- 6.3.4 Features that should be covered in detail as part of any survey include: woodland and scattered trees (especially old trees), hedgerows and scrub, bare ground, grassland and marsh, rivers, streams, canals and ponds, reedbeds and swamps, and rare plants, animals and insects.
- 6.3.5 As most survey can only be carried out at certain times of year, it is important to consider the need to gather ecological information at as early a stage as possible. Guidance on survey timing for different habitats and species is found in tables 2 and 3.

6.4 Keeping Existing Features and Protecting them During Development

- 6.4.1 Based on the findings of the survey the developer should put forward proposals for the retention, enhancement and/or restoration of nature conservation interest. This may include:
 - Locating the development away from the nature conservation interest;
 - Designing landscaping around the nature conservation interest;
 - Retaining trees, including trees bearing dead wood where safety considerations allow, as these are important for wildlife;
 - Integrating watercourses or ponds into the development as a feature of landscaping;
 - Restoration of habitat damaged by development;
 - Enhancing the nature conservation interest by improving neglected habitats;
 - Preserving or creating linkages from the site into surrounding areas to allow species movement;
 - Consideration of Biodiversity Action Plan aims and objectives and how to contribute to relevant targets.
- 6.4.2 Measures for the protection of the nature conservation interest during construction should also be considered. Examples are:
 - timing of site clearance or construction work to avoid disturbance to nesting birds or other species;
 - the erection of exclusion fencing around important nature conservation features and habitat;
 - the construction of bunds to protect water bodies or wetland features.
- 6.4.3 Situations may occur where it may not be possible to keep all the nature conservation interest on a site and still develop it. Where the Council accepts this they will expect compensatory nature conservation interest to be provided either on or off site by the creation of new habitat to replace that which has been lost, by the enhancement of habitat or by the provision of management.
- 6.4.4 Developers should be aware that it is not always possible to adequately compensate for the loss of certain types of nature conservation interest, which have developed over many years and in consequence have developed ecological diversity and complexity. Examples are: pockets of ancient woodland, old hedgerows and trees and species-rich grassland. Work to create ecologically diverse habitats is valuable, but cannot provide a substitute for old semi-natural habitat of high diversity.

6.5 Improving the Site for Nature Conservation

- 6.5.1 Most development provides opportunities for improving nature conservation interest, principally through habitat creation or the use of appropriate design of landscaping schemes utilising open spaces, site boundaries or other planting areas. When planning habitat creation, careful consideration should be given to what is appropriate to the locality and to how the site will be managed both during establishment and in the long-term.
- 6.5.2 By careful design and use of native species in keeping with local character it is possible for landscaping schemes to achieve both amenity and nature conservation objectives. Wherever possible, locally grown plant stock should be used as it is better suited to local conditions and is attractive to local wildlife.
- 6.5.3 The soil, and the complex community of micro-organisms associated with it, is an important feature of the overall ecology of a site. If in carrying out any landscape works extra subsoil or topsoil is required, every attempt should be made to ensure that the material used matches what is there already. Where use of topsoil is proposed the Borough's Nature Conservation Officer should be consulted. Some wildlife habitat, such as wildflower meadows and heathland, thrive on low fertility so the use of topsoil or fertilisers can be unnecessary and undesirable.
- 6.5.4 The Borough appreciates that developers may wish to incorporate an element of ornamental planting into landscaping schemes. Where this is the case then consideration should be given to the use of species that are beneficial to wildlife; such as berry bearing shrubs and plants attractive for bees and butterflies. It is strongly recommended that advice on appropriate species be obtained.
- 6.5.5 The creation of nature conservation interest does not have to be restricted to large sites, even small areas can make a contribution by for example, planting climbing plants such as ivy against a wall, or planting small corners with nectar and/or berry bearing shrubs. As well as being beneficial for wildlife, nature conservation habitat can be less costly to provide and manage than the more ornamental types of landscaping schemes.
- 6.5.6 Some suggestions on how to enhance nature conservation interest are set out below:

• Hedgerows:

Hedgerows are particularly good for wildlife if they are linked to other habitat such as woodland or wildflower grassland. Old hedgerows can be laid or coppiced and gaps planted up. New hedges can be planted using native shrubs and trees.

• Woodland and scrub:

Existing woodland or scrub can be managed for nature conservation, for example by coppicing or thinning dense growth or creating glades for woodland flowers. New areas of woodland or scrub can be planted. For most wildlife benefit, locally native trees and shrubs should be used with ground flora plants added as the woodland develops.

• Heathland:

Much of our region was once covered in heathland; now only pockets remain. Areas of heather, bilberry and gorse can be planted where soil conditions are right, giving an attractive flowering display as well as being good for wildlife. No topsoil, fertiliser or lime should be added.

• Wildflower Meadows and Grassy Banks:

Wildflower meadows can be created in a range of situations and should be considered as an alternative to closely managed grassland. They can form an attractive and colourful element of landscaping and attract a range of butterflies and other insects. They may be particularly suitable for steep slopes, hummocks and broken surfaces where regular management is difficult or to cover spoil where other plants find it difficult to survive. It is important to use those native species that are found naturally in the area and advice should be taken on the best seed mixture to use. No topsoil or fertiliser should be applied as native grasslands thrive on low fertility.

• Ponds, Wetlands and Watercourses

Ponds can be an important feature for wildlife, attracting a range of birds, amphibians and insects and acting as a focus for landscaping. In parts of the Borough the creation of ponds as potential great crested newt habitat will be encouraged. Ponds should be sited in a sunny position, have shelving edges and be stocked with native plants. Fish should not be introduced. Invertebrates such as dragonflies will colonise naturally.

Reedbeds and marshes can be a sustainable means of surface water treatment as well as being good for wildlife.

For rivers and streams, measures to improve channel and bank habitat will be encouraged especially for the benefit of Biodiversity Action Plan priority species. Sometimes watercourses have been culverted in the past. Where this has happened, the Council will actively promote their de-culverting and encourage the restoration of open channels wherever practical in order to bring them into the overall nature conservation provision of the site. This kind of feature will be easier to incorporate into development if it is considered at an early stage of site layout and design. The Environment Agency recommends that an eight metre strip of land on either side of the watercourse is seen as a viable minimum to be protected from development. The Environment Agency should always be consulted about the construction or modification of any wetland or water feature and development close to a watercourse and can give useful advice on design and planting.

• The Built Environment

Small scale, low-cost features that can be incorporated into design include:

- The erection of bird and bat boxes on buildings or existing trees;
- Bat bricks or tiles to provide roost sites in roof-spaces, especially valuable where a development is near to a canal, woodland or informal open space where bats can feed;
- Nest-sites on buildings for swifts, martins or swallows, such as suitable eave design, tiles or customised units.

• Small-Scale Landscape Features

Groups or borders of native trees and shrubs; Use of berry-bearing trees and shrubs in formal landscaping; Retention of tree stumps as wildlife habitat, perhaps planted with ivy or other climbing plants; Climbing plants against walls;

Butterfly borders using nectar-bearing shrubs and herbaceous plants.

• Disused Land

Land that has fallen out of use, such as former industrial sites that have been partly cleared, is of surprisingly high value for wildlife. Disused land goes through a sequence of changes, offering habitats to a range of uncommon plants and animals that thrive in short-lived open situations. None of these habitats and communities is permanent, and they arise on land that is often designated for development under the Unitary Development Plan. Landowners and developers can make a valuable and inexpensive contribution to wildlife conservation by planning the interim management of this land in discussion with Council officers. In most cases all that is needed is to plan the timing of any maintenance work and final site clearance.

6.6 Future Management

- 6.6.1 Applicants should consider how habitat and features will be managed post development so that their contribution to local biodiversity is maintained in the long-term. Management of natural habitat often proves less costly than that of equivalent areas of more formal landscaping.
- 6.6.2 For large sites, the Council would recommend the preparation of a management plan. Examples of the types of nature conservation interest that may benefit from management plans are: woodlands, hedgerows, wildflower grasslands, watercourses, ponds and wetlands.

- 6.6.3 Management plans can be simple brief documents and should focus on the important features of a site and the actions required to maintain or enhance their wildlife value, such as how often grassland should be cut, ponds maintained or woodland thinned. Timescales and resources for implementation should be identified.
- 6.6.4 It is recommended that expert advice be taken on management plan formulation. Some of the organisations that can provide this advice are found in the contacts list.
- 6.6.5 For small sites, the maintenance programme for landscaped areas and features such as bird boxes should be considered.

6.7 Information to Submit with the Planning Application

An application to the Council for development should contain sufficient information for the Council to be able to assess the following:

- That UDP nature conservation policies relevant to the application have been considered;
- The potential impact of the development on nature conservation interest;
- That the application contains sufficient measures to protect the existing nature conservation interest on and/or where appropriate close to, the proposed site during and after development;
- Where loss of nature conservation interest is unavoidable, compensatory provision either on or off site;
- That opportunities for enhancement of nature conservation interest have been included;
- Where relevant, that consideration has been given to nature conservation linkages from the site into the surrounding area;
- That details are given of how nature conservation interest will be managed in the future;
- That the application, where appropriate, furthers the aims, objectives and targets of the Birmingham and Black Country Biodiversity Action Plan.



Supplementary Planning Document Nature Conservation Appendices

September 2006

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NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 1 - DETAILED SPECIES GUIDANCE

Species covered by Policy NC6 Wildlife Species and associated Supplementary Planning Guidance

Legally protected species

European Protected Species are marked * Birds

Barn owl (Tyto alba) Black redstart (Phoenicurus ochruros) Hobby (Falco subbuteo) Kingfisher (Alcedo atthis) Little ringed plover (Charadrius dubius) Peregrine falcon (Falco peregrinus)

Amphibians & Reptiles

Adder (Vipera berus) Common lizard (Lacerta vivipara) Grass snake (Natrix natrix) Great crested newt (Triturus cristatus)* Slow worm (Anguis fragilis)

Mammals

Badger (Meles meles) Brandt's bat (Myotis brandtii)* Brown long-eared bat (Plecotus auritus)* Daubenton's bat (Myotis daubentonii)* Leisler's bat (Nyctalus leislerii)* Natterer's bat (Myotis nattererii)* Noctule (Nyctalus noctula)* Common pipistrelle (Pipistrellus pipistrellus)* Soprano pipistrelle (P. pygmaeus)* Serotine (Eptesicus serotinus) Whiskered bat (Myotis mystacinus)* Otter (Lutra lutra)* Water vole (Arvicola terrestris)

Invertebrates

White-clawed crayfish (Austropotomobius pallipes)*

Plants

Floating water-plantain (Luronium natans)*

Other Birmingham & Black Country Biodiversity Action Plan Species

Amphibians (frog, toad, smooth newt) Bluebell (woods) Brown hare Dingy skipper Green hairstreak Grey partridge Kestrel Orchids Skylark Snipe Song thrush Tree sparrow *Vaccinium* species Wall brown

Species that are rare in the Black Country (EcoRecord Standard Species Rarity Index)

1.0 European Protected Species Guidance –

1.1 Great Crested Newt (*Triturus cristatus*)

Legal Framework

The great crested newt is an internationally important species. It is protected under Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 8) and Schedule 5 of the Wildlife and Countryside Act 1981.

It is illegal to deliberately kill, injure, capture or disturb great crested newts or obstruct their access to areas where they live. It is also an offence under the Wildlife and Countryside Act to intentionally or recklessly damage, destroy or obstruct access to any structure or place which this species uses for shelter or protection. The law applies to eggs, tadpoles and juveniles, as well as adults. A licence, issued by English Nature, is necessary for any scientific or survey work that will involve catching or handling great crested newts, or where newts will be prevented from moving freely to and from the places where they live. A licence issued by the RDS is required for any development or permitted development works affecting great crested newts (see above under European Protected Species).

The Birmingham and the Black Country supports a population of great crested newts whose conservation is significant in national terms. The species is known to be present in about 30 localities with well-recorded strongholds in the western part of Dudley. A Local Biodiversity Action Plan exists for this species. Objectives are to sustain existing populations, preventing loss through development, to create suitable new ponds and to secure suitable habitat management.

Lifestyle and Habitat Requirements

The great crested newt is the largest of Britain's three newt species. It spends much of the year on land, and hibernates from October to February. Towards the end of winter (February to April) adult newts return to their ponds to breed, often the same ponds that they were hatched in. Great crested newts require extensive areas of terrestrial habitat as well as a breeding pond in order to survive. It has been estimated that a population of around two hundred and fifty newts requires a suitable breeding pond and about one hectare of good terrestrial habitat. Rough grassland and scrub provide good foraging habitats, and hibernation sites such as dead wood, log, stone and brick piles are also a requirement. Adult newts can travel some distance away from their breeding pond in search of suitable habitat and immature adults may disperse up to five hundred metres away.

Breeding ponds should be free of fish and have few waterfowl. The pond area should ideally be 100 - 300sq.m, have variable depth and preferably be one of a number within 250m of each other. Ponds supporting a wide range of invertebrates with a quantity of floating and submerged vegetation and areas of open water are ideal for successful breeding. High levels of human or animal disturbance, pollution and shading by surrounding trees and shrubs can cause considerable damage. Great crested newts can, however, be found

in ponds of all kinds, even in small temporary pools. Newts can survive infrequent drying out of the breeding pond. Eggs are laid on underwater leaves near pond margins. After four weeks the eggs hatch as tadpoles, which then take a further three months to develop into a young newt capable of leaving the water. At this time the young newts will leave the water to spend between one and three years in surrounding terrestrial habitat while they become sexually mature.

Information Requirements and Survey Standards

Expert advice is usually necessary to establish the potential impact of development. Information will be required where there are previous records or current records or great crested newts are suspected of inhabiting a proposal site or its surrounds, normally within 250 metres. The following aspects should be investigated:

- Long term records of species use of the site, if available;
- Population size;
- Breeding status;
- Breeding site(s);
- The nature and size of feeding habitat;
- Routes of movement;
- For terrestrial habitat, the importance of the site to the species;
- An assessment of the impact and proposals for mitigation;
- Opportunities for habitat creation or enhancement.

March through to July is the best period to survey breeding ponds. Survey of terrestrial habitat can take place at other times. A licensed surveyor should undertake fieldwork. Where great crested newts are recorded in an area, all surface water features on a site should be surveyed. Newts have been known to breed even in ditches and puddles. The Herpetofauna Workers' Manual produced by the Joint Nature Conservation Committee in 1998 provides the most comprehensive digest of surveying and management practice. In addition English Nature has published *Great Crested Newt Mitigation Guidelines* (2001). This is available on the English Nature website.

Design Considerations

Planning proposals should consider the following:

- English Nature and the RDS requirements;
- Timing of development work;
- Retention and/or provision of breeding ponds;
- Links to other breeding ponds/newt populations in the immediate area;
- Location of roads and footpaths and features such as drains and culverts which can be a problem during migration periods and means of mitigating against impacts of these;
- Retention and/or provision of suitable terrestrial habitat;
- Protection of populations and habitat during development;
- Management of ponds and terrestrial habitat;
- Monitoring of the effect of the development on newt populations.

1.2 Otters

Legal Framework

Otters are protected under Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 8) and Schedule 5 of the Wildlife and Countryside Act 1981. This legal protection means it is illegal to deliberately kill, injure, capture or disturb otters or obstruct their access to areas where they live. It is also an offence under the Wildlife and Countryside Act to intentionally or recklessly damage, destroy or obstruct access to any structure or place which the species uses for shelter or protection. A licence issued by the RDS is required for any development or permitted development works affecting otters (see above under European Protected Species).

Absent from Birmingham and the Black Country for over a quarter of a century, otters are now again being recorded in the conurbation. They are thought to be re-colonising the area from historic strongholds in the upper Severn catchment by making use of the conurbation's extensive canal network and the rivers Cole, Tame, Stour and Blythe. A draft Local Biodiversity Action Plan exists for this species; its objectives include establishing the local status and distribution of otters, and seeking to provide opportunities for otters through habitat creation and enhancement

Lifestyle and Habitat Requirements

Otters are found predominantly along rivers, but will also make use of canals, streams, lakes, ponds and wetlands. Watercourses with a healthy fish population are important; otters feed almost exclusively on fish, particularly eels, but will also take amphibians, birds and small mammals. Good bankside cover is another important habitat feature as otters tend to lie up during the day. Holts tend to be found in secluded spots in the roots of large riverside trees, dense bankside vegetation and reedbeds. An otter may have as many as 30 of these resting sites within its territory. Urban and suburban watercourses are used primarily to pass through built up areas at night. As an otter's territory can extend for up to 40km of watercourse, these sometimes apparently unfavourable corridors do serve a useful function in enabling otters to colonise new areas. Otters are secretive creatures and tend to be nocturnal. Consequently, spraints (droppings) are often the only sign of an otter's presence.

Development proposals can have a number of impacts on otters' use of watercourses and associated wetland habitat. Such impacts include loss of undisturbed breeding and lying up habitat, degradation and fragmentation of habitat, and increased disturbance. Changes in traffic patterns resulting from development may mean that otters are more at risk from being killed while crossing roads.

Information Requirements and Survey Standards

Spraints are used to mark territories and are a key sign of an otter's presence. They are most likely to be found in dry weather when the water level has been steady or is falling. Since they are used as a form of communication, spraints will be left in obvious locations such as under or near bridges, at tributary junctions and on prominent bankside or mid-stream features including boulders, tree stumps and sand bars. Winter surveys are easier because bankside vegetation will have died back, but heavy rains can wash signs away. In addition to looking for spraints, surveys should record other signs of the presence of otters such as footprints, feeding remains and bank slides, and should provide a general assessment of habitat condition and potential for improvement.

All developments involving watercourses, especially those which affect the integrity of river/canal corridors or impact upon waterside habitat, should provide the following information:

- Otter presence and status, including recent survey information and past records;
- As otters are rarely seen, surveys should be based on the presence of characteristic signs along the watercourse and adjacent habitats which may be used for lying up. Signs should be recorded on a detailed map.
- Records of otters for adjacent stretches of any watercourse or canal affected;
- If present, appraisal of the effect of the development on otters and details of mitigation.

Surveys can be carried out at any time of the year, but best results are achieved in dry periods between November and January. Recognised and competent ecological consultants, with experience of otter work, should undertake survey work and the development of mitigation proposals. An English Nature licence is required for survey work which causes disturbance to otters such as checking of known holts. Where development proposals are likely to impact on otters, English Nature and the Environment Agency should be consulted when full survey information has been obtained.

Design Considerations

Planning proposals should consider the following:

- English Nature and RDS requirements;
- Inclusion of otter safeguards in new road developments, such as appropriate design of bridges, inclusion of otter passes above flood level; restricting use of culverts, provision of otter fencing;
- Retention, restoration or creation of safe, undisturbed lying up areas in urban riverside developments;
- Retention/enhancement of watercourses to provide safe passage;
- Deculverting of urban watercourses, combined with favourable habitat creation/enhancement;
- Provision of artificial holts;
- Appropriate management post-development;
- Monitoring of the effect of the development on otter populations.

1.3 Bats - General

Legal framework

All of Britain's bat species are protected through their inclusion on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended) and by the Conservation (Natural Habitats, &c.) Regulations1994. This legislation meets the UK government's wider European obligations to protect bats enshrined in the Bern Convention, the EC Habitats Directive and the Agreement on the Conservation of Bats in Europe (Bonn Convention).

Bats are protected from killing, capture and injury, deliberate disturbance, (whether in a roost or not) and damage, destruction or obstruction of roosts. Since bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not bats are present at the time. English Nature should always be consulted when bats are affected by a planning proposal at the stage where full survey information has been obtained.

It is therefore important that where development might have an adverse impact on bats steps are taken to ascertain their presence. If bats are detected early in the development process it is more likely that they can be accommodated within any development without causing undue delay. Proposals for mitigation, future management and monitoring can then be considered at an early stage in the design process.

People who need to work with bats for survey and research purposes are controlled by the WCA, which states that they are only allowed to catch or mark bats, enter roost sites or photograph them if they have been granted a licence issued by English Nature that covers them for these activities. Activities associated with development are controlled by means of licences issued by the Rural Development Service (RDS).

Ten species of bat have been recorded in Birmingham and the Black Country. Detailed guidance is available for the following six species:

- Brown long-eared (*Plecotus auritus*)
- Daubenton's (Myotis daubentonii)
- Noctule (*Nyctalus noctula*)
- Common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*)
- Whiskered (Myotis mystacinus)

The following four species are less frequently encountered in Birmingham and the Black Country, and detailed guidance has yet to be prepared. However, in the absence of such guidance, developers are advised that the same legal powers, information requirements, survey standards and mitigation needs will apply to these species.

- Brandt's (Myotis brandtii)
- Leisler's (Nyctalus leislerii)
- Natterer's (Myotis nattererii)
- Serotine (*Eptesicus serotinus*)

• Lesser horseshoe (*Rhinolophus hipposideros*)

Local authorities will work closely with English Nature, the local bat group and developers to ensure development proposals do not have an adverse impact on bats. Should a bat roost be present and suitable mitigation can be designed this will need to be covered by conditions and possibly a planning agreement. Survey and impact assessment cannot be conditioned. All bats are covered by the Birmingham & Black Country Biodiversity Action Plan. Objectives include the protection of bat roosts and the maintenance and enhancement of features in the landscape important to bats.

Information Requirements and Survey Standards

It can be difficult for developers to determine whether a proposed development site is likely to be used by bats. Research has led to local criteria being devised that can give guidance as to whether bat roosts are likely to be present on a site or not. Development that fits in with these criteria should be assumed as being a site where the presence of roosts is suspected and an appropriate survey should be carried out.

The criteria to be applied are:

- If any part of the application site lies within 50 metres of open land. This includes parks, golf courses, cemeteries, agricultural land, Green Belt, river valley or other open land.
- If any part of the application site lies within 50 metres of the following habitats or features: woodland, mature trees, wetlands, water-courses, canals and all designated wildlife sites.
- If the application site lies within a neighbourhood characterised by large mature gardens and allotments.
- If any part of the application site lies within 150 metres of a known bat roost.
- If neighbours or other consultees make credible claims that bats are present on an application site.
- If demolition of older buildings, particularly those over 100 years, is proposed. Bats can also be present in newer properties, especially those with hanging tiles and hanging boarding. If demolition is proposed, and one or more of the criteria listed is met, a survey of the property will be required.

Where bats are known to be present, either roosting or habitually foraging^{*}, or where their presence is suspected, the applicant will be expected to gather sufficient information to ensure that an accurate and reasonable opinion can be reached about the importance of the site to bats and likely impacts should the development go ahead.

This should cover:

Type of roost-hibernation/maternity/summer/temporary and timing of occupation;

^{*} Foraging habitat includes woodland and woodland edge, hedgerows, scrub, parkland, gardens, grassland and open water.

- Foraging habitat and commuting routes used by bats (habitat survey work may need to be carried out between March and October);
- In the case of foraging habitat, its importance to the local bat population;
- Impacts of the development on roosts, foraging habitat, commuting routes;
- Mitigation proposals;
- Monitoring provision for mitigation work.

Requirements for survey and assessment for bats

Survey work and the development of mitigation measures and monitoring work should be undertaken by suitably experienced bat workers or ecological consultants with a track record of working with bats. It is also important that the personnel are licensed by English Nature to carry out any survey work that would contravene the legislation protecting bats. English Nature has published *Bat Mitigation Guidelines* (2004) which should be followed. This document is available on the English Nature website^{**}.

Records should be obtained by the applicant from EcoRecord, the Biological Records Centre for Birmingham & the Black Country but absence of records should not prevent survey where there are reports of bats and/or the planning authority has identified the site as having bat roost potential. Surveyors should carefully assess the extent of survey needed in relation to the characteristics of the site and the proposed development, and should take a precautionary view in making this assessment.

Building & tree surveys should make use of endoscopes to examine inaccessible areas, cracks and crevices that could be used by bats. Emergence surveys should take place over three non-consecutive nights in good weather conditions from half an hour before sunset to two hours after sunset. Foraging and commuting surveys may need to be carried out over whole nights. Dawn swarming surveys may also be necessary to confirm the findings of emergence surveys. As well as heterodyne detectors, image intensifiers and time expansion recording should be used.

Survey and assessment reports will be required to include the following (Bat Conservation Trust guidelines):

- Dates and times of survey;
- Personnel and qualifications
- Equipment used
- Weather conditions
- Description of site including detailed description of buildings including age, wall construction (solid/cavity, materials), cladding, roof covering, loft construction, access points;
- Potential and actual roost sites;
- Bat numbers actual and/or estimated;
- Bat species & how identified;

^{**} www.english-nature.org.uk

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- Type of roost hibernation, maternity, male etc.
- Bat signs droppings (quantity, location, age), staining etc;
- Areas inaccessible for survey;
- Survey limitations and justifications for any departure from guidelines;
- A sketch if appropriate

Assessment of impacts of development on:

- Any roost(s) present or potential if not able to be confirmed due to survey constraints;
- Foraging areas and dispersal/commuting routes;
- The local bat population;
- Appropriate mitigation with details of design, techniques and timescale;
- Justification of chosen techniques and approach to show that the bat population will not be adversely affected;
- Assessments of alternatives to the approach taken (including options of retaining roosts if these are to be lost and replaced)
- Monitoring provisions

Applicants should be aware that protection of existing habitat and/or roosting sites will be preferred over provision of alternatives. If loss cannot be avoided, incorporation of replacement roost sites/habitat will be expected as part of development.

General Design Considerations

Planning proposals, particularly those involving demolition, loft conversions, roofing work and house extensions, need to consider the following:

- Timing of work;
- Need for the exclusion of bats;
- The type of roost present, for example summer, maternity, winter roost;
- The likelihood of disturbance;
- The use of chemicals in timber treatment;
- The maintenance of access to roost sites;
- The retention of known summer and winter roost sites and/or provision of alternatives.

Local issues - Wrens Nest and Castle Hill Bat Populations

During survey and assessment work associated with limestone mine stabilisation at Wrens Nest National Nature Reserve and Castle Hill Site of Importance for Nature Conservation, between 1997 and 2003, it has become clear that these sites support hibernation roosts of some significance at the national level.

In order to facilitate protection an enhancement of the foraging and dispersal habitat used by the bat populations, the Dudley MBC Directorate of the Urban Environment commissioned a bat strategy. This document *Planning for Bats in Dudley* (Stebbings 2003) covers the main route believed to be used by bats to reach the hibernation sites and their main foraging areas. The affected area is largely concurrent with the Castle Hill to Sedgley Beacon Linear Open

Space/Green Belt. Any proposed development in this vicinity requires special scrutiny. This means ensuring location and layout of development, landscaping and lighting are designed to avoid undue impacts on both feeding habitat and corridors of movement.

1.4 Bats – Individual species guidance

1.4.1 Brown long-eared bat (*Plecotus auritus*)

Lifestyle and Habitat Requirements

This species is widespread throughout Britain and is the second most commonly found bat in Birmingham and the Black Country. The brown longeared is a medium-sized bat which emerges late, after dark, and has a slow flight, often gliding and sometimes hovering near foliage. Its main diet is moths but it also takes craneflies and flies, especially midges. Brown longeared bats are associated with mature trees and shrubs in woodland, parkland and orchards, even in built-up areas, where they feed. Hibernation and summer roosts are in houses and churches, especially attics, barns, roof spaces and cellars, and also in caves and tunnels, generally near the entrances. Temporary roosts can be found in shelters such as porches, churches, barns and hollow trees. These bats have been recorded using the hibernation roosts at Wrens Nest and Castle Hill.

Additional Design Considerations

In addition to the general design considerations above, planning proposals need to consider the following:

- The presence of underground cavities or structures and their possible suitability as roost sites;
- The creation, where possible, of fissures, artificial cavities and cracks by use of bat bricks, bat tiles, bat boxes etc;
- The retention and/or provision of, trees and shrubs, parkland and orchards as feeding habitat;
- Wherever possible the retention of old and decaying trees.

1.4.2 Daubenton's bat (Myotis daubentonii)

Lifestyle and Habitat Requirements

This bat is widespread throughout Britain and is regularly recorded in Birmingham and the Black Country. It is a medium-sized bat and has a close association with still or slow-moving water, including ponds, pools, lakes, reservoirs and canals. They fly low and fast in wide circles just above the water surface and feed on flies, moths, beetles, mayflies and water boatmen. Daubenton's bats roost in holes in trees over or near water in summer and occasionally buildings. In the winter, they also use cavities, fissures and holes in buildings, caves and tunnels. These bats have been recorded using the hibernation roosts at Wrens Nest and Castle Hill and are common along the canal system.

Additional Design Considerations

In addition to the general design considerations above, planning proposals need to consider the following:

- The presence of underground cavities or structures and their possible suitability as roost sites;
- Protection of potential roost sites by retaining old trees and perhaps stonework with holes, cracks and fissures within new development.
- Protection or provision of above water feeding habitat.

1.4.3 Noctule bat (*Nyctalus noctula*)

Lifestyle and Habitat Requirements

This species is widely distributed in England and Wales and is regularly recorded in Birmingham and the Black Country. Noctules are one of Britain's largest bats (the size of a swift) with narrow wings. They are able to cover great distances and are active soon after sunset. They feed often above water but also above trees and woodland, usually taking beetles but also crickets and moths.

They are heavily reliant on tree roosts for hibernation, breeding and summer roosting. This large bat will use quite large holes and cracks high up in trees – an old woodpecker hole is ideal. Colonies may regularly use three or four roosts. For feeding, trees, woodland, grassland and water in the form of large ponds, pools, lakes and reservoirs are required.

Additional Design Considerations

In addition to the general design considerations above, planning proposals need to consider the following:

- Retention of known roost sites in trees;
- Provision of potential roost sites by retaining old trees with holes within development;
- Protection or provision of trees, woodland and wetland feeding habitat.

1.4.4 Pipistrelles (Pipistrellus pipistrellus, P. pygmaeus)

Lifestyle and Habitat Requirements

Pipistrelles can be regarded as the most widespread species of Britain's bats and often roost in large colonies. Pipistrelles are the smallest of the British bats. They feed just above head height after sunset, usually taking flies, moths, mayflies and lacewings.

Pipistrelles often use buildings, especially modern houses, for roosting, usually out of sight in the loft or roof space, often unknown to a house's human occupants. They also roost in rock fissures, cavities, caves and tunnels. They can use trees and ivy particularly for hibernation. Gardens, parks and open space, woodland edge, farmland and water are all important feeding habitats for these species.

Additional Design Considerations

In addition to the general design considerations above, planning proposals need to consider the following:

- The presence of underground cavities or structures and their possible suitability as roost sites;
- The creation, where possible of fissures, artificial cavities and cracks by use of bat bricks, bat tiles, bat boxes etc.;
- The retention and/or provision of grassland, trees and shrubs and the presence of water as feeding habitat;
- Wherever possible the retention of old and decaying trees.

1.4.5 Whiskered bat (Myotis mystacinus)

Lifestyle and Habitat Requirements

This bat is widespread in England and Wales, though it is relatively scarce in Birmingham and the Black Country. A small to medium-sized bat, it emerges early in the evening in comparison with other species. Whiskered bats usually fly alone but can sometimes be seen in groups and usually will follow a regular track repeatedly before moving elsewhere. Diet consists of mayflies, small moths and other flies.

Whiskered bats have variable habitat requirements but are usually not far from trees. Hibernation is usually undertaken in solitary fashion in cellars, caves, old houses or fissured cliffs, whereas in summer it lives in colonies using buildings and trees. In summer, they use hollow trees or roost behind tree bark and cracks in masonry and in cellars, houses and wooden buildings.

These bats have been recorded using the hibernation roosts at Wrens Nest and Castle Hill.

Additional Design Considerations

In addition to the general design considerations above, planning proposals need to consider the following:

- The presence of underground cavities or structures and their possible suitability as roost sites;
- Provision of alternative roost sites where old houses containing roosts are demolished.
- The creation, where possible of fissures, artificial cavities and cracks by use of bat bricks, bat tiles, bat boxes etc.;
- The retention and/or provision of trees and shrubs as feeding habitat;
- Wherever possible the retention of old and decaying trees.

1.5 White-clawed crayfish (Austropotomobius pallipes)

Legal Framework

This species is protected under Schedule 5 of the WCA 1981 (as amended) and by inclusion in Annex II and V of the EC Habitats Directive. English Nature should always be consulted when freshwater crayfish are affected by a planning proposal since an RDS licence may need to be issued. The Environment Agency should be consulted in relation to proposals affecting watercourses. A Local Biodiversity Action Plan exists for this species.

Lifestyle and Habitat Requirements

The white-clawed crayfish is a lobster-like crustacean that grows to 12cm in length. It is Britain's only native freshwater crayfish and is mainly restricted to England and Wales. Britain's population is significant in European terms.

Crayfish can be found in rivers, streams, lakes, reservoirs and water-filled quarries with relatively hard, alkaline water, and prefer rivers and streams without too much sediment. Crayfish are sensitive to pesticides and other pollutants particularly those lowering the oxygen content of the water. They feed on a wide range of vegetable and animal matter. Shelter such as rocks or stones, aquatic vegetation, tree roots or a bank to burrow into, is important for survival as crayfish are predated on by the larger species of fish as well as birds and otters. White-clawed crayfish are threatened by disease carried by the non-native signal crayfish.

All aspects of canal and river restoration, improvement, management work and works which have implications for water quality can potentially impact on this species.

Information Requirements and Survey Standards

All proposals involving waterside habitat, especially watercourse engineering, bank modification or strengthening and bridge works, should provide the following information:

- Records of white-clawed crayfish for the watercourse concerned and the catchment as a whole;
- Up-to date survey where records indicate crayfish presence anywhere on the watercourse or within its immediate catchment;
- Measures to protect crayfish populations and habitat should they be present;
- Monitoring proposals.

When surveying for crayfish, it is important that competence and confidence in identification can be demonstrated. Survey work and the development of mitigation measures and monitoring work should be undertaken by suitably experienced surveyors or ecological consultants. It is also important that the personnel are licensed by English Nature to carry out any survey work that would contravene the legislation protecting crayfish.

This species is best surveyed either at dusk, by netting or pond dipping, or using torchlight after dark when the crayfish are more active. Surveys should be undertaken between April and October.

Design Considerations

Planning proposals affecting crayfish habitat should consider the following.

- Maintenance of suitable water quality and chemistry;
- Measures to avoid sediment or other polluting material entering the watercourse/water body;
- Protection or provision of refuges within and along the edge of water bodies, together with aquatic vegetation
- Maintenance or provision of soft banks for burrows.

1.6 Floating water-plantain (*Luronium natans*)

Legal Framework

The provisions of Section 13 of the WCA 1981 make it an offence for a person to intentionally uproot any wild plant unless they are authorised to do so by the landowner.

Some rare plants, listed in Schedule 8 of the WCA 1981 and listed in Schedule 4 of the Habitats Regulations 1994, have additional protection. It is an offence for any person, including the landowner, to intentionally pick, uproot or destroy these specially protected wild plants. Floating water-plantain (*Luronium natans*), which occurs on canals in Birmingham and the Black Country, has this greater level of legal protection.

In addition to its protected species status, floating water-plantain is a priority species in the UK Biodiversity Action Plan. A Local Biodiversity Action Plan also exists for this species. Objectives are to maintain its current range, protect it and its habitat and increase population size where possible.

A licence is required from English Nature for any survey or research work affecting this species, including the taking of samples for survey and identification purposes. English Nature should be consulted should floating water-plantain be found. Activities associated with development are controlled by means of licences issued by the Rural Development Service.

Description, Lifestyle and Habitat Requirements

Floating water-plantain is a European endemic aquatic plant that is rare and threatened across its whole range. In the UK its main area of distribution is in Snowdonia, mid-Wales and adjacent areas of north and central England. The population in Birmingham & the Black Country forms the most south-eastern part of the main area of distribution.

The plant occurs in a number of aquatic habitats, mostly characterised by a lack of competition and relatively low fertility. Almost all of the Birmingham and Black Country records are in or associated with the canal system. It grows as a submerged aquatic, a floating-leaved aquatic, and on exposed mud where water levels fluctuate.

All aspects of canal restoration, improvement and management works and proposals that have implications for water quality can potentially impact on this species.

Information Requirements and Survey Standards

All proposals affecting canals and associated water-bodies, especially dredging, restoration or alterations to the channel, should provide the following information:

- Evidence of a records search;
- Aquatic plant survey;
- Should floating water-plantain be found, measures to protect the population.

The plants die back in the autumn and winter so survey should be carried out between May and August. A competence in botanical identification, especially of submerged and floating aquatic plant species, is a prerequisite when surveying for this species which must be identified in the field as samples cannot be taken. Verification of the identification by a licensed surveyor will be required.

Design Considerations.

If floating water-plantain might be affected by planning proposals, the following should be incorporated into scheme design:

- Protection of individual plants during works affecting the habitat;
- Creation of refuges within and alongside water bodies to protect against disturbance;
- Protection of water quality.

2.0 Species Protected under the Wildlife & Countryside Act

2.1 Birds - General

All wild birds and their nests are protected under the WCA 1981 and CROW Act 2000. It is an offence to kill or injure any wild bird, nests may not be damaged or destroyed while in use or being built, and eggs may not be taken or destroyed. In addition, species listed on Schedule 1 of the WCA are protected by special penalties. For these species, it is an offence to disturb any nesting bird or dependent young and/or to interfere with its nest and nesting site. Where birds are present and/or breeding on a development site, appropriate timing of works will be required to ensure no adverse effects on nesting, breeding and feeding.

English Nature should be consulted when Schedule 1 birds are affected by a development proposal. Consideration should be given to protection and/or enhancement of foraging habitat

Six WCA Schedule 1 species of bird have been recorded breeding in Dudley or in the wider area of Birmingham and the Black Country and are covered by detailed guidance. They are:

- Barn owl (Tyto alba)
- Black redstart (Phoenicurus ochruros)
- Hobby (Falco subbuteo)
- Kingfisher (Alcedo atthis)
- Little ringed plover (Charadrius dubius)
- Peregrine falcon (Falco peregrinus)

In addition to those birds requiring attention because of their Schedule 1 status, a number of species found in Birmingham and the Black Country have been identified as being of conservation concern. This is the result of a recent review of the population status of birds in the UK by the RSPB, BTO and other governmental and non-governmental conservation organisations.

Red list species are those that are globally threatened or whose population or range has declined rapidly in recent years - by more than 50% in 25 years. Amber list species are those whose population or range has declined moderately – by more than 25%, but less than 50%, in 25 years. This group also includes species with internationally important populations in the UK.

Of particular concern in the urban areas of Birmingham and the Black Country is the inclusion of two common urban birds – starling and house sparrow – on the red list. These species have been included because of long term population declines. Other red list species present in the conurbation include skylark, song thrush, willow tit, linnet, bullfinch, tree sparrow and reed bunting. Amber list species include kestrel, lapwing, house martin, grey wagtail, willow warbler and goldcrest.

Specific guidance related to these species may be added at a later date.

General Information Requirements and Survey Standards for Birds

Information Requirements

Where there is evidence that:

- Schedule 1 species breed on or use the site, or there is a strong suspicion that this is the case; or
- that suitable breeding habitat is present in proximity to a known population; or
- that development may have a significant effect on an area of continuous or discontinuous but linked feeding habitat e.g. barn owl feeding territory:

then information may need to be collected as follows:

- Long term records of species use of the site/locality if available;
- The size of population and breeding status;
- Location of breeding site(s) where directly or indirectly affected by development;
- The nature and size of feeding habitat;
- An assessment of the importance of the site to the species;
- An assessment of impact of the development and proposals for mitigation.
- Proposed management of breeding resting and feeding habitat

Survey standards

Survey should be carried out by appropriately qualified/experienced personnel. Survey methods and timing depend on the species concerned, although generalised guidance on survey timing can be found in figure 1. Records search may indicate that sufficient data is already available, in which case further survey may not be required.

2.1.2 Barn owl (Tyto alba)

Lifestyle and Habitat Requirements

Once relatively common in lowland habitats, this species has suffered significant decline attributed to the loss of prey-rich foraging areas resulting from the intensification of agricultural practices; the destruction of traditional breeding sites; urban development; increased use of pesticides; and road construction on foraging habitat. This owl is largely nocturnal but also active at dawn and dusk. It roosts in trees as well as buildings. Barn owls nest in draught-free sites in buildings, tree cavities and caves. Food consists of small mammals, particularly short-tailed field voles, which they hunt by flying low and slowly over foraging habitat, which is rough grassland with field margins, hedgerows and woodland edges.

In carrying out survey and designing mitigation, the guidance in the English Nature publication 'Barn owls on site – A guide for developers and planners' 2002 should be followed.

Design Considerations

Planning proposals need to consider the following:

- Protection and/or provision of safe and secure nesting sites;
- The retention and provision of suitable foraging habitat on and/or off site and access to this;
- Appropriate foraging habitat management.

2.1.3 Black redstart (Phoenicurus ochruros)

Lifestyle and Habitat Requirements

The black redstart is a cavity, cliff and ledge nesting bird and in Britain has a clear preference for buildings or ruins. They can also nest in railway sidings and lorry parks. The breeding season runs from mid-April to mid-July and two broods can be raised. Food in the breeding season consists of insects, which are usually foraged on the ground from wasteland near to nest sites. This bird is normally a summer visitor. Black redstarts were first recorded breeding in Birmingham in 1943. By the 1980's, the Snow Hill Station and Gas Street Basin areas of the city were regarded as "traditional" breeding sites. Since then breeding has also been reported on factory sites in the Black Country, often adjacent to the canal network. Many nest sites are near water. This species is the subject of a local Biodiversity Action Plan. Objectives are to maintain and increase the Birmingham and Black Country breeding population.

Design Considerations.

Planning proposals need to consider the following:

- Renovation, alteration or demolition may well be controlled by the Wildlife & Countryside Act if the species is present and breeding.
- Where the renovation, alteration and demolition of old buildings are anticipated, especially those located alongside canal, rail or Metro corridors, the incorporation of features providing secure cavities or ledges for breeding purposes.

• The protection, provision and/or availability of foraging habitat, normally of a wasteland type, near to the nest site. "Brown roofs" on buildings should be considered where sufficient terrestrial landscaping cannot be provided.

2.1.4 Hobby (*Falco subbuteo*)

Lifestyle and Habitat Requirements

This is a small slender falcon with shortish tail and scythe-like wings, rather like a huge swift. In courtship, it undertakes spectacular display flights. It is a summer visitor, wintering in Africa, though it also occurs as a passage migrant. It is thought to be expanding its range in Britain. The hobby frequents open country and heaths with tree clumps, and farmland with old hedgerow trees and woodland edges, habitats normally associated with urban fringes. It usually nests in old crow nests but has been known to nest on structures such as pylons. The breeding period lasts between June to August and one brood is raised. Diet consists of small birds and large insects, which it hunts on the wing. As breeding birds, hobbies occur at only low densities, 3 to 5 pairs per 100sq.km, so an individual proposal is likely to affect only a small part of foraging territory.

Design Considerations

Planning proposals need to consider the following:

- Use of the site for nesting and/or foraging.
- Retention or provision of suitable nesting sites such as old trees and/or pylons.
- Where hobbies are known to use a site suitable foraging habitat such as open habitat with woodland edges, trees and hedgerows should be protected and/or provided.

2.1.5 Kingfisher (Alcedo atthis)

Lifestyle and Habitat Requirements

A small blue bird associated with Britain's rivers, canals and other open waters, kingfishers are highly popular with the British public. They are resident throughout the year. They nest in holes in banks above water and feed on fish and freshwater invertebrates which they catch by diving in from overhanging perches provided by trees and shrubs. Moderate water quality is required in order that fish and insects can survive to provide a potential diet. They have been known, however, to nest above polluted water and feed elsewhere. For nesting sites kingfishers require vertical riverbanks allowing for holes at least 1.5m above normal water level and, as the bird's nesting hole is dug around a metre into the bank, of sufficient width to accommodate this and to give protection from predators.

Design considerations

Planning proposals, which affect watercourses, canals and other surface water features, need to consider the following:

- Bank side nesting sites, habitat and fishing perches.
- Effects on water quality.
- Water quantity and flow and effects on breeding and feeding habitat.

• Provision of artificial nesting sites along appropriate watercourses.

2.1.6 Little ringed plover (Charadrius dubius)

Lifestyle and Habitat Requirements

This small wader is a regular summer visitor to Britain between March to October. It can be distinguished from the slightly larger ringed plover by a pale ring around the eye. Little ringed plovers are strongly associated with bare ground habitat such as that provided by clay pits, spoil heaps and rubbish tips, often close to water. They can be quick to exploit newly exposed sites, the nest being merely a scrape in the ground. Breeding sites are abandoned if vegetation cover becomes established. Breeding takes place between April and July. Breeding status should be suspected if birds are noted undertaking their noisy display flights over suitable bare habitat. They feed on insects and small molluscs which are usually found in waterside sand and shingle ridges, gravel pits etc. This species is highly susceptible to disturbance whether by human intervention or animal predators.

Design Considerations

Planning proposals for a little ringed plover breeding site need to consider the following:

- The retention and/or provision of open bare habitat of a shingly nature close to water.
- Measures to ensure that no work is carried out or disturbance caused during the breeding season.
- Control of public access to any breeding and /or feeding areas during the breeding season.

2.1.7 Peregrine falcon (Falco peregrinus)

Lifestyle and Habitat Requirements

A large robust falcon with a powerful flight, feeding almost exclusively on birds which it takes in the air. Associated with mountain and coastal cliffs and crags where it nests, it is now showing a tendency to nest on the ledges of high buildings, quarries and structures, even in urban areas. Though occasionally occurring as scarce visitors or passage migrants, several British towns and cities now have resident pairs where they exploit a ready supply of pigeons. Pairs are known to breed in Birmingham city centre and in the Black Country. Breeding normally occurs between April and July. This is a species that has a marked susceptibility to disturbance.

Design Considerations

Planning proposals need to consider the following:

- Protection of existing breeding or potential breeding sites.
- Where development consists of the refurbishment of existing tall structures, the provision/retention of ledges sheltered from prevailing weather and from disturbance.
- Where proposals involve quarrying, opportunities for creating ledges sheltered from prevailing weather and from disturbance.

2.2 Reptiles - General

Four species of Britain's protected reptiles have been recorded in Birmingham and the Black Country. They are:

- Slow worm (Anguis fragilis)
- Common lizard (Lacerta vivipara)
- Adder (*Vipera berus*)
- Grass snake (Natrix natrix)

Legal Framework

These species are protected under Schedule 5 of WCA 1981 against intentional killing or injuring. The animals themselves can be moved, however if this is necessary.

Information Requirements and Survey Standards

Where reptiles are known to be present or have been recorded on or immediately adjacent to a site that is the subject of a planning application, developers will be requested by the Council to provide:

- Information about population status and hibernation, feeding and basking sites.
- An evaluation of the importance of the site to the population using it.
- An assessment of the impact of the proposed development.
- Proposals for mitigation in respect of the population.

Records of these species usually result from chance encounters in suitable habitats. They are mostly inconspicuous and difficult to search for. April, May and September are the best months for surveying, when animals are most likely to be seen basking. Use of artificial refugia is a useful survey technique in certain situations. *The Herpetofauna Workers Manual* produced by the Joint Nature Conservation Committee in 1998 provides the most comprehensive digest of surveying.

The future management and monitoring of reptiles and their associated breeding, resting, feeding and hibernating habitat may need to be addressed whilst determining any planning application.

Developers should be aware that re-location schemes are not favoured by local authorities as they are not proven and are not regarded as a substitute for the retention and/or provision of suitable habitat and/or hibernation sites.

To assist developers, the specific requirements of the four species are set out below.

2.2.1 Slow worm (Anguis fragilis)

Lifestyle and Habitat Requirements

The slow worm is associated with dry habitats such as grassland and scrub, particularly along railway and canal corridors in urban areas and other places where disturbance is at a minimum such as churchyards, allotments and gardens. They require thick vegetation, especially grasses, along with loose soil to burrow in and plenty of refugia. They are not reliant on direct sunlight

and can absorb radiated heat from contact with warm surfaces. . Hibernation takes place underground through the autumn and winter and the species is active from early spring to mid-October though is often scarcely noticed since it can be active beneath the ground surface as well as above. The normal diet is slugs and snails though other invertebrates are eaten as well. The breeding season lasts from May to September.

Design Considerations

Planning proposals need to consider the following:

- Retention and/or provision of dry grassland and scrub where disturbance is minimal.
- Provision of habitat piles of stones and logs, which are important as resting/hibernation sites.

2.2.2 Common lizard (Lacerta vivipara)

Lifestyle and Habitat Requirements

Common lizards are small, quick brown reptiles which are found in open, sunny places. Typical habitats include heaths, grasslands, hedgerows, and woodland edges. In urban areas, railway embankments and "wasteland" sites provide favourable conditions - vegetation with structural variety, plenty of refuges and suitable micro-climate. Sheltered, sunny spots are used for basking, especially earlier and later in the day. Refuges such as logs, rubble and general debris are used to shelter at other times. Common lizards feed mostly on spiders and insects, although earthworms and snails may also be taken. They give birth to live young between June and September, and spend the cooler months of the year – usually October to March – in hibernation.

Design Considerations

Planning proposals need to consider the following:

- Retention and/or provision of access to areas of suitable open habitat.
- Management to prevent the growth of trees and scrub that would shade the open habitat.
- Protection and/or provision of good quality wildlife corridors linking breeding/foraging habitat, and enabling dispersal
- Provision of habitat piles of stones, logs or other suitable material to provide resting/hibernation sites.

2.2.3 Adder (Vipera berus)

Lifestyle and Habitat Requirements

The adder is found throughout the country though rare over much of central and southern England. Significant colonies are known to exist in the Wyre Forest National Nature Reserve near Bewdley. Although the venomous nature of the species can cause public concern, adders generally avoid contact with people. Adders are normally associated with open areas such as heathland, grassland and scrubby areas but are also found in meadows, embankments, woodland rides and edges and boggy ground. They require habitat for hibernation, basking and feeding. Hibernation in winter/cold weather takes place in holes (possibly small mammal holes) in dry banks, which may be between 500m and 2000m from their usual range. For basking they require open dry sunny areas. They feed on a range of prey including small mammals, nestling birds, amphibians, other reptiles, and invertebrates such as spiders, slugs, snails and worms. Mating takes place in the latter half of April and early May, leading to the birth of live young in the first half of August. They are born fully formed and disperse not long after birth.

Design Considerations

Planning proposals need to consider the following:

- Retention and/or provision of access to areas of suitable open habitat.
- Management to prevent the growth of trees and scrub that would shade the open habitat.
- Protection and/or provision of access routes linking breeding/foraging habitat.
- Well-drained frost-free areas, such as banks or walls retained or provided for winter hibernation.

2.2.4 Grass snake (Natrix natrix)

Lifestyle and Habitat Requirements

Restricted to England and Wales, this is the largest species of British snake growing up to 100cm long. It has an olive green body with a distinct yellow and black collar behind the head. Grass snakes are not venomous and feed on a range of prey including small mammals, young birds, amphibians, invertebrates such as slugs and snails, fish and other aquatic prey. They are often found in damp habitats associated with ponds, streams, dykes, rivers, wet ditches and wet grassland. They also seek prey on land and in shrubs, which they climb and in which they also bask. Mating takes place between the end of March and June with young hatching about the end of August or early September. The laying site can be as far as 1000m from the usual feeding habitat and several females may lay at one site. Egg-laying sites include dunghills and compost heaps, meaning that gardens with heaps potentially provide vital habitat during the grass snake life cycle. Hibernation takes place in holes, burrows and even stone walls located as far as 2000m from their usual habitat.

Design Considerations

Planning proposals need to consider the following:

- Protection and/or provision of suitable accessible habitat on and/or off site.
- Protection and/or provision of access routes linking areas of breeding/foraging habitat
- Provision of incubation sites in the form of piles of vegetation or grass clippings.
- Well-drained frost-free areas, such as banks or walls with holes, are needed so that they can survive the winter.
- Management to prevent the growth of trees and scrub that would shade the open habitat.

2.3 Mammals

2.3.1 Badger (*Meles meles*)

Legal Framework

The Protection of Badgers Act 1992 protects the animals themselves from harm or from disturbance when occupying a sett, and protects setts against damage, destruction or obstruction. In order to undertake the development of land (as defined in Section 55(1) of the Town & Country Planning Act (1990)) or to carry out any work that would entail interference with or disturbance of setts, a licence from English Nature, must be obtained. This covers operations up to 30 metres from setts. Licences are not granted during the breeding season – December-June. A Local Biodiversity Action Plan exists for this species. Objectives are to protect their setts and to protect and enhance habitat.

Lifestyle and Habitat Requirements

One of Britain's most popular and unmistakable native wild mammals; badgers are mostly nocturnal but can be active during the day near dawn and dusk. Though generally thought to be woodland animals, badgers can occupy a wide range of other habitats, including scrub, grassland and open space in urban areas. These latter habitats are especially important from a foraging point of view. Open corridors in urban areas such as railway lines, water courses, canals and linked open spaces are important for the movement of badgers and the definition of territories. Badgers are creatures of habit such that setts and badger pathways may be in use for decades or even centuries.

The badger has a lifestyle based around social or family groups associated with a sett or setts, which are underground tunnel systems providing shelter for breeding, lying up, and seasonal use related to foraging. Territories range in size from 15 - 180ha. Setts are located on well-drained banks where soils can be easily worked and where there is foliage cover around the holes. Sandy soil is preferred.

Earthworms provide the bulk of the badger's diet, though small mammals such as field voles, insects, birds' eggs, fruits and berries, cereals and green plants contribute. Grassland is often important for foraging, as is arable land. Badgers tend to use habitual routes between setts and foraging territory and may not be deterred by obstacles such as fences and roads. This can lead to road casualties. Mating takes place from February onwards up to as late as November. The breeding season is December to June with February seeing the peak of cub births. Female badgers are capable of delayed implantation, which means that they can regulate birth to the best time of year.

Information Requirements and Survey Standards

The amount of information required in support of a planning application will depend on the potential impact that the work is likely to have on the local badger population. This information should address:

- The status and occupancy of all setts affected or not, available to the social group(s);
- Effects of the development on setts and on the badger social group(s);

- The presence and location of badger walkways and pathways;
- The extent and location of foraging habitat;
- The scale, nature and timeframe of badger activity;
- Mitigation required to avoid damage to badgers and to comply with legal requirements.

Given this species' liability to persecution, it is of utmost importance that the issues relating to development proposals are dealt with in a confidential manner.

Survey and mitigation proposals and licensed work should be undertaken by recognised and competent ecological consultants with a proven record of badger work.

Design Considerations

Planning proposals should take into account the following:

- Any work affecting badgers or their setts is illegal without a licence, issued by English Nature. This may apply to activities up to 30 metres from a sett;
- Timing of work. There is a presumption against issuing licences between December 1st and June 30th (the badger breeding season);
- Design layout to accommodate setts and access to foraging habitat;
- Badger use patterns within the site and to and from adjacent habitat;
- Management of foraging habitat where appropriate;
- Protection of badgers and their setts will not be considered sufficient mitigation if foraging habitat or safe access to this is not safeguarded. This should include provisions to avoid or minimise risks of road casualties.

2.3.2 Water vole (Arvicola terrestris)

Legal Framework

The water vole receives protection through its inclusion on Schedule 5 of the Wildlife & Countryside Act 1981. This legal protection makes it an offence to intentionally damage or destroy or obstruct access to any structure or place which water voles use for shelter or protection; or disturb water voles while they are using such a place. Licences are available from English Nature to allow activities that would otherwise be offences, for example for scientific or educational purposes. If water voles are present or suspected on a site, liaison with English Nature will be necessary once full survey information has been obtained and mitigation proposals have been developed. In relation to riverbank or channel management work, the Environment Agency should be consulted.

A Local Biodiversity Action Plan exists for this species. Objectives are to protect current populations, to restore population levels, and to protect, enhance and restore habitat. This century has seen a long-term decline, which has accelerated in the 1980's and 90's, making this formerly common species a rare sight over much of the country. The reasons for this decline are complex but certainly involve degradation and loss of bankside habitat, isolation of populations, and the spread of mink, an effective predator of water voles. Recent research in Birmingham and the Black Country suggests that the urban area is of increasing importance as populations in rural counties decline.

Lifestyle and Habitat Requirements

The water vole is the largest of the native British voles and as the name suggests it is associated with riparian habitats throughout Britain. Water voles are shy and rarely seen; though the characteristic 'plop' as they dive into the water may sometimes be heard. They are associated with rivers, streams, brooks, canals, ditches and sometimes ponds and larger water bodies.

Voles require soft banks for burrows for shelter and breeding and marginal vegetation with soft tissue such as grasses, reeds etc. for food supply. Burrows may also be found in holes and crevices in brick or stone canal banks. Though they do not hibernate, water voles are not very active above ground in the winter. Characteristic signs of vole activity include latrines (collections of droppings), feeding stations and burrows. Burrows can be surrounded by grazed 'lawns'.

Information Requirements and Survey Standards

All developments involving waterside habitat, especially watercourse engineering or bank modification or strengthening and bridge works, should provide the following information:

- Water vole presence and status, including recent survey information and past records, on the development site;
- As water voles are rarely seen, surveys should be based on the presence of characteristic signs up to 2m away from the banks and edges of watercourses and ponds. Signs should be recorded on a detailed map.

- Records of water voles for adjacent stretches of any watercourse or canal affected;
- If present, appraisal of the effect of the development on water voles and details of mitigation.

Surveys should be carried out between March and October when voles are active. Guidance on survey methods and mitigation techniques can be found in the *Water Vole Conservation Handbook* published by English Nature and the Environment Agency. Expert advice may be required to assess development impacts.

Design considerations

Planning proposals need to address the following:

- Retention/creation of features of water vole conservation value such as soft banks or gaps in reinforcement, stands of marginal vegetation, bankside shrubs and long grass for cover
- As water voles confine their activities to within 2m of water, they can be accommodated by maintaining or creating wildlife corridors along watercourses and undeveloped areas around ponds.
- The straightening, deepening, piling, concreting and canalisation of watercourses exclude water voles. Any such proposals will not be supported unless vole habitat is incorporated or alternative habitat provided nearby.
- The loss of riverbank or canal habitat or a pond or ditch may be mitigated by the construction of a new habitat of equivalent area or length. The new habitat should be ready before the old one is destroyed.
- Phasing of dredging and canalisation work in an upstream direction and creation or retention of refuges to allow maintenance of local populations.

NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 2 – BIRMINGHAM & BLACK COUNTRY BIODIVERSITY ACTION PLAN HABITATS & SPECIES

Habitats

Arable fields Arable field margins and beetle banks Buildings and the built environment Canals Deadwood Eutrophic urban pools Gardens, allotments, parks and public open space Garden ponds Grassland: Lowland dry acid grassland Lowland neutral and base-rich grassland Lowland wet grassland Hedgerows Lowland heathland: **Rivers and streams** Urban "wasteland" Woodland Ancient and semi-natural woodland Wet woodland Lowland wood-pasture and parks Veteran and notable trees Scrub and naturally regenerating woodland Introduced woodlands Secondary woodland

Species

Amphibians (frog / toad / smooth newt) Badger Bats Black redstart Bluebell Brown hare Floating water plantain Great crested newt Green hairstreak Grey partridge Kestrel Orchids Skylark Snipe Song thrush Tree sparrow Vaccinium species (bilberry and relatives) Wall brown Water vole White-clawed crayfish

NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 3 - COUNTRYSIDE AND RIGHTS OF WAY ACT 2000 S74 PRIORITY HABITATS AND SPECIES RECORDED IN THE BLACK COUNTRY

Habitats

Ancient and/or species-rich hedgerows Cereal field margins Eutrophic standing waters Lowland calcareous grassland Lowland dry acid grassland Lowland heathland Lowland meadows Lowland mixed deciduous woodland Lowland wood-pasture and parkland Reedbeds Wet woodland

Species

Amphibians

Triturus cristatus

Great Crested Newt

Birds

Acrocephalus palustris Alauda arvensis Botaurus stellaris Caprimulgus europaeus Carduelis cannabina Emberiza schoeniclus Jvnx torquilla Lanius collurio Melanitta nigra Miliaria calandra Muscicapa striata Passer montanus Perdix perdix Pyrrhula pyrrhula Streptopelia turtur Turdus philomelos

Mammals

Arvicola terrestris Lepus europaeus Lutra lutra Myotis bechsteinii Pipistrellus pipistrellus Rhinolophus hipposideros Marsh Warbler Skylark Bittern Nightiar Linnet **Reed Bunting** Wryneck **Red-backed Shrike Common Scoter** Corn Bunting Spotted Flycatcher **Tree Sparrow Grey Partridge** Bullfinch **Turtle Dove** Song Thrush

Water Vole Brown hare Otter Bechstein's bat Pipistrelle bat Lesser horseshoe bat

Invertebrates

Amara famelica Asilus crabroniformis Austropotamobius pallipes Bombus ruderatus Eurodryas aurinia Mythimna turca Melanapion minimum a ground beetle a robber fly Freshwater Crayfish Large Garden Bumble Bee Marsh Fritillary Double line moth a seed weevil

Vascular (Higher) Plants

Arabis glabra Carex vulpina Centaurea cyanus Dianthus armeria Juniperus communis Luronium natans Mentha pulegium Pilularia globulifera Potamogeton compressus Ranunculus tripartitus Scandix pecten-veneris Silene gallica Tower Mustard True Fox-sedge Cornflower Deptford Pink Juniper Floating Water-plantain Pennyroyal Pillwort Grass-wrack Pondweed Three-lobed Crowfoot Shepherd's-needle Small-flowered Catchfly

NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 4 - LIST OF PRINCIPAL NATIVE TREES, SHRUBS AND CLIMBERS IN KEEPING WITH THE LOCAL CHARACTER OF DUDLEY

<u>KEY</u>

- W = Wet or damp habitats
- A = Acid habitats (Triassic Sandstones and Middle Coal Measures)
- N = Neutral habitats (Carboniferous Etruria Marls and Halesowen Beds)

C = Calcareous habitats (Silurian Limestone)

Trees and Shrubs

Alder Common - Alnus *glutinosa* (W) Ash - *Fraxinus excelsior* (N, C) Birch Silver - Betula pendula (A) Birch Downy - Betula pubescens (W, A) Blackthorn - Prunus spinosa (N, C) Cherry Wild - Prunus avium (N) Crab Apple - Malus sylvestris (N) Dogwood - Cornus sanguinea (C) Elder - Sambucus nigra (W, N) English Oak - Quercus robur (N) Sessile Oak - Quercus petraea (A) Gorse - Ulex europaeus (A) Guelder Rose - Virburnum opulus (W, N) Hawthorn - Crataegus monogyna (A, N, C) Hazel - Corylus avellana (A, N, C) Holly - Ilex aquifolium (A, N) Mountain Ash, Rowan - Sorbus aucuparia (A) Willow, Crack - Salix fragilis (W) Willow, Goat, Pussy Willow, Sallow - Salix caprea (W) Willow, Osier - Salix viminalis (W) Willow, White - Salix alba (W) Yew - Taxus baccata (C)

Climbers

Dog rose - *Rosa canina* (N, C) Honeysuckle - *Lonicera periclymenum* (A, N, C) Ivy - *Hedera helix* (W, N, C)

NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 5 – CONTACTS AND REFERENCES

Contacts

Bat Conservation Trust

Advice and information on bat ecology, conservation and legal requirements. Leaflets on bat species and their conservation.

15 Cloisters House, 8 Battersea Park Road, London SW8 4BG Bat Helpline 0171 627 8822

British Waterways

Information and advice relating to canals and their wildlife, including water voles.

Conservation Officer, National Office:

Llanthony Warehouse, Gloucester Dock, Gloucester, GL1 2BJ Birmingham and Black Country:

Albert House, Quay Place, 92-93 Edward Street, Birmingham B1 2RA 0121 200 7400

Butterfly Conservation

Information on butterflies, moths and their habitats

West Midlands Region – 15 Morrison Park Road, West Haddon, Northants NN6 7BJ

National office – Manor Yard, East Lulsworth, Wareham, Dorset BH20 5QP 0870 774 4309.

<u>Dudley Metropolitan Borough Council Directorate of the Urban Environment</u> 3 St. James Road, Dudley, West Midlands. DY1 1HZ.

Tel: 01384-818181, Fax: 01384 814141.

Development Control:- Information and advice on Unitary Development Plan requirements and submission of planning applications.

Nature Conservation Officer:-Information and advice on nature conservation matters include surveys, records, habitat protection, restoration and creation, and the Birmingham and Black Country Biodiversity Action Plan. 01384 814195

EcoRecord

The Local Biological Records Centre for Birmingham and the Black Country. Site and species data provided (a fee may be charged). 28 Harborne Road, Edgbaston, Birmingham B15 3AA. Tel: 0121 454 1808

English Nature

Must be contacted regarding any proposal affecting protected species (when full survey information as been obtained).

Information on habitat and species management practices.

Information on National and Local Biodiversity Action Plans

West Midlands Region: Attingham Park, Atcham, Shrewsbury, SY4 4TW 01743 282000 National Office: Northminster House, Peterborough, PE1 1UA

The Environment Agency

For any proposal affecting watercourses, ponds or other surface water features and disposal of waste water. For advice on sustainable treatment of surface water, management of water courses, pond creation and management.

Upper Severn catchment

Hafren House, Welshpool Road, Shrewsbury, SY3 8BB Upper Trent catchment: Sentinel House, Wellington Crescent, Fradley Park, Lichfield, Staffordshire,

WS13 8RR

Froglife

Advice on the conservation of all amphibians and on pond creation and management

White Lodge, London Road, Peterborough PE7 0LG

Herpetological Conservation Trust

Advice on the conservation of amphibians and reptiles 655a Christchurch Road, Boscombe, Bournemouth, Dorset BH1 4AP

National Federation of Badger Groups

Advice on badger conservation and legal requirements, contact for local badger groups

c/o 15 Cloisters House, 8 Battersea Park Road, London SW8 4BG

Pensnett Wildlife Group

Advice and records for local amphibian populations across the Black Country and Birmingham

Royal Society for the Protection of Birds Information on habitat and management requirements for birds. Headquarters: The Lodge, Sandy, Bedfordshire SG19 2DL. Tel: 01767-680551 Midlands Regional Office Banbury, Oxfordshire, OX16 9AB

The Wildlife Trust for Birmingham and the Black Country

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NATURE CONSERVATION SUPPLEMENTARY PLANNING DOCUMENT

APPENDIX 6 – UDP POLICIES ON NATURE CONSERVATION

NC1 BIODIVERSITY

The Council is committed to the protection and enhancement of biodiversity. Opportunities will be sought, through the planning process, to contribute to the delivery of UK and Birmingham and Black Country Biodiversity Action Plan targets for habitats and species. The Council will encourage the sympathetic management of features important for the movement of wildlife such as linear open space, river and canal corridors, hedgerows, small woods and grasslands, and ponds. The Council will endeavour to maintain up to date biodiversity information and as part of this commitment will support EcoRecord, the local biological records centre.

NC2 SPECIAL AREAS OF CONSERVATION AND SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)

The sites are defined on the Proposals Map.

Developments in or likely to affect the Fens Pool candidate Special Area of Conservation, Wrens Nest National Nature Reserve and Sites of Special Scientific Interest will be subject to special scrutiny. Where such development may have an adverse effect, it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard the national network of such sites.

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Where development is permitted, in order to ensure the protection and enhancement of the site's nature conservation interest the use of conditions or planning obligations will be considered.

NC4 LOCAL NATURE RESERVES AND SITES OF IMPORTANCE FOR NATURE CONSERVATION

Development likely to have an adverse effect on a Local Nature Reserve or a Site of Importance for Nature Conservation will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site or feature.

Where development is permitted which would damage the nature conservation value of the site or feature, such damage will be kept to a minimum. Where appropriate, the use of conditions and/or planning obligations to provide appropriate compensatory, mitigating measures will be considered.

The Council will support the appropriate identification of the new Local Nature Reserves and Sites of Importance for Nature Conservation to which this policy will apply.

The Council will actively seek to achieve positive management, for their nature conservation value, of Local Nature Reserves and Sites of Importance for Nature Conservation in its ownership, and through voluntary agreement, sites in private ownership.

NC5 SITES OF LOCAL IMPORTANCE FOR NATURE CONSERVATION

Within the network of Sites of Local Importance for Nature Conservation identified on the Proposals Map the Council will seek to maintain and where possible enhance the quality, amount and distribution of the key habitat types and features.

Development within areas identified as part of the Sites of Local Importance for Nature Conservation network will be required to protect areas of high ecological value in the design and layout of the proposal and provide appropriate mitigation for the loss of other areas of nature conservation value. Measures to protect the integrity of corridor and linear features will be required within layout and design of proposals. Where such measures are not included, there will be a presumption against the granting of planning permission.

Supplementary planning guidance for Nature Conservation sets out the requirements for the determination of planning permission with regard to:

• the submission of ecological information;

- how the ecological information will be evaluated; and
- relevant design considerations and appropriate and acceptable mitigation.

Where practicable the Council will seek to encourage management of these sites for the benefit of the nature conservation resource.

This policy will apply to additional Sites of Local Importance for Nature Conservation identified over the Plan period.

NC6 WILDLIFE SPECIES

Development that is likely to have an adverse effect on habitats important to wildlife species that are specially protected by law, are rare and vulnerable in the Black Country and/or are the subject of a Species Action Plan in the UK or Local Biodiversity Action Plan will only be permitted where it can clearly be demonstrated that measures to protect the species are included by:

- Provision of an ecological survey and impact assessment carried out by an appropriately qualified person;
- Accommodation of the needs of the species in the design and layout of the proposal; and
- Adequate mitigation for any effects of development on the active breeding, resting, or feeding habitat requirements of these species so that population levels are sustained.

In addition to these provisions, development proposals which would harm, either directly or indirectly a species protected by European law and associated British legislation, or its habitat, will not be permitted unless all of the following criteria are met:

- The development is for reasons of public health and safety or overriding public interest;
- There is no satisfactory alternative to the development proposal;
- The development would not be detrimental to the maintenance of the population of the species in its natural range.

NC7 GEOLOGICAL RESOURCE

The Council will seek to maximise the benefits of the Borough's important geology by:

- Requiring developers to follow the Supplementary Planning Guidance for Nature Conservation – Geology which encourages geological recording and retention of special features;
- maintaining and updating the geological sites record;
- preparing a geology strategy for the Borough to promote and integrate the management, understanding and educational potential of important geological sites and archive collections; and
- providing interpretation facilities focusing on the Wren's Nest and Castle Hill area and other sites of geological significance.

NC9 MATURE TREES

The Council will, as appropriate and possible, retain for the benefit of wildlife, individual and groups of trees that are mature or veteran examples of their species and ensure that they are managed in such a way as to prolong their life giving due consideration to public health and safety. Proposals for development will be required to include measures for the protection of such trees. Where loss of mature or veteran trees is unavoidable, they should be replaced by appropriate native species.

NC10 THE URBAN FOREST

Development which would adversely affect ancient woodland will not be permitted. The Council will ensure that other woodland is protected and will seek to encourage the appropriate management of existing trees and woodland.

Where trees occur on development sites the applicant will be required to provide full details and demonstrate that the Council's adopted standards of good practice have been followed. Proposals involving the loss of trees will be required to include measures for their replacement.

The Council will support new tree and woodland planting where it would not be detrimental to the existing value of the site and adjacent land for nature conservation, archaeology, landscape, amenity, or formal or informal recreation. The Council will require that native species of local provenance are used in planting and landscaping wherever possible.

DD10 NATURE CONSERVATION AND DEVELOPMENT

The Council will ensure that the effects of development proposals on wildlife and geological features are taken into full account. Where damage is unavoidable, appropriate mitigation will be required. If adequate mitigation is not provided planning permission will not be granted. Particular care will be taken to safeguard designated sites and protected species.

The Council will seek to promote development in accordance with natural ecological processes and nature conservation interest. Development should:

- retain existing wildlife habitats of value and provide new habitats and features through design of buildings, landscaping and open space provision and provide for their management;
- avoid impact on neighbouring areas and features of nature conservation interest, including watercourses, providing buffer zones where appropriate;
- avoid the use of materials whose extraction is damaging to nationally or internationally important environmental assets such as limestone pavements, peat bogs and tropical forests; and
- incorporate, where possible, environmentally sustainable drainage techniques which contribute to wetland habitat creation.

DD11 WATER COURSES

Development will be required to maintain or enhance the quality and value for nature conservation of existing water courses and their floodplains.

The Council will promote the restoration of natural watercourse and floodplain features such as bends, riffles, pools and wetlands.

The culverting of watercourses will be minimised and permitted only where it can be demonstrated that a culvert is necessary.

Wherever possible development will be required to restore the open watercourse where a culverted water course exists on site.

The Council will seek to enhance and promote access and recreational provision where this does not conflict with nature conservation value.