Local Development Framework

Biodiversity

Supplementary Planning Document

Adopted July 2009

Published by South Cambridgeshire District Council

ISBN: 0906016894

Gareth Jones, BSc. (Hons), MRTPI – Corporate Manager

(Planning and Sustainable Communities)

If you would like a copy of this document in large print or another format please contact South Cambridgeshire District Council on 08450 450 500 or email ldf@scambs.gov.uk

Contents

Page

Chapter 1 Introduction to the Supplementary Planning Document 1

Purpose 2

South Cambridgeshire Local Development Framework Policy 3

Chapter 2 Biodiversity Conservation 5

The Need 5

Contribution to the UK Biodiversity Action Plan 5

The South Cambridgeshire Biodiversity Resource 6

Chapter 3 The Development Process 9

Pre-Application: The Need for Up-To-Date Information 9

Submission of a Planning Application: Development Guidelines 9

Biodiversity Information to Support a Planning Application: Local Requirements for Priority Species Conservation 10

Local Requirement for Priority Species: Criteria and Indicative Thresholds for When a Survey and Assessment is Required 13

Exceptions for When a Full Priority Species Survey and Assessment May Not be Required 14

Biodiversity Information to Support a Planning Application: Local Requirements for Designated Sites and Priority Habitats 15

Local Requirements for Designated Sites and Priority Habitats: Criteria for When a Biodiversity Site Survey and Assessment is Required 17

Exceptions for When a Site Survey and Assessment May Not be Required 18

Determination of Planning Applications: Biodiversity Issues 18

B1 - Protection, Enhancement, Creation, Restoration and Management of Biodiversity Habitats

B2 - Biodiversity Site Protection

B3 - Mitigation and Compensation

B4 - Planning Obligations

B5 - Protection of Wildlife Corridors

B6 - Protection of Ancient Woodland

B7 - Biodiversity Provision in the Design of New Buildings

B8 - Provision of Green Roofs and Walls

B9 - Maximising the Biodiversity Potential of Agricultural Land

Appendix 1 Local Development Framework Policies Supplemented by the Supplementary Planning Document 41

Appendix 2 Legislative and National Policy Context 45

Appendix 3 Contact Details and Further Information 47

Appendix 4 Protected Species and Ecological Survey Seasons 51

Appendix 5 SCDC BAP Priority Species and Habitats 53

Appendix 6 Natural Area Profiles for South Cambridgeshire 55

Glossary 59

Chapter 1

Introduction to The Supplementary Planning Document

1.1 This South Cambridgeshire District Council (SCDC) Supplementary Planning Document (SPD) forms part of the South Cambridgeshire Local Development Framework (LDF).

1.2 The SPD expands on district-wide policies in the Development Control Policies Development Plan Document (DPD), adopted in July 2007, and policies in individual Area Action Plans for major developments that may vary from the district-wide policies. Policies seek to ensure that biodiversity is adequately protected and enhanced throughout the development process, and this SPD provides additional details on how these policies will be implemented.

1.3 The SPD builds on national policy in Planning Policy Statement (PPS) 1: Delivering Sustainable Development and PPS9: Biodiversity and Geological Conservation. These promote sustainable, well-designed development. In addition, they seek to ensure that biodiversity and appropriate landscaping are fully integrated to new developments in order to create accessible green spaces for wildlife and people, to contribute to a high quality natural and built environment, and to contribute to a better quality of life.

1.4 PPS9 further strengthens previous guidance (PPG9: Nature Conservation, 1994) and attaches a greater weight to the conservation of biodiversity within the development control process. The Biodiversity Issues section 3.24 of this document reflect the key principles of PPS9.

1.5 Biodiversity is a term used to describe the richness of the living environment around us, it incorporates all species and habitats, both rare and common, and strives to ensure the protection of genetic diversity. Species once considered to be common are facing increasing stresses upon their populations and the rate of species loss has never been higher. International initiatives exist to reduce the rate of species loss and at the national level lists of species and habitats have been produced that require particular measures to halt their decline.

1.6 PPS9 presents six key principles to guide Local Planning Authorities. In brief the key principles are:

1. The need to base decisions on up-to-date information.
2. The requirement to maintain, enhance, restore or achieve a gain in biodiversity.
3. The necessity to adopt a strategic approach to conservation and enhancement of biodiversity.
4. The need to incorporate biodiversity within the design of new developments.
5. The encouragement to support development schemes that conserve or enhance local biodiversity.
6. The requirement to prevent harm to biodiversity, including the consideration of alternative sites. Where significant harm cannot be avoided adequate mitigation or compensation should be in place, or the planning permission should be refused.

1.7 Biodiversity will not be peripheral to the planning process but will be fully integrated into the design stages. Consideration will be given, wherever possible, to the retention of biodiversity features within developments, or to incorporating new planting or specific biodiversity features into new designs. Biodiversity is a valuable addition to any development, often helping to create green spaces and achieve development of a high-quality design in the local landscape or townscape.

1.8 SCDC is also producing SPD to provide further guidance on trees and landscape issues, and it may be helpful to read these alongside this SPD. SCDC has already produced its Biodiversity Strategy and has adopted it as council policy, September 2006. The Biodiversity Strategy is due for review and will continue to act as a guiding document for SCDC's general approach to biodiversity conservation across its range of functions. The Strategy will act in parallel to the SPD.

Purpose

1.9 The objective of this SPD is to assist the achievement of the LDF objectives for the conservation and enhancement of biodiversity and landscape character.

- Specific objectives for this document are to: Assist applicants' understanding of the role of biodiversity within the wider environment and how biodiversity features should be incorporated within development proposals as part of a high-quality design.
- Assist applicants to gain planning permission quickly by informing them of the level of information required to accompany planning applications.
- Explain terminology associated with biodiversity conservation.

- Ensure that development works are undertaken in an appropriate manner to avoid harm to biodiversity.

South Cambridgeshire LDF Policy

1.10 There are a number of policies within the Development Control Policies DPD and Area Action Plans which relate to biodiversity. A full list of these policies is provided in appendix 1. The full wording of the two key LDF policies is also provided in appendix.

1.11 The supporting text of the Development Control Policies Policy NE/6 states that further guidance on Priority Species and Habitats, sites and the achievement of biodiversity targets shall be set in the Biodiversity Strategy. The Biodiversity Strategy was produced in 2006 and adopted as Council policy. It provided guidance in the interim period to the production of this Biodiversity SPD. This SPD now incorporates those matters from the Biodiversity Strategy that relate to the planning process and provides guidance to support the policies in the LDF. The Biodiversity Strategy will subsequently be reviewed to provide a wider strategy for the conservation of the district's biodiversity and will be adopted as Council policy.

1.12 The key themes arising from all policies, at a national or local level, can be summarised as follows:

- Conserve and enhance biodiversity.
- Undertake full surveys of existing biodiversity features and conserve the environmental aspects of the site.
- Include high quality landscaping.
- Achieve a net increase in biodiversity.
- Not to permit proposals where there will be an unacceptable impact on the countryside, landscape character or biodiversity.
- The major development locations are also required to include early provision of landscaping and biodiversity features on site.

Chapter 2 Biodiversity Conservation

The Need

2.1 In its capacity as the Local Planning Authority SCDC has an obligation to consider how development will affect biodiversity. The conservation and enhancement of an ecologically diverse countryside and built environment alike presents many challenges within the rapidly changing district. This document aims to provide guidance on biodiversity issues that are likely to be encountered during the development control process. The document provides information on the preservation and enhancement of biodiversity across South Cambridgeshire and should be read alongside the SCDC Biodiversity Strategy. A full list of habitats and species of principal importance for biodiversity conservation can be found in the Natural Environment and Rural Communities (NERC) Act, 2006, section 41, Natural Environment and Rural Communities Act 2006 (legislation.gov.uk)

2.2 Priority Species and Habitats for conservation are those identified within the Biodiversity Action Plans (BAPs) and/or the NERC Act. Further information on BAPs can be found at:

- Biodiversity SPD - South Cambs District Council
- Cambridgeshire and Peterborough Biodiversity Group
- UKBAP

2.3 The South Cambridgeshire Biodiversity Action Plan proposes a varied range of actions in order to protect existing biodiversity and to achieve biodiversity gain. Habitat enhancement should aim to contribute towards BAP targets.

2.4 Tables 5 and 6 in appendix 5 detail Priority Species and Habitats for South Cambridgeshire. Other species and habitats may be added (or removed) as BAPs are reviewed.

Contribution to the UK Biodiversity Action Plan

2.5 The UK Government is a signatory to the Convention on Biological Diversity (1992) and seeks to meet its obligations under the convention through the biodiversity action planning process. Biodiversity Action Plans (BAPs) should be considered as the drivers for nature conservation across the UK, counties and districts for listed species and habitats.

2.6 In 2000 the Cambridgeshire BAP was launched. It was produced by the Cambridgeshire and Peterborough Biodiversity Partnership and lists those species and habitats considered to be of particular importance at the county level.

2.7 The Cambridgeshire BAP has been used to focus attention on Priority Species and Habitats of particular relevance to the district. This document consequently aims to contribute to the achievement of the Cambridgeshire BAP by providing further guidance with respect to South Cambridgeshire.

The South Cambridgeshire Biodiversity Resource

2.8 The district of South Cambridgeshire contains important habitats and species. The increase in the distribution of the otter throughout the 1990's can be considered as an indicator of the general health of the district's watercourses. The discovery of a population of the Barbastelle bat at Wimpole by the Cambridgeshire Bat Group led to the designation of the Eversden and Wimpole Woods as a Special Area of Conservation (SAC) under the UK Habitats Regulations,1994. Large scale habitat creation projects such as the proposed Cambridgeshire Hundreds Woodland initiative and the National Trust's Wicken Fen Vision present examples of exciting opportunities to reverse some of the damage and habitat fragmentation of the past.

2.9 South Cambridgeshire is known to contain a broad range of statutorily protected species (refer to table 4). The habitat range of these species should never be considered to be static as species will move due to natural dispersal and / or environmental stresses.

2.10 In the past the largely rural nature of the district meant that wildlife could even find refuges within the villages. Species such as the great crested newt, barn owl and house sparrows were much more widespread. However, within villages, changing land-use and farming practice has placed increasing pressure upon a wide range of species. Small meadows, ponds and relatively quiet lanes have also been affected by change, and "unkempt" areas have been "tidied-up", often with a negative impact upon biodiversity. It is widely acknowledged that the opportunity to see and interact with biodiversity can enrich people's lives. It is therefore important to strive for the integration of wildlife within new developments.

2.11 English Nature (now Natural England) had undertaken a mapping exercise to display known information upon national Priority Habitats and protected sites. The information is presented on an interactive map entitled Nature on the Map (MAGIC interactive mapping). The map enables users to find information about protected sites and areas of semi-natural habitats. The map for South Cambridgeshire is presented in the SCDC Biodiversity Strategy.

2.12 It should be remembered that very little of the landscape that we see today has not been influenced by Man. However, recent decades have seen an increased rate of landscape change that has resulted in a significant loss of habitats including hedgerows, flower rich meadows, and wetlands. Other habitats, such as planted woodlands and grasslands are fragmented and are unlikely to ever receive the transfer of species that occurred in the past, thus their potential to become ecologically rich is limited without the positive intervention by conservationists or development schemes.

2.13 Biodiversity conservation is intrinsically linked with climate change. Many species rely on the seasonal patterns of our stable climate. As weather patterns subtly change or storm events become more frequent than certain species may experience stresses on their populations. Where species cannot move in order to adjust to rainfall patterns or periods of extreme temperature then they may suffer local extinctions. Habitat fragmentation is a real threat to biodiversity. In order to address this pressure large-scale habitat creation may become increasingly important. At the local level, the choice of traditional planting may need to be re-considered in order to deliver new habitats for the future.

Beech trees may suffer during drought periods due to the shallow nature of their roots. This could make the establishment of new beech woods difficult. Bluebells may be affected by the subtle change of spring weather patterns.

Chapter 3 The Development Process

Pre-Application: The Need for Up-To-Date Information

3.1 Planning staff welcome pre-application discussions. Such discussions may establish the potential impact of a development and help to outline the scope of survey and assessment needed to support an application.

3.2 Where the current level of biodiversity interest upon a site is unknown, and there are reasonable grounds to believe that the site may be used by a Priority Species, then an applicant shall be expected to undertake a site survey and assessment prior to the consideration of a development proposal. The information gained from the site survey and assessment should be up-to-date and sufficient to allow the development impact to be appropriately assessed. Failure to provide accurate environmental information will be a reason to refuse the registration of the planning application or will result in its subsequent refusal when considered against policy. This is because in order to protect and conserve species and habitats it is crucial that their distribution and interaction with the wider environment is understood.

3.3 Applicants should be aware that some developments may require the collation of ecological data, such as badger social group surveys, over an extended period of time in order to present the most suitable scheme of mitigation. The advance planning of ecological works should always be considered early on in a project.

3.4 The provision of compensatory habitats may also be required in advance of a development project. This is to ensure that the new habitat is of a suitable standard prior to the loss of the existing habitat.

Submission of A Planning Application: Development Guidelines

3.5 Development proposals should have regard to the following development guidelines:

Guideline 1: Site survey and assessment for Priority Species and Habitats	Example best practice approach: Surveying ponds and terrestrial habitat in advance of a development application for the presence of great crested newts. Desk based data searches may also be made through the Biological Records Centre.

Guideline 2: Protection of existing biodiversity	Example best practice approach: Development plans will show how features of value to biodiversity have been integrated into the design of a development, and how such features might relate to the biodiversity of the surrounding area (for example, wildlife corridors and greenways linking to the open countryside or the enhancement of watercourses within development sites).
Guideline 3: Enhancement of habitats	Example best practice approach: The restoration of a pond would provide an attractive feature within a development whilst also providing for a diverse range of species. Enhancement proposals should aim to contribute towards BAP targets or delivering aspects of the Countryside Enhancement Area concept.
Guideline 4: Mitigation against disturbance	Example best practice approach: If disturbance of a Priority Species or Habitat is unavoidable then a suitable mitigation scheme will need to be agreed. Where mitigation cannot take place on site, the applicant will be expected to enter into a planning agreement to re-create habitats off-site, and / or to make a financial contribution towards the management of nearby sites in order to offset the impact upon local biodiversity. In some cases, simply planning work on-site to avoid sensitive times of the year, such as the bird breeding season, may adequately address the issue. At other sites, the range of issues may be more complex and the input of a professional ecologist at an early stage is recommended.
Guideline 5: Compensation for Priority Species or Habitats	Example best practice approach: Where an impact is unavoidable, and mitigation alone cannot adequately protect a species or habitat then the provision of compensatory habitat will be expected whilst being proportional to the development scheme. The provision of compensatory habitat should be relevant to the loss that has occurred within the development site and should ultimately aim to provide an overall biodiversity gain. For example, if a pond is to be lost then two new ponds should be created, where an area of grassland is lost then a similar or larger area of wildflower grassland should be created. All created habitats are expected to be positively managed for at least ten years after their creation.

Biodiversity Information to Support a Planning Application: Local Requirements for Priority Species Conservation

3.6 When undertaking development, the majority of sites, whether infill, greenfield or brownfield, will be considered as having potential to support biodiversity. Where a proposed development is likely to affect Priority Species, the applicant must submit a Priority Species Survey and Assessment.

3.7 If the application involves any of the development proposals shown in table 1 a Priority Species Survey and Assessment must be submitted with the application. Exceptions to when a survey and assessment may not be required are explained in the table. The survey should be undertaken and prepared by competent persons with suitable qualifications and experience (such as a member of the Institute of Ecology and Environmental Management) and must be carried out at an appropriate time and month of year, in suitable weather conditions and using nationally recognised survey guidelines or methods where available. Further information on appropriate survey methods can be found on the website of the Institute of Ecology and Environmental Management: Sources of Survey Methods - CIEEM

3.8 The survey may be informed by the results of a search for ecological data from the Cambridgeshire and Peterborough Biological Records Centre. The survey must be to an appropriate level of scope and detail and must:

- Record which species are present and identify their numbers (may be approximate).
- Map their distribution and use of the area, site, structure or feature (such as for feeding, shelter, breeding).

3.9 The assessment must identify and describe potential development impacts likely to harm the Priority Species and / or their habitats identified by the survey (these should include both direct and indirect effects both during construction and afterwards). Where harm is likely, evidence must be submitted to show how:

- Alternative designs or locations have been considered.
- Adverse effects will be avoided wherever possible.
- Unavoidable impacts will be mitigated or reduced.
- Impacts that cannot be avoided or mitigated will be compensated.

3.10 In addition, proposals are encouraged that will enhance, restore or add to features or habitats used by Priority Species. The assessment should also give an indication of how species numbers are likely to change, if at all, after development so as to establish whether there will be a net loss or gain.

3.11 The information provided in response to the above requirements are consistent with those required for an application to Natural England for a European Protected Species License. For further detailed information see: Wildlife licences: when you need to apply

3.12 Please be aware that:

- Applications that do not contain the necessary level of biodiversity information may not be validated by the District Council and may be returned to the applicant undetermined or further information will be requested.
- Applications that have failed to inform the District Council about the presence of a Priority Species and / or Habitat on a development site may be refused on the basis of failure to adequately address the biodiversity impact of the proposal.
- Applicants are strongly advised to discuss all potential environmental issues at the earliest stage possible with the District Council.

The formerly common house sparrow has undergone a rapid decline in recent years due to the loss of nest sites, cover and lack of suitable food. New developments can provide native planting to provide cover and food, and nest boxes can be erected.

Local Requirement for Priority Species: Criteria and Indicative Thresholds for When a Survey and Assessment is Required

Table 1	Species likely to be affected and for which a survey will be required

Proposals for development that will trigger a Priority Species survey	Bats	Barn Owls	Breeding Birds	Gt. Crested Newts	Otters	Waters Voles	Badgers	Reptiles	Amphibians	Schedule 8 Plants	BAP Species
Proposed development which includes the modification, conversion, demolition or removal of buildings and structures (especially roof voids) involving the following:	-	-	-	-	-	-	-	-	-	-	-
• all agricultural buildings (for example, farmhouses and barns) particularly of traditional brick or stone construction and/or with	•	•	•	-	-	-	-	-	-	-	-

exposed wooden beams greater than 20cm thick											
• all buildings with weather boarding and / or hanging tiles regardless of location	•	-	-	-	-	-	-	-	-	-	-
• pre-1960 detached buildings and structures within 200m of woodland and / or water	•	-	-	-	-	-	-	-	-	-	-
• pre-1914 buildings within 400m of woodland and / or water	•	-	-	-	-	-	-	-	-	-	-
• pre-1914 buildings with gable ends or slate roofs, regardless of location	•	-	-	-	-	-	-	-	-	-	-
• all tunnels, kilns, ice-houses, adits, military fortifications, air raid shelters, cellars and similar underground ducts and structures	•	-	-	-	-	-	-	-	-	-	-

• all bridge structures (especially over water and wet ground)	•	-	-	-	-	-	-	-	-	-	-
Proposals involving lighting of churches and listed buildings or flood lighting of green space within 50m of woodland, water, field hedgerows or lines of trees with obvious connectivity to woodland or water	•	•	•	-	-	-	-	-	-	-	-
Proposals affecting woodland, or field hedgerows and/or lines of trees with obvious connectivity to woodland or water bodies	•	-	•	-	-	-	•	-	-	•	•
Proposed tree work (felling or lopping) and / or development affecting:	-	-	-	-	-	-	-	-	-	-	-
• old and veteran trees that are older than 100 years	•	-	•	-	-	-	-	-	-	-	•
• trees with obvious holes, cracks or cavities	•	-	•	-	-	-	-	-	-	-	•

• trees with substantial ivy cover	•	-	•	-	-	-	-	-	-	-	•
• trees with a girth greater than 1m at chest height	•	-	•	-	-	-	-	-	-	-	•
Proposals affecting gravel pits, quarries, cliff faces or caves	•	-	•	-	-	-	-	•	-	-	•
Major proposals within 250m* of a pond or Minor proposals within 100m* of pond (Note: A major proposals is one that is more than 10 dwellings or more than 0.5 hectares or for non-residential development is more than 1000m^2 floor area or more than 1 hectare)	-	-	-	•	-	-	-	-	-	-	•
Proposals affecting or within 25m* of rivers, streams, ditches lakes, or other aquatic habitats such as reedbeds or fen	•	-	•	-	•	•	-	-	•	•	•
Proposals affecting 'derelict' land (brownfield sites),	-	-	•	•	-	-	•	•	•	-	•

allotments and railway land especially where piles of dumped materials are to be moved or disturbed											
Proposed development affecting any buildings, structures, feature or locations where Priority Species are known to be present **	•	•	•	•	•	•	•	•	•	•	•

Table adapted from version produced by ALGE 2007, Validation of Planning Applications

* Distances may be amended to suit local circumstance on the advice of the local Natural England team and / or Local Biodiversity Partnership.

** Confirmed as present by either a data search (for instance via the Biological Records Centre or as notified to the developer by the local planning authority, and/or by Natural England, the Environment Agency or other nature conservation organisation.

Exceptions for When a Full Priority Species Survey and Assessment May Not Be Required

3.13 A full Priority Species survey and assessment may not be required when:

1. Following consultation by the applicant at the pre-application stage where the LPA has stated in writing that no Priority Species surveys and assessments are required.
2. It is clear that no Priority Species are present, despite the guidance in the above table indicating that they are likely, and the applicant is able to provide evidence with the planning application to demonstrate that such species are absent (for example, this might be in the form of a letter or brief report from a suitably qualified and experienced person, or a relevant local nature conservation organisation).
3. It is clear that the development proposal will not affect any Priority Species present, then only limited information needs to be submitted. This information should, however:

    a. demonstrate that there will be no significant effect on any Priority Species present; and

    b. include a statement acknowledging that the applicant is aware that it is a criminal offence to disturb or harm protected species should they subsequently be found or disturbed.

3.14 In some situations, it may be appropriate for an applicant to provide a Priority Species survey and assessment for only one or a few of the species shown in the table above for example, those that are likely to be affected by a particular activity. Applicants should make clear which species are included in the assessment and which are not and why the exceptions apply.

Biodiversity Information to Support a Planning Application: Local Requirements for Designated Sites and Priority Habitats

3.15 The District Council will have regard to the protection of biodiversity at designated sites and to Priority Habitats. Where a proposed development is likely to affect such a site or habitat an applicant must submit a Biodiversity Site Survey and Assessment**.**

3.16 If the application is likely to affect any of the designated sites, Priority Habitats or biodiversity features listed in table 2 a survey and assessment for the relevant feature(s) must be submitted with the application. Exceptions to when a survey and assessment may not be required are explained in the table. The survey should be undertaken and prepared by competent persons with suitable qualifications and

experience (such as a member of the Institute of Ecology and Environmental Management) and must be carried out at an appropriate time and month of year, in suitable weather conditions and using nationally recognised survey guidelines or methods where available. Further information on appropriate survey methods can be found on the website of the Institute of Ecology and Environmental Management Sources of Survey Methods www.ieem.net/survey%2Dsources/

3.17 The survey may be informed by the results of a search for ecological data from the Cambridgeshire and Peterborough Biological Records Centre. Information on internationally and nationally designated sites can be found at: www.natureonthemap.org.uk

3.18 The survey must be to an appropriate level of scope and detail and must:

- Record which habitats and listed Biodiversity Features are present on and, where appropriate, around the site.
- Identify the extent / area / length present.
- Map their distribution on site and/or in the surrounding area shown on an appropriate scale plan.

3.19 The assessment should identify and describe potential development impacts likely to harm designated sites, Priority Habitats, and listed Biodiversity Features. This should include both direct and indirect effects occurring during construction and after development. Where harm is likely, evidence must be submitted to show:

- How alternative designs or locations have been considered.
- How adverse effects will be avoided wherever possible.
- How unavoidable impacts will be mitigated or reduced.
- How impacts that cannot be avoided or mitigated will be compensated.

3.20 In addition, proposals are encouraged that will enhance, restore or add to designated sites, Priority Habitats, or Biodiversity Features. The assessment should give an indication of likely change in the area (hectares) of Priority Habitat(s) on the site after development such as to whether there will be a net loss or gain.

Due to their biodiversity value old orchards have been added to the UK BAP.

Fragments of old orchards still occur in many villages and should be conserved or suitably integrated within with the landscape of new developments.

Local Requirements for Designated Sites and Priority Habitats: Criteria for When a Biodiversity Site Survey and Assessment is Required

Table 2 - Local Requirements for Designated Sites and Priority Habitats: Criteria for When a Biodiversity Site Survey and Assessment is Required

1. Designated sites (as shown on the LDF Proposals Map)

Internationally designated sites

- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- Wetlands of International Importance (Ramsar site)

Nationally designated sites

- Site of Special Scientific Interest (SSSI)
- National Nature Reserve (NNR)

Regionally and locally designated sites

- County Wildlife Site (CWS)
- Local Nature Reserve (LNR)
- Protected Road Verge (PRV)

2. Priority Habitats (Habitats of Principal Importance for Biodiversity under S.41 of the NERC Act 2006)

- Ancient and/or species-rich hedgerows
- Floodplain grazing marsh
- Fen, marsh, swamp and reedbeds
- Purple moor grass and rush pastures
- Lowland beech and yew woodland
- Lowland calcareous grassland (for example, species-rich chalk and limestone grasslands)
- Lowland heathland and / or dry acid grassland
- Lowland meadows (for example, species-rich flower meadows)
- Lowland mixed deciduous woodland (ancient woodland)
- Lowland wood-pasture and parkland
- Rivers and streams (for example, chalk streams)
- Standing open water and canals (for example, lakes, reservoirs, ponds, aquifer fed fluctuating water bodies)
- Wet woodland
- Traditional orchards

3. Other Biodiversity Features (as identified by the Cambridgeshire and Peterborough Biodiversity Partnership - see paragraph 84 ODPM Circular 06/2005))

- Secondary woodland and mature / veteran trees
- Caves and disused tunnels (for example, roosts for bats)
- Trees and scrub used for nesting by breeding birds
- Previously developed land with biodiversity interest (for example, brownfield sites)
- Urban green space (for example, parks, allotments, flower-rich road verges and railway embankments)

Table adapted from version produced by ALGE 2007, Validation of Planning Applications

Exceptions for When a Full Biodiversity Site Survey and Assessment May Not Be Required

3.21 A full biodiversity site survey and assessment may not be required when:

1. International and National Sites: The applicant is able to provide copies of pre-application correspondence with Natural England, where the latter confirms in writing that they are satisfied that the proposed development will not affect any statutory sites designated for their national or international importance.
2. Regional and Local Sites and Priority Habitats: The applicant is able to provide copies of pre-application correspondence with the District Council's Ecology Officer or similar conservation professional, confirming that they are satisfied that the proposed development will not affect any regional or local sites designated for their local nature conservation importance or any other Priority Habitats or Biodiversity Features.

Determination of Planning Applications: Biodiversity Issues

3.22 Biodiversity is now established in planning policy as an important element within the decision-making process – a material consideration. Government guidance, PPS9, emphasises the importance of biodiversity and the requirement for development to positively enhance wildlife.

3.23 Development proposals provide many opportunities for building-in beneficial biodiversity features as part of good design. Planning polices, conditions and legal agreements can be used to maximise, and require, the provision of specific features for biodiversity.

3.24 Development proposals will be considered against the following Biodiversity Issues in order to appreciate how they have considered the requirements of PPS9 and LDF policies:

Table 3 - Biodiversity Issues

B1 - Protection, Enhancement, Creation, Restoration and Management of Biodiversity Habitats
B2 - Biodiversity Site Protection
B3 - Mitigation and Compensation
B4 - Planning Obligations
B5 - Protection of Wildlife Corridors
B6 - Protection of Ancient Woodland

B7 - Biodiversity Provision in the Design of New Buildings
B8 - Provision of Green Roofs and Walls
B9 - Maximising the Biodiversity Potential of Agricultural Land

3.25 Biodiversity Issue B1- Protection, Enhancement, Creation, Restoration and Management of Biodiversity Habitats. Development should:

1. Secure the protection, enhancement and management of natural and semi-natural landscapes and habitats together with the biodiversity that they contain, and to seek the restoration or creation of new wildlife habitats.
2. Secure the provision of appropriate public access to natural green spaces, particularly within or close to the villages.
3. Ensure that planning applications contain an adequate amount of information on a site's past and present biodiversity status in order to allow the impact of a proposal to be appropriately assessed.
4. Contribute to biodiversity gain as a means to achieve sustainable development.

3.26 Protection of Priority Species and Habitats - An example of a Priority Species of particular significance within the district is the occurrence of the Barbastelle bat (Barbastelle barbastellus), one of Britain's rarest bats. The species is protected on Schedule 5 of the Wildlife and Countryside Act, 1981, and on Annex IV of the EC Habitats Directive. The Directive is European law that provides for the creation of a network of protected sites known as Natura 2000. In the UK Special Areas of Conservation (SAC) are designated. The Eversden and Wimpole Woods SSSI also represents the SAC boundary. This area is shown on Map 1 and shows the wide area of land that is currently believed to support the bats outside of the SAC which is integral to the species' long-term survival within the district. Development proposals should aim to retain mature trees, woods, and copses, and to provide new habitat linkages, through new tree planting and the integration of existing hedgerow networks with new ones. Where a development is likely to cause an adverse effect, either alone or in combination, upon the special features of the SAC it shall be subject to rigorous scrutiny. Where a proposal is likely to have a significant effect on any European site it will be subject to an Appropriate Assessment.

3.27 The control of invasive plants - Vigorous or invasive non-native plant species can impact negatively upon biodiversity by out-competing native flora. This can then lead to a negative impact upon fauna by limiting the available feeding and cover areas. Species of particular concern include Japanese knotweed (Fallopia japonica),

Himalayan balsam (Impatiens glandulifera), giant hogweed (Heracleum mantegazzianum), parrot's feather weed (Myriophyllum aquaticum), New Zealand pygmy weed (Crassula helmsii) and Chinese water fern (Azolla filiculoides). Where proposals at development sites are likely to result in the spread of non-native invasive plant species the development may not be permitted until suitable measures have been agreed and / or undertaken to control the invasive species. It should be noted that it is an offence to spread, or cause to grow, certain plant species listed on Schedule 9 of the Wildlife and Countryside Act, 1981.

Japanese knotweed

Giant hogweed

3.28 Equestrian activity - The increased use of land for equestrian purposes can bring benefits if properly planned and sensitively managed. The use of grassland sites by horses can sustain their botanical interest. However, there is also much potential to damage the interest of grassland sites through overgrazing. Over-grazing may lead to the proliferation of certain weed species, increased soil erosion and diffuse pollution. Development proposals for stabling or for Change Of Use (COU) to paddock land will be subject to an appropriate level of scrutiny.

3.29 Enhancement of existing biodiversity assets through development - The creation and enhancement of habitats adjacent to existing biodiversity rich areas to complement and provide a buffer for biodiversity will be sought. Habitat creation and enhancement towards the achievement of targets in the Biodiversity Action Plans will also be sought.

3.30 There is also considerable scope for the use of green building methods within the landscaping of new developments. Buildings can be screened using native shrubs and hedges. They can also be made attractive to biodiversity by using climbing plants on walls, fitting window boxes or installing green roofs and walls. Plants can cleanse

particles from the air thus improving local air quality. Channelised or culverted watercourses can be restored to provide a more natural profile to rivers and streams whilst increasing the range of aquatic habitats, with the additional benefits of increased flood storage capacity and improvements to water quality. This may result through the careful integration of a Sustainable Urban Drainage System (SUDS) within the site.

3.31 The use of Article 4 Directions - In particularly sensitive areas such as within the Green Belt or within Conservation Areas, the District Council will consider the use of Article 4 Directions of the Town and Country Planning (General Permitted Development) Order 1995 which would remove certain Permitted Development rights. The purpose will be to control development that is of potential harm and maximise opportunities for biodiversity within new developments.

3.32 Development (that might otherwise be Permitted Development) that can be harmful to watercourses includes the construction of outhouses, boathouses, gazebos, jetties, bank stabilisation, decking or sheds that reduce or destroy the natural bankside habitat. Lighting and fencing can also impact upon the movement of species such as otter or bats.

3.33 **Garden extension** - It is important to consider the impact of garden extensions into the open countryside. In particular the physical and visual impact on the wider landscape character area will need to be considered. Such a change will normally require planning consent for a Change Of Use (COU). Species and features associated with a farmland landscape may not be replicable within the garden environment. These issues shall be considered when determining the biodiversity impact of a COU planning application to create or extend gardens.

3.34 Applicants, where appropriate, will be required to plant native species hedges to define boundaries in open countryside as opposed to the erection of fences that may hinder the natural movement of animals.

Garden extensions can provide an opportunity to diversify arable landscapes. Fencing can be softened through the use of native hedging. Wildflower grass mixes can be sown to increase the biodiversity value of new grasslands.

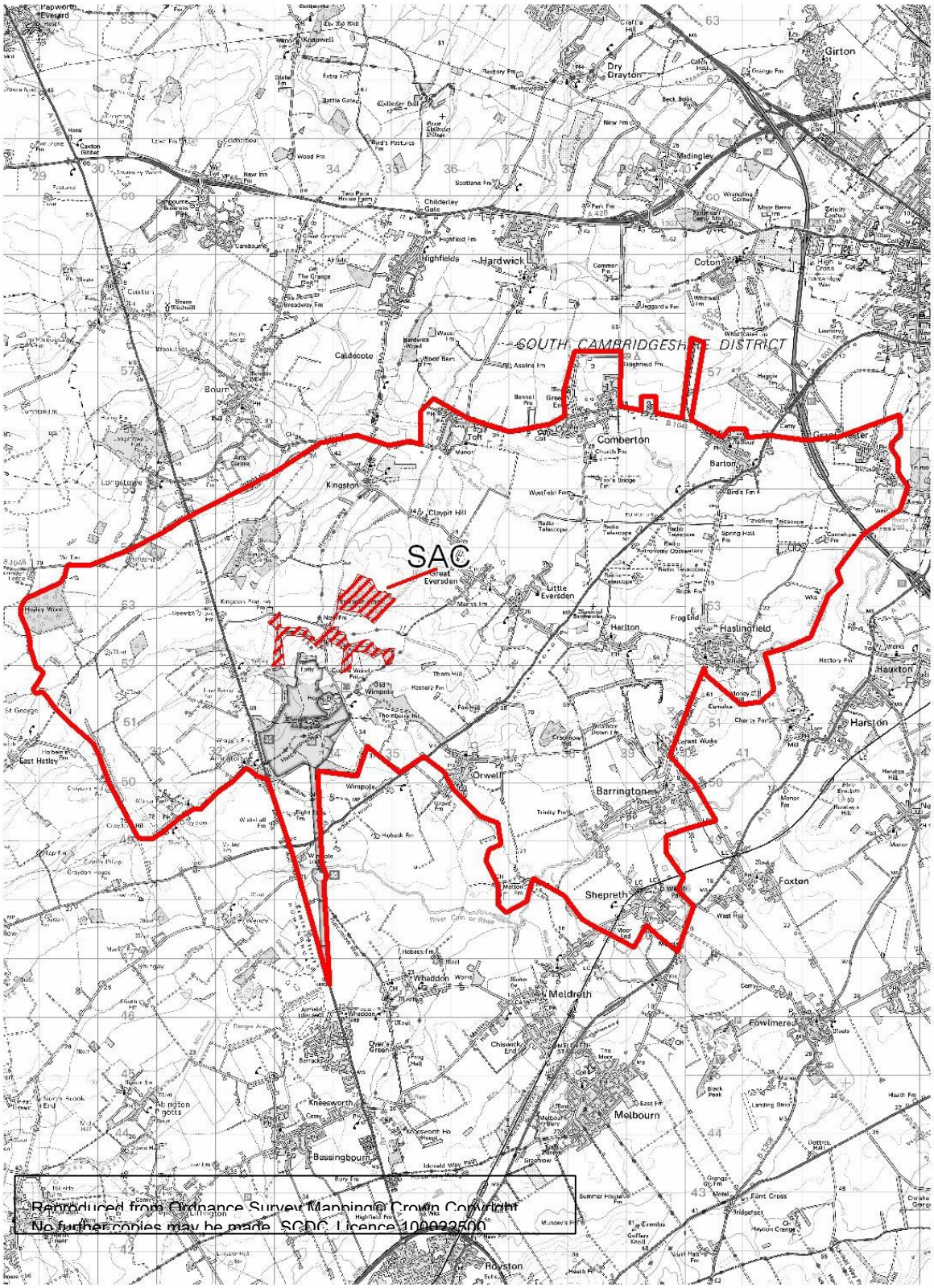
3.35 Development in gardens - The protection of species and their habitats is an important part of sustainable development. Much of the open space within the built-up areas of villages constitutes domestic gardens or curtilage land. These sites may support a wide array of wildlife especially where a diverse mix of flowerbeds, shrubs and tree cover is provided. A wide diversity of native and non-native flowering and berry bearing plants can also be particularly attractive to biodiversity especially invertebrates such as moths. Gardens ponds will further increase the value of a garden for biodiversity by drawing in amphibians, birds and mammals.

3.36 Areas with long gardens or large blocks of gardens and areas with a diversity of habitats can support Priority Species, such as the great crested newt or house sparrow. Large or long gardens are generally less disturbed by people and may contain a wider range of habitats such as a pond, formal areas and unmanaged areas. Small gardens, however well landscaped, tend to support a more limited range of wildlife. It is therefore possible that certain back garden blocks may provide the best habitat within a local area. In such cases the retention of habitat for biodiversity will have to be carefully integrated within development proposals.

3.37 Habitat creation and management - There will always be some opportunity within development proposals to create and manage biodiversity. Development proposals that deliver public open space which provides new wildlife habitats with clear management objectives will be encouraged. There is a particular need for such initiatives within or near to villages where the desire for increased access to nature is greatest. Access can be improved by making places more attractive and safer, enhancing, or creating, new accessible wildlife habitats. In the few cases where there are habitats or species that are particularly sensitive to disturbance, such as badger setts, specific mitigation and / or specific management proposals will be required to be presented prior to the commencement of development.

Stockbridge Meadows Riverside Park has been provided by Manor Kingdom Ltd for Melbourn Parish Council through a legal agreement attached to a planning decision.

Map 1 - Barbastelle bat area of importance for Eversden and Wimpole Woods SAC



3.38 Biodiversity Issue B2 - Biodiversity Site Protection

Sites will be considered important for biodiversity where they:

1. Are European protected sites (SPAs, SACs or Ramsar sites).
2. Are Nationally protected sites (SSSIs, NNRs or AONB).

3. Are County protected sites (CWS).
4. Provide for the presence of a Priority Species and / or Habitat.
5. Have the potential to assist in the delivery of National, County or District Biodiversity Action Plan targets.
6. Provide for the quiet enjoyment of biodiversity within semi-natural areas of an otherwise built environment (LNR).
7. Act as an educational resource (LNR).
8. Clearly act as a stepping-stone, wildlife corridor or refuge area within an otherwise built environment.
9. Have a demonstrable level of public involvement in the management of the site.

Development proposals, where appropriate, shall be expected to provide appropriate access to Biodiversity Sites. The most important Biodiversity Sites are shown on the Proposals Map within the LDF. Other such sites may occur through the process of site assessment as development proposals come forward and shall be added to the Proposals Map where necessary.

3.39 Within South Cambridgeshire there will be a tiered approach to biodiversity conservation at known sites. The two broad categories shall be Statutory Protected Sites (to be known as statutory sites) and Non-statutory Protected Sites (to be known as non-statutory sites).

3.40 Statutory sites - In line with PPS9, statutorily protected sites constitute a material consideration in all development proposals. Policy NE/7 of the Development Control Policies section of the LDF details the Council's approach to such sites. Sites that fall within policy NE/7 include Special Areas of Conservation (SAC), Special Protection Areas (SPAs), Ramsar sites and Sites of Special Scientific Interest (SSSI). Full details of the special interest of SAC's and SSSI's of particular interest to South Cambridgeshire can be obtained from Natural England at Natural England Access to Evidence - Special Areas of Conservation Map

3.41 Non-statutory sites - the most important non-statutory site is the County Wildlife Site (CWS). The Cambridgeshire and Peterborough County Wildlife Site Handbook provides a guide as to how the CWS system operates in Cambridgeshire. Further information regarding CWS and copies of the handbook can be obtained from Cambridgeshire and Peterborough Wildlife Handbook. The conservation of biodiversity across the district as a whole is an issue that requires a closer focus at the local level and a certain amount of careful balance in order to afford protection without unnecessarily restricting development. It has become apparent that there is a

need to identify areas within the villages that provide for local biodiversity and also for people's enjoyment of local biodiversity.

3.42 Non-statutory sites shall contribute to the overall conservation of biodiversity at the local level by retaining habitats and features important to Priority Species. Many parishes have relatively small areas that are managed by local people for the benefit of biodiversity. Due to their small size or limited number of species these areas may not fulfil the criteria used to designate statutory sites, however they may have an inherent value at the local level. Such sites should also be protected from inappropriate development where possible. Non-statutory sites frequently provide areas where people engage with and experience biodiversity, and thus contribute towards people's quality of life.

3.43 Non-statutory sites incorporate the following types of sites:

- County Wildlife Sites (CWS)
- Local Nature Reserves (LNR)
- Protected Road Verges (PRV)
- Village Green Spaces (VGS)
- Pocket Parks (PP)

For information on the above sites please refer to the SCDC Biodiversity Strategy.

3.44 **Open space targets** – The policy requirements of the adopted Development Control Policies DPD Policy SF/11 "open space standards" will always be the primary driver for open space provision. However, in order to encourage further access to biodiversity areas through development Natural England's Accessible Natural Green Space Target (ANGST) will be aspired to. The provision of new LNRs is one such mechanism to achieve the target and deliver necessary quality open space for experiencing biodiversity. The ANGST criteria as set out in "Assessing needs and opportunities: a companion guide to PPG17" requires the following:

- Every home to be within 300m / 5-minute walk of a natural greenspace site of at least 2 ha.
- Every home to be within 2km of >20ha natural greenspace site.
- Every home to be within 5km of a >100ha natural greenspace site.
- Every home to be within 10km of a >500ha natural greenspace site.

3.45 Preservation of non-statutory sites - Non-statutory sites in combination with statutory sites represent a strategic framework for the conservation of biodiversity. The District Council will give an appropriate level of protection to non-statutory sites to ensure the continued existence of their main features of interest, and to ensure that the contribution such sites have towards the achievement of Biodiversity Action Plan targets is not unnecessarily compromised.

3.46 Applications for development within, or near to, a non-statutory site will be expected to be informed by up-to-date information and will be subject to assessment with particular account taken of any direct or indirect effects on the main features giving rise to the designation. Indirect effects can include increased use and disturbance, hydrological changes (for example due to increased hard surfaces or underground development), an increased level of noise, pollution, shading and lighting disturbance. Adverse effects on a site include effects on the species that it supports. This principle shall also apply to the effects on people's opportunity to enjoy and experience nature on a site. Development on or adjacent to an important site can have an adverse impact upon people's enjoyment of the site's biodiversity and landscape value, for example through intrusive visual features, restrictions on access or a significant increase in noise.

3.47 If significant harm cannot be prevented, adequately mitigated against, or compensated for, the planning permission will be refused.

3.48 Biodiversity Issue B3 - Mitigation and Compensation

Where, development results in significant harm to a Biodiversity Site or a Priority Species (or Habitat) appropriate planning conditions or obligations will be required to adequately mitigate and / or compensate for the harm.

3.49 Mitigation consists of measures taken to avoid or reduce negative impacts on species or habitats. Measures may include: locating a development and its working areas and access routes away from areas of high ecological interest, fencing-off sensitive areas during a construction period, or timing works to avoid sensitive periods. Measures may be employed to protect a habitat from the operational impacts of a development such as a reedbed designed and constructed to prevent silt and road run-off from entering a watercourse.

3.50 Compensation is the process of providing species or habitats benefits specifically to make up for the loss of, or permanent damage to, biodiversity through the provision of replacement areas. Any replacement area should be similar to or, with appropriate

management, have the ability to reproduce the ecological functions and conditions of the resource that has been lost or damaged.

3.51 Compensation shall be considered as the last resort, with priority always given to protection in entirety followed by appropriate mitigation. Where the benefits of a proposal are demonstrated to clearly outweigh the importance of biodiversity conservation, conditions will be imposed and obligations negotiated with the aim of securing compensatory habitat creation to prevent biodiversity loss.

3.52 Mitigation schemes may require advance surveys in order to assess species' numbers and habitat quality. This work may only be possible at certain times of the year due to the seasonal nature of species and habitats.

3.53 Some forms of mitigation may be relatively simple such as avoiding the bird breeding season whilst undertaking vegetation clearance. Other requirements such as those associated with avoiding harm to bats during building works at a known bat roost may be more complex. Such works may require the input of a licensed ecologist to oversee the work.

3.54 Some compensatory measures can be relatively inexpensive in the scheme of a development, such as the provision of new swift nest sites. Other measures may require the construction of entirely new features, such as a bat roost building and may require planning consent in their own right.

3.55 A compensatory habitat will preferably replace "like with like". Where this is impossible more extensive new habitat will be sought that replaces the loss with a similarly valued habitat or biodiversity feature. Likewise, measures may be required that:

1. Secure the future of a retained site as an LNR or similar.
2. Provide for its long-term beneficial management.
3. Provide public access to a new habitat.

3.56 The SCDC Biodiversity Strategy provides further information on methods of mitigation in section 4.4 tables 10 and 11.

Protective measures in place to conserve a population of common lizards following their translocation within Melbourn.

3.57 Biodiversity Issue B4 - Planning Obligations

The District Council will seek to use planning obligations under Section 106 of the Town and Country Planning Act, 1990, in order to ensure the protection, restoration, management and further enhancement of biodiversity and people's accessibility to sites for the appreciation of biodiversity.

Planning obligations shall be considered as an important tool for the delivery of green infrastructure in line with the identified Countryside Enhancement Areas and the Cambridgeshire Green Infrastructure Strategy.

3.58 Securing biodiversity gain - Planning obligations are an important tool in securing mitigation and compensation for losses of biodiversity caused through development, and also for securing biodiversity enhancements. In seeking biodiversity gain priority will be given to actions that help achieve Biodiversity Action Plan targets. In particular, enhancements to create appropriate access to Biodiversity Sites will be sought, especially those where landowners or organisations undertake, or increase opportunities for, environmental education; or provide areas where people engage with and experience biodiversity and thus contribute to people's quality of life. Planning obligations relating to the creation of new wildlife habitats will usually include a provision for the ongoing management of new sites for at least ten years.

3.59 Assessing contribution requirements - Unlike other service areas, contribution requirements for biodiversity features cannot be solely based on housing units or any other form of development. Instead assessments will be made on a case-by-case basis in the context of wider viability considerations, taking account of:

1. The effect of a proposal on any existing Biodiversity Features, and upon Priority Species and Habitats.
2. The opportunities provided by a proposal for biodiversity, taking account of the location, type, scale and composition of the development.

3.60 There is no minimum development threshold. Whenever development falls into either category in 3.60 it will be necessary to implement suitable mitigation and / or enhancement measures and, where appropriate, to make provision for such measures off-site.

3.61 The SCDC Development Control Policy DPD has identified a broad approach to countryside enhancement and presents it in Policy NE/5 Countryside Enhancement Areas. Similarly, the Cambridgeshire and Peterborough Biodiversity Partnership has also produced its 50 Year Vision Map *(*refer to the SCDC Biodiversity Strategy*).*

3.62 Countryside Enhancement Areas apart from their habitat value, have the potential to provide accessible open spaces where people can experience the countryside close to home. This has the potential to contribute to people's quality of life. A greater provision of accessible sites spread across the district is required to relieve the pressure upon established "honey pot sites" such as Grantchester Meadows and Wandlebury Country Park.

3.63 Examples of Countryside Enhancement Areas where significant projects are already underway include the West Cambridgeshire Hundreds Project (Wildlife Trust and landowners), and the Coton Countryside Reserve (Cambridge Preservation Society), the Wicken Fen Vision (National Trust) and the Fen Drayton Lakes Projects (RSPB). These projects should be considered as prime examples of countryside enhancement projects that will provide significant areas of land for both people and biodiversity, thus meeting the aim of green infrastructure provision.

3.64 Establishing enhancement targets - The SCDC Biodiversity Strategy had established a broad range of potential habitat creation initiatives and proposed Countryside Enhancement Areas. The map of the Countryside Enhancement Areas is presented over the page as Map 2. Similarly, the Cambridgeshire Green Infrastructure Strategy identified the locations of fragile habitats; identified current and future areas of importance for biodiversity; established mechanisms for landscape and biodiversity restoration; and produced a framework plan to assist in its long-term delivery. The Green Infrastructure Strategy identified areas that are deficient in biodiversity and countryside access. Consequently, a range of concept projects have been prioritised for delivery. The use of planning obligations will be a key means of taking forward the Green Infrastructure Strategy where there is a clear relationship between a project and a proposed development. For example, where a development site results in the loss of grassland and a nearby project aims to re-create semi-natural grassland then financial support for the enhancement project may be sought.

3.65 The Green Vision is the county's combined response to the need for a green infrastructure strategy and was produced by Cambridgeshire Horizons in 2006. It presents a 20-year plan to improve the quality of life for residents of the county. It seeks to enhance the environment for both people and wildlife and respond to the planned population growth by identifying those areas most in need of environmental improvements. It can be viewed at Cambridge Horizons Green Infrastructure Strategy

South Cambs Biodiversity SPD

South Cambridgeshire District Council

Map 2

Wildlife Corridors

Countryside Enhancement Areas

CEA ref. no.	Location description	Target habitat
1	Fen Drayton to Willingham, River Ouse corridor.	Wetland habitats, inc. fen and wet grassland
2	Denny Abbey, A10 to Lower Cam corridor	Wetland habitats, inc. fen and wet grassland.
3	Milton to Waterbeach, River Cam corridor.	Wetland habitats, inc. fen and wet grassland.
4	Wicken Fen Vision Area to Great Wilbraham.	Wetland habitats, inc. fen and wet Grassland. Dry grassland, inc. chalk and neutral grassland.
5	Fleam Dyke to Roman Road.	Chalk grassland.
6	River Granta corridor.	Wetland habitats, inc. fen and wet grassland.
7	Cherry Hinton to Great Shelford.	Chalk grassland.
8	Upper River Cam corridor	Wetland habitats, inc. fen and wet grassland.
9	Great Chishill to the A505.	Chalk grassland.
10	Fowlmere Nature Reserve area	Wetland habitats, inc. fen and wet grassland. Dry grassland, inc. chalk and neutral grassland.
11	River Rhee corridor.	Wetland habitats, inc. fen and wet grassland.
12	Morden Grange.	Woodland, inc. grassland specific to varying geology.
13	Gamlingay to Wimpole.	Chalk Grassland.
14	River Bourn corridor.	Wetland habitats, inc. Fen and wet grassland
15	Coton Farming and Wildlife Reserve	Farmland habitat, inc. rivers and wet grassland.
16	Grantchester Meadows	Grassland habitat,inc. pollard Willows and river.

The RSPB's Fen Drayton Lakes Project will improve the site for wildlife whilst enhancing public access. The work to date has been funded by the Government's Growth Area Fund, however future improvements could be delivered through S106 agreements.

3.66 Biodiversity Issue B5 - Protection of Wildlife Corridor

Development proposals will be expected to contribute to the enhancement of biodiversity. Where a contribution to off-site works is requested regard will be had to the identified network of Wildlife Corridors and green infrastructure projects for the district.

A Wildlife Corridor shall be a site, feature or combination of features within the landscape that form linkages between Biodiversity Sites or have been identified as a regularly used route or flight path for a Priority Species within the wider landscape.

3.67 Purpose of Wildlife Corridors - Conservation of the district's biodiversity cannot be achieved solely by the protection of Biodiversity Sites (possibly fragmented sites). It should also take account of the value of other biodiversity features within the district such as rivers, ditches, hedgerows, ponds and woods which all provide valuable habitat. Regulation 37 of the UK Habitats Regulations draws specific attention to the management of such features in order to sustain biodiversity. Green spaces together with Biodiversity Sites may link together habitats, forming wider biodiversity networks. Green spaces adjacent to such sites may make them more resilient to pressure from overuse or climate change. Corridors will act as linkages between sites permitting the movement of some animals and plants. This may allow some animals to undertake movements between the different habitats that they require for survival, for example, great crested newts dispersing to land from breeding ponds. Wildlife Corridors may also enable species to re-colonise former habitats.

3.68 Wildlife Corridors are presented on Map 2 (after 3.66)

3.69 Water-based corridors - Rivers, streams and ditches are perhaps the most obvious and important Wildlife Corridors within the district. Where considered significant they have been identified as Wildlife Corridors in the SCDC Biodiversity Strategy and form the basis of a wider network of natural habitats worthy of protection. In addition to providing key landscape settings they provide important semi-natural habitats for a

wealth of biodiversity. Protected species such as the otter and water vole find habitats upon many of the rivers. Within an intensively farmed landscape, watercourses assist in species dispersal and migration. It is therefore essential to maintain the quality of these environments and to carefully balance public access.

The River Shep acts as a wildlife corridor between Fowlmere Nature Reserve and the River Rhee allowing otters to move between sites.

3.70 Roadside verges - Roadside verges constitute a significant area of grassland within the district. Due to their linear nature, road verges also have potential to act as Wildlife Corridors especially when associated with features such as hedgerows, tree belts or ditches. A series of Protected Road Verges (PRVs) exist and may act as refuge areas for uncommon species. Background information is available from the County Council's Biodiversity Officer, but for more detailed information on sites please contact the Cambridgeshire and Peterborough Biological Records Centre. Information is also available at Cambridgeshire & Peterborough Environmental Records Centre

3.71 Biodiversity Issue B6 - Protection of Ancient Woodland

The District Council will not grant planning consent for development that would result in the loss of ancient woodland or its deterioration as a result of a planning consent.

The District Council will expect any development that may have an impact on the biodiversity value of an ancient woodland to mitigate any adverse impact, and to contribute to the woodland's management and further enhancement via planning conditions or planning obligations. Ancient woodland shall be identified by having regard to the presence and combination of Ancient Woodland Indicator Species (as presented in the "Cambridgeshire County Wildlife Sites Selection Criteria", Cambridgeshire Biological Information Services, 1997).

3.72 Retention of ancient woodland - The SCDC Biodiversity Strategy has defined what an area of ancient woodland is. Ancient woodland once lost cannot be recreated. PPS9 states quite clearly that local planning authorities should identify areas of ancient woodland and resist granting permission for developments that would result in the

loss or deterioration of the woodland habitat. The SCDC Biodiversity Strategy shows known ancient woodlands upon its Proposals Map 4.

3.73 Veteran trees - English Nature defined a veteran tree as: A tree which, because of its great age, size or condition is of exceptional value culturally, in the landscape or for wildlife.

3.74 Some trees are clearly old and would instantly be recognisable as veteran or ancient. Others may not grow to a great size or reach a great age, but they may be veterans for their species, such as large pollard willows or fruit trees within an old orchard.

3.75 Veteran trees found outside ancient woodland are particularly valuable for biodiversity due to the large amount of deadwood that they may contain. Deadwood is important for invertebrates and rot holes may provide nest sites for birds or roosts for bats. The retention of veteran trees within development sites shall be encouraged where they present no unacceptable safety risks. Where trees have to be removed the deadwood will be retained on site where possible.

Veteran trees such as this willow pollard are important in respect of their biodiversity and landscape value. Once these trees are lost, they may take many decades or even hundreds of years to be replaced. PPS9 encourages the conservation of such trees within development proposals.

3.76 Biodiversity Issue B7 - Biodiversity Provision in the Design of New Buildings

The District Council will expect:

1. That on all major housing developments 50% of the dwellings will have features such as bird, bat or insect boxes provided in close association with the properties. On all other sites suitable provision for biodiversity enhancements shall be negotiated to achieve a similar standard.

2. That appropriate new wildlife habitats will be incorporated into landscaping schemes and the general layout of the built environment.
3. Development proposals to have regard to the biodiversity already present within a development site and to identify opportunities to maximise the provision for biodiversity within new buildings.

3.77 Net increase in biodiversity - Design for biodiversity is a key test of sustainable development and offers many opportunities for innovative design in order to achieve Biodiversity Action Plan targets. PPS9 also states that local planning authorities should maximise opportunities for building-in beneficial biodiversity features as part of good design.

3.78 Coping with higher density - Higher density built environments can be exploited to create habitats on walls, balconies, roof terraces and decks. Distinct microclimates can be found in and around buildings, with varying levels of daylight, wind, temperature and moisture. This requires the selection of appropriate native plants that are adapted to each distinct microclimate. Additionally, the careful selection of more exotic species may provide extended flowering periods and increased yields of berries.

3.79 Climbing plants can be encouraged to colonise walls creating habitats for birds, insects and small mammals. They can also enhance the visual appearance of buildings, as well as providing cooling and insulation.

3.80 Habitat mosaics can be creatively incorporated within landscaped areas of buildings or used to make communal spaces more interesting and distinctive. Private gardens, balconies and roof terraces can also be a haven for biodiversity. The provision of wildlife features such as birdbaths and feeders, bat or hedgehog boxes can act as catalysts to encourage a greater interest in biodiversity.

3.81 The erection of specialist bird, insect and bat boxes can provide shelter for a wide range of species where the improved build of modern developments may have removed former crevices and holes. Swifts, house sparrows and starlings are three bird species that can easily be catered for with specialist bird boxes. Additionally, simple measures such as lifting fences 150mm off the ground may allow hedgehogs to make use of new garden spaces. Similarly, the provision of dropped kerbs (or their total exclusion where not absolutely necessary) will assist the movement of small animals such as toads along their migration routes. The replacement of open drains and gully pots with sustainable urban drainage systems (SUDS) will also reduce the number of animals becoming trapped in drains.

3.82 SUDS can be particularly beneficial in higher density areas due to the dual land use that they can offer. The natural features offered by grass swales, infiltration strips, reedbeds and ponds will provide habitats for amphibians, birds, mammals and insects whilst also contributing to landscape settings and possibly open space requirements. The Design Guide SPD will provide further details on SUDS.

3.83 The success of wildlife areas or SUDS will depend on their proper understanding and management. Where such features are created an applicant may be expected to provide a suitable management statement or management plan. The level of detail is likely to include:

1. A description of the area including a map.
2. Species and habitat targets.
3. Management prescriptions.
4. Persons responsible for undertaking the management.
5. Means of reviewing the management plan.

3.84 For further examples of the incorporation of biodiversity into developments and for habitat creation refer to the SCDC Biodiversity Strategy section 4.3.

The creation of this osier greenway at Cambourne brings distinctive design, open space and biodiversity gain to the housing estate.

The use of ditches and wildflower meadows softens the impact of hi-tech office buildings at Granta Park.

Housing at Lamb Drove, Cambourne, has successfully integrated SUDS adjacent to footpaths and open space. The wetland features provided habitats for amphibians and invertebrates.

Bird boxes can be provided for house sparrows that attach to houses and garages (left) or they can be built-in to walls to provide for flycatchers, robins, or black birds (right). Climbing plants can be added for further cover.

Many specialist nest and bat boxes can be purchased. These swift brick-boxes are being built into dwellings in New Barnet for the Notting Hill Housing Trust.

3.85 Biodiversity Issue B8 - Provision of Green Roofs and Green Walls

The District Council shall adopt the following approach:

The provision of green roofs and walls will be encouraged as a means to maximise biodiversity particularly where the opportunities for ecological enhancement of a site area are limited and where such measures will deliver landscape enhancement.

3.86 Green roofs and walls can provide areas for biodiversity within high-density sites or those where habitat provision at ground level is simply not practicable. Green roofs can grow a variety of plant types depending on the roof design and its aspect. Commonly succulent plants of the sedum type are grown; however, grass and wildflower roofs are possible. A similar approach is now being developed for the

provision of vegetated green walls where prefabricated systems are being used to clad walls in order to provide a suitable growing medium.

3.87 Green roofs and walls can be beneficial for biodiversity by providing “stepping stones” within development sites. They can replicate the exposed surfaces of brownfield sites that are important for invertebrates and provide feeding areas for birds as well as contributing to the overall health of the environment. Sky larks have been recorded using green roofs on large factories where the wide-open space mimics conditions found at ground level.

3.88 In addition to providing opportunities for biodiversity, green roofs can also provide the following benefits: water attenuation by reducing run-off rates, increase of thermal insulation and improvement of air quality by reducing the level of airborne particulates. Further information can be found at www.livingroofs.org

Orchard Park Community Centre

A private building using green roof techniques to lessen the visual impact.

3.89 Biodiversity Issue B9 - Maximising the Biodiversity Potential of Agricultural Land

The District Council shall adopt the following approach:

1. When considering proposals for the change of use or diversification of farmland, particular consideration shall be given to the potential for impact upon Priority Species and Habitats.
2. New agricultural developments will be expected to make provision for typical farmland species, particularly Priority Species.

3.90 Biodiversity on farms - The district of South Cambridgeshire is still a largely rural district with open farmland constituting a very noticeable proportion of the landscape.

The farmland landscape, whether it be arable or pastoral, is also important for biodiversity. Until recently the rare stone curlew could still be found in the chalk belt in the south east of the district. On the fen edge nationally important numbers of birds, such as the golden plover may be observed in winter months. Rare arable plants such as the Venus's looking glass can be found on field margins. Consequently, farmland could be considered as the most extensive biodiversity resource of the district. However, due to the pressures of increasing land use and the past needs of intensive cultivation, the farmland of the district in places is under severe stress.

3.91 With consideration to the points above, farmland shall not be viewed as a landscape devoid of biodiversity. Appropriate surveys may be required in order to fully assist the evaluation of a development impact. The loss of farmland habitats may not always be suitably compensated for within modern developments.

The farmland landscape of the East Anglian Chalk Natural Area looking towards Great Criswell (above) provides visual interest and habitat diversity. Arable plants (left) of field margins provide nectar for invertebrates and seeds for farmland birds.

Appendix 1 Local Development Framework Policies Supplemented by the Supplementary Planning Document

Development control policies development plan document

DP/1 Sustainable Development – in particular part o

DP/2 Design of New Development – in particular parts b, k and l

DP/3 Development Criteria – in particular part o

GB/2 Mitigating the Impact of Development in the Green Belt

GB/3 Mitigating the Impact of Development Adjoining the Green Belt

GB/5 Recreation in the Green Belt

Natural Environment Objectives – in particular objective NE/c

NE/4 Landscape Character Areas

NE/5 Countryside Enhancement Areas

NE/6 Biodiversity

NE/7 Sites of Biodiversity Importance

CH/1 Historic Landscapes

Policy NE/6 Biodiversity

1. New development should aim to maintain, enhance, restore or add to biodiversity. Opportunities should be taken to achieve positive gain through the form and design of development. Where appropriate, measures may include creating, enhancing and managing wildlife habitats and natural landscape. The built environment should be viewed as an opportunity to fully integrate biodiversity within new development through innovation. Priority for habitat creation should be given to sites which assist in achieving targets in the Biodiversity Action Plans (BAPs).
2. The District Council will refuse development that would have an adverse significant impact on the population or conservation status of protected species or priority species or habitat unless the impact can be adequately mitigated or compensated for by measures secured by planning conditions or obligations.
3. Where there are grounds to believe that a proposal may affect a protected species or priority species or habitat, applicants will be expected to provide an adequate level of

survey information to establish the extent of the potential impact together with possible alternatives to the development, mitigation schemes and / or compensation measures.

4. New development will have regard to the impact, either direct or indirect, of a proposal on people's opportunity to enjoy and experience nature on a site together with opportunities to improve public access to nature in addition to understanding local environmental characteristics.
5. Previously developed land will not be considered to be devoid of biodiversity. The re-use of such sites must be undertaken carefully with regard to existing features of biodiversity interest. Development proposals will be expected to include measures that maintain and enhance important features whilst incorporating them within any development of the site.
6. Exceptionally, where the economic or social benefits of a proposal outweigh harm to an important site or species, the approach will be first to avoid or minimise the harm, then to seek mitigation of the impact, and finally to secure appropriate compensation for any residual impact in order to ensure no net loss of biodiversity. Planning conditions and obligations will be used as appropriate to secure this.
7. Planning permission will not be granted for development which would have an unacceptable adverse impact on the biodiversity of the Natural Areas shown on Figure 7.1 (of the LDF).

Policy NE/7 Sites of Biodiversity or Geological Importance

1. Planning permission will not be given for proposals that may have an unacceptable adverse impact, either directly or indirectly, on a Site of Biodiversity or Geological Importance.
2. In determining any planning application affecting international, national or non-statutorily protected sites the District Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to:
    a. The nature and quality of the site's features, including its rarity value;
    b. The extent of any adverse impacts on the features of interest;
    c. The likely effectiveness of any proposed mitigation with respect to the protection of the features of interest;
    d. The need for compensatory measures in order to protect and enhance remaining features or to recreate habitats on or off the site;

e. The status and designation of the site.

3. Where appropriate the District Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.

Northstowe Area Action Plan

NS/2 Development Principles – in particular part h

The Site and Its Setting Landscape Objective C2/b

Landscape Objectives – in particular objectives D7/b, D7/d and D7/g

NS/12 Landscape Principles

NS/13 Landscape Treatment of the Edges of Northstowe

NS/14 Landscaping Within Northstowe

Biodiversity Objectives D8/a – i

NS/16 Existing Biodiversity Features

NS/17 New Biodiversity Features

Cambridge Southern Fringe Area Action Plan

CSF/1 The Vision for the Cambridge Southern Fringe

CSF/2 Development and Countryside Improvement Principles – in particular part 9

Trumpington West and the Southern Setting of Cambridge Objectives – in particular C3/b

CSF/5 Countryside Enhancement Strategy

Landscape Objectives – in particular D6/b, D6/d and D6/g

CSF/12 Landscape Principles

CSF/13 Landscaping within Trumpington West

Biodiversity Objectives D7/a – f

CSF/15 Enhancing Biodiversity

Phasing and Implementation Objectives – in particular E1/b

Cambridge East Area Action Plan

CE/1 The Vision for Cambridge East

The Site and Its Setting Landscape Objective C3/b

CE/4 The Setting of Cambridge East

Landscape Objectives D7/b, D7/d and D7/g CE/13 Landscape Principles

CE/14 Landscaping Within Cambridge East

Biodiversity Objectives D8/a – i

CE/16 Biodiversity

CE/17 Existing Biodiversity Features

CE/33 Infrastructure Provision – in particular part g

Appendix 2 Legislative and National Policy Context

The following documents should be referred as key sources of reference and guidance with respect to biodiversity in the planning system:

- PPS9 Biodiversity & Geological Conservation (2005)
- Biodiversity and geological conservation: circular 06/2005 - GOV.UK
- Planning for biodiversity and geological conservation: a guide to good practice 2006 - GOV.UK
- Natural Environment and Rural Communities Act (NERC), 2006, Section 41. This requires the publication of a list of the living organisms and types of habitats which are of principal importance for the purpose of conserving biodiversity. A full list of the Section 41 species and habitats can be found at: NERC 2006 legislation PDF
    - Note: the NERC Act, Section 41, replaces Section 74 of the Countryside and Rights of Way Act, under which Defra published a similar list in 2002 which was identical with the UK BAP list at the time.
- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (commonly known as the Habitats Directive) seeks to protect wild plants, animals and habitats that have been noted of particular ecological value across Europe by maintaining their favourable conservation status. The Directive also requires the designation of Special Areas of Conservation. Article 17 Habitats Directive Report 2019 | JNCC - Adviser to Government on Nature Conservation
- In the UK the Habitats Directive is implemented by The Conservation (Natural Habitats, &c.) Regulations 1994
- Council Directive of 2 April 1979 on the conservation of wild birds (79/409/EEC) (commonly known as the Birds Directive) seeks to protect wild bird populations of European importance by establishing a network of protected areas known as Special Protection Areas.
- Wildlife and Countryside Act 1981 (as amended) (WCA 1981) provides varying degrees of protection for scheduled plants and animals. The Countryside and Rights of Way Act 2000 (CRoW 2000) amended to the WCA1981 with the effect that reckless disturbance of certain species was introduced, thus strengthening UK wildlife law.
- Protection of Badgers Act 1992 prevents persecution and cruelty to badgers. The likelihood of disturbing a badger sett, or adversely affecting badgers' forgaging territory, or links between them, or significantly increasing the likelihood of road or rail casualties

amongst badger populations, are capable of being material considerations in planning decisions (Circular 06/2005).

Appendix 3 Contact Details and Further Information

Ecology Officer

South Cambridgeshire Hall

Cambourne Business Park

Cambourne

Cambridgeshire

CB23 6EA

Tel: 08450 450 500

Website: South Cambs District Council (scambs.gov.uk)

Useful Websites

- Association of Local Government Ecologists
- Cambridgeshire & Peterborough Environmental Records Centre
- Cambridge Horizons Green Infrastructure Strategy
- Ministry of Housing, Communities & Local Government
- Department for Environment, Food & Rural Affairs
- Environment Agency
- CIEEM
- National Biodiversity Network
- Natural England
- Online information on internationally and nationally designated sites can be found at MAGIC Defra
- Planning Officers Society
- Planning permission
- Royal Town Planning Institute RTPI
- The RSPB Wildlife Charity: Nature Reserves & Wildlife Conservation

- The Wildlife Trusts
- Town and Country Planning Association
- Wildlife and Countryside Link

Sources of Reference and Further Reading

- British Standards Institution (2006)

  PAS 2010 Planning to halt the loss of biodiversity: biodiversity conservation standards for planning in the United Kingdom – Code of Practice

- Department for Communities and Local Government (2007)

  The Validation of Planning Applications: Best practice guidance for local planning authorities

- Institute of Ecology and Environmental Management (2006)

  Guidelines for Ecological Impact Assessment (EcIA)

- Judicial Review (2001) Mr. Justice Harrison

  Regina -v- Cornwall County Council ex parte Jill Hardy Journal of Planning Law 786

- Colston, Gerrard & Parslow Cambridgeshire's Red Data Book

  The Wildlife Trust for Cambridgeshire,1997

- Badgers and development

  English Nature, 2002

- Barn Owls on Site – a guide for developers and planners

  Barn Owl Trust and English Nature, 2nd edn, 2002

- Bat Mitigation Guidelines

  English Nature, 2004

- Bat Worker's Manual

  Joint Nature Conservation Committee, 1999

- Biodiversity By Design – A guide for sustainable communities

  Town and Country Planning Association, 2004

- Biodiversity checklist for land use planners in Cambridgeshire and Peterborough

  Cambridgeshire County Council, 2001

- Biodiversity – The UK Action Plan

  London: HMSO,1994

- Birds of Conservation Concern

RSPB, 2001

- Byron, H

  Biodiversity Impact – Biodiversity and environmental impact assessment: A good practice guide for road schemes

  RSPB, WWF-UK, English Nature and the Wildlife Trusts, 2000

- Design Manual for Roads and Bridges

  Highways Agency, 2001

- Eversden and Wimpole Woods SSSI – supporting information, a supplement to the notification package English Nature, 2003

- Eversden and Wimpole Woods SSSI – notification under section 28C of the

  Wildlife and Countryside Act 1981 (as amended)

  English Nature, 2003

- Green Roofs: their existing status and potential for conserving biodiversity in urban areas

  English Nature Research Report No. 498, 2003

- Great Crested Newt Mitigation Guidelines English Nature, 2001

- Handbook for Phase 1 habitat survey – a technique for environmental audit and field manual

  Nature Conservancy Council, 1990, revised 1993

- Johnston, J and Newton, J

  Building Green – a guide to using plants on roofs, walls and pavements

  London Ecology Unit, 1992

- Planning Policy Statement 9: Biodiversity and Geological Conservation

  Office of the Deputy Prime Minister, 2005

- Otters and River Habitat Management

  Environment Agency 2nd edn, 1999

- Oxford, M J

  Developing Naturally – a handbook for incorporating the natural environment into planning and development

  ALGE, 2000

- The New Rivers and Wildlife Handbook

  RSPB, NRA and RSNC, 1994

- Special Areas of Conservation – what they mean for you

  English Nature, 2002

- Special Areas of Conservation – questions and answers

  English Nature, 2002

- Validation of Planning Applications: planning applications (local) (pilot draft)

  Association of Local Government Ecologists, 2007

- Water Vole Conservation Handbook

  English Nature, Environment Agency and Wildlife Conservation Research Unit,1998)

- Working with the Grain of Nature – A Biodiversity Strategy for England

  DEFRA, 2002

- Working with Wildlife – A resource and training pack for the construction industry

  CIRIA, 2004

Appendix 4 Protected Species and Ecological Survey Seasons

Table 4 - Protected Species and Ecological Survey Seasons Key:

Optimal survey time = Extending into + N/A -

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Badgers	-	=	=	=	+	+	+	+	+	=	=	+
Bats (hibernation roosts)	=	=	-	-	-	-	-	-	-	-	=	=
Bats (summer roosts)	-	-	-	+	=	=	=	=	-	-	-	-
Bats (foraging / commuting)	-	-	-	+	=	=	=	=	=	+	-	-
Birds (breeding)	-	-	=	=	=	=	=	=	-	-	-	-
Birds (over wintering, nonprotected)	=	=	-	-	-	-	-	-	-	-	=	=
Great–crested newts (Terrestrial)	-	-	=	=	=	=	=	=	=	=	-	-
Great-crested newts (aquatic)	-	=	=	=	=	-	-	-	-	-	-	-
Invertebrates (mostly nonprotected)	-	-	-	=	=	=	=	=	=	-	-	-
Otters	=	=	=	=	=	=	=	=	=	=	=	=
Reptiles	-	-	-	=	=	=	-	-	=	-	-	-
Water voles	-	+	=	=	=	=	=	=	=	+	-	-
White-clawed crayfish	-	-	-	-	-	-	=	=	=	-	-	-

Habitats / vegetation (mostly non-protected)	-	-	-	=	=	=	=	=	=	=	=	=

Table adapted from version produced by ALGE 2007, Validation of Planning Applications

Points to note regarding surveys are as follows:

- For certain species and habitats surveys can be carried out at any time of year, but for other species, particular times of year are required to give the most reliable results, as indicated in the above table.
- Surveys conducted outside of optimal times (identified above) may be unreliable. For certain species (for example great crested newt) surveys over the winter period are unlikely to yield any useful information. Similarly, negative results gained outside the optimal period should not be interpreted as absence of a species and further survey work maybe required during the optimal survey season. This is especially important where existing surveys and records show the species has been found previously on site or in the surrounding area. An application may not be valid until survey information is gathered from an optimum time of year.
- Species surveys are also very weather dependent so it may be necessary to delay a survey or to carry out more than one survey if the weather is not suitable, for example, heavy rain is not good for surveying for water voles as it washes away their droppings. Likewise, bat surveys carried out in wet or cold weather may not yield accurate results.
- Absence of evidence of a species does not necessarily mean that the species is not there, nor that its habitat is not protected (for example, a bat roost is protected whether bats are present or not).
- The Cambridgeshire and Peterborough Biological Records Centre may have useful existing information and records.
- Competent ecologists should carry out surveys. Where surveys involve disturbance, capture or handling of a protected species, then only a licensed person (as issued by Natural England) can undertake such surveys. Surveys should follow published national or local methodologies. Further details may be found on the following websites:

  CIEEM

  Natural England Access to Evidence

Appendix 5 South Cambridgeshire District Council BAP Priority Species and Habitats

Table 5 - South Cambridgeshire District Council BAP Priority Species

Priority Species	Reason
Otter	Otters are widespread along the Upper Cam and its tributaries. Work must be undertaken to ensure that the local environment continues to have the capacity to support otters.
Water vole	Water voles are widespread in some parishes. The species has the ability to live in close proximity to people if suitable habitat is maintained.
Skylark	The skylark was chosen as a national indicator of sustainability and skylarks are still widespread in South Cambridgeshire.
Great crested newt	The great crested newt receives full protection in law. It may often be encountered at smaller development sites within villages.
House sparrow	Rapid decline since the 1970's. For example, in Coton the species was considered too numerous to record until 1978, but none have been recorded from the parish's farmland in recent survey work. The species' recovery can be assisted by nest box erection and sensitive planting and the phasing of activities that might cause disturbance. DEFRA leaflet produced in 2004 to explain reasons for the decline.
Barn owl	The RSPB currently lists the barn owl upon its Amber List believing the decline to range between 25-49% over the last 25 years. The loss in South Cambridgeshire may have been higher due to the drive for intensive farming and the high number of barn conversions. However, barn owl numbers are now increasing but the species needs to be the focus of further conservation effort as a flagship species for positive land management.
White-clawed crayfish	The white-clawed crayfish is the UK's only native crayfish. Populations were formally widespread in the River Rhee and its tributaries. Disease passed on from the American signal crayfish has wiped out all but one population of the white-clawed crayfish for the whole of Cambridgeshire. However, undiscovered populations may still remain.

Native black poplar tree	A nationally scarce tree formerly of floodplains. Only 57 adult trees occur within the district following survey in 2007. The national black poplar BAP should also be used as a guide document.

Table 6 - South Cambridgeshire District Council Bap Priority Habitats

Priority Habitat	Reason
Rivers and streams (including chalk rivers)	Rivers and river valleys have been the focus of policies in Local Plans for many years. It is widely recognised that rivers and streams represent a major habitat resource within the landscape of the district. The high-water quality and dependant species of the chalk rivers, such as the Shep and Mel, make their habitats particularly worthy of conservation.
Woodland	Woodland provides a diverse habitat for many different species. The protection and creation of woodlands has previously been the focus of Local Plan policies. South Cambridgeshire is relatively poorly wooded.
Scrub	Changes in farming practice over the last forty years has resulted in some small fields becoming over-grown with scrub. Scrub can provide an important habitat for many different species, especially birds, and should not be looked upon as over-grown wasteland.
Old orchards	Changes in farming practice over the last forty years has resulted in the loss of many orchards, particularly in the Fen edge villages.
Hedgerows	Changes in farming practice, and land use generally, has resulted in the loss of extensive lengths of hedgerows. Many of the remaining and newly planted hedges are not particularly species rich, however as landscape features and as a biodiversity resource they are important.
Farmland (arable)	South Cambridgeshire is dominated by an arable landscape. Within this habitat important and declining species remain.
Ponds	Many farm and village ponds have been lost. This has negatively impacted upon biodiversity. However, ponds can be relatively straightforward to recreate and can bring back wildlife with suitable management.

Churchyards and cemeteries	The tranquil environment of these sites offer important greenspaces. If sensitively managed they can be a place for people to quietly enjoy wildlife.
Lowland calcareous grassland	Grasslands were once extensive within the district. Maintaining the diversity of wildflowers contained within chalk grasslands is of particular conservation interest.
Meadows and pastures	Small meadows were once common within villages. Grazing upon nutrient rich soils created diversity within grass swards rather than dominance by weed species.

Chalk grassland can contain a high diversity of plants. At Litlington Chalk Pit wild thyme, milkwort and squinancywort are of special interest.

Appendix 6 Natural Area Profiles for the South Cambridgeshire District

Table 7 - Natural Area Profiles

Natural Area	Characteristic flora and fauna	Parishes
The East Anglian Chalk	Scattered chalk grassland, beechwood plantations on dry hill tops, willow and alder in wetter vallies, scrub of hawthorn and blackthorn with ivy or bramble beneath. Spring-fed fens, mires and marshy ground with reed, sedge and hemp agrimony. Spring-fed flowing water supporting water crowfoots and pondweeds with reed sweetgrass at the margins. Large open arable fields may support rare arable plants such as grass poly or Venus's looking-glass. Brown hare and typical farmland birds, such as linnet, yellow hammer and corn bunting also occur.	Abington Pigotts, Babraham, Balsham, Barrington, Bassingbourn-cum-Kneesworth, Carlton, Duxford, Fen Ditton, Folwmere, Foxton, Fulbourn, Granchester, Gt & Lt Abington, Gt & Lt Chishill, Gt & Lt Shelford, Gt & Lt Wilbraham, Guilden Morden, Harlton, Harston, Haslingfield, Hauxton, Heydon, Hildersham, Hinxton, Horningsea, Ickleton, Linton, Litlington, Melbourn, Meldreth, Newton, Orwell, Pampisford, Sawston, Shepreth, Shingay-cum-Wendy, Stapleford, Steeple Morden, Stow-cum-Quy, Teversham, Thriplow, Weston Colville, West Wratting, West Wickham, Whaddon, Whittlesford.

The East Anglian Plain	Hedges, isolated trees and woods can give a wooded feel and provide habitat for song thrush, bullfinch and corn bunting. Hay meadows with knapweeds and crested dog's-tail grasses. Relict parkland and large hedgerow trees particularly of oak with associated bats, lichens and turtle doves. Arable farming dominants the land use and provides habitat for skylarks, grey partridge and brown hare.	Balsham, Bartlow, Carlton, Castle Camps, Horseheath, Linton, Shudy Camps, Weston Colville, West Wickham, West Wratting.
Natural Area	Characteristic flora and fauna	Parishes
The Bedfordshire Greensand Ridge	Arable land and agriculturally improved pasture comprise a major proportion of the habitats within the area. Skylark and grey partridge are both still found in the area, as are a number of rare arable plants including broad-leaved spurge, fine-leaved sandwort and toothed medick. Important ancient woodland containing oak, ash and holly occurs. Ground flora may contain bluebell, oxlip and wood sorrel. Fungi and invertebrates are also of note.	Gamlingay.

The Fens	Agriculture is very important in the area due to the high-quality soil. This has restricted biodiversity in some parts. However, drains, hedges and field margins provide refuge for species such as barn owl, corn bunting and skylark. Washlands provide temporary areas of flooded grassland that are important for plants such as the marsh foxtail, tufted hairgrass and narrow-leaved water dropwort.	Cottenham, Fen Ditton, Horningsea, Milton, Over, Stow-cum-Quy, Waterbeach, Willingham.

The Fens Natural Area looking towards Over.

Natural Area	Characteristic flora and fauna	Parishes
The West Anglian Plain	Hedgerows, mature trees, ponds, small watercourses, and rough grassland are all typical of the area and support species such as skylark and grey partridge. Flooded gravel and clay pits diversify the semi-natural habitats and provide habitat for various waterfowl and the great crested newt.	Abington Pigotts, Arrington, Bar Hill, Barton, Bourn, Boxworth, Caldecote, Caxton, Childerley, Comberton, Conington, Coton, Cottenham, Croydon, Croxton, Dry Drayton, Elsworth, Eltisley, Fen Ditton, Fen Drayton, Gamlingay, Girton, Granchester, Gransden, Graveley, Gt & Lt Eversden, Guilden Morden, Hardwick, Harlton, Haslingfield, Hatley, Histon, Horningsea, Impington, Kingston, Knapwell, Landbeach, Lolworth, Longstanton, Longstowe, Madingley, Milton, Oakington, Orwell, Over, Papworth Everard, Papworth St Agnes, Rampton, Shingay-cumWendy, Steeple Morden, Swavesey, Teversham, Tadlow, Toft, Waterbeach, Westwick, Whaddon, Willingham, Wimpole.

The West Anglian Plain Natural Area contains a number of ancient woodlands such as Hayley Wood.

Glossary

Appropriate Assessment	This is an assessment carried out under Regulation 48 of the Habitats Regulations.
Area Action Plan	A planning document that provides a statutory framework for an area of land-use change.
Biodiversity	The biological diversity of the earth's living resources. Encompasses the total range of variability among ecosystems and organisms from the lowest level to the highest level.
Biodiversity Action Plan	A plan that lists habitats and species considered to be priorities for conservation (either local or national). The action plan will usually contain a series of agreed targets and actions.
Biodiversity Feature	Habitats, structures (natural or Man-made) or landscape features as listed in column 1 of tables 1and 2.
Brownfield site	Previously developed land that is or was occupied by a permanent structure and is associated with fixed surface infrastructure. The definition covers the curtilage of development. Previously developed land can occur in both rural and urban settings and may contain Priority Habitats. A precise definition can be found in PPS3.
Compensation	Measures taken to make up for the loss of, or permanent damage to, biological resources through the provision of replacement areas. Any replacement area should be similar to or, with appropriate management, have the ability to reproduce the ecological functions and conditions of those biological resources that have been lost or damaged.
Conservation	The act of maintaining species and habitats at their current distribution and abundance levels across an area (such as a parish).
Designated site	Are sites noteworthy for their biodiversity interest. Such sites may be Statutory sites (Special Area of Conservation, Special Protection Area, Site of Special Scientific Interest) or Non-statutory sites (County Wildlife Site, Local Nature Reserve, Village Green Space or Pocket Park).
Diffuse pollution	Pollution arising from a series of points such as agricultural run-off.

Enhancement	A new benefit to biodiversity, unrelated to any negative impact.
Fragmentation	The breaking up of a habitat, ecosystem or land use type into smaller parcels.

Green Infrastructure	The sub-regional network of protected sites, nature reserves, green spaces, and greenway linkages. The linkages includes river corridors and floodplains, migration routes and features of the landscape which are of importance as wildlife corridors. Additionally, green infrastructure should provide for multi-functional uses such as wildlife and recreation.
Greenfield site	Land which has not been previously developed or which has returned to greenfield status over time.
Habitat	A place in which a particular plant or animal lives. Often used in the wider sense referring to major assemblages of plants and animals found together.
Impact	The way in which an ecological receptor or resource is affected by a project.
Infill development	Development within a village of a gap in an otherwise built-up frontage, or the redevelopment or sub-division of an existing residential curtilage, or the sub-division of an existing dwelling, or the conversion or redevelopment of a non-residential building.
Local Development Framework	Comprises a number of Development Plan Documents that set out policies and proposals for the development and use of land in the district.
Microclimate	Local climatic conditions that may result through semi-natural or Man-made features such as shading and / or wind funnelling due to tall buildings. Microclimates may provide specific conditions such as warmth on an embankment for invertebrates and reptiles.
Mitigation	Mitigation is the process of reducing harm to a species or habitat during the course of site development, preparation or clearance. See also compensation (which is separate from mitigation).

Natural Area	Is identified by a combination of physical attributes such as geology, plant and animal species, land use and culture. These attributes combine to give an area its distinctive biodiversity.
Net gain	The point at which the quality and quantity of habitats or species improves compared to their original condition, for example, improvements over and above those required for mitigation and compensation.
Network	An interconnected system of corridors.
Preservation	The act of maintaining a species and / or habitat at their current distribution and abundance level at a particular site. Preservation will often favour (but not to the exclusion of others) one species or habitat.
Priority Habitat	Priority Habitats are those identified within a BAP and / or the NERC Act, Section 41.
Priority Species	Priority Species are those identified within a BAP and / or the NERC Act, Section 41.
Restoration	The re-establishment of a damaged or degraded system or habitat to a close approximation of its pre-degraded condition.
Species	A group of organisms that can interbreed within their group but cannot breed (exchange genetic material) outside of it in order to produce fertile offspring.
Supplementary Planning Document	Informal policy that has been the subject of public participation. It replaces any previous Supplementary Planning Guidance (SPG).
Sustainable Urban Drainage System (SUDS)	The control of water, usually rainfall, by means of swales, lagoons, permeable paving, green roofs and sensitively re-engineered channels or reed beds.
Watercourse	Any river, brook, stream, ditch, drain, lode or dyke that conveys water from one location to another.
Wildlife corridor	A site, feature or combination of features within the landscape that form linkages between protected sites or have been identified as a regularly used route or flight path for a Priority Species.

Where necessary glossary definitions have been collated or adapted from:

IEEM website (glossary no longer available)

SCDC LDF Development Control Policies DPD

SCDC Biodiversity Strategy

Planning Services

South Cambridgeshire District Council

Cambourne Business Park

Cambourne

Cambridgeshire CB23 6EA

t: 08450 450 500

South Cambs District Council (scambs.gov.uk)