

Building Biodiversity in Kent

a guide for clients, designers and contractors of building and civil engineering projects

a supplement to Kent Design – a guide to sustainable development

Biodiversity
Action for Kent's wildlife

Published by Kent County Council on behalf of the Kent Biodiversity Partnership





Introduction

This guide provides an introduction to the subject of biodiversity and is specifically aimed at those involved in the development industry, particularly clients, designers and contractors, working in Kent. It is by no means the full story, but it does explain some of the fundamental issues and provides guidance as to how the industry can help.

What is biodiversity?

Biodiversity is 'biological diversity' shortened to one word. It means the richness and variety of plants, birds, animals and insects that exist throughout the world.

Why bother with biodiversity?

Biodiversity provides the living fabric of the planet. Without this framework the world we know could collapse, taking us with it. Biodiversity, and its products, provides us with most of our food, medicine, clothing and building materials. Many of our leisure activities (gardening, bird-watching, or the simple pleasure of enjoying beautiful landscapes, for example) are reliant upon biodiversity. It also provides variety of place or local distinctiveness. Most importantly it maintains the environmental good health of the planet and therefore the systems which support human life. In short it helps maintain our 'quality of life'.

But this framework is under severe strain – the UK has lost a vast amount of wildlife habitat in the past 100 years and as a consequence many species of plants and animals have become rare or even extinct.

How is biodiversity protected in Kent?

Biodiversity is protected by wildlife legislation, by international agreements, by planning policies and by appropriate land management.

The principal piece of legislation conserving biodiversity is the Wildlife and Countryside Act 1981 (WCA), which amongst other things gives protection to certain species of plant and animal, and establishes the legal background for designating Sites of Special Scientific Interest (SSSI), Britain's top wildlife areas.

At a smaller scale, there are sites that are identified as being of regional or local importance for their wildlife. In Kent these are referred to as Sites of Nature Conservation Importance (SNCI).

Other environmental legislation can have a positive influence on biodiversity. For example, the Water Resources Act 1991 seeks, amongst other things, to protect watercourses from pollution, an environmental impact which can have a highly damaging effect on wildlife.

In recent years an integrated approach – biodiversity action planning (BAP) – has been adopted. The BAP process aims to establish agreed objectives and targets in respect of the protection and conservation of wildlife and identifies how these can be met through integrated action by the nature conservation sector in partnership with a wide range of other sectors and industries.

The Biodiversity Action Planning process in Kent

Biodiversity is not restricted simply to protected areas. If it was, the rest of the world would be pretty drab. Biodiversity exists everywhere – in the urban environment as much as in rural areas. Of course it is different from place to place, and some areas are richer than others, but in order to conserve biodiversity in protected areas we also need to look after biodiversity in the wider environment. It is not acceptable to make rare that which is still relatively common by a failure to consider biodiversity conservation wherever our activities could result in adverse impact on wildlife habitat.

Kent is rich in wildlife habitats which support a range of rare and uncommon species. Many of these places are protected, some are not, particularly those which comprise more common habitats and species. Accordingly, the Kent BAP adopts an integrated approach based on the principle that all those who influence land management (directly or indirectly) have a role to play.

The Kent BAP sets out what is of regional, national and international importance in the County and begins to identify how each sector, including the construction industry, can assist in achieving its conservation objectives. Its goal is to conserve and enhance biodiversity in Kent, and thereby contribute to the conservation of national and global biodiversity.

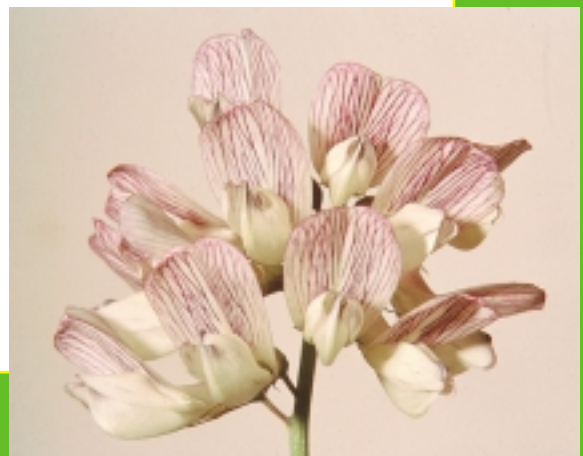
Biodiversity and Sustainable Development

Conserving biodiversity is a key aspect of the Government's strategy for sustainable development – a strategy that promotes development which meets the needs of the present without compromising the ability of future generations to meet their own needs. Implicit within the concept of sustainable development is a requirement to ensure wide-ranging environmental protection. The conservation of biodiversity is regarded as one of the key indicators of sustainable development. It is widely accepted that we cannot be achieving a more sustainable way of living if the populations of other species are continuing to decline as a result of our adverse impact upon the habitats on which they depend.

Many sectors are now responding to the need for sustainable development by developing policies and strategies which will address how economic development in the future can address environmental (and social) concerns, including biodiversity conservation

The construction industry is also responding to the issue of sustainable development. A number of industry organisations are currently working on action plans that include consideration of biodiversity. For example, the Construction Industry Research and Information Association in its publication *Environmental Issues in Construction: a Strategic Review* proposes the following indicator of sustainable development – the area of habitat destroyed compared with the area of habitat created

The Kent Association of Local Authorities is also keen to promote sustainable development and in Spring 2000 published a wide-ranging design guide, entitled *Kent Design – a guide to sustainable development*. This guidance note complements the design guide, providing further information on biodiversity conservation.





The Planning System in Kent

The majority of development proposals in Kent will require planning permission from the local planning authority. In addition, major developments will require a formal Environmental Impact Assessment (EIA) to be completed which must address the impact of the proposal on wild plants and animals. The local planning authorities (i.e. Kent County Council, Medway Council and the twelve District Councils) will hold information on designated sites and will be able to provide contacts in organisations with an interest and involvement in local nature conservation. At the earliest stages of planning a development it is wise to contact the planning authority to get any relevant information on wildlife and biodiversity. *However, it must not be assumed that the planning authority knows everything – carrying out an independent ecological assessment of the site is recommended in most cases.*

At a strategic level the Government has issued Planning Policy Guidance: Nature Conservation (PPG 9). This guidance, which is due for review, provides a good summary of the issues which should be considered by developers as well as planners.

Other planning related mechanisms help conserve biodiversity: Tree Preservation Orders, Hedgerow Protection Orders, Landscape Character Assessments and nature conservation strategies being important examples.

Biodiversity in Kent – some key facts and figures

Kent Fact – 30% of deciduous and mixed woodland have been lost in the last 30 years.

Kent Fact – there are 101 SSSIs in Kent.

Kent Fact – the County is internationally important, amongst other things, for its chalk grassland and for three of its estuaries. It has 43% of the UK's shingle habitat.

Kent Fact – the county's varied geology and long coastline has resulted in a diverse range of habitats, and its more continental climate means that several species of plant and animal which occur in Kent are found nowhere else in the UK.

Kent Fact – Kent is the UK stronghold for species such as dormouse and nightingale.

Kent Fact – Urban land use grew by 25% between 1961 and 1990. 81,000 houses are planned for the County by 2011. Growing economic ties with Europe will ensure that Kent will continue to be a focus for increased development and infrastructure improvements.

How does development affect biodiversity?

Built development can have an enormous adverse impact on biodiversity.

Typical impacts include:

- **Direct loss of habitat** – Development of any site can result in valuable habitats being lost forever. The loss of long-established habitats is particularly damaging but newly developing and recently-developed habitats (frequently encountered on 'brownfield' sites) can also support a wide variety of rare and uncommon species.
- **Impact on species** – Species that are uncommon may be lost from an area, or the commonplace made uncommon, if particular features such as ponds, hedgerows or ancient trees are lost or the full range of needs of a species are not properly considered. Retaining a pond for frogs or newts, for example, will be futile without retaining adjacent dry-land habitats in which the adult frogs and newts spend most of their lives.
- **Fragmentation and isolation** – Small scattered areas of habitat are more likely to suffer from gradual degradation and deterioration in quality due to the impact of external factors. Habitats that are isolated from larger similar habitats tend to lose species more quickly as a small number of isolated individuals are unable to survive without contact with larger populations. Numbers of dormice in a wood, for example, may be greatly reduced if it is sub-divided or cut off from neighbouring areas.
- **Indirect impacts** – There are many ways in which development can have an indirect impact on biodiversity. For example, an animal species can suffer disturbance either temporarily because of construction activities, or permanently because of what is being constructed. Mitigatory measures may be able to be put in place to cater for temporary disturbance but permanent disturbance may result in the eventual loss of that species from the surrounding area. Development may also result in the spread of invasive species (e.g. Japanese Knotweed), alter the hydrology (even subtle changes can have a dramatic impact on sensitive species) or make a site more difficult to manage in the longer term.

Getting things wrong for wildlife may not just mean a loss of biodiversity – it can also be expensive. Delays to a construction programme may occur and mitigation measures not budgeted for may be necessary. Furthermore, the effect of a development on biodiversity, which could be positive and/or negative, is becoming an increasingly important factor in determining whether a development is acceptable.





What can the development industry do to help?

Clearly a balance has to be made between the benefits that development is providing in terms of transport infrastructure, houses, workplaces, hospitals, jobs etc. and what impacts may result for wildlife and biodiversity. Considering the conservation of biodiversity at each phase of the development process can ensure that appropriate decisions are made.

Development need not be synonymous with adverse impact. It can also provide the opportunity to protect, regenerate and recreate wildlife and wildlife habitats, thereby increasing the biodiversity of an area, and ultimately the benefits to people.

The Client

The client sets the whole tone of the development – where it is to be placed, and how it is designed, constructed and managed. Therefore, in many ways, the client is the most important piece in the development jig-saw as far as biodiversity is concerned. A client who understands and is sympathetic to environmental concerns, and wildlife in particular, will achieve much for biodiversity and for the quality of the final development. The client should:

- establish an environmental policy which seeks to conserve and, if possible, increase biodiversity either on site or, if not on site, then in the area local to the proposed development;
- consider the implications for biodiversity of the preferred location for the development and the infrastructure which may be needed to support it;
- avoid developing on, or adjacent to, designated sites. Developments which impact on SSSIs, or other protected areas, take longer to achieve, require mitigation for any damage caused, create ill feeling in the local community and ultimately can be more expensive;
- when planning a development, scope out the likely impacts and opportunities for wildlife. If some impact is suspected, no matter how small, carry out an ecological assessment. Allow plenty of time to undertake the assessment. Those carried out during the winter months, when plants and animals are not at their most obvious, may not be as persuasive as ones which cover a range of seasons;
- ensure that the appointed designers and contractors are aware of the wildlife interest and potential of the development, and have management systems for ensuring that it is protected and conserved throughout the construction period;
- ensure that the management of the completed development encourages biodiversity.

The Designer

The designer can have a great influence on the overall ecological impact of a development. Designers should:

- utilise the advice and guidance available on sustainable development and biodiversity;
- try to protect and conserve the most ecologically important areas of the proposed development site;

- only consider removing wildlife habitats or species to a new site (a process known as translocating) when the option of conservation on site is not feasible. Translocation is rarely truly successful, and even when it is the place is never quite the same;
- wherever possible, consider creating new wildlife habitats or links between existing wildlife habitats. These can be as part of the landscape setting, or even on the roofs and walls of buildings where they may bring additional environmental benefits;
- incorporate features that encourage or protect a range of species. These can range from bird boxes and nesting and roosting chambers for bats, to road and rail 'underpasses' for badgers and otters;
- ensure that any planting schemes reflect, at least in part, the natural habitats and species found on or near the development site, and are well managed once the project is completed. Certain types of plant are more attractive to insects and birds than others. Wherever possible, use plants of local provenance as this helps to conserve locally distinctive varieties and local character;
- Understand the construction process and consider the temporary as well as permanent issues.

The Contractor

Whilst, in most cases, the overall nature and appearance of the development will have been settled by the time a contractor comes to build it, there is still a great deal that can be done to conserve and increase biodiversity on and around the development site. Contractors should:

- ensure that they have all the baseline information on any ecological aspects and understand the implications for their work;
- at the start of the contract, erect fencing and warning signs around any particularly sensitive areas on site e.g. nesting or roosting areas for protected species, soils or plants to be relocated etc.;
- nominate a contract environmental manager to be responsible for, amongst other things, ecological aspects of the work and liaison with interested parties e.g. English Nature;
- consider employing an ecologist to provide advice and guidance during the construction phase;
- ensure that all staff, the workforce and sub-contractors, undergo a thorough induction on ecological aspects of the job and know who to contact for advice and guidance;
- try to ensure that any clearance of trees, hedgerows, shrubbery or other potential bird nesting habitat is implemented outside the bird nesting season, which is considered to be the period between April and July inclusive. At other times check any nesting habitat before it is cleared and, if nesting birds are found, reschedule work until the young have flown the nest;
- minimise any adverse impact on existing habitat on site or adjacent to the site by sensitive location of storage areas, access routes etc.



Conclusion



Conserving biodiversity is important – not only for those interested in wildlife, but for everybody. Whilst there are laws and procedures in place, biodiversity is still in decline in Kent. Biodiversity, outside of protected areas, cannot be properly conserved without an awareness and a sympathetic approach from all those organisations and individuals who have an influence upon the management and use of land.

The development industry has a significant role to play in conserving Kent's wildlife. If projects are planned and carried out with proper regard for conservation, opportunities to enhance biodiversity can arise and any potentially negative impacts can be minimised. By building biodiversity conservation into their projects, developers improve the quality of the built environment as well as providing tangible benefits to those (people and wildlife) who ultimately use it.

Where to go for more information

Key organisations

UK Biodiversity Secretariat, DETR
Tel: 01179 878000 Fax: 0117 878182
www.detr.gov.uk

English Nature, Kent Area
Tel: 01233 812525
email: enquiries@english-nature.org.uk
www.english-nature.org.uk

Environment Agency, Kent Area
Tel: 01732 875587

Kent County Council, Environmental Management
Tel: 01622 221523

Medway Council
Tel: 01634 727777

N.B. There are 12 district councils in Kent: Ashford, Canterbury, Dartford, Dover, Gravesham, Maidstone, Sevenoaks, Shepway, Swale, Thanet, Tonbridge & Malling, and Tunbridge Wells

Kent Wildlife Trust
Tel: 01622 662012

RSPB, Regional Office
Tel: 01273 775333

There are several county based organisations dealing specifically with certain species groups such as bats, birds, reptiles and amphibians, mammals, etc. Kent County Council or Kent Wildlife Trust can provide contact names and addresses for these groups.

Publications

Anon (1999). *A Better Quality of Life – a Strategy for Sustainable Development for the United Kingdom*. Cmd. 4345. The Stationery Office.

Anon (1998). *Making Biodiversity Happen – a supplementary consultation paper to Opportunities for Change*. Available from DETR, Eland House, Bressenden Place, London SW1E 5DU.

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Department of the Environment. (1994). *Planning Policy Guidance: Nature Conservation*. PPG 9. HMSO, London.

Kent Wildlife Habitat Survey Partnership (1995). *Kent Wildlife Habitat Survey – County report*. Kent County Council.

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Kent Association of Local Authorities (2000). *Kent Design – a guide to sustainable development*. Kent County Council.

UK Round Table on Sustainable Development (1998). *Business and biodiversity – a UK guide for understanding and integrating nature conservation and biodiversity into environmental management systems*. Earthwatch

Waite, A. (Ed.) (2000). *Kent Red Data Book – a provisional guide to the rare and threatened flora and fauna of Kent*. Kent County Council

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