



A snapshot of our work

New woodlands to help corporations tackle climate change

The Ecology Consultancy team at our Norwich office has been working with local organisation, Project Climate, on an exciting new project. Project Climate is creating corporate sponsored carbon offsetting projects through new woodlands developed on low grade arable land in the UK. We have been commissioned as technical consultants to conduct biodiversity studies, advise on planting plans, and to help predict future carbon stocks using Intergovernmental Panel on Climate Change (IPCC) methodology.

Project Climate's Apley Lincolnshire project will be the first in the developed world to achieve the Climate, Community and Biodiversity Alliance (CCBA) international standard. In the later stages of independent audit by the Rainforest Alliance, we remain technical consultants for this and future planned projects.

"Ecology Consultancy's help has been invaluable" says Project Director, James West. "I've been truly impressed by the depth of their knowledge, skills and above all their adaptability in what is new ground for all of us."



Consultants to the Leamouth Peninsula Development

Ecology Consultancy has been commissioned to undertake all ecological and greening work on the Leamouth Peninsula Development. This major new residential and mixed-use neighbourhood development will transform a brownfield site into 3,000 homes, stores, shops, restaurants, cafés, and an arts' facility. New public spaces will include landscaped plazas, cultural venues, communal gardens and a continuous promenade along the Peninsula perimeter.

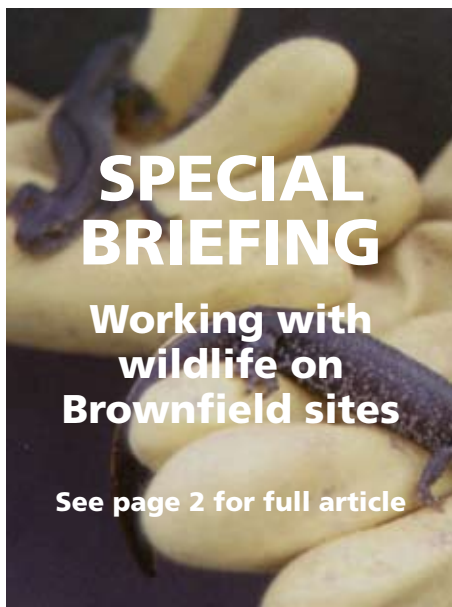
Working with leading international landscape designers Martha Schwartz on this project has presented a great opportunity to combine contemporary approaches to ecology and landscape design.

The vision for the Peninsula is based on the principles of sustainable mixed-use development

and we have been working on the ecological elements. The subsequent planning permission included ecological provisos and we have been able to assist with:

- mitigation, compensation and enhancement schemes
- landscaping and ecological management planning
- recommendations for biodiverse green roofs (in partnership with the Green Roof Consultancy)

The London population of the black redstart – a rare and specially protected bird – is concentrated along the Thames, east of Tower Bridge and in the Lea Valley. As a result Leamouth is a Key Area for black redstarts and we will be conducting ongoing surveys.



SPECIAL BRIEFING

Working with wildlife on Brownfield sites

See page 2 for full article

Keeping the Mersey sound

Recent work conducted on the site of a proposed rail freight depot proved the value of bringing in ecological expertise early on what was potentially a difficult site. Although the site was on contaminated land, it was considered likely to have populations of protected species such as reptiles, bats and wintering birds. It was also on the edges of the Mersey estuary, an internationally important site designated as a Site of Special Scientific Interest, a Special Protection Area, and a Ramsar site. It was therefore important to ensure that there were no indirect impacts from the project on the habitats or special interest features of the estuary.

Ecology Consultancy was brought in to conduct habitat and protected species surveys of the site. As a result of the surveys we were able to make practical recommendations for cost-effective mitigation measures for the important habitats and species found. Because we were brought in at an early stage, issues were identified whilst they could still be effectively managed, and solutions were more easily incorporated into the project.

Our reports formed the ecology chapter of an Environmental Statement and these were submitted as an important part of the application for planning permission.



Special briefing: Working with wildlife on brownfield sites

by **John Newton**,
Managing Director, Ecology Consultancy

Picture brownfield sites and you probably picture fly-tipping, derelict land, ruined buildings and a seemingly impenetrable jungle of vegetation. In short, a huge mess that needs to be cleared up and returned to economically beneficial use as soon as possible. Indeed the Government urges developers to focus on such sites in order to ensure that all land is being efficiently used. However, many of these brownfield sites are also havens for wildlife and, before any plans for redevelopment are brought forward – if nothing else – ecological surveys should be carried out. These surveys highlight the wildlife interest of the site and more importantly help to determine if there are any plants, or animals, present that might need special conservation measures.

So what's so special about brownfield sites?

It is the unmanaged and wild nature of these brownfield sites that makes them so attractive to all forms of wildlife and means that their development should be very carefully considered and planned.

Make sure you're not breaking the law

Some of our native flora and fauna are legally protected, and a breach of the legislation is a criminal offence which could result in fines or even imprisonment. You need to be aware of the law and, in terms of brownfield sites, the *Wildlife and Countryside Act 1981 (as amended)* is the most relevant. It protects a variety of plants and animals, many of which are likely to be found on brownfield land. Some of these species receive additional protection under the *Habitat Regulations 1994 (as amended)* meaning that proposed works where such animals occur may require licensing. Other potentially relevant legislation includes the *CRoW Act 2000* and the *Protection of Badgers Act 1992*.

The law is there to protect key species of plants and animals, as well as their habitats, and you may be in breach of the law if you develop a brownfield site without undertaking the appropriate surveys.

Planning guidance

As the need to provide more housing, work places and associated infrastructure puts more and more pressure on land and wildlife resources, the planning process will need to ensure that any ecological components are given due consideration. The most important piece of guidance in this respect

is *Planning Policy Statement 9 Biodiversity and Geological Conservation (2005)*.

Amongst other things it states:

- Planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests
- The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests
- Planning authorities should ensure that these species of principal importance for biodiversity, i.e. UK Biodiversity Action Plan (BAP) species, are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations

What, how and when to survey

The critical issue for ecological surveys is timing. Certain species of plant and animal may only be visible or active at certain times



of year and it may take several visits over a period of weeks, or months, to complete appropriate surveys. For example, great crested newts use ponds for breeding from March to June and therefore pond surveys can only be reliably carried out during that period. This would include at least two surveys during the peak breeding period between mid-April and mid-May. Outside that season surveys may be difficult or impossible, and may lead to project delays and added expense.

The best way to start is to carry out what is known as a Phase 1 habitat survey, combined with an assessment of the likely presence of protected and BAP species, as soon as possible in the site acquisition or development process. This will identify the principal habitats on site and give an idea of whether there might be important animal species, such as Species of Principal Importance for Biodiversity, on site. More detailed Phase 2 surveys may then be needed of any animal species likely to be present. For some species, such as bats, great crested newts and dormice, the surveyor will need to be licensed. The local Statutory Nature

Conservation Organisation (e.g. Natural England) can provide more advice on these issues.

We recommend that surveys are carried out by professional ecologists and members of the Institute of Ecology and Environmental Management (IEEM).

What happens next?

If a brownfield site has ecological value what are the options? The preferred option is to avoid damage or disturbance to habitats and resident species. Where that's not possible reducing the scale of impact, by designing in some form of mitigation, is the next best thing. This may require careful consideration of the requirements of the species, or habitats, involved and the setting aside of an area of the site for mitigation purposes.

The least favoured option is translocation of the species to an off-site location. However, this is not always successful and can be

complicated and difficult to administer. With certain species, licences may have to be obtained before translocation can be put into effect and this in itself can be time consuming. Even where licences are not needed the regulatory bodies, like the Environment Agency, may want to see method statements and assurances regarding all aspects of the translocation procedure.

One group of animals that regularly occurs on brownfield sites is reptiles, usually slow worms and/or common lizards. If these are found on site they will need quite a few capture visits to make sure the site can be considered clear of them. The biggest problem, however, often relates to finding a suitable alternative site. Available land can take time to find, and must be surveyed to see if reptiles are already present on site. If they are, the site may not be suitable for more. Even if it is suitable, works may have to be carried out to prepare it for the translocated animals. All this takes time and money and the sooner this is considered and factored into the development process the better.

In urban areas where space is at a premium, mitigation for the loss of brownfield habitat and any important species may be virtually impossible. One solution that ECL is promoting, through a venture with partners Livingroofs.org and Clear Environmental, is



the creation of green roofs. These can be designed to replicate a variety of habitats from the roof garden (intensive green roof) to the free-draining low nutrient wasteland site (extensive green roof). In the centre of

cities such as Birmingham and London, the creation of brownfield habitat on roofs is one way of ensuring the continued survival of rare species such as the black redstart, a relative of the robin, and various BAP invertebrates.

Brownfield sites can be very special places for wildlife and its presence shouldn't hamper development. Surveys should be undertaken early on in the development process to work out what is present and, in the face of development, to draw up adequate mitigation strategies. The costs of surveys are usually minor compared to the costs that may result from delays in the construction programme.

The Ecology Consultancy team can help you ensure that you stay on the right side of legislation and advise and train your staff on the best ways of working with wildlife. The existence of protected species on your brownfield site need not be a problem and for details of how we can help you just email enquiries@ecologyconsultancy.co.uk.

Species spotlight: Bats underground

by Tony Hutson

Although mild, January produced some record bat counts in the south-east (including Britain's single individual of greater mouse-eared bat back in its usual haunt); maybe the wet conditions have made them congregate in alternative sites. Of course we can't say much from one survey, but the data from January and February in hibernation sites throughout the country is pooled by the Bat Conservation Trust's National Bat Monitoring Programme (NBMP). Each year the NBMP produces an annual report giving trends from this and its other surveys.

Now an initiative is underway to develop a pan-European project to co-ordinate the monitoring of bats in underground habitats and its data. As part of this we also hope to see the development of Bat Life Europe, a partnership of bat-related NGOs throughout Europe.

The initiation of the pan-European project is partly driven by the Agreement on the Conservation of Populations of European Bats (Eurobats). The Agreement is an intergovernmental treaty developed, under the Bonn Convention, in conjunction with the 32 Party range states (plus others that collaborated fully). Eurobats has recently published guidance on the protection and management of underground sites⁽¹⁾. It includes a wealth of information, drawn from across Europe, on the mechanisms for site protection, management, creation and enhancement, and monitoring. This and other guidance results from international collaboration on a range of issues for the conservation of bats. Future publications will include guidance on survey requirements for wind turbines, and for consistent monitoring for all species. Such guidance is, of course, of a general Europe-wide nature and may need to be refined for local situations.

⁽¹⁾ Mitchell-Jones, A.J., Bihari, Z, Masing, M & Rodrigues, L. *Protecting and Managing Underground Sites for Bats*. Eurobats Publication Series, No 2.



Bradford schools go batty

As part of the Building Schools for the Future initiative in Bradford Ecology Consultancy has been working on three sites alongside engineering contractors Educo UK. Bat roosts were known to occur on some of the sites and detailed surveys were needed to assess the likely impacts of the redevelopment proposals on bats and to inform mitigation measures.

Of the three sites surveyed, bat roosts were confirmed in one and work is ongoing at

another to more fully assess the situation. At the school with the confirmed roosts, we recommended mitigation measures that allowed the work to continue with the minimum impact on the bat population and the construction programme. This included designing new roosts to fit into the new school walls. We also obtained European Protected Species Licences for the site and we will continue to be involved with the site as the works continue.

Informing living roofs policy

Ecology Consultancy recently completed a piece of research for the Greater London Authority (GLA) and Design for London in regard to the possible inclusion of a policy on living roofs and walls in the Further Alterations to the London Plan. Our team, led by associate and green roof campaigner Dusty Gedge and John Newton, undertook the work in association with Savills Hephher Dixon and EPG Clear. The research was instrumental in supporting the inclusion of the following policy in the London Plan.

Policy 4A.11 Living Roofs and Walls

The Mayor will, and boroughs should, expect major developments to incorporate living roofs and walls where feasible and reflect this principle in LDF policies. It is expected that this will include roof and wall planting that delivers as many of these objectives as possible:

- accessible roof space
- adapting to and mitigating climate change
- sustainable urban drainage
- enhancing biodiversity
- improved appearance

Boroughs should also encourage the use of living roofs in smaller developments and extensions where the opportunity arises.

The Mayor has now published the full report – *Living Roofs and Walls Technical Report Supporting London Plan Policy* – available on the GLA website at:

www.london.gov.uk/mayor/strategies/sds/docs/living-roofs.pdf

Other information on Living Roofs issued by the GLA is available at: www.london.gov.uk/mayor/auu/livingroofs.jsp

New staff

Ecology Consultancy is a fast-growing consultancy and we are pleased to welcome a whole host of new staff who have joined us recently.

In the London office, we have **Corrado Cacciarru**, our GIS specialist, who joined us from local government just before Christmas. He is responsible for GIS mapping, design and project management. We also have two new ecologists – **Wendy McFarlane** joins us from the Centre for Ecology and Hydrology, and **Toni Harrington**, who worked with us last summer, rejoins us after completing her MSc. **Caroline Nash** is our new bookkeeper and is also studying animal biology and conservation.

Niall Grieve is based in our newly-formed Oxford office and specialises in habitat surveys with a focus on aquatic ecosystems. **Jo Clarke** joins our Lewes office as an assistant ecologist. She gained her work experience with us during her MSc and has returned to specialise in birds and botany.

The Norwich office has also been busy expanding and has taken on two assistant ecologists specialising in all things botanical. **Alex Prendergast** joins us after his MSc at Edinburgh University and **Tracy Simpson** also recently completed her MSc at Sussex University.

Code for Sustainable Homes

Last year the Government outlined its plans for the 3 million additional homes it wants to see built by 2020. This was supported by a Green Paper (Cmd 7191) *Homes for the Future: more affordable, more sustainable* and a number of related documents. At the same time the Government sought views on whether the Code for Sustainable Homes (CfSH) should be a mandatory requirement and thus become a key part of its Homes for the Future delivery mechanism. An initial summary of responses to the consultation on 'The future of the Code for Sustainable Homes – making a rating mandatory' is available at www.communities.gov.uk/publications/planningandbuilding/sustainablehomes

Ecology Consultancy is currently working with a number of developers in assessing their projects against the ecological section of CfSH, and it does appear that the take up of the scheme is fast gathering pace! Whether it becomes mandatory remains to be seen but developers can no longer afford to ignore it.

Building Greener out now

John Newton was pleased to have been part of the team that developed the long-awaited guidance on green roofs and walls, *Building Greener*, for CIRIA. The team comprised green roof campaigners Dusty Gedge and Paul Early (livingroofs.org) and SUDS specialists Phil Cooper and Steve Wilson (EPG Clear). This easy-to-use resource looks at the planning, design, construction and maintenance issues surrounding the incorporation of green roofs, green walls and associated features in buildings. It looks at a range of different property types for both new and existing buildings, provides a comprehensive assessment of published information on the subject, and helps to dispel the myths for clients and designers.

The guidance includes information on:

- the framework and drivers for including green roofs and walls provided by planning guidance, Building Regulations etc.
- the benefits and challenges, design choices and construction and maintenance issues in relation to each of the features
- case studies – highlighting good practice and lessons learnt
- key points summarising each chapter for quick reference
- references for further information

To order your copy of *Building Greener*, or to find out more, please visit the CIRIA website at www.ciria.org/buildinggreener

Standardised Planning Applications to include biodiversity

From 6 April 2008 the Government intends to amend the Town and Country (General Development Procedure) Order 1995 to introduce a mandatory standard application form and associated information requirements for validation of applications. Guidance on the adoption of the new form is provided in *The Validation of Planning Applications – Guidance for local planning authorities* which is available to download at www.communities.gov.uk/documents/planningandbuilding/pdf/582764

The guidance proposes a list of mandatory issues to be included at a national level, with a list of additional optional issues for consideration of inclusion at the local level. A Biodiversity Survey and Report is one of the latter options. The guidance states that

'Where a proposed development may have possible impacts on wildlife and biodiversity, information should be provided on existing biodiversity interests and possible impacts on them to allow full consideration of those impacts. Where proposals are being made for mitigation and/or compensation measures, information to support those proposals will be needed'.

John Newton said "The new form is going to make a tremendous difference to the way in which developers view the ecological aspects of their sites. Early scoping and Phase 1 surveys, along with appropriate mitigation, are going to be essential if the planning process is to go as smoothly as developers would wish."

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East Lindsey Biodiversity Study

Ecology Consultancy has been appointed by East Lindsey District Council to undertake a resurvey and evaluation of some 224 non-statutory Sites of Nature Conservation Importance in the district. The information will be used to select Local Wildlife Sites to be included in the emerging Local Development Framework for East Lindsey.