Planning for Invertebrate Biodiversity
by Greg Hitchcock of Buglife

Brownfield sites can support high biodiversity, and can be of national importance for invertebrates, but that this value is not often recognised. Such sites are under threat from development, owing to government development targets designed to reduce urban sprawl and promote urban regenration. As an area with a relatively hot and dry climate, the Thames Gateway is home to many invertebrate species, many of which are on the edge of their European range and are found nowhere else in the country.

The 'All of a Buzz...' project has been working in the Thames Gateway and Greater London since 2005. Using a methodology to assess the probable biodiversity value of brownfield sites we have been producing databases and GIS layers which are provided to planning authorities and NGOs. Almost 500 sites have been assessed, covering over five thousand hectares. Twenty-four percent of sites have been assessed as having a high biodiversity, with 22% and 54% of sites having a medium and low biodiversity respectively. Most small sites provide fewer opportunities to wildlife, and most are low in biodiversity interest. Sites of high biodiversity vary in size a lot, but tend to be dominated by large sites. This is reflected when we look at the results in terms of area; 55% of the area of brownfield has been assessed as having a high biodiversity.

The information being gathered should help prioritise further investigations and feed into forward planning. There are a number of reasons why this is necessary:

Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9) requires the use of biodiversity information not only in development control decisions, but also in forward planning. This is part of an overall requirement in planning policy for all planning decisions to be based upon 'up-to-date environmental information'. This biodiversity information would also be useful in reducing impacts on biodiversity by identifying alternative sites where specific developments would have a lesser impact on biodiversity. There are now many new BAP species associated with brownfields, and the BAP habitat 'Open mosaic habitats on Previously Developed Land' will be present on many high biodiversity brownfield sites. PPS9 requires the identification and conservation of these types of habitats and species, even if they are outside of the designated sites system. Ultimately, PPS9 requires no net loss of biodiversity as a result of development.

The Natural Environment and Rural Communities Act requires that "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." In theory this should have no effect on the planning system because the biodiversity considerations in PPS9 are stronger. However, there are other ways that the biodiversity of brownfields can be impacted by the actions of public authorities outside of the planning system. These include control of invasive species (which if done sensitively can have a beneficial effect on biodiversity), dealing with antisocial behaviour on brownfield sites, and other issues relating to estates management.

In April 2008, along with a new standard form for planning applications will be the option for planning authorities to identify a 'Biodiversity Survey and Report' as a required document in the validation of planning applications. This will not replace the need for an Environmental Impact Assessment (EIA) for sites that fall under the EIA regulations, but will potentially apply to those sites which do not fall under the EIA regulations but nevertheless have significant biodiversity interest.

There are sound financial reasons for identifying biodiversity at the forward planning stage. Mitigation and compensation costs time and money, and sites supporting high biodiversity are likely to generate objections to planning applications. If these costs can be foreseen and avoided, the costs of development can be reduced. Even if they cannot be avoided, planning in advance for biodiversity, through intelligent masterplanning and increasing the mitigation development period, can increase the likelihood of achieving sustainable development.

Ecosystem Services is the name given to the benefits provided to people by the environment. These vary in how direct the benefits are, and therefore how tangible they are. They include things like pollination services provided by insects, and the reduced healthcare costs, especially mental healthcare costs, as a result of human interaction with biodiversity and green spaces. Ideally, the value of ecosystem services lost as a result of developments should be costed in to reflect the true cost of those developments. Defra have recently produced guidance on Ecosystem Services and their valuation. ('Securing a healthy natural environment: an action plan for embedding an ecosystems approach' and 'An introductory guide to valuing ecosystem services' both Defra, 2007).

The degree to which biodiversity is taken into account in planning, and the stage at which it is considered, has a big influence on the likelihood and cost of achieving sustainable development. The more it is taken into account, and the earlier it is taken into account, the more likely it is that sustainable development will be achieved, and the cheaper that achievement will be. This may be stating the obvious, but, in the Thames Gateway at least, it is not happening, and biodiversity continues to be lost as a result of development at an alarming rate.

From conversations with planning authorities through the Thames gateway and Greater London, the barriers to sustainable development were identified as a lack of: awareness of the biodiversity value of brownfields (though this is improving); information available on the biodiversity value of brownfields to feed into forward planning; and resources, both skills and financial, to gather that information. This leads to poor forward planning, which results in inappropriate site allocations. High biodiversity brownfield sites are not being identified, so high density developments are being directed onto such sites, while lower biodiversity sites are being ignored for a variety of reasons. Currently, the lack of biodiversity information feeding into forward planning is leading to an imbalance in the decision making process.

The only way we are going to overcome these barriers and achieve sustainable development, is if all levels of government, NGOs, land owners and developers work together to provide the funding, information, awareness and skills needed to fill the gaps.

Buglife will be producing a report in Spring 2008, 'Planning for Brownfield Biodiversity', summarising the results of the assessment of Thames Gateway brownfield sites and making recommendations on how to achieve sustainable brownfield development with regard to biodiversity. For information email greg.hitchcock@buglife.org.uk.

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