



Research Information Note

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Planning for biodiversity – opportunity mapping and habitat networks in practice: a technical guide

Report Authors: Dr Roger Catchpole Date: May 2006

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Introduction

This work has been undertaken to try and provide a bridge between science and practice. It has attempted to demonstrate how first principles might be applied to existing information in order to try and deliver a standardised, ecologically robust starting point for the delivery of both regional and local spatial planning. In doing this it has not only provided a framework for strategic environmental enhancement across large areas but it has also informed a number of Regional Spatial Strategies (RSS). At a smaller scale it has evaluated the potential landscape permeability between sites. This has been essential in developing a credible response to obligations to define and manage networks of habitat.

What was done

The work relied on widely available information sources that included national habitat inventories, Landscape Description Units (level1) and Land Cover Map 2000. The analysis was based on two different approaches. The first utilised a landscape characterisation framework to package biodiversity information. The second utilised site-based information to indicate the degree of functional connectivity between sites. This work was undertaken in partnership with regional biodiversity forums. The products were distributed to English Nature staff and selected local record centres between 2005 and 2006.

Results and conclusions

The results provide spatially referenced indicative habitat networks, at three different dispersal intervals, for woodlands, heathlands, grasslands and mires/fens/bogs. A series of biogeographic summaries were also produced for a number of regions that have since provided the basis for strategic, environmental enhancement maps for two RSS submissions. The habitat network analysis will be used to create planning guidance to help frame Local Development Frameworks (LDF) and Green Infrastructure Planning (GIP) in one region. The work successfully demonstrated how strategic, character-based frameworks can be used, in conjunction with biodiversity information, to set realistic environmental objectives. At the level of the individual site, this work has also demonstrated how the degree of connectivity, that might be present between similar habitats, can be evaluated and how clusters of sites might function as a wider network.

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English Nature's viewpoint

The methodology makes a direct and pragmatic contribution to setting ecologically robust frameworks for the delivery of Regional Spatial Strategies, Local Development Frameworks, Green Infrastructure Planning, Local Biodiversity Action targeting, climate change adaptation and future agri-environment targeting. The different approaches have now been demonstrated across a number of different regions. The strategic, biogeographic analysis is potentially available to all regions while the patch-based analysis is currently available in only two. The availability of the site-based analysis will be extended to cover the whole of England. Neither approach is intended as a replacement for existing initiatives but as something that will provide a common starting point for local action as well as a consistent response to strategic issues such as habitat fragmentation and climate change.

Selected references

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