



## INSTITUTE of ECOLOGY and ENVIRONMENTAL MANAGEMENT

### Position Statement on Ecological Networks and Protected Areas

November 2010

#### OUR VISION

1. IEEM supports the vision of a coherent network of legally defensible protected spaces integrated and linked through expanded functional ecological networks within the wider land and seascape. IEEM believes that a protected areas system is the essential core to such a network and that it should be sufficiently robust to safeguard species and ecosystems, yet flexible enough to safeguard mobile organisms such as wide-ranging marine mammals and migratory birds. We foresee a protected areas system embedded in wider ecological networks which delivers benefits for people (e.g. access to green space, recreation, educational resources), safeguards biodiversity and protects the natural environment. Robust ecological networks would provide sufficiently large areas of land and sea to protect key life support systems in the face of climate change.

#### BACKGROUND

2. Emphasis on protected areas is extremely high in the wake of major international (UN Aichi Targets, EU 2020 Biodiversity Targets) and national drivers (e.g. Making Space for Nature<sup>1</sup>, UK National Ecosystem Assessment). Protected areas aim to achieve the long-term conservation of nature, associated ecosystem services and cultural values through the designation of a clearly defined geographical space, recognised, dedicated and managed through legal or other effective means<sup>2</sup>. The current UK administration is committed to "introduce measures to protect wildlife and promote green spaces and wildlife corridors in order to halt the loss of habitats and restore biodiversity"<sup>3</sup>. We support the view submitted to the UK Government that the current system of wildlife sites "does not comprise a coherent and resilient ecological network"<sup>1</sup>. Protected areas form the fundamental component of our ecological network and have served as one of the key mechanisms for safeguarding environmental assets for many decades. However, 'Making Space for Nature' concludes that the ecological networks needed to support functional protected areas are at present inadequate.
3. We recognise that nature does not respect national boundaries and that the high level designations of the UK and Ireland are set in a European (e.g. Natura 2000) and global (e.g. Ramsar) context. Protected areas vary from national and international statutory sites to local non-statutory sites, designated for their biological, geological and/or landscape interest. At any given scale, a protected area will have value in its own right and also in relation to the connectivity it provides within the entire protected sites network.

<sup>1</sup> Lawton, J.H. et al (2010) *Making Space for Nature: a review of England's wildlife sites and ecological network*. Report to Defra

<sup>2</sup> Dudley N (Editor) (2008) *Guidelines for Applying Protected Area Management Categories*. IUCN, Gland, Switzerland and Cambridge, UK.

<sup>3</sup> *The Coalition: our programme for government*, The Cabinet Office, May 2010

## OUR UNDERSTANDING

4. Ecological networks may function through their *component* features and/or designated sites. Alternatively, it may be that the overall fabric of the *wider* land/seascape provides such functionality. Protected areas occupy a greater proportion of land in relation to those at sea. The degree to which patterns of environmental variation, land cover and bio/geodiversity features are represented within protected areas is critical and we recognise that there are places of high biodiversity, geodiversity and cultural importance that remain undesignated and unprotected, yet are essential components within our wider ecological networks. Larger sites and/or those that possess a greater degree of connectivity are more likely to achieve their long-term conservation objectives, especially in relation to the retention of viable populations, in providing space for fully functional processes and in responding to the threats of climate change.
5. Protected areas and the wider ecological networks provide multiple ecosystem goods and services (such as food, pollination, flood alleviation, drinking water, carbon sequestration), as well as enhanced opportunities for tourism, recreation and overall well-being. In economic terms, the provision of such goods and services outweighs the cost of maintaining such areas. Whilst the valuation of ecosystem services demonstrates the importance of protected areas beyond their nature conservation value<sup>4</sup>, it does not necessarily imply that such services are tradable. Urban (including 'local') sites are integral to the protected area network, especially in the context of connecting people with nature. The future of protected areas is dependent upon communities gaining a sense of appreciation and ownership through local input and governance, along with effective management provided by suitably qualified professionals.
6. Our protected areas and ecological networks face a number of increasing pressures from, for example, development (including renewable energy), inappropriate agriculture, fisheries and forestry. Climate change is having both direct (e.g. changing weather patterns) and indirect (e.g. changing approaches to energy, food, water and raw material consumption) effects, with the potential to exacerbate the impacts of other anthropogenic actions. Such impacts may be mitigated by buffers and networks of interconnected sites sufficient to allow dynamic systems to operate, enabling the protection of features or processes for which they are designated and thereby enhancing ecological resilience within the wider landscape. Local wildlife sites, while not being afforded legal protection, play an integral role in this respect.

## IEEM RECOMMENDATIONS

- Further designation of marine protected areas, especially beyond territorial limits.
- Expansion of protected areas, applied at a landscape scale, to provide coherent functioning networks that safeguard biodiversity and ecosystem services simultaneously
- Urgent implementation of effective governance systems and adequate resource allocation, along with a more integrated and coherent legislative framework that effectively links terrestrial, freshwater, coastal and marine sites, particularly with regard to planning.
- Strengthening of terrestrial protected areas through use of the non-statutory site system.
- Recognition of ecosystem service provision as part of the value of sites.

The Institute urges the UK and Irish Governments to consider fully the importance of improving the connectivity of protected areas in future legislation (e.g. the forthcoming Natural Environment White Paper (England)) and to take the lead in achieving the UN Aichi Targets. In the interim, Governments should take measures to ensure that our biodiversity assets and the services they provide are secured as public goods with sufficient funding and support.

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<sup>4</sup> TEEB (2010) The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB.