

9. Access to information

There is rising pressure for decisions regarding both biological and geological conservation to make maximum use of available information. The barriers to this are often not so much that the data do not exist but rather they are held in a wide range of formats and locations; potential users are often unaware of their existence or lack the time or skills necessary to assimilate them. One of the aims of the Access to Information programme is to address these problems, and JNCC provides advice and expertise on all levels, from local right up to global.

The programme has been focused largely on the technical aspects of gaining access to data, such as the development of *Recorder*, a system for entering and collating biodiversity data in a standard digital format, and the *NBN Gateway*, which allows a user to find what biodiversity information is available online rapidly.

Recorder

There is an enormous amount of volunteer recording in progress across the UK, with over 100 million records currently available in electronic format, and perhaps twice that number in non-digital format. The project to develop Recorder, which began in 1996, set out to improve the quality and quantity of data available from the volunteer community, by providing an easy means by which data owners could enter and collate data while adopting the relevant dictionaries and standards.

During 2005/06, JNCC released *Version 6* of this product. This is the first version that allows virtually limitless numbers of records to be held in a single copy; previous versions were limited to holding approximately one million records. It is aimed particularly at the more organised and professional sectors of the community, such as voluntary recording schemes and Local Record Centres, who are often dealing with very large volumes of data. The release of the package has been deliberately staggered to allow any necessary improvements to be made before it has too wide an uptake. This has gone well and the package will be made more widely available later in 2006.

A provisional survey of 50 Local Record Centres (bodies responsible



42. English meadow

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Neutral grassland habitat has declined dramatically in England, as meadows have been ploughed and fertilised. The National Biodiversity Network allows us to track the declining fortunes of meadow plants, such as these orchids, and by linking through to the Global Biodiversity Information Facility, we can improve our understanding of the UK responsibility for conservation. Currently, it is believed that the UK contains more than 25% of the European population of plants such as the northern and southern marsh orchids.



for collating records made within a local geographical area) suggested that roughly 50 million records were digitally available within those organisations surveyed. The survey found that 41 were using a version of *Recorder* and eight had already switched to *Recorder 6*.

The National Biodiversity Network

In 2000, the National Biodiversity Network (NBN) Trust was formed with representatives from JNCC, English Nature, the Countryside Council for Wales, Scottish Natural Heritage, the Royal Society for the Protection of Birds, the National Federation for Biological Recording, the Environment Agency and the Marine Biological Association. Membership has since expanded to include the Scottish Environmental Protection Agency, the Freshwater Biological Agency and the British Ecological Society. It had the goal of establishing a co-operative network of biodiversity databases to allow

rapid access to the wealth of information available within the UK.

Ensuring the data are digitised and collated in standard format is the first part of the problem, but critically they must also be made more widely available. The NBN has the basic goal of solving this problem through establishing a co-operative network of biodiversity databases, thus allowing rapid access to the information. A major component of this has been the development of the *NBN Gateway*, a project which has been managed by JNCC.

The project aims to provide a single internet site where potential users of biodiversity data can access what information is available rapidly. The site, which can be viewed at www.searchNBN.net, also allows some simple reporting such as the production of maps, or a species list for a geographical area. The last year has seen substantial increases in both the volume of data available through the site, which now stands at 20 million species records, and the level of use the site receives, which has nearly doubled over the last twelve months. This has necessitated some redevelopment during 2005/06 to maintain the performance and reliability of the system under these increased loads.

During 2005/06, the *Gateway* team began to develop the technology, known as *web services*, to allow the data and reports available through the *Gateway* to be integrated seamlessly into other websites and systems. A further challenge is to increase the content of the NBN data resource through negotiations with other organisations. The restrictions to increasing capacity

43. Ruddy darter, mating *Sympetrum sanguineum*

© Paul Glendell/English Nature
Records of this species have shown that it is expanding its range, possibly in connection with climate change.

are not technical but overcoming the reluctance of some potential data providers to provide data, and to allow sufficient access to it.

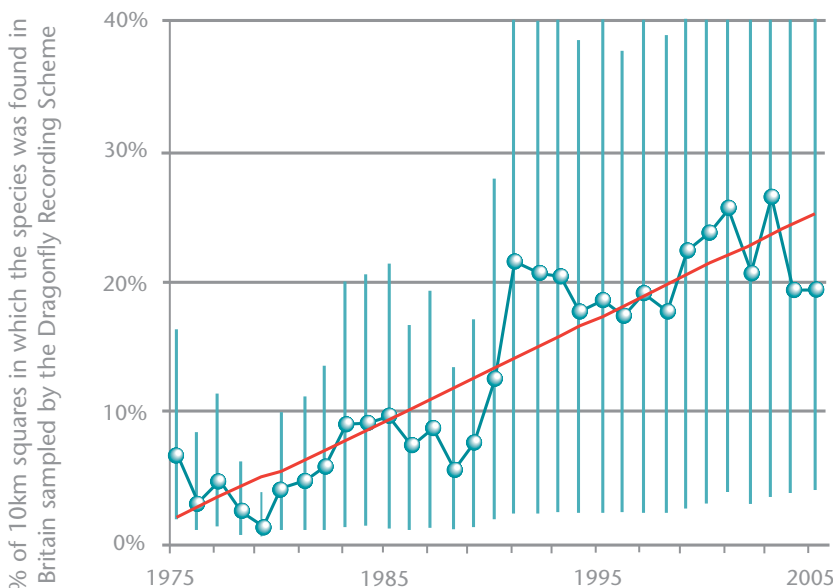
Global Biodiversity Information Facility

The Global Biodiversity Information Facility (GBIF) (www.gbif.org) is an international organisation that is working to make the world's biodiversity data accessible anywhere in the world. At March 2006, GBIF had 70 members, including 47 countries.

Globally, the majority of countries are looking to make the best use of their biodiversity data sources as they strive to reduce the rate of biodiversity loss, and make sustainable use of their biodiversity. Many countries share the UK situation where their biodiversity data is a fragmented and hard-to-use resource, but with the added complication that many of the sources of information are held in the major collections and science institutions of the West.

GBIF is an international collaboration between countries, and between international organisations, that is establishing the standards and technologies that allow countries to get their data into accessible digital formats, and link it together through the internet, so that within-country and external sources can be used as a unified whole.

The UK's engagement with GBIF is through Defra who lead a range of stakeholders, including research councils, the major collections institutions and the NBN Trust. JNCC has helped this group influence GBIF's strategy for its next five years of operation, ensuring that GBIF focuses on skills and technology transfer to help developing and transition countries exploit their data resources, seeks partnerships internationally to develop global and regional applications of the available data (to support the objectives of the Convention on Biological Diversity,) and provides a clear means of finding and using all available data through an internet access point.



44

44. Graph drawn up from records of the ruddy darter *Sympetrum sanguineum*
© JNCC

The expansion of this species over time is shown by the general trend line (in red); geographical spread analyses furthermore indicate an expansion to the north and west from south-east England. The blue vertical lines are 95% confidence intervals around the calculated proportion.