

Marine Life Information Network (*MarLIN*)

Identifying species and ecosystem sensitivities.

Final Report to the Department for Environment, Food and Rural Affairs.

Executive Summary

The programme of work was commissioned in September 1998 to supply information to underpin the UK's commitments to protection and conservation of the ecosystems and biodiversity of the marine environment under the 1992 OSPAR Convention on the Protection of the Marine Environment of the North East Atlantic. The programme also provided support for the implementation of the Biodiversity Convention and the EU Habitats Directive.

The *MarLIN* programme initiated a new approach to assessing sensitivity and recoverability characteristics of seabed species and biotopes based on structures (such as the seabed biotopes classification) and criteria (such as for assessing rarity and defining 'sensitivity') developed since 1997. It also developed tools to disseminate the information on the Internet. The species researched were those that were listed in conventions and directives, included in Biodiversity Action Plans, or were nationally rare or scarce. In addition, species were researched if they maintained community composition or structure and/or provided a distinctive habitat or were special to or especially abundant in a particular situation or biotope. At its conclusion in August 2001, the work carried out under the contract with DETR/DEFRA had:

- Developed protocols, criteria and structures for identifying 'sensitivity' and 'recoverability', which were tested by a programme management group.
- Developed a database to hold research data on biology and sensitivity of species and biotopes.
- Defined the link between human activities and the environmental factors likely to be affected by those activities.
- Developed a user-friendly Web site to access information from the database, on the sensitivity and recoverability characteristics of over 100 species and basic information on over 200 species.

Additionally, the project team have:

- Brought together and facilitated discussion between current developers and users of electronic resources for environmental management, protection and education in the conference 'Using Marine Biological Information in the Electronic Age' (19-21 July 1999).
- Contributed to the development of Ecological Quality Objectives for the North Sea (Scheveningen, 11-3 September 1999 and subsequent papers).
- Provided detailed information on species as a supplement to the National Biodiversity Network Gateway demonstration www.searchnbn.net.
- Developed a peer-reviewed approach to electronic publication of updateable information.
- Promoted the contract results and the *MarLIN* approach to the support of marine environmental management and protection at European research fora and, through the web site, internationally.

The information available through the Web site is now being used by consultants and Government agencies. The DEFRA contract has been of critical importance in establishing the Marine Life Information Network (*MarLIN*) programme and has encouraged support from other organisations. Other related work in the *MarLIN* programme is on-going, especially to identify sensitivity of biotopes to support management of SACs (contract from English Nature in collaboration with Scottish Natural Heritage), to access data sources (in collaboration with the National Biodiversity Network) and to establish volunteer recording schemes for marine life.

The results of the programme are best viewed on the Web site (www.marlin.ac.uk). Three reports have been produced during the project. A final report detailing the work undertaken, a brochure 'Identifying the sensitivity of seabed ecosystems' and a CD-ROM describing the programme and demonstrating the Web site have been delivered as final products in addition to the Web site.