

present. Two biogeographic regions were proposed: Arctic and Atlantic. Three vertical biological zones were proposed (Upper Bathyal, Lower Bathyal and Abyssal) that relate to changes in water mass with depth. Zones should be selected primarily based on the biological community present if possible, but depth proxies representing water mass structure were also defined. Substratum categories were taken from the existing MHCBI and EUNIS to ensure compatibility. The deep-sea section of the classification will be made available on the JNCC website (jncc.gov.uk) along with guidance documents, background information and a database that allows users to search for biotopes based on characterising variables. Deep-sea biotopes in the MHCBI will be proposed for inclusion in the upcoming revision of EUNIS to ensure classification within the UK is consistent with the approach taken at the European scale.

THE EUROPEAN OCEAN BIOGEOGRAPHIC INFORMATION SYSTEM (EURO-BIS): ONLINE SOURCE FOR MARINE QUALITY CONTROLLED BIOGEOGRAPHIC DATA

L. Vandepitte, F. Waumans, L. Tyberghein, B. Vanhoorne, F. Hernandez

Flanders Marine Institute (VLIZ), Oostende, Belgium

Knowledge on species occurrences in space and time is of the utmost importance in biological research. Although species occurrence information is highly relevant and often requested by scientists, this kind of data can be hard to find and sometimes even harder to access...

The European Ocean Biogeographic Information System – EurOBIS – helps filling this gap in our scientific knowledge, by making the largely scattered and very diverse biogeographic data on marine species freely available and easily accessible online. EurOBIS brings together biogeographic data that are either collected within European marine waters or by European researchers and institutes outside Europe, with a focus on taxonomy and distribution records in space and time and offers a number of online tools to easily query and visualize the data.

EurOBIS does however more than just putting the available data online. As an additional service to its users, all received data go through a series of quality checks. The aim of these quality control (QC) procedures is two-fold. First of all, it helps the data management team and data providers to check the quality and completeness of the submitted data and to detect (possible) errors. Secondly, the assigned quality flags can help users in selecting data that are fit for their use and purpose. The assigned quality control flags can be combined according to the required ‘fitness for use’ for the users, thereby creating specific filters on the available data within EurOBIS. The European Marine Data and Observation Network (EMODnet) Biology (<http://www.emodnet-biology.eu/portal/>) makes the EurOBIS data available through its data portal and is currently applying such a filter. EMODnet only makes available those distribution records from EurOBIS that comply with specific QC steps, including e.g. only records that were identified till genus or species level and locations within the marine environment. On the dataset level, users can see how many records have passed the postulated quality control procedures and are thus available through the portal.

EurOBIS is part of the central taxonomic backbone of LifeWatch, which aims at standardizing species data and integrating the distributed biodiversity data repositories and operating facilities. In this framework, the database structure of EurOBIS is being expanded, making it possible to not only capture presence or abundance of species but also to offer e.g. biomass data and length-measurements in a standardized and structured way. EurOBIS closely links with other ongoing European and international initiatives, such as the World Register of Marine Species (WoRMS, www.marinespecies.org), the most authoritative and comprehensive list of names of marine organisms. In addition, a link is being prepared between these distribution and taxonomic databases and ecological species traits. The documentation of species traits is currently ongoing within EMODnet Biology and WoRMS. Linking taxonomy, distribution and ecological information on a species level will open up a wide range of possibilities related to ecological research. Within EMODnet Biology for example, EurOBIS data will – amongst others – be used in the creation of spatially distributed data products with specific relevance for Descriptor 2 of the European Marine Strategy Framework Directive (MSFD), dealing with non-indigenous species.

Currently (April 2014), EurOBIS holds 544 marine datasets representing over 17.3 million distribution records, of which 87% or 15 million are available through the EMODnet Biology Portal. The development and maintenance of EurOBIS and the related quality control procedures is part of the VLIZ contribution to LifeWatch, and funded by the Hercules Foundation. The main goal is to facilitate the fitness for use of individual and integrated biogeographic data for scientists, by offering several tools that help in the assessment of the completeness and validity of distribution records.