

MARBEF PROGRESS

EUROBIS: growing in numbers

By Edward Vanden Berghe

The Ocean Biogeographic Information System, OBIS, is both the marine component of the Global Biodiversity Information Facility (GBIF) and the Information component of the Census of Marine Life (CoML). Its international portal is hosted by Rutgers University in New Jersey. EurOBIS is one of a growing family of regional OBIS nodes. Through these regional nodes, OBIS is brought closer to the regional scientific communities, and is better equipped to support these scientists in making their biogeographical data available through web-based systems.

For some time now, EurOBIS development is completed, and the system has been running smoothly since it came online in June 2004. Progress has been quantitative rather than qualitative; the main systems have been built, and are being gradually filled. Growth is presented graphically in Figure 1. At the time of writing, there were over 3,400,000 distribution records, coming from 42 different data collections.

Looking at Figure 1, it is immediately obvious that there is a great variation in size between the different data collections; actually, the difference is more than what is apparent from the graph – the smallest collections are not visible in the graph. One might argue that dealing with these small data collections is not cost-effective, and that we only should deal with the large ones. Obviously, this is not the view we take. First of all, the large collections are often hosted in institutes that have quite a bit of data management expertise, and were often already available online through the website of the data custodian. It's with the smaller collections

that EurOBIS makes a difference: these would not be available unless they were included in EurOBIS. It is also these small collections that run the risk of disappearing completely, dying a slow death in a shoebox or having their last moments on a floppy disk on top of a loudspeaker. Contributing to the preservation of biodiversity information, these small datasets are one of the tasks of the data management of MarBEF.

EurOBIS is supported by several other data- and information systems. Documentation of the dataset, including data collectors, projects and publications based on the data is done through IMIS, also visible as the 'Register of Resources' on the MarBEF site. The geography is standardised through a Gazetteer, which is visible as a separate system through the VLIZ website (<http://www.vliz.be/vmdc/data/vlimar/>). And taxonomy is standardised through the European Register of Marine Species. Both the gazetteer and ERMS are classifications, and use the hierarchies to support

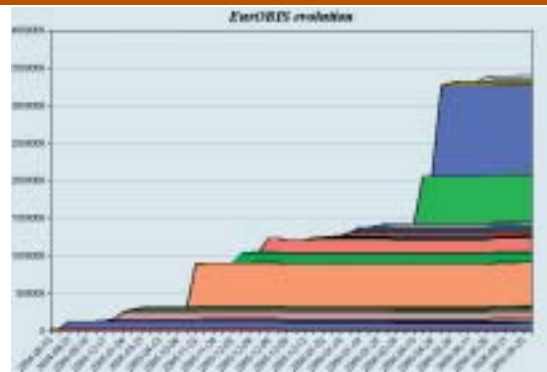


Fig 1. Growth of EurOBIS. Colours are different data collections. See website for legend of colour coding: <http://www.marbef.org/data/eurobisproviders.php>.

searching and browsing. The hierarchies make it possible to ask such questions as 'Which Echinodermata live in Belgium?' Chances are that there is not a single record for Echinodermata in Belgium – but the system knows that, for example, Zeebrugge and Oostende are both in Belgium, and that *Asterias rubens* and *Amphiura filiformis* are Echinodermata, and return a complete list.

Well over three million distribution records sounds like a lot of data. But we know that there are many more datasets that have been collected in the past, and are still being collected. We hope that the MarBEF community is now convinced of the benefits of data sharing, and that many more datasets will be made available for inclusion in EurOBIS.



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Starfish eating sea potato.

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Curonian Lagoon.

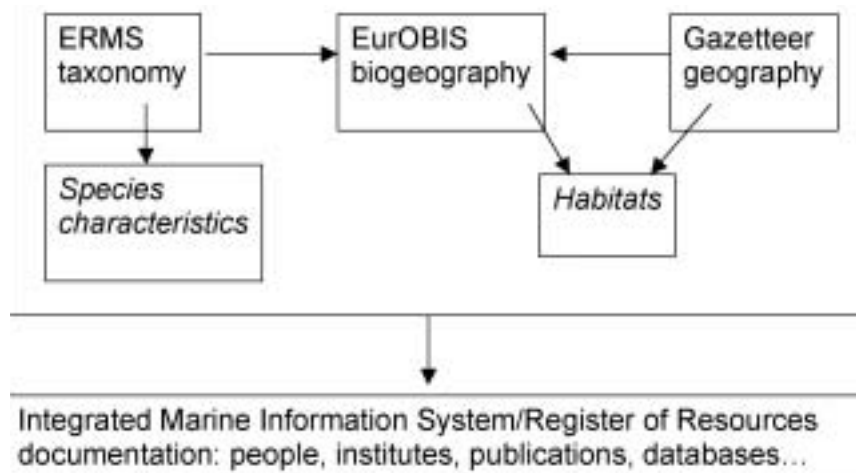


Fig 2. Data systems supporting EurOBIS. 'Species characteristics' and 'Habitats', shown in italics, are both possible extensions that are not implemented yet.