WP1: Towards more European marine biodiversity data integration

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Data integration and dissemination are some of the fruitful products of MarBEF, and for this good data management practices are essential. MarBEF is recognizing that and is making good progress. The amount of data integrated and effectively used is increasing. The responsive mode project on data archeology allows for rescuing data and making them available in a digital format suitable to share with a much larger public.

Europe has now two unique and large integrated databases, one on soft-bottom macrobenthos (macroben database) and one on meiobenthos (Manuela database). The subproject LargeNet will do a similar job on hard-bottom macrobenthos and pelagic biota. The benefits of these kinds of integrative projects are enormous. The analyses that are going to be done on these databases with such an extensive geographical, temporal and taxonomical scale will undoubtedly bring several new insights, which were impossible to obtain on an individual basis.

We strongly support the MarBEF's philosophy of open access to data within a partnership approach and actually thanks to many partners a lot of data have been contributed and are now freely available through the European node of the Ocean Biogeographic Information System (EurOBIS). With 3.5 million records from 47 data providers, EurOBIS serves one third of all species distribution records in the world and hopefully still much more will be added in the future. Also interesting is that EurOBIS integrates data from a variety of data sources, from large-scale monitoring surveys to time-series of a single location, from observational data to museum collections. EurOBIS is making good progress and is already an important source to data discovery. Although we are aware that this is just a tiny bit of the top of the iceberg, and we will have a lot more work just to get the data currently at risk of being lost forever, to be integrated and made publicly available as soon as possible.

Another big challenge is also to control data quality. We rely very much on the data providers, but there are a number of things we can do, such as to link the taxonomic names with the European Register of Marine Species (ERMS) – there is now also an online tool where you can do this exercise yourself (called taxon match) – and to check the geographical positions and other parameters related to them. Extensive metadata, the information on the datasets, describing the accuracy of the data, the protocols applied and the people involved, will be extremely important. The more data are available the more difficult it will be to find the right data that fit your needs and satisfy your standards.

It is heartwarming to see how many people are actually making use of the systems. Every month there are over 10,000 visitors (nearly half a million hits) on the MarBEF website. The taxonomic register ERMS comes up as one of the most visited pages and we have nearly 100 people visiting EurOBIS every day and many are effectively downloading the data. It is also encouraging to see that the mobility portal, a system that matches CVs and vacancies, is a success and the MarBEF calendar of events is serving details on many meetings, not only those organized by MarBEF. The MarBEF Open Archive (MOA), an initiative we started only one year ago, already includes over 250 scientific papers, fully downloadable in PDF. MOA is now also indexed by Google scholar, which increases our visibility. The weekly news bulletin (MarBEF web news) is a way to advertise the latest news from MarBEF, including related topics by a simple weekly email. The mailing list of this e-bulletin includes over 1,500 subscribers, and hereby has become a service that is now appreciated by a large community of scientists, students, policy makers and many others interested in marine sciences.