

# European Register of Marine Species

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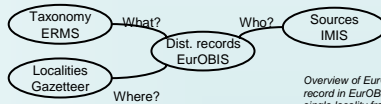
Geographical scope of ERMS

## Scope

The project covers species of the kingdoms Animalia, Plantae, Fungi and Protocista occurring in the marine environment. Bacteria and marine viruses are not included. The area covered by the project is all the continental shelf seas of Europe, from the Canaries and Azores to Greenland and north west Russia, including the Mediterranean shelf, Baltic Seas and deep-sea areas.

## Introduction

Taxonomic information systems are an essential tool in integration of data from several sources; without intelligent taxonomic databases, all spelling variations and synonyms would be treated as separate taxa, thus (sometimes vastly) increasing apparent biodiversity. Within Europe, The European Register of Marine Species (ERMS) is the most complete register of marine taxonomic names, and is used by several initiatives as the standard vocabulary for taxonomy. ERMS contains not only valid names, but also invalid synonyms and documented misspellings; this way, ERMS forms a guide to the correct application of taxonomic names. ERMS provides an online tool for data integration. Scientists and data managers can preserve their own nomenclature, but link it to the standard taxonomic vocabulary. The contents of ERMS is maintained by the taxonomic community, through a web application that allows them to edit data residing in the central database. The system of passwords is classification-aware, and allows fine control over who has edit rights for which taxa. The intellectual property rights of the taxonomic editors are managed by a society founded to this purpose, the Society for the Management of European Biodiversity Data (SMEBD). One of the objectives of ERMS is to make a contribution to broader initiatives such as ITIS, Species 2000 and Catalogue of Life. Currently the list contains 52,105 taxonomic names, of which 36,957 are of species or infraspecific rank, from these 31,973 are valid.



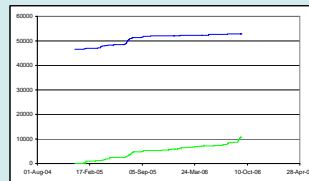
Overview of EuroBIS and related data systems. A distribution record in EuroBIS is about a single taxon from ERMS, and a single locality from the Gazetteer. It is documented by one or more sources from IMIS

## Society for the management of European Biodiversity Data

A society aiming to make biodiversity data available for the benefit of science and environmental management. This includes the archiving of electronic biodiversity data and encouraging and facilitating data being given an 'added value' by being combined and linked with other data. SMEBD manages the intellectual property rights on behalf of the taxonomists that contribute to ERMS and to Fauna Europaea

## ERMS History

The European Register of Marine Species (ERMS) was created in 1998 by a project funded under the European Union MAST research programme. It resulted in a species list for European marine waters. This first version has been published as a book (Costello *et al.*, 2001). In December 2003, the data, which up to then were residing in a collection of spreadsheets, were transferred to a relational database. Since then Associate Editors and Review editors have been revising the content of the database, to keep it up to date, and to remove remaining issues and mistakes.



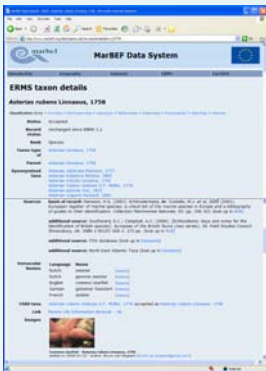
Evolution of the number of records in ERMS. Blue: total number of records; green: number of records changed or checked by associated editors

## ERMS Editorial Board

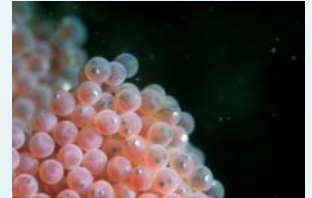
The editorial board of ERMS consists of an Executive Committee and Associate Editors. Each taxonomic group is represented by an Associate editor, responsible for the quality and content of large taxonomic groups; currently there are 67 Associate Editors. Associate Editors can appoint review editors who are responsible for smaller taxa.

## Aphia

ERMS is part of a larger database, Aphia (not an acronym but a nice-sounding name of fish genus!). Other databases maintained in Aphia are e.g. the North West Atlantic Register of Marine Species (NWARMS), and the world list of Porifera. The total number of names is 114,192. The whole database will be exposed through a single interface very soon.



Elements of the user interface of ERMS



Pictures © Rudy Van Gelder



The Flanders Marine Institute develops and maintains the European Register of Marine Species on behalf of the Society for the Management of European Biodiversity Data (SMEBD), using resources of the Marine Biodiversity and Ecosystem Functioning (MarBEF), an EU FP6 Network of Excellence. URL <http://www.marbef.org/data>; <http://www.smebd.org>