

# Taxonomic databases, collections and environmental governance



How could we achieve a proper environmental governance without knowing the essential blocks of biodiversity, the biological species? How can we monitor variations in the number of species and their abundance, the effects of climate change, the spreading of alien species or document extinctions without assessing the state of relevant Italian populations?

With the national project CollMap, the ANMS is making public an essential database on the Italian biodiversity for inclusion into the National Biodiversity Network (Progetto Sistema Ambiente 2010) in support of research activity, with the aim of collecting, improving and sharing knowledge about the various facets of biodiversity and the measures for its conservation.



## What is the ANMS?

The Italian Association of Scientific Museums (ANMS) was founded in 1972 as an organisation promoting scientific museology in Italy, also after coordination of the affiliated institutions and their staff members.

The activities of the ANMS include the organisation of congresses and seminars to promote exchange of views and professional development. Publication of the journal "Museologia Scientifica" allows a continuous flow of information not only among the museums but also to the entire research community and the general public.

**ANMS** ASSOCIAZIONE NAZIONALE MUSEI SCIENTIFICI

[www.anms.it](http://www.anms.it)



*Ministero dell'Istruzione,  
dell'Università e della Ricerca*

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MAPPING THE NATURAL HISTORY  
COLLECTIONS OF THE  
ITALIAN SCIENTIFIC MUSEUMS



# The natural history collections of the Italian Scientific Museums

Natural History Museums are the sole holders of an essential heritage for scientific advancement in that they contain a huge amount of information on past and present biodiversity. The National Biodiversity Strategy, with the launch of a National Network, recognised the important role of Natural History Museums in studies on biological diversity, as well as on its evolution and conservation.

The Italian Association of Scientific Museums (ANMS) proposed the project CollMap to census the biological collections housed in the Italian scientific museums. This project was funded in 2013 by the Ministry of Education, University and Research (MIUR) through Law 6/2000.

## The national project CollMap

The project CollMap involves the online mapping of the zoological and botanical collections currently housed in the Italian Natural History Museums. The historical, taxonomic and biogeographical importance and the number of specimens will be outlined

for each collection. On the basis of the results and following comparisons with other datasets by the Ministry of the Environment, critical areas in Italy from where distribution data on plants and animals are unsatisfactory will be circumscribed. The results of CollMap will be used to raise awareness by national and local authorities about the value of the Italian Scientific Museums and the immense heritage which they preserve.

## Taxonomy and biodiversity

Taxonomy is the science that describes, names and classifies all the organisms on the Earth. Taxonomists search for, identify, describe and hierarchically arrange the species that make up the planet's biological diversity by means of morphological, biogeographical, genetic and eco-ethological research. In over 250 years, taxonomists have identified and named more than 1,700,000 species, though most recent estimates point to more work which needs to be done, as the species now inhabiting the planet are thought to be at least five times that number.

The current increase in studies on biodiversity and ecosystem services throughout the world demonstrates the basic necessity to set up a broad community of specialist taxonomists that may consistently address the cultural policies by bodies governing scientific research.

Hence, a further objective of CollMap is to train new taxonomists to join the small number of zoologists and botanists currently employed by Italian museums who have achieved a vast knowledge on most biological groups.



Photographs by: S. Bambi (Museum of Natural History, Florence); V. Vomero (City Museum of Zoology, Rome); S. Mazzotti (City Museum of Natural History, Ferrara); L. Latella and R. Salmaso (City Museum of Natural History, Verona).