

IS OUR BELGIAN LAB REALLY MORE BIODIVERSE THAN DARWIN'S GALAPAGOS ISLANDS?

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Out of 136,000 valid marine species registered in the World Register of Marine Species today, 2,070 occur in the Belgian part of the North Sea (BPNS). It is quite surprising to find about 2,000 marine species (of which 1,800 animals) in such a small area as Belgium's coastal zone. Only 800 sea animals are known to reside around the Galapagos Islands. European marine biodiversity counts 31,000 species, but we should take into account that Europe is 10,000 times bigger and more heterogeneous in marine habitats, although Belgium's seabed isn't just plane sand either. In fact, Belgium is not only rich in species, it also holds 23 of the 70 known higher phyla in the world. Most people would think of fish in the first instance, and most children also know crabs and shells and perhaps jelly fish. But there is a lot more to see below the surface and in the seabed. Remarkably is the high diversity of 'seaworms'. No less than 727 species or 35% of our living creatures belong to the segmented worms (Annelida: 222), flatworms (Platyhelminthes: 170) or roundworms (Nematoda: 335). Also the crustaceans, sort of the counterpart of the insects on land, are represented with 502 species. The majority are smaller crustaceans, up to a few millimeters long, whereas crabs (39 species) and shrimps (5 species) are few. Other so-called famous groups are molluscs (153 species), of which 118 are bivalves, and there are 129 fish species, 15 seaspiders, 6 jelly fish, 41 seabirds and 14 marine mammal species in Belgium.

Unfortunately this does not simply imply that the BPNS is healthy, or a Garden of Eden on earth. The BPNS is simply one of the most investigated places in the world. Already from the mid-nineteenth century, our coast has been a big laboratory where extensive studies of our biodiversity have been carried out. The above-mentioned numbers represent a compilation of more than hundred years of research and it is not totally clear how much of this biodiversity is left in our ocean today. Although many scientists are monitoring and detecting changes in species occurrences, we have not done a complete re-inventory of this biodiversity hotspot yet.

Since 2000, the Flanders Marine Institute (VLIZ) manages several data systems on marine biodiversity, and recently (since 2007) took on the challenge of creating a World Register of Marine Species (WoRMS). Today 142 world experts from 92 institutions in 26 countries around the world form the editorial board. They are in control of the quality published through the register. Because the Belgian register (amongst several other regional lists) is part of this world register, it means that nomenclature changes get simultaneously corrected throughout the system.

WoRMS will be a standardised, authoritative register of all marine species and already fulfills this role within several global initiatives and programmes, such as Species2000, the Global Biodiversity Information Facility (GBIF), the Ocean Biogeographic Information System (OBIS) and the International Oceanographic Data and Information

Exchange programme of IOC/UNESCO. The Encyclopedia of Life (EoL) and the Census of Marine Life (CoML) recently agreed to prioritise the marine species part of their encyclopedia based on WoRMS.

Belgian Register: <http://www.vliz.be/vmdcdata/tisbe>

World Register: <http://www.marinespecies.org>