

The Operational Directorate Natural Environment (Royal Belgian Institute of Natural Sciences)

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The Operational Directorate Natural Environment (OD Nature) is the largest scientific directorate of the Royal Belgian Institute of Natural Sciences (RBINS) and envisages being a “centre of excellence in fundamental and applied research of biodiversity and ecosystems in support of the protection and sustainable management of the natural environment”. To realise this vision, the OD Nature has a fourfold mission: 1) to study the biotic and abiotic components of the natural environment and the interactions of the systems that form part of it, 2) to provide scientific expertise including running a monitoring program for the North Sea and capacity building in the field of biodiversity in developing countries, 3) to manage and improve databases and major scientific instruments, and 4) to represent the Federal state in international bodies and instruments.

The OD Nature currently employs around 120 collaborators (in Brussels and Ostend) with a large and diverse expertise and strong reputations in fields that include ecology, molecular biology, nature conservation and protection, biodiversity, chemistry, hydrodynamics, modelling, databases and image processing. The institute has a long tradition of scientific research in the marine environment (with special focus on the North Sea) but its expertise is also applicable to freshwater and terrestrial environments worldwide.

The North Sea waters and sediments are both rich and diverse in life and form a sensitive ecosystem that is under heavy pressure from intense human activities (such as fishing, sand and gravel extraction, shipping, oil and gas drilling, tourism, industry, ...). Therefore, it is important for scientific research to be carried out in our marine territories, not only to learn more and better understand the sea, but also to better protect it and make predictions for the near and more distant future. Most of the OD Nature research takes place at the crossroads of human activities and nature conservation, and concentrates on the following subjects: marine mammals, exotic species, jellyfish, sea birds and bats, hard substrates, underwater noise, hydrodynamic models, sediment transport models, ecological models, remote sensing, marine geology, marine chemistry and Antarctic biodiversity. OD Nature also coordinates and manages the RV Belgica and is responsible for the Belgian North Sea Aerial Survey program tracing marine pollution.

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