

BELGIAN SHIPWRECKS: HOTSPOTS FOR MARINE BIODIVERSITY

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Hard bottom substrates at sea allow the development of communities that are often rich in terms of species diversity. Non-biogenic structures such as shipwrecks are an integral part of these substrates, even if they have an anthropogenic origin and the species assemblages they harbor could be for that reason qualified as 'exotic'. There are 200 recent shipwrecks on the Belgian Continental Shelf (BCS), which represent a large fraction of the hard substrate available locally; their presence has an additional interest if we know that the major part of the English Channel and Southern Bight of the North Sea consists almost exclusively of soft sediments. Five shipwrecks on the BCS will be studied in order to assess the meio- and macrofaunal diversity using direct observations and scuba sampling techniques. The soft sediments close to shipwrecks will also be studied to serve as model for areas relatively undisturbed by fisheries (untrawled). Added to this, the influence of shipwrecks on local hydrodynamics and sediment transport will favor the colonization by fragile epibenthic species and as a consequence increase habitat complexity. For each site, standard abiotic parameters and current vectors will be measured and modeled. The information will be centralized in a database and disseminated through a web site devoted to the biodiversity of the BCS. The results will be relevant to the management of the BCS; the anthropogenic hard substrates of shipwrecks can serve as a model for what will happen with the installation of offshore windmills. A brochure will increase public awareness of the importance of marine diversity, and increase public support for marine protected areas.