



## **Benthic marine landscapes of the Eastern Gulf of Finland, the Baltic Sea**

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Benthic marine landscapes are a combination of ecologically relevant hydrographical and geological datasets that characterize potential broad scale habitat distribution patterns with the overall aim to allocate conservation efforts on biodiversity and spaces instead of single species. At the best the benthic marine landscapes describe both the habitat distribution as well as the characteristics of the physical environment. This kind of spatial knowledge that informs both about geology and biology at the regional scale is very usable in ecosystem based management (ESBM) of marine areas. Here we will present the benthic marine landscapes of the Eastern Gulf of Finland at the scale of 1:500 000 and explain the analysis methods behind.

The study area in the Eastern Gulf of Finland, the Baltic Sea, is a transboundary marine area shared by Finland and Russia. The HELCOM Baltic Sea Action Plan along with EU, Finnish and Russian legislation requires both countries to identify and assess the state of the marine environment in the Gulf of Finland. These appoint the need for shared knowledge on the marine environment, its state, physical characteristics and distribution of habitats among others. In order to produce ecologically relevant marine landscapes we have collected geological, hydrographical and biological data from the transboundary study area and studied their correlation. The statistical analyses have been run with Primer –software (BEST and LINKTREE).

The study is a part of ENPI CBC funded Finnish-Russian co-operation project, the TOPCONS (<http://www.merikotka.fi/topcons/>). Project aims to develop innovative spatial tools for the regional planning of the sea areas in the Gulf of Finland, the Baltic Sea. The objective is to create methodology and tools to map the locations of the most diverse and sensitive marine landscapes. These will help the society when striving for the sustainable consolidation of human activities and the marine nature values. The TOPCONS is implemented in close relationship to the Finnish Inventory Programme for the Underwater Marine Environment (VELMU).