Geo-biointeractions in a fragmented seafloor area, the Eastern Gulf of Finland

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Ecosystem based management (ESBM) requires accessible and reliable information concerning the state, species distributions and physical characteristics of coastal and marine environments. Nevertheless this type of marine environmental data is often spatially limited and collected using different methods. Here we will present an example of an interdisciplinary approach that targeted to integrate marine environmental knowledge with information about human pressures.

We have produced new spatial knowledge on marine environmental characteristics by studying geo-bio interactions in a fragmented seafloor area, the Eastern Gulf of Finland. Here we will present our key findings regarding the benthic environment and demonstrate that physical (geological) heterogeneity of the seafloor should be considered in broad scale habitat mapping and marine spatial planning. We have had a close co-operation with the Regional Council of Kymenlaakso in their regional plan for the trade- and sea area process, already in the early phase of regional planning process.

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