142 Inclusion of coastal and marine recreation in a data-driven framework for ecosystem-based Maritime Spatial Planning in Danish marine waters.

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This presentation describes how coastal and marine recreation data has been included in a cross-sectoral project 'ECOMAR: A data-driven framework for ecosystem-based Maritime Spatial Planning in Danish marine waters'. This development and demonstration project involves data from a range of marine sectors including coastal and marine recreation and analyses these in an extensive cumulative impact assessment modelling. The presentation will focus on the results linked to the coastal and marine recreation: How other marine sectors have impact on coastal and marine recreation as well as the recreational impacts on some of the sectors. The results, implications and use of coastal and marine recreation data for Maritime Spatial Planning and management are discussed and related to the newly released Danish Maritime Spatial Plan.

The data on coastal and marine recreation was collected through two studies: A crowdsource-based study using an online PPGIS mapping tool allowing respondents to map places of marine recreation and identify key facts about their activity and the site. Secondly, this mapping tool was used in combination with a national representative survey of the Danish adult population with 10,291 valid responses. These studies provide new and more in-depth knowledge of 92 water-oriented recreation activities grouped in 16 main types as well as nationwide spatial mapping. In total approx. 16,000 recreation sites were mapped and the two studies supplement each other. Results show that marine recreation is very widespread and 77.6 percent of the adult population has participated in water-oriented recreation within the past year. Domestic tourism counts for 25 % of the mapped activities. Furthermore, our data was triangulated with AIS data on recreational boating and provides a solid documentation and mapping of coastal and marine recreation at national level.

Link to project reports

Andersen, J.H., J. Bendtsen, K. Hammer, E.T. Harvey, S.W. Knudsen, C. Murray, J. Carstensen, I.K. Petersen, J. Tougaard, S. Sveegaard, K. Edelvang, J. Egekvist, J. Olsen, M. Vinther, Z. Al-Hamdani, J.B. Jensen, J.O. Leth, B.C. Kaae, A.S. Olafsson, W. McClintock, C. Burt & D. Yocum (2020): A data-driven framework for ecosystem-based Maritime Spatial Planning in Danish marine waters. Part I: Results and conclusions from a development and demonstration project. NIVA Denmark Report, 85 pp. Link: https://www.researchgate.net/publication/346975311_ECOMAR_A_data-driven_framework_for_ecosystem-based_Maritime_Spatial_Planning_in_Danish_marine_waters

Andersen, Jesper Harbo; Hammer, Kathrine Jul; Harvey, E. Therese; Knudsen, Steen Wilhelm; Murray, Ciaran Joseph; Carstensen, Jacob; Petersen, Ib Krag; Sveegaard, Signe; Tougaard, Jakob; Edelvang, Karen; Olsen, Jeppe; Vinther, Morten; Al-Hamdani, Zyad; Jensen, Jørn Bo; Leth, Jørgen O; Kaae, Berit C; Olafsson, Anton S. (2020) Supplementary material to ECOMAR: A data-driven framework for ecosystembased Maritime Spatial Planning in Danish marine waters. NIVA-rapport nr. 7525. Norsk institutt for vannforskning, 289 pp. Link: https://niva.brage.unit.no/niva-xmlui/handle/11250/2678968.