

Assessment of coastal environment in Hokkaido by using ocean health index

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The Ocean Health Index (OHI), which considers humans as a part of natural ecosystems and comprehensively assesses the health of coastal and marine environments from social, economic and ecological perspectives, was devised (Halpern et al., 2012). OHI can compare and examine each target and each region by evaluating each region/target with a perfect score of 100 points. The purpose of this study was to comprehensively evaluate the environment in the coastal area of Hokkaido using OHI, and to make proposals for integrated management to improve the soundness of the coastal area.

The highest OHI score was Okhotsk with 72 points, followed by Shiribeshi with 64 points, and the lowest was Rumoi and Ishikari with 29 points. One of the reasons for the high evaluation value of Okhotsk is the high evaluation value of food supply (85 points), which is mainly due to the high production of fishery and aquaculture. In Shiribeshi, the number of annual users of the natural parks in the coastal area was large, and the high score (97 points) of the place image contributed to the high overall evaluation value. On the other hand, in Rumoi and Ishikari, the production of fisheries and aquaculture was low, and the number of visitors to coastal natural parks was low. This suggests that in Rumoi and Ishikari, managing the resources of important fish species appropriately and striving to restore the amount of resources, as well as attracting tourists, will improve the environmental health of the region.

Keywords: Ocean Health Index, Hokkaido, Coastal region, Fisheries, Tourism, Ecosystem service