



Coastal Case Study: Blekinge Archipelago and east coast of Skåne, Sweden

The Hanö Bight stretches from the south east corner of Skåne to the east end of the Blekinge Archipelago. The area covers 680,000 ha and has a combined coastline length of over 200 km, not including the islands. Natura 2000 sites cover around 4 % of the area. The deepest point reaches 60 m, and the salinity ranges from 7.5 PSU to 13 PSU in the deeper parts. It is characterised by two different shore types: In Skåne, the majority of the coast is covered by sandy beaches and wetlands, while the coast of Blekinge is formed by an extensive archipelago with several small islands and skerries.

In 2001 the Swedish Board of Fisheries carried out an investigation of herring spawning sites in Skåne and the archipelago of Blekinge by interviewing fishermen in the area about their visual observations of spawning sites. It showed that, according to the observations made by the fishermen, herring spawn in scattered places along the east coast of Skåne as well as in the archipelago of Blekinge. Based on this survey the World Maritime University in Malmö (WMU) in cooperation with the County administrative Board of Skåne carried out samplings in the same area to find out if herring roe still could be found. The sampling results confirmed abundance of herring roe in two of the areas that were, by visual observations, said to be spawning areas. Due to the lack of repeated surveys conclusions can however not be drawn from these result and additional studies are needed.

After observations of decreased abundance of fish along the coast, brown smelly coastal water and an increased frequency of wounds on fish, the County Administrative Board of Skåne together with Region Skåne appealed to the Swedish government. The Swedish Agency for Marine and Water Management conducted an investigation of plausible causes to these symptoms. Three public

hearings in Gothenburg, Åhus and Simrishamn were held in order to get input from the public about observations from the area. They gathered approximately 80 people each from various different sectors and organisations such as fisheries, local and regional authorities, politicians and scientist. Based on these hearings in-depth analyses were made on a number of topics which had been suggested as possible contributing factors to the degrading state of the Hanö bay. In October 2013 the Swedish Agency for Marine and Water Management presented their findings in a final report. They had looked particularly at four different fields; hazardous substances, water quality, fish and fisheries, and ecosystem services. None of these areas alone could be the cause of the observed problems. Hazardous substances come from different sources and are monitored through a so called recipient control, and no particular substance could be confirmed to have caused the observed problems. High levels of organic material in the largest river in the area, the Helge river, may have had an impact on the coastal waters around the river mouth and may also explain what was observed as brownified coastal water. Lower fish abundance in coastal areas could not be confirmed by the investigation, but it was shown that cod landed in the area were thin and showed signs of weak reproductive capability. Ultimately, according to monitoring data of the ecosystem in the south Baltic Sea some negative trends were observed, such as decreased abundance of benthic organisms. However this is valid for the entire south Baltic Sea, not just Hanö bay.

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